

ANNUAL REPORT 2017-18

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR


NIT SILC
ADMIN C




NIT SILCHAR
ADMIN COMPLEX









ANNUAL REPORT 2017-18

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

Contents

Sl. No.	Topic	Page No.
	From the Director's Desk	
	Mission	
	Vision	
	Objectives	
01	**INTRODUCTION**	
	Historical Background	1
	Location	2
	Campus	2
02	**COUNCIL, BOG AND OTHER COMMITTEES**	
	The Council	3
	Board of Governors	4
	Finance Committee	4
	Building and Works Committee	5
	The Senate	5
	Internal Complaints Committee (ICC)	6
	Deans and HODs	6
03	**EDUCATION SYSTEM**	
	Undergraduate (B.Tech.)	7
	Postgraduate (M.Tech./ M.Sc./ MBA)	8
	Research Programme (Ph.D.)	8
	Academic Programmes	9
	Enrolment	10
	Admission Statistics	12
	Awards	16
	Examination Details	17
04	**PLACEMENT STATISTICS**	19
05	**DEPARTMENTS**	
	Civil Engineering	23
	Mechanical Engineering	36
	Electrical Engineering	51
	Electronics & Communication Engineering	72
	Computer Science & Engineering	93
	Electronics & Instrumentation Engineering	101
	Mathematics	107
	Physics	114
	Chemistry	119
	Humanities & Social Sciences	126
	Management Studies	131
06	**ACADEMIC CENTRES/ CELLS**	
	Central Computer Centre	137
	Central Library	138

Sl. No.	Topic	Page No.
	CDAC	142
	Supercomputing Centre	142
	Institute-Industry Partnership Cell (IIPC)	143
	Research Promotion Cell (RPC)	143
	Indovation	144
	Startup Centre	146
	E-Cell	147
07	**STUDENTS' ACTIVITIES**	
	Scholarship / Assistantship	152
	Students' Gymkhana	154
	Genaral Programmes / Annual Festivals	155
08	**INFRASTRUCTURE AND AMENITIES**	
	Estate	159
	Vehicle Management	162
	The Hostels	163
	Health Centre	164
	Kendriya Vidyalaya	164
	KIDS-NITS	166
	Sports Complex & Gym	166
	Guest House	166
	Post Office	166
	Bank and ATMs	166
	Shopping Complex	166
	Cafetaria	166
09	**RESEARCH AND CONSULTANCY**	
	Research Development	167
	Ongoing Project	167
10	**STAFF POSITION**	**171**
11	**TEQIP-II**	
	Introduction	177
	Goal of TEQIP	177
	Objectives of TEQIP	177
	Distribution of Fund	178
	Other Activities of TEQIP	178
12	**AWARDS AND ACHIEVEMMENT**	**186**
13	**GLIMPSES OF ANNUAL ACTIVITIES**	**187**
14	**CORPORATE SOCIAL RESPONSIBILITY**	
	Contribution to Social Development	197
	Gyansagar	197
15	**ACCOUNTS**	
	Audit Statement	
	Statement of Accounts	201

From the Director's Desk...



It is extremely delightful for me to present the Annual Report of National Institute of Technology Silchar, Assam for the year 2017-2018. National Institute of Technology Silchar, an Institute of National Importance, previously known as Regional Engineering College, Silchar, started its academic activities in the year 1977. NIT Silchar holds a respectable position among premier technical institutes in the country and has been consistently excelling in academics, research and innovation.

In the last four decades, the Institute has flourished and progressing gracefully in the field of engineering education. The Institute was established in the year 1977, and has a proud strength of 3400 students including UG, PG and research scholars. It gives me immense pleasure to mention that in the National Institute Ranking Framework (NIRF) announced by the Ministry of HRD in 2018, NIT SIlchar has been ranked 57th among all the top 100 Engineering Institutes/ universities in the country. It ranked 2nd in the North Eastern Region after IIT Guwahati, 36th in The Week survey and 18th in the survey conducted by Data quest for top 100 technical schools in India. National Board of Accreditation (NBA) has accredited eight programs of NIT Silchar among the twenty-one eligible UG & PG engineering programs. Nine PG programs out of fifteen are in process of the accreditation and periodically assessed by NBA. We hope that the remaining programs will be accredited soon in near future.This was possible only because of the unconditional support, cooperation and contribution of all stake holders specially faculty members, staff, students and alumni of NIT Silchar.

The Annual Report is prepared based on the various activities of the Institute during the year of reporting of 2017-2018 specifically highlighting the achievements of the institute. I express my sincere gratitude to the MHRD and the State Government for their whole hearted support and co-operation. I am specially thankful to all the members BOG, FC, B&WC, Senate, faculty, staff, students and alumni of NIT Silchar for their commitment and contribution towards the growth of the institute and I firmly believe we will conquer the epitome of successwith all the dedication and persistence, and will be leading as topmost technical institute of the country.

Prof. Sivaji Bandyopadhyay
Director, NIT Silchar

Mission

The mission of NIT Silchar is to train and transform young men and women into responsible engineers, technologists and scientists to motivate them to attain professional excellence and to inspire them to proactively engage themselves for the betterment of the society.

Vision

The vision of NIT Silchar is to establish a unique identity by developing quality human and knowledge resources in diverse areas of technology to meet local, national and global economic and social needs as well as the needs of human society at large in self-sustained manner.

Objectives

- *To impart the best technical education at both the Undergraduate/Postgraduate level so as to train the students to be able to boldly face a world that is being transformed by scientific and technological advances.*
- *To engage in research work beneficial to Industry as well as society and disseminate the research findings.*
- *To provide knowledge based technological services to satisfy the needs of the industry as well as society.*
- *To help in building national capabilities in developing technologies, opening up new vistas in education and research.*
- *To promote Institute-Industry interaction through sponsored research by sponsoring faculty to work in Industry for short terms and by inviting people from Industry to deliver lectures etc.*
- *To promote national integration and impart value based education.*



Introduction

Historical Background

In the fifties, the Government of India decided to establish Regional Engineering Colleges (RECs) under the Quality Technical Education Policy – one each in every major state – with prime objective of imparting quality technical education throughoyt the country and to foster national integration. These Reginal Engineering Colleges were established as joint ventures of the Government of India and the respective State Governments. Assam is considered as the flag bearer of the Northeast India and so in the year 1967 the 15th REC was officially established in Silchar. However it took almost a decade for REC SilCchar to start its academic programmes due to various constraints.

The first batch of students were admitted in 1977 in the BE programm in 3 branches of Engineering namely, Civil Engineering, Mechanical Engineering and Electrical Engineering. The total intake in the first batch was 60 students. The adequate infrastructure facilities consisted of only a part of a hostel, two Assam type buildings (for classes and administration), a workshop building, seven faculty quarters and a few staff quarters when the College started its academic programs in November 1977. Initiallyunder the guidance of the then Principal Dr. H. R. Chablani, the classes started with only four full time Faculty members. The College started its academic program with affilation from Gauhati University. The first batch of BE students were awarded degrees in the year 1982-83. Subsequently, two more branches, namely, Electronics and Communication Engineering and Computer Science and Engineering started functioning from the year 1983 and 1987 respectively. The affiliation was later shifted to Assam University in 1994.

On the basis of the report of the High Powered Joint Expert Committee of AICTE and UGC under the chairmanship of Prof. S. K. Joshi, Director General of Council for Scientific and Industrial Research (CSIR), Regional Engineering College Silchar has been transformed and upgraded to National Institute of Technology, Silchar with the status of Deemed University on 28th June, 2002. The Institute has been taken over by Government of India and subsequently made into fully funded Central Governmnet Autonomous Institution. This ensures a better financial status for NIT Silchar and will accelerate its growth ensuring that it becomes one of the premier technological institutes of not just the North East but the entire nation. The Institute has remodelled its curriculum and academic activitits in line with that of the IITs. With its Deemed University status, the institute started awarding degrees from the year 2002 and the first convocation of the Institute was held on 16th February 2004. The Government of India declared the Institute as an Institute of National Importance by enacting the National Institutes of Technology Act 2007.

Location

The Institute is situated at Silchar (latitude 24.50N, longitude 92.510E, at a height of 114.68m above MSL), at adistance of about eight kilometres to the south from the heart of the town on the Silchar–Hailakandi road in Cachar District of Assam. Silchar is well connected to rest of the country via airways, railways and roadways. The Institute boasts of state-of-the-art academica and research infrastructure, lecture theaters, laboratories, resource-centres, sport grounds, open-air theatre, hospital, food-courts and many more being embraced by the greenery, expansive teagradens and lakes.

Campus

The campus of the Institute is spread over an area of 540 acres, set admist a sprawling landscape of natural quietness, bordered by expansive tea gardens. It presents a spectacle of harmony in the form of modern architecture, natural beauty and picturesque surroundings.

The campus area has been organized in three functional sectors:

- Hostel, amenities and activity centres for students
- Academic blocks and administrative block
- Residential sectors for the staff

The instructional buildings are strategically located between the hostels and staff quarters to provide easy.



The Council, BOG and other Committees

The Council

Composition of Council

Sl. No	Members	Position
1	Minister in charge, Ministry of Human Resource Development, Govt.	Chairman (ex-officio)
2	Secretary to the Govt. of India, Deptt. of Higher Education, Ministry of Human Resource Development	Vice-Chairman (ex-officio)
3	The Chairperson of all National Institutes of Technology	Member (ex-officio)
4	Director of every National Institute of Technology	Member (ex-officio)
5	The Chairman, University Grant Commission	Member (ex-officio)
6	The Director General, Council for Scientific & Industrial Research	Member (ex-officio)
7	Secretary, Department of Bio-Technology, Govt. of India	Member (ex-officio)
8	Secretary, Department of Atomic Energy, Govt. of India	Member (ex-officio)
9	Secretary, Department of Information Technology, Govt. of India	Member (ex-officio)
10	Secretary, Department of Space, Govt. of India	Member (ex-officio)
11	The Chairman, All India Council for Technical Education	Member (ex-officio)
12	Not less than three, but not more than five persons to be nominated by the Visitor, at least one of whom shall be a women, having special knowledge or practical experience in respect of education, industry, science or technology	Member
13	Three Members of parliament, of whom two shall be chosen by the House of People and one by the Council of States	Member
14	Two Secretaries to the State Govt. of Maharashtra, from amongst the Ministries or departments of that government dealing with technical education	Member (ex-officio)
15	The Financial Advisor, Ministry of Human Resource Development, Govt. of India	Member Secretary (ex-officio)
16	Joint Secretary to the Govt. of India (Technical)/Additional Secretary (Technical)/ Department of Higher Education, Ministry of Human Resource Development	Member (ex-officio)

Board of Governors

Name and Position of Board of Governors

Name and Address	Position
Prof. Rajat Gupta Director i/c NIT Silchar (upto 30.11.17) Prof. Sivaji Bandyopadhyay, Director NIT Silchar w.e.f 01.12.2017	Chairperson (Acting)
Sri. R Subrahmanyam, Special Secretary (AE), Dept. of Higher Education, MHRD, GoI	Member
Ms. Darshana M Dabral, JS & FA, Integrated Finance Division, Dept. of Higher Education, MHRD, GoI	Member
Sri Ajay Tiwari, Principal Secretary, Higher Education Department, Government of Assam.	Member
Ms. Krishna Gohain, Director of Technical Education, Kahilipara Guwahati, Assam – 781019.	Member
Prof. S. L. Bapat, Professor Department of Mechanical Engineering, IIT Bombay	Member
Prof. Uma Bhattacharjee, Head Department of CSE, IIEST Shibpur	Member
Dr. S.K. Kakoty, Dean of Infrastructure, Planning and Management, IIT Guwahati	Member
Dr. K.M. Pandey, Professor, Department of Mechanical Engineering, NIT Silchar	Member
Dr. L.C.Saikia, Assistant Professor, Department of Electrical Engineering, NIT Silchar	Member
Prof. A. K. Barbhuiya, Registrar, NIT Silchar	Member Secretary

Finance Committee

Name and Address	Position
Prof. Rajat Gupta, Director i/c , NIT Silchar Prof. Sivaji Bandyopadhyay, Director, NIT Silchar w.e.f 01.12.2017	Chairman (Acting)
Sri. R Subrahmanyam, Additional Secretary (TE), Dept. of Higher Education, MHRD, GOI	Member
Ms. Darshana M Dabral, JS & FA, Integrated Finance Division, Dept. of Higher Education, MHRD, GOI	Member
Prof. S. L. Bapat, Professor Department of Mechanical Engineering, IIT Bombay	Member
Dr. S.K. Kakoty, Dean of Infrastructure, Planning and Management, IIT Guwahati	Member
Prof. A.K. Barbhuiya, Registrar & Member Secretary, NIT Silchar	Member Secretary

Building and Works Committee

Name and Address	Position
Prof. Rajat Gupta Director i/c NIT Silchar Prof. Sivaji Bandyopadhyay, Director NIT Silchar w.e.f 01.12.2017	Chairman (Acting)
Sri Sanjeev Sharma, Director NITs, Dept. of Higher Education, MHRD	Member
Sri Anil Kumar, Director (IFD), Dept. of Higher Education, MHRD	Member
Prof. U. Kumar, Board Nominee, Civil Engineering Department, NIT Silchar	Member
Dr. P. Rajbongshi, Dean (P&D), Civil Engineering Department, NIT Silchar Prof. A.I. Laskar, Dean (P&D), Civil Engineering Department, NIT Silchar	Member
Superintendent Engineer, PWD, Silchar Building Circle	Member
Executive Engineer (Electrical), Office of Chief Engineer, PWD (Bldng), Assam	Member
Prof. A.K. Barbhuiya, Registrar & Member Secretary, NIT Silchar	Member Secretary

The Senate

Name and Position of Members of Senate

Name and Address	Position
Prof. Rajat Gupta, Director (i/c) and Chairman, Senate Prof. Sivaji Bandyopadhyay, Director and Chairman, Senate w.e.f 1/12/2017	Chairman
Prof. Fazal A Talukdar, Prof., ECE Deptt., NIT Silchar	Member
Prof. K M Pandey, Prof of ME Deptt, NIT Silchar	Member
Prof. A K Sinha, Prof of EE Deptt, NIT Silchar	Member
Prof Nidul Sinha, Professor of Electrical Engg,NIT Silchar	Member
Prof. S Baishya, Prof., ECE Deptt., NIT Silchar	Member
Prof. Gurudas Das, Prof of HSS, Deptt., NIT Silchar	Member
Prof. A K Dey, Professor of Civil Engineering, NIT Silchar	Member
Prof. P S Choudhury, Professor of Civil Engineering, NIT Silchar	Member
Prof. S Choudhury, Professor of Civil Engineering. NIT Silchar	Member
Prof. R D Misra, Prof, ME Deptt, NIT Silchar	Member
Prof. A I Laskar, Professor, Dept of Civil Engg, NIT Silchar	Member
Prof. D Chakraborty, Professor of Civil Engineering. NIT Silchar	Member
Prof. M A Ahmed, Professor of Civil Engineering, NIT Silchar	Member
Prof. B K Roy, Prof , Electrical Engineering Deptt. NIT Silchar	Member
Prof. N.C.Shivaprakash, Professor of Instrumentation & Applied Physics Dept., IISC Bangalore	Member
Prof. S.K.Deb, Professor of Civil Engineering Dept., IIT Guwahati	Member
Prof. (Mrs.) R.R.Dhamala, Professor of Political Science Dept., Assam University, Silchar.	Member
Prof. A.K. Barbhuiya, Registrar & Secretary, Senate	Member

Internal Complaint Committee

Name	Department	Designation	Role in ICC
Dr. (Mrs.) Madhuchanda Choudhury	Electronics and Communication Engineering	Associate Professor	Presiding Officer
Dr. (Mrs) Mausumi Sen	Mathematics	Associate Professor	Member Secretary
Mrs. Madhumita Paul	Electronics and Communication Engineering	Associate Professor	Member
Dr. Krishnamati Sinha	Central Library	Assistant Librarian	Member
Dr. Binoy Krishna Roy	Electrical Engineering	Professor	Member
Smt Sanchita Acherjee	NGO		Member

DEANs and HoDs

Sl No.	Name	Department	Designation	Dean
1	Dr. Mokaddes Ali Ahmed	Civil Engineering	Professor	S.W
2	Dr. Asim Roy	Physics	Professor	R&C
3	Dr. Srimanta Baishya	Electronics and Communication Engineering	Professor	Academic
4	Dr. Nalin Behari Dev Choudhury	Electrical Engineering	Professor	Alumni
5	Dr. P.Rajbongshi	Civil Engineering	Professor	P & D
	Dr. Aminul Islam Laskar	Civil Engineering	Professor	
6	Dr. Aminul Islam Laskar	Civil Engineering	Professor	FW

Associate Dean till 31.03.2018

Sl No.	Name	Department	Designation	Dean
1	Dr. Arup Kumar Goswami	Electrical Engineering	Associate Professor	Academic
2	Dr. Debjit Bhowmik	Civil Engineering	Assistant Professor Grade I	P&D
3	Dr Jyoti Prakash Mishra	Electrical Engineering	Associate Professor	P&D
4	Dr. Ganti Ramesh	Mathematics	Assistant Professor Grade I	S.W
5	Dr. Dulal Chandra Das	Electrical Engineering	Assistant Professor Grade I	S.W
6	Dr. Saurabh Chaudhury	Electrical Engineering	Professor	S.W
7	Dr. (Mrs) Mausumi Sen	Mathematics	Associate Professor	R&C
8	Mrs. Madhumita Paul	Electronics and Communication Engineering	Associate Professor	F.W

List of HoDs till 31.03.2018

Sl No.	Name	Department	Designation
1	Dr. Rupak Dutta	Physics	Assistant Professor Grade II
2	Dr. Baban Haridas Shambharkar	Chemistry	Assistant Professor Grade II
3	Dr. Krishna Murari Pandey	Mechanical Engineering	Professor
4	Dr. Santanu Roy	Mathematics	Associate Professor
5	Dr N Bhupendro Singh	Humanities and Social Sciences	Associate Professor
6	Dr. Upendra Kumar	Civil Engineering	Professor
7	Dr. Saurabh Chaudhury	Electrical Engineering	Professor
8	Dr. Fazal Ahmed Talukdar	Electronics and Communication Engineering	Professor
9	Dr Arup Bhattacharjee	Computer Science and Engineering	Assistant Professor Grade I
10	Dr. Rajdeep Dasgupta	Electronics and Instrumentation Engineering	Assistant Professor Grade I
11	Dr. Gurudas Das	Management Studies	Professor

Education System

Undergraduate (B.Tech.)

Admission Procedure

Admissions to the first semester of all Undergraduatecourses are made on the basis of seats allocated byCentral Seat Allocation Board (CSAB) from the list ofcandidates selected by all India JEE (Main). Besides, aspecified number of foreign nationals/NRIs selectedunder the policy laid down by Govt. of India, are admitteddirectly to the 1st year of the courses.

Academic Calendar

The academic session is divided into two semesters each of approximately 17 weeks duration, an Odd Semester (July-December) and an Even Semester (January-June). The JEE (Main) selected candidates take admission in the first semester and on successful completion of the semester register for the subsequent semester on the dates specified in the Academic Calendar. The Senate approves the Academic Calendar consisting of schedules of activities for a session inclusive of dates for registration, mid-semester and end-semester examinations, inter-semester breaks etc. well in advance of a session. The Academic Calendar usually provides a total of about 90 working days in each semester.

Programme Structure

The duration of the programme leading to B.Tech.degree is four years. The curricula for the different degree programmes as proposed by the respective departments and recommended by the Departmental Undergraduate Programme Committee (DUPC) shall have the approval of the Senate. The departments would also prepare the syllabus of each subject containing the scope of studies and detailed instructions to be imparted which must have the approval of the Senate. All subjects would have a lecture-tutorial-practical (laboratory/ sessional) component (L-T-P) to indicatethe contact hours. The tutorial (T) or practical/ Sessional (P) component may be absent in certain courses. Separate laboratory subjects (0-0-P) may exist in certain cases as decided by the Senate on the recommendation of the DUPC. All subjects will have a credit count 'C'.Teaching of subjects will be reckoned in terms of credits. One hour lecture or tutorial class is designated as 2 credits while one hour practical class is designated asone credit.In each of the first year/ second year, there shall benon-credit compulsory Extra Academic Activity (EAA).The Extra Academic Activity may be N.S.S., N.C.C., orany other physical education. The curricula for B.Tech.programme includes compulsory Industrial training of6-8 weeks duration after 6th semester in any reputed industry, research organization, IIT's and other reputed institutions which is assessed in the 7th Semester. The Project work will carry a total of 15-20 credits.

Registration and Assessment

Students are registered in every semester irrespective of number of credits they have earned at the end of every year. However, if a student fails to complete his/ her courses in the stipulated first four years (8 semesters), the student is required to vacate the hostel and complete the remaining part of credits from outside.

a) If a student fails in a course, s/he will have to repeat the course in the appropriate semester when the course is on offer. S/he may prefer to register that course and attend all classes and offer him/her fornormal evaluation or the student may prefer to appear the mid-semester and end-semester examination and his/her internal evaluation would be carried forward from the semester where s/he was regularly registered.

b) A student may change an elective course within the time-frame mentioned in the academic calendar. If a student fails in an elective course, s/he may change the elective when s/he re-registers for the elective in the appropriate semester.

c) The duration of the UG programme is normally four years. However, academically weak students are permitted to complete the programme in six years from the date of first registration.

d) A student is permitted to register for few DD graded courses if the CPI of the student falls below 6.0 for improvement.

e) If a student fails to clear a subject in the end semester examination, then s/he is permitted to clear the same in the re-examination normally conducted within the first 15 days of the next semester. No reduction in grade is invoked if a student clears the subject in the re-examination.

Postgraduate
(M.Tech. / M.Sc. / MBA)

The M.Tech. regulations provide the necessary guidelines for the two years regular Postgraduate programme and three years part-time programme in Engg. disciplines. Similarly the M.Sc./MBA regulations provide guidelines for 2 years (4 semesters) M.Sc./MBA course.

Academic Procedure
M.Tech.

The courses leading to M.Tech. degree are open to candidates who have obtained the requisite qualification with 60% marks or 6.5 CGPA in aggregate in the qualifying examination. Statutory relaxation in the eligibility criterion is provided to candidates belonging to SC/ST communities. Admission for the GATE qualified candidates is made through Common Admission Process called Central Counselling for M.Tech./M. Plan/M.Arch (CCMT). When GATE qualified candidates are not available, admission is done on the basis of merit as decided by the Institute.

M.Sc. (Chemistry, Mathematics, Physics)

Admission to M.Sc. courses in Chemistry, Mathematics and Physics are based on career marking, written test and interview. Applicants must have secured at least 50% marks or a CPI of 5.5 in aggregate at B.Sc. level and preference is given to students having honours in the applied discipline. Statutory relaxation in the minimum eligibility criterion is provided to candidates belonging to SC/ST communities.

MBA

The minimum eligibility criterion for admission to MBA is Bachelor degree in any branch of Engg./science/ humanities etc. with 50% marks or 5.5 CGPA and valid CAT/MAT/ CMAT scores. Final selection is made on the basis of Group Discussion and Personal Interview conducted at the Institute.

Programme Structure

Teaching for the courses is reckoned in credits. Due credit is given to lecture, tutorial (theory) and practical components for a given subject. Normally for M.Tech.,first two semesters have theory and practical (laboratory) subjects while for MSc/ MBA, theory courses are taught in all the semesters.

The 3rd and 4th semester mostly constitute the project work for M.Tech. while for M.Sc./MBA, the project work spans over the fourth semester. MBAstudents undergo a compulsory summer internship after second semester. Project work and Seminar are essential part of the curricula. Class tests, assignments, tutorials, viva-voce, laboratory assignments, etc., are the constituent components of continuous assessment process and a student must fulfil all these requirements as prescribed by the teacher/coordinator of the subject.

Registration

Students in Postgraduate programmes register for the course at the beginning of each semester. These programmes do not have summer/re-examinations. Students securing 'F' grade in any course appear the exam in the following session. Attendance in all classes is compulsory and assessment and evaluation pattern is similar to undergraduate course.

Research Programme
(Ph.D.)

Students for admission to Ph.D. Programme in Engg. Departments must satisfy one of the following criteria:

1. Master Degree in Engg./Technology or equivalent in an appropriate area with a minimum CPI of 6.5 or equivalent (60% of marks).
2. Bachelor Degree in Engg./Technology with an excellent academic record and with a CPI of at least 8 or equivalent (70% of marks).

   Students for admission to the Ph.D. Programme in Science Departments must have a Master degree in relevant discipline with a first class or a minimum of 60% of marks or equivalent.

   Students for admission to the Ph.D. Programme in Humanities and Social sciences (HSS) Departments must have a Master degree with a minimum of 55% marks or equivalent. Selection of candidates is made on the basis of interview conducted by the department concerned.

Academic Programmes

Courses Offered

i. A four years B.Tech. Programme in the following branches of Engineering and Technology, was offered during the period.
   - ❖ Civil Engineering
   - ❖ Mechanical Engineering
   - ❖ Electrical Engineering
   - ❖ Electronics & Communication Engineering
   - ❖ Computer Science & Engineering
   - ❖ Electronics & Instrumentation Engineering

ii. A two- years M.Tech. M.Sc. & MBA programmes in the following branches of Engineering and Technology was offered during the period.

M.Tech (under Civil Engg. Department)

- ❖ Water Resources Engineering
- ❖ Geotechnical Engg.
- ❖ Transportation Engg.
- ❖ Structural Dynamics & Earthquake Engineering
- ❖ Structural Engineering.

M.Tech (under Electrical Engg. Department)

- ❖ Power and Energy systems Engineering.
- ❖ Control & Industrial Automation.

M.Tech (under Mechanical Engg. Department)

- ❖ Thermal Engineering.
- ❖ Design & Manufacturing.
- ❖ CAD-CAM & Automation.
- ❖ Materials & Manufacturing Technology.

M.Tech (under Electronics & Communication Engg. Department)

- ❖ Microelectronics & VLSI Design.
- ❖ Communication & Signal Processing Engg.

- ❖ **M.Tech** in Computer Science & Engg.
- ❖ **M.Tech** in Instrumentation Engg. (Under Electronics & Instrumentation Engineering)
- ❖ **M.Sc.** in Applied Chemistry (Chemistry Department)
- ❖ **M.Sc.** in Applied Physics (Under Physics Department)
- ❖ **M.Sc.** in Mathematics (Under Mathematics Department)
- ❖ **MBA** (Under Management studies)

B. Tech Enrollment

The following table shows the semester-wise, course wise enrollment with gender and caste breakup for the Year 2017-18.

The excess intake (over and above the intake capacity) was carried out as seat distribution programme made by MHRD.

Sem	Branch	Open (Breakup)		OBC (Break up)		SC (Break up)		ST (Breakup)		PH		Total Enrolment
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1ST&42ND	Civil	53	3	32	1	13	4	08	1	1OPH 2OBPH	1OBPH	**119**
	Mech	50	2	34	2	16	1	09	-	2OPPH 1OBPH	--	**117**
	Elect.	46	8	33	4	16	1	07	-	1OPPH 1OBPH	1OPPH	**118**
	ECE	53	6	31	02	15	02	08	01	1OPPH	--	**119**
	CSE	40	8	25	2	13	--	03	03	1OPPH	--	**95**
	EIE	26	3	15	01	07	02	04	01	--	--	**59**
	Total	**268**	**30**	**170**	**12**	**80**	**10**	**39**	**06**	**10**	**2**	**627**
3RD &4TH	Civil	38	4	29	3	14	1	4	3	1 OPPH, 1OBPH, 1 SCPH	-	**99**
	Mech	41	4	32	1	17	-	6	3	2OPPH, 2OBPH	-	**108**
	Elect.	43	7	27	2	14	1	6	3	2OPPH	2OBPH	**107**
	ECE	51	4	26	3	14	3	5	-	1SCPH	-	**107**
	CSE	38	8	21	2	13	-	6	-	1OPPH, 1 OBPH	-	**90**
	E&I	16	4	12	3	4	1	4	-	1OPPH, 1OBPH	-	**46**
	Total	**227**	**31**	**147**	**14**	**76**	**6**	**31**	**9**	**14**	**2**	**557**
5TH & 6TH	Civil	42	9	34	1	13	3	9	-	2 OPPH	-	113
	Mech	47	2	36	-	14	2	7	1	2 OPPH	-	111
	Elect.	31	8	36	6	14	4	6	1	1 OBPH	1 OPPH	108
	ECE	39	12	27	8	15	2	8	-	1 OPPH	-	112
	CSE	44	7	20	6	12	2	7	-	1 OPPH	-	99
	E&I	20	4	15	1	7	1	3	1	-	-	52
	Total	**223**	**42**	**168**	**22**	**75**	**14**	**40**	**3**	**7**	**1**	**595**
7TH & 8TH	Civil	44	6	31	6	14	3	8	3	1 OPPH	-	116
	Mech	61	4	35	-	18	-	8	1	3 OPPH	-	130
	Elect.	48	4	29	1	15	1	5	2	2 OPPH	-	107
	ECE	52	8	26	7	15	-	7	2	0 OPPH	-	117
	CSE	44	7	25	2	13	-	3	2	2 OPPH	-	98
	EIE	22	2	14	2	8	1	2	1	1 OPPH	-	53
	Total	**271**	**31**	**160**	**18**	**83**	**5**	**33**	**11**	**9**	-	**621**
Grand Total		**989**	**134**	**645**	**66**	**314**	**35**	**143**	**29**	**40**	**5**	**2400**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science & Engineering, E&I= Electronics & Instrumentation Engineering.

PG Enrollment (2017-2018)

Sem	Branch	Open (Break up)		SC (Break up)		ST (Break up)		OBC (Break up)		PH (Break up)		Total		TOTAL
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
lst sem	CE	43	6	11	4	1	3	24	2	0	0	79	15	94
	ME	23	3	8	0	1	1	15	0	0	0	47	4	51
	EE	17	2	4	2	0	3	5	1	0	0	26	8	34
	ECE	9	2	1	0	0	0	2	2	0	0	12	4	16
	CSE	8	4	3	0	1	0	1	0	0	0	13	4	17
	E&I	4	2	0	1	0	1	2	0	0	0	6	4	10
Total		**104**	**19**	**27**	**7**	**3**	**8**	**49**	**5**	**0**	**0**	**183**	**39**	**222**
3rd Sem	CE	39	4	10	1	3	2	14	3	0	0	66	10	76
	ME	18	3	3	0	3	0	13	2	0	0	37	5	42
	EE	16	3	4	1	0	1	3	0	0	0	23	5	28
	ECE	5	1	2	0	1	0	3	1	0	0	11	2	13
	CSE	4	3	2	0	1	0	1	0	0	0	8	3	11
	E&I	3	0	0	1	1	0	2	1	0	0	6	2	8
Total		**189**	**33**	**48**	**10**	**12**	**11**	**85**	**12**	**0**	**0**	**334**	**66**	**400**
1st Sem	PHY	3	0	2	0	1	0	0	0	0	0	6	0	6
	CHEM	3	0	1	1	1	0	2	1	0	0	7	2	9
	MATHS	2	1	1	0	0	0	2	0	0	0	5	1	6
3rd Sem	PHY	4	2	0	0	1	0	1	1	0	0	6	3	9
	CHEM	3	3	2	0	0	0	2	0	0	0	7	3	10
	MATHS	5	2	0	1	0	1	1	0	0	0	6	4	10
Total		**20**	**8**	**6**	**2**	**3**	**1**	**8**	**2**	**0**	**0**	**37**	**13**	**50**
1st	MBA	19	11	1	2	0	0	1	0	0	0	21	13	34
3rd	MBA	17	7	2	3	2	1	3	8	1	0	25	19	44
	Total	**36**	**18**	**3**	**5**	**2**	**1**	**4**	**8**	**1**	**0**	**46**	**32**	**78**
	G.Total	**245**	**59**	**57**	**17**	**17**	**13**	**97**	**22**	**1**	**0**	**417**	**111**	**528**

The following is a summary table of the number, B.Tech. Students on the roll of NIT Silchar during 2017-18.

Year	CE	ME	EE	ECE	CSE	EIE	TOTAL
2ND	119	117	118	119	95	59	**627**
4TH	99	108	107	107	90	46	**557**
6TH	113	111	108	112	99	52	**595**
8TH	116	130	107	117	98	53	**621**
	447	**466**	**440**	**455**	**382**	**210**	**TOTAL-2400**

Admission Statistics B.Tech

(a) Indian Students Admitted

The following table shows the state-wise and course-wise admission statistics with category breakup for the year - 2017-18

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Assam	OP	30	26	28	30	21	15	150
	OBC	16	19	17	16	15	08	91
	SC	09	09	08	08	07	05	46
	ST	04	05	05	05	03	02	24
	OPPH	01	01	--	01	--	--	3
	SCPH	--	--	--	--	--	--	--
	OBPH	--	--	--	--	--	--	--
Rajasthan	OP	01	06	04	03	04	03	21
	OBC	01	01	01	--	01	--	4
	SC	03	02	--	01	01	01	8
	ST	02	01	02	01	--	--	6
Bihar	OP	06	04	08	02	02	04	26
	OBC	10	07	10	04	04	04	39
	SC	--	03	01	01	--	--	5
	ST	--	01	-	-	01	01	3
	OPPH	--	01	01	--	--	--	2
	OBPH	01	01	01	--	--	--	3
UP	OP	13	07	06	09	05	02	42
	OBC	03	06	01	04	03	02	19
	SC	02	02	04	01	03	02	14
	OPPH	--	--	--	--	--	--	--
	OBPH	01	--	--	--	--	--	01
Andhra Pradesh	OP	03	01	01	05	02	01	13
	OBC	--	01	01	04	--	01	7
	SC	--	01	--	01	--	--	02
	ST	--	01	--	01	--	--	02
	OPPH	--	--	--	--	--	--	--
Jharkhand	OP	--	--	01	--	01	--	02
	OBC	02	--	01	--	--	--	03
Kerala	OBC	--	--	01	--	01	--	02
Mizoram	ST	01	--	--	--	--	--	01
Orissa	OP	--	01	02	--	--	--	03
	OBPH	01	--	--	--	--		01
Maharashtra	OP	--	--	01	--	03	01	05
	OBC	01	--	03	--	--	01	05
	SC	--	--	01	--	--	--	01
Tamil Nadu	OP	--	--	01	--	--	--	01
	SC	01	--	--	--	--	--	01

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Chhattisgarh	SC	--	--	--	--	01		01
	ST	--	--	--	--	--	01	01
Haryana	OP	--	--	--	01	--	02	03
	OPPH	--	--	--	--	--	--	--
New Delhi	OP	--	--	--	01	--		01
Telangana	OP	01	03	--	04	4	--	12
	OBC	--	--	01	04	2	--	07
	SC	01	--	--	03	--	--	04
	ST	--	--	--	2	2	1	05
Puducherry	OP	--	--	--	01	--	--	01
	OBC	--	01	--	--	---	--	01
	ST	--	01	--	--	--		01
Uttarakhand	OP	--	01	--	01	--	--	02
	OBC	--	--	--	01	--	--	01
	SC	01	--	--	--	--	--	01
West Bengal	OP	--	--	--	--	--	01	01
	SC	--	--	02	02	01	01	06
	OPPH	--	--	--	--	01	--	01
Meghalaya	ST	01	--	--	--	--	--	01
J&K	ST	01	--	--	--	--	--	01
	OPPH	--	--	01	--	--	--	01
MP	OP	--	02	02	02	01	--	07
	OBC	--	01	01	--	01	--	03
	SC	--	--	01	--	--	--	01
TRIPURA	OP	--	01	--	--	01	--	02
Foreign: 6(Sixth) Nos. foreign Students Afghanistan :2 Bangladesh: 4	Open	02	--	-	--	04	--	06
Grand Total		119	117	118	119	95	59	627

Admission Statistics M.Tech/M.Sc/MBA

(b) Indian Students Admitted

The following table shows the course-wise admission statistics with category breakup for the year -2017-18

ADMISSION STATISTICS (M.Sc. & MBA BRANCH WISE) FOR THE YEAR 2017-18

Programme	Specialization	General		SC		ST		OBC		PwD		Sponsored		Total		Grand Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	
M.Sc	MATHEMATICS	2	1	1	0	0	0	2	0	0	0	0	0	5	1	6
	PHYSICS	3	0	2	0	1	0	0	0	0	0	0	0	6	0	6
	CHEMISTRY	3	0	1	1	1	0	2	1	0	0	0	0	7	2	9
	TOTAL	8	1	4	1	2	0	4	1	0	0	0	0	18	3	21
Management Studies	MBA	19	11	1	2	0	0	1	0	0	0	0	0	21	13	34
	TOTAL	19	11	1	2	0	0	1	0	0	0	0	0	21	13	34

ADMISSION STATISTICS (M.TECH BRANCH WISE) FOR THE YEAR 2017-18

Programme	Specialization	General		SC		ST		OBC		PwD		Sponsored		Total		Grand Total
		M	F	M	F	M	`F	M	F	M	F	M	F	M	F	
Civil Engg.	WRE	8	2	3	0	0	0	6	0	0	0	0	0	17	2	19
	SD & EQE	6	3	3	0	0	1	3	2	0	0	0	0	12	6	18
	Transportation	10	0	3	0	0	0	5	0	0	0	0	0	18	0	18
	Geotechnical	9	1	1	2	0	2	5	0	0	0	0	0	15	5	20
	Structural Engg	10	0	1	2	1	0	5	0	0	0	0	0	17	2	19
	TOTAL	43	6	11	4	1	3	24	2	0	0	0	0	79	15	94
Mechanical Engg.	Thermal	9	0	3	0	0	0	6	0	0	0	0	0	18	0	18
	Design & Manuf.	9	1	3	0	1	0	5	0	0	0	0	0	18	1	19
	CAD-CAM & Auto.	2	1	1	0	0	1	2	0	0	0	0	0	5	2	7
	MMT	3	1	1	0	0	0	2	0	0	0	0	0	6	1	7
	TOTAL	23	3	8	0	1	1	15	0	0	0	0	0	47	4	51
Electrical Engg.	Control & Indu.Auto.	7	2	2	1	0	2	0	0	0	0	0	0	9	5	14
	Power & Energy Sy.Engg	9	-	2	1	0	1	5	1	0	0	1	0	17	3	20
	TOTAL	16	2	4	2	0	3	5	1	0	0	1	0	26	8	34
Electronics & Communication Engg.	Microelectronics & VLSI D	4	1	1	0	0	0	1	2	0	0	2	0	8	3	11
	CSP Engg,	4	1	0	0	0	0	0	0	0	0	0	0	4	1	5
	TOTAL	8	2	1	0	0	0	1	2	0	0	2	0	12	4	16
Computer Science. & Engg.	Computer Sc. & Engg	6	3	3	0	1	0	1	0	0	0	2	1	13	4	17
	TOTAL	6	3	3	0	1	0	1	0	0	0	2	1	13	4	17
Electronics & Instrumentation Engg.	Instrumentation Engg.	4	1	0	1	0	1	2	0	0	0	0	1	6	4	10
	TOTAL	4	1	0	1	0	1	2	0	0	0	0	1	6	4	10
	GRAND TOTAL	100	17	27	7	3	8	48	5	0	0	5	2	183	39	222

(c) Foreign Students Admitted

The following table shows the admission statistics of foreign students for the year 2017-18.

Sl. No.	Courses (B.Tech)	Admitted
1.	Civil Engineering	2
2.	Mechanical Engineering	-
3.	Electrical Engineering	-
4.	Electronics & Communication Engg.	--
5.	Computer Sc. & Engg.	4
6.	Electronics & Instrumentation Engg.	-
Total		**6**

(d) Course-Wise Admission statistics (B.Tech-1st Year)-2017-18

Sl.No.	Courses	Intake Capacity	Admitted	Remarks
1.	Civil Engineering	120	119	. The excess intake (over & above the intake capacity) was carried out as distribution foreign students.
2.	Mechanical Engineering	120	117	
3.	Electrical Engineering	120	118	
4.	Electronics & Communication Engg.	120	119	
5.	Computer Sc. & Engineering	92	95	
6.	Electronics & Instrumentation Engg.	60	59	
	Total	**632**	**627**	

(e) M.Tech. M.SC & MBA Intake & Admission

The following table shows course admission statistics of PG programmes (M.Tech. M.Sc. & MBA) for the year 2017-18.

Deptt.	Sanctioned strength including approved category (R-20+S-5)*	M.Tech. & M. Sc. Specialization	No. of PG students	
			M.Tech/M.Sc. /MBA	Total
CE	20+5	M.Tech. in Water Resource Engg.	19	19
	20+5	M.Tech. in Structural Dynamics &Earthquake Engg.	18	18
	20+5	M.Tech in Transportation Engg.	18	18
	20+5	M.Tech. in Geotechnical Engg.	20	20
	20+5	M.Tech in Structural Engg.	19	19
ME	20+5	M.Tech. in Thermal Engg.	18	18
	20+5	M.Tech. in Design & Manufacturing	19	19
	10+2	M.Tech in CAD-CAM Automation	7	7
	10+2	M.Tech in Material & Manufacturing Technology	7	7
EE	20+5	M.Tech. in Power & Energy systems Engg.	20	20
	20+5	Control & Industrial Automation	14	14
ECE	10+2	M.Tech. in Microelectronics & VLSI Design	11	11
	10+2	M.Tech in Communication & Signal Processing Engg.	5	5
CSE	20+5	M.Tech. in Computer Science & Engg.	17	17
E&I	10+2	Instrumentation Engg.	10	10
PHY	20+5	M.Sc. in Applied Physics	6	6
CHEM	20+5	M.Sc. in Applied Chemistry	9	9
MATH	20+5	M.Sc. in Mathematics	6	6
MS(MBA)	60	MBA	34	34
Grand Total (M.Tech. + M.Sc. + MBA) =			**277**	**277**

*(Regular & Sponsored)

The following is a summary of the total number of PG students on the roll of NIT Silchar during 2017-18

Courses	CE	ME	EE	ECE	CSE	E&I	PHY	CHY	MATHS	HSS	MBA	TOTAL
M.Tech	170	93	62	29	28	18						400
M.SC							15	19	16			50
MBA											78	78
											Total	**528**

CE= Civil Engineering, ME= Mechanical Engineering, EE= Electrical Engineering , MS=Management Studies.
ECE= Electronics & Communication Engineering, CSE= Computer Science & Engineering,
E&I= Electronics &Instrumentation Engg .PHY= Physics, CHEM= Chemistry, MATH= Mathematics.
MBA= Master of Business Administration.

Students Strength

The following table shows the total student strength on the roll (course wise) of the year 2017-18 at NIT Silchar.

Courses		Branches	Total students strength (course-wise)
UG (B.Tech.)		Civil Engineering	447
		Mechanical Engineering	466
		Electrical Engineering	440
		Electronics & Communication Engg.	455
		Computer Science& Engineering	382
		Electronics & Instrumentation Engg.	210
PG	M.Tech	Postgraduate Course (all engineering department)	400
	M.Sc.	Applied Chemistry/Applied Physics/Mathematics	50
	Management studies	MBA	78
GRAND TOTAL			**2928**

Awards

a. The Institute offered the following awards during the period under consideration:

(A)	**Institute Gold Medal**		
Sl.No.	**Title of the Medal**	**Department**	**Awardees**
1.	Best B.Tech. Graduate	Electrical Engineering	Amit Kumar Das

(B)	**Institute Silver Medals**	
Sl.No.	**Title of the Medal**	**Awardees**
1.	Best B.Tech. Graduate in Mechanical Engineering	Navneet Goswami
2.	Best B.Tech. Graduate in Electronics& Communication Engineering	Lalit Manam
3.	Best B.Tech. Graduate in Computer Science &Engineering.	Shruti Datta Gupta
4.	Best B.Tech. Graduate in Civil Engg.	Deepjyoti Nath
5	Best B.Tech. Graduate in Electronics and Instrumentation Engg.	Anjishnu Bhattacharjee

b. Sponsored awards -

(C)	**Kalikrishna Mrinalini Krori Gold Medal**		
Sl.No.	**Title of the Medal**	**Department**	**Awardees**
1.	Best B.Tech. Graduate on overall performance, (Instituted by Dr. K.D Krori, Guwahati)	Computer Science & Engg.	Shruti Datta Gupta

(D)	**Saswata Purkayastha Memorial Gold Medal**		
Sl.No.	**Title of the Medal**	**Department**	**Awardees**
1.	Best B.Tech. Graduate on overall performance, (Instituted by Shree Niharendu Purkayastha, Silchar)	Mechanical Engg.	Mrinal Shrivastav

EXAMINATION DETAILS

* Even semester examinations were held in the month of May 2017 (both UG & PG)
* Odd semester examinations were held in the month of Nov-Dec. 2017 (both UG & PG).

Statistics of the Results

a) End semester examination Held in May 2017

Programme	Branch & Course	No. of Students appeared	Passed & Eligible for Degree	Failed/ Withheld	Percentage passed	Remarks
M.Tech	Civil Engg. (Water Resources Engg.)	17	17	--	100%	
	Civil Engg. (Structural Dynamics & Earthquake Engg.)	17	17	--	100%	
	Civil Engg.(Transportation Engg)	17	17	--	100%	
	Civil Engg.(Structural Engineering)	19	19	--	100%	
	Civil Engg.(Geotechnical Engg)	20	20	--	100%	
	Mech. Engg. (Thermal Engg.)	14	14	--	100%	
	Mech. Engg. (Materials & Manufacturing Technology)	5	5	--	100%	
	Mech. Engg.(Design & Manufacturing)	14	14	--	100%	
	Mech. Engg.(CAM-CAM & Automation)	8	8	--	100%	
	Electrical Engg. (Power & Energy system Engg.)	9	9	--	100%	
	Electrical Engg. (Control & Industrial Automation Engg)	4	4	--	100%	
	Electronics & Comm. Engg. (Communication & Signal Process Engineering)	7	7	--	100%	
	Electronics & Comm. Engg. (Microelectronics & VLSI Design)	11	11	--	100%	
	Computer Science & Engg	19	18	1	94.74%	
	Instrumentation Engineering	9	9	--	100%	
M.Sc	Chemistry (Applied Chemistry)	18	18	--	100%	
	Physics (Applied Physics)	14	14	--	100%	
	Mathematics	12	12	--	100%	
MBA	Master of Business Administration(MBA)	49	49	--	100%	
B.Tech.	Civil Engg.	117	105	12	89.74%	
	Mechanical Engg.	134	122	12	91.04%	
	Electrical Engg.	84	72	12	85.71%	
	Electronics & Comm. Engg.	115	98	17	85.22%	
	Computer Sc. & Engg.	81	69	12	85.19%	
	Electronics & Instrumentation	53	49	4	92.45%	

b) List of candidates qualified for the Degree of Bachelor of Technology after 14th Convocation held in May 2016 and before End semester Examination held in May 2017

Branch	Appeared	Passed
Civil Engg (B.Tech)	8	8
Mechanical Engineering (B.Tech)	11	11
Electrical Engineering (B.Tech)	5	5
Electronics & Communication Engg. (B.Tech)	6	6
Computer Science & Engg. (B.Tech)	5	5
Electronics & Instrumentation Engg (B.Tech)	-	-
Mech. Engg. (Thermal Engg.)	1	1
Computer Science & Engg	1	1

Placement Statistics

Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total	Remarks
1.	Yodlee	18-19 Jul 17 Pool campus at NIT Agartala	8.7 LPA	-	-	-	-	2	-	-	-	2	
2.	John Deere	24-25 Jul 17	6.1 LPA	-	1	-	-	3	-	-	-	4	
3.	Philips India Ltd	27-29 Jul 17	6.5 LPA	-	-	-	-	8	-	-	-	8	
4.	Wells Fargo	7-9 Aug 17	8 LPA	-	-	-	5	8	-	-	-	13	
5.	Bajaj Auto Ltd.	9 Aug 17 Pool campus at Pune	8 LPA	-	1	-	-	-	-	-	-	1	
6.	Oracle GBU	10 Aug 17 Pool campus at NIT Agartala	9 LPA	-	-	-	3	2	-	-	-	5	
7.	Johnson Controls	12-14 Aug 17	4.7 LPA	-	-	2	2	-	1	-	-	5	
8.	Ashok Leyland	1-18 Aug 18 Pool campus at AEC	4 LPA	-	5	-	-	-	-	-	-	5	
9.	CGI Information SYS & Mgmt. Consultants	22-24 Aug 17	7.12 LPA	-	-	-	2	14	-	-	-	16	
10.	Sun Pharmaceuticals	28-30 Aug 17	5.5 LPA	-	RA	RA	-	-	RA	-			Result awaiting
11.	Wipro Ltd	29-01 Sep 17	5 LPA	-	4	4	20	7	5	-	CSE-1	40+1	
12.	Goldman Sachs	1-3 Sep 17	22 LPA	-	-	-	0	2	0	-	-	2	
13.	L&T, ECC Chennai	3-5 Sep 17	UG-5.11 LPA PG-5.38 LPA	12	5	5	-	-	-	-	Struc-1 Struc Dy-1	22+2	
14.	ZS Associates	5 Sep 17 Pool at Jadavpur, University	6.53 LPA	-	2	-	1	-	-	-	-	3	
15.	Accenture	6-9 Sep 17	3.5 LPA	8	11	10	13	5	5	-	-	52	
16.	L&T Heavy Engineering, Mumbai	8-9 Sep 17	4.87 LPA	-	-	1	1	-	1	-	-	3	
17.	Mphasis, Mysore Road, Bangalore	13-15 Sep 17	4 LPA	-	-	1	3	3	2	-	-	9	
18.	MU Sigma	15-16 Sep 17	21 Lakhs(over 3 years)	1	4	3	4	-	5	-	-	17	
19.	Maruti Suzuki	19-20 Sep 17 Pool campus at NIT Agartala	6.4 LPA	-	4	-	-	-	-	-	-	4	
20.	UNISYS	4-6 Oct 17	6.5 LPA	-	-	-	-	5	-	-	-	5	
21.	Medlife	7-9 Oct 17	11 LPA	-	-	-	-	3	-	-	-	3	
22.	IBM	5-8 Oct 17	3.2 LPA	-	-	12	9	3	5	-	-	29	
23.	Deloitte, Bangalore	9-1 Oct 17	6.2 LPA	1	2	2	2	4	3	-	CSE-1	14+1=15	
24.	First American India	16-18 Oct 17	7 LPA	-	-	-	-	-	-	-	-	0	

Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total	Remarks
25.	Infosys	23-26 Oct 17	3.2 LPA	9	9	9	10	2	3		CSE-3	42+3=45	
26.	Maple Construction	25-27 Oct 17	4 LPA	RA	-	-	-	-	-	-	-		Result awaiting
27.	Virtusa, Chennai	26-28 Oct 17	5 LPA	-	-	-	1	2	-	-	-	3	
28.	OFSS	30 Oct-01 Nov 17	5.17 UG 6.19 PG				7	1	2		CSE-2	10+2=12	
29.	Nestle	31 Oct 17	5 LPA	-	-	-	-	-	-	Mktg 2	-	2	
		Pool at Tezpur University											
30.	Concept Education	01-03 Nov 17	4 LPA	-	1	1	-	1	-	-	-	3	
31.	DENSO International (I) Ltd	7-9 Nov 17	4.24 LPA	-	-	2	2	-	-	-	-	4	
32.	Bajaj Electricals	17-18 Nov 17	4.6	-	-	-	-	-	-	Mktg 3	-	3	
33.	Tata Motors	20-21 Nov 17	6 LPA	-	6	-	-	-	-	-	-	6	
34.	Sify Technologies Ltd. Chennai	21-23 Nov 17	5.5 LPA	-	-	-	4					4	
35.	HSBC	24-26 Nov 17	7 LPA	-	-	1	-	7	-	-	-	8	
36.	Fiat Automobile	8-10 Dec 17	7 LPA	-	3	-	-	-	-	-	-	3	
37.	Nokia , Bangalore	10-12 Dec 17	7 LPA	-	-		3	-	-	-	-	3	
38.	Karvy Stock Broking Ltd.	11 Jan 18	2.5 LPA	-	-	-	-	-	-	Fin-5	-	5	
		Pool at Assam University											
39.	Sankalp Semi-conductors, Kolkata	11-12 Dec 17	4 LPA	-	-	-	1	-	-	-	-	1	
40.	BPCL	17-21 Dec 17	17 LPA	6	5	-	-	1	-	-	-	12	
41.	IOCL	17-19 Jan 18	16 LPA	-	6	4	-	-	-	-	-	10	
42.	EVIVE software Analytics	20 Jan 18	5.5 LPA	-	-	1	1	-	1	-	-	3	
		On line interview											
43.	Vedanta	22-23 Jan 18	7.95 LPA	-	2	1	-		4	-	-	7	
44.	Samsung R&D	23-25 Jan 18	8.88 LPA	-	-	-	-	2	-	-	-	2	
45.	KEC	23-25 Jan 18	4.75 LPA	1	-	3	-	-	-	-	-	4	
46.	Reliance Jio Infocomm	28-30 Jan 18	5.3 LPA	-	-	-	2	3				5	
		4-5 Feb 18	4.5 LPA	-	-	-	2	9	-	-	-	11	
47.	Capgemini	29 Jan-02 Feb 18	4 LPA	-	-	1	6	2	-	-	-	9	
48.	ITC Ltd.	2 Feb 18	4.4 LPA	-	-	-	-	-	-	Mktg-1	-	1	
		Interview at Guwahati Office											
49.	Oppo Mobiles Pvt Ltd.	7 Feb 18	2 LPA	-	-	-	-	-	-	Mktg-1		1	
		Pool at Guwahati University											

Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total	Remarks
50.	Jaro Education	8 Feb 18	6.66 LPA	-	-	-	-	-	-	Mktg-1	-	1	
		Pool at Jadavpur University											
51.	Pune Institute of Business Management	13-14 Feb 18	4 LPA	-	-	-	-	-	-	HR-4 Mktg-2 Fin-2	-	8	
52.	Marico, Mumbai	17 Feb 18	5.5 LPA	-	-	-	-	-	-	Mktg-1	-	1	
53.	WSP Group, Noida	24 Feb 18	4.56	-	-	-	-	-	-	-	WR-1 TPT-1	2	
		Interview at Noida & Bangalore											
54.	HDFC	26 Feb 18	3 LPA	-	-	-	-	-	-	Mktg-3 Fin-3	-	6	
55.	Mahindra	28 Feb 18	6 LPA	-	2	-	-	-	-	-	-	2	
56.	Cognizant Technology Solution, Kolkata	10-11 Mar 18	6.8 LPA	-	-	1	4	-	1	-	-	6	
57.	AMDOCS	17-18 Mar 19	6 LPA	-	-	-	1	-	-	-	-	1	
		Pool campus at Agartala											
58.	Affinity Classes	Mar 2018	6 LPA	-	-	-	1	-	-	-	-	1	
		Interview at Guwahati											
59.	Sig Tuple Tech. Pvt. Ltd.	Mar 2018	10 LPA	-	-	-	-	1	-	-	-	1	
60.	Ittiam Systems, Bangalore	23-24 Mar 18	9.35 LPA UG 10.10 LPA PG	-	-	-	-	2	-	-	-	2	
61.	GOIBIBO	27-30 Mar 18	9 LPA	-	-	-	2	8	-	-	-	10	
62.	ICICI prudential Life	27 Mar 18	2 LPA	-	-	-	-	-	-	Mktg-2 Fin-4 HR-1	-	7	
		Interview at Silchar Office											
63.	Oil Indian Ltd.	O2-04 Apr 18	13 LPA	1	4	2	-	-	-	-	-	7	
64.	Brahmos Aerospace	4-6 Apr 18	10.7 LPA	-	2	-	1	-	-	-	-	3	
65.	Venera Technologies, Noida	10-12 Ap4 18	5.7 LPA	-	-	-	-	1	-	-	-	1	
66.	JCB , India	11-12 Apr 18	4 LPA	-	1	-	-	-	-	-	-	1	
67.	Nidhi Creative Infrastructure Pvt Ltd	17 Apr 18	MBA-1.8 B.tech -2.16	2	2	-	-	-	-	HR-1	-	4+1	
68.	Max Cement, Guwahati	21-23 Apr 18	2.16 LPA	3	-	2	-	-	1	-	-	6	
69.	Valeo India Pvt Ltd	22-24 Apr 18	4.5 LPA	-	-	0	0	0	0	-	-	0	
70.	BEL, Ghaziabad	24-25 Apr 18	10.02 LPA	-	1	-	4		-	-	-	5	
		17-19 May 18		-	-	-	3	-	-	-	-	3	
71.	Power System Operation Corpn. Ltd.(POSOCO)	4 May 18	12 LPA	-	-	3	-	-	-	-	-	3	
		Pool Campus at Guwahati											
72.	Eduvert Service Pvt Ltd. (IITian Tutor)	16 May 18	5 LPA	-	1	2		1				4	
73.	Coffee Day Beverages, Bangalore	14-17 May 18	UG-.3.3 LPA PG-5.1 LPA)	-	-	RA	RA	-	RA	Mktg-2	-	2	Result awaiting

Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total	Remarks
74.	PGCIL	17-18 May 18	12 LPA	1	-	7	-	-	-	-	-	8	
75.	Hevells	15-17 Jun 17	4.8 LPA	-	-	7	-	-	-	-	-	7	
76.	Brahmaputra Cracker & Polymer Ltd, Dibrugarh	20 Jun 18 Interview at Guwahati	3 LPA	1	-	-	-	2	3	-	-	6	
77.	Tata Project	23 Jul 18	4.5 LPA	1	-	-	-	-	-	-	-	1	
78.	MyKarma	22 Jun 18	9.5 LPA	-	-	-	-	-	1	-	-	1	
79.	Nissan Digital	25 Jun 18	6.25 LPA	-	-	1	-	-	--	-	-	1	
80.	Bridge and Roof	27 Jun 18	3.36 LPA	6	1	-	-	-	-	-	-	7	
81.	Infovity	28 Jun 18	5 LPA	-	-	-	1	-	-	-	-	1	
82.	Tata Projects	23 Jul 18	4.5 LPA	1	-	-	-	-	-	-	-	1	
83.	Schulumberger	10 Aug 18	5.5	-	1	-	-	-	-	-	-	1	
84.	EIL	26 Aug 18	14 LPA	-	-	-	-	-	3	-	-	3	

Branch	***CE***	***ME***	***EE***	***ECE***	***CSE***	***EI***	***MBA***	***M.Tech.***	***Total***	***Remarks***
****Total No of students***	110+***6***	127+***2***	104+***4***	116	94+***4***	53	44	179	604+***16*** (B.Tech.)	
Total No of eligible students	***102***	***112***	***74***	***94***	***77***	***37***	***44***	***169***	***496*** (B.Tech)	
Total No. Of Job offers (till date)	***53***	***86***	***88***	***121***	***114***	***45***	***38***	***11***	***508***	
Total No. Of Job Placed	***43***	***72***	***60***	***79***	***76***	***31***	***36***	***9***	***361***	
Average Job Placed %(B.Tech. – 72.78%)	***42.15***	***64.28***	***81.08***	***84.04***	***98.7***	***83.78***	***81.81***	5.32		
Average Job Offer % (B.Tech. 102.4)	51.96	76.78	118.91	128.72	148.05	124.32	***86.36***	6.5		
Average Salary(B.Tech. –6.08 LPA)	5.68 ***LPA***	6.8 ***LPA***	5.94 ***LPA***	5.36 ***LPA***	6.74 ***LPA***	5.76 ***LPA***	3.25 ***LPA***	4.82 ***LPA***		
Median Salary (B.Tech. 6 .35LPA)	***6 LPA***	***6 LPA***	***6 LPA***	***6.25 LPA***	***6.15 LPA***	***7 LPA***	***4.2 LPA***	***5.19 LPA***		
Highest package	***B.Tech. –22 LPA***			***M.Tech. - 6.2 LPA***				***MBA -6.66 LPA***		
Average Package	***B.Tech. –6.08 LPA***			***M.Tech. – 4.82 LPA***				***MBA – 3.25 LPA***		

*Total No of students - Bold & Italic indicates foreign students.

Departments

1. Name of the Department :-

Civil Engineering



1.1 Academic Staff:

HEAD: Dr. Upendra Kumar

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
Prof. Ashim Kanti Dey	Dr. T. Rahman (under suspension)	Dr. Parthajit Roy
Prof. Satyabrata Choudhury	Dr. P. Rajbongshi (upto 17/9/17)	Mrs. Parbin Sultana
Prof. Parthasarathi Choudhury	Dr. Asit Kumar Das	Dr. Susmita Ghosh
Prof. A. K. Barbhuiya	Dr. Upendra Kumar	Dr. Debjit Bhowmik
Prof. Mokaddes Ali Ahmed		Dr. Nitesh A.
Prof. A. I. Laskar		Mrs. Nirmali Borthakur
Prof. D. Chakrabarty		Dr. Arjun Sil
		Dr. Dillip Kumar Ghose
		Dr. Lakshmi Vara Prasad. M
		Dr. Briti Sundar Sil
		Dr. Monowar Hussain
		Dr. Khwairakpam Lakshman Singh
		Dr. Prashanth J.
		Dr. Nirmalendu Debnath
		Dr. Bijan Kumar Roy
		Mr. Pallab Das

Visiting Professor (If any): NIL

1.2 Distinction Achieved

a) By Student: NIL

b) By Faculty Member:

1. **Dr. Nitesh A.** was felicitated with **Young Faculty Award** for Contribution in Earthquake Engineering by Venus International.

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr. Debjit Bhowmik	National conference on Recent Advancement of Geotechnical Investigations and Ground Improvement Techniques (RAGIGIT 2017)	AIMIL and HEICO	14th – 15th May, 2017
2	Dr. Dillip K Ghose	Recent advances on water and environment studies	TEQIP-III	1 week
3	Dr. Nitesh A., Dr. MLV Prasad	Rapid Visual Screening of Built - up Facilities at Silchar	National Institute of Disaster Management, New Delhi and TEQIP III, NIT Silchar	3 days
4	Dr. Monowar Hussain	National Conference on Recent Advancement in Geotechnical Investigation and Groud Improvement Technique (RAGIGIT 2017)	NITS Geotechnical Society, NIT Silchar	14th - 15th May, 2017
5	Dr. Monowar Hussain	Resource person in "One day National Seminar on GEOTECHNICAL PROBLEMS IN SOUTHERN ASSAM: CAUSES AND REMEDIES	Silchar Local Centre, Institution of Engineers (I) and Silchar Chapter of Indian Geotechnical Society	9th Sept, 2017.
6	Prof. Upendra Kumar and Dr. Prashanth J.	National Conference on Recent Advances in Environmental Science and Engineering (RAESE – 2018)	TEQIP-III	01 day
7	Parthajit Roy	Training on River Flow Processes Modelling	TEQIP-III	9th – 13th Oct, 2017
8	Parthajit Roy	National Conference on "River Flow Processes Modeling"	TEQIP-III	11th Nov, 2017

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. Nitesh A.	GIAN on "Structural Health Monitoring by Full Field Measurement"	NIT Hamirpur
2.	Dr. Nitesh A.	GIAN Course on "Advances in Reliability Engineering"	NIT Jalandhar
3.	Dr. Nitesh A.	GIAN Course on "Plasticity and Constitutive Modeling of Soil and Finite Element Application"	IIT Delhi
4.	Dr. Kh. Lakshman Singh	Two Days " Train the Trainer" National Workshop on Massive Open Online Courses (MOOCs), held on 26-27 August, 2017	NIT Silchar and Thapar University (Patiala)
5.	Dr. Kh. Lakshman Singh	AICTE approved Faculty Development Programme on "Foundation Program in ICT for	IIT Bombay

		Education". 3rd August to 7th September, 2017	
6.	Dr. Kh. Lakshman Singh	One Week Short term Training Program on "Recent Advances on Water and Environment Studies" held during 13th to 17th February, 2018	NIT Silchar
7.	Dr. Monowar Hussain	Indian Geotechnical Conference, IGC 2017	IIT Guwahati
8.	Parbin Sultana	IGC 2017, Annual conference of Indian Geotechnical Society	IIT Guwahati
9.	Dr. Susmita Ghosh	Recent advancements on Water and Enviornment studies sponsored by TEQIP-III 13/02/2018 to 17/02/2018	National Institute of Technmology, Silchar
10.	Prof. U. Kumar	One week STTP on "*Recent Advances on Water and Environment Studies*" 13-17 February 2018, TEQIP III	NIT Silchar.

1.4 Research Development

a) Ph.D. Programme (Specializations): NIL

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
7	0	44

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Computational Geomechanics	Research in the field of Geomechanics, which is linked to PG and Ph.D. program in Geotechnical Engineering
2	Earthquake Engineering Lab	M.Tech. in Structural Dynamics and Earthquake Engineering
3	Geotechnical lab	Developed Geotechnical lab

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	"Condition Assessment & Reliability of Existing Bridges (Indian Railway & others) in North East India due to earthquake and deterioration hazards".	Dr. Arjun Sil	DST-SERB	19 lacs	03 years
2	"Development of Site Specific Design Response Spectrum [DRS] for the city of Silchar, Assam, India"	Dr. Arjun Sil	STIS	2.8 lacs	02 years
3	Effect of variations in input-excitation on the performance of limited-sensors based operational modal analysis	Dr. N. Debnath	DST-SERB	31.67	03 years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr. A. I. Laskar	ACI Structural Journal	1	2018
2	Dr. A. I. Laskar	Construction And Building Material	1	2018
3	Dr. A. I. Laskar	*Arabian Journal for Science and Engineering*	1	2017
4	Dr. Arjun Sil	Journal of Earthquake Engineering(Taylor &Francis)	1	2017-2018
5	Dr. Debjit Bhowmik	Geotechnical and Geological Engineering	1	2017
6	Dr. Dillip K Ghose	KSCE journal of Civil Engineering	6	2017-18
7	Dr. Dillip K Ghose	International journal of Hydrology science and Technology	1	2017-18
8	Dr. Dillip K. Ghose	Journal of Science and Technology(Pertanika)	1	2017-18
9	Dr. M. Hussain	Construction and Building Materials(Elsevier)	1	2018
10	Dr. U. Kumar	Carbohydrate Polymers (Elsevier)	2	1997
11	Dr. Prashanth J	Journal of The Institution of Engineers (India): Series A	1	2018
12	Dr. Prashanth J	International Journal of Earth Science and Engineering	2	2018
13	Dr. S Choudhury	Journal of IEI (I) series A	1	2018
14	Dr.L.V.Prasad .M	International Journal of Civil Engineering	02	2017-18
15	Dr. N. Debnath	Journal of Vibration and Control	1	2018
16	Dr. N. Debnath	Engineering Structures	4	2017
17	Dr. N. Debnath	Journal of The Institution of Engineers (India): Series A	1	2017

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr. Dillip K. Ghose	2nd International Conference onSmart Computing & Informatics (SCI-2018)
2.	Dr. M. Hussain	Resource person in "Colloquium on Research in civil engg. During 27th to 28th Feb.2017, organized by Deptt. of Civil Engg. , College of Engg. Kidangoor, Kerala."
3.	Dr. M. Hussain	National Conference on Recent Advancement in Geotechnical Investigation and Groud Improvement Technique (RAGIGIT 2017), on 14th& 15th May, 2017, Silchar, India, organized by NITS Geotechnical Society, NIT Silchar
4.	Dr. M. Hussain	Resource person in "One day National Seminar on GEOTECHNICAL PROBLEMS IN SOUTHERN ASSAM CAUSES AND REMEDIES, Organised by Silchar Local Centre, Institution of Engineers (I) and Silchar Chapter Indian Geotechnical Society on 9th September 2017.

1.5 PUBLICATION

a) International Journal(s):

1. R A Mozumder, A I Laskar, M Hussain. Empirical Approach For Strength Prediction of Geopolymer Stabilized Clayey Soil Using Support Vector Machines, Construction and Building Materials, Elsevier, 132 (2017), 412-424.

2. R A Mozumder, Biswajit Roy, A I Laskar. Support Vector Regression Approach to Predict the Strength of FRP Confined Concrete. Arabian Journal for Science and Engineering, Springer, 42:1129-1146 (2017).

3. Biswajit Roy, Al Laskar. Cyclic behavior of in-situ exterior beam-column subassemblies with cold joint in column. Engineering Structures, Elsevier, 132 (2017), 822-833.

4. B Singhi, A I Laskar, M A Ahmed. Mechanical Behavior and Sulfate Resistance of Alkali Activated Stabilised Clay, Geotech Geol Engineering, Springer, 35 (2017): 1907-1920.

5. Biswajit Roy, Al Laskar. Beam–column subassemblies with construction joint in columns above and below the beam, Magazine of Concrete Research, http://dx.doi.org/10.1680/jmacr.17.00155

6. Roy Biswajit, Al Laskar. Cyclic performance of Beam–column subassemblies with construction joint in columns retrofitted with GFRP, Structures, Elsevier, 14 (2018) 290-300.

7. Amit Zarola and Arjun Sil (2017). “Artificial Neural Networks (ANN) and Stochastic techniques to estimate earthquake occurrences in Northeast region of India” Annals of Geophysics, INGV. Vol.60 (4). IF-1.374

8. Longbir Singnar, and Arjun Sil (2017). “Assessment of soil liquefaction potential of Guwahati city based on standard penetration test data.”Disaster Advances (SciE), Vol.10(12),pp-10-21)

9. Arjun Sil and Jyotirmoy Haloi (2017). "Empirical Correlations with Standard Penetration Test (SPT)-N for Estimating Shear Wave Velocity Applicable to any Region." International Journal of Geosynthetics and Ground Engineering (Springer Publication, doi.org/10.1007/s40891-017-0099-1)

10. Amit Zarola and Arjun Sil (2017)"Quantification of recent seismicity and a back propagation Neural Network for forecasting of earthquake magnitude in Northeast Region of India"Disaster Advances (SciE), Vol.10.(6)/2017.pp-17-34.

11. Arjun Sil (2017). "Spatial analysis of IISc campus using remote sensing data and image processing (GIS) technique" Disaster Advances (SciE). Vol.10.(4)/2017.pp-52-59

12. Bijan Kumar Roy (2017), Optimum Performance of Bridge Isolation System under Parameter Uncertainty, International Journal of Geotechnical Earthquake Engineering, Volume No. 8, Issue No 2, IGI Global, DOI: 10.4018/IJGEE.2017070105.

13. U Das, P J Roy, D K Ghose. (2017) Modeling Water Table Depth using Adaptive Neuro-Fuzzy Inference System, Modeling Water Table Depth using Adaptive Neuro-Fuzzy Inference System, Taylor & Francis, DOI: 10.1080/09715010.2017.1420497.

14. D K Ghose. (2017) Sediment yield prediction using neural networks at a watershed in south east India, ISH Journal of Hydraulic Engineering, Taylor & Francis, DOI: 10.1080/09715010.2017.1408432.

15. Ruhul Amin Mozumder, Aminul Islam Laskar, Monowar Hussain (2017)“Empirical approach for strength prediction of geopolymer stabilized clayey soil using support vector machines” Construction and Building Materials 132, 412–424.

16. Ruhul Amin Mozumder, Aminul Islam Laskar and Monowar Hussain (2018) “Penetrability prediction of microfine cement grout in granular soil using Artificial Intelligence techniques”, Tunnelling and Underground Space Technology, 72, 131–144.

17. Laskar, N., and Kumar, U., “SEM, FTIR and EDAX Studies for the Removal of Safranin Dye from Water Bodies using Modified Biomaterial – Bambusa Tulda.” IOP Conf. Series: Materials Science and Engineering 225 (2017) 012105. doi:10.1088/1757-899X/225/1/012105. IOPscience - Journal. Indexed by Scopus, ISSN: 1757-8981

18. Dey, A.K., Kumar, U., (2017). Adsorption of Reactive red 195 from polluted water upon Na2CO3 Modified Jute fibre. International Journal of Engineering and Technology. 9(3S) 53-58. DOI: 10.21817/ijet/2017/v9i3/170903S011. Scopus Journal

19. Dey, A.K., and Kumar, U., "Adsorption of anionic azo dye Congo Red from aqueous solution onto NaOH-modified jute fibre", Desalination and Water Treatment, 92 (2017) 301–308 (Taylor & Francis), Indexed by Scopus, SCIE. doi: 10.5004/dwt.2017.21484.
20. Pallab Das, P. and S. Choudhury, 2018, "Experimental Study on Fibre-Reinforced Concrete Beam-Column Joint with Ductile Detailing Under Reverse Cyclic Loading", International Journal of Engineering & Technology, v.7 special issue, pp. 85-89.
21. Umesh Das, Parthajit Roy & DillipGhose, "Modeling Water Table Depth using Adaptive Neuro-Fuzzy Inference System", ISH Journal of Hydraulic Engineering (Scopus), Accepted, Dec 12, 2017, https://doi.org/10.1080/09715010.2017.1420497.
22. Joseph Tripura & Parthajit Roy, "Flow Forecasting in Multiple Sections of a River System", KSCE Journal of Civil Engineering (SCI), DOI: 10.1007/s12205-017-1514-9, Vol. 21 (2), 2016, pp 512-522.

b) National Journal(s):

1. Arjun Sil and Thaihamdau Longmailai (2017). "Drift Reliability Assessment of a Four Storey Residential Building under Seismic Loading Considering Multiple Factors." Journal of the Institution of Engineers (India): Series A. (Springer Publication, doi.org/10.1007/s40030-017-0216-0)
2. Sultana P. and Dey A. K. (2018), "Estimation of Ultimate Bearing Capacity of Footings on Soft Clay from Plate Load Test Data Considering Variability", Indian Geotechnical Journal, DOI: 10.1007/s40098-018-0311-9
3. Prashanth Janardhan, Subba Rao and Kiran G. Shirlal, (2018), "Reshaping berm breakwaters: A physical model study", Indian Journal of Geo-Marine Sciences, Vol. 47 (05), May 2018, 1050-1057.

c) International Conference(s):

1) Shulanki Pal, Bijan Kumar Roy, Satyabrata Choudhury, Mitigation of Structural Vibration Response using Tuned Liquid Damper under Random Earthquake, Advances in Construction Materials and Structures (ACMS 2018), IIT Roorkee, 7-8 March 2018.
2) Saha, H.S. and Bhowmik, D. (2018), "Effect of glass fibre on shear strength of soil", Proceedings of the 8th International Conference on Key Engineering Materials (ICKEM 2018), Vol.: 775, pp. 603-609, March 16-18, 2018, Osaka, Japan.
3) D K Ghose, S samantaray, S samantaray, A Rath. (2017) Removal of turbidity using Dual media filter, ASCE India conf, IIT Delhi, 2017, IIT Delhi. (ASCE-SCOPUS)
4) D K Ghose, S samantaray, MAgasti, J Munda, P C Swain. (2017) Stabilization of black cotton soil using ground granulated blast furnace slag, ASCE India conf, IIT Delhi, 2017, IIT Delhi. (ASCE-SCOPUS)
5) D K Ghose. (2017) Modeling runoff using Feed forward-back propagation and Layer recurrent neural networks, ICDECT-2017, Symbiosis Institute of Technology, India, 2017, Symbiosis Institute of Technology, Pune, India. (Springer link-SCOPUS).
6) D K Ghose, S samantaray. (2017) Modelling sediment concentration using back propagation neural network and regression coupled with genetic algorithm, ICSCC-2017, NIT Kurukshetra, 2017, NIT Kurukshetra. (Proceedia computer science-Elesvier-SCOPUS)
7) D K Ghose. (2017) Measuring discharge using Back propagation neural network: a case study on Brahmani river basin. FICTA-2017, KIIT, 2017, KIIT BBSR. (Springer link-SCOPUS)
8) D K Ghose. (2017) Prediction of suspended sediment load using Radial basis neural network, FICTA-2017, KIIT, 2017, KIIT BBSR. (Springer link-SCOPUS)
9) Singh, V., Nitesh, A., "Model Updating of a Real RC Building using Vibration Data from Smartphone", 16th Symposium on Earthquake Engineering, Roorkee, India, Dec 2018

10) Maurya, K. K., Nitesh, A.,"Evaluation od Procedure for Blast Resistant Design of Structures", International conference by School of Civil Engineering VIT University Vellore and ASCE Indian Section, 2017

11) Ayan Dutta, Kh. Lakshman Singh, "Fatigue Life Prediction Models in Asphalt Materials", International Conference on Innovations and Research in Sciences, Technology, Commerce, Business Management, Social Science and Humanities for Sustainable Development, Sukh Chandra Mishra Industrial training Institute, Paktola, Darbhanga Bihar, 24-25 March, 2018

12) Bhattacharya, A.; Ghosh, S. and Mukherjee, K." Multi-decadal Mass Budget and Area Change of Some Eastern Himalayan Glaciers (Nepal-Sikkim) Using Remote Sensing Techniques". RAIT 2018: IEEE international conference. ISM Dhanbad, March 15-17, 2018.

13) Ghosh, S. Gupta, S and Ghosh, S." Modelling of Groundwater Development Using Arc-SWAT and MODFLOW" Sustainable Technologies for Intelligent Water management (STIWM) 2018, International Conference, IIT Roorkee, February16-19, 2018.

14) Pallab Das, Effect of Infill and Configurations of Shear Wall in RC Frame Buildings, 7th ICEAS 2017 International Conference (organized by SEAS- International), Toronto, ON, Canada on 27 and 28 June, 2017

15) Prashanth Janardhan, Harish Narayan and Sukomal Mandal, (2017), "Prediction of Tides off Mithividi, Gujarat – West Coast of India", Proceedings of the 37th IAHR World Congress, August 13 – 18, 2017, Kuala Lumpur, Malaysia, 5366-5372.

16) Prashanth Janardhan, Jupiter Rajkumar, Harish N., M L V Prasad, (2017), "Hydrological Modelling and GIS for Early Flood Warning System", Conference Abstract on International Conference on Geo-Spatial Technologies for Natural Resource Management and Climate Change, December 21 – 22, 2017, Hyderabad, Telengana, India, 51.

17) Lakshman Singh Bisht, Mokaddes Ali Ahmed, "Paratransit System Characteristics in Mid-size City Silchar, India", Urbanization Challenges in Emerging Economics, ASCE India Conference 2017, 12-14 December, IIT Delhi, Book of Abstract: 0078_0116_000217.

18) Mokaddes Ali Ahmed, Khandakar Minhajul Islam, "Evaluation of Pedestrain level of Service in Presence of Street Vendor : Kolkata", Urbanization Challenges in Emerging Economics, ASCE India Conference 2017, 12-14 December, IIT Delhi, Book of Abstract: 0078_0116_000378.

19) Ranadip Mandal, Mokaddes Ali Ahmed, "Assessment of Qualitative Level-of-Service for Pedestrains : Silchar, Assam", Urbanization Challenges in Emerging Economics, ASCE India Conference 2017, 12-14 December, IIT Delhi, Book of Abstract: 0078_0116_000434.

20) M.L.V.Prasad et.al, "Fibres Self Compacting Concrete Strength Prediction Using ANFIS Analytical Model" Fourth International Conference on Computational Science and Technology (ICCST2017), held on 29th – 30th November 2017 at Kuala Lumpur, Malaysia.

21) M.L.V.Prasad et.al, "A Review on The Application of Remote Sensing & GIS Technologies for Disasters Management", International Conference on Geo-Spatial Technology for Natural Resource Management & Climate Change, 21 - 22 December 2017, to be held at NIRD&PR, Rajendranagar, Hyderabad.

22) M.L.V.Prasad et.al, A Review on Mechanical Properties of Magnesium Based Nano Composites, International Conference on Electrical, Electronics, Materials and Applied Science, 22-23 Dec 2017, Secundrabad,Telangana, India, IP Conf. Proc. 1952, 020069-1–020069-8; https://doi.org/10.1063/1.5032031.

23) M.L.V.Prasad et.al, Strength Study of Pavement with Self Compacting Concrete, 6th International Conference on Contemporary Engineering and Technology 2018 (ICCET), Prince Shri Venkateshwara Padmavathy Engineering College, Ponmar, Chennai, 10th -11th March 2018.

d) National Conference(s):

1) Das, S., and Bhowmik, D. (2017) "Small Strain Dynamic Behavior of Sand and Sand-Crumb Rubber Mixture in Dry Condition" Proceedings of Indian Geotechnical Conference 2017 GeoNEst14-16 December 2017, IIT Guwahati, India.
2) Sarkar, R. and Bhowmik, D. (2017)"Effect of Polypropylene Fiber Reinforcement on Cement Stabilization of Local Red soil in Silchar Area" Proceedings of Indian Geotechnical Conference 2017 GeoNEst14-16 December 2017, IIT Guwahati, India.
3) Das, S., and Bhowmik, D. (2017) "Study of Small Strain Dynamic Behavior of Crumb Rubber Mixed with Sand using Resonant Column Apparatus" Proceedings of National Conference on Recent Advancement in Geotechnical Investigation and Ground Improvement Technique,14th & 15th May 2017, NIT Silchar, India.
4) Das, S., and Bhowmik, D. (2017) "Effect of Saturation on Dynamic Properties of Barak River Sand at Small Strain Condition" Proceedings of National Conference on Recent Advancement in Geotechnical Investigation and Ground Improvement Technique, 14th & 15th May 2017, NIT Silchar, India.
5) Sarkar, A. and Bhowmik, D. (2017) "Site Soil Classification ApplyingSeismic Refraction Tomography" Proceedings of National Conference on Recent Advancement in Geotechnical Investigation and Ground Improvement Technique, 14th & 15th May 2017, NIT Silchar, India.
6) Sarkar, R. and Bhowmik, D. (2017) "Effect of Jute Reinforcement OnCement Stabilization of Local Red Soil in Silchar Area" Proceedings of National Conference on Recent Advancement in Geotechnical Investigation and Ground Improvement Technique, 14th & 15th May 2017, NIT Silchar, India.
7) Kh. Lakshman Singh, Tathagatha Khan, Prasenjit Das, "Laboratory Investigation on Strength Characteristics of Asphalt Concrete Mixture Containing Fibres", National Conference on Roads and Transport (NCORT- 2017), IIT Roorkee, 14-15 October, 2017
8) Ramu B, Paul. A and Monowar Hussain (2017) "Experimental Model Study: Improvement of Peat Soil by Construction of Floating Peat-Cement Columns through Application of Deep Mixing Method" Proceeding of the Indian Geotechnical Conference, 14-16 Dec, IIT Guwahati.
9) Sumit Bisht, Subhradeep Dhar and Monowar Hussain (2017) "Performance Evaluation of Lime Stabilized Sub-Grade Soil Using Light Weight Deflectometer" Proceeding of the Indian Geotechnical Conference, 14-16 Dec, IIT Guwahati.
10) Subhradeep Dhar Arindam Sarkarand Monowar Hussain (2017) "Influence of fiber on strength characteristics of clayey soil" Proceeding of the Indian Geotechnical Conference, 14-16 Dec, IIT Guwahati.
11) B Ramuand Monowar Hussain (2017) "Effect of ion migration from peat-cement columns" proceding on National conference on recent advancement in geotechnical investigation and groud improvement technique 14th& 15th may, 2017, , NIT Silchar, India
12) Seal P. R., Sultana P. and Dey A. K., "Deterministic Seismic Hazard Analysis of Mawphu Dam Site", Indian Geotechnical Conference, IGC 2017, IIT Guwahati, 14-16 December, 2017
13) Nath, A. and Ghosh, S; Dam break analysis using HEC-RAS- a case study of AJI I dam,Rajkot, SPACE 2017,1st September'2017. (SCOPUS Indexed conference)
14) M.L.V.Prasad et.al, "Artificial Neural Network for Strength Prediction of Fibres Self Compacting Concret", Advances in Intelligent Systems and Computing, Soft Computing for Problem Solving, SocProS 2017, Volume 1, (Accepted).

e) Book/Chapter:

Accepted: 4

S.NO.	TITLE	AUTHOR
1	"Model Assisted planning of groundwater Development" by Kashyap, D and **Ghosh,S**, Chapter-16 of **ASCE** book on 'Sustainable water Resources' online published on Oct'2017, ISBN:9780784480908.	Dr. Susmita Ghosh
2	D K Ghose, S samantaray. (2018) Integrated Sensor networking for estimating ground water potential in scanty rainfall region: challenges and evaluation, Computational Intelligence in Sensor Networks, Springer. 776, 335-352.	Dr. D.K. Ghose
3	D K Ghose, S samantaray. (2018) Sedimentation process and its assessment through integrated sensor networks and machine learning process, Computational Intelligence in Sensor Networks, Springer, 776, 473-488.	Dr. D.K. Ghose
4	S Samantaray, D K Ghose. (2018) Assessment of suspended sediment load with Neural Networks in arid watershed, Springer. (Accepted)	Dr. D.K. Ghose

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1	Proof checking of design and drawing of multilevel car parking near Nandankanan Bhubaneswar	Govt. of Odisha	59,000/
2.	Structural Stability of 13 nos. of Buildings	North Eastern Electric & Power Corporation Ltd.	3,06,800.00
3.	Calibration of Compression Testing Machine	North Eastern Electric & Power Corporation Ltd.	53,100.00
4.	Mix Design of Concrete for IOCL, Moinarbond, Silchar	Indian Oil Corporation Ltd.	66,080.00
5.	Testing of Steel	Shyam Steel Industries Ltd.	23,464.00
6.	Mix Design of Concrete	Central Public Works Department	24,780.00

1.7 MAJOR EQUIPMENT ACQUIRED

- pH Meter
- Electrical Conductivity Meter
- Data acquisition system (16-Channel)
- DC-Response MEMS Accelerometers
- Impact Hammer
- Modal Shaker System

1.8 PATENT

Sl. No.	Details	Year
1.	Improved Concrete Rheometer (Patent no. 301513)	2018

1.9 VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Dr. Debjit Bhowmik	ICKEM 2018	Osaka	March 16-18, 2018
2	Pallab Das	7th International Conference on Engineering and Applied Sciences (ICEAS-2017)	Toronto, Canada	27 - 28 June, 2017
3	Dr. Prashanth J.	Proceedings of the 37th IAHR World Congress	Kuala Lumpur, Malaysia	August 13 – 18, 2017
4	Dr.L.V.Prasad.M	Fourth International Conference on Computational Science and Technology (ICCST2017)	Kuala Lumpur, Malaysia	29th -30th November 2017

1.10 M.Tech. / M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Arshad Hussain Choudhury	Prof. A.I.Laskar	Rehabilitation of beam column joint with geopolymer
2	Nazir Laskar	Prof. A.I.Laskar	Retrofitting of beam-column joints with GFRP
3	Rohit Kr Gupta	Prof. A.I.Laskar	Behavior of CFST and plain concrete short column under axial load
4	Arnab Jyoti Das	Prof. A.I.Laskar	Dynamic analysis of Tied Arch Bridge
5	Akhil V	Prof. A.I.Laskar	Model updating and damage detection techniques
6	Mr. Amit Zarola	Dr. Arjun Sil	Artificial neural networks (ANN) and stochastic techniques to estimate earthquake occurrences in Northeast region of India
7	Mr. Ashis Bhaguna	Dr. Arjun Sil	SEISMIC HAZARD ANALYSIS OF ASSAM STATE
8	Mr. Jaydeep Das	Dr. Arjun Sil	CONDITION ASSESSMENT OF EXISTING DECK O F BRIDGES IN THE CACHAR DISTRICT
9	Mr. Gaurab Das	Dr. Arjun Sil	CHARACTERISTICS OF FBD AND DDBD TECHNIQUES FOR SMRF BUILDINGS DESIGNED FOR SEISMIC ZONE-V USING SITE SPECIFIC GROUND MOTION IN N.E. INDIAN CONTEST
10	Mr.Masum Das	Dr. Arjun Sil	IMPACT ASSESSMENT OF LOAD AND RESISTANCE CHARACTERISTICS OF STRUCTURES AND COMPARIVE STUDY ON TIME DEPENDENT FAILURE PROBABILITY DURING SERVICE LIFE
11	Mr. Saurab Das	Dr. Arjun Sil (joint)	Non-linear time history analysis of cable suspension bridge

12	Mr.Subodh Kumar	Dr. Arjun Sil (joint)	Analysis of cable stayed bridge with different cable geometric configuration
13	Mr. Sanala Thomas	Dr. Arjun Sil (joint)	Comparative study of the dynamic responses of box girder bridge by varying span and speed of the vehicle
14	Ms. Ido Jerang	Dr. Arjun Sil (joint)	Seismic hazard assessment of Itanagar City
15	TASSO DURI	Dr Bijan Kumar Roy	Optimum Performance of Tuned Liquid Column Dampers in Vibration Control of Structures under Seismic loading
16	AVINASH KUMAR	Dr Bijan Kumar Roy	SEISMIC PERFORMANCE OF RC FRAMED BUILDINGS RESTING ON SLOPING GROUND
17	SHAILENDRA KUMAR PRAJAPATI	Dr Bijan Kumar Roy	OPTIMUM PERFORMANCE OF STRUCTURE USING MULTIPLE TMD UNDER SEISMIC VIBRATION
18	Sukanta Das	Dr. D. Bhowmik	Study of Dynamic Properties of Crumb Rubber Mixed With Sand Using Resonant Column Apparatus
19	Raja Sarkar	Dr. D. Bhowmik	Effect of Fiber Reinforcement on Cement Stabilization of Local Red Soil In Silchar Area
20	Rahul Raj RB	Dr. D. Bhowmik	Numerical Analysis of Seepage Flow Through Earthen Embankment
21	Saravanan P	Dr. D. Bhowmik	The Study of Interface Behavior of Geogrid on Local Soil
22	Vinod Singh	Dr. Nitesh A.	Model Updating of a Real RC Building using Vibration data from Smartphone
23	Sandeep Das	Dr. Nitesh A.	Evaluation of Bridge Soil Interaction using Vibration Data from Smartphone
24	Prasenjit Das	Kh. Lakshman Singh	Effect of fibres in asphalt concrete mixture
25	Manish Jamtia	Kh. Lakshman Singh	Study on soil subgrade properties with reinforced fibres
26	Pinki Deb	Kh. Lakshman Singh	A comparative study of strength characteristics of Cold mix Asphalt Emulsion with different fillers.
27	Dheeraj Desmukh	Kh. Lakshman Singh	Use of waste material in soil subgrade of pavement
28	Masum Yadav	Kh. Lakshman Singh	Proposed traffic route distribution and management in silchar
29	Vishnu T.B	Kh. Lakshman Singh	Performance of bituminous mixes using waste tyres
30	B Ramu	Dr. M. Hussain	Improvement Of Peat Soil By Employing Surface And Deep Mixing Technique: Emphasis On Unconfined Compressive Strength And Soil-Cement Colu
31	Debasish Nayak	Dr. M. Hussain	Evaluation Of Geotechnical Charachteristics Of Municipal Solid Waste And Remediation Techniques Of Contaminated Site, Meherpur Silchar

32	Sumit Bisht	Dr. M. Hussain	Performance Evaluation Of Lime Stabilized Subgrade Soil Using Light Weight Deflectometer
33	Arindam Sarkarand	Dr. M. Hussain	Influence Of Fiber On Strength Characteristics Of Clayey Soil
34	Lakshmi Nandan Gogoi	Pallab Das	Experimental Study onFiber ReinforcedBeam-Column Joint
35	Saheen V. K.	Pallab Das	Study on Hybrid FiberReinforced Beam- Column Joint
36	Pinaki Ranjan Seal	Parbin Sultana	Seismic Hazard Analysis of Mawphu Hydro Electric Project Stage-II in Southern Meghalaya
37	Joshodi Haflongbar	Parbin Sultana	A Study on the Scale Effect of Plate Size on the Result of Plate Load Test Performed on Highly Plastic Calyey Soil
38	Ramji Prasad	Dr. Prashanth J.	Studies on Compressive Strength of Pervious Concrete with and without using LLDPE powder
39	Amit	Dr. Prashanth J.	Experimental and Numerical studies on Bio-retention
40	Sunny Gupta	Dr. Susmita Ghosh	Groundwater Flow modeling and stream-aquifer interaction using Visual MODFLOW
41	Mrinal Kumar Singh	Dr. Susmita Ghosh	Assessment of Groundwater development in plane land of Cachar (Assam)
42	Purnima Kempa	Prof. U. Kumar	Phytoremediation for wastewater treatment using : A case study
43	Violena Basumatari	Prof. U. Kumar and Dr. B. Sil	Development of IDF Curves Considering Climate Change Effect for the Barak River Basin
44	Anupam Ghosh	Prof. S. Choudhury	Correlation between Performance and Damage Index in RC Frame Buildings
45	Ankit Rai	Prof. S. Choudhury	Retrofitting Seismically Deficient RC Frame Buildings
46	Utpal Maity	Prof. S. Choudhury	Performance-Based Seismic Design of Reinforced Concrete Bridge Pers
47	Prateek Narayan Panda	Prof. S. Choudhury	Performance of Steel Frame Buildings with Concentric Bracing
48	Chetan Swaroop	Dr.Parthajit Roy	Discharge over plan view Circular Arc form Weir
49	Debasish Dutta	Dr.Parthajit Roy	Discharge over plan view W-form Weir
50	Abhilash Singh (16-21-207)	Dr.L.V.Prasad.M	Seismic analysis of building with different shapes using different codal provisions
51	Prakhar Mishra (16-21-518)	Dr.L.V.Prasad.M	Eco-friendly SCC strength prediction using ANN

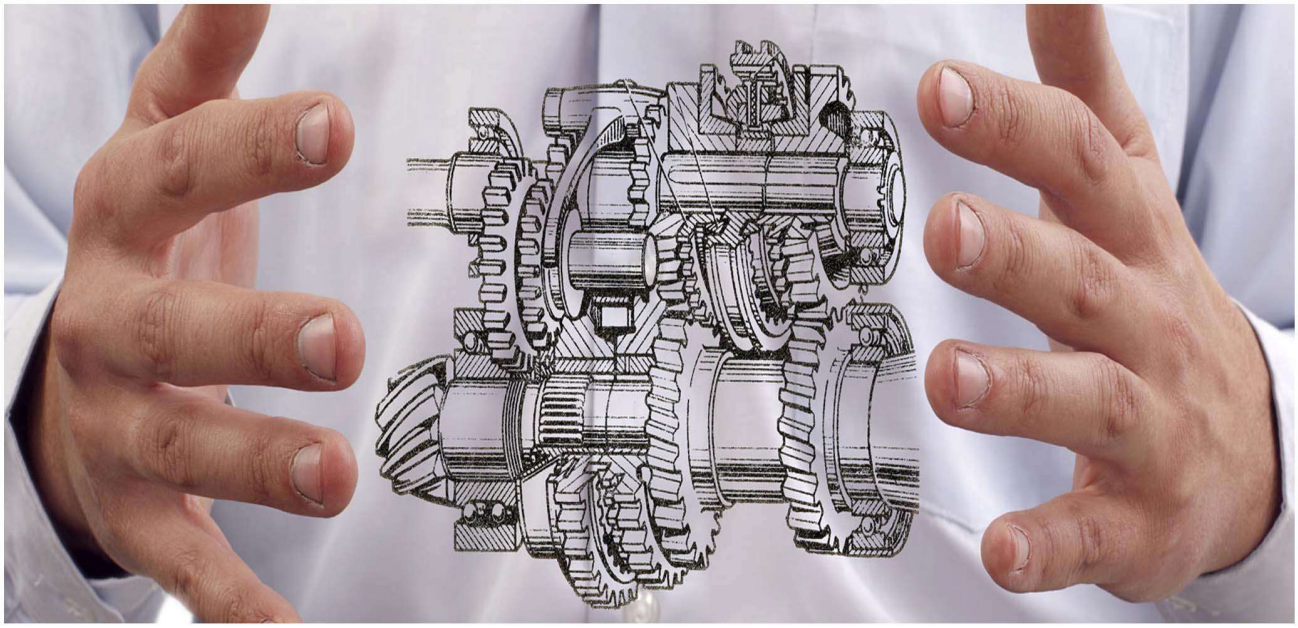
52	Mrigank Das (16-21-509)	Dr.L.V.Prasad.M	Optimisation of Location of Shear wall in Tall building using ETabs Modeling
53	Nilarghya Sarkar (16-21-505)	Dr.L.V.Prasad.M	High performance concrete Strength prediction using ANFIS
54	Sahil Kumar (16-21-317)	Dr.L.V.Prasad.M	Flexural strength studies of concrete Pavements
55	Aneet Kumar	Dr. N. Debnath	Structural performance of railway steel bridge under moving train load
56	Anurag Gupta	Dr. N. Debnath	Studies on seismic performance of open ground storied frame-building
57	Baleshwor Yumnam	Dr. N. Debnath	Seismic vibration control of frame building using tuned mass dampers with H-inf optimization
58	Mridusmita Goswami	Dr. N. Debnath	Studies on passive vibration control of framed building using tuned mass damper system
59	Satabdi Das	Dr. N. Debnath	Vibration control of multi-storied building system using pendulum tuned mass damper (PTMD)
60	Deepmala Das	Dr. N. Debnath	Improving seismic performance of reinforced-concrete framed buildings using passive control devices
61	Moitreyee Ghosh	Dr. N. Debnath	Studies on multi-modal vibration control of the structure using passive control device

1.11 Ph.D. Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Ruhul Amin Mazumder	Prof. A. I. Laskar (Main Supervisor)	Prediction of UCS of geopolymer stabilized clay and penetrability of microfine cement grout in granular soil
2	Biswajit Roy	Prof. A.I.Laskar	Cyclic behavior of RCC exterior beam column subassemblies with construction joint in column
3	Ruhul Amin Mozumder	Dr. M. Hussain (Co-supervisor)	Prediction of UCS of Geopolymer Stabilized Clay and Penetrability of Cement Grout in Granular Soil
4	Apurba Nath	Dr. Susmita Ghosh	Studies of Breach parameter uncertainties
5	Mrinal Singh	Dr. Susmita Ghosh	Groundwater Planning for irrigation at CAchar, Assam
6	Sayed Sadulla Ahmed	Dr. Susmita Ghosh and Prof. A. K. Barbhuiya	Sediment load studies of Meandering river
7	Shyama Debbarma	Dr. Parthajit Roy	A Study on the Effects of Climate Change in Barak River Basin

1. Name of the Department :-

Mechanical Engineering



1.1 Academic Staff:

HEAD: Prof. K.M. Pandey

Name of Faculty members:

Professor	Associate Professor	Assistant Professor	
Prof. R. Gupta (on lien)	Dr. P.K. Patowari	Dr. A. Biswas	Dr. B. Das
Prof. K.M. Pandey	Mr. D.H. Das	Dr. S. Dey	Dr. S. Pati
Prof. R.D. Misra	Dr. K.K. Sharma	Dr. D. Bhanja	Dr. S. Halder
	Mr. P. Choudhury	Dr. S. Bhowmik	Dr. S.R. Maity
	Dr. K. Chakraborty	Dr. S. Nath	Dr. P. Debroy
		Dr. A.B. Deoghare	Dr. L. Roy
		Dr. P.R. Randive	Dr. Jagadish
		Dr. S. Debbarma	Mr. S.K. Pattanayak

Visiting Professor (If any): --

1.2 Distinction Achieved

a) By Student:

b) By Faculty Member: Solar Regional Test Center housed in ME Deptt. became the first NABL accreditated laboratory of this Institute w.e.f. 29th May 2017. Contributing faculty members were- Prof. R.D. Misra & Dr. A. Biswas

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr. B. Das, Dr. A. Biswas, Dr. S. Bhowmik	Regional Seminar on Renewable Energy Technology: Issues and Prospects **(RETIP - 2017)**	TEQIP – III	25/09/2017

b) Participated by Faculty Member: NIL

1.4 Research Development

a) Ph.D. Programme (Specializations):

1. Molecular dynamics under parameter uncertainty
2. Stochastic tribological analysis of journal bearing
3. Biomaterials and Biosciences
4. Composite Materials
5. Application of nanoparticles in biodiesel to study performance, emission and combustion characteristics.
6. Application of Ocean wave force for the development of new wave energy converter
7. Bio-fuel research
8. Boiling heat transfer
9. Thermal Engineering
10. Renewable Energy
11. Solar Energy
12. Advanced Manufacturing
13. Composite Materials
14. Smart Adhesives and their joining.
15. Hybrid multi scale laminated composites
16. Bio-composites
17. Phase change materials and encapsulation technology
18. Surface engineering and functionalization
19. Self-healing composite materials
20. Energy efficient building materials

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
6	4	40

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Machine Element Laboratory	UG, PG and PhD work -New

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Design and development of a hybrid photo voltaic thermal (PVT) system for rural application	Dr. B. Das & Dr. A. Biswas (Co-PI)	DST	14.46	3 years
2	Development and testing of hybrid solar photovoltaic thermal (PVT) air system for the composite environment of North-East India for tea drying applications	Dr. B. Das & Dr. A. Biswas (Co-PI)	DST	30.30	3 years
3.	Experimental and computational analysis of heat sink application for optimal performance by developing low-cost natural filler reinforced the composite material	Dr. S. Bhowmik Dr. B. Das (Co-PI)	CPRI, under MoP, Govt. of India	Rs. 22.63 Lakh	2017-2019
4.	Bamboo bricks/laminates from BMFs (Bamboo Micron Fibres) for low cost housing structures for North Eastern Himalayan region	Dr.S Halder	NMHS	49.5	2017-2020
5.	Synthesis and characterization of smart phase change materials for efficient thermal management of electronic devices	Dr.S Halder	NIT Silchar	4.10	2016-2018
6.	Oxo—tungsten Based Nanocatalysts in the synthesis of industrially important adipic acid	Dr.S Halder (co-PI)	NIT Silchar	4.75	2016-2018

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Prof. K.M. Pandey	Propulsion and Power Research	1	2017
		Applied Energy	1	2017
		Solar Energy	1	2017
		Combustion Science and Technology	2	2017
		Recent Patents in Mechanical Engg.	1	2017
		Acta Astronotica	2	2017/18
		International Journal for Hydrogen Energy	4	2017/18

		Sustainable Computing Informatics and System	1	2017
		Applied Thermal Engg.	3	2017
		Journal of the Institution of Engineers Series c	2	2018
		Flow Turbulence and Combustion	1	2017
2.	Dr. A. Biswas	Applied Energy, Elsevier	3	April 2017-Mar 2018
		Energy Conversion and Management. Elsevier	5	April 2017-Mar 2018
		Australian Journal of Mechanical Engineering	1	April 2017-Mar 2018
3.	Dr. S. Bhowmik	▪ Kybernetes	1	2018
		▪ BioResources	1	2018
		International Journal of Quality and Reliability Management	1	2018
4.	Dr. Sukumar Pati	International Journal of Thermal Sciences, Journal of Thermal Science and Engineering Applications (ASME), European Journal of Mechanics- B/Fluids, Journal of the Institution of Engineers (India): Series C, Journal of Applied Fluid Mechanics, Engineering Science and Technology, an International Journal	08	April 2017-Mar 2018
5.	Dr. Sudip Dey	Thin-walled Structures (Elsevier Publication), Composites Part B: Engineering (Elsevier Publication), Composite Structures (Elsevier Publication)	03	2017-18
6.	Dr. S. Debbarma	Alexandria Engineering Journal, Elsevier	1	2017-18
7.	Dr. S. Nath	International Journal of Heat and Mass transfer	1	2018
		Heat and Mass transfer	2	2017-18
		Sadhana	1	2017
8.	Dr. S. Halder	Carbon	2	2017
		Ultrasonics Sonochemistry	1	2017
		Polymer Composites	1	2018
9.	Dr. S. Halder	International Journal of Heat and Mass transfer	2	2017-18
		Heat and Mass transfer	4	2017-18
		Applied Thermal Energy	1	2017
		Journal of renewable and sustainable energy	2	2017-18
		Energy conversion and management	1	2017

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. S. Bhowmik	Session Chair 10TH International Conference on Sustainable Energy and Environmental Protection June 27th – 30th, 2017, Bled, Slovenia
2.	Dr. B. Das	Session Chair 10th International Conference on Sustainable Energy and Environmental Protection June 27TH – 30TH, 2017, Bled, Slovenia
3.	Dr. Sudip Dey	Chairing Technical session in 3rd International Conference on Mechanical and Aeronautical Engineering (ICMAE 2017) by HKSME on Dec 13-16, 2017 at Dubai, UAE

1.5 PUBLICATION

a) International Journal(s):

1. Maji, A. Bhanja, D., Patowari, P. K. and Kundu, B. (2018) 'Thermal Analysis for Heat Transfer Enhancement in Perforated Pin Fins of Various Shapes with Staggered Arrays', Heat Transfer Engineering, 7632, pp. 1–25, Taylor & Francis, doi: 10.1080/01457632.2018.1429047.
2. Das, S. S., Tilekar, S. D., Wangikar, S. S. and Patowari, P. K. (2017) 'Numerical and experimental study of passive fluids mixing in micro-channels of different configurations', Microsystem Technologies, 23(12), pp. 5977–5988, Springer, doi: 10.1007/s00542-017-3482-x.
3. Maji, A., Bhanja, D. and Patowari, P. K. (2017) 'Numerical investigation on heat transfer enhancement of heat sink using perforated pin fins with inline and staggered arrangement', Applied Thermal Engineering, 125, pp. 596–616, Elsevier, doi: 10.1016/j.applthermaleng.2017.07.053.
4. S. Dey, T. Mukhopadhyay, S. Adhikari, Metamodel based high-fidelity stochastic analysis of composite laminates: A concise review with critical comparative assessment, Composite Structures, Vol. 171, 227-250, 2017.
5. P. K. Karsh, T. Mukhopadhyay, S. Dey, Spatial vulnerability analysis for the first ply failure strength of composite laminates including effect of delamination, Composite Structures, Vol. 184, pp.554-567, 2017.
6. H. Singh, B. C. Hazarika, S. Dey, Low velocity impact responses of functionally graded plates, Procedia Engineering, Vol.173, pp. 264–270, 2017.
7. S. Dey, T. Mukhopadhyay, S. Naskar, T. K. Dey, H. D. Chalak, S. Adhikari, Probabilistic characterization for dynamics and stability of laminated soft core sandwich plates, Journal of Sandwich Structures and Materials, DOI: 10.1177/1099636217694229, 0(00) 1–32, 2017.
8. S. Dey, T. Mukhopadhyay, S. K. Sahu, S. Adhikari, Stochastic dynamic stability analysis of composite curved panels subjected to non-uniform partial edge loading, European Journal of Mechanics / A Solids, Vol. 67, pp.108-122, 2018.
9. Kumar A., Biswas A. Techno-Economic Optimization of Stand-alone PV/PHS/Battery systems for very low load situation. Journal of Renewable Energy Research, Vol 7, No. 2, 2017, pp 844-856. Publisher: IJRER Press,
10. Kumar A. Biswas A. Techno-Economic Optimization of a Stand-alone PV-Battery Renewable Energy system for low load factor situation- a comparison between optimization algorithms. Publisher: Materials and Energy Research Center, IJE Transactions A: Basics, Vol 30, No. 10, 2017, pp 1417-1426.
11. Sengupta, A.R., Biswas, A. and Gupta, R. The aerodynamics of high solidity unsymmetrical and symmetrical blade H-Darrieus rotors in low wind speed condition. Journal of Renewable and Sustainable Energy 9, 043307 (2017). Publisher: American Institute of Physics (AIP).
12. Sengupta, A.R., Biswas, A. and Gupta, R. Investigations of H-Darrieus rotors for different blade parameters at low wind speeds. Journal of Wind and Structures, Vol 25, No. 6 (2017) 551-567. Publisher: Techno-Press.
13. Manash Protim Boruah, Pitambar R. Randive, Sukumar Pati, hydrothermal performance and entropy generation analysis for mixed convective flows over a backward facing step channel with baffle, Manash Protim Boruah, Pitambar R. Randive, Sukumar Pati , International Journal of Heat and Mass Transfer 125 (2018) 525–542.
14. Kumar, R., Bhowmik, S., and Kumar, K., 2017, Establishment and effect of constraint on different mechanical properties of bamboo filler reinforced epoxy composite, International Polymer Processing, 32 (3), 308 – 315, SCI, Impact Factor: 0.634., DOI: https://doi.org/10.3139/217.3311
15. Zindani, D., Maitya, S. R., Bhowmik, S., and Chakraborty, S., 2017, A material selection approach using the TODIM (TOmada de Decisao Interativa Multicriterio) method and its analysis, International Journal of Materials Research, 108 (5), 345-354, SCI, Impact factor: 0.6, DOI: 10.3139/146.111489
16. Kumar, R., Kumar, K., and Bhowmik, S., 2017, Assessment and response of treated Cocos nucifera reinforced toughened epoxy composite towards fracture and viscoelastic properties, Journal of Polymers and The Environment, 26(6), 2522 - 2535, SCIE, Impact Factor: 1.877, ISSN: 1566-2543, DOI: https://doi.org/10.1007/s10924-017-1150-y.
17. Kumar, R., Kumar, K., and Bhowmik, S., 2018, Mechanical characterization and quantification of tensile, fracture and viscoelastic characteristics of wood filler reinforced epoxy composite, Wood Science and Technology, 52(3), 677 - 699, SCI, Impact Factor: 1.509, ISSN: 1432-5225, DOI: https://doi.org/10.1007/s00226-018-0995-0.

18. Payel Deb, Ashish B. Deoghare, Effect of pretreatment processes on physicochemical properties of hydroxyapatite synthesized from Puntius conchonius fish scales. Bulletin of Materials Science (Accepted on 26-03-18).
19. S. Debbarma, R.D. Misra, Effects of iron nanoparticle fuel additives on the performance and exhaust emissions of a CI engine fuelled with diesel and biodiesel, Journal of Thermal Science and Engineering Application, 10(4), 1-6, 2018, doi: 10.1115/1.4038708 (SCI).
20. S. Debbarma, R.D. Misra, Effects of iron nanoparticles blended biodiesel on the performance and emission characteristics of a diesel engine, Journal of Energy Resources Technology, 139(4), 1-8, 2017, doi: 10.1115/1.4036543 (SCI).
21. Dey, A., Pandey, K.M., Selection of optimal processing condition during WEDM of compocasted AA6061/cenosphere AMCs based on grey-based hybrid approach (2018) Materials and Manufacturing Processes, 33 (14), pp. 1549-1558. DOI: 10.1080/10426914.2018.1453154 (SCIE), PUBLISHER: Taylor and Francis Inc.
22. Dey A, Pandey KM. Wire electrical discharge machining characteristics of AA6061/cenosphere as-cast aluminum matrix composites. Materials and Manufacturing Processes. 2017 Oct 25; 33(12):1346-53.
23. Choubey G, Pandey KM. Effect of variation of inlet boundary conditions on the combustion flow-field of a typical double cavity scramjet combustor. International Journal of Hydrogen Energy. 2018 March 31; 43(16):8139-51.
24. Choubey G, Pandey KM. Effect of different wall injection schemes on the flow-field of hydrogen fuelled strut-based scramjet combustor. Acta Astronautica. 2018 January 31; 145:93-104.
25. Debbarma A, Pandey KM. CFD Analysis of Rewetting Behavior in Nuclear Fuel Rod Bundle with Change in Operating Conditions. Kerntechnik. 2018 March; 83(1):36-49.
26. Kummitha OR, Pandey KM, Gupta R. CFD analysis of a scramjet combustor with cavity based flame holders. Acta Astronautica. 2018 January 5; 144:244-53.
27. Kummitha, O.R., Pandey, K.M., Gupta, R., Numerical analysis of hydrogen fueled scramjet combustor with innovative designs of strut injector (2018) International Journal of Hydrogen Energy, . Article in Press. DOI: 10.1016/j.ijhydene.2018.04.067 (SCIE), PUBLISHER: Elsevier Ltd.
28. Pandey, K.M., Choubey, G., Ahmed, F., Laskar, D.H., Ramnani, P., Effect of variation of hydrogen injection pressure and inlet air temperature on the flow-field of a typical double cavity scramjet combustor (2017) International Journal of Hydrogen Energy, 42 (32), pp. 20824-20834. DOI: 10.1016/j.ijhydene.2017.07.026 (SCIE), PUBLISHER: Elsevier Ltd.
29. Choubey, G., Pandey, K.M., Effect of different strut + wall injection techniques on the performance of two-strut scramjet combustor (2017) International Journal of Hydrogen Energy, 42 (18), pp. 13259-13275. DOI: 10.1016/j.ijhydene.2017.04.024 (SCIE), PUBLISHER: Elsevier Ltd.
30. DEY, A., DEBNATH, S., PANDEY, K.M., Optimization of electrical discharge machining process parameters for Al6061/cenosphere composite using grey-based hybrid approach (2017) Transactions of Nonferrous Metals Society of China (English Edition), 27 (5), pp. 998-1010. DOI: 10.1016/S1003-6326(17)60117-1 (SCIE), PUBLISHER: Nonferrous Metals Society of China
31. Choubey, G., Pandey, K.M., Effect of parametric variation of strut layout and position on the performance of a typical two-strut based scramjet combustor (2017) International Journal of Hydrogen Energy, 42 (15), pp. 10485-10500. DOI: 10.1016/j.ijhydene.2017.03.014 (SCIE), PUBLISHER: Elsevier Ltd.
32. Kummitha, O.R., Suneetha, L., Pandey, K.M., Numerical analysis of scramjet combustor with innovative strut and fuel injection techniques (2017) International Journal of Hydrogen Energy, 42 (15), pp. 10524-10535. DOI: 10.1016/j.ijhydene.2017.01.213 (SCIE), PUBLISHER: Elsevier Ltd
33. Debnath, P., Pandey, K.M., Exergetic efficiency analysis of hydrogen–air detonation in pulse detonation combustor using computational fluid dynamics (2017) International Journal of Spray and Combustion Dynamics, 9 (1), pp. 44-54. DOI: 10.1177/1756827716653344 (SCIE), PUBLISHER: SAGE Publications Inc.
34. Sharma, D., Pandey, K.M., Size control synthesis and characterization of ZnO nanoparticles and its application as ZnO-water based nanofluid in heat transfer enhancement in light water nuclear reactor (2017) Kerntechnik, 82 (1), pp. 112-124. DOI: 10.3139/124.110635 (SCIE), PUBLISHER: Carl Hanser Verlag
35. Rahman, M., Dey, A., Pandey, K.M., Machinability of cenosphere particulate–reinforced AA6061 aluminium alloy prepared by compocasting (2017) Proceedings of the Institution of Mechanical

Engineers, Part B: Journal of Engineering Manufacture. DOI: 10.1177/0954405417699013 (SCI), PUBLISHER: SAGE Publications Ltd.

36. Debnath, P., Pandey, K.M., Numerical investigation of detonation combustion wave in pulse detonation combustor with ejector (2017) Journal of Applied Fluid Mechanics, 10 (2), pp. 725-733. DOI: 10.18869/acadpub.jafm.73.239.27266 (SCIE), PUBLISHER: Isfahan University of Technology
37. Pandey, K.M., Chaurasiya, R., A review on analysis and development of solar flat plate collector (2017) Renewable and Sustainable Energy Reviews, 67, pp. 641-650. DOI: 10.1016/j.rser.2016.09.078 (SCIE), PUBLISHER: Elsevier Ltd.
38. Bhowmik, C., Bhowmik, S., Ray, A., Pandey, K.M., Optimal green energy planning for sustainable development: A review (2017) Renewable and Sustainable Energy Reviews, 71, pp. 796-813. DOI: 10.1016/j.rser.2016.12.105 (SCIE), PUBLISHER: Elsevier Ltd.
39. Mohd Zeeshan, S. Nath , D. Bhanja, 2018. Numerical investigation for the optimal placements of rectangular vortex generators for improved thermal performance of fin-and-tube heat exchangers, Applied Thermal Engineering, Elsevier, Vol. 136, pp. 589-601. https://doi.org/10.1016 /j.applthermaleng. 2018. 03. 006 (Citation: 1) SCIE (Impact Factor: 3.771) ISSN: 1359-4311.
40. A. Kumar, S. Nath, D. Bhanja, 2018. Effect of nanofluid on thermo hydraulic performance of double layer tapered microchannel heat sink used for electronic chip cooling, Numerical Heat Transfer part –A, Taylor & Francis, Vol. 73:7, pp. 429-445. DOI:10.1080/10407782.2018.1448611 SCI (Impact Factor: 2.409) ISSN: 1040-7782.
41. Suman Debnath, Biplab Das, P.R. Randive, K.M. Pandey. Performance analysis of solar air collector in the climatic condition of North Eastern India. Energy 165 (2018) 281-298.
42. Sumit Mahajan Kalyan Chakraborty and K M Pandey April-June 2017 Study on the mechanism of chip formation employing material properties consideration while machining Inconel 718 Journal of material science and mechanical engineering (JMSME) volume 4 Issue2
43. Aby M Philip, Kalyan Chakraborty, May2018, Dry turning of austenitic stainless steel(316L) using CVD coated tool, International journal of innovative research in advanced engineering (IJIRAE) Volume5 Issue 5.
44. S. Pati, S. K. Mehta, A. Borah, Numerical investigation of thermo-hydraulic transport characteristics in wavy channels: comparison between raccoon and serpentine channels, International Communications in Heat and Mass Transfer 88 (2017) 171-176.
45. S. Dutta, A. K. Biswas, S. Pati, Natural convection heat transfer and entropy generation inside porous quadrantal enclosure with non-isothermal heating at the bottom wall, Numerical Heat Transfer, Part A: Applications 73 (2018) 222-240.
46. Kh. G. K. Singh, S. Halder, S. Pati, J. Wang, Microencapsulation of Paraffin Wax Microspheres with Silver, Defence Science Journal 68(2) (2018) 218-224.
47. S. Pati, V. Kumar, Effects of temperature-dependent thermophysical properties on hydrodynamic swirl decay in microtubes, Proc IMechE Part E: J Process Mechanical Engineering, 2018 DOI: 10.1177/0954408918755782.
48. Shubham, A. Saikia, A. Dalal, S. Pati, Thermo-hydraulic transport characteristics of non-Newtonian fluid flows through corrugated channels, International Journal of Thermal Sciences 129 (2018) 201-208.
49. Debroy P. Interaction of linear waves with the vertical plate. International Journal of Mechanical and Production Engineering Research and Development (Scopus). Publisher- Trans Stellar. ISSN- 2249-6890.
50. Wangikar, S.S., Patowari, P.K., and Misra, R.D., “Effect of Process Parameters and Optimization for Photochemical Machining of Brass and German Silver", Materials and Manufacturing Processes, 2017, Vol. 32, No. 15, pp. 1747-1755, DOI: 10.1080/10426914.2016.1244848.
51. Pattanaik, B.P. and Misra, R.D., “Effect of Reaction Pathway and Operating Parameters on the Deoxygenation of Vegetable Oils to Produce Diesel Range Hydrocarbon Fuels: A Review", Renewable & Sustainable Energy Reviews, 2017, Vol. 73, June 2017, pp. 545-557; DOI http://dx.doi.org/10.1016/j.rser.2017. 01.018
52. Roy, Bidesh, Misra, R.D., and Pandey, K.M., “Computational and Experimental Study of Swirl Flow within SI Engine with Modified Shrouded Intake Valve", Progress in Computational Fluid Dynamics, An Int. J., Accepted for publications in July 2017.
53. Pattanaik, B.P., Jena, J., and Misra, R.D., “Studies on the Effect of Oxygen Content in Soapnut Biodiesel-Diesel Blends on the Performance of a Diesel Engine”, International Journal of Automotive and

Mechanical Engineering (IJAME), 2017 (Sept.), Vol. 14, No. 3, pp. 4574-4588, DOI.org/10.15282/ijame.14.3.2017.14.0361.

54. Sudipta Halder*, Tankeshwar Prasad, Nazrul Khan, Manjeet Goyat, R Chauhan, Superior Mechanical Properties of Poly Vinyl Alcohol-Assisted ZnO Nanoparticle Reinforced Epoxy Composites, Material Chemistry and Physics, 192, 1 p 198–209, 2017. Impact factor: 2.101.
55. Pannalal Choudhury, Sudipta Halder*, Nazrul Islam Khan, Jialai Wang, Krishna Murari Pandey, Enhanced crack suppression ability of hybrid glass fiber reinforced laminated composites fabricated using GNP/epoxy system by optimized UDM parameters, Ultrasonic Sonochemistry, 39, p 174–187, 2017. Impact factor: 4.556.
56. Jaideep Adhikari , Bhabatosh Biswas, Sumit Chabri, Nil Ratan Bandyopadhyay, Sudipta Halder, Bhairab Chandra Mitra, Arijit Sinha, Mechanical properties of metal oxide dispersed jute fiber reinforced polyester biocomposites, Polymer composites, 2017 (Accepted). Impact factor: 2.004.
57. Ashangbam Satyavrata Singh, Sudipta Halder*, Jialai Wang, Jagadish, Extraction of bamboo micron fibres by optimized mechano-chemical process using a central composite design and their surface modification, Materials Chemistry and Physics. Impact factor: 2.101.
58. Subhankar Das, Sudipta Halder*, Jialai Wang, MS Goyat, A Anil Kumar, Yi Fang, Amending the thermo-mechanical response and mechanical properties of epoxy composites with silanized chopped carbon fibers, doi.org/10.1016/j.compositesa.2017.07.026, 2017, Impact factor: 4.075.
59. Animesh Sinha, Nazrul Islam Khan, Subhankar Das, Jiawei Zhang, Sudipta Halder, Effect of reactive and non-reactive diluents on thermal and mechanical properties of epoxy resin, High performance polymer. Impact factor: 1.179.
60. M.S.Goyat, S.Rana, Sudipta Halder, P.K.Ghosh, Facile Fabrication of Epoxy-TiO 2 Nanocomposites: A Critical Analysis of TiO 2 Impact on Mechanical Properties and Toughening Mechanisms, Ultrasonic Sonochemistry, doi.org/10.1016/j.ultsonch.2017.07.040, 2018. Impact factor: 4.556.
61. Radhe Tado, Ashish B.Deoghare, K.M.Pandey, “Computational Study of Blood Flow Analysis for Coronary Artery Disease”, World Academy of Science, Engineering and Technology, International Journal of Biomedical and Biological Engineering, Vol:12, No:2, 2018.

b) National Journal(s):NIL

c) International Conference(s):

1. Sitaram Wangikar, S., Patowari, P. K. & Dev Misra, R. (2018). Parametric Optimization for Photochemical Machining of Copper using Overall Evaluation Criteria. Materials Today: Proceedings, 7th International Conference of Materials Processing and Characteriztion, Hyderabad, March 17-19, 2017, 5(2), 4736–4742, Elsevier, https://doi.org/10.1016/j.matpr.2017.12.046
2. Baroi, B. K., Kar, S. & Patowari, P. K. (2018). Electric Discharge Machining of Titanium Grade 2 Alloy and its Parametric Study. Materials Today: Proceedings, 7th International Conference of Materials Processing and Characteriztion, Hyderabad, March 17-19, 2017, 5(2), 5004–5011, Elsevier, https://doi.org/10.1016/j.matpr.2017.12.078
3. Debnath, T., Haashir, A. & Patowari, P. K. (2017). Parametric Study of Micro-hole Drilling in Glass using Ultrasonic Machining, Proceedings of 10th International Conference on Precision, Meso, Micro and Nano Engineering (COPEN 10), IIT Madras, Dec 07-09, 2017, 1–4.
4. Kar, S. & Patowari, P. K. (2017). Machining of Micro Slots in Titanium using Micro Electrical Discharge Milling, Proceedings of 10th International Conference on Precision, Meso, Micro and Nano Engineering (COPEN 10), IIT Madras, Dec 07-09, 2017, 214–217.
5. Maji, A., Bhanja, D., Patowari, P. K., Choubey, G. & Deshamukhya, T. (2017). Computational investigation of heat transfer analysis through perforated pin fins of different materials. AIP Conference Proceedings, Elluru, April 07-09, 2017, 1859. https://doi.org/10.1063/1.4990162.
6. Bhowmik, C., Baruah, A., Bhowmik, S., and Ray, A., Green energy sources selection for sustainable energy planning using multi-criteria decision-making approach, International Conference on Mechanical, Materials and Renewable Energy, 8–10 December 2017, Sikkim, India Published in IOP Conf. Series: Materials Science and Engineering 377 (2018) 012029 DOI:10.1088/1757-899X/377/1/012029
7. Kakoti, N., Sethi, R., Agarwal, S., Zindani, D., and Bhowmik, S., 2018, Study of tensile behaviour of bamboo epoxy composites using finite element method, 1st International Conference on Mechanical

Engineering (INCOM18), (January 4 – 6, 2018, Jadavpur University Kolkata India) Paper No. – 092, Page 43 – 46.

8. Bhowmik, C., Bhowmik, S., and Ray, A., 2018, Selection of green energy sources: an entropy-topsis Approach, 1st International Conference on Mechanical Engineering (INCOM18), (January 4 – 6, 2018, Jadavpur University Kolkata India) Paper No. INCOM18-177, Page 658 – 661.
9. S.B.Kharat, A.B.Deoghare, K.M.Pandey, "Airflow and Particle Transport Through Human Airways: A Systematic Review", IOP Conf. Series: Materials Science and Engineering 225(2017)012132. Doi:10.1088/1757-899X/225/1/012132.
10. Shende Suraj Balu, A.B.Deoghare, K.M.Pandey, "Design and Modeling of Human Middle Ear for Harmonic Response Analysis", World Academy of Science, Engineering and Technology, International Journal of Biomedical and Biological Engineering, vol:12, No:2, 2018.
11. Shende Suraj Balu, A.B.Deoghare, K.M.Pandey, "Design and Modeling of Human Middle Ear for Harmonic Response Analysis", World Academy of Science, Engineering and Technology, International Journal of Biomedical and Biological Engineering, vol:12, No:2, 2018.
12. Shende Suraj Balu, A.B.Deoghare, K.M.Pandey, "Design and Modeling of Human Middle Ear for Harmonic Response Analysis", World Academy of Science, Engineering and Technology, International Journal of Biomedical and Biological Engineering, vol:12, No:2, 2018.
13. Ghanshyam Boob, Ashish deoghare, Pramod Walke, "Fatigue life prediction model for steel EN-31 considering effect of turning process parameters", INCOM18: Proceedings of the 1st International Conference on Mechanical Engineering, Jadavpur University Kolkata India January 4-6, 2018. Paper no-INCOM18.
14. P Deb, A B Deoghare and E Barua, "Poly ethylene glycol/fish scale-derived hydroxyapatite composite porous scaffold for bone tissue engineering" IOP Conf. Series: Materials Science and Engineering 377 (2018) 012009 doi:10.1088/1757-899X/377/1/012009
15. Jaiswal, S., Deoghare, A.B., Pandey, K.M., Mass concentration analysis of aerosol through human airways (2018) Proceedings of the 2nd International Conference on Inventive Systems and Control, ICISC 2018, Coimbatore, 19-20 January 2018, pp. 334-338. DOI: 10.1109/ICISC.2018.8399090 (Scopus), PUBLISHER: Institute of Electrical and Electronics Engineers Inc.
16. Alam, N., Sharma, K.K., Pandey, K.M., Numerical investigation of combustion phenomena in pulse detonation engine with different fuels (2018) AIP Conference Proceedings, 1966, art. no. 020015. DOI: 10.1063/1.5038694 (Scopus), PUBLISHER: American Institute of Physics Inc.
17. Sahu, M.K., Pandey, K.M., Chatterjee, S., Numerical investigation of thermal-hydraulic performance of channel with protrusions by turbulent cross flow jet (2018) AIP Conference Proceedings, 1966, art. no. 020021. DOI: 10.1063/1.5038700 (Scopus), PUBLISHER: American Institute of Physics Inc.
18. Yadav S, Pandey KM. A Comparative Thermal Analysis of Pin Fins for Improved Heat Transfer in Forced Convection. Materials Today: Proceedings. 2018 February 3; 5(1):1711-7.
19. Yadav, S., Pandey, K.M., A parametric thermal analysis of triangular fins for improved heat transfer in forced convection (2018) Strojniski Vestnik/Journal of Mechanical Engineering, 64 (6), pp. 401-411. DOI: 10.5545/sv-jme.2017.5085 (Scopus), PUBLISHER: Assoc. of Mechanical Eng. and Technicians of Slovenia.
20. Basak, R., Choudhury, P.L., Pandey, K.M., Effect of Temperature Variation on Surface Treatment of Short Jute Fiber-Reinforced Epoxy Composites (2018) Materials Today: Proceedings, 5 (1), pp. 1271-1277. DOI: 10.1016/j.matpr.2017.11.211 (Scopus), PUBLISHER: Elsevier Ltd
21. Dey, A., Bandi, V.R.R., Pandey, K.M., Wire electrical discharge machining characteristics of AA6061/cenosphere aluminium matrix composites using RSM (2018) Materials Today: Proceedings, 5 (1), pp. 1278-1285. DOI: 10.1016/j.matpr.2017.11.212 (Scopus), PUBLISHER: Elsevier Ltd.
22. Choubey, G., Suneetha, L., Pandey, K.M., Composite materials used in Scramjet- A Review (2018) Materials Today: Proceedings, 5 (1), pp. 1321-1326. DOI: 10.1016/j.matpr.2017.11.217 (Scopus), PUBLISHER: Elsevier Ltd
23. Tripathi, S., Pandey, K.M., Randive, P., Computational study on effect of obstacles in pulse detonation engine (2018) International Journal of Engineering and Technology(UAE), 7 (4), pp. 113-117. DOI: 10.14419/ijet.v7i4.5.20025 (Scopus), PUBLISHER: Science Publishing Corporation Inc
24. Choudhury, P., Halder, S., Khan, N.I., Wang, J., Pandey, K.M., Enhanced crack suppression ability of hybrid glass fiber reinforced laminated composites fabricated using GNP/epoxy system by optimized UDM parameters (2017) Ultrasonics Sonochemistry, 39, pp. 174-187. DOI: 10.1016/j.ultsonch.2017.04.014 (Scopus), PUBLISHER: Elsevier B.V.
25. Kumar, P., Pandey, K.M., Effect on heat transfer characteristics of nanofluids flowing under laminar and turbulent flow regime - A review (2017) IOP Conference Series: Materials Science and Engineering, 225

(1), art. no. 012168. DOI: 10.1088/1757-899X/225/1/012168 (Scopus), PUBLISHER: Institute of Physics Publishing.

26. Kumar, R.R., Pandey, K.M., Static structural and modal analysis of gas turbine blade (2017) IOP Conference Series: Materials Science and Engineering, 225 (1), art. no. 012102. DOI: 10.1088/1757-899X/225/1/012102 (Scopus), PUBLISHER: Institute of Physics Publishing.
27. Mazarbhuiya, H.M.S.M., Pandey, K.M., Steady State Structural Analysis of High Pressure Gas Turbine Blade using Finite Element Analysis (2017) IOP Conference Series: Materials Science and Engineering, 225 (1), art. no. 012113. DOI: 10.1088/1757-899X/225/1/012113 (Scopus), PUBLISHER: Institute of Physics Publishing
28. Alam, N., Pandey, K.M., Experimental Study of Hydroxy Gas (HHO) Production with Variation in Current, Voltage and Electrolyte Concentration (2017) IOP Conference Series: Materials Science and Engineering, 225 (1), art. no. 012197. DOI: 10.1088/1757-899X/225/1/012197 (Scopus). PUBLISHER: Institute of Physics Publishing
29. Kharat, S.B., Deoghare, A.B., Pandey, K.M., Airflow and particle transport through human airways: A systematic review (2017) IOP Conference Series: Materials Science and Engineering, 225 (1), art. no. 012132. DOI: 10.1088/1757-899X/225/1/012132 (Scopus). PUBLISHER: Institute of Physics Publishing
30. Yadav, R.K., Basak, R., Pandey, K.M., Review on heat transfer from fins (2017) IOP Conference Series: Materials Science and Engineering, 225 (1), art. no. 012145. DOI: 10.1088/1757-899X/225/1/012145 (Scopus). PUBLISHER: Institute of Physics Publishing
31. Choubey, G., Pandey, K.M., Maji, A., Deshamukhya, T., A brief review on the recent advances in scramjet engine (2017) AIP Conference Proceedings, 1859, art. no. 020036. DOI: 10.1063/1.4990189 (Scopus). PUBLISHER: American Institute of Physics Inc.
32. Dey, A., Debnath, M., Pandey, K.M., Analysis of Effect of Machining Parameters during Electrical Discharge Machining Using Taguchi-Based Multi-Objective PSO (2017) International Journal of Computational Intelligence and Applications, 16 (2), art. no. 1750010. DOI: 10.1142/S1469026817500109 (Scopus). PUBLISHER: World Scientific Publishing Co.
33. Debbarma, A., Pandey, K.M., CFD Study on Emergency Core Cooling of Hot Vertical Nuclear Fuel Rod Bundle by Jet Impingement (2017) Materials Today: Proceedings, 4 (2), pp. 2534-2543. DOI: 10.1016/j.matpr.2017.02.107 (Scopus). PUBLISHER: Elsevier Ltd.
34. Sharma, D., Pandey, K.M., Simulation of rod clad interaction and effect of various parameters on distribution of temperature in the cylindrical nuclear fuel rod (2017) Materials Today: Proceedings, 4 (2), pp. 4204-4212. DOI: 10.1016/j.matpr.2017.02.123 (Scopus). PUBLISHER: Elsevier Ltd
35. Debbarma, A., Pandey, K.M., CFD Analysis of Rewetting Temperature and Wetting Delay during Emergency Cooling of Vertical Nuclear Fuel Rod Bundle with Water Jet Impingement (2017) Materials Today: Proceedings, 4 (2), pp. 4144-4152. DOI: 10.1016/j.matpr.2017.02.117 (Scopus). PUBLISHER: Elsevier Ltd.
36. Sharma, D., Pandey, K.M., Chandrashekharapratap, C., Computational Study of Effect of Varying Properties of Carbon Dioxide on Convective Heat Transfer in Sub Channels Flow at a Pressure Just above the Critical Value (2017) Materials Today: Proceedings, 4 (2), pp. 1293-1302. DOI: 10.1016/j.matpr.2017.01.150 (Scopus). PUBLISHER: Elsevier Ltd.
37. Yadav, S., Das, K., Pandey, K.M., A comparative analysis of heat transfer in extended surfaces with and without holes (2017) Lecture Notes in Mechanical Engineering, Part F8, pp. 421-429. DOI: 10.1007/978-81-322-2743-4_40 (Scopus). PUBLISHER: Springer Heidelberg
38. Sharma, D., Pandey, K.M., Debbarma, A., Choubey, G., Numerical Investigation of heat transfer enhancement of SiO2-water based nanofluids in Light water nuclear reactor (2017) Materials Today: Proceedings, 4 (9), pp. 10118-10122. DOI: 10.1016/j.matpr.2017.06.332 (Scopus). PUBLISHER: Elsevier Ltd.
39. Choubey, G., Pandey, K.M., Maji, A., Deshmukhya, T., Debbarma, A., Computational Investigation of Multi-Strut Injection of Hydrogen in a Scramjet Combustor (2017) Materials Today: Proceedings, 4 (2), pp. 2608-2614. DOI: 10.1016/j.matpr.2017.02.115 (Scopus). PUBLISHER: Elsevier Ltd.
40. Tuhin Deshamukhya, Dipankar Bhanja, Sujit Nath, Ambarish Maji, Gautam Choubey, 2017. Analytical study of temperature distribution in a rectangular porous fin considering both insulated and convective tip, FCSPTC-2017, 7-8 April 2017, Andhrapradesh, INDIA, AIP Conference Proceedings 1859, 020031 (2017), SCOPUS, http://dx.doi.org/10.1063/1.4990184
41. Debayan Dasgupta, Sujit Nath, Dipankar Bhanja, 2017. Linear stability analysis of planar liquid sheet with unequal gas velocities confined between two solid walls, FCSPTC-2017, 7-8 April 2017, Andhrapradesh, INDIA, AIP Conference Proceedings 1859, 020113 (2017), SCOPUS, http://dx.doi.org/10.1063/1.4990266.

42. Saheera Azmi Hazarika, Mohd Zeeshan, Dipankar Bhanja, Sujit Nath, 2017. Analytical study on the thermal performance of a partially wet constructal T-shaped fin, FCSPTC-2017, 7-8 April 2017, Andhrapradesh, INDIA, AIP Conference Proceedings 1859, 020039 (2017), SCOPUS, http://dx.doi.org/10.1063/1.4990192
43. Mohd Zeeshan, Saheera Azmi Hazarika, Sujit Nath, Dipankar Bhanja, 2017. Numerical investigation on the performance of fin and tube heat exchangers using rectangular vortex generators, FCSPTC-2017, 7-8 April 2017, Andhrapradesh, INDIA, AIP Conference Proceedings 1859, 020011 (2017), SCOPUS, http://dx.doi.org/10.1063/1.4990164
44. Abhijeet Borthakur, Dipankar Bhanja, Sujit Nath, 2016. Numerical modeling of phase change material to enhance heat transfer using extended surfaces, FMFP2016, MNNITA, Allahabad, U.P., India, December 15-17, 2016.
45. S. Dutta, A. K. Biswas, S. Pati, Effects of non-uniform heating on natural convection within rhombic enclosures: A numerical study, 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTC-2017), BITS Pilani Hyderabad campus, Hyderabad, Dec. 27-30, 2017, Paper ID No: IHMTC2017-07-0447, pp. 1-9.
46. S. Dutta, A. K. Biswas, S. Pati, Numerical Analysis of Laminar Natural Convection in a Quadrantal Cavity with Non-uniform heating of Bottom Wall, 1st International Conference on Mechanical Engineering, Jadavpur University, Kolkata, January 04-06, 2018, Paper ID: INCOM18-96, pp 1—4.
47. Debroy P., Kumar M. Wave force on submerged inclined thin plate in intermediate depth of water. International Conference on Mechanical, Material and Renewable Energy. Sikkim Manipal University, December 2017.
48. Nazrul Islam Khan, Sudipta Halder, Subhankar Das, M.S. Goyat, Parametric influence towards size reduction of poly(methylmethacrylate) shelled microcapsule with epoxy core, Materials Today Proceeding (ICMS 2017).
49. Jialai Wang, Sudipta Halder, Fang, Guangping Lin, Novel Encapsulation Technology for Energy Efficient Building Materials and Self-Healing of Concrete, JEC-Chicago, USA, 2017.
50. Subhankar Das, Sudipta Halder. Effect of oxidation and silanization of C60 on the tensile and dynamic mechanical behavior of epoxy nanocomposites. The 4th International Conference on Advances in Materials & Materials Processing (icAMMP-IV) IIT Kharagpur, November 5-7, 2016.
51. Subhankar Das, Sudipta Halder, and Nazrul Islam Khan. Influence of acoustic cavitation mixing on tensile and fracture properties of oxidized fullerene-epoxy nanocomposites. International Conference on Nanotechnology: Ideas, Innovations & Initiatives-2017 (ICN: 3i-2017) on 6–8 December 2017 at IIT Roorkee, India.
52. Subhankar Das, Nazrul Islam Khan, Sudipta Halder. Thermo-mechanical stability of epoxy composites induced with surface silanized recycled carbon fibers. 1st International Conference on Mechanical Materials and Renewable Energy (ICMMRE 2017) Sikkim Manipal Institute of Technology, Majhitar, Sikkim, 8th – 10th December, 2017.

d) National Conference(s):

1. Sarma, P. and Patowari, P. K. (2018). Alternate Soft Lithographic Approaches for Microfluidic Device Fabrication Using PCM and EDM based tools. In National Conference on Recent Advances in Science and Technology (NCRAST-2018), Assam Science and Technology University, Guwahati, March 15-17, 2018.
2. Sarma, P. and Patowari, P. K. (2018). Fabrication of microchannels on metal using WEDM and EDM for microfluidic applications. In National Conference on Recent Advances in Science and Technology (NCRAST-2018), Assam Science and Technology University, Guwahati. March 15-17, 2018.
3. Kumar, R., Bhargav, C., and Bhowmik, S., Bamboo fibre reinforced thermoset and thermoplastic polymer composites: A short review, Renewable Energy Technologies: Issues and Perspectives (RETIP 2017), NIT Silchar, Assam, 25th September, 2017, AIP Conf. Proc. 1998, 020018-1–020018-3; DOI: https://doi.org/10.1063/1.5049114, Published by AIP Publishing. 978-0-7354-1714-4/$30.00.
4. Jagadish, Bhowmik, S., Ray, R., and Rajakumaran, M., Optimization of Process Parameters using Fuzzy-Grey Relational Analysis (F-GRA) for Green EDM, Renewable Energy Technologies: Issues and Perspectives (RETIP 2017), NIT Silchar, Assam, 25th September, 2017, AIP Conf. Proc. 1998, 020011-1–020011-9; DOI: https://doi.org/10.1063/1.5049107, Published by AIP Publishing. 978-0-7354-1714-4/$30.00.
5. Jagadish, Bhowmik, S., Ray, A., and Gudala, S., Cutting Fluid Selection for Environmentally Conscious

Design for Manufacturing: An Integrated Theory Design for Manufacturing: An Integrated Theory, Renewable Energy Technologies: Issues and Perspectives (RETIP 2017), NIT Silchar, Assam, 25thSeptember, 2017AIP Conf. Proc. 1998, 020010-1–020010-7, DOI: https://doi.org/10.1063/1.5049106; Published by AIP Publishing. 978-0-7354-1714-4/$30.00.

6. Zindani, D., Maity, S.R., and Bhowmik, S., Selection of material for wind turbine blade using PROMETHEE-GAIA method, Renewable Energy Technologies: Issues and Perspectives (RETIP 2017), NIT Silchar, Assam, 25th September, 2017, AIP Conf. Proc. 1998, 020008-1–020008-6; DOI: https://doi.org/10.1063/1.5049104, Published by AIP Publishing. 978-0-7354-1714-4/$30.00.

e) Book/Chapter:

1. Book Chapter 4 (Part – I): Bhowmik, S., Jagadish, and Ray, A., 2017 Abrasive Water Jet Machining of Composites Materials , Advanced Manufacturing Technologies, Springer, 77 – 97, ISBN 978-3-319-56098-4, DOI:-10.1007/978-3-319-56099-1;
2. Book Chapter 9: Kumar, R. and Bhowmik, S., 2017, Development of Natural Bio-Filler based epoxy composite for wind turbine blade application, Design and Optimization of Mechanical Engineering Products, IGI Global, 180 – 196, DOI: 10.4018/978-1-5225-3401-3.ch009;
3. Book Chapter 12: Bhowmik, S. and Jagadish, 2017, Multi-criteria decision making for optimization of product development under green manufacturing environment, Design and Optimization of Mechanical Engineering Products, IGI Global, 234 – 249, DOI: 10.4018/978-1-5225-3401-3.ch012;
4. Book Chapter 6: Zindani, D., Maity, S.R. and Bhowmik, S., 2017, A decision making Approach for Material Selection of Polymeric Composite Bumper Beam, Composites and Advanced Materials for Industrial Applications, IGI Global, 112-128, DOI: 10.4018/978-1-5225-5216-1.ch006.

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1.	Solar Regional Test Center	MNRE	Rs. 23,000/-

1.7 MAJOR EQUIPMENT ACQUIRED: NIL

1.8 PATENT

Sl. No.	Details	Year
1.	Sudipta Halder, P.K. Ghosh, A multifunctional technique for dispersion of thoroughly broken agglomerates of inorganic nanoparticles in viscous fluid, Application No. 1554/Del/2008, Grant No. 292158.	2018
2.	Development of composite material from biodegradable Cashew nut shell (Anacardium occidentale), Das Lala Sumit, Deoghare Ashish Bhalchandra, Chatterjee Sushovan. Application No – 201731007338. (Examination awaited)	2017
3.	Development of composite material from oil extracted and alkali treated Cashewnut shells (Anacardium occidentale), Das Lala Sumit, Deoghare Ashish Bhalchandra, Chatterjee Sushovan. Application No – 201731007337 (Examination awaited)	2017

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1.	Dr. S. Bhowmik	10TH International Conference on Sustainable Energy and Environmental Protection (SEEP 2017)	Bled, Slovenia	June 27 – 30, 2017
2.	Dr Sudip Dey	3rd International Conference on Mechanical and Aeronautical Engineering (ICMAE 2017) on Dec 13-16, 2017 at Dubai, UAE	Dubai, UAE	Dec 13-16, 2017
3.	Dr.K.M.Pandey	10th International conference on Sustainable Energy and Environmental Protection (SEEP2017)	Bled, Slovenia	27-30 June 2017
4.	Dr. B. Das	10th International conference on Sustainable Energy and Environmental Protection (SEEP2017)	Bled, Slovenia	27-30 June 2017
5.	Dr. S. Halder	Novel Encapsulation Technology for Energy Efficient Building Materials and Self-Healing of Concrete, JEC-Chicago	USA	2017

1.10 M.Tech. / M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	Monotosh Das	Dr. A. Biswas	Techno-economic optimization of some Hybrid Renewable Energy Systems for meeting energy demand of a radio transmitter station.
2.	Sanjeet Kumar	Dr. A. Biswas & Dr. B. Das	Design and thermal analysis of an innovative photo-voltaic thermal collector (PVTC) system for the meteorological condition of North-East
3.	Ankur Srivastav	Dr. A. Biswas & Dr. B. Das	Experimental and Computational Analysis of Solar drying of tea leaves using PV-T module
4.	Abhijeet Kumar	Dr. Sudip Dey	Free vibration analysis of multiple delaminated glass-epoxy composite plates
5.	Surajit Das	Dr. Sudip Dey	Effect of eccentricity on stochastic dynamic analysis of journal bearing – An ANN approach
6.	Vaishali	Dr. Sudip Dey	Stochastic natural frequency analysis of sandwich plates
7.	Rutupurna Choudhury	Dr. Sudip Dey	Fuzzy based low velocity impact analysis of composite plates
8.	Vijay Singh	Dr. Pitambar Randive	Numerical Investigation on the effects of Swirl and Surface Configurations on Thermo-Hydraulic Characteristics of Turbulent offset Jet
9.	Gaurav Kumar	Dr. S. Bhowmik	Synthesis and response study of tensile and flexural properties of bamboo filler based functionally grade composite
10.	Rahul Jayasval	Dr. S. Bhowmik	Evaluation and optimization of thrust force in drilling operation of particle board composite panels
11.	Pran Jyoti Saikia	Dr. S. Bhowmik	Development of bamboo filler epoxy composite and its response towards cyclic loading

12.	Mr. Sumit Kumar	Dr. A.B. Deoghare	Computational Study of Human Abdominal Artery for Blood Flow Analysis
13.	Mr. Kharat Sandeep Bhagwan	Dr. A.B. Deoghare	Two phase CFD analysis of air-aerosol flow through human airways to achieve efficient patient specific drug deposition
14.	Mr. Dhiraj S. Bombarde	Dr. A.B. Deoghare	Three-Dimensional Finite Element Modelling and Dynamic Response Analysis of Human Middle Ear
15.	Siddhita Yadav	K.M.Pandey	Computational study of flame behaviour on scramjet engine with tandem dual cavity
16.	Saurabh Tripathi	K.M.Pandey	Effect of Obstacles on Flame velocity in Pulse Detonation Engine
17.	Kumar Aditya Chandra	K.M.Pandey &K. K Sharma	CFD analysis solar water heater
18.	Shivji Kumar	K.M.Pandey &K. K Sharma	CFD analysis solar water heater
19.	Pankaj Kumar Shahu	K.M.Pandey & S.R. Maity	Machining Performance Evaluation of Al 6061T6 using Abrasive Water Jet Process.
20.	Dhiraj Raj	K.M.Pandey &S.R. Maity	Experimental Study on Properties of Cold Rolled Al-12 Si alloy fabricated by spray forming
21.	Shende suraj Balu	K.M.Pandey &A.B. Deoghare	Design and modeling of human middle ear for harmonic response analysis
22.	Radhe Tado	K.M.Pandey &A.B. Deoghare	Computational study of blood flow analysis for coronary artery disease
23.	Guttikonda Manohar	K.M.Pandey &S.R.Maity	Experimental study on Mechanical properties of AA 7075/B_4C Nano Composites Fabricated by Power Metallurgy Technique
24.	Navin Niraj	K.M.Pandey	Tribiological behaviour of magnesium metal matrix composites
25.	Ajay Yadav	K.M.Pandey	Tribiological behaviour of aluminium metal matrix composites
26.	Smriti Jaiswal	K.M.Pandey &A.B. Deoghare	CFD simulation of two phase air aerosol drug deposition in the human airways
27.	Girija sankar Murmu	K.M.Pandey	Preparation of biodegradable plastic and bio-bag using banana peel as an alternative of plastic bag optimising with Taguchi method
28.	Netrananda Behera	K.M.Pandey	Modeling and simulation of uni-directional MMC subjected to off axis loading using cohesive zone under elevated temperature
29.	Shashi Bhushan Gunjan	Sudipta Halder & P. Choudhury	Synthesis and characterization of Graphene induced diels- alder based self-healing epoxy system
30.	Jogeshwar Sahoo	P. Choudhury	Determination of GTT & elastic constants of DGEBF-DETDA epoxy polymer system using molecular dynamics simulation
31.	Ajay Kumar	Dr. K.M. Pandey	Performance Analysis of wind farm model using Savonius VAWTs with various Alignment having Different Diameter and Different Heights
32.	Siddhartha Sagar Bora	Sudipta Halder & P. Choudhury	Experimental study on electrophoretic deposition of surface modified carbon nano particles on glass fibre.
33.	Aby M Philip	Dr. K. Chakraborty	Study on machinability of austenitic stainless steel(316L)
34.	Jai Tiwari	Dr. K. Chakraborty	Study on machinability of 52100 alloy steel

35.	Gopal Chandra Pal	Dr. Sukumar Pati	Some Studies on Natural Convection Heat Transfer inside an Enclosure having Pair of Cylinders Embedded in it.
36.	Madhusmita Sahoo	Dr. Sukumar Pati	Combined effects of Pulsatile Flow and Non-uniform Heating on Transport Characteristics for Flow through Wavy Channel
37.	Saranga Sekhar Saikia	Dr. S. Nath	Investigation of macrochannel and microchannel evacuated tube solar collectors
38.	Shashank Paul	Dr. D. Bhanja	Thermal performance analysis of PVT System with cooling arrangement
39.	Shreekant Kumar Sahu	Dr. S. Nath and Dr. D. Bhanja	Development of a methodology to optimize micro fin heat sink for enhancing heat transfer
40.	Yogesh Garud	Dr. P. Debroy	Analysis of wave forces on submerged vertical plate using Stokes Non-linear wave theory and design of Numerical Wave tank
41.	Biswa Baran Behera	Dr. S. Halder	Introducing transformation behaviour during failure in hybrid GFRP laminates
42.	Dhruba Jyoti Sarma	Dr. S. Halder	Incorporation of surface modified waste glass nanoparticle in GFRP to enhance the multifunctional property

1.11 Ph.D Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Mr. Jagadish	S. Bhowmik (Supervisor) and A. Ray (Jt. Supervisor).	Development of Green Manufacturing Strategies for Process Parameter Optimization on Processing of Metallic and Polymeric Materials
2.	Ajoy Debbarma	K.M.Pandey	Computational analysis of rewetting of nuclear fuel clad surface during loss of coolant accident
3.	Deepak Sharma	K.M.Pandey	CFD Analysis of thermal hydraulics behaviour of fuel rod using nanofluids in Light water nuclear reactor
4.	Abhijit Dey	K.M.Pandey	Experimental Studies on composite materials
5.	Gautam Choubey	K.M.Pandey	Numerical simulation with CFD on the performance of Scramjet combustor using Multi-strut injector
6.	Saroj Yadav (Submitted)	K.M.Pandey	A Comparative Thermal Analysis of Pin Fins for Improved Heat Transfer in Forced Convection
7.	Sumita Debbarma	R.D. Misra	Experimental Investigation on CI Engine Performance and Exhaust Emissions using Biodiesel with Nano-Additives
8.	S. Wangikar (Submitted)	P.K. Patowari & R.D. Misra	Design and Development of Microchannel for effective Mixing of Multifluids
9.	Bhabani Pattanayak (Submitted)	R.D. Misra	Synthesis of Deoxygenated Biofuels and their Experimental Performance Evaluation for CI Engine Applications
10.	Subhankar Das (Submitted)	Dr. S. Halder	Silanized Carbon Fillers and its Damage Mitigation Capabilities for Potential Reinforcement in Hybrid Laminates

1. Name of the Department :-

Electrical Engineering



1.1 Academic Staff:

HEAD: Prof. Nalin B. Dev Choudhury

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
Prof. (Late) Ashoke Kumar Sinha	Dr. Saurabh Chaudhury	Dr. Lalit Chandra Saikia
Prof. Nidul Sinha	Dr. Nalin B Dev Choudhury	Dr. Tanmoy Malakar
Prof. Binoy Krishna Roy		Dr. Chayan Bhattacharjee
		Dr. Dulal Chandra Das
		Dr. Prashant Kumar Tiwari
		Dr. Nirmala Soren
		Dr. Raj Kumar Biswas
		Dr. Prasanta Roy
		Dr. Rajeeb Dey
		Dr. Jyoti Prakash Mishra
		Dr. Arup Kumar Goswami

Visiting Professor (If any): NIL

1.2 Distinction Achieved

a) By Student:

Dr. Rajeeb Dey: B.Tech students have filed and published one patent in Dec 2017. Name of the students, Santosh Rakkumar, Sayan Chakraborty.(Application No.201721039540A)

b) By Faculty Member:

Dr. Rajeeb Dey:

- Rajeeb Dey has filed and published two patents in Dec 2018

1) Wireless network based embedded control design method for actuator with uncertain delay. No. 201721043325A, publication date 22 December 2017, Indian Patent office journal 51/2017.

2) Fabrication of an automated assembly of jigs and fixtures for knee replacement surgery. No. 201721039540, pub date 22 December 2017, Indian Patent Journal 51/2017.

- Rajeeb Dey Selected as Associate Editor IEEE Access Journal.
- Delivered invited talk at IEEE EPSCICON January 2018 at Thrissur, Kerela.
- Delivered technical session as a resource person at ISTE-STTP on Control of Power Electronics Devices, July 2017 at Nirma University, Gujarat,
- Editor of the International Journal of Advanced Intelligence Paradigms, Inderscience.

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr. Saurabh Chaudhury	IET Awareness cum Invited talk on Smart Grid & IOT	IET (UK) Kolkata & NIT Silchar	28th August 2017 (1 day)
2	Dr T Malakar and Dr. R. Dey	One Week Workshop on Hands on Training using Mi-Power Software for Power System Analysis	TEQIP-III & PRDC Pvt. Ltd	2-6 Oct'2018
3	RAJEEB DEY EXPERT: ALEXENDER S POZNYAK, MEXICO	GIAN COURSE ON ROBUST CONTROL: ATTRACTIVE ELLIPSOID METHOD AND SLIDING MODE CONTROL	MHRD	11/11/2017 TO 16/11/2017
4	Prof. N. B. Dev Choudhury	National Workshop on Massive Open Online Courses (MOOCs),from 26.08.17 to 27.08.17	TEQIP-III and Royal Academy of Engineering, UK	26-08-2017 to 27-08-2017
5	Prof. N. B. Dev Choudhury	Two week ISTE STTO on Electric Power System under MNEICT	IIT Kharagpur and MHRD	10-07-2017 to 15-07-2017
6	Prof. N. B. Dev Choudhury	One week GIAN course on "Methodological Approach for circuit analysis of Modern Power System" sponsored by MHRD	IIT Kharagpur and MHRD	08-01-2018 to 13-08-2018
7	Prof. B. K. Roy, Dr. P. Roy	Edumeet on Factory Autmation and Reform of Academia,	TEQIP-III and Mitsubishi Electric India Ltd.	23rd March, 2018

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Prof. Binoy Krishna Roy	National Workshop on Massive Open Online Courses (MOOCs),from 26.08.17 to 27.08.17	NIT Silchar &Thapar University
2	Dr. Jyoti Prakash Mishra	Two-week ISTE STTP on "Electric Power System" under the National Mission on Education through ICT (MHRD) from 10th to 15th July, 2017	IIT Kharagpur
3	Dr. Prashant Kumar Tiwari	**3rd Educational meet** on Factory Automation, "Bridging the Gap between Industry and Academia", on 23rd March-2018	Jointly organized by NIT Silchar and Mitsubishi Electric India.Ltd.
4	Dr. Prashant Kumar Tiwari	**National workshop** on "Train the Trainer" on Massive Open Online Courses (MOOCs), 26-27 August 2017	Organized by TEQIP-III, N.I.T. Silchar in collaboration with Royal Academy of Engineering (UK) and Thapar University (Patiala).
5	Prof. N. B. Dev Choudhury	**National workshop** on "Train the Trainer" on Massive Open Online Courses (MOOCs), 26-27 August 2017	Organized by TEQIP-III, N.I.T. Silchar in collaboration with Royal Academy of Engineering (UK) and Thapar University (Patiala).
6	Prof. N. B. Dev Choudhury	Edumeet on Factory Autmation and Reform of Academia, 23rd March, 2018	Organized by EE Dept of NIT Silchar and sponsored by TEQIP-III and Mitsubishi Electric India Ltd.
7	Dr. L. C. Saikia	**National workshop** on "Train the Trainer" on Massive Open Online Courses (MOOCs), 26-27 August 2017	Organized by TEQIP-III, N.I.T. Silchar in collaboration with Royal Academy of Engineering (UK) and Thapar University (Patiala).
8	Dr. L. C. Saikia	Edumeet on Factory Autmation and Reform of Academia, 23rd March, 2018	Organized by EE Dept of NIT Silchar and sponsored by TEQIP-III and Mitsubishi Electric India Ltd.
9	Dr. D. C. Das	Two-week ISTE STTP on "Electric Power System" under the National Mission on Education through ICT (MHRD) from 10th to 15th July, 2017	IIT Kharagpur

1.4 Research Development

a) Ph.D. Programme (Specializations):

Prof. Nidul Sinha: Power System
Prof. Binoy Krishna Roy: Control System
Prof. Saurabh Chaudhury: VLSI Design, Tunnel FETs, FinFET Devices, Nanomaterials, Image Processing and Applications.
Prof. N. B. Dev Choudhury: Deregulated Power system, Reliability, Energy.
Dr. A. K. Goswami: Power system
Dr. Jyoti Prakash Mishra: Power and Energy System
Dr. Lalit Chandra Saikia: Power systems, Energy
Dr. Tanmoy Malakar: Electrical Power Systems
Dr. D. C. Das: Power and Energy Systems
Dr. Chayan Bhattacharjee: Power System and Control

Dr. P. K. Tiwari: Power System
Dr. N. Soren: Energy and Power system
Dr. R. Dey: Control Systems
Dr. Raj Kumar Biswas: Control systems
Dr. P. Roy: Control Systems

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
18	7	44

c) Research Lab/ Workshop:

Sl. No.	Faculty Name	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Prof. Saurabh Chaudhury	Virtual Nanolab (ATK 2018)	Research on Nanomaterials
2	Prof. Saurabh Chaudhury	Synopsys CAD Tool	For M.Tech and Ph.D research works
3	Dr. Lalit Chandra Saikia	Power system lab	For research scholar, PG student lab class, UG Lab class
4	Dr. Lalit Chandra Saikia	Electrical machine lab	For UG 5th and 6th semester Lab classes
5	Dr. Prasanta Roy	EDUMEET 2018 (with Mitsubishi Electric India)	To bridge the gap between the Industry and the Academia
6	Dr. D. C. Das	Non-conventional Energy lab	PG student lab class, PG/PhD research lab

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Design & Implementation of pure sine wave inverter for residential solar power system in India	Dr. Arup K Gosweami	All India Council for Technical Education (AICTE), Research Promotion Scheme, India	15 Lakhs	December 2012 to January 2016
2	Power Quality Assessment and Improvement in Barak Valley	Dr. Arup K Gosweami	Department of Science and Technology, Science and Engineering Research Board, India	9.87 Lakhs	December 2012 to January 2016
3	Development of Battery Super-capacitor Hybrid Energy Storage System for Stand-alone Solar Photovoltaic Power System	**PI:** Dr. Munmun Khanra (E&I Dept., NIT Silchar) **Co-PI:** Dr. J.P. Mishra, EE Dept., NIT Silchar	DST, SEED Division	22.21816	03 Years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Prof. Binoy Krishna Roy	IEEE-TCAS-II,TCAS-I, IEEE Acess Elsevier-CSF, Springer-NODY AIP-Chaos, Wiley-Asian Journal of Control, Control theory application , T&F-JSS, IJC, IOP Science: CPB, etc.	30+	Apr. 2017 To March 2018
2	Dr, J.P. Mishra	IET Renewable Power Generation	02	2017
3	L. C. Saikia	IET generation, transmission & Distribution IET Renewable power generation ISA transaction ITEES, Willy International Journal of Renewable power generation International journal of Electrical power and Energy IEEE transactions on power and Energy	3 4 2 5 4 2 4	2017-18 2017-18 2017-18 2017-18 2017-18 2017-18 2017-18
4	Dr. T. Malakar	IEEE Trans on Industrial Informatics IEEE System Journal IET Gen, Transm & Distrib IET Renewable Power Generation Applied Soft Computing, Elsevier Int. J. of Electrical Power & Energy Systems, Elsevier Electric Power Components and Systems, T & F Swarm & Evolutionary Computation, Elsevier	01 01 04 01 02 02 03 02	2017-18
5	Dr. Chayan Bhattacharjee	Energy Conversion and Management, Elsevier IEEE transactions on power systems	2 1	2017
6	Dr. Raj Kumar Biswas	Journal of the Franklin Institute Asian Journal of Control Transactions of the Institute of Measurement and Control IMA Journal of Mathematical Control and Information	04 01 01 01	2017-18
7	Dr Prashant Kumar Tiwari	IEEE Transactions on Power Systems IET Generation, Transmission & Distribution Int. J. of Computers & Electrical Engineering (Elsevier) Renewable Energy Focus (Elsevier) Ain Shams Engineering Journal (Elsevier)	02 05 01 02 01	2017-18
8	Dr. Rajeeb Dey	ISA Transaction, JFI, Asian Journal of control, IEEE ACCESS	15	2017-18
9	Dr. Prasanta Roy	ISA Transaction	4	2017-18
10	Prof. N. B. Dev Choudhury	IET Science, Measurement and Technology International Transactions on Electrical Energy Systems IET Generation, Transmission & Distribution	12	2017-18

11	Dr. D. C. Das	IEEE System Journal IET Renewable Power Generation Energy Conversion and Management. International Journal of System Assurance Engineering and Management	5	April 17 to March 18

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr. Saurabh Chaudhury	Research Conclave 2017, NIT Silchar ICNSNT 2017, SriLanka
2	Dr. T. Malakar	Inter. Conf. on Innovations in Infrastructure, Springer. Organized by Institute of Infrastructure Technology Research and Management, Ahmedabad. Gujarat. During 18-19 May 2018
3	Rajeeb Dey	In IEEE EPSCICON at Thrissur, Kerala. Technical Session on Control Theory and Applications, January 2018.

1.5 PUBLICATION

a) International Journal(s):

1. K. Lochan, B. K. Roy, B. Subudhi, November 2017, Robust tip trajectory synchronisation between assumed modes modelled two-link flexible manipulators using second-order PID terminal SMC, Robotics and Autonomous Systems, Vol.97, Pp 108-124. *(http://www.sciencedirect.com/science/article/pii/S0921889017300611)*
2. J. P. Singh, K. Lochan, N. V. Kuznetsov, B. K. Roy, Coexistence of single- and multi-scroll chaotic orbits in a single-link flexible joint robot manipulator with stable spiral and index-4 spiral repellor types of equilibria, *Volume 90, Issue 2, pp 1277–1299.* (https://link.springer.com/article/10.1007/s11071-017-3726-4)
3. JP Singh, B. K. Roy,September 2017, Coexistence of Asymmetric Hidden Chaotic Attractors in a New Simple 4-D Chaotic System with Curve of Equilibria, Optik - International Journal for Light and Electron Optics, Volume no.145,Pages 209-217, (http://www.sciencedirect.com/science/article/pii/S0030402617308598)
4. P. P. Singh, JP Singh , BK Roy,2017,NAC-based Synchronisation and Anti-synchronisation Between Hyperchaotic and Chaotic Systems, Its Analogue Circuit Design and Application,IETE Journal of Research, Volume 63,Issue 6,Pages 853-869. (http://www.tandfonline.com/doi/full/10.1080/03772063.2017.1331758)
5. M. Borah, P. Roy , BK Roy, Enhanced Performance in Trajectory Tracking of a Ball and Plate System using Fractional Order Controller,IETE Journal of Research,DOI: 10.1080/03772063.2017.1343157, (http://www.tandfonline.com/doi/full/10.1080/03772063.2017.1343157)

6. JP Singh , BK Roy,Multistability and hidden chaotic attractors in a new simple 4-D chaotic system with chaotic 2-torus behaviour,International Journal of Dynamics and Control,DOI: 10.1007/s40435-017-0332-8, (https://link.springer.com/article/10.1007/s40435-017-0332-8)
7. JP Singh and BK Roy,The simplest 4-D chaotic system with line of equilibria, chaotic 2-torus and 3-torus behaviour, Nonlinear Dynamics,Volume 89, Issue 3, pp 1845–1862, (https://link.springer.com/article/10.1007/s11071-017-3556-4)
8. M. Borah, BK Roy,An enhanced multi-wing fractional-order chaotic system attractors and switching hybrid synchronisation with its non autonomous counterpart with coexisting,Chaos Solitons & Fractals,Volume 102, September 2017, Pages 372-386, (http://www.sciencedirect.com/science/article/pii/S0960077917301169)
9. P. Roy, B. Kar, BK Roy, 2017,Fractional Order PI-PD Control of Liquid Level in Coupled Two Tank System and its Experimental Validation: Cascaded FOPI-FOPD Control,Asian Journal of Control,Volume 19, Issue 5 ,Pages 1699–1709, (http://onlinelibrary.wiley.com/doi/10.1002/asjc.1487/abstract)
10. M. Borah and BK Roy,2017, Can fractional-order coexisting attractors undergo a rotational phenomenon,ISA Transactions,DOI: 10.1016/j.isatra.2017.02.007,(https://www.ncbi.nlm.nih.gov/pubmed/28213982)
11. C. Bhattacharjee, B. K. Roy,2018,A Novel Fuzzy-Supervisory Control of a Hybrid System to Improve Contractual Grid Support with Fuzzy Proportional-Derivative and Integral (FPD+I) Control for,IET Generation Transmission & Distribution,Vol 12.Iss. 7 pp. 1455-1465, (http://digital-library.theiet.org/content/journals/10.1049/iet-gtd.2017.0708)
12. J. P Singh, B. K. Roy , S. Jafari,2017, New family of 4-D hyperchaotic and chaotic systems with quadric surfaces of equilibria,Chaos Solitons & Fractals,Vol. 106, pp. 243-257, (https://www.sciencedirect.com/science/article/pii/S0960077917304939)
13. J. P Singh and B. K. Roy,2018, Hidden attractors in a new complex generalised Lorenz hyper- chaotic system, its synchronisation using adaptive contraction theory, circuit validation and application,Nonlinear Dynamics,Vol. 92(2), 373-394, (https://link.springer.com/article/10.1007%2Fs11071-018-4062-z)
14. S. Samanta, J. P.Mishra and B. K. Roy,2017,Hierarchical Virtual Inertia Control of a Grid Connected Inverter Interfaced DC Micro Grid to Regulate the DC Bus Voltage,Journal of Advanced Research in Dynamical and Control Systems,10(03-Special Issue):pp.186-195, (http://www.jardcs.org/abstract.php?archiveid=3043)
15. J. P Singh, B. K. Roy and Zhouchao Wei,A new four-dimensional chaotic system with first Lyapunov exponent =22, hyperbolic curve and circular paraboloid types of equilibria and its switching synchronization by an adaptive global integral sliding mode control,Chinese Physics B,Vol. 27(4), 040500-040514, (https://www.sciencedirect.com/science/article/pii/S0960077917304939)
16. J. P Singh , B. K. Roy, A more chaotic and easily hardware implementable new 3-D chaotic system in comparison with 50 reported systems, Nonlinear Dynamics,DOI: https://doi.org/10.1007/s11071-018-4249-3, Accepted,

17. Debashish Dash, Chandan K. Pandey, Saurabh Chaudhury, and Susanta K. Tripathy,2018,Structural, Electronic and Mechanical Properties of Cubic TiO2: A First-Principle Study, Vol. 27, No. 1, 171530, DOI: 10.1088/1674-1056/27/1/017102
18. DebashishDash,SaurabhChaudhury,SusantaK.Tripathy,2018, Firstprincipleinvestigation of structural and optical properties of cubic titanium dioxide, AIP Conference Proceedings, Vol.1953,2018, DOI:10.1063/1.5033322
19. Abdul Kayom MdKhairuzzaman and Saurabh Chaudhury,2017, Moth-Flame Optimization Algorithm Based Multilevel Thresholding for Image Segmentation, International Journal of Applied Metaheuristic,8(4)
20. Rohit Lorenzo and Saurabh Chaudhury, 2017,A Novel 9T SRAM Architecture for Low Leakage and High Performance, Analog Integrated Circuits & Signal Processing (ALOG),Springer
21. Abdul Kayom MdKhairuzaman and Saurabh Chaudhury, April 2017, Multilevel thresholding using grey wolf optimizer for image segmentation, Expert Systems With Applications
22. JayeshRuikar, Ashoke Sinha and Saurabh Chaudhury,2017, Image Quality Assessment using Edge Correlation, International Journal of Electronics and Telecommunications, Vol.63,No.1
23. Subhojit Dawn, Prashant Kumar Tiwari, Arup Kumar Goswami, March 2018, An efficient approach for establishing the economic and operating reliability via optimal coordination of wind-PSH-solar-storage hybrid plant in highly uncertain double auction competitive power market, IET Renewable Power Generation
24. G. H. Reddy., P. Chakrapani., Arup KumarGoswami and Nalin B Dev Choudhury,2018, Fuzzy based Approach for Restoration of Distribution System during post Natural Disasters, IEEE Access. (SCIE/Scopus),
25. G. H. Reddy., Arup Kumar Goswami and Nalin B Dev Choudhury,2018, Estimation of Distribution System Reserve Capacity and Its Impact on System Reliability considering load growth, International Journal on Electrical Engineering and Informatics. (Scopus),
26. G. H. Reddy., Arup Kumar Goswami and Nalin B Dev Choudhury,2018, Impact of plug-in electric vehicles and distributed generation on reliability of distribution systems." Engineering Science and Technology, an International Journal. (ESCI/Scopus),
27. Subba Reddy B and Arup Kumar Goswami,2017, Voltage Sag due to Pollution Induced Flashover across Ceramic Insulator Strings, International Journal of Emerging Electric Power Systems, Vol. 18 , Issue 6, **(DOI:** https://doi.org/10.1515/ijeeps-2016-0160)
28. Gope, Sadhan; Arup Kumar Goswami; Tiwari, Prashant Kumar, AUG 2017, Transmission Congestion Management using a Wind Integrated Compressed Air Energy Storage System, Engineering Technology & Applied Science Research, Volume: 7 Issue: 4 Pages: 1746-1752, ISSN: **1792-8036**
29. Galiveeti Hemakumar Reddy, Pranju Chakrapani, Arup Kumar Goswami and Nalin B Dev Choudhury,June 2017, Optimal Distributed Generation Placement in Distribution System to Improve Reliability and Critical Loads Pick up after Natural Disasters, Engineering Science and Technology an International Journal, Vol. 20, No. 3, pp. 825-832, Elsevier publication, ISSN: 2215-0986, ESCI Journal

30. Galiveeti Hemakumar Reddy, Arup Kumar Goswami and Nalin B Dev Choudhury,April 2017, A Hybrid Method for Distribution Substation Reliability Evaluation, International Review of Electrical Engineering (I.R.E.E.), Vol. 12, No. 2, pp 142-150, ISSN: 1827-6660, Scopus Journal
31. Subhojit Dawn, Prashant Kumar Tiwari, Arup Kumar Goswami,August 2017, An approach for efficient assessment of the performance of double auction competitive power market under variable imbalance cost due to high uncertain wind penetration, Renewable Energy (Elsevier), vol 108, pp 230-243, SCI Journal, Impact Factor: 4.357. SCIE/Scopus/ISSN:0960-1481,
32. Santosh Kumar Singh, Nilotpal Sinha, Arup Kumar Goswami and Nidul Sinha,June 2017, Gravity Search Algorithm Hybridized Recursive Least Square Method for Power System Harmonic Estimation, Engineering Science and Technology an International Journal, Vol 20, Issue 3, Pages 874-884 ,Elsevier publication, ISSN: 2215-0986, ESCI Journal
33. Rituparna Mitra, Arup Kumar Goswami and Prashant Kumar Tiwari, May 2017, Voltage Sag Assessment using Type-2 Fuzzy system considering uncertainties in Distribution system, IET Generation, Transmission & Distribution, Vol 11, Issue 6, pp 1409-1419, SCI Journal. INSPEC Accession Number: 16899584, DOI: 10.1049/iet-gtd.2016.0816,
34. Soumya Samanta, Jyoti Prakash Mishra, Binoy Krishna Roy, Hierarchical Virtual Inertia Control of a Grid Connected Inverter Interfaced DC Micro Grid to Regulate the DC Bus Voltage,Journal of Advance Research in Dynamical and Control Systems, Vol. 10, 03-Special Issue, pp. 186-195, Institute of Advanced Scientific Research (ISSN 1943-023X)
35. Soumya Samanta, Jyoti Prakash Mishra, Binoy Krishna Roy, Virtual DC machine: an inertia emulation and control technique for a bidirectional DC-DC converter in a DC microgrid,IET Electr. Power Appl, Vol. 12 Issue. 06, pp. 874-884
36. S. Datta, J. P. Mishra and A. K. Roy,July-2017, Operation and control of a DFIG-based grid connected WECS using NSC during grid fault and with unbalanced non-linear load,International Journal of ambient Energy,Page No.1-11, Taylor and Francis, Indexed by Thomson Routers/Scopus.
37. ArinditaSaha,Lalit Chandra Saikia, Utilisation of ultra-capacitor in load frequency control under restructured STPP-thermal power systems using WOA optimised PIDN-FOPD controller, IET Generation, Transmission & Distribution, Vol No 11, Issue No 13
38. Debdeep Saha,L. C. Saikia, Impact of phase-locked loop on system dynamics of a CCGT incorporated diverse source system employed with AC/DC interconnection, Journal of Renewable and Sustainable Energy, Vol No 9, Issue No 6
39. Debdeep Saha,L. C. Saikia, Automatic generation control of a multi-area CCGT-thermal power system using stochastic search optimised integral minus proportional derivative controller under restructured environment, IET Generation, Transmission & Distribution, Vol No 11, Issue No 5
40. WashimaTasnin, L.C.Saikia, Maiden application of an sine-cosine algorithm optimized FO cascade controller in automatic generation control of multi-area thermal system incorporating dish-Stirling solar and geo-thermal power plants, IET Renewable Power Generation

41. Debdeep Saha,L. C. Saikia, Automatic generation control of an interconnected CCGT-thermal system using stochastic fractal search optimized classical controllers, International Transactions on Electrical Energy Systems
42. R. Rajbongshi,L. C. Saikia, Combined voltage and frequency control of a multi-area multisource system incorporating dish-Stirling solar thermal and HVDC link, IET Renewable Power Generation, Vol No 12, Issue No 3
43. WashimaTasnin,L.C. Saikia, Performance Comparison of Several Energy Storage Devices in Deregulated AGC of a multi area system incorporating Geothermal Power Plant, IET Renewable Power Generation
44. R. Rajbongshi,L. C. Saikia, Performance of coordinated FACTS and energy storage devices in combined multi-area ALFC and AVR system, Journal of Renewable and Sustainable Energy,Vol No.9
45. ArinditaSaha,L.C. Saikia, Performance analysis of combination of ultra-capacitor and superconducting magnetic energystorage in a thermal-gas AGC system with utilization of whale optimization algorithm optimizedcascade controller, Journal of Renewable and Sustainable Energy, Vol No 10, 6
46. ArinditaSaha,Lalit Chandra Saikia, Combined Application of Redox Flow Battery and DC Link in RestructuredAGC System in Presence of WTS and DSTS in Distributed Generation Unit, IET Generation, Transmission& Distribution
47. A. Rajan, K. Jeevan, T. Malakar,2017, Weighted elitism based Ant Lion Optimizer to solve optimum VAr planning problem, Vol. 55, pp. 352-370, Applied Soft Computing, Elsevier
48. A. Rajan, T. Malakar, Optimum Generation and VAr Scheduling on a Multi-Objective Framework using Exchange Market Algorithm, International Journal of Applied Intelligence Paradigms, Inder-science
49. S. Das, T. Malakar, Optimal capacitor placement and sizing in distribution system using Competitive Swarm Optimizer algorithm, International Journal of Applied Intelligence Paradigms, Inder-science
50. C. Bhattacharjee, B. K. Roy,2017, Fuzzy-supervisory control of a hybrid system to improve contractual grid support with fuzzy proportional–derivative and integral control for power quality improvement, IET Generation Transmission and Distribution, vol 12 (7), pp. 1-10,
51. I. Hussain, D. C. Das and N. Sinha,2017, Reactive Power Performance Analysis of Dish-Stirling Solar Thermal-Diesel Hybrid Energy System, IET Renewable Power Generation, Vol. 11.6, 2017, 750-762
52. I. Hussain, S Ranjan, D. C. Das and N Sinha.,2017, Performance Analysis of Flower Pollination Algorithm Optimized PID Controller for Wind-PV-SMES-BESS-Diesel Autonomous Hybrid Power System, International Journal of Renewable Energy Research-IJRE,Vol.7,No.2
53. Abdul Latif, D. C. Das, S Ranjan, I Hussain,March 2018, Integrated Demand Side Management and Generation Control for Frequency Control of a Microgrid Using PSO and FA based Controller, International Journal of Renewable Energy Research-IJRE,No.1
54. Chiranjeevi, T., and Biswas, R.K, Discrete-Time Fractional Optimal Control, Mathematics, 5(2), pp. 01–12, (https://doi.org/10.3390/math5020025)
55. Chiranjeevi, T., and Biswas, R.K, Formulation of Optimal Control Problems of Fractional Dynamic Systems with Control Constraints, Journal of Adv Research in Dynamical and Control Systems, Vol.10, pp. 201-212. (http://www.jardcs.org/abstract.php?archiveid=3045)

56. Paul Thomas & Nirmala Soren, The efficacy of an anaerobic digesterbased biogas production from various feedstocks, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 39:13, 1416-1424, Taylor & Francis, DOI: 10.1080/15567036.2017.1336817
57. Paul Thomas, Nirmala Soren, Nelson Pynadathu Rumjit, Jake George James, M.P. Saravanakumar, Biomass resources and potential of anaerobic digestion in Indian scenario, Renewable and Sustainable Energy Reviews, 77, 718-730, Elsevier
58. Subhojit Dawn, Prashant Kumar Tiwari, Arup Kumar Goswami, and Rajesh Panda, An Approach for System Risk Assessment and Mitigation by Optimal Operation of Wind Farm & FACTS Devices in Centralized Competitive Power, IEEE Transactions on Sustainable Energy, Impact Factor, 4.909, SCI Journal.
59. Rajesh Panda, Prashant Kumar Tiwari, Economic Risk based Bidding Strategy for Profit Maximization of Wind Integrated Day-Ahead and Real-Time Double Auctioned Competitive Power Markets, IET Generation, Transmission & Distribution, Impact Factor: 2.618, SCI Journal
60. Rituparna Mitra, Arup Kumar Goswami. Prashant Kumar Tiwari, Optimal Selection of Voltage Sag Mitigating Devices for Micro Level Customer in Distribution System, IET Renewable Power Generation, Impact Factor: 3.488, SCI Journal.
61. Subhojit Dawn, Prashant Kumar Tiwari, Arup Kumar Goswami, An efficient approach for establishing the economic and operating reliability via optimal coordination of wind-PSH-solar-storage hybrid plant in highly uncertain double auction competitive power market, IET Renewable Power Generation, vol. 12, Issue 10, pp. 1189-1202, Impact Factor: 3.488, E-ISSN: 1752-1424, SCI Journal.
62. Subhojit Dawn, Prashant Kumar Tiwari, Arup Kumar Goswami, An approach for efficient assessment of the performance of double auction competitive power market under variable imbalance cost due to high uncertain wind penetration, Renewable Energy (Elsevier), vol. 108, pp. 230-243, Impact Factor: 4.068, ISSN: 0960-1481, SCI Journal.
63. Rituparna Mitra, Arup Kumar Goswami, Prashant, Voltage Sag Assessment using Type-2 Fuzzy system considering uncertainties in Distribution system, IET Generation, Transmission & Distribution, vol. 11, issue 6, pp. 1409-1419, Impact Factor: 2.011, ISSN: 1751-8695, SCI Journal.
64. Sadhan Gope, Arup Kumar Goswami, Prashant Kumar Tiwari, Transmission Congestion Management using a Wind Integrated Compressed Air Energy Storage System, Engineering, Technology & Applied Science Research, vol. 7, no. 4, pp. 1746-1752, ISSN: 1792-8036, ESCI Journal.
65. Rupak Dutta, Rajeeb Dey, Baby Bhattacharjee, Further Improved Stability Condition for T-S Fuzzy Time-Varying Delay Systems via Generalized Inequality, Int. J. of Advanced Intelligence Paradigms,
66. Anirudh Nath, Rajeeb Dey, Carlos Augilar Avelar, Observer based nonlinear control design for glucose regulation in type 1 diabetic patients: An LMI approach, Biomedical Signal Processing and, Vol. 27, pp. 7-15. (ACCEPTED IN Jan)\
67. Prasanta Roy, Biprajeet Kar and Binoy Krishna Roy,2017, Fractional Order PI-PD Control of Liquid Level in Coupled Two Tank System and its Experimental Validation, Asian Journal of Control, vol. 19(5), pp 1699-1709, (https://onlinelibrary.wiley.com/doi/full/10.1002/asjc.1487)

68. Biprajeet Kar and Prasanta Roy,2018, A Comparative Study Between Cascaded FOPI–FOPD and IOPI–IOPD Controllers Applied to a Level Control Problem in a Coupled Tank System, Journal of Control, Automation and Electrical Systems, vol. 29(3), pp 340-349, (url:https://link.springer.com/article/10.1007/s40313-018-0373-z)
69. Asadur Rahman, L. C. Saikia, Nidul Sinha, May-2017,A Comparative Study Between Cascaded FOPI–FOPD and IOPI–IOPD Controllers Applied to a Level Control Problem in a Coupled Tank System, Renewable Energy
70. DebashishBhowmik, Nidul Sinha, A. K. Sinha,Dec-2017, Investigation of multifarious power transferred through the transmission network for all associated generators in the system individually, IET Generation, transmission & distribution.
71. S. Sutradhar, N. B. D. Choudhury, and N. Sinha. Modelling of Hydrothermal Unit Commitment Coordination Using Efficient Metaheuristic Algorithm: A Hybridized Approach, Journal of Optimization, Article ID: 4529836, 14 pages, Hidawi, dx.doi.org/10.1155/2016/4529836 (ESCI).
72. G. H. Reddy, P. Chakrapani, A. K. Goswami, and N. B. D. 2017, Choudhury, Optimal distributed generation placement in distribution system to improve reliability and critical loads pick up after natural disasters, Eng. Sci. Technol. an Int. J, Elsevier, 2017, vol. 20, no. 3, pp. 825–832,doi.org/10.1016/ j.jestch.2017.05.001(ESCI).
73. G. H. Reddy, A. K. Goswami, and N. B. D. Choudhury, 2017, A Hybrid Method for Distribution Substation Reliability Evaluation, International Review of Electrical Engineering (I.R.E.E.), 2017, vol. 12, no. 2, pp. 142-150, doi.org/10.15866/iree.v12i2.11319 (Scopus)
74. M. Barman and N. B. D. Choudhury, 2017, Artificial Neural Network Based Electricity Price Forecasting Using Levenberg-Marquardt Algorithm, Int. J. Control Theory Appl, Serials Publications, 2017, vol. 10, no. 19, pp. 127–136, (Scopus).
75. G. H. Reddy, P. Chakrapani, A. K. Goswami and N. B. Dev Choudhury, 2017, Fuzzy based Approach for Restoration of Distribution System during post Natural Disaster,IEEE Access, IEEE, 2017, Volume: PP Issue: 99. DOI: 10.1109/ACCESS.2017.2779823, (SCIE).
76. G. H. Reddy, A. K. Goswami and N. B. Dev Choudhury, Estimation of Distribution System Reserve Capacity and Its Impact on System Reliability Considering Load Growth, Int. Journal on Electrical Engineering and Informatics (Scopus).
77. M. Barman and N. B. D. Choudhury, 2017, A fuzzy logic controller based mid-term load forecasting with renewable penetration in Assam, India, ADBU-Journal of Engineering Technology, Assam Don Bosco University, Volume 6, Issue 3 December, 2017, 006031207, pp. 1-6 (Scopus).
78. M. Barman and N. B. D. Choudhury, S. Sutradhar, 2017, A regional hybrid GOA-SVM model based on similar day approach for short-term load forecasting in Assam, India, Energy, Elsevier, DOI: 10.1016/j.energy.2017.12.156 (SCI).

b) National Journal(s): NIL

c) International Conference(s):

1. P. P. Singh, J. P. Singh, and B. K. Roy. Tracking Control and Synchronization of Bhalekar-Gejji Chaotic Systems using Active Backstepping Control. IEEE International Conference on Industrial Technology (ICIT). Lyon, France, February 20-22, 2018
2. Saurabh Chaudhury, Debashish Dash. Optical Properties of Pristine Pyrite Titanium Dioxide: A DFT Approach. 4th International Conference on Nanoscience and Nanotechnology (ICNST) -2017. Dec 14-15, 2017, Colombo, SriLanka.
3. Debashish Dash, Saurabh Chaudhury, Susanta K. Tripathy. First principle investigation of structural and optical properties of cubic titanium di-oxide. 2nd International Conference on Condensed matter and Applied physics (ICC-2017). Nov. 24-25, 2017, Government Engineering College, Bikaner, Rajasthan, India.
4. Debashish Dash, Saurabh Chaudhury, Susanta K. Tripathy. A Density Functional Theory Based Study of Electronic and Optical Properties of Anatase Titanium Di – oxide. International Conference on Communication, Devices and Networking (ICCDN). June 3-4, 2017, SMIT, Sikkim, India.
5. Saurabh Chaudhury and Anindya Biswas. Intelligent Traffic Control using Online Video Analysis. Int. Conference on CCSN 2017.,30-31 Dec. 2017, Kolkata
6. Inamul Hussain and Saurabh Chaudhury. Performance comparison of 1 bit Conventional and Hybrid Full adder circuits. International Conference on Communication, Devices and Networking (ICCDN). June 3-4, 2017, SMIT, Sikkim, India.
7. Rituparna Mitra, Galiveeti Hemakumar Reddy, Arup Kumar Goswami, Nalin B Deb Choudhury. Power Transformer Failure Analysis using Interval type 2 Fuzzy Set Theory based fault tree analysis. Power India International Conference (PIICON). 2016 IEEE 7th, 25-27 Nov. 2016, Bikaner, India, 26 October 2017.
8. Gope, S., Goswami, A.K., Tiwari, P.K. Congestion constraint corrective rescheduling in the competitive power market with the integration of a wind farm. International Conference on Advancement of Computer Communication and Electrical Technology. ACCET 2016, pp. 289-294 , Murshidabad India, 21-22 October 2017.
9. Galiveeti Hemakumar Reddy, Pranju Chakrapani, Arup Kumar Goswami and Nalin B Deb Choudhury. Prioritization of Load Points in Distribution System considering Multiple Load Types using Fuzzy.Theory Fuzzy Systems (FUZZ-IEEE), 2017 IEEE International Conference. 9-12 July 2017, Napels, Italy, INSPEC Accession Number: 17137700, DOI: 10.1109/FUZZ-IEEE.2017.8015535, Electronic ISSN: 1558-4739, 24 August 2017.
10. Saumitra Barman, Soumya Samanta, Jyoti Prakash Mishra, Prasanta Roy, Binoy Krishna Roy. Design and Implementation of an IDA-PBC for a Grid Connected Inverter used in a Photovoltaic System. Proc. of 5th International Conference on Advances in Control & Optimization of Dynamical Systems (ACODS-2018). pp. 712-717, Feb. 18-22, 2018 (IFAC ACODS 2018), Dr. APJ Abdul Kalam Missile Complex, Hyderabad.

11. Himshekhar Das, L.C.Saikia. Ethernet based Smart Energy meter for Power Quality Monitoring and Enhancement. Recent Developments in Control, Automation & Power Engineering. 2017.
12. DebdeepSaha, L.C.Saikia, More Raju, Rumi Rajbongshi. Impact of Redox Flow Battery and Capacitive Energy Storage Devices in Performance Enhancement of Restructured AGC of a CCGT Incorporated Hydro-thermal System. International Conference on Power Systems held at COEP. 21-23rd dec'2017 Pune.
13. Debdeep Saha, L. C. Saikia, More Raju, Rumi Rajbongshi. Introducing Electric Vehicles in AGC of Restructured hybrid system with DSTS and WTS". International Conference on Power and Energy Systems towards Sustainable Energy. Amrita VishwaVidyapeetham 18th-20th Jan'2018.
14. Rumi Rajbongshi, L. C. Saikia, DebdeepSaha, Arindita Saha. Combined Voltage and Frequency Control of Multi-area Multi-source System Incorporating HVDC link and Redox Flow Battery. International Conference on Power and Energy Systems Towards Sustainable Energy. Amrita VishwaVidyapeetham 18th-20th Jan'2018.
15. WashimaTasnin, L.C.Saikia, Rumi Rajbongshi, ArinditaSaha and Debdeep Saha. A step by step procedure for SCA optimization in AGC of multi-area multi-source system incorporating renewable energy sources and Interline Power flow controller. International Conference on Power and Energy Systems Towards Sustainable Energy. Amrita VishwaVidyapeetham 18th-20th Jan'2018.
16. ArinditaSaha, L.C.Saikia, More Raju, Rumi Rajbongshi. Performance Analysis of IPFC and SMES in multi-area multi-source AGC systems using WOA optimized PIDN-FOPD controller. International Conference on Power and Energy Systems Towards Sustainable Energy. Amrita VishwaVidyapeetham 18th-20th Jan'2018.
17. T. Malakar, S. K. Goswami, A.Rajan. Demand Side Mangement of a Commercial Customer based on ABC Algorithm. 7th Int. Conf. on Soft Computing for Problem solving. SocProS-2017, Dec 23-24, 2017, IIT Bhubneswar, Springer.
18. A. Rajan, T. Malakar, Abhimanyu. Solution of Constrainted Optimal Active Power Dispatch Problems using Exchange Market Algorithm. 7th Int. Conf. on Soft Computing for Problem solving. SocProS-2017, Dec 23-24, 2017, IIT Bhubneswar, Springer.
19. D. C. Das. Demand Response Strategy for Frequency Control of a Parabolic Dish Solar Thermal Diesel based Microgrid. International Conference on Intelligent Sustainable Systems (ICISS 2017) 7-8 Dec 2017. SCAD Institute of Technology at Palladam, India, 2017, pp.298-304, ISBN: 978-1-5386-1959-9.
20. D.C. Das, Hareesh Sriramoju, Sudhanshu Ranjan, N Sinha. Voltage Control of Fuel Cell-Wind-Diesel Hybrid Power System Using FA Based SVC and AVR Controller. IEEE Region 10 Humanitarian Technology Conference 2017 (IEEE R10HTC 2017) 21-23 Dec 2017. Bangladesh University of Engineering & Technology (BUET), Dhaka, Bangladesh.
21. Amar Barik and D.C. Das. Active Power Management of Isolated Renewable Microgrid Generating Power from Rooftop Solar Arrays, Sewage Waters and Solid Urban Wastes of a Smart City using Salp Swarm Algorithm. Technologies for Smart-City Energy Security and Power (ICSESP) 28-30 March 2018. Bhubaneswar, India2018. IEEE, pp. 1-6, 2018.

22. Chiranjeevi, T., and Biswas, R.K. Formulation of Optimal Control Problems of Fractional Dynamic Systems with Control Constraints. CISCON 2017, CSIR, DRDO, ISRO, Manipal.
23. Raj Debnath, Nirmala Soren, S. Bhakta, Ram Kumar Karsh, A.K. Roy. Feasibility Study of an Off-Grid Hybrid Renewable Energy System. IEEE Region 10 Conference (TENCON). Penag, Malaysia, November 5-8, 2017.
24. Anirudh Nath, Shivanagouda Biradar, Archana Balan, Rajeeb. Physiological Models and Control for Type 1 Diabetes Mellitus: A Brief Review. IFAC PapersOnLine. 51-1 (2018) 289294.
25. Nalini Prasad Mohanty, Rajeeb Dey, Binoy Krishna Roy. A New 3-D Memristive Timdelay Chaotic System with Multi-scroll and Hidden Attractors. IFAC Papers On Line. 51-1 (2018) 580585.
26. Saumitra Barman, Soumya Samanta, Jyoti Prakash Mishra, Prasanta Roy, Binoy Krishna Roy. Design and Implementation of an IDA-PBC for a Grid Connected Inverter used in a Photovoltaic System. ACODS. Hyderabad, February, 2018, India. (https://www.sciencedirect.com/science/article/pii/S2405896318302805)
27. More Raju, L. C. Saikia, Nidul Sinha. AGC of multi-area ST — thermal — hydro system incorporating redox flow batteries. International Conference on Innovations in Power and Advanced Computing Technologies [i-PACT2017]. Vellore, Jan., 2018.
28. Barman, M., Dev Choudhury, N. B. Artificial neural network based electricity price forecasting using Levenberg-Marquardt algorithm. 2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Management (SCESM 2017). Goa, India during 27-29 Jan, 2017.
29. Sutradhar, S., Choudhury, N.B. and Sinha, N. MINLP for Hydro-Thermal Unit Commitment problem using BONMIN solver. IEEE International conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2016). Delhi, 4-6 July, 2017, pp. 1-6.
30. G. H. Reddy, P. Chakrapani, A. K. Goswami and N. B. Dev Choudhury. Prioritization of load points in distribution system considering multiple load types using fuzzy theory. IEEE International Conference on Fuzzy Systems (FUZZ-IEEE-2017), Naples, Italy, 9-12 July, 2017, pp. 1-6.
31. R. Mitra., G. H. Reddy, A. K. Goswami and N. B. Dev Choudhury. Power Transformer Failure Analysis using Interval Type-2 Fuzzy Set Theory Based Fault Tree Analysis. IEEE 7th Power India International Conference (PIICON-2017), Bikaner, India 25-27 Nov, 2017 pp. 1-4.
32. Nalin B Dev Choudhury, Debasis Tripathy. Spider Monkey Optimization Based Fuzzy-2D-PID Controller for Load Frequency Control in Two-Area Multi Source Interconnected Power System. IEEE International Conference on Technologies for Smart City Energy Security and Power (ICSESP) 2018. 28th -30th March, 2018. C.V. Raman College of Engineering, Bhubaneswar, Odisha, India

d) National Conference(s):

1. S. Datta, A.K. Roy and J. P. Mishra. Effectiveness of B2BC and NSC in a Grid Connected DFIG based WT System - A Comparative Study. National Conference on Recent Trends in Engineering and Technology. March 17-18, 2017, TIT, Agartala.

e) Book/Chapter:

1. Prof. Binoy Krishna Roy. An LMI Based Integral SMC for Tracking Control of a New 4-D Conservative Chaotic System. Soft Computing Applications, Publisher: Springer, pp.354-364. 04 October 2017 ISBN 978-3-319-62523-2. https://link.springer.com/chapter/10.1007/978-3-319-62524-9_27
2. Prof. Binoy Krishna Roy. Tracking Control with Vibration Suppression of a Two-link Flexible Manipulator using Singular Perturbation with Composite Control Design. Soft Computing Applications, pp.365-377. 04 October 2017 ISBN 978-3-319-62523-2. https://link.springer.com/chapter/10.1007/978-3-319-62524-9_28
3. Prof. Binoy Krishna Roy. Development of parsimonious orthonormal basis function models using particle swarm optimization. Computational Intelligence: Theories, Applications and Future Directions, I, AISC, Springer. https://link.springer.com/chapter/10.1007/978-981-13-1132-1_43
4. Prof. Binoy Krishna Roy. 5-D Hyperchaotic and Chaotic Systems with Non-hyperbolic Equilibria and Many Equilibria. Nonlinear Dynamical Systems with Self-Excited and Hidden Attractors, Springer, Cham. 133, 465-497, 2018.

https://link.springer.com/chapter/10.1007/978-3-319-71243-7_20

5. Debashish Dash, Saurabh Chaudhury, Susanta K. Tripathy. A Density Functional Theory Based Study of Electronic and Optical Properties of Anatase Titanium Di-oxide. Advances in Communication,DevicesandNetworking,Vol.462,Springer–VerlagPublishers.

DOI: https://doi.org/10.1007/978-981-10-7901-6_8

6. Inamul Hussain and Saurabh Chaudhury. Performance comparison of 1 bit Conventional and Hybrid Full adder circuits. Advances in Communication, Devices and Networking, Vol. 462, Springer – Verlag Publishers. DOI: https://doi.org/10.1007/978-981-10-7901-6_6
7. Arindita Saha, L.C.Saikia, Rumi Rajbongshi, DebdeepSaha, WashimaTasnin. AGC of multi-area thermal-split shaft gas turbine system integrating interline power flow controller and ultra-capacitor. International Conference on Innovations in Infrastructure.
8. Rumi Rajbongshi, L.C.Saikia, ArinditaSaha, WashimaTasnin, Debdeep Saha. Impact of Power System Stabilizer on Combined ALFC and AVR System. International Conference on Innovations in Infrastructure.
9. WashimaTasnin, L.C. Saikia, DebdeepSaha, Rumi Rajbongshi, ArinditaSaha. Effect of Geothermal Power Plant and other renewable on AGC of an interconnected thermal system using SCA optimized Fractional Order Cascade Controllers. International Conference on Innovations in Infrastructure.
10. T. Malakar. An Efficient Unbalanced Load Flow for Distribution Networks. Springer, 2018.
11. Sadhan Gope, Arup Kumar Goswami and Prashant Kumar Tiwari. Computer, Communication and Electrical Technology Chapter: Congestion constraint corrective rescheduling in the competitive power market with the integration of a wind farm. CRC Press 2017, Taylor & Francis Group, 6000 Broken Sound Parkway NW, Print ISBN: 978-1-138-03157-9, https://doi.org/10.1201/9781315400624-55.
12. Rajeeb Dey, Goshaidas Ray, & Valentina .E. Balas. Stability and Stabilization of Linear and Fuzzy Time-Delay Systems: A Linear Matrix Inequality Approach. Springer International Publishing. AG 2018, ISSN 1868-4394 in the book series Intelligent Systems Reference Library, Springer.

13. Anirudh Nath, R. Dey, Valentina E Balas. Closed Loop Blood Glucose Regulation of Type 1 Diabetic Patient Using Takagi-Sugeno Fuzzy Logic Control. Springer International Publishing AG, Gewerbestrasse 11, 6330 Cham, Switzerland. ISSN 2194-5357, ISBN 978-3-319-62523-2, book series Advanced Intelligent Systems.
14. Hemjyoti Das, Aniket Samrat Mazumdar, Rajeeb Dey, & Lintu Roy. Experimental Implementation of Fuzzy Vision-Based Tracking Control of Quad-Rotor. Springer International Publishing AG, Gewerbestrasse 11, 6330 Cham, Switzerland. ISSN 2194-5357, ISBN 978-3-319-62523-2, book series Advanced Intelligent Systems.
15. Jay P. Singh, Rajeeb Dey, Binoy Krishna Roy. An LMI Based Integral SMC for Tracking Control of a New 4-D Conservative Chaotic System. Springer International Publishing AG, Gewerbestrasse 11, 6330 Cham, Switzerland. ISSN 2194-5357, ISBN 978-3-319-62523-2, book series Advanced Intelligent Systems.
16. Kshetrimayum Lochan, Rajeeb Dey, Binoy Krishna Roy, Bidyadhar Subudhi. Tracking Control with Vibration Suppression of a Two-link Flexible Manipulator using Singular Perturbation with Composite Control Design. Springer International Pulishing AG, Gewerbestrasse 11, 6330 Cham, Switzerland. ISSN 2194-5357, ISBN 978-3-319-62523-2, book series Advanced Intelligent Systems.
17. Debasis Tripathy, Amar Kumar Barik, N. B. Dev Choudhury, B. K. Sahu. Perforance Comparison of SMO-based Fuzzy PID Controller for Load Frequency Control. Soft Computing for Problem Solving, Springer, ISBN 978-981-13-1591-6, Book series Advances in Intelligent Systems and Computing.https://www.springer.com/gp/book/9789811315916

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED

1. Serial 2DOF two-link flexible manipulator

1.8 PATENT

Sl. No.	Details	Year
1	D. Deb, R. Dey, S. Chakraborty, S. M. Rajkumar, Wireless Network Based EmbeddedControl Design Method for Actuators with Uncertain Delays", No. 201721043325 A.	Pub Date: Dec 22, 2017.
2	H. Gandhi, H. Karangia, D. Goyal, D. Deb, M. Sharma, R. Dey, Fabrication of an Automated Assembly of Jig and Fixture or Knee Replacement Surgery, No. 201721039540A.	Pub Date: Dec 22, 2017.

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Dr. Saurabh Chaudhury	ICNSNT 2017	Colombo, SriLanka	14-15 Dec. 2017
2	Nirmala Soren	2017 IEEE Region 10 Conference (TENCON)	Penag, Malaysia	November 5-8, 2017

1.10 M.Tech. / M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	BhawaniSankarDey	Prof. Binoy Krishna Roy Dr. Manas Kumar Bera	Control of Cancerous Tumour Growth by Chemotherapy
2	Pakaj Prakash	Prof. Binoy Krishna Roy	Fractional-order and Integer-order Chaotic and Hyperchaotic Systems, Control, Synchronisation, and Their Circuit Simulation
3	Sibir Ahmad	Prof. Binoy Krishna Roy	Tip Position and Tip Deflection Control of a Two-Link Flexible Manipulator
4	UtsabRakshit	Prof. Binoy Krishna Roy	Selection and Placement of Automatic Couplers in a Long Freight Train to Reduce the Coupler Forces and Wheel Slide Protection System
5	Anindya Biswas	Dr. Saurabh Chaudhury	Intelligent Traffic Control
6	Mr. Pratik Harsh	Dr. A K Goswami	Charging Coordination of Plug-in Electric Vehicle for Congestion Management in Distribution System.
7	MsMamataDebbarma	Dr. A K Goswami	Optimal placement and sizing of distributed Generation for voltage sag mitigation in an Industrial distribution system
8	Jajna Prasad Sahoo	Dr. A K Goswami	Charging Coordination of Plug in Electric Vehicle to Mitigate Congestion in Distribution System Integrated with Renewable Energy Sources
9	Gyanendra Prakash	Dr. Jyoti Prakash Mishra	Study of Control Strategies to improve Micro-grid performance during Islanding mode.
10	Prantik Majumder	Dr. Jyoti Prakash Mishra and Dr. Rajeeb Dey	An Improved Control Scheme for Shunt Active Filter under Distorted and Unbalanced Conditions
11	Naladi Rambabu	Dr. L.C.Saikia	Demand Side Management using Smart AC qndMicro DC Grid with BSS and Wind Energy
12	Survra Vijay	Dr. L.C.Saikia	Scheduling of Residential Appliances for Demand Side Management with Energy Storage in Smart Grid Environment
13	Sanjeeb Bhagat	Dr. L.C.Saikia	Automatic Generation Control of Multi-area System Under Deregulated Environment
14	Shaik Mahmmadsufiun	Dr. T. Malakar	Some Studies In The Application Of Competitive Swarm Optimizer To Maximize The Generator Reactive Power Reserve In Power System Operation
15	Abhimanyu	Dr. T. Malakar	Solution Of Optimal Active Power Dispatch Problem Using Hybrid Artificial Bee Colony Algorithm

16	Mr. Ankit Sahi	Dr. Chayan Bhattachattacharjee	Fuzzy Logic Based Maximum Power Extraction of WECS and Its Comparative Analysis
17	Mr. Ankit Pal	Dr. Chayan Bhattachattacharjee	A Comparative Analysis of Different Control Schemes for PV Systems
18	Arup Pramanik	Dr. D. C. Das	Frequency control of plug in hybrid vehicle wind turbine diesel battery based autonomous hybrid power system
19	Soumyashree Behera	Dr. D. C. Das	Active Power Control of Parabolic-Trough Solar Thermal-Wind-Diesel Generator-Battery Based Isolated Hybrid Power System
20	Chudamani Sethi	Raj Kr Biswas	A formulation and solution scheme for optimal control problem of a fractional order singular system
21	Pintu Kumar	Raj Kr Biswas, Manas Bera	Control of HIV/AIDS dynamics
22	Raj Debnath	Nirmala Soren	Techno-economic feasibility analysis of an off-grid hybrid Energy system
23	Arun Dev Pandey	Nirmala Soren	An improved grey wolf optimization based MPPT teehnique for pv systems under partially shading conditions
24	Mr. Ankit Kumar Singh	Dr. Prashant Kumar Tiwari	An Optimal Bidding Strategy for Micro-grid in Day Ahead Deregulated Power Markets with Intermittent Renewables
25	Mr. G. Sriniwasulu	Dr. Prashant Kumar Tiwari	Feasibility Assessment of Bilateral & Multilateral Transactions with Optimal Location of Solar Power Plant in Competitive Power Market
26	Ms. Ampolu Maneesha	Dr. Prashant Kumar Tiwari	Optimal Bidding Strategy While Providing Ancillary Services with Wind-PSP Hybrid Generation System in Competitive Power Markets
27	Mr. Adarsh Nagariya	Dr. Prashant Kumar Tiwari	A Strategic Bidding Model for Power Market Considering Economic & Physical Congestions
28	Prantik Majumder	Dr. Rajeeb Dey	An improved control scheme for shunt active filter under distorted and unbalanced conditions.
29	Mr. Anindya Basu	Dr. P. Roy	Different Zone Temperature Control of Reheating Furnace and Plate Thickness Gap Control of Hot Rolling Mill of a Steel plant
30	Mr. Soumitra Barman	Dr. P. Roy	Design of an IDA-PBC Technique for Energy Management and Damping Improvement of a Renewable Based DC Hybrid Power System
31	Mr. Sadasiva Behera	Prof. N. B. Dev Choudhury	Maximum Power Point Tracking of Grid Connected PV System Employing Model Predictive Control Technique
32	M. Mohan	Prof. N. Sinha	Designing of Wind Turbine Emulator and its Integration with The Compressed Air Energy Storage and Grid
33	Neetu Singh	Prof. N. Sinha	Emotion Recognition from EEG signals

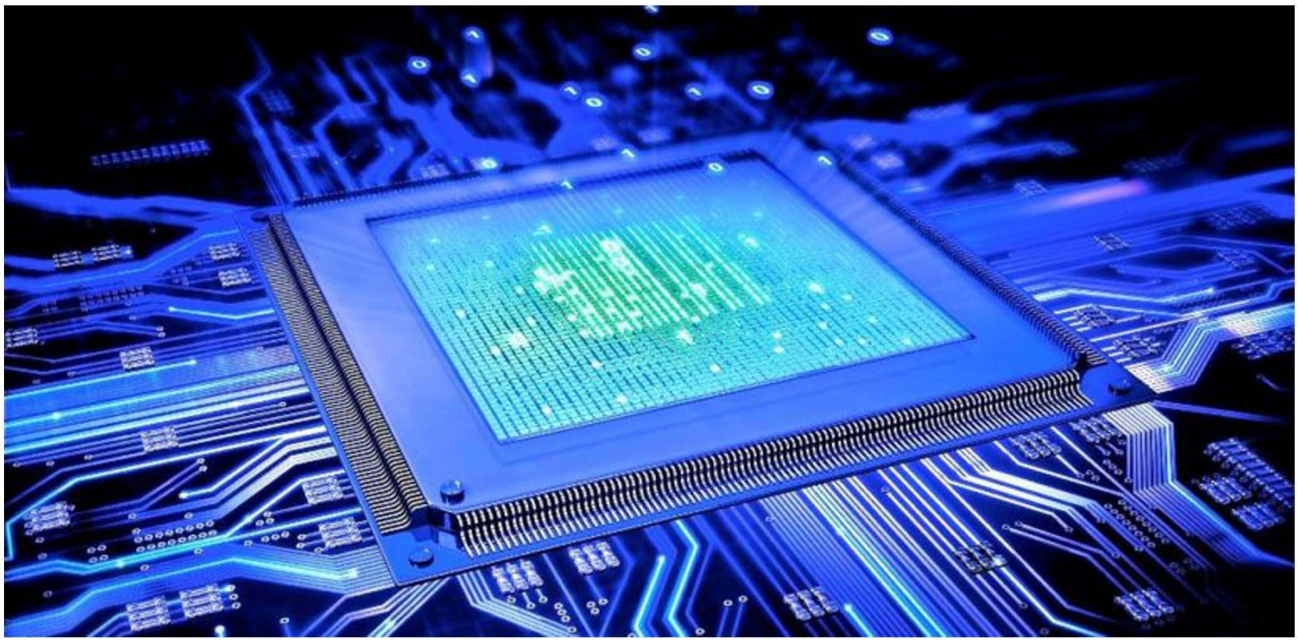
1.11 Ph.D. Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Mr. Abahan Sarkar	Prof. Binoy Krishna Roy	Automation of some real issues in ITC plant
2	Mr. BidharMalakar	Prof. Binoy Krishna Roy	A Study on Certain Aspects of Comfort and Safety Issues in Indian Railways Using VI-Rail
3	Mr. Kshetrimayum Lochan	Prof. Binoy Krishna Roy	Design, Simulation and Experimental Validation of Robust Control Algorithm for Tip Trajectory Tracking Control of TLFM
4	Mr. Prashant Roy (Part time)	Prof. Binoy Krishna Roy	Design and Application of Fractional Order Controllers and a Comparative Study with their Integer Order Counterparts
5	Mr. LaluSaben (Part time)	Prof. Binoy Krishna Roy	Applications of Orthonormal Basis Function Models in Some Aspects of Plantwide Process Control
6	Mr. Jay Prakash Singh	Prof. Binoy Krishna Roy	Development, analyses and applications of various type of new chaotic and hyperchaotic systems
7	Mr. ManashitaBohra	Prof. Binoy Krishna Roy	Design, Control, Synchronisation and Applications of Fractional-order Chaotic Systems
8	Mr. Rohit Lorenzo	Dr. Saurabh Chaudhury	Design and Simulation of Some Leakage Minimization Schemes for CMOS VLSI Circuits and Systems
9	Mr. Joyesh D. Ruikar	Dr. Saurabh Chaudhury & Prof. (late) A. K. Sinha	Some Studies on Perceptual Image Quality Assessment Techniques
10	Mr. Subhojit Dawn	Dr. P K Tiwari Dr. A K Goswami	Study and Analysis the Impacts of Uncertain Renewable Power Penetration in Competitive Power Market.
11	Mr. SadhanGope	Dr. A K Goswami Dr. P K Tiwari	Transmission Congestion Management Considering Wind Farm and Energy Storage System in Competitive Electricity Market.
12	Mr. Hema Kumar Reddy	Dr. A K Goswami Dr. N B Dev Choudhury	Comprehensive approach for reliability assessment and improvement of electrical distribution systems.
13	Mr. Suman Sutradhar	Prof. N. B. Dev Choudhury Prof. N. Sinha	Some Studies on Intelligent Algorithms for Optimal Operation of Power System under Conventional and Deregulated Environment
14	Mr. Subir Datta	Dr. Jyoti Prakash Mishra and Dr. A.K. Roy (Retd. Prof)	Simulation of Grid Connected Speed Sensor-less DFIG-based Wind Energy Conversion System with its Power Quality Improvement
15	Mr. Abhishek Rajan	Dr. T. Malakar	Solution of Active and Reactive Power Dispatch Using a Meta-Heuristic Exchange Market Algorithm
16	Mr. Israfil Hussain	Prof. N. Sinha Dr. D. C. Das	Performance Analysis of Automatic Generation Control of Integrated Hybrid Power System based on Renewable Energy Sources/Energy Storage System
17	Mr. Subhojit Dawn	Dr. Prashant Kumar Tiwari (Supervisor), Dr. Arup Kumar Goswami (Cosupervisor)	Study and Analysis the Impacts of Uncertain Renewable Power Penetration in Competitive Power Market

18	Mr. Sadhan Gope	Dr. Arup Kumar Goswami (Supervisor), Dr. Prashant Kumar Tiwari (Cosupervisor)	Transmission Congestion Management Considering Wind Farm and Energy Storage System in Competitive Electricity Market
19	Mr. Chayan Bhattacharjee (Part time)	Prof. Binoy Krishna Roy	Dynamic Power Management and Power Quality Improvement of a Grid Tied Hybrid Distribution System

1. Name of the Department :-

Electronics & Communication Engineering



1.1 ACADEMIC STAFF

HEAD : Dr. K.L.Baishnab

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
Prof. F. A. Talukdar	Dr. P. K. Paul	Dr. W. Arif
Prof. S. Baishya	Dr. M. Choudhury	Dr. K. Guha
	Mrs. M. Paul	Dr.T. R. Lenka
		Dr. A. Hossain
		Dr. R. K. Karsh
		Mr. G. Prasad
		Dr. T. Khan
		Dr. B. Basu
		Dr. S. K. Tripathi
		Dr. A. Nandi
		Dr. U. Chakraborty
		Dr. K. L. Baishnab
		Dr. R. H. Laskar
		Dr. B. Bhowmick

Visiting Professor (If any): NIL

1.2 DISTINCTION ACHIEVED

a) By Student:

1) S. R. Routray, PhD Scholar: DST-SERB International Travel Support (ITS) to visit Singapore for attending IEEE NMDC 2017 during 2-4Oct 2017.

b) By Faculty Member:

1) Dr. B. Bhowmick won Sir Visvesvaraya Young Faculty Research Fellowship.
2) Dr. K. Guha awarded 2nd Prize in Best paper presentation awarded in International conference MICRO 2017 held at Darjeeling, West Bengal, India during 3-4th June 2017.
3) Dr. K. Guha delivered as Keynote Speaker in International conference on Signal Processing and Communication Engineering Systems (SPACES - 2018)" in 4th and 5thJanuary, 2018.
4) Dr. K. Guha feels proud achievement as member of VLSI team of Electronics and Communication Engineering Department of NIT Silchar for its 1st VLSI chip tape out of "Neural front End Amplifier for Brain Machine Interface" made by indigenous using the SCL Mohali foundry, 180 nm Technology node (January 2018).
5) Dr. K. Guha awarded as External Reviewer to assist with the evaluation of proposals for its Competitive Internal Research Award (CIRA) program in Khalifa University of Science & Technology (Abu Dhabi, UAE) in 4th November 2017.
6) Dr. K. Guha acted as Co-Convener of CCSN 2017 Conference, 30-31 Dec, 2017.
7) Dr. T. R. Lenka has received Sir Visvesvaraya Young Faculty Research Fellowship Award by Ministry of Electronics and Information Technology (MeitY), Govt. of India, 2018 with a funding of 37 Lakhs.
8) Dr. T. R. Lenka has received Funding of 2300 USD to conduct IEEE EDS Mini-Colloquium at NIT Silchar.
9) Dr. T. R. Lenka has IEEE-EDS Fellowship of 760 USD to attend IEEE-EDS Region-10 Mid-Year Governance Meeting Series at Kochi, India, 20-21May 2017.
10) Dr. A. Hossain has elevated to the grade of IEEE Senior Member in June 2017.
11) Dr. B. Basu has elevated to the grade of IEEE Senior Member.
12) Dr. B. Basu has opened "IEEE Antennas and Propagation Society Student Branch Chapter" in NIT Silchar. Chapter Advisor: Dr. Banani Basu.
13) Dr. B. Basu has opened "IEEE Women in Engineering (WIE) Student Branch Affinity Group" in NIT Silchar. Group Advisor: Dr. Banani Basu.
14) Dr. S K Tripathy has received INSA Visiting Scientist Fellowship.

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator of Faculty	Title	Funding Agency	Duration
1	Dr. K. L. Baishnab	5 Days workshop VLSI Design using Cadence in Nov, 2017	Self-Financed	5 days
2	Dr. T. R. Lenka	IEEE-EDS Distinguished Lecture on "Compact Modeling of GaN HEMTs for High Frequency and High Power Application" on 08 Nov 2017 by Prof. Y. S Chauhan, IIT Kanpur	IEEE -EDS	1 Day

3	Dr. T. R. Lenka	IEEE-EDS Distinguished Lecture on "Research Methodology in Nanoscience" on 20 Dec 2017 by Prof. Vijay K. Arora, USA.	IEEE -EDS	1 Day

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Prof. S. Baishya	Communication Backbone Architecture (DiCoBA) with Prototype Development, in collaboration with IIT Kharagpur, DeitY	IIT Kharagpur
2	Dr. K. L. Baishnab	3rd ZoPP Workshop under SMDP-C2SD, Oct-2017	IIT Guwahati
3	Dr. K. Guha	National PARAM Shavak User Summit at GOA during 15-16 Feb 2018.	C-DAC, Pune
4	Dr. K. Guha	Prof. Lotfi A. Zadeh memorial 6th international conference on 'Computing, Communication and Sensor Network", CCSN-2017, in Kolkata, India (30-31 Dec 2017).	International Association of Science, Technology and Management
5	Dr. K. Guha	Micro 2017 : 4th International Conference on Microelectronics, Circuits and Systems,Micro2017, during 3rd and 4th June, 2017 at Darjeeling City, West Bengal, India.	International Association of Science, Technology and Management
6	Dr. K. Guha	12th IEEE Nanotechnology Materials and Devices Conference Singapore, 2nd-4th October 2017.	IEEE Nano Technology Council
7	Dr S. K. Tripathy	3rd International Conference on Photonics Solutions (ICPS 2017), Thailand	Electrical Engineering Academic Association (Thailand) (EEAAT)

1.4 RESEARCH DEVELOPMENT

a) Ph.D Programme (Specializations):

Sl. No.	Faculty Name	Specializations
1	Prof. S. Baishya	Solid State Device Modeling and Simulation, Electronic Circuits, VLSI, and MEMS
2	Dr. M. Choudhury	Machine Learning, Nanotechnology
3.	Dr. R. H. Laskar	Image processing, Speech Processing, Signal processing
4.	Dr. B. Basu	Design of Antenna and Metamaterials Structure Soft Computing Techniques in Antenna Array Optimization
5.	Dr. A. Nandi	Wireless Sensor Networks, 4G and 5GCommunication, Design of Antenna and Metamaterials Structure

b) Ph.D Produced/Ongoing (in number):

Completed	Submitted	Ongoing
10	03	47

c) Research Lab/Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	TCAD Lab	To perform simulation of device/circuits.
2	Computer Vision Lab (Room no.- EC 17)	To accommodate increased number of research scholars in the relevant area and for running the BRNS, BARC sponsored project titled "Development of Prototype Video Surveillance System Using Face Invariant Face Recognition System"
3	Image Processing Lab	Research
5	Solar cell fabrication Laboratory	To fabricate new solar devices
6	Advanced RF Systems Laboratory	SERB project "Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application"

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Hetero-Junction Tunnel FETs: Characterization, Modeling, and Simulation of Electrical Parameters	Prof. S. Baishya	NCERT	8.83	2 years
2	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with Prototype Development, in collaboration with IIT Kharagpur, DeitY	Prof. S. Baishya	DeitY	110	3 years
3	Special Manpower Development Program for Chips to System Design(SMDP-C2SD)	Dr. K.L. Baishnab	MeitY	0.961	5 years
4	Visvesvaraya PhD Scheme	Dr. K. L. Baishnab	MeitY	3.10	5 years
5	Development of Speech based Multi-Level Person Authentication System (Consortium Project along with IIT Guwahati and NEHU, Shillong)	PI: Dr. R. H. Laskar, Co-PI: Mrs. U. Baruah	DeitY, Govt. of India	57.3	4 Years (2012 – 2016)
6	Development of Prototype Video Surveillance System Using Face Invariant Face Recognition System	PI: Prof. F. A. Talukdar, Co-PI: Dr. R. H. Laskar	BRNS, BARC	24.9	3 years (2015-2018)
7	Development of EBG –structures printed antenna for ultra wideband communication and futuristic modelling for prediction of performance parameter using computational intelligence technique.	PI: Dr. T. Khan, Co-PI: Dr. R. H. Laskar	DST-SERB	15	3 years (2016 - 2019)
8	Hetero-Junction Tunnel FETs: Characterization, Modelling and Simulation of Electrical parameters	PI: Prof. S. Baishya Co-I : Dr. B.	CSIR, Extramural Research	11.54Lakhs	2 years

		Bhowmick	Division.		
9	IEDC 2017 Project:Heart Attack Detection and Response system	Dr. B. Bhowmick	DST	1 lakh	1Year
10	Chips to System Design- Special Manpower Development Project (C2SD-SMDP) in IIT Madras cluster	Dr. K. L. Baishnab Dr. K. Guha	MeitY, Govt. of India	160 approx.	5 Years (2015 – 2020)
11	Development of EBG-Structured Printed Antennas for Ultrawideband Communication and Futuristic Modeling for Prediction of Performance Parameters using Computational Intelligence Techniques	Dr. T. Khan (Principal Investigator)	SERB, DST, Govt. of India	16, 27, 560	2017-2020
12	Development of a Prototype of Disabled-Friendly Automatic Virtual Text-Entry Keyboard Interface System under Practical Environmental Conditions", under IMPRINT-2 scheme of SERB, DST, Govt of India (2018-2021)	Dr. T. Khan (Co-Principal Investigator)	IMPRINT II, SERB, DST, Govt of India	116,60,527	2018-2021
13	Effect of metal doped TiO_2 on photoanode and lead free organic-inorganic metal halide perovskite on photovoltaic performance of perovskite solar cell: experimental and theoretical approach	Dr. S. K. Tripathy	SERB	42.38	2017-2020
14	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application	Dr. A. Nandi	SERB, GoI	23.4	3 Years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1	Prof. S. Baishya	Int. Journal of Electronics	4	2018
2	Dr. K. L. Baishnab	Journal Of Information Science And Engineering	2	2018
		Microsystem TechnologiesMicro- and Nanosystems Information Storage and Processing Systems	8	2018
		Journal of Information and Optimization Sciences, JIOS, Taylor and Francis	4	2017
		Journal of Low Power Electronics	1	2017
		Journal of Current Trends in Science and Technology	1	2017
		International Journal of Computer Science and Information Security	1	2017
		Journal of Information Science and engineering	2	2018
3	Dr. R. H. Laskar	IET Signal Processing	2	2017
		IEEE Access	1	2018
4	Dr. B.Bhowmick	IET Circuits, Devices and Systems	1	2018
		Applied Physics D	1	2018
		Journal of Nano Opto Electronics	2	2017, 2018
		IET Micro nano letters	2	2018
		International Journal of Electroincs	1	2018
5	Dr. Koushik Guha	Microsystem Technologies, Springer	08	April 2017 – March 2018
		International Journal of Modelling and Simulation	02	April 2017 – March 2018

		Journal of Nanoelectronics and Optoelectronics	02	April 2017 – March 2018
6	Dr. T. R. Lenka	AEU-International Journal of Electronics and Communications (Elsevier)	02	2017-2018
		International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (Wiley)	02	2017-2018
		Solid State Electronics (Elsevier)	01	2017-2018
		Superlattices and Microstructures (Elsevier)	02	2017-2018
		Semiconductor Science Technology (IOP Science)	01	2017-2018
		IEEE Transactions on Industrial Electronics	01	2018
7	Dr. A. Hossain	IEEE Sensors Journal	2	2017-18
		IEEE Communications Letters	1	2017-18
		IEEE Transactions on Vehicular Technology	1	2017-18
		Microsystem Technologies, Springer	1	2017-18
8	Dr. R. K. Karsh	Journal of Electronic Imaging	2	2018
		Journal of Applied Remote Sensing	1	2018
		Journal of Supercomputing	1	2018
		Journal of ICT Research and Applications	1	2018
		IEEE Access	1	2018
9	Dr S. K. Tripathy	International Journal of Modern Physics	01	2018

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr. K. Guha	Session chair in Micro-2017, 4th International Conference on Microelectronics, Circuits & Systems, June, 3rd - 4th, 2017, Darjeeling, West Bengal, India
2	Dr. K. Guha	Session chair in International conference on Signal Processing and Communication Engineering Systems (SPACES - 2018)" in 4th and 5thJanuary, 2018 at KL University Hyderabad.

1.5 PUBLICATION

a) International Journal(s):

1. R. Das and S. Baishya, "Controlling fixed trap charge effect in FinFET using heterodielectric BOX," in Electronics Letters, vol. 54, no. 4, pp. 239-241, 22 2 2018.
2. Rajesh Saha, Brinda Bhowmick, and S. Baishya, "Quantum Analytical Modeling of Inversion Charge and Threshold Voltage in Modified Bi-Level FinFET (BL-FinFET)," ECS Journal of Solid State Science and Technology, vol. 7, no. 2, pp. Q8-Q15, 2018.
3. Rajesh Saha, Brinda Bhowmick, and S. Baishya, "A 3D Statistical Simulation Study of Titanium Metal Gate WFV on Electrical Parameters in n-channel Ge step-FinFET," Applied Physics A - Materials Science & Processing, vol. 124, 96(1-11), 2018.
4. N. P. Maity, Reshmi Maity, and S. Baishya , "A Tunneling Current Model with Realistic Barrier for Ultra Thin High-k Dielectric ZrO2 Material Based MOS Devices," Silicon, vol. 10, no. 4, pp. 1645–1652, December 2017.
5. S. Baishya, Debarun Borthakur, Richik Kashyap, and Amitabh Chatterjee, "A High Precision Lumped Parameter Model for Piezoelectric Energy Harvesters," IEEE Sensors Journal, vol. 17, no. 24, pp. 8350-8355, December 2017.

6. Achinta Baidya, S. Baishya, and T. R. Lenka, “Impact of Thin High-K Dielectrics and Gate Metals on RF Characteristics of 3D Double Gate Junctionless Transistor,” Materials Science in Semiconductor Processing, vol. 71, pp. 413-420, Nov. 2017.
7. Reshmi Maity, N. P. Maity, and S. Baishya, “Silicon Nitride Based Electro-Mechanical Model of Capacitive Micromachined Ultrasonic Transducers,” Far East Journal of Electronics and Communications, vol. 17, no. 4, pp. 749-760, 2017.
8. N. P. Maity, Reshmi Maity, and S. Baishya, “Voltage and Oxide Thickness Dependent Tunneling Current Density and Tunnel Resistivity Model: Application to High-k Material HfO2 Based MOS Devices,” Superlattices and Microstructures, vol. 111, pp. 628-641, 2017.
9. Rajesh Saha, Brinda Bhowmick, and S. Baishya, “Si and Ge step-FinFETs: Work function variability, optimization and electrical parameters,” Superlattices and Microstructures, vol. 107, pp. 5-16, 2017.
10. Saurav Roy, Amitabh Chatterjee, Dheeraj Kumar Sinha, Rimma Pirogova, and S. Baishya, “Two Dimensional Analytical Modelling of Surface Potential and Threshold Voltage for Vertical Super-Thin Body Field Effect Transistor,” IEEE Transactions on Electron Devices, vol. 84, no. 5, pp. 2106-2112, May 2017.
11. N. P. Maity, Reshmi Maity, and S. Baishya, “Ultra Thin Body Partial Silicon-on-Insulator MOSFET with Suppressed Floating Body Effect: A Simulation Study,” Journal of Nanoelectronics and Optoelectronics, vol. 12, no. 5, pp. 472-479, May 2017.
12. Reshmi Maity, N. P. Maity, R. K. Thapa, and S. Baishya, “An Improved Analytical and Finite Element Method Model of Nanoelectromechanical System Based Micromachined Ultrasonic Transducers," Microsystem Technologies, vol. 23, pp. 2163-2173, June 2017.
13. Reshmi Maity, N. P. Maity, and S. Baishya, “Circular Membrane Approximation Model with the Effect of the Finiteness of the Electrode's Diameter of MEMS Capacitive Micromachined Ultrasonic Transducers,” Microsystem Technologies, vol. 23, no. 8, pp. 3513–3524, Aug. 2017.
14. N. P. Maity, Reshmi Maity, R. K. Thapa, and S. Baishya, “Modeling and Simulation of Tunneling Current Density for Ultra Thin MOS Devices,” Applied Mechanics and Materials, vol. 860, pp. 30-34, 2017.
15. N. P. Maity, R. R. Thakur, reshmi Maity, R. K. Thapa, and S. Baishya, “Analysis of Interface Trap Densities for Al2O3 Dielectric Material Based Ultra Thin MOS Devices,” Applied Mechanics and Materials, vol. 860, pp. 25-29, 2017.
16. Reshmi Maity, N. P. Maity, R. K. Thapa, and S. Baishya, “Characterization of Nanoscale Ultrasonic Transducer Elements as Effective Acoustical Devices,” Applied Mechanics and Materials, vol. 860, pp. 35-40, 2017.
17. Reshmi Maity, N. P. Maity, R. K. Thapa and S. Baishya, “Investigation of Silicon Nitride as an Excellent Membrane Material for MEMS Ultrasonic Transducers,” Applied Mechanics and Materials, vol. 860, pp. 41-45, 2017.
18. Abhigyan Ganguly, Siddhartha S. Nath, Madhuchhanda Choudhury, 2018 , Cu-doped CdS QDs for sensitisation in solar cell, Published in Micro & Nano Letters. (Accepted).
19. Abhigyan Ganguly,Siddhartha Sankar Nath, Madhuchhanda Choudhury and Gautam Gope ,2018 , A back illuminated solar cell using PbS quantum dotsas sensitisers Int. J. Nanoparticles, Vol. 10, No. 3.
20. A. Ganguly, S. S. Nath, G. Gope2, M. Choudhury, 2017, CdS quantum dot sensitized zinc oxide based solar cell with aluminum counter electrode, Int . J.Nanosystem : physics, Chemistry, Mathematics, 2017, 8 (6), P. 782–786.
21. A.J. Gogoi; N. M. Laskar; Ch. L. Singh; K. Guha; K. L. Baishnab, 2017, Throughput Optimization in Multi-user Single Relay Cognitive Radio Network using Swarm Intelligence Techniques, JOURNAL OF INFORMATION SCIENCE AND ENGINEERING , Vol. 34, pp. 885-902.
22. K.Guha, N.M.Laskar, H.J.Gogoi, K.L.Baishnab, K. Srinivasa Rao, 2018, A New Analytical Model for Switching Time of a Perforated MEMS Switch, Microsystem Technologies, Springer, doi: 10.1007/s00542-018-3803-8.
23. K.Guha, N.M.Laskar, H.J.Gogoi, A.Borah, K.L.Baishnab, S.Baishya, 2017, Modeling and Optimization of Pull-in Voltage in a Flexured MEMS Switch Incorporating Beam Perforation Effect, Journal of Solid State Electronics, Elsevier, Vol.137,pp.85-94, doi: 10.1016/j.sse.2017.08.007.
24. C.L.Singh, Ch.Anandini, A.J.Gogoi, K.L.Baishnab, 2017, Automated sizing of Low-noise CMOS analog amplifier using ALCPSO optimization algorithm, Journal of Information and Optimization Sciences, JIOS, Taylor and Francis, Vol.39. No.1, pp.99-111.doi: 10.1080/02522667.2017.1380408.
25. K.L.Baishnab, P.K.Paul, N.M.Laskar, S.Nath, P.Sarkar, 2017, Modelling and Optimization of CMOS Winner takes All Circuit for imrpoved Slew Rate using Swarm Intelligence based techniques, Journal

of Information and Optimization Sciences, JIOS, Taylor and Francis, Vol.38, No.6, pp.841-856, doi: 10.1080/02522667.2017.1372133.

26. P.Sarkar, N.M.Laskar, S,Nath, S.Chanda, K.L.Baishnab, 2017, Offset Voltage Minimization based Circuit Sizing of CMOS OpAmp using Whale Optimization Algorithm, Journal of Information and Optimization Sciences, JIOS, Taylor and Francis,Vol.39, No.1, pp.83-98, doi: 10.1080/02522667.2017.1372913.
27. B.Sinha, S.Nath, K.L.Baishnab, 2017, A Hybrid RFD-ACO Approach for Routing Optimization in VLSI Physical Design," Journal of Information and Optimization Sciences, JIOS, Taylor and Francis, Vol.39,No.1,pp.53-66, doi: 10.1080/02522667.2017.1372910.
28. C.L.Singh, Ch.Anandini, A.J.Gogoi, K.L.Baishnab, 2017, Analysis and Optimization of noises of an analog circuit via PSO algorithms, Microsystem Technologies, Springer, doi: 10.1007/s00542-017-3573-8.
29. Roy, A., Manam, L., & Laskar, R. H. (2018). Region Adaptive Fuzzy Filter: An Approach for Removal of Random-Valued Impulse Noise. IEEE Transactions on Industrial Electronics, 65(9), 7268-7278.
30. Roy, A., Singha, J., & Laskar, R. H. (2018). Removal of Impulse Noise from Gray Images Using Fuzzy SVM Based Histogram Fuzzy Filter. Journal of Circuits, Systems and Computers, 27(09), 1850139.
31. Islam, M., & Laskar, R. H. (2017). Geometric distortion correction based robust watermarking scheme in LWT-SVD domain with digital watermark extraction using SVM. Multimedia Tools and Applications, 1-28.
32. Islam, M., Roy, A., & Laskar, R. H. (2018). Neural network based robust image watermarking technique in LWT domain. Journal of Intelligent & Fuzzy Systems, 34(3), 1691-1700.
33. Misra, S., & Laskar, R. H. (2018). Approach toward extraction of sparse texture features and their application in robust two-level bare-hand detection. Journal of Electronic Imaging, 27(5), 051209.
34. Karsh, R. K., Saikia, A., & Laskar, R. H. (2018). Image authentication based on robust image hashing with geometric correction. Multimedia Tools and Applications, 1-21.
35. Karsh, R. K., & Laskar, R. H. (2017). Robust image hashing through DWT-SVD and spectral residual method. EURASIP Journal on Image and Video Processing, 2017(1), 31.
36. R.Saha, K Vanlalawmpuia, B.Bhowmick, S.Baishya, 2018, Deep Insight into DC, RF/Analog, and Digital Inverter Performance Due to Variation in Straggle Parameter for Gate Modulated TFET" accepted in Materials Science in Semiconductor Processing (in press).
37. P.Kumar, B.Bhowmick, 2018, Comparative analysis of hetero gate dielectric hetero structure Tunnel FET and Schottky barrier FET with n+ pocket doping for Suppression of Ambipolar conduction and improved RF/linearity performances" accepted in Journal of Nano Opto Electronics, (in press)
38. .K Vanlalawmpuia, B.Bhowmick, M.Choudhury, 2018, Optimization of fully depleted SiGe channel with raised source/drain buried oxide nMOSFET, accpted in International Journal of Nano particles, (in Press).
39. V.Devi, B.Bhowmick, 2018,Optimization of Pocket doped Junctionless TFET and its Application in digital Inverter, IET Micro Nano letters, , doi:10.1049/mnl.2018.5086
40. K. Vanlalawmpuia, R.Saha, B.Bhowmick, 2018, Performance Evaluation of Heterostacked TFET for variation in lateral straggle and its application as digital inverter, Applied Physics A,Springer,doi.org/10.1007/s00339-018-2121-4
41. R.Saha, B.Bhowmick, S.Baishya, 2018, "Analytical Threshold Voltage and Subthreshold Swing model for TMG FinFET"International Journal of Electronics, Taylor and Francis , doi10.1080/00207217.2018.1545258
42. R.Saha, B.Bhowmick, S.Baishya , 2018 ,Temperature Effect on RF/Analog and Linearity Parameters in DMG FinFET," accepted in Applied Physics A, (in press)
43. S.K Mitra, B.Bhowmick, 2018 ,A Compact Interband Tunneling Current Model of Gate-On-Source/Channel SOI-TFET" Journal of Computational Electronics, (Springer), https://doi.org/10.1007/s10825-018-1236-3
44. S.K Mitra, B.Bhowmick, 2018, A Physics Based Capacitance Model of Gate-on-Source/Channel SOI TFET", IET Micro Nano letter, DOI: 10.1049/mnl.2018.5214.
45. S.K Mitra, B.Bhowmick, 2018, Impact of Temperature and Fixed Oxide Charge Variation on Performance of Gate-on- Source/Channel SOI TFET and its Circuit Application, accepted in Journal of Nano and Opto Electronics, (in press)
46. D.Barah, A. singh, B.Bhowmick, 2018, TFET on selective buried oxide (SELBOX) substrate with improved ION/IOFF ratio and reduced ambipolar current, Silicon Journal, DOI: 10.1007/s12633-018-9894-0

47. R.Saha, B.Bhowmick, S.Baishya, 2018, Effect of gate dielectric on electrical parameters due to metal gate WFV in n-channel Si step FinFET" , IET Micro Nano letters, DOI: 10.1049/mnl.2018.0189 , Online ISSN 1750-0443 Available online
48. R. Saha, B.Bhowmick, and S.Baishya, 2018, Effect of Ge mole fraction on electrical parameters of Si1-xGex source step-FinFET and its application as an inverter", Silicon, 10.1007/s12633-018-9846-8
49. R.Saha, B.Bhowmick, and S. Baishya, 2018, Comparative Analysis among SMG, DMG, and TMG FinFETs: RF/Analog and Digital Inverter Performance" journal of Nano and Optoelectronics, Vol. 13, pp.1-9doi:10.1166/jno.2018.2336
50. R.Saha, B.Bhowmick, and S. Baishya, 2018, Quantum Analytical Modeling of Inversion Charge and Threshold Voltage in Nanoscale Bi-Level Uniform Gate FinFET, ECS Journal of Solid State Science and Technology,vol.7, Issue 2,doi: 10.1149/2.0231802jss
51. P.Kumar, B.Bhowmick, 2018, Suppression of Ambipolar Conduction and Investigation of RF Performance Characteristics of Gate Drain Underlap SiGe Schottky Barrier Field Effect Transistor, Micro & Nano Letters, IET,DOI: 10.1049/mnl.2017.0895 , Online ISSN 1750-044.
52. R.Saha, B.Bhowmick, S.Baishya, 2017, A 3D Statistical Simulation Study of Titanium Metal Gate WFV on Electrical Parameters in n-channel Ge step-FinFET, Applied Physics A. DOI: 10.1007/s00339-017-1545-6, 3.
53. P.Kumar, B.Bhowmick, 2017, A Physics Based Threshold Voltage Model for Hetero - Dielectric Dual Material Gate Schottky Barrier MOSFET, International Journal of Numerical Modelling: Electronic Networks, Devices and Fields.Wiley.10.1002/jnm.2320
54. .R.Goswami, B.Bhowmick, 2017, A Temperature Dependent Surface Potential Based Algorithm for Extraction of Threshold Voltage in Homojunction TFETs, accepted in International Journal of numerical modelling: Electronic network, devices and fields. DOI: 10.1002/jnm.2304..
55. R.Saha, B.Bhowmick, and S. Baishya, 2017, 3D Analytical Modeling of surface potential, threshold voltage, and subthreshold swing in Dual Material Gate (DMG) SOI FinFET", Journal of Computational Electronics. DOI 10.1007/s10825 -017-1072-x.
56. P.Kumar, B.Bhowmick, 2017, 2D analytical model for surface potential based electric field and impact of wok function in DMG SB MOSFET , Superlattice and Microstruc vol.109, pp. 805-814.
57. P.Kumar, B.Bhowmick, 2017, 2-D Analytical modeling for electrostatic potential and threshold voltage of dual work function gate Schottky Barrier MOSFET, Journal of Computational Electronics, Springer, doi10.1007/s10825-017-1011-x
58. R.Saha B.Bhowmick, and S. Baishya, 2018, GaAs SOI FinFET: Impact of Gate Dielectric on Electrical Parameters and Application as Digital Inverter, Int. J. of Nanoparticles (IJNP) Special Issue, Inderscience. Doi.org/10.1504/IJNP.2018.092668
59. R.Saha B.Bhowmick, and S. Baishya, 2017,Si and Ge step-FinFETs: Work function variability, optimization and electrical parameters, accepted in Superlattice and Microstruc., Elsevier, doi: 10.1016/j.spmi.2017.04.001.
60. R.Saha, B.Bhowmick, and S. Baishya, 2017, Statistical Dependence of Gate Metal Work Function on Various Electrical Parameters for an n-channel Si step-FinFET," IEEE Transactions on Electron Devices, vol. 64, no. 3, pp. 969-976, doi: 10.1109/TED.2017.2657233
61. K. Guha, N.M.Laskar, H. J. Gogoi, S. Chanda, K. L. Baishnab, K. Srinivasa Rao. "An Improved Analytical Model for Static Pull-in Voltage of a Flexured MEMS Switch", Microsystem Technologies, Springer, April 2018 (Available online). DOI: 10.1007/s00542-018-3911-5. (SCI)
62. K.V. Vineetha, P. Ashok Kumar, B.V.S. Sailaja, Koushik Guha, K.Girija Sravani, and K.Srinivasa Rao, "Performance Analysis of MEMS sensor for the Detection of Cholera and Diarrehea", Journal of Microsystems technologies, Springer, March 2018.DOI: 10.1007/s00542018-3810-9. (SCI)
63. Srinivasa Rao Karumuri; Akshar Kumar R; Girija sravani k; Sateesh J; Koushik Guha; Baishnab KL, "Analysis of Uniform Structured RF MEMS Switch with Different Uniform and Non-Uniform Meandering Techniques", Microsystem Technologies, Springer. DOI: 10.1007/s00542-018-38666. (SCI)
64. K. Srinivasa Rao, K.V. Vineetha, B.V.S Sailaja, Koushik Guha, P. Srinivas Varma, K.Girija Sravani, "Design, Simulation and Performance analysis of MEMS based Bio-sensors for the detection of Cholera and Diarrhea", Journal of Microsystem Technologies, Springer Publications, DOI & Year: 10.1007/s00542-018-3810-9 & 2018. (SCI).
65. Reshmi Maity, Niladri Maity, Koushik Guha, S. Baishya, "Analysis of fringing capacitance effect on the performance of MEMS based micromachined ultrasonic air transducer", Micro & Nano Letters, IET , March 2018 (Available Online).DOI: 10.1049/mnl.2017.0688. (SCIE)

66. J. Sateesh, K.Girija Sravani, R.Akshay Kumar, Koushik Guha and K. Srinivasa Rao, "Design and Flow Analysis of MEMS based Piezo-electric Micro Pump", Microsystem Technologies, Springer, 2017 (Available Online).DOI: 10.1007/s00542-017-3563-x. (SCI)
67. P.Ashok Kumar, K.V.Vineetha, B.V.S. Sailaja, Koushik Guha, K.Girija Sravani, K. Srinivasa Rao, "Modelling and design of lab - on - chip for detection of e.coli bacteria in water using capacitance modulation method", Journal: International Journal of Pure and Applied Mathematics Volume 117 No. 19 Special Issue, 2017, Pages 121-125. (SCOUPUS)
68. K.V. Vineetha, P. Ashok Kumar, B.V.S. Sailaja, Koushik Guha, K.Girija Sravani, and K. Srinivasa Rao , "Design of MEMS sensor for the Detection of Cholera and Diarrehea by Capacitance Modulation", Microsystem Technologies, Springer Doi &Year: 10.1007/s00542-0173702-4 &2017. (SCI)
69. Srinivasa Rao Karumuri; Sateesh J`; Girija Sravani K; Koushik Guha; Baishanab KL, "Design and Analysis of MEMS Based Piezoelectric Micro pump integrated with Micro Needle", Microsystem Technologies, Springer, December 2017.DOI: 10.1007/s00542-018-3807-4. (SCI)
70. D. Panda, T. R. Lenka, "A Compact Thermal Noise Model for Enhancement mode N-polar MOS-HEMT including 2DEG Density Solution with Two Sub-bands," IET Circuits, Devices and Systems, Mar 2018.DOI: 10.1049/iet-cds.2017.0226.[SCI] [IF:1.395]
71. M. Krishnasamy, T. R. Lenka, "An analytical model with two degree of freedom of piezo-magneto-elastic energy harvester for low frequency wide bandwidth applications," IETMicro & Nano Letters, Mar 2018. DOI: 10.1049/mnl.2017.0633. [SCIE, Clarivate Analytics][IF: 0.841]
72. B. Shougaijam, C. Ngangbam, T. R. Lenka, "Enhancement of Broad Light Detection based on Annealed Al-NPs Assisted TiO2-NWs Deposited on p-Si by GLAD Technique," IEEE Transactions on Nanotechnology,Vol. 17, No. 2, 2018, DOI: 10.1109/TNANO.2018.2795344.[SCI] [IF: 2.485]
73. M. Krishnasamy, Feng Qian, Lei Zuo,T. R. Lenka, "Distributed Parameter Modeling to Prevent Charge Cancellation for Discrete Thickness Piezoelectric Energy Harvester," Solid State Electronics (Elsevier).DOI: https://doi.org/10.1016/j.sse.2017.12.010. [SCI] [IF: 1.666]
74. D. Panda, T. R. Lenka, "Investigation of Gate Induced Noise in E-mode GaN MOS-HEMT and its Effect on Noise Parameters," International Journal of Numerical Modelling: Electronic Networks, Devices and Fields(Wiley),DOI: 10.1002/jnm.2318, 2017. [Scopus, SCI]
75. S. R. Routray, T. R. Lenka, "InGaN-based Solar Cells: A Wide Solar Spectrum Harvesting Technology for 21st Century,"CSI Transactions on ICT (Springer), Nov 2017. DOI: https://doi.org/10.1007/s40012-017-0181-9. [INSPEC]
76. D. Panda, T. R. Lenka, "Oxide Thickness Dependent Compact Model of Channel Noise for E-Mode AlGaN/GaN MOS-HEMT," AEU-International Journal of Electronics and Communications (Elsevier),Vol. 82, pp. 467–473,Dec2017,DOI: https://doi.org/10.1016/j.aeue.2017.09.025.(SCI)
77. G. Amarnathand T. R. Lenka, "Analytical model development for unified 2D electron gas sheet charge density of AlInN/GaN MOSHEMT,"International Journal of Electronics and Telecommunications, 2017, Vol. 63, No. 4, pp.363-368. DOI: 10.1515/eletel-2017-0049. (Scopus, ESCI, Clarivate Analytics)
78. D. Panda, T. R. Lenka, "Effects of trap density on drain current LFN and its model development for E-mode GaN MOS-HEMT," Superlattices and Microstructures(Elsevier), Sept 2017, DOI: 10.1016/j.spmi.2017.09.045. (SCI)
79. M. Krishnasamy, T. R. Lenka, "Distributed parameter modeling for autonomous charge extraction of various multilevel segmented piezoelectric energy harvesters," Microsystem Technologies (Springer), pp.1-11, Sept 2017, DOI: 10.1007/s00542-017-3559-6.(SCI)
80. G. Amarnath, D. Panda and T. R. Lenka, "Microwave frequency small-signal equivalent circuit parameter extraction for AlInN/GaN MOSHEMT," International Journal of RF and Microwave Computer-Aided Engineering (Wiley), Sept 2017. DOI: 10.1002/mmce.21179 [SCIE, Clarivate Analytics]
81. A. Baidya, S. Baishya, T. R. Lenka, "Impact of Thin High-K Dielectrics and Gate Metals on RF Characteristics of 3D Double Gate Junctionless Transistor," Materials Science in Semiconductor Processing (Elsevier), Vol. 71, pp. 413–420, 2017. (Scopus)
82. S. R. Routray, B. Shougaijam,T. R. Lenka, "Exploiting Polarization Charges for High Performance (000-1) facet GaN/InGaN/GaN Core/Shell/Shell Triangular Nanowire Solar Cell," IEEE Journal of Quantum Electronics, July 2017.DOI: 10.1109/JQE.2017.2734078.(SCI)[IF: 1.887]
83. S. R. Routray, T. R. Lenka, "Performance Analysis of Nanodisk and Core/Shell/Shell-Nanowire type III-Nitride Heterojunction Solar Cell for Efficient Energy Harvesting," Superlattices and Microstructures (Elsevier) July 2017. DOI: 10.1016/j.spmi.2017.07.038.(SCI)

84. S. R. Routray, T. R. Lenka, “Spontaneous and Piezo-phototronics Effect on Geometrical Shape of III-Nitride Wurtzite Nanowires for High Efficiency Photovoltaic Applications,” IET Micro & Nano Letters, June 2017.DOI:10.1049/mnl.2017.0403.[SCIE, Clarivate Analytics][IF: 0.841]
85. G. Amarnath, R. Swain and T. R. Lenka, “Modeling and Simulation of 2DEG Density and Intrinsic Capacitances in AlInN/GaN MOSHEMT,” International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (Wiley)DOI:10.1002/jnm.2268, 2017. [SCI, Clarivate Analytics]
86. M. Krishnasamy, T. R. Lenka, “Distributed Parameter Model for Assorted Piezoelectric Harvester to Prevent Charge Cancellation,” IEEE Sensors Letters, Vol. 1, Issue. 3, 2017. DOI: 10.1109/LSENS.2017.2705348, Apr 2017.
87. B. Shougaijam, C. Ngangbam, T. R. Lenka, “Plasmon Sensitized Optoelectronic Properties of Au Nanoparticles assisted Vertically Aligned TiO2 Nanowires by GLAD Technique,” IEEE Transactions on Electron Devices, Vol. 64, No.3, pp. 1127-1133,Apr2017.[DOI: 10.1109/TED.2017.2648500] [IF: 2.605]
88. S. R. Routray, T. R. Lenka, “Effect of Metal-fingers/doped-ZnO Transparent Electrode on Performance of GaN/InGaN Solar Cell,” Journal of Semiconductors(IOP Science),Vol. 38, No. 9, 2017. [Scopus, Clarivate Analytics]
89. D. Panda, T. R. Lenka, “Modeling and Simulation of Enhancement mode p-GaN Gate AlGaN/GaN HEMT for RF Circuit Switch Applications,” Journal of Semiconductors(IOP Science),Vol. 38, No. 6, 2017.[DOI: 10.1088/1674-4926/38/6/06xxxx] [Scopus, Clarivate Analytics]
90. B. Shougaijam, R. Swain, C. Ngangbam, T. R. Lenka, “Electrical Characteristics of MOS Device with annealed TiO2 Nanowires based Dielectric,”Journal of Semiconductors(IOP Science), Vol. 38, No. 5, 2017. [DOI: 10.1088/1674-4926/38/5/05xxxx] [Scopus, Clarivate Analytics]
91. S.M Chowdhury, Ashraf Hossain, 2018, "Impact of Error Control Code on Characteristic Distance in Wireless Underground Sensor Networks" IET Communications, 2018, DOI: 10.1049/iet-com.2018.0171
92. Barnali DEY, Ashraf HOSSAIN, Valentina. E. BALAS, R. N. BERA, 2017, "Improved Energy Detector for Spectrum Sensing Using Neuro-Fuzzy Double Threshold Technique", Studies in Informatics and Control, vol. 26(3), pp. 335-342, 2017.
93. S Debnath, Ashraf Hossain, SM Chowdhury, AK Singh, 2017, "Effective sensing radius (ESR) and performance analysis of static and mobile sensor networks" ,Telecommunication Systems, Springer, September 2017, DOI: 10.1007/s11235-017-0379-z.
94. S. Debnath, Ashraf Hossain, S.M Chowdhury, 2017, "Comment on "Impact of Interference on Coverage in Wireless Sensor Networks"" Springer Wireless Personal Communications, May 2017, DOI: 10.1007/s11277-017-4552-1.
95. Kumar Rajeev, Hossain Ashraf, 2017, "Optimization of Throughput of Two-Way Buffer-Aided Relaying Networks with Wireless Assisted Links ", IET Communications Journal, May 2017, DOI: 10.1049/iet-com.2016.1364.
96. G. Prasad, D. Mishra, and A. Hossain, 2018, “Joint Optimization Framework for Operational Cost Minimization in Green Coverage-Constrained Wireless Networks”, Vol. 2, No. 3, IEEE Transactions on Green Communications and Networking, IEEE.
97. G. Prasad, D. Mishra, and A. Hossain, 2018, “Joint Optimal Design for Outage Minimization inDF Relay-assisted Underwater Acoustic Networks”, Vol. 22, No. 8, IEEE Communications Letters, IEEE.
98. G. Prasad, J. Rani, and A. Hossain, 2017, “Energy Efficient Sensor Node Deployment in an Event Driven Sensor Network”, International Journal of Applied Engineering Research.
99. Sounik Kiran Kumar Dash, Taimoor Khan and Yahia M.M. Antar, “A state-of-art review on performance improvement of dielectric resonator antennas”, International Journal of RF and Microwave Computer Aided Engineering, Wiley Interscience, ISSN No. 1099-047X, Impact Factor. 0.524, pp. 1-18, February 2018. DOI: https://doi.org/10.1002/mmce.21270
100. Sounik Kiran Kumar Dash, Taimoor Khan, and Binod Kumar Kanaujia, “Circularly Polarized Dual Facet Spiral Fed Compact Triangular Dielectric Resonator Antenna for Sensing Applications”, IEEE Sensor Letters, Vol. 2, Issue 1, March 2018. DOI: 10.1109/LSENS.2018.2795017
101. Samineni Peddakrishna, Taimoor Khan, Binod Kumar Kanaujia, and Nasimuddin, “Study of Pass Band Resonance Characteristics of Aperture Type FSS”, AEU International Journal of Electronics and Communication, Elsevier, Vol. 83, pp. 479-483, 2017. ISSN No: 1434-8411, Impact Factor: 1.147, DOI: http://dx.doi.org/10.1016/j.aeue.2017.06.007.
102. Sounik Kiran Kumar Dash, Taimoor Khan, Binod Kumar Kanaujia, Yahia M.M. Antar, “Gain Improvement of Cylindrical Dielectric Resonator Antenna Using Flat Reflector Plane: A New

Approach", IET Microwave, Antennas and Propagation, May 2017, Vol. 11 Iss. 11, pp. 1622-1628, Impact Factor: 0.883, ISSN No. 1751-8733, DOI:10.1049/iet-map.2017.0284

103. Sounik Kiran Kumar Dash and Taimoor Khan, "Wideband High Gain Conical Dielectric Resonator Antenna: An Experimental Study of Superstrate and Reflector", International Journal of RF and Microwave Computer-Aided Engineering, Wiley Interscience, ISSN No. 1099-047X, Impact Factor. 0.524, pp. 1-10, 7th June 2017. DOI:10.1002/mmce.21140
104. Sounik Kiran Kumar Dash, Taimoor Khan and Binod Kumar Kanaujia, "Wideband Circularly Polarized Cylindrical Dielectric Resonator Antenna for X-Band Applications", Microwave and Optical Technology Letters, Vol. 59, Issue No. 10, pp. 2463-2468, ISSN No. 1098-2760, Impact Factor. 0.731, 27th July 2017. DOI: 10.1002/mop.30756
105. Sounik Kiran Kumar Dash, Taimoor Khan, Binod Kumar Kanaujia and N. Nasimuddin, "Wideband Cylindrical Dielectric Resonator Antenna Operating in HEM11d Mode with Improved Gain: A Study of Superstrate and Reflector Plane", International Journal of Antenna and Propagation, Hindawi Publishing Corporation USA, Vol. 2017, Article ID 2414619, 11 pages, Impact Factor: 1.164, ISSN No: 1687-5877, June 2017. DOI: https://doi.org/10.1155/2017/2414619
106. Sounik Kiran Kumar Dash, Taimoor Khan and Binod Kumar Kanaujia,"Conical Dielectric Resonator Antenna with Improved Gain and Bandwidth for X-Band Applications", International Journal of Microwave and Wireless Technologies,Cambridge University Press, Impact Factor: 0.472, pages 1-8, April 2017, ISSN No: 1759-0787.
107. Abhijyoti Ghosh, Sudipta Chattopadhyay, L. Lolit Kumar Singh, Subhradeep Chakraborty and Banani Basu, "Wide Bandwidth Microstrip Antenna with Defected Patch Surface for Low Cross Polarization Applications," International Journal of RF and Microwave Computer-Aided Engineering (Wiley), Vol. 27, Issue 8, pp. 1-10, 2017. Impact Factor 0.746. DOI: 10.1002/mmce.21127. SCIE Indexed
108. Abhijyoti Ghosh, Sudipta Chattopadhyay, Subhradeep Chakraborty and Banani Basu, "Cross Type Defected Ground Structure Integrated Microstrip Antenna: A Novel Perspective for Broad Banding and Augmenting Polarization Purity," Journal of Electromagnetic Waves and Applications (Taylor & Francis), Vol. 31, Issue 5, pp. 461-476, 2017. http://dx.doi.org/10.1080/09205071.2017.1284610 .Impact Factor 0.772.SCIE Indexed
109. First-principles study of phase transition, electronic, elastic and optical properties of defect chalcopyrite ZnGa2Te4 semiconductor under different pressures, RishikantaMayengbam, S. K. Tripathy, G. Palai and S. S. Dhar, J. Phys. Chem. Solids 119 (2018) 193-201.
110. Study of fiber optic code division multiple access Code families for Application in Optical Communication based on weight and bit error rate, C. S. Mishra, M. Ravikumar, S. K. Tripathy, G. palai, Optik154 (2018) 41-46.
111. J. Kumar, B. Basu, F. A. Talukdar and A. Nandi, "Graphene based multimode inspired frequency reconfigurable user terminal antenna for satellite communication," IET Communications, Vol. 12, Issue 1, pp. 67–74, 2018. Impact Factor 1.061. DOI: 10.1049/iet-com.2017.0253.
112. Amiya Dey, Arnab Nandi and Banani Basu, "gold-MUSIC based DOA Estimation using ULA Antenna of DS-CDMA Sources with Propagation Delay Diversity," AEUE - International Journal of Electronics and Communications (Elsevier), Vol. 84, pp. 162-170, February 2018. Impact Factor 1.147. DOI: 10.1016/j.aeue.2017.11.029. SCIE Indexed
113. J. Kumar, B. Basu, F. A. Talukdar and A. Nandi, "X-band Antenna Printed on A Multilayered Substrate," IET Microwaves, Antennas & Propagation (IET MAP), Vol. 11, Issue 11, pp. 1504 - 1509, 2017. Impact Factor 1.187. DOI: 10.1049/iet-map.2017.0197. SCI Indexed
114. J. Kumar, B. Basu, F. A. Talukdar and A. Nandi, "Graphene-based wideband antenna for aeronautical radio-navigation applications," Journal of Electromagnetic Waves and Applications (Taylor & Francis), Vol. 31, Issue 18, pp. 2046-2054, 2017. Impact Factor 0.772. 10.1080/09205071.2017.1359686. SCIE Indexed
115. Sourav Roy, Ujjal Chakraborty: 'Metamaterial-embedded dual wideband microstrip antenna for 2.4 GHz WLAN and 8.2 GHz ITU band applications', Waves in Random and Complex Media, 2018, pp.1-15, DOI: 10.1080/17455030.2018.1494396.
116. Sourav Roy, K.L.Baishnab, UjjalChakraborty: 'Beam Focusing Compact Wideband Antenna Loaded with Mu-Negative Metamaterial for Wireless LAN Application', Progress in Electromagnetics Research C, 2018, 83, pp. 33-44. DOI: 10.2528/PIERC18012908.

b) National Journal(s):

1. A. Ganguly , M.choudhury , S.S Nath , Synthesis and characterization of one pot synthesized PVA capped PbS quantum dots, Devices for Integrated Circuits (DevIC 2017), Kalyani Government Engineering college , March 23-24, 2017
2. Abhigyan Ganguly , Rupam Goswami, Madhuchhanda Choudhury, Siddhartha Sankar Nath, Simulation of CdS quantum dot sensitized ZnO based solar cell using Silvaco-TCAD, Prof. Lufty ZadehMemorial 6th international conference on computing , communication and Sensor Network CCSN2017, Decmber 30th-31st, 2017, Vanue : The Lalit (Great Eastern) BBD Bag, Kolkata- 700069, India . Organizer : Applied computer Technology, Kolkata , India
3. K.Putea, M.Choudhury, B.Bhowmick, Optimization of Electrical parameters in SiGe channel nMOS. Devices for Integrated Circuits (DevIC 2017), Kalyani Government Engineering College, March 23-24, 2017.

c) International Conference(s):

1. R. Das and S. Baishya, "Investigation of work function and temperature of germanium FinFETs," 2017 International Conference on Electron Devices and Solid-State Circuits (EDSSC), Hsinchu, 2017, pp. 1-2.
2. R. Das and S. Baishya, "Dual stacked gate dielectric source/oxide overlap Si/Ge FinFETs: Proposal and analysis," 2017 Devices for Integrated Circuit (DevIC), Kalyani, 2017, pp. 66-70.
3. R. Saha, B. Bhowmick and S. Baishya, "Effects of temperature on electrical parameters in GaAs SOI FinFET and application as digital inverter," 2017 Devices for Integrated Circuit (DevIC), Kalyani, 2017, pp. 462-466.
4. N.M.Laskar, S.Chanda, K.Guha, U.Pandey, K.L.Baishnab, P.K.Paul, A Low Noise Area Efficient Amplifier for Neural Recording Systems,NanoFim-2017, Noida, India, Nov, 2017.
5. N.M.Laskar, S.Chanda,K.Guha, U.Pandey, K.L.Baishnab, K.Srinivasa Rao, Realization of Low Power Gm-C Filters using High Swing Self-biased Cascode Current Mirror Load based Operational Transconductance Amplifier, NanoFim-2017, Noida, India, Nov, 2017.
6. N.M.Laskar, K.Guha, K.L.Baishab, S.Chanda, D.Biswas, P.Sarkar, P.K.Paul, A Low Power, Low Noise Amplifier for Neural Signal Amplification in SCL 180nm, 6th CCSN, Kolkata, India, Dec, 2017.
7. P.Sarkar, N.M.Laskar,S.Nath, K.L.Baishnab, K.Guha, S.Biswas, P.K.Paul, K.S.Rao, “A Comparative Analysis of Dragonfly Algorithm and Drosophila Food Search Algorithm in Optimization of Switching Characteristics of CMOS Inverter,” 6th CCSN, Kolkata, India, Dec, 2017.
8. P.Sarkar, K.L.Baishnab, S.K.Tripathy, Application of ZnO film as transparent electrode for dye-sensitized solar cells, 6th CCSN, Kolkata, India, Dec, 2017.
9. K. Guha, K.L.Baishnab, H. J. Gogoi, A. K. Borah, N.M. Laskar, Closed form Model for Switching Time of a Meander Hinged MEMS Switch with Beam Perforation Effect”, in IEEE Conference on Nanotechnology Materials and Device Conference (NMDC 2017), Singapore, 2-4th October 2017.
10. Rajeeb Talukdar, Shreshtha Bohra, Dip Jyoti Bania, K. L. Baishnab, Koushik Guha and K. Srinivasa Rao, “Time Response Analysis of a Continuous Blood Glucose Monitoring System”, in IEEE Conference on Nanotechnology Materials and Device Conference (NMDC 2017), Singapore, 2-4th October 2017.
11. Guha. K, Laskar, N.M., Gogoi, H.J., Borah, A.K., K. L. Baishnab, ‘Pull-in Analysis of a Flexure Based MEMS Shunt Capacitive Switch’, presented in 4th INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems MICRO 2017, held in Darjeeling, West Bengal, India, 3-4th June 2017.
12. K. L. Baishnab, Guha, K., Lukose, C., Laskar, N.M., Nath, S., Kumar, S. : ‘A Low Noise Narrowband VCO with Tail Filtering Circuit’, presented in 4th INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems MICRO 2017, held in Darjeeling, West Bengal, India, 3-4th June 2017.
13. Laskar. N.M., Guha, K., Toshniwal, N., Das, S., K. L. Baishnab, Nath, S., Paul, P.K. : ‘A Low Noise, High Gain OTA for Low Frequency Application’, presented in 4th INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems MICRO 2017, held in Darjeeling, West Bengal, India, 3-4th June 2017.
14. Guha,K., Gogoi,H.J., Borah,A.K.,Laskar,N.M., K. L. Baishnab, Rao, K. Srinivasa.: ‘Novel Switching Time Model of a Flexure Type MEMS Switch Incorporating Beam Perforation Effect’, presented in 4th

INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems MICRO 2017, held in Darjeeling, West Bengal, India, 3-4th June 2017.

15. R. Akshay Kumar, K.Girija Sravani, J.Sateesh, Koushik Guha, K. L. Baishnab and K.Srinivasa Rao.: 'Design and Analysis of Uniform Structured RF MEMS Capacitive Shunt Switch with Different Meandering Technique', presented in 4th INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems MICRO 2017, held in Darjeeling, West Bengal, India, 3-4th June 2017.
16. Jasti Sateesh, K.Srinivasa Rao, K. Girija Sravani, B.Yougitha, Koushik Guha, K. L. Baishnab and R.Akshay Kumar.: 'Design and Optimization of MEMS Based Piezo-ElectricMicro Pump', presented in 4th INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems MICRO 2017, held in Darjeeling, West Bengal, India, 3-4th June 2017.
17. C.L.Singh, Ch. Anandini, A.J.Gogoi, K.L.Baishnab "Automated design of Low-noise High-gain CMOS amplifier via HPSO Multi-objective optimization Methodology," (Micro-2017), Darjeeling, India, June, 2017.
18. A.Gogoi, N.M.Laskar, C.L.Singh, K.L.Baishnab, "Optimization of Throughput of Multiuser Cognitive radio," Micro-2017, Darjeeling Indi, June, 2017.
19. Roy, A., Singha, J., & Laskar, R. H. (2017, November). Impulse noise removal from color images: An approach using SVM classification based fuzzy filter. In Region 10 Conference, TENCON 2017-2017 IEEE (pp. 929-934). IEEE.
20. Manam, L., Roy, A., Laskar, R. H., & Talukdar, F. A. (2017, November). Removal of fixed valued impulse noise using global noise statistics based adaptive histogram fuzzy filter. In Region 10 Conference, TENCON 2017-2017 IEEE (pp. 2231-2235). IEEE.
21. Islam, M., Mallikharjunudu, G., Parmar, A. S., Kumar, A., & Laskar, R. H. (2017, July). SVM regression based robust image watermarking technique in joint DWT-DCT domain. In 2017 International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT) (pp. 1426-1433). IEEE.
22. Alphonsa, A. C., Bhanja, C. C., Laskar, A., & Laskar, R. H. (2017, July). Spectral feature based automatic tonal and non-tonal language classification. In 2017 International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT) (pp. 1271-1276). IEEE.
23. Misra, S., & Laskar, R. H. (2017, November). Multi-factor analysis of texture and color-texture features for robust hand detection in non-ideal conditions. In Region 10 Conference, TENCON 2017-2017 IEEE (pp. 1165-1170). IEEE.
24. Misra, S., & Laskar, R. H. (2017, December). Taxonomy of Texture and Color-Texture Features for Developing Hand Detection System under Non-Ideal Conditions. In 2017 14th IEEE India Council International Conference (INDICON) (pp. 1-6). IEEE.
25. Devi S. S. & Laskar R. H., " Non-parametric statistical test based feature selection and classification of malaria-infected erythrocyte using microscopic blood smear images", INDIACom – March, 2018. (Accepted)(scopus)
26. Devi S. S. & Laskar R. H., " Color Channel Difference Based Multilevel Thresholding for Malaria Parasite Segmentation," INDIACom, March 2018. (Accepted)
27. Saikia, A., Karsh, R. K., & Lashkar, R. H. (2017, November). Image authentication under geometric attacks via concentric square partition based image hashing. In Region 10 Conference, TENCON 2017-2017 IEEE (pp. 2214-2219). IEEE.
28. D. Bisharad, D. Dey, B. Bhowmick, " Fast Detection of P,Q,S and T waves from Normal ECG signals using local context windows", accpted in IEEE RCAR, Maldives, Aug1-5, 2018.
29. Vikas Kumar, Rajesh Saha, Rajashree Das, BrindaBhowmick, Srimanta Baishya, "Comparison between Square and Right Angle Triangle Grain Due to WFV in Metal Gate and Implication of WFV in FinFET" NANOFILM 2017, 16-17 Nov, 2017, IEEE sponsored.
30. V. Devi, B.Bhowmick, " Optimization of N+ hetero pocket doped Dual metal Vertical TFET" proceedings of 2nd International Conference on Computing Methodologies and Communication (ICCMC 2018) , IEEE sponsored
31. R.Saha, B.Bhowmick, S.Baishya, "Effects of Temperature on Electrical Parameters in GaAs SOI FinFET and Application as Digital Inverter" accepted in Devices for Integarted Circuits (DevIC 2017)", Kalyani Government Engineering College, March 23-24, 2017.
32. K.Putea, M.Choudhury, B.Bhowmick " Optimization of Electrical parameters in SiGe channel nMOS" accepted in Devices for Integarted Circuits (DevIC 2017)", Kalyani Government Engineering College, March 23-24, 2017

33. Ashok Kumar.P,NareshKumar.S,Sailaja.B,Vineetha.K.V,Girija Sravani.K, Koushik Guha andK. Srinivasa Rao, "Design and Simulation of Circular type Tunable Patch Antenna loaded with RF MEMS Switch", presented in CCSN 2017 International Conference held on 30-31st Dec, 2017 in Kolkata, India.
34. Laskar, N.M., Guha, K., Baishnab, K.L., Chanda, S., Biswas, D., Sarkar, P, Paul, PK "A Low Power, Low Noise Neural Signal Amplifier in 180 nm Technology", presented in CCSN 2017 International Conference held on 30-31st Dec, 2017 in Kolkata, India.
35. Sarkar, P., Laskar, N.M, Baishnab, K.L., Guha, K., Biswas, S. "A Comparative Analysis of Dragonfly Algorithm and Drosophila Food Search Algorithm in Optimization of Switching Characteristics of CMOS Inverter", presented in CCSN 2017 International Conference held on 3031st Dec, 2017 in Kolkata, India.
36. B.V.S. Sailaja, D. Manaswi, K.V. Vineetha, P. Ashok Kumar, Koushik Guha, K. Girija Sravani and K. Srinivasa Rao, "Design a novel structure of shunt Configuration based Switch via asymmetric structures", presented in CCSN 2017 International Conference held on 30-31st Dec, 2017 in Kolkata, India.
37. K.V. Vineetha, P. Ashok Kumar, B.V.S. Sailaja , Koushik Guha , K.Girija Sravani and K. Srinivasa Rao, "Design of MEMS sensor for the Detection of Cholera and Diarrehea by Capacitance Modulation", presented in CCSN 2017 International Conference held on 30-31st Dec, 2017 in Kolkata, India.
38. Maity Reshmi, Maity N. P., Guha K., Baishya S. "Analytical Modeling and FEM Simulation of Fringing Field Effect of 4H-SiC Based MEMS Capacitive Micromachined Ultrasonic Transducers", presented in CCSN 2017 International Conference held on 30-31st Dec, 2017 in Kolkata, India.
39. Maity N. P., Maity Reshmi, Guha K., Baishya S. "Investigation and Analysis of Collapse Voltage of Capacitive MEMS Ultrasonic Transducers", presented in CCSN 2017 International Conference held on 30-31st Dec, 2017 in Kolkata, India.
40. Lakshmi Narayana T, Srinivasa Rao K, Koushik Guha and Girija Sravani K, "Performance of RF MEMS Switch with Meanders and Perforated Structure for k-Band Applications", presented in NANOfIM 2017 conference held on 16-17th Nov, 2017 in India.
41. D. Borthakur, S. Chander, K. Guha, S. Baishya : "Optimization of Piezoelectric Energy Harvesting Structure by Segmenting the Piezoelectric Layer(s)", in IEEE Conference on Nanotechnology Materials and Device Conference (NMDC 2017), Singapore, 2-4th October 2017 (Presented).
42. Koushik Guha, Srimanta Baishya, Ananta Kumar Borah and K. Srinivasa Rao, "New Analytical Model of Switching Capacitance for MEMS Shunt Perforated Switch", in IEEE Conference on Nanotechnology Materials and Device Conference (NMDC 2017), Singapore, 2-4th October 2017.
43. S. R. Routray, T. R. Lenka, "Effects of Stress and Strain Distribution on Performance Analysis of GaN/InGaN/GaN Core/Shell/Shell Radial Nanowires for Solar Energy Harvesting," 5thJoint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS) 2018, 19-21 Mar 2018, Granada, Spain. (IEEE Xplore)
44. Vallisree S., T.Rajalingam, T. R. Lenka, "Modelling of CZTS/ZnS/AZO solar cell forEfficiency Enhancement," 2018 3rd International Conference on Microwave and Photonics (ICMAP 2018), 9-11 February, 2018. (IEEE Xplore)
45. D. K. Panda and T. R. Lenka, "Device Optimization of E-Mode N-Polar GaN MOS-HEMT for Low Noise RF & Microwave Applications," XIX International Workshop on the Physics of Semiconductor Devices 2017 (IWPSD 2017), 12-15 Dec 2017.
46. R. Paswan, D. K. Panda and T. R. Lenka, "Dielectric Modulated AlGaAs/GaAs HEMT for Label Free Detection of Biomolecules," XIX International Workshop on the Physics of Semiconductor Devices 2017 (IWPSD 2017), 12-15 Dec 2017.
47. M. Krishnasamy, T. R. Lenka, "Nonlinear Broadband Piezo-Magneto-Elastic Energy Harvester in Bistable and Monostable Configurations," IEEE Nanofim 2017, 16-17 Nov 2017, India.(IEEE Xplore)
48. D. K. Panda, A. Kumar, T. R. Lenka, "Gate Current Low Frequency Noise Model for High-K GaN MOS-HEMT," IEEE Nanofim 2017, 16-17 Nov 2017, India. (IEEE Xplore)
49. S. R. Routray, T. R. Lenka, "Polarization Charges in High Performance GaN/InGaN/GaN Core/Shell/Shell Nanowire for Solar Energy Harvesting,"IEEE NMDC 2017, 2-4 Oct 2017, Singapore.(IEEE Xplore)
50. B. Shougaijam, C. Ngangbam,and T. R. Lenka, "Morphology, Structural and Optical Analysis of Au Nanoparticle Assisted TiO2 Nanowires for Opto-Nanoelectronic Applications," IEEE NMDC 2017, 2-4 Oct 2017, Singapore.(IEEE Xplore)
51. S. R. Routray, T. R. Lenka, "Design and Simulation of GaN/InGaN Core/Shell/Shell Radial Nanowires for Solar Energy Harvesting," IEEE NMDC 2017, 2-4 Oct 2017, Singapore.(IEEE Xplore)

52. KrishanuDey and T. R. Lenka, “Simulation of High Efficiency InGaP/InP Tandem Solar Cells Under Flat Plate and Concentrator Conditions,” IEEE International Conference on Microelectronics Devices Circuits and Systems (ICMDCS) 2017, 10-12 Aug, 2017, VIT, Vellore, India.(IEEE Xplore)
53. Vallisree S., T. Rajalingam, T. R. Lenka, “Comparative Characteristics Study of the Effect ofVarious Gate Dielectrics on ZnO TFT,” International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS-2017), 1-2 Aug 2017.(IEEE Xplore)
54. Arunav Saikia , Ram Kumar Karsh and Rabul Hussain Laskar, “Image authentication under geometric attacks via concentric square partition based image hashing”, TENCON 2017-2017 IEEE, Penang (Malaysia), 5 Nov. 2017.
55. Hoque S, Karsh RK, Baishya S, Arif W, “Spectrum handoff performance in opportunistic and negotiated situations for cognitive radio networks”, TENCON 2017 IEEE, Penang (Malaysia), 5 Nov. 2017.
56. Debnath R, Soren N, Bhakta S, Karsh RK, Roy AK,“Feasibility study of an off-grid hybrid renewable energy system”,TENCON 2017 IEEE, Penang (Malaysia), 5 Nov. 2017.
57. S. Maity and R. K. Karsh, “Image Hash Minimization for Tamper Detection,” in Proc. IEEE International Conference on Advances in Pattern Recognition (ICAPR), (accepted), Bangalore, Dec. 2017.
58. G. Prasad, D. Mishra, and A. Hossain, “Coverage-constrained Base Station Deployment andPower Allocation for Operational Cost Minimization”,International Conference on Personal, Indoor, and Mobile Radio Communications (PIMRC), Montreal, QC, Canada, 8-13 Oct. 2017.
59. Partha Paritam Shome and Taimoor Khan, “A Compact Multi-Mode Resonator and Inter-Digital Coupled Lines Based UWB Bandpass Filter”, Proceedings of 6th International Conference on Computing, Communication and Sensor Networks, CCSN2017, Kolkata, India, Vol. II, pp. 80-82, December 30-31, 2017.
60. Saurabh Kumar and Taimoor Khan, “CPW-Fed UWB Flexible Antenna for GSM/WLAN/X-Band Applications”, Proceedings of Fifth International Conference on Signal Processing & Integrated Networks", SPIN 2018, Department of Electronics and Communication Engineering ASET, Amity University, Noida, Sec-125, Delhi-NCR, 22-23 Feb. 2018.
61. Rizwan Ahmed, Ekansh Goyal, Taimoor Khan, K.L. Baishnab, “Compact Dual-Band Monopole Antenna with Improved Bandwidth for WiMAX and WLAN Applications”,Proceedings of 6th International Conference on Computing, Communication and Sensor Networks, CCSN2017, Kolkata, India, Vol. II, pp. 80-82, December 30-31, 2017.
62. Chandan Roy and Taimoor Khan, “Slotted-Microstrip Antenna with Modified Ground Plane for Performance Parameters Enhancement”, Proceedings of 2017 IEEE International Conference on Telecommunications and Photonics (ICTP) 26-28 December, 2017, pp. 187-189, Dhaka, Bangladesh.
63. Samineni Peddakrishna, Taimoor Khan, Sounik Kiran Kumar Dash and Saurabh Kumar, “Design and Experimental Characterization of Novel Compact Planar EBG Structure”, Proceedings of Applied Electromagnetics Conference, Aurangabad, India, December 19-22, 2017.
64. Sounik Kiran Kumar Dash, Taimoor Khan, Samineni Peddakrishna and Saurabh Kumar, “Dielectric Resonator Antenna with Engraved Grooves on Side-wall for Improved Bandwidth and High Gain”, Proceedings of Applied Electromagnetics Conference, Aurangabad, India, December 19-22, 2017.
65. Sounik Kiran Kumar Dash and Taimoor Khan, “Circularly Polarized Conical Dielectric Resonator Antenna for X-Band Applications: An Experimental Study”, European Microwave Week 2017, Nurnberg Convention Center, Nurnberg, Germany, October 8-13, 2017.
66. Sounik Kiran Kumar Dash and Taimoor Khan, “Wideband Cylindrical Dielectric Resonator Antenna Operating in HEM11δ Mode with Improved Gain: An Effect of Superstrate and parasitic Sheet”, URSI General Assembly and Scientific Symposium (GASS) held in Montreal, Canada, August 19-26, 2017.
67. Mandovi Borthakur, Taimoor Khan and Sounik Kiran Kumar Dash, “Circularly Polarized Dual-Band Cylindrical Dielectric Resonator Antenna for Cubesat Applications”, URSI General Assembly and Scientific Symposium (GASS) held in Montreal, Canada, August 19-26, 2017.
68. Taimoor Khan and Deepak Saurabh, “Low Profile High Gain Cylindrical Dielectric Resonator Antenna for Millimeter-wave Applications” 3rd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2017), ISBN No. 978-81-934083-1-5, The Institution of Electronics and Telecommunication Engineers (IETE), Pune, Maharashtra, India, 28 May 2017.
69. Taimoor Khan and ShabanBarbhuiya, “Study of Different Slotted UWB Antennas for Capsule Endoscopy Applications” 3rd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2017), ISBN No. 978-81-934083-1-5, The Institution of Electronics and Telecommunication Engineers (IETE), Pune, Maharashtra, India, 28 May 2017.

70. Taimoor Khan and Deepak Kumar, “A Compact Resonating Antenna for Tumor Location Identification using SAR Analysis” 3rd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2017), ISBN No. 978-81-934083-1-5, The Institution of Electronics and Telecommunication Engineers (IETE), Pune, Maharashtra, India, 28 May 2017.
71. Taimoor Khan and Sweety Kumari, “A Simple Wideband Slotted Antenna using Graphene Technology for Terahertz Communication” 3rd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2017), ISBN No. 978-81-934083-1-5, The Institution of Electronics and Telecommunication Engineers (IETE), Pune, Maharashtra, India, 28 May 2017.
72. Taimoor Khan and PallabPran Dutta, “CPW-Fed Circularly Polarized Dual loop Antenna for UHF Application” 3rd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2017), ISBN No. 978-81-934083-1-5, The Institution of Electronics and Telecommunication Engineers (IETE), Pune, Maharashtra, India, 28 May 2017.
73. Jayendra Kumar, Banani Basu, Fazal A. Talukdar, and Arnab Nandi, " Graphene: A Possible Low-Cost Eco-friendly," IEEE Applied Electromagnetics Conference (AEMC-2017), 19th – 22nd Dec, 2017, Maharashtra, India.
74. J. Kumar, B. Basu, F. A. Talukdar and A. Nandi, “Graphene-Based Multiband Frequency Reconfigurable Antenna,” IEEE International Microwave & RF Conference (IMaRC 2017), 11th – 13th Dec, 2017, Ahmedabad, India.
75. Abhijyoti Ghosh and Banani Basu, "Defected Ground Structure integrated Rectangular Microstrip patch Antenna on Semi-insulating Substrate for Improved Polarization Purity," International Conference on Computational Strategies for Next Generation Technologies (NEXTCOM 2017), 25th – 26th Nov, 2017, Jalandhar, India.
76. Jayendra Kumar, Banani Basu and Fazal A. Talukdar, "A Monopole Frequency Reconfigurable Antenna Printed on Multilayered Substrate," IEEE Asia Pacific Microwave Conference (APMC 2017), 13th – 16th Nov, 2017, Kuala Lumpur, Malasyia.
77. PrarthanaSaikia and Banani Basu, "CPW Fed Frequency Reconfigurable Dual Band Antenna Using PIN Diode," 2nd International Conference on Electronics, Communication and Aerospace Technology (ICECA 2018), 29th – 31st Mar, 2018, Coimbatore, India.
78. J. Kumar, R. Kumar, B. Basu, F. A. Talukdar, "Design Challenges of Rectenna For Wireless Energy Harvesting," nternational Conference on Renewable Energy Potential for Sustainable Initiatives (REPSI-2018), 8-9 February 2018.
79. Prediction of electronic and optical properties of ZnAl2Te4 defect chalcopyrite semiconductor: an ab-initio study, RishikantaMayengbama, S. K. Tripathy, B. P. Pandey, 3rd International Conference on Photonics Solutions (ICPS 2017), Imperial Pattaya Hotel, Thailand, held during Nov, 8-10, 2017.
80. First principle investigation of structural and optical properties of cubic titanium di-oxide”, Debashish Dash, S. Chaudhury, S. K. Tripathy, 2nd International Conference on Condensed matter and Applied physics (ICC – 2017), Nov. 24-25, Government Engineering College, Bikaner, Rajasthan, India. American Institute of Phys. AIP Conf. Proc. 1953, (2018) 140147;doi/10.1063/1.5033322.
81. Jayendra Kumar, Banani Basu, Fazal A. Talukdar, and Arnab Nandi, " Graphene: A Possible Low-Cost Eco-friendly," IEEE Applied Electromagnetics Conference (AEMC-2017), 19th – 22ndDec, 2017, Maharashtra, India.
82. J. Kumar, B. Basu, F. A. Talukdar and A. Nandi, “Graphene-Based Multiband Frequency Reconfigurable Antenna,” IEEE International Microwave & RF Conference (IMaRC 2017), 11th – 13thDec, 2017, Ahmedabad, India.
83. Amiya Dey and Arnab Nandi, "Competency of MUD Decorrelator Receiver for Far Users in Eight User DS-CDMA System," IEEE CALCUTTA CONFERENCE (CALCON 2017), 2nd – 3rdDec, 2017, Kolkata, India. ISBN: 978-1-5386-3744-9.
84. Arnab Nandi and Ashim Kumar Biswas, "Suppression of Cross Polarized Radiation for Circular Patch Antenna Using Different Substrates and Defected Ground Structure," IEEE Asia Pacific Microwave Conference (APMC 2017), 13th – 16thNov, 2017, Kuala Lumpur, Malasyia. ISBN: 978-1-5386-0639-1.
85. Nurol Islam, Amit BaranDey and Arnab Nandi, “Design of Reconfigurable Defected Ground Structure Resonator for C, X and Ku Band Application,” 2nd IEEE International conference on Electronics, Communication and Aerospace Technology (ICECA 2018), 29th - 31stMarch, 2018, Coimbatore, India.
86. Rohan Kumar Gupta, Ashish Pandey and Arnab Nandi, “Lifetime Enhancement of WSN Using Evolutionary Clustering and Routing Algorithms,” IEEE International Students' Conference on Electrical, Electronics and Computer Sciences (SCEECS 2018), 24th – 25thFeb, 2018, MANIT Bhupal, India.

87. A. K. Biswas, A. Kundu, A. K. Bhattacharjee, U. Chakraborty : 'Isolator Based Mutual Coupling Reduction of H-shaped Patches in MIMO Antenna Applications', International Conference on Emerging Trends in Engineering and Science (ETES) 2018.
88. Sourav Roy, U. Chakraborty: 'Design of Dual wideband Microstrip Antenna loaded with SRR metamaterial', IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), 14-16, DEC. 2017, Coimbatore, India.
89. Sourav Roy, U. Chakraborty: 'A U-Shaped Dual Band Microstrip Antenna for WLAN and ITU Band Application', IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), 14-16, DEC. 2017, Coimbatore, India.
90. Ashim Kumar Biswas, U. Chakraborty: 'An 'I'-Shaped Probe Fed Microstrip Antenna for UWB and X-Band Applications', IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), 14-16, DEC. 2017, Coimbatore, India.
91. Ashim Kumar Biswas, Sourav Roy. U. Chakraborty: 'Wide Band Microstrip Antenna integrated with Complementary Split Ring Resonator (CSRR) for WLAN and C Band Applications', IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), 14-16, DEC. 2017, Coimbatore, India.
92. Ashim Kumar Biswas, AparnaKundu. U. Chakraborty: 'A Simple Wide Band Microstrip Loop Antenna with Modified Ground Plane for Mobile Applications', IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), 14-16, DEC. 2017, Coimbatore, India.
93. U. Chakraborty, Ashim Kumar Biswas, AparnaKundu, Suman Kumar Ram: 'A Wide Band Microstrip Antenna for WLAN, C Band uplink and Wimax Applications', IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), 14-16, DEC. 2017, Coimbatore, India.
94. Suman Kumar Ram, Sourav Roy, U. Chakraborty: 'A ladder loop microstrip antenna integrated with rectangular DRA for lower X band Application', International Conference AEMC 2017 MIT(T), Aurangabad and the Kolkata Chapter of IEEE AP/MTT, India.
95. Sourav Roy, U. Chakraborty: 'Dual Wide band Microstrip Antenna for WLAN, C uplink, ITU and X Band Applications', International Conference AEMC 2017 MIT(T), Aurangabad and the Kolkata Chapter of IEEE AP/MTT, India.

d) National Conference(s): NIL

e) Book/Chapter:

1. Madhuchhanda Choudhury , Synthesis of quantum dots and their Applications As Nano Gas Sensors , Lambert Academic Publisher, ISBN;978-620-2-07028-7.
2. B.Bhowmick, R.Goswami, " Band gap mdulated Tunnel FET" ,as book chapter in " Field Effect Transistors - Materials, Fabrication and Application" Publisher: InTech - open science | open minds (DOI: 10.5772/intechopen.76098)
3. R.Goswami, B.Bhowmick, "DIELECTRIC MODULATED TFETs AS LABEL-FREE BIOSENSORS" as book chapter in "Field Effect Transistors - Materials, Fabrication and Application" Publisher: InTech - open science | open minds (doi.org/10.5772/intechopen.76000).
4. Koushik Guha, Ananta Borah, Naushad Manzoor Laskar, "Noise in RF MEMS Switch - Modelling & Analysis" LAP Lambert Academic Publishing, Germany, 2017, pages: 116.

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED

1. Electrospinning machine
2. Ultrasonic spray pyrolysis
3. Cyclic voltmetery

4. Glove box
5. Vector Network Analyzer (5 kHz to 15 GHz)

1.8 PATENT

Details	Year
Indian Patent filed and Published :No.201731000942	Published: 31/08/2018

1.9 VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1	Dr. R. H. Laskar	2017 IEEE TENCON – IEEE Region Ten Conference	Malaysia	5-8 Nov 2017
2	Dr. K. Guha	12th IEEE Nanotechnology Materials and Devices Conference Singapore, 2nd-4th October 2017	Singapore	2-4 October 2017
3	Dr. T. R. Lenka	5thJoint International EUROSOI Workshop and International Conference on Ultimate Integration on Silicon (EUROSOI-ULIS) 2018	Granada, Spain	19-21 Mar 2018
4	Dr. T. R. Lenka	12th IEEE Nanotechnology Materials and Devices Conference (NMDC 2017)	Singapore	2-4 Oct 2017
5	Dr. R. K. Karsh	TENCON 2017 IEEE	Penang (Malaysia)	5-8 Nov. 2017
6	Mr. G. Prasad	International Conference on Personal, Indoor, and Mobile Radio Communications (PIMRC), IEEE	Montreal, QC, Canada	8-13 Oct. 2017
7	Dr. B. Basu	IEEE Asia Pacific Microwave Conference (APMC 2017)	Kuala Lumpur, Malasyia	13th – 16th Nov, 2017
8	Dr S. K. Tripathy	3rd International Conference on Photonics Solutions (ICPS 2017), Thailand	Pattaya	8-10 Nov 2017
9	Dr. A. Nandi	IEEE Asia Pacific Microwave Conference (APMC 2017)	Kuala Lumpur, Malasyia	13th – 16th Nov, 2017

1.10 M.Tech. / M.Sc. (Theses/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	D. Borthakur	Prof. S. Baishya	High Precision Lumped Parameter Model for Piezoelectric Energy Harvesters
2	K. Vanialawmpuia	Dr. M. Choudhury	Optimization of Electrical Parameters in single Gate and double SiGe channel nMOSFETs and their application in digital inverter.
3	D. Boruah	Dr. K. L. Baishnab	
4	S. K. Sahu	Prof. F. A. Talukar & Dr. R. H. Laskar	Design and analysis of two port MIMO Antennas with Wideband Isolation

5	W. V. Devi	Dr. B. Bhowmick	A Novel Dual Metal Gate N+ Pocket Doped VTFET and JL-TFET
6	U. Pandey	Dr. K. Guha and Dr. K. L. Baishnab	Ferroelectric FET as Low Power Device
7	R. Paswan	Dr. T. R. Lenka	Design and Simulation of AlGaAs/GaAs-HEMT as a Biosensor
8	S. Kumar	Dr. T. Khan	Design and Development of Triple Band EBG- Loaded UWB Antennas
9	S. Kumari	Dr. T. Khan	Wideband Slotted Antenna using Graphene Technology for Terahertz Communication
10	C. Roy	Dr. T. Khan	SVM Modeling for Computing Performance Parameters of Microstrip Antennas
11	Ms. P. Saikia	Dr. B. Basu	Design of Frequency and Polarization Reconfigurable Antenna With and without Artificial Magnetic Conductor
12	Mr. K. Lama	Dr S. K. Tripathy	Investigation of Structural & Optical Properties of TiO2 Nanowire for Photodetector Application
13	Mr. R. K. Gupta	Dr. A. Nandi	Lifetime Enhancement of Load Balancing of Heterogeneous WSNs Using Optimization Techniques
14	Mr. S. K. Ram	Dr. U. Chakraborty	Design and analysis on Printed and Dielectric ResonatorAntennas for C and X band RADAR Applications

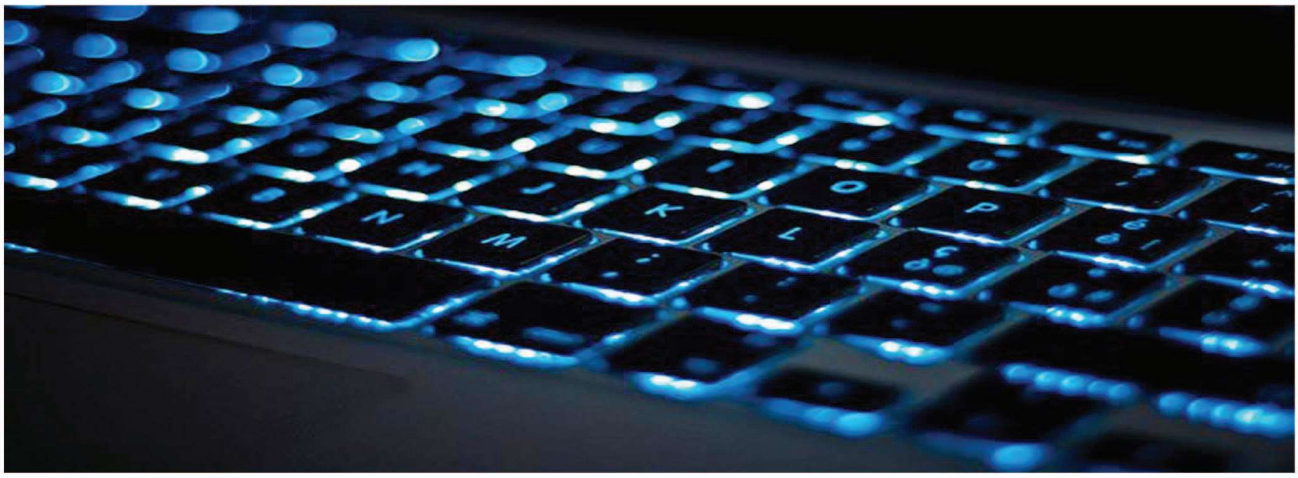
1.11 Ph.D. Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	R. Saha	Prof. S. Baishya	Modeling and Simulation of Electrical Parameters in FinFET Structures and the Effects of Statistical Variability of Metal Gate Workfunction
2	A. Roy	Dr. R. H. Laskar	Design and Implementation of Various Filtering Techniques for Removal of Impulse Noise from Color Images
3	S. Shuleenda Devi	Dr. R. H. Laskar	Computer Assisted Malaria Infected Erythrocyte Classification and Life-Cycle Stages Analysis using Microscopic Images of Thin Blood Smears
4	R. K. Karsh	Dr. R. H. Laskar	Robust and Secure Image Hashing Techniques for Content Authentication
5	R. Goswami	Dr. B. Bhowmick	Gate Engineered and Bandgap Engineered TFETs: simulation, modeling and application
6	R. Saha	Prof S. Baishya (Main Guide) Dr. B. Bhowmick (Co Guide)	Modeling and Simulation of Electrical Parameters in FINFET Structures and the Effects of Statistical Variability of Metal Gate Workfunction
7	B. P. Kumar	Dr. B. Bhowmick	Modeling, Simulation and Optimization of Hetero Junction Schottky Barrier FET and RF/linearity Performances for Low Power applications
8	B. Shougaijam,	Dr. T. R. Lenka	Growth and Characterization of TiO2 Nanowires and Metal Nanoparticle Assisted TiO2 Nanowires for Opto-Nanoelectronic Applications
9	A. Baidya	Dr. T. R. Lenka	Circuit Performance Analysis of Double Gate Junctionless Transistor with High-k Dielectrics and Metal Gates
10	S. Peddakrishna	Dr. T. Khan	Design and Development of Compact EBG and FSS Structures for Printed Antenna Applications

11	S. K. K. Dash	Dr. T. Khan	Design and Development of Dielectric Resonator Antennas with Improved Performances for Wireless Communication
12	Mr. J. Kumar	Dr. B. Basu and Prof. F. A. Talukdar	Frequency Reconfigurable Antennas Printed on Different Substrates Using Copper and Graphene-based Materials
13	Ms. Ruchi (Awarded degree from Thapar University, Patiala, Punjab)	Dr. B. Basu	Synthesis and Optimization of Time Modulated Linear Array
14	D. Dash	Dr S. K. Tripathy (Co-Supervisor)	Some Studies of Anatase and Cubic Titanium Dioxide using DFT Approach

1. Name of the Department :-

Computer Science & Engineering



1.1 Academic Staff

HEAD: Dr. Arup Bhattacharjee

Professor	Associate Professor	Assistant Professor
Prof. Sivaji Bandyopadhyay, Director	Dr. Biswajit Purkayastha	Dr. Arup Bhattacharjee
		Mrs. Ujawala Barua
		Dr. Pinki Roy
		Mr. Prabhakar Sharma Neog
		Dr. Samir Kumar Borgohain
		Mr. Biswanath Dey
		Mr. Pantha Kanti Nath
		Dr. Saroj Kumar Biswas
		Dr. Dalton Thounaojam
		Dr. Badal Soni
		Mr. Ripon Patgiri
		Mr. Umakantha Majhi
		Dr. Shyamoshree Pal
		Dr. Shyamapada Murkherjee

Visiting Professor (If any):

1.2 Distinction Achieved

a) By Student:

b) By Faculty Member:

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member:

Sl. No.	Name(s) of Coordinator	Title	Funding Agency	Duration
1	Shyamapada Mukherjee	Seminar on Data Science	TEQIP III NIT Silchar	25th January, 2018

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Shyamapada Mukherjee	ICoIAS'2018 28th Feb-2March 2018	NTU Singapore
2	Shyamapada Mukherjee	ICECA 2018 28th-31stMarch 2018	RVS Technical Campus, Coimbatore, India

1.4 Research Development

a) Ph.D. Programme (Specializations): All areas of Computer Science and Engg.

b) Ph.D. Produced/Ongoing (in number): Ongoing-23

Sl. No	Name of the Supervisor	Specializations	Completed	Submitted	Ongoing
1	Dr. A. Bhattacharjee	Computer Networks	-	-	3
2	Dr. Biswajit Purkayastha	Soft Computing	-	-	2
3	Dr. Pinki Roy	Speech Processing	-	-	3
4	Dr. Samir Kumar Borgohain	Natural Language Processing	-	-	3
5	Dr. Saroj Kumar Biswas	Soft Computing, Machine Learning	-	-	3
6	Dr. Dalton Thounaojam	Soft Computing, Machine Learning	-	-	3
7	Dr. Shyamoshree Pal	Computational Geometry	-	-	3

8	Dr. Shyamapada Murkherjee	VLSI	-	-	3

c) Research Lab/ Workshop: NIL

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	NLP	Mr. Samir Kr. Borgohain	IBM Shared University	10000USD	2 years
2	Analysis of Brain Waves and development of intelligent model for Silent Speech Recognition	Dr. Saroj Biswas	DietY	25 lakhs	2 years
3	Implementation of a Rainfall forecasting model for Silchar weather Station	Dr. Saroj Biswas	NIT Silchar (Under STIS Scheme)	4 lakhs	2 years
4	Development of Speech based Multi-level Authentication System	Mrs. U. Baruah with IIT Guwahati(Co-PI)	DietY	57.93 lakhs	3years
5	Development of android child e-health care system for N-E Region using fuzzy logic	Dr. Saroj Biswas(Co-PI)	NIT Silchar (Under STIS Scheme)	4 lakhs	2years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr.Saroj Kr. Biswas	International Journal on Semantic Web and Information Systems	1	2017
2	Dr.Saroj Kr. Biswas	IEEE Transaction on Systems, Man and Cybernetics: Systems	1	2007
3	Dr.Saroj Kr. Biswas	Applied computing and informatics	1	2018
4	Dr.Saroj Kr. Biswas	Neuro Computing	1	2018
5	Ripon Patgiri	IET Software	1	2018
6	Ripon Patgiri	KSII Transactions on Internet and Information Systems	1	2018
7	Ripon Patgiri	EAI Endorsed Transactions on Energy Web and Information Technologies	2	2018
8	Ripon Patgiri	Electronics Letters	1	2018
9	Ripon Patgiri	EAI Endorsed Transactions on Scalable Information Systems	1	2018

10	Ripon Patgiri	EAI Endorsed Transactions on Creative Technologies	1	2018
11	Ripon Patgiri	EAI Endorsed Transactions on Security and Safety	1	2018
12	Shyamapada Mukherjee	IEEE TCAD	1	2018
13	Dr. Badal Soni	International Journal of Computer vision and Image Processing	1	2018
14	Dr. Badal Soni	International Journal of Image and Graphics	1	2018

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr S K Biswas	Session Chair 20th and 21st December, 2017 International Conference on Cognitive Informatics & Soft Computing (CISC-2017), Hyderabad, Advances in Intelligent Systems and Computing, AISC Series Springer
2	Ripon Patgiri	6th International Conference on Advanced Computing, Networking, and Informatics, 04-06 June 2017, NIT Silchar.
3	Dr. Pinki Roy	Session Chair on 6th International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2018)

1.5 PUBLICATION

a. International Journal(s):

1) Manomita Chakraborty, Saroj Kr. Biswas, Biswajit Purkayastha, February 2018, Recursive Rule Extraction from Neural Network using Reverse Engineering Technique, New Generation Computing, DOI: 10.1007/s00354-018-0031-9, Springer,

2) Saroj Kr. Biswas, Monali Bordoloi, Shreya Jecob, December 2017, A Graph Based Keyword Extraction Model using Collective Node Weight, Expert Systems with Applications, Vol. 97, pp. 51-59, Elsevier.

3) Saroj Kr. Biswas, Manomita Chakraborty, Biswajit Purakayastha, 2017, Rule Extraction from Neural Network using Classified and Misclassified Data: International Journal on Artificial Intelligence Tools, Vol. 26, No. 3, World Scientific

4) Saroj Kr. Biswas, Manomita Chakraborty, Biswajit Purakayastha, February 2018 A Rule generation Algorithm from Neural Network using Classified and Misclassified Data: International Journal of Bio-Inspired Computation, Vol. 11 No.1, Inderscience.

5) Debashree Devi, Saroj Kr. Biswas, Biswajit Purakayastha, 2017, Redundancy-Driven Modified Tomek Link Based Undersampling: A Solution To Class Imbalance, Pattern Recognition Letters, Vol. 93, Elsevier

6) Heisnam Rohen Singh, Saroj Kr. Biswas, Biswajit Purakayastha, 2017 A Neuro-fuzzy Classification Technique using Dynamic Clustering and GSS Rule Generation, Journal of Computational and Applied Mathematics, vol. 309, Elsevier.

7) Saroj Kr. Biswas, Manomita Chakraborty, Heisnam Rohen Singh, Debashree Devi, Biswajit Purkayastha, Akhil Kr. Das, 2017, Hybrid Case Based Reasoning System by Cost Sensitive Neural Network for Classification, Soft computing, vol. 21, Issue 24, Springer.

8) Ripon Patgiri, Sabuzima Nayak, and Samir Kumar Borgohain, "Preventing DDoS using Bloom Filter: A Survey", EAI Endorsed Transaction on Scalable Information Systems, DOI: 10.4108/eai.19-6-2018.155865.

9) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam, "Keypoints based enhanced multiple copymove forgeries detection system using density-based spatial clustering of application with noise clustering algorithm", Published in IET Journal of Image Processing, 2018, DOI: 10.1049/iet-ipr.2018.5576, Print ISSN 1751-9659, Online ISSN 1751-9667.

10) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam, "CMFD: A detailed review of block based and key feature based techniques in image copy-move forgery detection," IET Journal of Image Processing, vol. 12, issue 2, February 2018, pp. 167-178 DOI: 10.1049/iet-ipr.2017.0441. (SCI)

11) Badal Soni, Pradip K. Das, and Dalton Meitei Thounaojam, "Dual System for Copy-move Forgery Detection using Block-based LBP-HF and FWHT Features," Engineering Letters, vol. 26, no.1, pp. 171-180, February 2018.

12) Saroj Kumar Biswas, Manomita Chakraborty, Biswajit Purkayastha, Pinki Roy and Dalton Meitei Thounaojamv, 2017, "Rule Extraction from training data using Neural Network," International Journal on Artificial Intelligence Tools, vol. 26, no. 3, (SCIE)

13) Dalton Meitei Thounaojam, Vivek Singh Bhadouria, Sudipta Roy and Kh. Manglem Singh, 2017, "Shot boundary detection using perceptual and semantic information," International Journal of Multimedia Information Retrieval, vol. 6, no. 2, pp. 167–174. (Scopus)

14) Chitralekha C., MJ Sanada Kh., Y Jina Chanu, Neelima Arambam, Dalton Meitei, P Roji Chanu, Kh Manglem Singh, February 2018 "A Copyright Protection Scheme for Videos Based on the SIFT," Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Vol.42, No.1, pp. 107-121. (SCIE)

15) S.Namasudra and P. Roy, 2017 "Time saving protocol for data accessing in cloud computing," IET Communications, Volume: 11, Issue: 10, IEEE Xplore DOI: 10.1049/iet-com.2016.0777 (SCI Indexed).

16) S.Namasudra and P. Roy, 2017 "A new table based protocol for data accessing in cloud computing," Journal of Information Science and Engineering, vol. 33, no. 3, pp. 585-609, 2017. DOI: 10.6688/JISE.2017.33.3.1 (SCIE Indexed).

17) Saswati Debnath and Pinki Roy, 2017, "Study of Speech Enabled Healthcare Technology", International Journal of Medical Engineering and Informatics (IJMEI), Inderscience, (Scopus indexed) (In press).

b. National Journal(s): NIL

c. International Conference(s):

1) Monali Bordoloi, Dr. S. K. Biswas, E- Commerce Sentiment Analysis using Graph Based Approach, International Conference on Inventive Computing and Informatics (ICICI 2017), Coimbatore.

2) Monali Bordoloi, Dr. S. K. Biswas, Graph Based Sentiment Analysis Model for E- Commerce websites' data, International Conference on Cognitive Informatics & Soft Computing (CISC-2017), Hyderabad.

3) Akanksha Goel, Manomita Chakraborty, Saroj Kr. Biswas, The role of social media in Crisis situation management: A survey, International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC 2017), Priyadarshini Engineering College, Vellore

4) Heisnam Rohen Singh, Dr. Saroj Kr Biswas, Dr. Biswajit Purkayastha, A Neuro-fuzzy Classification system using Dynamic Clustering, MISP-2017 International Conference On Machine Intelligence And Signal Processing IIT Indore,

5) Saroj Kr. Biswas, Keyword Extraction from Tweets using Weighted Graph, International Conference on Cognitive Informatics & Soft Computing (CISC-2017), Hyderabad.

6) Saroj Biswas, Subhasish Chowdhury, Manomita Chakraborty and Biswajit Purkayastha Biswajit Purkayastha: A Medical Expert System to Identify Major Factor of Diseases using P-Rules" submitted to ICoIAS'2018, NTU Singapore.

7) Akanksha Goel, Manomita Chakraborty, Saroj Kr. Biswas, A Survey on Crisis Management using Social Media, IEMIS2018, Kolkata.

8) Ripon Patgiri, Sabuzima Nayak, Dipayan Dev, and Samir Kumar Borgohain, "Dr. Hadoop Cures In-memory Data Replication System", 6th International Conference of Advanced Computing, Networking and Informatics, to be held on 4-6th June 2018, Assam, India (Accepted).

9) Ripon Patgiri, Samir Kumar Borgohain, and Arup Bhattacharjee, "rFilter: A Scalable and Space-efficient Membership Filter", Fifth International Conference on Signal Processing & Integrated Networks (SPIN), 22-25 February, 2018, Noida, UP, India, DOI: 10.1109/SPIN.2018.8474044.

10) Ripon Patgiri, Sajid Hussain, and Aditya Nongmeikapam, "Airline Delay Analysis and Prediction", 5th EAI International Conference on Big data and Cloud Computing Challenges, March 8–9, 2018, VIT, Chennai (In press).

11) Ripon Patgiri, and Rajdeep Das, "rTuner: A Performance Enhancement of MapReduce Job", The 10th International Conference on Computer Modeling and Simulation (ICCMS), Pages 176-183, Jan. 08-10, 2017, Sydney, Australia, ACM, doi: 10.1145/3177457.3191710.

12) Ripon Patgiri, Samir Kumar Borgohan, and Shyamosree Pal, "Elastica: A Large Scale Elastic Array Data Structure" , 8th edition, 2018 International Conference on Computer Communication and Informatics (ICCCI -2018), Jan. 04 – 06, 2018, Coimbatore, India, IEEE, DOI: 10.1109/ICCCI.2018.8441469.

13) Ripon Patgiri, Sabuzima Nayak, and Samir Kumar Borgohain, "Big Biomedical Data Engineering", 9th International Conference on Advanced Computing, Chennai, India, IEEE (In-press).

14) S. Purkayastha and S. Mukherjee, "Lookahead legalization based global placement for heterogeneous FPGAs," 2017 7th International Symposium on Embedded Computing and System Design (ISED), Durgapur, India, 2017, pp. 1-5.

15) S. Kundu, S. Roy and S. Mukherjee, "K-nearest neighbour (KNN) approach using SAT based technique for rectilinear steiner tree construction," 2017 7th International Symposium on Embedded Computing and System Design (ISED), Durgapur, India, 2017, pp. 1-5.

16) Prasun Datta and Shyamapada Mukherjee, Global Placement for Large-scale Mixed-size Design VLSI Circuits using Plant Model.2nd International conference on Electronics, Communication and Aerospace Technology (ICECA 2018), IEEE, 29th-31th March 2018, Coimbatore, Page s: 1577 – 1581.

17) Prasun Datta and Shyamapada Mukherjee, GPSAT: A SAT based Global Placement for Large Scale Mixed-size Designs. International Conference on Intelligent Autonomus Systems (ICIAS 2018), IEEE, SCOPUS, 1st-3rd March, Singapore, 2018, pp. 77-81.

18) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam, "Copy-Move Tampering Detection based on Local Binary Pattern Histogram Fourier Feature," International Conference on Computer and Communication Technology, (7th ICCCT-2017), MNNIT Allahabad, India. Published in ACM Digital Library, (ISBN: 978-1-4503-5324-3), DOI: 10.1145/3154979.3155001.

19) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam, "Blur Invariant Block based Copy-Move Forgery Detection Technique using FWHT Features," International Conference on Watermarking and Image Processing (ICWIP-2017), 6-8 Sept 2017, Paris, France, Published in ACM Digital Library, DOI: 10.1145/3150978.3150987.

20) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam, "Improved Block-based Technique using SURF and FAST Keypoints Matching for Copy-Move Attack Detection," IEEE 5th International Conference on Signal Processing and Integrated Networks, (SPIN –2018), February 2018, New Delhi, India.

21) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam, "multiCMFD: fast and efficient system for multiple copy-move forgeries detection in image," International Conference on Image and Graphics Processing (ICIGP 2018), February 24-26, Hong Kong. Published in ACM digital library. (Accepted)

22) Kiran Sonavane, Badal Soni, "Optimization of multiple sequence alignment (MSA) using invariant code extraction and static thread scheduling", Published in IEEE International Conference for Convergence in Technology (I2CT), 2017, DOI: 10.1109/I2CT.2017.8226313, Mumbai, India.

23) Badal Soni, Debalina Biswas, "Image Forensic using Block-based Copy-move Forgery Detection", Published in IEEE, Fifth International Conference on Signal Processing & Integrated Networks, SPIN 2018, Delhi, India

24) Nilima Ahmed, Pinki Roy, "A Review Study of Digit Recognition System", IEEE International Conference on NextGen Electronic Technologies: Silicon to Software. March 23rd to 25th 2017, VIT university vellore, Chennai.

25) Pinki Roy, Nilima Ahmed, Saswati Debnath "Facial feature based authentication system from video stream" 58th International Conference on Best Researches, International Organization of Scientific Research and Development (IOSRD) 2017 (In press)

26) S.Namasudra, P. Roy, B. Balamurugan and P. Vijayakumar, "Data accessing based on the popularity value for cloud computing," Proc. of the International Conference on Innovations in Information, Embedded and Communications Systems (ICIIECS), IEEE, Coimbatore, India, Vol. V, pp. 109-104, 2017.

27) S.Namasudra, P. Roy and B. Balamurugan, "Cloud computing: fundamentals and research issues", Proc. of the 2nd International Conference on Recent Trends and Challenges in Computational Models, IEEE, Trivandivanam, India, 2017.

28) Saswati Debnath, and Pinki Roy, "Speaker Independent Isolated Word Recognition based on ANOVA and IFS", 10th International Conference on Computer Modeling and Simulation (ICCMS-2018), 8-10 January, 2018 Sydney, Australia.

d. National Conference(s): NIL

e. Book/Chapter:

1) Heisnam Rohen Singh, Dr. Saroj Kr. Biswas, Recent Neuro-fuzzy Approaches for Feature Selection and Classification, Exploring Critical Approaches of Evolutionary Computation, IGI Global (Accepted)

2) Badal Soni, Pradip K. Das, Dalton Meitei Thounaojam (2018), "An Efficient Block Phase Correlation Approach for CMFD System," In: Pattnaik P., Rautaray S., Das H., Nayak J. (eds) Progress in Computing, Analytics and Networking, Advances in Intelligent Systems and Computing, vol 710, Springer, Singapore.

3) Saswati Debnath, and Pinki Roy, "Isolated Word Recognition based on Difference Statistical and Feature Selection Technique", Advances in Intelligent Systems and Computing (AISC Series Springer), International Conference on Cognitive Informatics & Soft Computing (CISC-2017), 20-21 December 2017, Hyderabad, India.

4) Himanish Shekhar Das, Pinki Roy, "A Deep Dive into Deep Learning Techniques for solving Spoken Language Identification Problems", in the book titled "Intelligent Techniques in Speech Signal Processing" Elsevier press (Accepted)

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED: NIL

1.8 PATENT: NIL

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1	Dr. Shyamapada Mukherjee	ICoIAS'2018	NTU, Singapore	1-3 March, 2018
2	Dr. Badal Soni	International Conference on Image and Graphics Processing (ICIGP 2018),	Hong Kong	February 24-26
3	Dr.Pinki Roy	10th International Conference on Computer Modeling and Simulation (ICCMS-2018)	Sydney, Australia.	8-10 January, 2018

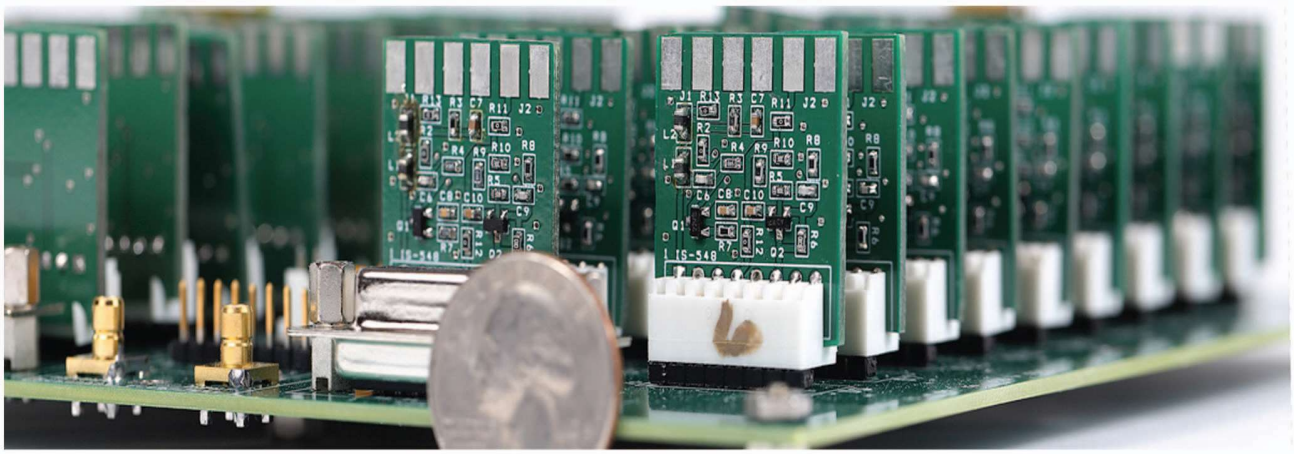
1.10 M.Tech. / M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Jacob Shreya	Dr. Saroj Kr. Biswas	Keyword Extraction from Twitter Data using Graph Based Model
2	Sabuzima Nayak	Ripon Patgiri	Metadata Server
3	Asish Singh	Dr. Shyamapada Mukherjee	Placement Solution for Homogeneous FPGA using Tree-based Algorithm
4	Vishwajeet Singh	Dr. Badal Soni	Emotion Recognition from EEG signals
5	Sujit Kumar	Biswajit Purkayastha	TLRUSBoost : A Hybrid Approach to Overcome Class Imbalance Problem
6	Nilesh Dilipkumar Ghadre	Dr. Dalton Meitei Thounaojam	Robust Perceptual Image Hashing using Fuzzy Color Histogram
7	Nilima Ahmed	Dr. Pinki Roy	Speech and Facial Feature Based Authentication System

1.11 Ph.D. Theses: NIL

1. Name of the Department :-

Electronics and Instrumentation Engineering



1.1 Academic Staff:

HEAD: Dr. Rajdeep Dasgupta

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	Dr. Shahedul Haque Laskar	Dr. Rajdeep Dasgupta
		Dr. Munmun Khanra
		Dr. Arun Kumar Sunaniya
		Dr. Manas Kumar Bera
		Dr. Ranjay Hazra
		Mrs. Jupitara Hazarika
		Dr. Lalu Seban
		Mr. Sudarsan Sahoo
		Dr. Shivendra Kumar Pandey
		Dr. Koena Mukherjee

Visiting Professor (If any): NIL

1.2 Distinction Achieved

a) By Student: NIL

b) By Faculty Member: NIL

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr. Manas Kumar Bera	Robustness, Fragility, Optimality and Modern PID Control	GIAN project awarded by MHRD	10 Days
2	Dr. Ranjay Hazra, Dr. Arun Kumar Sunaniya and Mr. Sudarsan Sahoo	A short term course on "Recent Trends in Communication, Signal Processing and Solid State Devices."	TEQIP-III	5 days
3	Dr. Ranjay Hazra, Dr. Arun Kumar Sunaniya	GIAN course on "Innovation and Technology Enterprise: Idea to Entrepreneurship."	MHRD	12 days
4	Mr. Sudarsan Sahoo, Dr. Ranjay Hazra and Dr. Arun Sunaniya.	Recent Trends in Communication, Signal Processing and Solid State Devices	TEQIP-III	1 week
5	Mr. Sudarsan Sahoo and Dr. S.H. Laskar	Data Acquisition and LabVIEW Applications	TEQIP-III	01 week

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
2.	Dr. Munmun Khanra	QIP Short Term Course "Applied optimal control and estimation" from 09-19 May 2017	IISC Bangalore
2	Dr. Arun K Sunaniya	3-Day Short-Term Course on "Theory & Technology of Silicon Solar Cell"September 18-20, 2017.	IIT Bombay
3	Dr. Ranjay Hazra	EDUMEET on "Fatory Automation and Reform of Academia" on 23/03/18	NIT Silchar
4	Dr. Ranjay Hazra	Two days "Train the Trainer" National Workshop on Massive Open Online Courses (MOOCS) on 26/08/17 and 27/08/17	NIT Silchar
5	Dr. Rajdeep Dasgupta	10 Days GIAN Course on "Systems Design for Remote Healthcare", at IIT Kharagpur from Dec. 18 to Dec. 29, 2017	IIT Kharagpur

1.4 Research Development

a) Ph.D. Programme (Specializations):

- Biometric Authentication
- Biomedical Signal Processing
- Biomedical Instrumentation
- Brain Computer Interface
- Biosensors
- Transdermal drug delivery
- Sensors design & Application
- VLSI design (Analog & Digital)
- Thin Film solar cells
- Signal, Speech & Image Processing
- Image Segmentation
- Measurement and Monitoring of Industrial Parameters
- Modelling, Estimation, Control and Optimization of Energy Systems (PG, Batteries, Supercapacitors in Electrified Vehicles, Wireless Sensor Nodes, Consumer Electronics)
- Industrial Instrumentation
- Linear and Non-linear Control
- Sliding Mode Control
- Control of Biological systems
- Study of dielectric material used for insulator, Communication circuit, nano-film, defense, pharmaceutical, polymer, food and agricultural industry
- Communication System: Performance Analysis, Energy Efficiency and Power Allocation
- Wireless Communication: D2D, Cognitive Radio, 5G, UWB
- Wireless Networks: VANET, Cross Layer Optimization
- Control Theory and its applications
- Bio-medical Application of Control

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
0	1	30

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Energy and transportation Lab	• New research • To support existing Power Electronics Lab

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Development of battery supercapacitor hybrid energy storage for standalone solar	Dr. Munmun Khanra	Department of Science & Technology, Govt. of	22.21816	3yrs

	photovoltaic power systems		India.		
2	Development of Piezoelectric Energy Harvesting Mat & Supercapcitor Based Storage Device for E-Rickshaw	Dr. Sudarsan Sahoo	IEDC, NIT Silchar	1	1 year

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr. Ranjay Hazra	IET Communication	1	2018
2	Dr. Ranjay Hazra	International Journal of Communication Systems, WILEY	1	2018
3	Dr. Ranjay Hazra	IET Communication	1	2017
4	Dr. Munmun Khanra	ISA Transactions	3	2017
5	Dr. Munmun Khanra	IEEE Trans on Industrial Informatics	2	2017
6	Dr. Munmun Khanra	IEEE Trans on Materials Reliability	1	2017
7	Dr. Munmun Khanra	IEEE Access	1	2018
8	Dr. Munmun Khanra	Asian Journal of Control	1	2018
9	Dr. Manas Kumar Bera	ISA Transactions	2	2017, 2018
10	Dr. Manas Kumar Bera	Part I ; Journal of Systems and Control Engineering	1	2018

f) Chairing of Technical Section: NIL

1.5 PUBLICATION

a) International Journal(s):

1. Namita Boruah, Lalu Seban, B. K. Roy, 2018, "Nonlinear Model Predictive Control in Quadruple Tank System: An Event Triggered Approach", Journal of Advanced Research in Dynamical & Control Systems, Vol. 10, Issue: 03, pp.179-185, Institute of Advanced Scientific Research

b) National Journal(s):

1. Subhra Sankha Sarma, Piyush Kant and Raj Kumar, 2018, “Multi-functional system for persons with disabilities using EEG signals of eye blink,” Current Science, Vol 114, No 1, pp. 193-195, Current Science Association along with the Indian Academy of Sciences, DOI: 10.18520/cs/v114/i01/193-195

2. B. Mali, S. H. Laskar, 2018, “Soft Sensor for Estimation and Identification of Reduced Dimensional Quality Control Inputs”, Journal of Instrumentation Technology and Innovations, Vol. 7, No.3, pp. 24-29, STM Journals

c) International Conference(s):

1. J. Hazarika, P. Kant and R. Dasgupta, “Functional neural connectivity in healthy subjects while playing an action video game”, The International Conference on Science and Technology 2017, Rajamangala University of Technology Thanyaburi, Pathum-thani, Thailand, December 7-8, 2017.

2. Pankaj Saha, Satadru Dey, and Munmun Khanra. "Modelling of charge and self-discharge responses of supercpacitors" Circuits and Systems (MWSCAS), 2017 IEEE 60th International Midwest Symposium on. IEEE, August 6-9, 2017.

3. P Khuntia, R Hazra."Resource sharing for Device-to-Device communication underlaying cellular network", IEEE International conference on Recent Advances in information Technology, IIT Dhanbad, March 15-17, 2018

4. P Khuntia, R Hazra." Device-to-Device Communication Aided by Two-Way Relay Underlaying Cellular Network", IEEE International conference on Wireless Communications, Signal Processing and Networking (Wispnet), , SSN college,Chennai, March 22-24, 2018

5. Soumya Sundar Pattanayak, Tushar Bachar, and Swagatadeb Sahoo, "Dielectric Relaxation Phenomenana of N, N-Dimethylformamide in Different Solvents from Conductivity Measurement under 9.90 GHz Electric Field", International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC), IEEE Proceedings, Priyadarshini Engineering College, Chettiyappanur, Vaniyambadi - 635751, Vellore District, Tamil Nadu, India, January 28-29, 2018.

6. MA Siddiqui, MN Anwar, S H Laskar, "PID Controller Tuning of Cascade Control Systems Using Frequency Response Matching and Dominant Pole Placement Method ", International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC), IEEE Proceedings, Priyadarshini Engineering College, Chettiyappanur, Vaniyambadi - 635751, Vellore District, Tamil Nadu, India, January 28-29, 2018.

7. Manas Kr. Bera, Modeling & Simulation of Hybrid Model for the Short-Circuit Mode of Transfer in GMAW Systems, 2018 International Conference on Intelligent Autonomous Systems (ICoIAs'2018), Singapore, March 1-3, 2018.

8. Bhabani Shankar Dey, Manas Kumar Bera and Binoy Krishna Roy, Nonlinear Active Control of a Cancerous Tumour, Control Instrumentation System Conference, CISCON 2017, MIT, Manipal, November 3-4, 2017.

d) National Conference(s):

1. B. Mali, and S. H. Laskar, "Soft Sensor for Estimation and Identification of Reduced Dimensional Quality Control Inputs", XIV Control Instrumentation System Conference (CISCON-2017), Manipal Institute of Technology, Manipal University, Nov 3-4, 2017

e) Book/Chapter: NIL

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED

- 2 USRP DSR KITS purchased by Department of E&I worth Rs 11 lakhs
- Bitrode life cycle tester (FTV-2), 2017

1.8 PATENT: NIL

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Dr. Munmun Khanra	• IEEE International Midwest Symposium on Circuits and Systems, MWSCAS-2017	Tufts University, Boston, USA	• 06-09 August, 2017
2	Dr. Munmun Khanra	Visit to Laboratory of Prof. Jae-Do Park, Associate Prof., Electrical Engineering Department, CU Denver	University of Colorado, Denver, USA	July 31 - August 04, 2017
3	Dr. Manas Kumar Bera	2018 International Conference on Intelligent Autonomous Systems (ICoIAs'2018)	Singapore	March 1-3, 2018

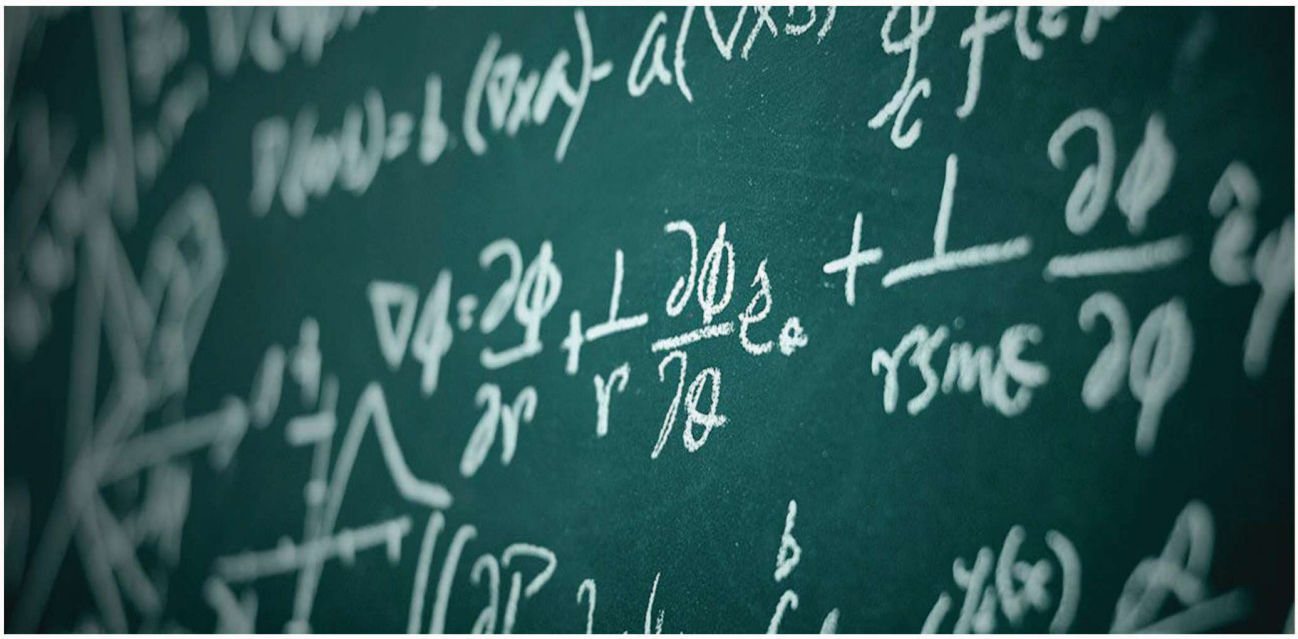
1.10 M.Tech. / M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Naveen Yadav	Dr. Ranjay Hazra	Resource Allocation in Device to Device Communication
2	Sarful Alam	Dr. Arun Kumar Sunaniya and Dr. Ranjay Hazra	Design & performance analysis of Gallium Arsenide (GaAs) Hetro-junction Bipolar Transistor solar cell
3	Prabhat Ranjan	Dr. Munmun Khanra	Current-sensorless maximum power point tracking of photovoltaic systems
4	Abdus Samad	Mr. Sudarsan Sahoo	Development of a Micro-Controller Based Robotic Arm Control System for Educational Purpose.
5	Nayan Jyoti Boro	Mr. Sudarsan Sahoo, and Dr. Arun Kumar Sunaniya	Efficiency Enhancement And Reflectance Reduction Of Single Junction Compound Semiconductor Solar Cell
6	Seema	Dr, Lalu Seban, Dr. Manas Kumar Bera	Control of Rotary Inverted Pendulum
7	Suman Kumar	Dr, Lalu Seban, Dr. Swagatadeb Sahoo	Blood Pressure Measurement using Portable Sensor
8	Jusmita Das	Dr. R. Dasgupta, Mrs. Jupitara Hazarika	Development of modified graphite pencil electrode for sweat based glucose sensor.
9	Bhabani Shankar Dey	Dr. Manas Kumar Bera	Control of Cancerous Tumor Cell Growth By Chemotherapy
10	Pintu Kumar	Dr. Manas Kumar Bera	Control of HIV/AIDS Dynamics

1.11 Ph.D. Theses: NIL

1. Name of the Department :-

Mathematics



1.1 Academic Staff:

HEAD: Dr. Santanu Roy, Assistant Professor

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	Sri Bijan Nath	Dr. Santanu Roy
	Dr. Pijus Kanti De	Dr. (Mrs.) Mausumi Sen
		Dr. Ganti Ramesh
		Dr. Kedar Nath Das
		Dr. Praveen Kumar Gupta
		Dr. Md Maqbul
		Dr. Pankaj Biswas
		Dr. (Mrs.) Juthika Mahanta
		Dr. Subrata Bera
		Dr. Balla Hema Sundar Raju

Visiting Professor (If any): NIL

1.2 Distinction Achieved

a) By Student: NIL

b) By Faculty Member:

1. Dr. Subrata Bera has received a travel grant from DST-SERB, Govt. of India under International Travel Scheme for attending ***ASME 2017, Fluid Engineering Division Summer Meeting***held at Hilton Waikoloa, Hawaii, USAduring July 30-August 03, 2017.

2. Dr. Praveen Kumar Gupta has received a best paper award in ***3rd International Conference on Advances in Mechanical and Production Engineering 2018*** held at Bangkok, Thailand during March 19-20, 2018.

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member: NIL

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. Subrata Bera	ASME 2017, Fluid Engineering Division Summer Meeting held on Hilton Waikoloa, Hawaii, USA during July 30-August 03, 2017.	The American Society for Mechanical Engineering.
2.	Dr. Praveen Kumar Gupta	International Conference on Mathematics and Computing 2018 held on IIT (BHU) Varanasi, India during January 9-11, 2018.	IIT BHU, Varanasi, India
3.	Dr. Subrata Bera	International Conference on Mathematics and Computing 2018 held on IIT (BHU) Varanasi, India during January 9-11, 2018.	IIT BHU, Varanasi, India
4.	Dr. Md Maqbul	International Conference on Mathematical Sciences and Statistics held on University Putra Malaysia during February 6-8, 2018.	University Putra Malaysia, Malaysia
5.	Dr. Pankaj Biswas	International Conference on Mathematical Sciences and Statistics held on University Putra Malaysia during February 6-8, 2018.	University Putra Malaysia, Malaysia
6.	Dr. Praveen Kumar Gupta	International Conference on Mathematical Sciences and Statistics held on University Putra Malaysia during February 6-8, 2018.	University Putra Malaysia, Malaysia
7.	Dr. Praveen Kumar Gupta	3rd International Conference on Advances in Mechanical and Production Engineering (ICAMPE 2018) held on Bangkok, Thailand during March 19-20, 2018.	World Academy of Research in Science and Engineering

1.4 Research Development

a) Ph.D. Programme (Specializations):

- Fuzzy Set Theory and Fuzzy real-valued multiple sequence spaces.
- Evolutionary Optimization, Networking optimization.
- Mathematical Modelling of Biological Problems, Fractional Calculus, Numerical Methods for ODE and PDEs.
- Higher Order Compact Schemes, Multigrid methods, Application to incompressible flows, Heat transfer.
- Computational Fluid dynamics in Micro and Nano fluidics.
- Spectral Element Methods in Parallel Computers, Applications to Coanda effect in cardiology.
- Inverse Eigenvalue problem
- Fractional integral equation
- Fuzzy optimization.
- Operations Research, Mathematical Modeling, Elastodynamics, PDE in Wave Propagation Problems, Fuzzy Reliability Modelling, Fuzzy Statistics.

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
02	0	14

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Research Scholar Computer Laboratory	Computer Laboratory for Ph.D. students
2.	M.Sc. Computer Laboratory	Computer Laboratory for M.Sc. students
3.	Computational Laboratory for Micro and Nano Fluidics	Computational Laboratory for Micro and Nano fluidics Research
4.	Numerical Computational Laboratory	For High Performance Parallel Computations

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1.	Spectral element methods for elliptic and parabolic interface problems in R^2 on parallel computers	**PI:** Dr. N K Kumar (BITS Pilani, Hyderabad) **Co-PI: Dr. Pankaj Biswas (NIT Silchar)**	National Board of Higher Mathematics, Mumbai-400 001, Maharashtra INDIA	Rs. 13,59,100/-.	03 Years
2.	Numerical Study on Electrokinetic Flow through	**PI:** Dr. Subrata Bera	Science and Engineering Research Board	Rs. 25,00,000/-	03 Years

	Polyelectrolyte coated Nanopore		(SERB), DST, Govt. of India, New Delhi-110070		
3.	A study on measure theoretical approach to convergence of sequences in probabilistic normed spaces.	**PI:** Dr. M. Sen	SERB(DST)	Rs.15,35,520/-	03 Years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr. P.K. Gupta	Waves in Random and Complex Media (Taylor & Francis)	01	February, 2018
2	Dr. P.K. Gupta	Journal of King Saud University – Science (Elsevier)	01	December, 2017
3	Dr. P.K. Gupta	Nonlinear Engineering – Modeling and Application (de Gruyter)	01	August, 2017
4	Dr. P.K. Gupta	Mathematical Biosciences (Elsevier)	01	June, 2017

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr. K. N. Das	International Conference in "Soft Computing for Problem Solving (SocProS 2017)", 23-24 Dec. 2017, IIT Bhubaneswar, Odisha.

1.5 PUBLICATION

a) International Journal(s):

1. SubrataBera and S. Bhattacharyya (2018). Effects of geometric modulation and surface potential heterogeneity on electrokinetic flow and solute transport in a microchannel, Theoretical and Computational Fluid Dynamics, Vol. 32, Issue2, pp. 201–214, Springer Berlin Heidelberg, https://doi.org/10.1007/s00162-017-0448-7.
2. SangitaSaha and Santanu Roy (2017). Some I-Convergent Triple Sequence Spaces of Fuzzy Numbers defined by OrliczFunction, International Journal of Control Theory and Applications, Vol. 10, Issue 19, (Scopus) ISSN: 0974:5572,
3. SangitaSaha and Santanu Roy (2017). Some new classes of ZweierI-Convergent Triple Sequence Spaces of Fuzzy Numbers defined by an Orlicz Function, Advances in Fuzzy Sets and Systems; ISSN: 0973:421X, 22(1), pp.53-70.
4. PrabhujitMahapatra, KedarNath Das, Santanu Roy (2017). A modified competitive swarm optimizer for large scale optimization problems, Applied Soft Computing, ELSEVIER (SCIE/Scopus), Vol. 59, pp. 340-362.
5. S. Saha and S. Roy (2018). New ClassesofStatistically Pre- Cauchy Triple Sequences of Fuzzy Numbers defined by Orlicz Function, Indian Mathematical Society, Vol. 85, Issue (3-4), pp. 1-11.

6. M. Sen, B.C. Tripathy and S. Nath (2017). Best approximation in quotient probabilistic normed space,Journal of Applied Analysis , 23(1), pp. 53-57.
7. D. Sarma, M. Sen(2017), Inverse Eigenvalue Problems with Partial Eigen Data for Acyclic Matrices whose Graph is a Broom, Kyungpook Math. J. , 57, 211-222
8. LN Mishra, M. Sen, R N Mohapatra(2017),On Existence Theorems for Some Generalized Nonlinear Functional-Integral Equations with Applications, Filomat, 31(7), 2081–2091.
9. M. Sen, D. Dutta, A. Deshpande (2017), Type-2 fuzzy G-tolerance relation and its properties. International Journal of Analysis and Applications, 15 (2), 172-178.

b) National Journal(s): NIL

c) International Conference(s):

1. D. B. Mishra, R. Mishra, **K. N. Das**, A. A. Acharya (2017). Solving Sudoku Puzzles Using Evolutionary Techniques—A Systematic Survey, Conference Proceeding of SocTA, Soft Computing: Theories and Applications, Vol. 583, pp. 791-802, Springer, Nov. 2017.

2. **Pankaj Biswas**, N. Kishore Kumar and Anil Kumar Kar (2018). Performance of space-time coupled least-squares, International Conference on Mathematical Sciences & Statistics (ICMSS 2018), University of Putra Malaysia, Kualalumpur, Malaysia, February 06-08, 2018.

3. **Praveen Kumar Gupta**(2018). Numerical Solution with analysis of HIV/AIDS dynamics model with effect of fusion and cure rate, International Conference on Mathematical Sciences & Statistics (ICMSS 2018), University of Putra Malaysia, Kualalumpur, Malaysia, February 06-08, 2018.

4. **Praveen Kumar Gupta** and Biplab Dhar (2018). Dynamical behaviour of fractional order tumor-immune model with targeted chemotherapy treatment, 3rd International Conference on Advances in Mechanical and Production Engineering (ICAMPE 2018), Bangkok, Thailand, March 19-20, 2018.

5. S. Saha and **S. Roy**, New classes of Statistically Spaces of Fuzzy Real Numbers Convergent Difference Triple Sequence, Second *International Conference on Modern Technologies in engineering and science,* ICMTES 2017 organised by Knewton Institute of Research in Engineering and Technology, Andra Pradesh, India during 18-19 August 2017.

6. **Subrata Bera** and S. Bhattacharyya, Effect of charge density on electrokinetic ions and fluid flow through polyelectrolyte coated nanopore, ASME 2017 Fluids Engineering Division Summer Meeting, Waikoloa, Hawaii, USA, July 30–August 3, 2017.

7. D. Dutta, M. Sen. Multi-item solid fixed charged transportation problem with type-2 fuzzy variables. International Conference on Quality, Productivity, Reliability, Optimization, and Modeling, 258-265, IEEE Xplore, 2017.

8. D. Dutta, M. Sen. Multi-item fixed charged solid shipment problem with type-2 fuzzy variables. Soft Computing: Theories and Applications, Advances in Intelligent Systems and Computing, 689-702, Springer, 2018. (SCOPUS indexed)

9. P.K.De, A.C.Paul and Mitali Debnath, "Mathematical Modeling of Economic Order Quantity in a Fuzzy Inventory Problem Under Shortages", NGCT 2017,Dehradun, October 30-31, 2017.

10. P.K.De and Joyshree Das, "Mathematical Modelling and Analysis of Channel Wave Propagation in an Initially Stressed Medium", ICOVP-2017, IIT Guwahati, 29 Nov- 02 Dec, 2017 [in Press]

d) National Conference(s):NIL

e) Book/Chapter:

1. D. Dutta, M. Sen. Fixed Charged Solid Transportation Problem with Budget Constraints in Type-2 Fuzzy Variables: Multi-Objective Solid Transportation Problem. Soft Computing Techniques and Applications in Mechanical Engineering, Advances in Mechatronics and Mechanical Engineering (AMME), Book Series, 35-71, IGI Global Publisher, 2018.

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED

- Name: IBM Power System S822LC (Sponsored by SERB, DST Project)

1.8 PATENT: NIL

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1.	Dr. Subrata Bera	ASME 2017, Fluid Engineering Division Summer Meeting	Hilton Waikoloa, Hawaii, USA.	July 28 – August 06, 2017.
2.	Dr. Md Maqbul	International Conference on Mathematical Sciences and Statistics	UPM, Kualalumpur, Malaysia	February 6-8, 2018
3.	Dr. Pankaj Biswas	International Conference on Mathematical Sciences and Statistics	UPM, Kualalumpur, Malaysia	February 6-8, 2018
4.	Dr. P.K. Gupta	International Conference on Mathematical Sciences and Statistics	UPM, Kualalumpur, Malaysia	February 6-8, 2018
5.	Dr. P.K. Gupta	3rd International Conference on Advances in Mechanical and Production Engineering	Bangkok, Thailand	March 19-20, 2018.

1.10 M.Sc. (Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	Ms. Disha Saikia (16-47-101)	Dr. P.K. Gupta	A study on Hepatitis B virus model with fusion effect
2.	Ms. Rubi Das (16-47-102)	Dr. Kedar Nath Das	Networking Optimization

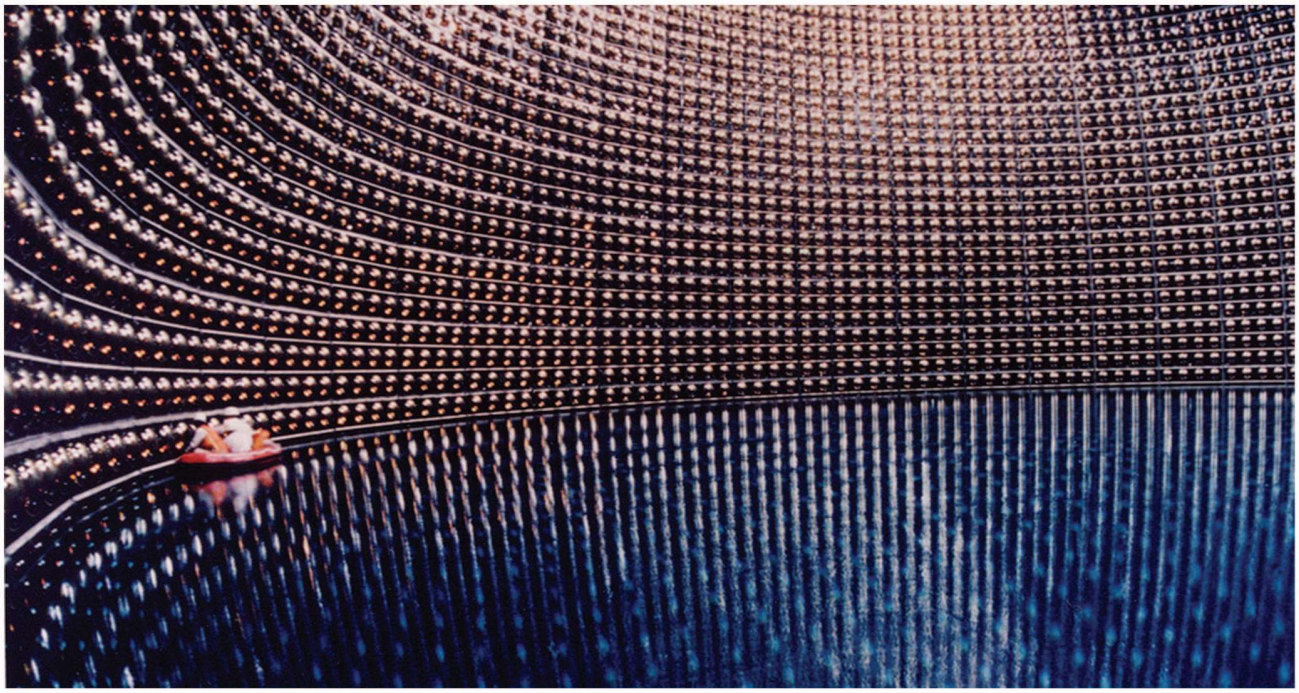
3.	Mr. Vivek Kumar (16-47-103)	Dr. Md Maqbul	A Study On Parabolic Partial Integro-Differential Equations
4.	Mr. Dipankar Subba (16-47-104)	Dr. Kedar Nath Das	Solving Rubic Cube by using Evolutionary Optimization Algorithms
5.	Mr Nirmal Kumar Singha (16-47-105)	Dr. Mausumi Sen	Numerical Solution of Fredholm Integral Equation of Second kind with Toeplitz Plus Hankel Kernel using Weighted Mean Value Theorem for Integrals
6.	Mr. Shivam Batra (16-47-106)	Dr. Pijus Kanti De	A Study on Fault Tree Analysis Under Intuitionistic Fuzzy Setting
7.	Mr. Pankaj (16-47-107)	Dr. Pijus Kanti De	A Study On Propagation of Love Waves in an anisotropic initially stressed porous layer medium and a non-homogeneous elastic half space.
8.	Mr. M. Sri Srinivasa Raju (16-47-108)	Dr. B.H.S. Raju	Forced convection past a sphere for liquid metals
9.	Ms. Anjali Patel (16-47-109)	Dr. Pankaj Biswas	A nonstandard Finite difference scheme for convection diffusion equation
10.	Ms. Sulagna Sarkar	Dr. Subrata Bera	Distribution of External Electric Field in the Heterogeneous Surface

1.11 Ph.D. Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Ms. Munmun Nath	Dr. S. Roy	A study on multiple sequence spaces of fuzzy real numbers
2	Mr. Biplab Chaudhuri	Dr. K.N. Das	Troop Search Optimization: Strategies and Applications

1. Name of the Department :-

Physics



1.1 Academic Staff:

Head: Dr. Rupak Dutta

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	Dr. Asim Roy	Dr. S. K. Barik
		Dr. A. Chowdhury
		Dr. R. Dutta
		Dr. S. R. Mohapatra
		Dr. R. G. Nair
		Dr. S. Panda

1.2 Distinction Achieved

a) By Student: NIL

b) By Faculty Member: NIL

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr. A. Chowdhury	Artificial Limb camp	Gyansagar, NIT Silchar in association with Bharat Vikas Parishad Silchar Branch	Dec. 17, 2017

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Dr. Avijit Chowdhury	International School on Fundamental Crystallography and Workshop on Structural Phase Transitions: A Satellite School of 24th IUCr Congress, 2017	30thAugust to 4th September 2017 by Department of Physics and Astronomy, National Institute of Technology Rourkela, Sundargarh, Odisha-769008, INDIA
2	Dr. S. R. Mohapatra	International School on Fundamental Crystallography and Workshop on Structural Phase Transitions: A Satellite School of 24th IUCr Congress, 2017	30thAugust to 4th September 2017 by Department of Physics and Astronomy, National Institute of Technology Rourkela, Sundargarh, Odisha-769008, INDIA
3	Dr. Ranjith G. Nair	International Conference on Functional Materials and Metallurgy (ICFMM 2017, November 28-30, 2017	University of Malaya

c) **Participated by Research Students: NIL**

1.4 Research Development

a) Ph.D. Programme (Specializations):

- B- Physics, Neutrino Physics, CP Violation,
- DFT study of Perovskite Solar Cell
- Solar energy materials, Solar Photocatalysis, Solar Photovoltaics, Semiconductor Heterojunction
- Resistive memory devices, Semiconductor nanostructure, high-k dielectrics
- Multiferroics
- Nanomaterials
- Energy storage materials
- Nano ionic resistive switching devices

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
02	NIL	6

c) Research Lab/Workshop: NIL

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Energetic Ion beam assisted synthesis ofAg/Au ion implanted Titania/ZnO thin filmand investigation of their utility asPhotoanode for Dye Sensitized Solar Cell	Dr. Ranjith G. Nair	IUAC-UGC	6.03	2016-2019
2.	Fabrication and Testing of Tandem LayeredQuantum Dot Sensitized Solar Cell withElevated Absorption	Dr. Ranjith G. Nair	DST-SERB	25.13	2017-2020

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Prof. Asim Roy	Journal of Materials Science: Materials in Electronics	1	2017
2	Dr. S. R. Mohapatra	Journal of Physics D: Applied Physics	2	2017-2018
3.	Dr. Ranjith G. Nair	Journal of Alloys and Compounds	2	2017-2018

1.5 PUBLICATION

a) International Journal(s):

1. S. Bhattacharjee, P. K. Sarkar, M. Prajapat, A. Roy, 2017, Electrical reliability, multilevel data storage and mechanical stability of MoS_2-PMMA nanocomposite-based non-volatile memory device, Journal of Phys. D: Applied Physics, Vol. 50. No. 26

2. S. R.Mohapatra, M. G.Nair, A. K.Thakur, 2018, Synergistic effect of nano-ceria dispersionon improvement of Li + ion conductivity in polymer nanocomposite electrolytes, Materials Letters, 221, 232-235

3. Rupak Dutta and Anupama Bhol, 2017, $b\to(c,u)\tau\nu$leptonic and semileptonic decays within an effective field theory approach, Physical Review D, Vol 96, American physical society

4. Rupak Dutta and AnupamaBhol, 2017, $Bc\to(J/\Psi,\eta c)\tau\nu$semileptonic decays within Standard model and beyond, Physical Review D, Vol 96, American physical society

b) National Journal (s): NIL

c) International Conference(s):

1. Abinash Das, MoumitaPatra, RiuRiu Wary, Pradip Gupta, Ranjith G. Nair, 2018 Photocatalytic performance analysis of Degussa P25 under various laboratory conditions, IOP Conference Series: Material Science and Engineering, 377, 012101.
2. Ranjith G. Nair, Mathan Kumar P, Samdarshi S. K., January 2018, Performance engineering of Dye Sensitized Solar Cells (DSSC) using Ag modified Titania as Photoanode, IOP Conference Series: Materials Science and Engineering, 303, 012001.

d) National Conference(s): NIL

e) Book/Chapter: NIL

1.6 CONSULTANCY SERVICES:NIL

1.7 MAJOR EQUIPMENT ACQUIRED

1. Dual channel source meter
2. Hot Air Oven
3. UV-Visible Spectrometer

1.8 PATENT: NIL

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Dr. Ranjith G. Nair	International Conference on Functional Materials and Metallurgy (ICFMM 2017	Kuala Lumpur, Malaysia	November 28-30, 2017

1.10 M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	Prajna Chakraborty	Dr. S. R. Mohapatra	Preparation of MoS_2nano-sheets using Liquid Phase Exfoliation Method.
2	Anindita Deb	Dr. A. Chowdhury	Synthesis and characterization of high quality and exfoliated graphene oxide
3	PrantikSarmah	Dr. Subhasis Panda	Self-Organized Criticality and The Abelian Sandpile Model
4	Sumitra Dutta	Dr. Asim Roy	Fabrication and characterization of ZnO/MoS_2/ heterostructure
5	Rima Das	Dr. Asim Roy	Computation of and their analysis on Physics Experiment.
6	Subrata Debnath	Dr. Asim Roy	Photosensitivity and Capacitance characteristics of Graphene Molybdenum Disulphide Hybrid Structure
7	Kunjan Kashyap Sharma	Dr. Rupak Dutta	CKM matrix: A review

8	Panchali Malakar	Dr. R. G Nair	Performance Engineering of ZnOPhotocatalyst using Microwave assisted Technique for solar energy applications
9	Kumarendra Baishya	Dr. Rupak Dutta	Neutrino oscillation: A review
10	Alokesh Baishya	Dr. Avijit Chowdhury	Theoretical study of structural and electronic properties of Indium Phosphide
11	Suma Das	Dr. Avijit Chowdhury	Fabrication of low cost dye sensitized solar cell using natural plant pigment as sensitizers and Graphene oxide/ITO as counter electrode
12	Pradip Kr. Gupta	Dr. R. G Nair	Design, fabrication and testing of a prototype indigenous photocatalytic reactor along with using reusability analysis of some photocatalysis
13	Trinayana Deka	Dr. S. R. Mohapatra	Preparation and characterization of PVdF-HEP based proton exchange membrane by phase inversion technique
14	Dilip Kumar Roy	Dr. Subhasis. Panda	Studies on PT-symmetric hamiltonians

1.11 Ph.D. Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Susmita Nath	Dr. S.K. Barik	Studies on structural, electrical and multiferroic properties of co-doped rare earth orthoferrites
2.	Snigdha Bhattacharjee	Dr. Asim Roy	Resistive Switching and Memory Performances of Semiconductor nanoparticles Embedded Polymer Films

1. Name of the Department :-

Chemistry



1.1 Academic Staff:

HEAD: Dr. Baban H. Shambharkar

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	NIL	Dr. Ruma Rano
		Dr. Baban H. Shambharkar
		Dr. L. Rokhum
		Dr. N. Shaemningwar Moyon
		Dr. S. S. Dhar
		Dr. M. A. Zaman
		Dr. P. Barman

Visiting Professor (If any): NIL

1.2 Distinction Achieved

a) By Student: Six (6) number of students qualified GATE Exam

b) By Faculty Member: NIL

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Pranjit Barman	A One-Week Workshop/ Teacher Training On'STRATEGIC PLANNING, TECHNIQUES AND METHODS (SPTM)'	PMMM NMTT, DHE, GOI	21-25th August 2017 (One week)

b) Participated by Faculty Member: NIL

1.4 Research Development

a) Ph.D. Programme (Specializations):

Environmental Waste Management, Characterisation and Utilisation of Coal Combustion Residues, Synthesis and Characterization of Fly Ash as catalyst/ Photocatalyst

Synthesis of Bivalent Organo-sulfur compounds and their applications. Synthesis of Metal-complexes and their applications.

Synthesis of nanostructured catalysts and their application in organic transformations.

Synthesis of nanocomposites for environmental remediation

Energy and Environment

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
6	01	22

c) Research Lab/ Workshop: NIL

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Synthesis of Indenoisoquinolinedione	L. Rokhum	SERB	16.5	2014-17
2	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	L. Rokhum	SERB	32.16	2014-18

3	Nanostructured Metal Oxides Immobilized Ionic Liquids as Green Catalysts for Selective Organic Transformations	Dr S S Dhar	DST-SERB	28.64	March 2018-March 2021
4	Spectrofluorimetric studies of nitrogen-heterocyclic drugs and its interaction with DNA-nucleotides	Dr. N. S. Moyon	DST-SERB	33.09	2017-2020
5	Metal complexes of new chiral Schiff bases: Design, structure, elucidation, reactivity and synthetic applications.	Pranjit Barman	DST-SERB	35	3-years

e)Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	L Rokhum	Green Chemistry	1	2017-2018
2	L Rokhum	Organic Letters	1	2017-2018
3	L Rokhum	Royal Society Open Science	1	2017-2018
4	L Rokhum	Journal of Nanostructure in chemistry	1	2017-2018
5	L Rokhum	Catalysis letters	1	2017-2018
6	L Rokhum	BioNanoScience	1	2017-2018
7	Dr S S Dhar	Materials Chemistry and Physics	01	2018
8	Dr S S Dhar	Journal of Chemical Technology and Biotechnology	01	2017
9	Dr S S Dhar	Research on Chemical Intermediates	01	2017
10	Dr S S Dhar	Inorganic and Nano-metal Chemistry	01	2017
11	Dr S S Dhar	Applied Catalysis A	01	2017
12	Dr. Pranjit Barman	Applied Organometallic Chemistry(Elsiver)	01	2017-2018
13	Pranjit Barman	Journal of Organic Chemistry(ACS).	01	2017-2018
14	Pranjit Barman	Asian Journal of Organic Chemistry	01	2017-2018

f) Chairing of Technical Section: NIL

1.5 PUBLICATION

a) International Journal(s):

1. Kalyani Rajkumari, Juri Kalita, Diparjun Das, **Lalthazuala Rokhum.** Magnetic Fe3O4@silica sulfuric acid nanoparticles promoted regioselective protection/deprotection of alcohols with dihydropyran under solvent-free conditions. *RSC Adv.,***2017**, 7, 56559 (Highlighted in SYNFACTS).

2. Sushovan Chatterjee, Dhanurdhar, **Lalthazuala Rokhum**. Extraction of a cardanol based liquid bio-fuel from waste natural resource and decarboxylation using a silver-based catalyst. *Renew. Sustainable Energy Rev.***2017**, 72, 560-564. (Elsevier, Impact factor 9.135).
3. Diparjun Das, Gunindra Pathak, Jasha M. H. Anal and **Lalthazuala Rokhum**. Polymer Supported Triphenylphosphine-Methylacrylate Complex: An Efficient Catalyst for the Selective Iodination of Alcohols. *Curr. Appl. Polym. Sci.***2017**, 2017, 1, 63-71.
4. Arpita Paul Chowdhury, **Baban H. Shambharkar** BiOBr-Ag_8SnS_6 heterostructured nanocomposite photocatalysts: Synthesis, characterization, and photocatalytic application Asia-Pac J Chem Eng. 2018 doi.org/10.1002/apj.2182 Wiley
5. Bishal Bhuyan, Arijita Paul, Meghali Devi, **Siddhartha Sankar Dhar** Silver NPs dispersed water extract of fly ash as green and efficient medium for oxi-dant-free dehydrogenation of benzyl alcohols, , *RSC Advances*, Jan **2018**, 8, 1313-1319.
6. Bishal Bhuyan, Bappi Paul, Arijita Paul, **Siddhartha Sankar Dhar** Paederia foetida Linn. promoted synthesis of $CoFe_2O_4$ and $NiFe_2O_4$ nanostructures and their photocatalytic efficiency, , *IET Nanobiotechnology*, **2017**, 12, 253-240.
7. Bishal Bhuyan, Arijita Paul, Bappi Paul, **Siddhartha Sankar Dhar** and Pranab Dutta Paederia foetida Linn. promoted biogenic gold and silver nanoparticles: synthesis, characterization, photocatalytic and in vitro efficacy against clinically isolated patho-gens, , *J. Photochemistry and Photobiology B: Biology*, **2017**, 173, 210-215.
8. Firoza Sultana and **Ruma Rano**, "Comparative study of coal combustion residues from pulp and paper mills of Assam." Energy sources Part A, Vol. 39 (16) 1799-1806, 2017 (Taylor & Francis)
9. N.A. Mazumder, **R. Rano**, "Synthesis and characterization of fly ash modified copper oxide (FA/CuO) for photocatalytic degradation of methyl orange dye." Materials Today: Proceedings: 5, 2281-2286, Feb 2018 (Elsevier)
10. Devi, N.; Sarma, K.; Rahaman, R.; **Barman, P.** Synthesis of a new series of Ni(II), Cu(II), Co(II) and Pd(II) complexes with an ONS donor Schiff base: crystal structure, DFT study and catalytic investigation of palladium and nickel complexes towards deacylativesulfenylation of active methylenes and regioselective 3-sulfenylation of indoles via thiouronium salt formation. Dalton Trans. March **2018**, 47, 4583-4595. **DOI**. 10.1039/C7DT04635A
11. Rahaman, R.; **Barman, P.**Iodine-Catalyzed Mono-and Disulfenylation of Indoles in PEG400 through a Facile Microwave-Assisted Process. Eur. J. Org. Chem.**2017**,6327-6334. **DOI**. 10.1002/ejoc.201701293.
12. Devi, N.; Rahaman, R.; Sarma, K.; Khan, T.; **Barman, P.** Towards the Iodine-Catalyzed Regioselective Sulfenylation of Unsymmetrical Ketones. Eur. J. Org. Chem. **2017**, 1520-1525. **DOI**. 10.1002/ejoc.201601562.
13. Shamima Begum, Md. Ahmaruzzaman, Biogenic synthesis of SnO_2/activated carbon nanocomposite and its application as photocatalyst in the degradation of naproxen, Applied Surface Science, Volume 449, Pages 780-789.
14. Archita Bhattacharjee, M. Ahmaruzzaman, α-Amino acid assisted facile synthesis of two-dimensional ZnO nanotriangles for removal of noxious pollutants from water phase, Journal of Environmental Chemical Engineering,Volume 6, Issue 4, August 2018, Pages 4970-4979.
15. Shamima Begum, Md. Ahmaruzzaman, CTAB and SDS assisted facile fabrication of SnO2 nanoparticles for effective degradation of carbamazepine from aqueous phase: A systematic and comparative study of their degradation performance, Water Research, Volume 129, 1 February 2018, Pages 470-485.
16. DipyamanMohantaMd.Ahmaruzzaman, Bio-inspired adsorption of arsenite and fluoride from aqueous solutions using activated carbon@SnO_2 nanocomposites: Isotherms, kinetics, thermodynamics, cost estimation and regeneration studies Journal of Environmental Chemical Engineering, Volume 6, Issue 1, February 2018, Pages 356-366.

17. Archita Bhattacharjee, M. Ahmaruzzaman, Microwave assisted facile and green route for synthesis of CuO nanoleaves and their efficacy as a catalyst for reduction and degradation of hazardous organic compounds, Journal of Photochemistry and Photobiology A: Chemistry, Volume 353, 15 February 2018, Pages 215-228.
18. Dipyaman Mohanta, Koushik Barman, Sk. Jasimuddin Md. Ahmaruzzaman, MnO doped SnO_2 nanocatalysts: Activation of wide band gap semiconducting nanomaterials towards visible light induced photoelectrocatalytic water oxidation, Journal of Colloid and Interface Science, Volume 505, 1 November 2017, Pages 756-762.

b) National Journal(s):NIL

c) International Conference(s):

1. Kalyani Rajkumari, Aayushi Biswas and **Lalthazuala Rokhum.** Magnetic Fe_3O_4@SiO_2–NH_2 nanoparticle catalyzed green synthesis of nitroalcohols via Henry reaction. *Proceedings of Int. Conf. on Systems and Processes in Physics, Chemistry and Biology. Feb* 2018, 80-83.

2. Aayushi Biswas and **Lalthazuala Rokhum.** Bio derived synthesis of silver nanoparticles from *Tecoma stans* leaf extract and its photocatalytic and antimicrobial activity. *Proceedings of Int. Conf. on Systems and Processes in Physics, Chemistry and Biology. Feb* 2018, 76-79.

3. R. Rano,N. A. Mazumder, F. Sultana, Synthesis and Characterization of Fly Ash-Ag_2O Nanoaggregates Photocatalyst for Degradation of Malachite Green Dye, 4th International Conference on Nanoscience and Nanotechnology (ICNSNT), 14-15th Dec'2017, Colombo, Sri Lanka.
4. N.A. Mazumder, R. Rano, Importance of FE-SEM, FT-IR, XRD and BET surface area analysis to characterize various heterogeneous catalysts derived from coal fly ash, International Conference on Sophisticated Instruments in Modern Research (ICSIMR 2017), June 30 - July 1' 2017 at IIT ,Guwahati
5. Firoza Sultana, Ruma Rano ,Water Holding Capacities of High carbon ash from Paper Mills, International Conference on Waste Management,22-24 Feb'18 Recycle-2018,IIT Guwahati .

d) National Conference(s): NIL

e) Book/Chapter:

Sl. No.	Title of the Book	Name of the Publisher	Publication details	Name of Co-Authors
1	INTRODUCTION TO FLY ASH AND ITS PERSPECTIVE UTILISATION Dr. Ruma Rano	Scholars' Press, Germany	ISBN 978-620-2-30438-2	NIL

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED

1. **Fluorescence spectrometer**

1.8 PATENT: NIL

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Dr. Ruma Rano	"4th International Conference on Nanoscience and Nanotechnology (ICNSNT) "	Colombo, Sri Lanka.	14-15th Dec'2017

1.10 M.Tech. / M.Sc. (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Dibya Jyoti Koiry 15-48-106	Dr S S Dhar	Synthesis of novel MnFe2O4/g-C3N4 and it application as catalyst in cross aldol condensation
2	Alimpia Borah 15-48-110	Dr S S Dhar	Synthesis of a novel ZnO/NiMoO4 nanocomposite and its applications as photocatalyst and antibacterial agent
3	Debashree Bora 15-48-116	Dr S S Dhar	Facile synthesis of nanostructured α-Fe_2O_3 and Cu/α-Fe_2O_3 and application of Cu/α-Fe_2O_3 nanoparticles as catalysts
4	Subhakankhi Thakur (15-48-111)	Dr. B. H. Shambharkar	Synthesis and Characterization of BiOCl-Cu_2ZnSnS_4 nanocomposites and investigation of their photocatalytic activity
5	Ringham Khempri (15-48-112)	Dr. B. H. Shambharkar	Synthesis and characterization of BiOCl-Ag_8SnS_6 nanocomposites and investigation of their photocatalytic activity
6	Juri Kalita (15-48-113)	L. Rokhum	Nano-Fe3O4@silica sulfuric acid: A magnetically retrievable heterogeneous catalyst for protection and deprotection of alcohols under solvent-free conditions
7	Bhaskar Mahanta (15-48-101)	L. Rokhum	Bio-inspired synthesis of silver nanoparticles and studies of their photocatalytic activities.
8	Hemonta Borthakur (15-48-103)	Dr Ruma Rano	HCl modified Flyash(HFA):A Highly efficient heterogeneous solid catalyst for esterification reaction.
9	Gyandeep Pathok (15-48-118)	Dr Ruma Rano	Ethoxy functionalized Flyash(EFA): A highly efficient heterogeneous solid base catalyst for Alod Condensation reaction.
10	Rakhi Bormon (15-48-109)	Pranjit Barman	Electrophilic Sulfenylation of Amino acids and Active Methylene Compounds through N-S and C-S Coupling
11	Diganta Kalita (15-48-114)	Pranjit Barman	Studies on the Synthesis, Characterization of ONS Donor Schiff Base Complexes and Application of Schiff Base Complex of Nickel
12	Shivashis Das	Pranjit Barman	An Efficient Iodine-Catalyzed Regioselective 3-Sulfenylation

	(15-48-107)		of Indoles and Imidazo[1,2-a]pyridines with Thiols in PEG_{400}
13	Dipankar Phukon (15-48-105)	Dr .N. S. Moyon	Fluorescence study of 2, 4-(1H, 3H)-Quinazolinedione in miceller media.
14	Reema Pegu (15-48-104)	Dr .N. S. Moyon	Spectrofluorimetric studies on the interaction of 4-hydroxyquinazoline with serum albumin.
15	Priyanka Dey (15-48-117)	Dr. M. A. Zaman	Synthesis of silver nanoparticles and silver loaded activated carbon nanocomposites in waste water treatment and its antimicrobial assay.
16	Minakshi Dutta (15-48-115)	Dr. M. A. Zaman	Synthesis and characterization of SnO_2 loaded activated carbon nanocomposites and its applications towords removal of iron (III), arsenic (III) and Fluoride from aqueous phase

1.11 Ph.D Theses

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Bappi Paul (13-3-23-101)	Dr S. S. Dhar	Novel approaches for synthesis of catalysts and reagents and their application for selective organic reactions
2	Diparjun Das (14-2-23-104)	L. Rokhum	Application of easy recoverable polymeric reagents in solod phase organic synthesis (SPOS)- A green Approach.
3	Kuladip Sarma (12-3-8-110)	Pranjit Barman	Thioether containing Schiff base ligands and their metal complexes: Experimental, Theoretical and Catalytical activity studies.

1. Name of the Department :-

Humanities & Social Sciences



1.1 Academic Staff:

HEAD: Dr. N. B. Singh

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
Prof. Gurudas Das		Dr. N.B. Singh
		Dr. Reena Sanasam
		Dr. Avishek Ray

Visiting Professor (If any): NIL

1.2 Distinction Achieved

a) By Student: NIL

b) By Faculty Member:

1. Avishek Ray has been awarded the Purdue University Library Research Grant (USA) and the CICOPS Fellowship, University of Pavia (Italy). He has delivered invited lectures at: (1) Institute of Development Studies Kolkata (IDSK), Kolkata; (2) Centre for Advanced Theory (CAT), University of Liberal Arts (ULAB), Dhaka, Bangladesh; (3)

Ambedkar University, New Delhi; (4) Research Institute of Cultures & Languages of Asia, Mahidol University, Thailand | 19 Jun 2017; and (5) Centre for Policy Research, New Delhi

2. Gurudas Das has delivered a valedictory address in the national seminar on "Challenges of Development, Governance and Democracy in South and South East Asia", held during January 4-5, 2018, organized by the Department of Economics, Calcutta University.

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr. Avishek Ray	GIAN Course on 'Images as Modes of Knowledge, Social Practice and Affect'	MHRD	2 weeks
2	Dr. Avishek Ray	GIAN Course on 'Religion, Ideologies & nationalism in South Asia'	MHRD	1 week
3	Prof. Gurudas Das	National Seminar on "ASEAN Calling: Development of India's North East through Sub-regional Cooperation	ASEAN Study Centre, Shillong	2 Days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. Avishek Ray	International Symposium on Digital Politics in Millennial India, 15-17 Mar 2018	Indraprastha Institute of Information Technology, New Delhi (IIIT-Delhi)
2	Dr. Avishek Ray	Goethe Society of India International Conference on Cosmopolitanism, Globalisation and Literary Space: Perspectives and Narrations of a (new) World Citizenship, 21-23 Feb 2018	University of Delhi, India,
3	Dr. Avishek Ray	International Conference on Contemporary Communication Cultures, Controls and Becomings, 16-17 Feb 2018	University of Madras, India,
4	Dr. Avishek Ray	International Seminar on Reinventing Nationalism: Seculairsm & Plurality: Media discourses & Deconstruction, 11-12 Nov 2017	Gauhati University, India
5	Dr. Avishek Ray	National Seminar on Indian Music and Dance: The Absence of Critical Attention and Analysis, 4-6 September 2017	Indian Institute of Advanced Study (IIAS), Shimla
6	Dr. Avishek Ray	International Conference on Mahabharata & Inter-Asian Cultures, 6-8 April 2017	Delhi University
7	Prof. Gurudas	National Seminar on "ASEAN Calling:	Department of HSS,

	Das	Development of India's North East through Sub-regional Cooperation, April 18-19, 2017	NIT Silchar
8	Prof. Gurudas Das	International Conference on "India - Myanmar – Thailand Trilateral Relations: Way towards a Stronger ASEAN – India Partnership", September 6-7, 2017	ASEAN – India Centre (AIC), Research and Information System for Developing Countries (RIS), New Delhi & ASEAN Studies Center and Indian Studies Center Chulalongkorn University, Bangkok *in collaboration with* Maulana Abul Kalam Azad Institute of Asian Studies (MAKAIAS), Kolkata Centre for Studies in International Relations and Development (CSIRD), Kolkata
9	Prof. Gurudas Das	*National Seminar on "Changing Contexts of India-China Relations: Insights and Lessons from Crisis Pathways and Imperatives in Stability and Convergence",* September 11, 2017	ICSSR-NERC, Shillong
10	Prof. Gurudas Das	Regional consultations on "Development of North East India and India's Act East Policy: A Quest for Synergy", 24 and 25 October 2017	FIDC and RIS, New Delhi
11	Prof. Gurudas Das	Workshop on "Research Methodology in Social Sciences", December 4-13, 2017	ICSSR-NERC, Shillong
12	Prof. Gurudas Das	National seminar on "Challenges of Development, Governance and Democracy in South and South East Asia", January 4-5, 2018	Department of Economics Calcutta University
13	Prof. Gurudas Das	National Workshop on "Logistics, Global Governance and India's Look East Policy", March 20, 2018	Calcutta Research Group-Rosa Luxemburg Stiftung programme, In collaboration with Deptt of Political Science, Vidyasagar University, Midnapore, West Bengal

1.4 Research Development

a) Ph.D. Programme (Specializations): NIL

b) Ph.D. Produced/Ongoing (in number): NIL

c) Research Lab/ Workshop: NIL

d) Ongoing/Completed Sponsored Research Project:

e) Research Paper Reviewed: NIL

f) Chairing of Technical Section: NIL

1.5 PUBLICATION

a) International Journal(s):

1. Avishek Ray, S. Bhattacharyya, 2017, 'On Knowledge Ecology: A Dissenter's Tryst with Scientificity', in Localities, Vol. 7, pp. 223-30
2. Avishek Ray, 2017, 'A Survey on the Semantic Field of 'Vagabond'', in Anglica: An International Journal of English Studies [published by the University of Warsaw], Vol. 26: 2, pp. 51-60
3. Gurudas Das, Ujjwal Kanti Paul, Avishek Ray, Tanuj Mathur, 2017, "Is the Organic System Economically Viable? The Case of Pineapple in India's Northeast", International Journal of Fruit Science, n1 (20170125): 1-11
4. Gurudas Das [Ujjwal Kanti Paul, Avijit Debnath Tanuj Mathur], "Market Integration and Price Leadership in India's Onion Market", *Review of Market Integration* 8(1&2) 49–64, 2017
5. Gurudas Das [with Subodh Chandra Das] ' "Public Resource Allocation through Grassroots Democratic Institutions: Evidence from Assam, India", *International Journal of Public Administration,* 2017
6. Gurudas Das [with Tanuj Mathur and Hemendra Gupta] "Examining the influence of health insurance literacy and perception on the people preference to purchase private voluntary health insurance", *Health Services Management Research, (Online Version)* 1–14, 2018

b) National Journal(s): NIL

e) Book/Chapter:

Gurudas Das, Ujjwal Paul and Tanuj Mathur, 2017, " Making 'Act East Policy' work for the Development of North Eastern Region of India", in Pankaj Jha and Rahul Mishra (eds), *Integrating North East in India's Act East Policy*, Indian Council of World Affairs, Sapru House, New Delhi.

Gurudas Das, Ujjwal Kanti Paul, 2017, "Reaping Dividend from India's Act East Policy: What North East can offer?", in Joshua Thomas and K Sarda (eds), *Act East and India's North East,* Pentagon Press, New Delhi

Gurudas Das, Malabika Das, 2017, "India-Myanmar-Thailand (IMT) Trilateral Highway and its likely impact on the Economic Integration between NER and ASEAN", in Ujjwal Kanti Paul, Gurudas Das and C Joshua Thomas (eds), *ASEAN Calling: Development of India's North East through Sub-regional Cooperation,* Pentagon Press, New Delhi

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED: NIL

1.8 PATENT: NIL

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Dr. Avishek Ray	Purdue University Library Research Grant	USA	June 2017
2	Dr. Avishek Ray	CICOPS Fellowship, University of Pavia	Italy	Apr-May 2017

1.10 M.Tech. / M.Sc. (Thesis/Project): NIL

1.11 Ph.D. Theses: NIL

1. Name of the Department :-

Management Studies



1.1 Academic Staff: 02 (Regular Faculty), 06 (Temporary Faculty), 01 (Visiting Faculty)

HEAD: Dr. Ashim Kumar Das

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	NIL	Dr. Ashim Kumar Das
		Dr. Soma Panja
		Dr. Subroto Chowdhury
		Mr. Subhadeep Mukherjee
		Mr. Saroj Kumar Koiri
		Mr. Sourav Dey
		Mr L. A Meetei
		Mrs. Sona Srivastava
		Dr Mansi Rastogi (Visiting Faculty)

Visiting Professor (If any):

1. Dr. Rajat Bashya, Retired Professor, IIT – Delhi
2. Dr. Madhusudan Karmakar, Professor, IIM – Lucknow
3. Dr. Saptarshi Purkayastha, Assistant Professor, IIM – Calcutta
4. Dr. Thandava Murthy, Principal, S. D. C, Mysore, Karnataka.
5. Mr Anish Sengupta- Executive VP, Valforma Technology Services Pvt. Ltd.
6. Dr. Subhadeep Paul, Assistant Professor, Bankura University.

7. Dr. Nikhil Bhushan Dey – Professor (Emeritus Fellow) Deptt of Commerce, Assam University.

1.2 Distinction Achieved

a) By Student: NIL

b) By Faculty Member: NIL

1.3 SEMINARS, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name(s) of the Coordinator	Title	Funding Agency	Duration
1	Dr Soma Panja	Research Methodology and Data Analytics	Self- Finance	5 Days

b) Participated by Faculty Member: NIL

1.4 Research Development

a) Ph.D. Programme (Specializations): HR / Marketing / Finance

b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
00	00	**05**

c) Research Lab/ Workshop: NIL

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Innovation & Entrepreneurship Development Centre (IEDC)	Dr. Ashim Kr Das	DST, Govt. of India	50,00,000/-	5 Years

e) Research Paper Reviewed: NIL

f) Chairing of Technical Section: NIL

1.5 PUBLICATION:

a) International Journal(s):

- Mansi Rastogi, (2018), 'Job Crafting And Work Family Enrichment: The Role Of Positive Intrinsic Work Engagement', Journal of Personnel Review (Emerald), 47 (3), 654-674. (Scopus, ABDC-A Category, SCI)
- Mansi Rastogi, (2017), ' Work-Family Enrichment in India : Validation of Work-Family Enrichment Scale, Global Business Review, 18 (6), 1568-1579, (Scopus, ABDC-C Category, SCI)

b) National Journal(s):

- Subhadeep Mukherjee, (2017), 'Employees Perception of Spirituality in the Workplace – A Case Study of IT Industry' Adhyatma : A Journal of Management, Spirituality, and Human Values., 1 (1), 1-7. (Peer- Reviewed)

c) International Conference(s):

- Dr Soma Panja, ' Decision in Management Science as Applied to Heuristically Designed Portfolio Optimisation Model '- International Conference on Interdisciplinarity: Contemporary Research in Humanities, Social Sciences and Management Studies, (COIN – 2017), Department of Humanities and Social Sciences, National Institute of Technology Meghalaya, 21-22 July, 2017.
- Subhadeep Mukherjee & Saroj Kumar Koiri attended 5th PAN IIM World Management Conference at IIM Lucknow, December 14-16, 2017.
- Subhadeep Mukherjee, Business Tattva – Transformation of Intra Business Framework with Indian Spiritual Ethos, presented at International Conference on Science, Spirituality, & Civilization at Deptt of Applied Science & Engineering, IIT Roorkee, March 17-18, 2018.
- Subhadeep Mukherjee, Relationship between spiritual leadership and job satisfaction among the faculty members with reference to NIT Silchar in International Conference on "Alchemy of Leadership for Innovation and Sustainability" at SMS Varanasi, 17th and 18th February 2018.
- Mr. Subhadeep Mukherjee and Dr. Ashim Kr Das presented paper entitled "Spiritual Tourism at Banaras'- The Heart of Spiritual India" at International Conference on Sustainable Tourism and Hospitality Marketing: Setting Agenda for Future Research", Department of Tourism and Hotel Management, NEHU Shillong , March 15th – 17th, 2018.

7. d) National Conference(s):

- Dr Soma Panja, presented paper titled 'Initiatives of the State Governments in shaping Border Trade in North East India: Policies, Practices and a Proposed Framework', ASEAN Calling Development of India's North-East through Sub-regional Cooperation, April 18-19, 2017, Department of HSS, NIT Silchar.
- Saroj Kumar Koiri, Namo the Brand: A Remarking India Today, National Seminar on 'Management Strategies in New India with special reference to North East India" Gauhati Commerce College, Centre of Management Studies (GCMS), November 17, 2017.
- Subhadeep Mukherjee & Ashim Kumar Das, presented paper titled 'Karma Yoga (Path of Action) : A Paradigm Vision from Indian Wisdom on Today's Business Problem of Job Attitudes' National Conference, FMS New Delhi, February 2018.

e) Book/Chapter:

- Subhadeep Mukherjee, Ashim Kumar Das, Prabhu Dutta Mohanty, (2018), 'Karma Yoga (Path of Action) : A Paradigm Vision from Indian Wisdom on Today's Business Problem of Job Attitudes' Transforming Management Education, New Delhi Publisher (1st Edition), ISSN : 978-93-86453-36-5., 135-143.

1.6 CONSULTANCY SERVICES: NIL

1.7 MAJOR EQUIPMENT ACQUIRED: NIL

1.8 PATENT: NIL

1.9 VISITS TO ABROAD: NIL

1.10 MBA (Theses/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Nabanita Sharma	Dr. Soma Panja	Investors' Emotion Associated in Portfolio Optimisation
2	Vijaylakshmi Nath	Dr. Soma Panja	A study on the performance of the portfolio of SRI with ESG stocks in relation to the portfolio of Non-SRI stocks in the Indian stock market
3	Farheen Akhtar Barbhuiya	Dr. Soma Panja	Impact of Demonetisation on the Indian Stock Market: An Event Study
4	Abhishek Dubey	Dr. Soma Panja	Optimizing Portfolio with Sharpe Single Index Model Heuristically: An Empirical Analysis
5	Geetanjali Sinha	Dr. Soma Panja	Role of Private Equity and Venture Capital in Development of Emerging Entrepreneurial Activity in India
6	Anupal Sarmah	Dr. Soma Panja	An Analysis of Investor Behaviour on Various Investment Avenues with Reference to Jorhat Town
7	Arkasree Bhattacharjee	Dr. Soma Panja	A study of new explanation of sticky dividend: An empirical Research on Indian stock market
8	Nilanjana Roy	Dr. Soma Panja	Study on the Implication of CAPM Model in Indian Stock Market
9	Samip Das	Dr. Soma Panja	A Study on Financial Distress of Major Pharmaceutical Companies in India using Altman Z Score
10	Debasree Das	Dr. Subroto Chowdhury	Evaluating the Financial performance of banks in India.
11	Subrata Mandal	Dr. Subroto Chowdhury	An empirical study of the valuation process for Start-Up companies; Developing a viable valuation model
12	Himanshoo Dabar	Dr. Subroto Chowdhury	Credit culture of banks operating in Northeastern region of India
13	Anu Kumari	Dr. Subroto	Analysis of Risk-Return Relationship In Indian Stock

		Chowdhury	Market
14	Jyoti Shah	Dr. Subroto Chowdhury	A Study on the Arbitrage Opportunity in Stock Futures with reference to NSE
15	Nilakshi Saikia	Dr. Subroto Chowdhury	A study on various investment options influencing investment decisions of salaried class individuals (with respect to Nagaon town)
16	Madhusmita Mazumdar	Dr. Subroto Chowdhury	Factors influencing choice of investment by people on LICI products
17	Chaitali Das	Dr. Subroto Chowdhury	A study of comparison between the performance of public & private sector banks using CAMELS Rating Approach
18	Debasree Das	Dr. Subroto Chowdhury	Evaluating the Financial performance of banks in India.
19	Sumit Chakraborty	Sona Srivastava	Customer Service Quality and Customer Delightness of organised Apparel retail: A case of Pantaloon, Kolkata.
20	Tuhina Das Choudhury	Sona Srivastava	Comparative Analysis of Patient satisfaction in Public and private Healthcare: A case of Cachar district.
21	Ramu Pokhrel	Sona Srivastava	Analysing and Assessing the Service Quality factors of online Apparel shopping towards customer satisfaction.
22	Ankur Hazarika	Sona Srivastava	Customer Perception on Online Banking Service Quality and its relationship with customer satisfaction.
23	Rashmi Sinha	Sona Srivastava	Critical Determinants Influencing the choice of Tourism Destination.
24	Nasreen Sultana Ahmed	Dr Mansi Rastogi	The impact of organizational resources on service quality: A case of hospitality sector
25	Ashim Saikia	Dr Mansi Rastogi	Determinants of work engagement among nurses: A study from Assam
26	Mercilis Kamei	Dr Mansi Rastogi	What causes turnover among nurses in India?.
27	Sagnik Choudhury	L. Athouba Meitei	A study on counteroffer: a boon or evil for the employees with respect to information technology companies
28	Grahadish Sarma	L. Athouba Meitei	Leadership traits of the founder; a mandate to Start-ups' growth in India
29	Tridib Sarma	L. Athouba Meitei	A study on factors influencing attrition of Ph.D. Scholars in north-eastern public universities
30	Deponkar Das	Subhadeep Mukherjee	Influence of FMCG Product's Packaging on Consumer Buying Behaviour with special reference to villages of Silchar Circle.

31	Rajanish Koiri	Subhadeep Mukherjee	An analytical study of personal selling and sales promotion to the medical practitioners in pharmaceutical industry at Silchar.
32	Arindam Gupta	Subhadeep Mukherjee	The impact of social media marketing on Brand Loyalty : Case Study of Reliance Jio Infocomm Limited
33	Subrajit Nath	Subhadeep Mukherjee	A study on employees 'job satisfaction and its relationship with employees' performance with reference to Oil India Limited.
34	Partha Pratim Das	Subhadeep Mukherjee	A study on employee's perception of spirituality at workplace and its impact on job performance with reference to Oil India Limited.
35	Sidhant Majumder	Subhadeep Mukherjee	A Study on Labour Welfare Measures in Industrial Organization with reference to Indian Oil Corporation Limited
36	Abul Salam Azad Barbhuiya	Saurav Dey	Satisfaction level of customers regarding the logistics services provided by e-retailers -A study in Silchar
37	Randeep Kumar Chakravarty	Saurav Dey	Ascertainment of the opportunities of the product (Tea) of Bochapathar Tea Estate Pvt Ltd in Dibrugarh
38	Arun Jyoti Bora	Saurav Dey	Consumer perception towards green Cars-A study in Guwahati
39	Writu Patgiri	Saurav Dey	Perceptions of existing owners of Commercial four wheeler passenger cars towards the same during their next purchase- A study in Guwahati & Bongaigaon
40	Roshan Dhakal	Saurav Dey	Impact of Big retail players on Indian Rural Market- A study in Silchar
41	Daisy Laskar	Saroj Kumar Koiri	A Comparative study on loyalty programs and its impact on consumer buying behaviour with reference to big bazaar and reliance mart
42	Swagata Dey	Saroj Kumar Koiri	Influence of promotion mix on buyingbehaviour of consumers: Study of Cosmetic Industry in Guwahati City
43	Plabon Saikia	Saroj Kumar Koiri	A study on factors influencing the purchase behaviour of male apparel consumers: A case study
44	Anamitra Khataniar	Saroj Kumar Koiri	A study on effectiveness of distribution channel of star cement in Guwahati
45	Mithisar Basumatary	Saroj Kumar Koiri	A study on factors affecting supply chain management of FMCG industries in lower Assam.

1.11 Ph.D. Theses: NIL

Academic Centres & Cells

Central Computer Centre

Head : **Dr. Arup Bhattacherjee,** Asstt. Prof. & HOD, CSE Dept.

Staff :

Officer	Technical Staff	Attendant
(i) Mr. Kumar Mithilesh, Sr. Tech. Officer.	(i) Abhishek Palit (contractual), (ii) Rupak Ranjan Deb (contractual), (iii) Nazmul Haque Laskar (contractual), (iv) Abinash Bhar (contractual).	(i) Ms. Champabati Balmiki.

1. A brief Introduction and Activities of CCC:

The Institute computing facility is maintained by the Central Computer Centre (CCC) which includes high-end servers and Intel Core-i5 & i7 based Personal Computers. The CCC is having three computer labs equipped with around 330 computers.

The State-of-Art IT Infrastructure has been deployed in the year 2013 and the whole Institute including the various Departments, Students' Hostels, Administrative Building, Guest House, Library, Residential Quarters, Health Centre, Estate Engg. Branch, SAC Building, NITS Café, is connected by a campus-wide LAN & Wi-Fi facility using high speed Fibre Optic cables (1 Gbps). The LAN & Wi-Fi are managed by High Level Switches and a host of Servers. The Switches are connected by Fibre Optic Cables to Switches located in different academic departments, students' hostels of the Institute.

- The Institute has a dedicated 1 Gbps leased line under National Mission on Education through Information & Communication Technology (NME-ICT) / National Knowledge Network (NKN), which provides 24x7 Internet Connectivity to serve the Institute Internet needs.
- The institute also has a 16 Mbps leased line from Bharat Sanchar Nigam Ltd. (BSNL), dedicated to DNS service and for Backup purpose.

Currently, Wi-Fi connectivity is available at Guest House, Administrative Building, Lecture Hall Complex, Residential Quarters, Health Centre, Estate Engg. Branch, SAC Building, NITS Café, Sports Complex as well as the departments. Network expansion still continues and work is going on for making the campus Wi-Fi by deploying more number of Access Points. CCC takes all possible steps in its capacity to make the network accessible round-the-clock. Efforts are being made to improve the reliability to meet the expectations of the user-base.

2. Facilities provided by Central Computer Centre :

- Campus wide Internet connectivity: Providing / Maintaining internet facility around campus through LAN and Wi-Fi on required basis.

- Institution mail service: Creating and looking after personal Institute mail of all employees and students. Institute e-mail ids are being served to all, under nits.ac.in domain.
- Hardware maintenance/ support: On required basis, rectifying computer hardware issues over academic areas.
- UPS maintenance/ support: On required basis, providing UPS backup to active network components.
- Institution web portal: Day-to-day activities/updates of NIT Silchar, exploring to rest of the world through institute website.
- Video conferencing: CCC has been supporting video conferences with MHRD, Rastrapati Bhawan and live lecture series with other institutions, virtual sessions.
- Virtual classroom: Through this virtual classroom it has been possible to interchange technical sessions/ discussions with other institutions. Few workshops and conferences have also been conducted in our virtual classroom.
- Computer lab facility: Three labs are running under the center for conducting UG/PG classes, Training and Placement (T&P) Cell's activities and for common online examinations.
- Supporting surveillance camera: Providing passive communication support for IP Camera around the campus.

CENTRAL LIBRAY

1. INTRODUCTION:

The Central Library is integral part of academic and research activities of NIT Silchar. It was set up in the year 1977 and it is one of the best technical libraries in North East India. It has been growing and expanding in the aspect of collection both in print form and digital form since its inception and provide services to the academic fraternity of NIT Silchar to meet their teaching, research, and consulting, training and learning requirements. The range of services offered by the library is comparable to the best libraries in the eastern zone of India. During the last year, the library initiated a number of important activities & services which are presented here briefly.

The key officers of the Central Library are:

Chairman Prof. S. Baishya, M. Tech, PhD

Librarian Dr. Kishor Chandra Satpathy, M.A (Edu), MLISc, PGDLAN, PhD

Astt. Librarian Ms. Krishnamati Singha, BSc, MLISc, MBA (HRM)

2. COLLECTION DEVELOPMENT:

Collection building is one of the important functions of the library, which supports academic and research activities of the students, faculty, staff and other users. Library collections of central library consist of books, CDs, journals, e-resources, theses, reports, standards, and other reading materials covering the areas of science, engineering, technology, humanities, social sciences and management. The following table presents the collections of the library for the year 2017-18.

The total collection of library as on 31st March 2018 stands as follows:

Sl. No.	Name of Resources	As on 31st March 2015	As on 31st March 2016	As on 31st March 2017	As on 31st March 2018
1.	Books	92588	94319	96683	98959
2.	Print Journals	116	99	114	105
3.	Bound Volumes	5417	5468	5468	5468
4.	CD-ROMs	4013	4274	4297	4393
5.	Databases	21	17	14	21
6.	Videos	909	909	909	909
7.	ISI Code (Printed)	8627	8627	8627	8627

Sl. No.	Name of Resources	As on 31st March 2015	As on 31st March 2016	As on 31st March 2017	As on 31st March 2018
8.	Book Bank (General)	9235	9235	9235	9235
9.	Book Bank (SC/ST)	8154	8180	8180	8336
10.	IRC Codes	152	152	152	152
11.	Thesis	54	70	92	123
12.	Project & Dissertation	246	365	425	474
13.	Reports/Annual Reports	353	399	423	449

A need-based collection of knowledge resources is being developed in lines with the objectives and activities of the Institute in mind. Resources include e-books & e-journals, online databases/ e-journals.

Printed Journals / Magazines

During the year Library reviewed the printed and stopped subscribing 9printedjournals that were not utilized by the users and are now available on open access. Library added 7 new printed journals; all total 105 printed journals were subscribed during the year.

Digital Resources: E-resource/database and e-book

Apart fromthe 13 databases provided by E-ShodhShindhu, NIT Silchar has renewed 7 databases like Elsevier Science Direct (7 subjects collection), Springer, Taylor & Francis, Royal Society of Chemistry, Indiastat.com, LNCS and Proquest Dissertation and Thesis Database and also subscribed 14 new e-resource/ database/ e-journals like ASTM, ACI, BIS Standard, Case Studies-IIM, Ahmedabad, Capitaline, IEEE–IEL, EBSCO-Business Source Elite, Emerald, Wiley, WSP, WDA (Archive 1817-2009), SIAM-17 e-journals and Sage-EMS etc.

Further, NIT Silchar also procured the Research tools like Scopus also purchased similarity check software like Turn-it-in. Library also get access to the e-books from the major publishers like Elsevier, Springer, Pearson, and Cambridge, Proquest e-brary purchased by NIT Silchar, World eBook library provided by NDL and South Asia Archive provided by e-ShodhSindhu. In 2017-18, Library has purchased e-books from renowned publishers like Springer-Nature, Tata McGraw- Hill, Oxford University Press and Taylor & Francis.

Usage Statistics of Electronic Resources

Major electronic resources have shown a significant increase in use pattern. The most popular full-text databases are ACM, ASCE, ASME, Elsevier' Science Direct, IEL, Springer Link, ACS. Comparative data of last four calendar years is given below:

Uses Statistics from 2014 to 2017

Sl. No.	Source	Year wise download statistics			
		2014	2015	2016	2017
1.	ACM	1225	1689	2090	18,141
2.	ASCE	4155	6523	5902	8,894
3.	ASME	1997	1433	2762	2,104
4.	Elsevier Science Direct	103,067	127,004	1,43,521	1,79,704
5.	IEEE- IEL level 2	73476	74420	40,314	49,969
6.	Springer Link (1400+ Jnls)	12315	16370	17,477	22,142
7.	AMS	358	3218	2230	2,838
8.	Taylor & Francis	4959	5781	5714	7,634
9.	Emerald	105	526	2960	3888
10.	Proquest Dissertation and Theses	--	1337	1391	1877

3. BUDGETARY DETAILS:

Central Library received a projected allocation of 350 Lakh under Plan-Head during the financial year 2017-18. Out of the allocation of Plan funds Rs. 25,74,764.00has been utilized for purchase of books and Rs. 4,33,65,076.52 has been utilized for renewal as well as new subscription of e-resources. The comparative statement of detailed

expenditure incurred on books, journals, newspaper, binding etc. for the year 2014-15 to 2017-18 is given below:

Details expenditure:

Year	Books	e-Books and archive of e-Journals	Printed Journals/ Magazine	Online Database/e-Journals	Contingency/ DOC	News paper & Magazines
2014-15	36,04,675.00	10,50,903.00 (TEQIP – II)	1,51,210.00	1,97,50,106.00	3,51,562.00	17,562.00
2015-16	20,63,132.00	---------	1,94,533.00	2,49,63,597.00	1,33,980.00	20,072.00
2016-17	17,05,851.00	70,558.00	----------	----------	32,295.00 & Rs. 3,51,475.00 for AMC of equipment	----------
2017-18	25,74,764.00	1,03,55,883.00 (TEQIP III) 87,72,895.00 (Institute Fund)	2,80,098.00	4,33,65,076.52	1,51,343.00	_____

4. MEMBERSHIP:

All the Faculties, staff and students have got the Library membership. The following table reflects the growth of library users:

S. N.	Members	2014-15	2015-16	2016-17	2017-18
01.	BTech	2226	2340	2458	2460
02.	MTech	372	394	423	430
03.	MBA	71	101	97	83
04.	MSc	47	42	35	39
05.	PhD	170	263	284	516
06.	Academic Staff (Teaching)	199 (including Contractual)	165 (including Contractual)	166 (including Contractual)	181
07.	Non-Academic	55	130	108	59
Total		**3140**	**3475**	**3631**	**3768**

5. LIBRARY SERVICES:

Circulation service

The books circulation service is kept open for 40 hours a week. The Library issued25397numbers ofbooks during the year 2017-18.

Resource Sharing

The library maintains excellent relations with libraries of Assam University, and other local college libraries in Sothern Assam and also with DELNET for exchange of books, journals, photocopies etc. for the mutual benefit of the users. Library provides resource sharing service through inter-library loan and document delivery services. Library has core membership of E-ShodhSindhu, NDL.

Book Bank facilities

The library maintains a book bank facility to help students belonging to Scheduled Castes, Scheduled Tribes, Physically Challenged and economically weaker sections of the society. The book bank mainly consists of the prescribed text books for undergraduate courses and loans up to 5 to 7 books each to these students for full semester and sometimes more depending on availability. During the year, 500 students availed this facility and borrowed 3895 books from this collection.

Lib 2.0 SERVICES

Library users can get the latest updates/happenings in the library through our library blog at http://library-

nitsilchar.blogspot.com/ and get connected through our Facebook group at http://www.facebook.com/groups/369833813038102/. Central Library has created a web portal for e-resource management, which provides web-based access to its electronics journals, e-books and databases. It has set up a digital library & e-learning portal for the NIT, Silchar community. The library is a part of the institute-wide network and has adequate computing infrastructure to cater to the needs of the users.

Web OPAC (Search Library Catalogue): The entire Library collection including books, journals, CDs etc. can be searched through the web enabled Online Public Access Catalogue (OPAC). Users can access the OPAC to find out the real-time availability of library materials from their own computer terminals from library of institute website or the URL is: http://10.30.30.20:8001

6. LIBRARY ORIENTATION & TRAINING

Library Orientation for fresher / user's education

Library has taken key initiatives for 'user's education programme' to inform, educate and train users about various resources and services of the library. In addition to that library organizes orientation programmes for new students. During the year library also organized three library orientation programmes where users were familiarized with various resources and services.

7. MANPOWER DEVELOPMENT

The library has a small team of talented and dedicated staff to perform their duties and responsibilities with dignity and honestly. In addition to their regular jobs, most of them are involved in various academic activities like attending workshop, presenting papers in journals, seminars and conferences, delivering lectures in various training programmes, serving on various expert committees etc.

Dr. Kishor Chandra Satpathy, Librarian

Honours, Awards, Prizes

Received certificate of Appreciation for ILN in recognition for the work as the country Ambassador for India, for the International Librarians Network, Australia in June 2017.

Programme Organised:

"Train The Trainer" National Workshop on Massive Open Online Courses (MOOcs) from 26-27 Aug 2017 sponsored by Thapar University, Patiala & Royal Academy Of Engineering (UK) & TEQIP III (https://moocsworkshop.blogspot.in)

Library Orientation Programme & User Awareness Programme on JGate. (http://library-nitsilchar.blogspot.in/

Edited Publications (Books)

Digital Library & Open Access Initiatives: Responses, Strategies and Emerging Trends published by Shankar's Book Agency Pvt. Ltd, New Delhi, 2017, (ISBN 978-93-81893-13-5)

Emerging Trends and Human Resource Management in Library and Information Centers published by Shankar's Book Agency Pvt. Ltd, New Delhi, 2017, (ISBN 9789381893111)

Publications (Conference Proceedings): National

Singha, Krishnamati & Satpathy, K C; "Change Management in New Age Libraries: A Case study of Central Library, NIT Silchar" in the Proc. "1st International Conference on Transforming Library 2017", ed. Singh, Sanjay Kumar [et.al] (Guwahati: MRB Publishers), 2017: 167-179. (9789383403042)

Worked as a resource person in the following training programmes:

Acted as Panellist in the panel discussion on "Challenges faced by Librarians from resource acquisition to engagement" organised by Wiley India on 20th December 2017 at New Delhi.

Acted as an invited speaker and co-chaired a session in "1st International Conference on Transforming Library 2017" held on 8-10 July 2017 at CIT Kokrajhar.

CDAC

Education: Capacity Building through Internship in the Area of SCADA and Automation, a project conducted in collaboration with NIT, Silchar was concluded successfully with the training of over 30 interns from across the different NE states participating.

- IT training program for Candidates Belonging to the North Eastern States of India.
- Establishing research Laboratories using C-DAC Labkits in North East Region Educational Institutes.
- Delivery of courses through virtual classroom between NIT Silchar and NIT, Manipur.
- Empowering NE manpower with IoT skills to support Digital India and Smart City initiatives.

C-DAC offers several short term courses in Networking, Web Technologies and IoT at its premises. In addition to this, C-DAC has conducted summer training for student of Assam University, NIT Silchar in the area of Advance Java, Python Programming concept.

E-Governance: C-DAC has successfully implemented e-Aushadhi in the states of Manipur and Meghalaya. E-Aushadhi is now being implemented in Sikkim and Arunachal Pradesh.

Emergency Response Support System (ERSS) is the vision of Ministry of Home Affairs (MHA), Govt. of India, to launch a nationwide, unified emergency response system with a single emergency number '112', for all kinds of emergencies and distress calls from across the country. NERS is designed to address distress signals from citizens in the form of voice call, SMS, e-mail, panic SOS request, web request etc. All these distress signals are sent to the common number 112. C-DAC, Silchar is implementing the roll out of this project in the NE states. This project is expected to go-live in all the states before March, 2018. C-DAC also sets up cyber-forensics training and analysis labs for Law enforcement Agencies of NE states.

PMGDISHA: C-DAC is authorize assessment agency for remote proctoring of PMGDISHA(Pradhan Mantri Gramin Digital Shaksharata Abhiyan and is conducting online assessment for certification for candidate across India.

Indian AIRFORCE Recruitment: C-DAC has been awarded responsibility for conducting recruitment examination for Indian Airforce including development of software, conducting online examination india and processing of result. The exam is conducted four time in a year all over india.

Social Empowerment: e-Saadhya, an Adaptable & Accessible e-Learning framework for the children with mild mental retardation and Autism. IT enabled computer aided design for weavers and artisans of Cachar District, Assam.

Out Reach: C-DAC is conducting Training in C-DAC educational technology solutions to schools **OLAB (Online Labs) & e-Basta and also conducting ISEA workshops to government officials and people across North East states.**

Supercomputing Centre

NITS Supercomputing Centre,***TheCentre of Excellence in High Performance Computing (HPC)*** *was* commissioned on 05 April 2014 and it was first of its kind in North East NITs having state-of-the-art Supercomputing Centre built with x86_64-bit latest Intel Ivy Bridge processing and Accelerators (Intel Xeon Phi and NVIDIA Kepler Co-processing) technologies with a compute power of 15 Tera Flops, established in collaboration with C-DAC, Pune. The HPC Centre comprises of one Master node, sixteen compute nodes with NVIDIA GPU, Intel Xeon Phi Accelerators, and 84TB storage capacity connected by Storage node, management node and Infy band of 56Gbps connectivity. It has been used on high priority by the researchers of North East Institutions in computational science and engineering research and also highly acknowledged through research publications. The project proposed by Dr. T. R. Lenka, Coordinator, HPC entitled"**Capability building through Internship Scheme for UG/PG/PhD Research students of recognized universities/institutes in North Eastern India for strengthening research and development using HPC Technologies**" was approved by C-DAC North East Steering Committee for 2 Years (2016-2017). It covered internship of 50 students from North East Technical Institutions with stipend of Rs. 5000 per month for two months and Internship held at C-DAC, Pune. The NITS Supercomputing Centre has also shown interest to be a part of the ongoing National Supercomputing Mission (NSM) of Govt. of India

Institute-Industry Partnership Cell (IIPC)



To keep up with the increasing demand of Industry Ready Professionals and establish the Institute as a research oriented centre of excellence, NIT Silchar thrives hard to establish Institute-Industry Collaboration. The Institute- Industry collaborations have been executed in various modes, such as Testing, Consultancy Project, and Joint Research Project etc. Various MoUs are being signed for a fruitful Institue-Industry Collaboration.One audit course titled "Off Highway Vehicle" is developing in collaboration with NASSCOM and TATA Technologies.

Research Promotion Cell (RPC)

The genesis of the Research Promotion Cell by the National Institute of Technology, Silchar in the year 2012 has been a phenomenal step towards materializing Innovation. The cell dedicates itself for development of ideas in the field of science and technology. It provides research support to B.Tech./M.Tech./M.Sc. students for pursuing exciting and Innovative research. The principal objective of this body of research includes:

• Promotion of professional and academic activities.

• Provide career guidance to students

• To involve young brains in Science, Engg. and Technology development process

FACILITIES :

Research Promotion Cell has a dedicated air conditioned computer Lab with Wi-Fi and dedicated Internet access which remains open for 24 hours and provides a perfect atmosphere for research. Funding is provided for equipment, consumables, travel, staff/ labour charges and contingency. Research Promotion Cell not only provides support to the research oriented students, but also informs all the students of NIT Silchar about various internships opportunities in India and abroad through its facebook page. This has benefitted not only students of NIT Silchar, but also students from other colleges too.

PROJECTS:

Some research projects undertaken by the students include:

- Integrate of MPPT based on solar power generation hybridized with thermocouple principle, based solar generation, enabled with wireless transmission of solar power from ocean buoys
- Self Stabilized Quad- rotor with GSM Navigation
- Solar fountain
- Quadcopter and Image processing
- Ethane-o-creeper
- DC generator by using electromagnet (Solenoid)
- Refrigerated automatic pet feeder
- Solar powered bamboo rickshaw
- Design & Development of efficient tea leaf plucking machine
- Focusing & positioning system using automated robot
- Gesture Recognized Robot
- Study on improvement of bearing capacity of soft clay using geocell reinforcement
- Development of new triaxial cell for determination of shear parameters of soil

Indovation

The Indovation Lab, NIT Silchar came into existence with the vision to sensitize the young minds towards innovation and to foster original and creative thinking in them so that their ideas can be developed, shaped and transformed into products. The name of the center is given as INDOVATION LAB which is incepted and inspired by the concept of INDianInnOVATION. The Indovation Lab is working as a single window for idea generation, Establishment of plan, product prototype and start-up enterprise formation since its inception. It is equipped with 3-D Printing facility, Mechanical Devices, Electronic measuring instruments and gadgets, computer terminals with wi-fi connectivity etc. and has already started with product prototype development and start-up business model. It also offers few Audit and Credit courses on Design and Innovation, in consultation with industry and Academia with the Mission -

- To promote innovation and design in the country
- To promote innovative product development for social needs
- To initiate start-ups and endorse product ideas
- Nurturing creative minds of techies and entrepreneurs
- To be a unique platform where innovation meets design
- Skill development and creation of job through entrepreneurship

Achievements:

The Indovation Lab has made notable achievements in a very short span of time since its inception. Some of the activities and achievements of Indovation Lab are as follows:

PATENTS FILED-

- Development of composite material from oil extracted and alkali treated Cashewnut shells (Anacardium occidentale) [Examination awaited] Patent No- 201731007337
- Development of composite material from biodegradable Cashew nut shell (Anacardium occidentale) [Examination awaited] Patent No- 201731007338
- Easy Biometric Attendance System (eBATS) patent Number: 201731037542 [Examination awaited]

PROJECT PROPOSALS-

- Proposal entitled “Development of portable device to examine Sodium–Potassium content in blood” submitted to “PRATYAKSHA AGROTECH PRIVATE LIMITED” is approved and a grant-in-aid of Rs 500000 is received.
- Proposal entitled “Design and Development of Mobile Intravenous Drip” submitted to Innovation & Entrepreneurship Development Centre (IEDC) NIT Silchar is approved and a grant-in-aid of Rs 60000 is received.
- Proposal entitled “Utilization of fish scale bio waste of Puntius conchonius for development of composite bone scaffold” has been submitted to DST is under review.

PARTICIPATION IN SEMINARS/ WORKSHOPS/ COMPETITIONS OUTSATION-

- Students of Team Tejas 3.0, NIT Silchar has developed “HUMAN ENERGIZED VEHICLE” and participated in HPVC, Asia Pacific’18 Competition which held in Delhi Technological University, Delhi from 16th to 18th march, 2018.

PROJECTS:

Baja SAE is an intercollegiate design competition run by the Society of Automotive Engineers (SAE). Teams of students from universities all over the world design and build small off-road vehicles. The goal in Baja SAE racing is to design, build and race off-road vehicles that can withstand the harshest elements of rough terrain.

Project Plan:

1) **Cost to Performance ratio-** Our primary aim is to fabricate a vehicle with good body (roll-cage) strength with reduction of overall weight by optimising its design. Keeping the cost as one of the important priority we are focused to maximize the performance and minimizing the cost under the allotted budget.

2) **Sponsorship and cost management**- Our sole aim is to acquire maximum financial support from external means like Industries and Dealers and service providers. We are trying hard and approaching sponsors to minimize the financial support from the institute.

3) **Training and Automotive Skills Development**-For the benefits of the scholars of our institutes we are planning to conduct theoretical and practical sessions by us and professionals to educate our fellow juniors about the dynamics of vehicle, different stages involved in development of vehicle and various mechanical engineering concepts related to this field. To grow knowledge related to automobiles, motivating and educating them about different competitions to take part in it are the major goals for stabilizing a club in the institute.

Project Grant in Aid : Rs 7,00,000.00



PUBLICATIONS-

1. Payel Deb, Ashish B. Deoghare, Animesh Borah, Emon Barua, Sumit Das Lala "Bone Scaffold Development using Biomaterials: A Review", Materials Today: Proceedings 5 (2018) 12909–12919.

2. Emon Barua, Ashish B. Deoghare, Payel Deb, Sumit Das Lala "Naturally derived biomaterials for development of composite bone scaffold: A review", IOP Conf. Series: Materials Science and Engineering 377 (2018) 012013 doi:10.1088/1757-899X/377/1/012013.

3. Payel Deb, Ashish B. Deoghare, Emon Barua "Poly ethylene glycol/fish scale-derived hydroxyapatite composite porous scaffold for bone tissue engineering", IOP Conf. Series: Materials Science and Engineering 377 (2018) 012009 doi:10.1088/1757-899X/377/1/012009.

4. Payel Deb, Ashish B. Deoghare, "Effect of pretreatment processes on physico- chemical properties of hydroxyapatite synthesized from Puntius conchonius fish scales" , Bulletin of Materials Science. [SCIE]. (Accepted)

5. Sumit Das Lala, Ashish B. Deoghare, Sushovan Chatterjee, "Effect of dual pre-treatment on the mechanical, morphological and thermal properties of biodegradable waste Rubber seed shell reinforced epoxy composites", Arabian journal for science and Engineering. doi- https://doi.org/10.1007/s13369-018-3302-3.

6. Sumit Das Lala, Ashish B. Deoghare, Sushovan Chatterjee, " Effect of Reinforcements on Polymer Matrix Bio-composites-An Overview. Science and Engineering of composite materials", doi- https://doi.org/10.1515/secm-2017-0281.

7. S D Lala*, A B Deoghare and S Chatterjee, "Mechanical and Morphological characterization of Walnut Shell reinforced epoxy composite ", IOP Conf. Series: Materials Science and Engineering 377 (2018) 012011 doi:10.1088/1757-899X/377/1/012011

Startup Centre NIT Silchar

Under the joint initiative of Department of Science and Technology (DST) and Ministry of Human Resource Development (MHRD), NIT Silchar has been granted **Start Up Centre** in 2016 under 'Start-Up India' Scheme which was launched by Hon'ble Prime Minister of India from VigyanBhavan. The startup centre is a three project worth of Rs.1.5 cr. jointly funded by MHRD and DST, GoI.Startup Centre (F. No. 5-2/2016-TS-VII dated 17th May, 2016) is equipped with 5000 sq.ft well-furnished area to offer modular office space to entrepreneurs with Conference hall, Internet facility, cafeteria etc. The preliminary exertion for the project Start-up Centre at NIT Silchar has been started as per the guidelines and financial aid received from MHRD and DST, GOI and there were 10 nos. of startups selected for the year 2016-17 out of which four are started by our own students.

Project Coordinator : **Dr. Wasim Arif,** Assistant Professor, ECE

Joint Co-coordinators : **Prof. Ashim Kanti Dey,** Professor, CE

Prof. M Ali Ahmed, Professor, CE

Prof. A K Barbhuyia, Professor, CE

Startup Centre of NIT Silchar was inaugurated by Hon'ble Chief Minister of Assam, Shri SarbanandaSonowal on 5thSeptember, 2016. The Start-Up Centre, NIT Silchar aims to inculcate the spirit of innovation & creativity amongst the students and entrepreneurs of North East region by encouraging and supporting innovative ideas to start-up creation throughintermediary stages of innovation, incubation and entrepreneurship.

The complete list of all the Start-ups under Start-up Centre of NIT Silchar are listed below:

1. Doorhopper
2. Agro Pratakshya
3. Art Exlpora
4. Educile Tutors
5. Edports
6. VewMet
7. Roghaari
8. Rushbud

The Start-up Centre also includes an official entity as E-CELL, NIT SILCHAR which looks after all the activities and events related to business and entrepreneurship in the college.

E-CELL
NIT SILCHAR

Entrepreneurship Cell (E-Cell) NIT Silchar is a non-profit organisation whose main aim is to act as a link between the students and their entrepreneurial aspirations. It functions to bridge the gap which comes in the path of success for a budding entrepreneur by equipping him/her with the relevant skill-set required to excel in the market.

E-Cell NIT Silchar has organised numerous events, competitions, real-time pitching simulations, Business-plan models and market-trade analysis scenarios to name a few.

Here is the list of some of the notable events and competitions which E-Cell NIT Silchar organised successfully:-

1. Empresaario|Tecnoesis 2017:

Under the banner of Tecnoesis 2017, E-Cell NITS organised a whole module named “Empresaario” comprising of various events to foster and promote the Entrepreneurship culture in our campus, list of which is as follows:-

a. Pitch Please:

A real-time simulation event for the entrepreneurial minds wherein they were supposed to pitch their mind boggling ideas in front of the judgement panel along with the audience. This event was aimed at targeting and honing the influencing aspect required in any Entrepreneur which is needed in times of presenting their ideas before others.



b. If I Were the CEO:

An online event where the participants were asked to step into the shoes of the CEO of a leading multi-national company in order to provide a real, applicable solution to the specific problem being faced by that company/startup. This event required solving of some of the unique as well as original questions which appears before the CEO.

c. Plantastic:

A two-stage event where part 1 comprised of a quiz consisting of questions from the trending concepts of market, business, economics etc. The participants who cleared part 1 where able to participate in part 2. Here they had to design a fully-functional Business-model about a specific issue but in less than 24 hours.

d. Bech Ke Dikhao:

An event full of fun and frolic where the participants had to sell virtually useless products such as torn clothes, used bottles, broken umbrella etc. It required thinking out of the box approach so as to convince the audience to buy that particular product (virtually). The participation was huge and people were very enthusiastic about the uniqueness and the fun aspect of this event.

2. INTERACTION VIDEO:

An interaction video was shot by the team of E-Cell NITS inside the campus itself. The host asked various simple yet not-much-thought-about questions to the students of various disciplines and programmes of our college. It was really amazing to see the responses of the students and their opinions about the various issues happening around the world of business, trade and startups.

3. ORIENTATION:

E-Cell NITS conducted its orientation programme (2018) for the freshmen of our campus to make them aware of the existence of E-Cell NITS and its achievements in the past. It highlighted the students about the need of building startups, having an entrepreneurial bent of mind, various aspects of taking risks and learning and growing in the process. The session was witnessed by a hugely enthusiastic audience and they also got many of their doubts cleared in the session.

4. ORIENTATION QUIZ:

The orientation was followed by a two-round Quiz comprising questions related to various aspects of business, startups, trending terms of the industry market and some general knowledge. It was heartily accepted by the students and they participated wholeheartedly in the Quiz.

5. E-CELL WARFARE

E-Cell NITS in association with “Dare2Comptete” (an online platform of hosting various quizzes, competitions, events etc) conducted 3 online Quizzes as follows:

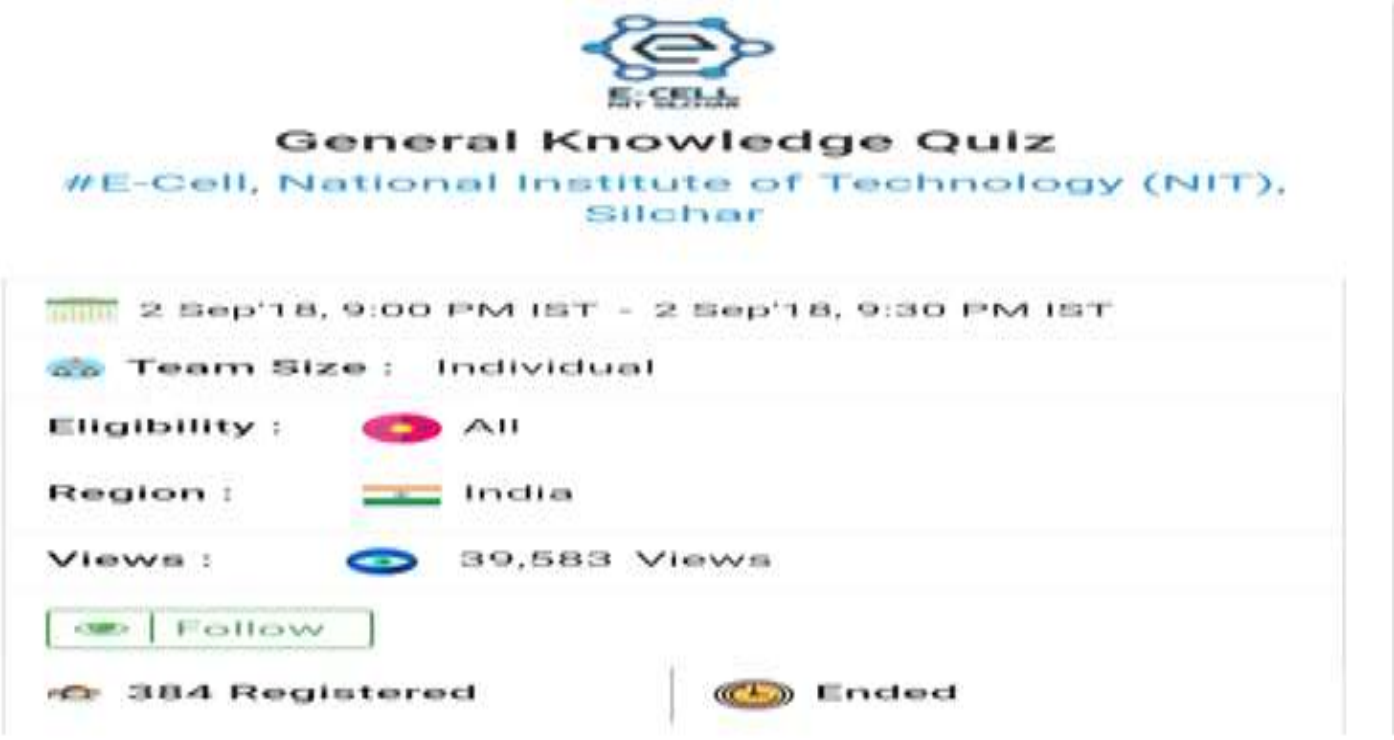
a. Entrepreneurship Quiz



b. Tech Quiz



c. General Knowledge Quiz



All the three Quizzes had participation from all over the country. The winners of the various quizzes were provided with e-certificates by the E-Cell NIT Silchar. This was the event with the most widely reaching audience.

E-CELL NIT Silchar bagged the 2nd prize all over India among various E-Cells of different colleges in the competition "E-CELL WARFARE" organised by 'Dare2Compete'. This feat is really commendable and appreciable. It has paved a new way for the development of our E-Cell and its promotion around India.



1. Empresaario 2.0 | Tecnoesis 2018

These events were organized by E-CELL ,NIT SILCHAR during Tecnoesis,2018.

a. Pitch Please

b. If I Were the CEO

c. Ad-ovation

d. Bech Ke Dikhao

e. Taglore

We have also organized a Guest Lecture under Conferenza Event in Tecnoesis 2018, in which we invited Mr Abhinav Prateek also known as 'ABBY VIRAL' as the guest speaker, who is an Entrepreneur, YouTuber, Motivational Speaker, and an influencer.

Future event to be organised is as follows:-

1. E-SUMMIT NIT Silchar:

E-Cell NIT Silchar wishes to organise an "E-Summit" for two days in the second week of March 2019. This would be a one of its kind of event in the entire North-East. We wish to have various events, competitions, guest lectures, seminars, workshops etc. in the summit. It would provide the students of NITS and adjoining areas with the insights required to outshine their competitors. What is the need of the hour is to develop and foster the culture of thinking out of the box and working out innovative ways of solving the complex problems with meticulous proficiency. E-Summit would be an ideal platform for the raw talents of our campus to emerge as leading business tycoons of the future generations.

2. Weekly Events

E-Cell NIT Silchar is planning to organize various weekly events like pitching,business model presentations etc., to give a taste of entrepreneurship to all the enthusiasts.

Pictures of Various Events Organized by E-CELL, NIT SILCHAR













Students' Activities

Scholarship / Assistantship Awarded to the students during 2017-18:

The students, of this Institute, are awarded various types of scholarships from various schemes of Central Govt., State Governments, PSUs, Charitable Trusts/ Organizations. During this period under review no. of students received scholarship/stipend from various sources.

Sl. No.	NAME OF THE SCHOLARSHIP	Name of the State	Amount of Scholarship awarded in 2016-17 (RS)	No. of students received the Scholarship	Remarks
1.	Govt. of Andhra Pradesh	Andhra Pradesh	70000.00	2	
2.	Govt. Of Bihar	Bihar	1141880.00	18	
3.	Telengana	Telengana	655240.00	12	
4.	Govt. of Maharashtra	Maharashtra	78740.00	1	
5.	NEPCO	NEPCO	107000.00	3	
6.	Central Sector Scholarship	All India	1900470.00	17	
7.	Swami Dayanand Education Fund		155000.00	7	
8.	Hans Cultural Charitable Trust		51600		
			Total - 4159930.00	**60**	

Apart from the aforesaid Scholarships, guardians of our students also avail reimbursement of educational expenditure from their employers like – BSNL, Railways, & other Govt. / PSUs on our recommendations.

Other than this, there are many more scholarship schemes of Central & State Govt. of India where the students are directly benefited. The Institute only recommends the application of the students. If selected by the awarding authority, the students directly receives the money on their bank accounts.

Assistantships (M.Tech / Ph.D): Students admitted in the M.Tech & Ph. D programme in the institute are awarded Assistantship as per norms of MHRD and Institute. To be eligible for this Assistantship, a student must have cleared GATE/NET/UGC exams & must be a regular non-sponsored student.

Railway concession service is also provided to students of NIT Silchar from Dean (SW) Office.

NIT Silchar encourages its students for sports and other activities as well. Students are involved in NCC/NSS/ Gyansagar and various other co-curricular activities. They also have a student union body, known as "Gymkhana Union Body"

STUDENTS' GYMKHANA

In pursuit of excellence and giving life a meaningful direction, Students' Union body **"Gymkhana"** of NIT Silchar works towards profound personality development of NIT students by infusing in them a spirit of constructive co-operation, leadership qualities and organizational capabilities. This is being achieved by involving them in a wide spectrum of Sports & Games as well as Social & Cultural and Technological activities throughout the year.

The year 2017-2018 was also full of activities and achievements and students have made the Institute proud by maintaining high standards of organizational and leadership qualities.

LIST OF GYMKHANA OFFICE BEARERS 2017-18

Sl. No.	Name	Sch. No.	Portfolio	Contact No.
1.	DEV MANAS	14-1-2-027	**Vice President**	8135044969
2.	BHAWANI SHANKAR SHARMA	14-1-1-102	**GS (Gymkhana)**	7086880300
3.	SHISHU KUMAR	14-1-3-114	**Treasurer (Gymkhana)**	8134977083
4.	SHUBHAM TIWARI	14-1-2-062	**GS (Technical)**	9508363317
5.	ANIKET RAJ	14-1-4-093	**GS (Cultural)**	9085235795
6.	SHUBHAM ANAND	14-1-6-040	**GS (Sports)**	8011851644
7.	ANKAN KISHORE PATHAK	15-1-1-027	**Secretary, Eco Club**	8752078081
8.	SUMIT KUMAR TIWARI	15-1-6-046	**Secretary, Kabaddi & Kho Kho**	7073268463
9.	VAKKALA MANOJ KUMAR	15-1-5-069	**Secretary, Cricket**	8134082157
10.	CHEPPALA SIDDARTHA	15-1-6-071	**Secretary, Indoor games (Badminton, Chess, Carom & TT)**	7896542499
11.	ANSHUMAN ROY	15-1-1-042	**Secretary, Football**	8399826398
12.	EESHAN DUTTA	15-1-1-046	**Secretary, Tennis**	8474031019
13.	PRASHANT AWASTHI	15-1-3-133	**Secretary, Athletics and Gymnasium**	9453921635
14.	MIRZA KAWSAR AHMED	15-1-1-063	**Secretary, Trekking, Mountaineering, Karate and Skating**	8752925995
15.	BHARGAV DEKA	15-1-2-043	**Secretary, Basketball and Volleyball**	8638094948
16.	SAJAL GUPTA	15-1-4-109	**Secretary, Photography Club**	7086831220
17.	ANIRBAN ROY	15-1-4-012	**Secretary, Dramatic Club**	9085587009
18	CHIRANJEET DAS	15-1-3-046	**Secretary, Dance Club**	8472064360
19	AYAN NEEL MEDHI	15-1-6-056	**Secretary, Music Club**	9126676423
20	BHATTACHARYYA TRISHA	15-1-5-097	**Secretary, Literary, Publication & Fine Arts**	9954957615
21	PANCHALI BAISHYA	15-1-1-039	**Girls Representative**	7086764131
	DIIXITA GULGULIA	15-1-1-006		7399290900
22	ANAND JEE	16-2-4-208	**PG/PhD Representative**	8447576482
	SAURABH SHUKLA	16-2-1-005		8876360815

LIST OF FACULTY ADVISORS OF GYMKHANA UNION BODY 2017-18

Sl. No.	Name	Sch. No.	Portfolio	Contact No.	Faculty Advisor
1.	DEV MANAS	14-1-2-027	**Vice President**	8135044969	Dr. N.B. Singh
2.	BHAWANI SHANKAR SHARMA	14-1-1-102	**GS (Gymkhana)**	7086880300	Dr. Wasim Arif
3.	SHISHU KUMAR	14-1-3-114	**Treasurer (Gymkhana)**	8134977083	
4.	SHUBHAM TIWARI	14-1-2-062	**GS (Technical)**	9508363317	
5.	ANIKET RAJ	14-1-4-093	**GS (Cultural)**	9085235795	Mr. P.S. Neog
6.	SHUBHAM ANAND	14-1-6-040	**GS (Sports)**	8011851644	Dr. Saumya R Mohapatra
7.	ANKAN KISHORE PATHAK	15-1-1-027	**Secretary, Eco Club**	8752078081	Dr. Lakshmi Vara Prasad.M
8.	SUMIT KUMAR TIWARI	15-1-6-046	**Secretary, Kabaddi & Kho Kho**	7073268463	Dr. Manas Kumar Bera
9.	VAKKALA MANOJ KUMAR	15-1-5-069	**Secretary, Cricket**	8134082157	Mr. Umakanta Majhi
10.	CHEPPALA SIDDARTHA	15-1-6-071	**Secretary, Indoor games (Badminton, Chess, Carom & TT)**	7896542499	Mrs. Jupitara Hazarika
11.	ANSHUMAN ROY	15-1-1-042	**Secretary, Football**	8399826398	Dr. Rupak Dutta
12.	EESHAN DUTTA	15-1-1-046	**Secretary, Tennis**	8474031019	Dr. Prashanth Janardhan
13.	PRASHANT AWASTHI	15-1-3-133	**Secretary, Athletics and Gymnasium**	9453921635	Dr. Avijit Chowdhury
14.	MIRZA KAWSAR AHMED	15-1-1-063	**Secretary, Trekking, Mountaineering, Karate and Skating**	8752925995	Dr. Lakshmi Vara Prasad.M
15.	BHARGAV DEKA	15-1-2-043	**Secretary, Basketball and Volleyball**	8638094948	Subhasis Panda
16.	SAJAL GUPTA	15-1-4-109	**Secretary, Photography Club**	7086831220	Dr. Koushik Guha
17.	ANIRBAN ROY	15-1-4-012	**Secretary, Dramatic Club**	9085587009	Dr. Dibyakusum Ray
18	CHIRANJEET DAS	15-1-3-046	**Secretary, Dance Club**	8472064360	Dr. L.C. Saikia
19	AYAN NEEL MEDHI	15-1-6-056	**Secretary, Music Club**	9126676423	Dr. A.K. Sunaniya
20	BHATTACHARYYA TRISHA	15-1-5-097	**Secretary, Literary, Publication & Fine Arts**	9954957615	Dr. Kishor Chandra Satpathy
21	PANCHALI BAISHYA	15-1-1-039	**Girls Representative**	7086764131	Dr. Abhishek Ray
	DIIXITA GULGULIA	15-1-1-006		7399290900	
22	ANAND JEE	16-2-4-208	**PG/PhD Representative**	8447576482	
	SAURABH SHUKLA	16-2-1-005		8876360815	

General programmes / Annual Festivals

i) **GYMKHANA HELP DESK:** This year, the Gymkhana Union Body took an initiative to facilitate the admission procedure for the incoming batch by providing volunteers at help desks so that the students along with their parents don't feel any discomfort or panic during the procedure. This served as a medium to showcase the warm hospitality of the NIT Silchar family.

ii) **ORIENTATION PROGRAM:** Like every year, Gymkhana Union Body 2017-18 organized an orientation session for the freshmen batch of 2017-2021. This orientation program helped the freshmen to know the entire administration of the college, the regulations and other important information. The honorable Director Sir, Deans, HODs, Wardens and faculty members of the college address the students for the first time. They were also introduced to the Gymkhana Union Body and its various activities. Judging by the response of the students of 2017-21 batch, this proved to be highly beneficial to them for the upcoming years of their college life.

iii) **RABINDRANATH TAGORE MEMORIAL DAY:** The ILLUMINITS organized Rabindranath Tagore Memorial Day on the 76thdeath anniversary of Rabindranath Tagore, India's most beloved and revered poet i.e. on the 8th of August 2017. It was an attempt to inculcate the noble values of the great man in everyone and introduce the young generation to the wonderful poems and songs he composed. The event comprised of Rabindra Sangeet competition as an ode to his classic songs, dance performances by the students, recitation of his poetic masterpieces by the students and faculty members and on the spot poetry and prose writing competition in English, Hindi and Bengali. The event was a success and applauded by one and all.

iv) **INDEPENDENCE DAY 2017:** NITS being the abode of patriotic souls, celebrated the 69th Independence Day with great zeal and enthusiasm. The tricolor was hoisted by Director Sir, followed by his inspiring speech. Events that followed included the marvelous parade by the NCC cadets and students of different hostels that set a remarkable example of synchronization.

v) **Blood Donation Camp:** A blood donation camp was set up on the Independence Day by the Gymkhana Students' Union body with the co-operation of the NCC students. Honorable Director Sir, faculty members and a large number of students came forward to donate blood henceforth contributing to the noble cause.

vi) **EKTA DAUD:**A marathon was organized in the college by Gymkhana Union body on August 14, 2017. Huge number of students participated in the marathon thereby depicting unity and harmony among them.

vii) **GENERAL FRESHMEN WELCOME PROGRAM :** A breathtaking and amazing night was put up by the Gymkhana Union body to welcome the freshmen to the college. The program unleashed overwhelming fun and excitement by the awe inspiring performances of the students. The most awaited "Mr. & Miss Fresher's "competition was also conducted on that day itself.

viii) **JANMASHTAMI:** The festival of the birthday of Lord Krishna, Janmashtami, was celebrated on 14th August with great enthusiasm. A puja for Lord Krishna was organized on that auspicious day in Hostel -7, which was followed by the most exciting "Dahi-Handi" competition, which involves the breaking of an earthen pot raised to a considerable height. The zeal and energy of the students was vividly demonstrated in the competition where all the hostels competed against each other. All the faculty members and students were invited to be a part of the grand celebration.

ix) **HINDI DIWAS:** MANTHAN'17, a show of respect for the Hindi language, was organized in NIT Silchar with the aim of promoting admiration for Hindi culture amongst the NIT family. In this age when this culture is striving hard to abstain from the ever so growing encroachment of foreign influence, the students of NIT Silchar came up with their solemn vow to keep up the age of Hindi culture strong and binding.

x) **Swachhta Pakhwara:** Extending its full support towards the Govt. of India initiative NIT Silchar organized the cleanliness drive- Swachhta Pakhwara in its campus as well as for its surroundings during the 1st & 2nd week of September 2017.

xi) **DURGA PUJA:** To seek the blessings of the Goddess of strength, Maa Durga, a 5-day celebration of Durga Puja was organised by the combined effort of the Durga Puja Committee and Gymkhana Students' Union Body from 26th ofSeptember to 30th of September with great pomp and show. The Durga Puja revelry was not only limited to the holy rituals, but also extended to the various cultural programmes including the exuberant "dandiya night" in which all the faculty members and students participated wholeheartedly with immense pleasure. The 3 days of extravaganza ended with the Idol immersion and bidding farewell to Maa Durga on the way to her heavenly abode.

xii) **DIWALI:** The whole campus of NIT Silchar was glowing with the shine of the magnificent diyas and colourful lights, on the pristine occasion of Diwali which was celebrated on the 19th October 2017. On that day the students got actively involved in making beautiful Rangolies and decorating their hostels thereby creating an amazing festive mood throughout the campus.

xiii) **TECNOESIS 17:** Tecnoesis 2K17 witnessed extravaganza of modules ranging from Robotics event to Events to bring out the non-technical intelligence of students as well in events like Smart City. It also had events for School children to harness their talents in technical and non-technical fields. Gamers and photographers of the college were not left unattended as V-Warz and Pixelate gave them the right platform to display their might. The fun events like zorbing, pedal boating and balloon shooting etc also attracted a lot of crowd. The fest also took care of its students' development and proper nurturing by enlightening the students to various personalities. The children were also exposed to various military equipment and a long list of Automobiles in the military and Auto Expo. The end of the auto expo saw a stunt show like never before as the enthusiasm of the students matched the high expertise stuntman to give a thrilling display of showmanship. The Spark Night saw the end of Tecnoesis 2k17. Spark Night witnessed the amazing performances of Rajasthani folk singer Moti Khan, the Hindi rock band 'Nalayak'and DJ Shanaya. It was the selfless effort and pure devotion of the Tecnoesis 2k17 team which made it a success.

xiv) **ALUMNI MEET:** Alumni Meet'17 was an emotional event which offered an opportunity to rejuvenate amidst the company of old boys and girls. NIT Silchar has the custom of welcoming its alumni after an interval of twenty five years, thus in its seventh incarnation, this meet was dedicated to the pass out batch of 1991 & 1992.

Promoting the values of cultural diversity of India and spreading the message of **'Ek Bharat Shreshtha Bharat',**with reference to the letter received from MHRD, Govt. of India the numerous events were organized details of which are given below—

xv) NIT Silchar invited renowned Rajasthani folk music artist Mr. Moti Khan to the campus and he presented us with an evening of soulful Rajasthani music. The students, staff and faculty members of the Institute received the music very well and overall it was an evening for all of us to witness the variety in the music of this culturally vastly diverse nation of India.

xvi) On 11th of November, 2017 NITS showcased a stage act enacting the life of a farmer in Rajasthan. Under the initiative of 'Ek Bharat Shreshtha Bharat', the students tried to showcase the hardships that a farmer and his family face. Right from the harsh weather conditions to the lack of rain, a farmer faces a lot. Then, they tried to showcase the evils of various money lenders and banks exploit farmers for their cause. A lot of farmers commit suicide owing to these factors. The students enacted how and what a farmer and his family members have to go through for each day of survival. The act was well received by the audience and the performers were bestowed by a standing ovation for the same.

xvii) Keeping in mind the festival of Lohri that is celebrated in Rajasthan, the students tried to showcase the same here at NI Silchar. The students came out in large numbers and enjoyed a mesmerizing evening with their friends. For a lot of them, it was a very different and new experience.

xviii) Bihu and Lohri, both are the festivals of the harvesting season. Followed by Lohri on the 13th of January, the NIT Silchar fretarnity celebrated Bihu with the same passion on the 14th of January. A glimpse of two different celebrations of the same festival was a whole different experience for the students in the Institute.

xix) NIT Silchar invited SWARAAG band all the way from Rajasthan to our Institute to showcase classical Rajasthani folk music to all the stakeholders of the Institute. This event was planned during the annual cultural fest of NIT Silchar to promote the cultural diversity of India. The band mesmerized the audience with their beautiful performance.

xx) NIT Silchar promoted the local cultural dance forms among the students of NIT Silchar. We invited Deusila Bihu Dol of Kahilipara, Guwahati to perform the traditional Bihu dance of Assam. We also invited Shri Satyajit Bose Joy to perform the local Dhamail Dance of Barak Valley.

The cumulative effect of all these events under **Ek Bharat Shreshtha Bharat** has been a better understanding and knowledge of the vast diverse cultures of Assam and Rajasthan by the majority of students, staff and faculty members of the Institute. Also, with the continuation of the events, it will help to further promote the cultural values.

xxi) **REPUBLIC DAY '18:** Like every other year, our institute celebrated 69th Republic Day on 26th January, 2018. The exuberance and the patriotism of the entire fraternity filled the atmosphere. The event began with an inspiring, kindling speech by Honourable Director Sir followed by a colourful parade by the hostels. The NCC parade aroused patriotism in everyone. Several cultural programs also followed up.

xxii) **Blood Donation Camp:** A blood donation camp was set up on the Republic Day by the Gymkhana Students' Union body with the co-operation of the NCC students. Honorable Director Sir, faculty members and a large number of students came forward to donate blood henceforth contributing to the noble cause.

xxiii) **INCANDESCENCE '18:** NIT Silchar celebrated its annual cultural fest Incandescence'16 from 17th February-19th February. The ambience of the institute had been full of fun and frolic. Several modules were chalked out catering to different fields. Dance Module (Natraaj), Music Module (Indie Lake), Film-making Module (Directors Cut) saw the dancing stars, the singing sensations and the prolific filmmakers among the youth; while the MUN module provided a platform for the budding MUNners. These events saw participation not only by the students of NIT Silchar but from various cities of India like Delhi, Mumbai, Kolkata etc. Pankaj Thapa of Dance India Dance fame who was invited entertained everyone with his dance moves. The literary module Deprador organised a debate competition and a book fair. The management department's module Paarbon organized events like Business Treasure Hunt, Poker

Night, virtual IPL auction, Ad-making competition, photography competition etc. The Fun Module had been another exciting one, with Prom Night, Roadies, Food Carnival etc. Another big event, Razzmatazz exclusively for the school children of Barak Valley allowed them to display their creativity and enjoy a fun-filled ride. Events from sketching to singing and dancing competition were held for the school kids. However, the cultural nights during the fest were the most promising. On the 18th night, Glitterati, a fashion show was held which as expected drew a huge audience. Carpe Diem, Jaspreet Singh(Comedian), Aakash Gupta(Comedian),Gajendra Verma, Swaraag, Harfun Maula, DJ Seezi and DJ Myris graced the 19th night. The satirical poems, the hilarious jokes and the bewitching musical extravaganza created an enrapturing atmosphere. On the 18th night Thunder march-the rock fest was held where rock bands from various parts of the country came here to compete with each other in the Battle of bands. Chronic Xorn created an electrifying atmosphere. The 4-day celebrations had been a huge success and surely enlightened one and all.

xxiv) **Self Defense Workshop for Women:** A two days' workshop on self-defense was organized by the Gymkhana Union Body of NIT Silchar on 23rd and 24th of March with an intent to empower the women and encourage them for self-protection.

xxv) **EDUMEET 2018:** The 'Third EDUMEET 2018' was jointly organised by NIT Silchar and Mitsubishi Electric India (MEI) at NIT Silchar on 23rd March, 2018, under the aegis of TEQIP III. This meet aims at bridging the gap between the Industry and the Academia. The objective is to discuss whether the current graduate attributes are sufficient to cater the expectation of the Industry from a fresh engineer. The brainstorming sessions were organised in the respective department to initiate the necessary revision of the curriculum. Further, necessary changes in teaching-learning process to attain the non-academic graduate attributes were discussed at depth. Apart from the experts from Mitsubishi Electric India, the experts from various Industries and R&D organisations such as CSIR, BSNL, IOCL, HPCL, IIATCA, FLUGEL-SOFT etc. attended the meet. The academicians from several IITs, NITs, Reputed State Universities, IEEE, ISA, representatives of all engineering departments (faculty members), NITS-Alumni, parents of current students, and senior students of NIT Silchar etc. also attended the same. Experts lectures are followed by brainstorming sessions on curriculum-revision. A tech-model competition and a poster presentation competition were held to showcase the talent of the students on factory automation. The coordinators of the event were Prof. B.K.Roy and Dr. P.Roy from NIT Silchar and Ms. Ripanjit Kaur (MEI).

xxvi) **NIT Conclave 2017:** The 7th edition of NIT Conclave - a pan NIT Confluence of students of all the NITs - was hosted by NIT Silchar during September 1st - 3rd, 2017, which was inaugurated by Dr. Banwari Lal Purohit, Former Governor of Assam. The event hosted a technical exhibition, a series of Guest Lectures by eminent personalities like, Dr TCA Anant, Chief Statistician of India. The confluence included a presentation competition and a technical competition among all the NITs, and NIT Silchar was the winning NIT among all the various NITs which participated in it, with SVNIT Surat and NIT Srinagar getting the 1st and 2nd runners up respectively.

Apart from all the above mentioned programmes NIT Silchar also celebrated many other events, e.g. World Environment Day 2017, International Day of Yoga 2017 etc.

Infrastructure and Amenities

Estate - An OVERVIEW :

1. Historical Background

In the late fifties, the Government of India decided to establish Regional Engineering College under the Quality Technical Education Police - one each in every major state – with the prime objective of imparting quality technical education throughout the country and to foster national integration. These Regional Engineering Colleges were established as joint venture of the Government of India and the respective State Government. Assam is a major state in the North-East of India and the 15th REC was officially established in Silchar in 1967. Though 14 other RECs started functioning within 1967, it took about another decade for REC, Silchar to start its academic programmes due to various constraints.

The college started functioning in 1967 from a camp office in Shillong (the then Capital of Assam) with Dr. S. K. Baruah as Principal and Prof. B. R. Seth, the then Vice-Chancellor of Dibrugarh University as Chairman of the Board of Governors. Subsequently, an area of about 540 acres of land was acquired by the Govt. Of Assam, on the outskirts of Silchar town. This land was part of Bhorakhai Tea Estate.

The first batch of students was admitted in 1977 in the B.E programmes in 3 branches of Engineering viz. Civil Engineering, Mechanical Engineering and Electrical Engineering. The total intake in the first batch was 60 students. The meagre infrastructural facilities consisted of only a part of a hostel, two seven faculty quarters and a few quarters for Grade-IV staff of the college when the college started its academic programme in November, 1977. Initially, the classes started with only 4 full time teachers and with Dr. H. R. Chablani as Principal. The college started its academic programme with affiliation to Gauhati University. The affiliation was later shifted to Assam University in 1994. The first batch of B.E students were awarded their degrees in the year 1982-83. Subsequently, two more branches viz (i) Electronics and Telecommunication Engineering and (ii) Computer Science and Engineering started functioning from the year 1983 and 1987 respectively. On the basis of the report of the High Powered Joint Expert Committee of AICTE and UGC under the chairmanship of Prof. S. K. Joshi, Director General of Council for Scientific and Industrial Research (CSIR), Regional Engineering College Silchar has been transformed and upgraded to National Institute of Technology, Silchar with a Deemed University status with effect from 28.06.2002. The Institute has been subsequently made into a fully funded Government of India Institution. This ensures a better financial status for NIT Silchar which will accelerate its growth and ensure that it becomes one of the premier technological Institutes of not just the North-East but also of the entire nation. The Institute has remodelled its curriculum and academic activities in line with that of IITs. With its Deemed University status, the Institute started awarding degrees from the year 2002 and the first convocation of the Institute is being organization today to award degrees to all those students who qualified for the degree after its transformation into an NIT.

2. Location

The Institute is situated at Silchar, the headquarters of the district of Cachar in Assam. The location of the Institute is at a distance of about eight kilometres to the south of the town of Silchar on the Silchar-Hailakandi road. Cachar is the southernmost district of Assam bordering Mizoram on south, Manipur on east and Tripura and Meghalaya on west.

3. Campus

The campus of the Institute is spread over an area of 540 acres. It presents a spectacle of harmony in modern architecture, natural beauty and picturesque surroundings. The campus area has been organization in three functional sectors, viz.

(a) Hostel for students.

(b) Instructional Buildings and Administrative Block.

(c) Residential sectors for the staff.

The instructional buildings have been so located that these are fairly near to both the hostels and the staff quarters.

There is a full-fledged branch of State Bank of India, a Post Office in the campus. The students & staff and also the villagers surrounding the campus get the facility of the SBI & Post Office. The Institute has its own Health Care Centre with a full-time Senior Medical Officer to attend to the emergency medical needs of the students, staff and their families. Patients suffering from serious illness, requiring intensive care, are referred to the Silchar Medical College & Hospital, which is only about two kilometres from the campus. The Institute have ambulance facility for shifting patient to the near by hospital. An adequately equipped canteen is there near the instructional zone and mini market complex which will provide facilities to the students and the staff during and beyond the working hours. There is a well equipped gymkhana and sports complex attached with a auditorium which are utilized by students for activity like gymnasium, indoor games and similar other pursuits.

4. Services

(a) Housekeeping of the campus (Except Hostel) : Departmentally

(b) Housekeeping of the Hostels : Outsourced

(c) Security Management of the campus : Outsourced

(d) Maintenance of Civil & Electrical : Departmentally

5. Staff Structure

(A) Administrative:

Sl. No.	Staff / Officers	Designation	Remarks
1	Dr. A. I. Laskar	Dean (P&D)	Regular
2	Dr. Debjit Bhowmik	Associate Dean (P&D)	Regular
3	Dr. J. P. Misra	Associate Dean (P&D)	Regular
4	Mr. Sikumar Chauhan	Assistant Engineer (E) & Estate (i/c)	Regular
5	Mr. Dhrubajyoti Chakraborty	Assistant Engineer (C)	Contractual
6	Mr. Rahul Suklabaidya	Junior Engineer (C)	Contractual
7	Mr. Bipon Sinha	Junior Engineer (E)	Contractual
8	Mr. Tapan Kumar Roy	Junior Engineer (E)	Contractual

(B) Supporting:

Sl. No.	Staff / Officers	Designation	Remarks
1	Mr. Debabrata Barman	Sr. Assistant	Regular
2	Mr. Subasish Barman	Technician	Regular
3	Mr. Ashok Kurmi	Technician	Regular
4	Mr. Monoj Gopal Deb	Attendant SG-II	Regular

6. Infrasturcture

Sl. No.	Name of building	Area (Sqm)
Staff quarters:		
1	Director's Bungalow	195.00
2	Professor quarters 7 units	1169.00
3	Asst. Prof. quarters 6 units	868.00
4	Type-D quarters 12 units	1344.00
5	Type-C quarters 8 units	480.00
6	Type-A quarters 12 units	540.00
7	Lecturer's quarters 15 units	1200.00

8	Teachers' Flat 12 units	590.00
9	Grade-III quarters 56 units	3600.00
10	Grade-IV quarters 30 units	1350.00
11	Type-VI(EL) Prof. qtrs. 12 units (old)	2466.00
12	Type-VI(EL) Prof. qtrs. 12 units (new)	2466.00
13	Type-V(E) Asst Prof. qtrs. 21 units (old)	2787.00
14	Type-V(E) Asst Prof. qtrs. 21 units (new)	2787.00
15	Type-IV(E) Lecturer qtrs. 30 units (old)	2556.40
16	Type-IV(E) Lecturer qtrs. 30 units (new)	2556.40
17	Type-III – 100 units	9923.04
18	KendriyalaVidyalaya qtrs.	1183.38
	Sub Total (A) -	**38061.22**

Hostels		
19	Boys Hostel No.1	3600.00
20	Boys Hostel No.2	2620.00
21	Boys Hostel No.3	2620.00
22	Boys Hostel No.4	5030.00
23	Boys Hostel No.5	2894.00
24	Boys Hostel No.6	7950.00
25	Boys Hostel No.7	7950.00
26	Boys Hostel No.8	20654.52
27	Boys Hostel No.9	23560.00
28	Girls Hostel No.1	2114.00
29	Girls Hostel No.2	3303.00
30	Girls Hostel No.3	3303.00
31	300 capacity P.G Hostel & 100 capacity Married Scholar Hostel	12060.00
	Sub Total (B) -	**97658.52**

Academic bldgs., Guest House, KID-NITS School, Post Office, KV School etc.		
32	New Administrative building	8846.36
33	Expansion of classroom	6974.00
34	Mechanical Workshop building	2588.00
35	Mechanical Department	1895.00
36	Civil Engg. Dept	2799.00
37	Electrical Engg. Dept.	1647.00
38	ETE building	1137.00
39	Central Store / Estate Branch	800.00
40	Library building (old)	975.60
41	Dispensary building	156.00
42	Vertical Expansion Dispensary building	189.00
43	Old Administrative building	800.00

44	NIT Café	416.00
45	Classroom Expansion Pt. II	2800.00
46	Expansion of Physics Dept (ground floor)	470.00
47	Expansion of Physics Dept (first floor)	164.00
48	Expansion of Chemistry Dept (first floor)	470.00
49	Expansion of Chemistry Dept (ground floor)	164.00
50	CSE & ETE building (G+2)	7935.70
51	Humanities Dept (first floor)	105.00
52	Mathematics Dept (ground & first floor)	195.00
53	Training & placement dept (second floor)	386.00
54	Students Activity Centre	1145.00
55	KendriyalaVidyalaya	4642.70
56	New Library building	7987.77
57	Guest House (old)	216.00
58	Guest House (new)	4079.17
59	Post Office	118.57
60	Earthquake Engineering Laboratory	2734.00
61	Production Engineering Lab under Mech. Engg. Dept.	5361.00
62	New Academic building	7935.70
63	KID-NITS School	152.64
64	NABL building	790.56
65	Expansion of Electrical Engg. Dept	1152.41
66	Eat-Out Dhaba	970.91
67	Sports Complex (Indoor & outdoor)	12565.92
	Sub Total (C) -	**91765.01**
	Grand Total (A+B+C) =	**227484.75**

VEHICLE MANAGEMENT

The Institute at present provides the following vehicles for various purposes as tabled below:

Sl. No.	Vehicle Registration No.	Type of Vehicle	Purpose
1.	AS11E-5501(SX4)	MarutiCar	ForOfficeUse
2.	AS11B-0930	TataBus	Forstaff& students
3.	AS11B-2703	TataBus	Forstaff& students
4.	AS11C-0043	Ambassador Car	Forofficeuse
5.	AS11E-2416	MarutiVan	Fordifferentlyabledstaff& students
6.	AS11AC-5027(Ambulance)	MarutiVan	Medicalpurposeforstaff&students
7.	AS11D-7736 Donated by NIT Alumni	TataIndigoCar	ForT&P,Academic& Officepurpose
8.	B-2701/2702	Tractor&Trailor	EstateBranch
9.	AS11CC-0712	Travellor (Force) 9 seater Mini Bus	ForT&Pandothermisc.purpose

BOARD OF HOSTEL MANAGEMENT

Name	Designation	Qualification (e.g., B. Tech., M. Tech., Ph.D.)
Prof. M.A. Ahmed	Chairman	Ph. D
Dr. D.C. Das	Vice Chairman	Ph. D
All Asso. Wardens of Hostels	Members	

THE HOSTEL

NIT Silchar is a residential campus. It provides hostel accommodation for students. Separate hostel accommodation is available for girl students. Apart from that, family accommodation is also provided to the married Ph. D scholars. It is mandatory for all the students to stay in the hostels. However, under special and extraordinary cases a student may be permitted to live with his/her parents or local guardian at Silchar. Students permitted to stay outside hostels are exempted from payment of mess charges, electricity and water charges under hostels fees but they will have to pay the hostel establishment charges. The name, full address, office and residence telephone number, designation and willingness of local guardian have to be furnished at the time of admission. Room allotment in the hostels is done in such way that students from different regions of the country freely stay with each other, depicting national integration.

The Institute has 13 nos. of hostels for the students inside the campus. 9 for the boys (UG/PG separate), 3 for the girl students (UG/PG) and one for family accommodation to the married Ph. D Scholars. Hostels' capacity varies from hostel to hostel. Available capacity of boys' hostels all together (UG/PG) is 2675, the available capacity of girls' hostel (UG/PG) is 403 and available capacity of Married Scholar Hostel is 106.

List of Asso. Wardens of Hostel

WARDENS				period	
Hostel No.	*Name*	*Designation*	*Department*	*from*	*to*
1	Dr. T.R. Lenka	Ph. D	ECE	03/03/2015	04/09/2017
	Dr. Pankaj Kumar Biswas	PhD	Mathematics	04/09/2017	Till Date
2	Dr. B.S. Sil	Ph. D	Civil	18/01/2016	Till Date
3.	Dr. N. Bhupendro Singh	Ph. D	HSS	3/11/2015	10/09/2017
	Dr.D.K.Ghose	PhD	Civil	11/09/2017	Till Date
4.	Dr. Ashraf Hossain	Ph. D	ECE	28/04/2015	04/09/2017
	Dr.R.Hazra	Ph.D	ECE	041/09/2017	Till Date
5.	Dr. S.S. Dhar	Ph. D	Chemistry	08/08/2014	31/08/2017
	Dr. N. Ahir	PhD	Civil	01/09/2017	Till Date
6	Mr. Saroj Kr Biswas	M.Tech	CSE	24/02/2015	04/09/2017
	Dr. JagaDish	PhD	Mechanical	05/09/2017	Till Date
7	Dr. Arup Kr Goswami	Ph. D	EE	10/02/2015	04/09/2017
	Dr. P.K. Gupta	PhD	Mathematics	05/09/2017	Till Date
8.	Dr. R.G Nair	Ph.D	Physics	04/02/2016	Till Date
GH-1	Dr. Nirmala Soren	Ph.D	EE	06/04/2015	Till Date
GH-2	Dr. Juthika Mohanta	Ph.D	Mathematics	10/04/2015	22/05/2017
	Dr. Munmun Khanra	PhD	E&I	23/05/2017	Till Date
GH-3	Dr. Banani Basu	PhD	ECE	18/07/2016	Till Date
PGH	Dr. A.K. Sunaniya	PhD	E&I	03/11/2016	Till Date
MSH	Dr. Sukumar Pati	PhD	Me	15/12/2015	Till Daste

Following are the list of facilities available in the Hostels:

1. Chair, Table, Bed, Wardrobe, and Fan provided in each room
2. Round the clock water supply and power supply.
3. Diesel generator (centrally) available in case failure of power supply.
4. LAN/ Internet
5. Wi-Fi connection
6. Inverter.
7. Water cooler cum Purifier.
8. TV Hall with LED TV.
9. Newspaper and Magazine.
10. Photocopier (Xerox) in each hostel.
11. Ambulance service round the clock.
12. Coffee house provided.
13. Indoor game like, Table Tennis, carom, chess provided.
14. LPG connection and fire wood cook house available.
15. Dining hall with dining Table/chair provided
16. Fire Extinguisher provided.
17. Bio Gas plant provided. (Only Hostel – 8)
18. Bi-cycle stand provided.
19. Badminton court with lighting arrangement available (Only BH-1 & GH- 2).
20. Washing Machine provided to the Girls Hostels.

Following are the list of services available in the hostels:

1. Security service
2. Cleaning service
3. Food & catering service
4. Maintenance of civil, electrical, plumbing & sanitary services.
5. Maintenance of Aqua guard & cooling cum purifier service.
6. Hot water for bath during winter.
7. Managerial service provided for messing & Maintenance
8. Vehicle service provided for attending classes.

HEALTH CENTRE

The Institute has a Health Centre with a full time Medical Officer to attend the Medical needs of the students, staffs and their families. The Health Centre apart from providing allopathic medicine also offers Ayurvedic treatment, Dental treatment, dressing and first aid ,pushing saline and injection ,dispensing medicines,ECG,Laboratory facilities (Blood & Urine tests) etc.

Patients suffering from serious illness, requiring intensive care are referred to Silchar Medical College & Hospital (SMCH) which is about two kilometers from the campus. There is also a students' counsellor who offers counselling to the students.

Ambulance facility is also available round the clock for any medical emergency.

KENDRIYA VIDYALAYA

The 6thAcademic Session for the year 2017-18 commenced from 1 st April 2017. The TotalEnrolment position of Students during the year was 885 with very healthy gender distribution of 457 boys and 428 girls. Atotal of 111 new

students were admitted in the Vidyalaya in the year 2017-18 with 85 of them in class I and 26 in other classes. In 2017-18, a total of 78 students appeared in CBSE Class-X Board Examination and 29 students appeared in Class-XII Board Examination. Out of these, 92.31% of students qualified Class X and 96.55% of students qualified Class XII examination. In Class-X, the highest percentage of marks was 94.8 % scored by Shivangi Verma. Similarly, the highest percentage of marks in Class XII was 94.6 % scored by Mihika Deb who also got Rs. 10,000/- prize money for standing in the top 1.5% of qualified students in CBSE nationwide merit. Various games and sports activities are regularly organized and conducted as an integral part of school curriculum in the Vidyalaya. Under the Sports category, the Vidyalaya has seen all-time high participation in the KVS Regional and National Sports Meets where 74 students participated in the KVS SIlchar Region Regional Sports Meet. Out of these 74 students, 14 students (including 5 girls) got selected for the KVS National Level Sports Meet in various events like Taekwondo, Skating, Chess, Rope skipping and Athletics. The students of the Vidyalaya very actively participated in Silverzone International Olympiad 2017-18 conducted in Mathematics, Science, English and Computer Subjects. A good number of students got Gold, Silver and Bronze Medals in each of these subjects. In addition, two students namely Purbita Banik, Class VII and Alisha Borah, Class VIII got selected for the 2nd level to compete for the top slots in Science Olympiad, and one student namely Dakshayani Sharma, Class VI got selected for the 2 nd level to compete for the top slots in English Olympiad. In the year 2017, several students from our Vidyalaya participated in KVS Cluster Level Social Science Exhibition out of which 2 students were selected to compete at the Regional Level of the Social Science Exhibition at Tejpur. A major event for the Vidyalaya was the 45 th Jawaharlal Nehru National Science Mathematics and Environment Exhibition for Children 2017-18 in which a large number of students from our Vidyalaya took very active part in the Regional Level program of the event and demonstrated their innovative ideas and concepts under various themes of the event through properly designed scientific models and exhibits. Five students from the Vidyalayawere selected in different themes for the KVS National Level program of the event that wasorganized by KV IIT Kanpur. Out of these, one Student namely Sourav Ghose, Class XI was selected for the National Level program of the Exhibition to be conducted by NCERT at Ahmedabad. Apart from students, teachers also brought laurels for the Vidyalaya. Our three teachers namely Mr. S. Umananda Sharma, TGT(P&HE), Mrs. Mayajyoti Dam, PRT and Mrs. Swagata Sen, PRT and one staff member namely Mr. Noni Gopal Nath, Sub-Staff were awarded with the prestigious KVS Regional Incentive Awards for the year 2017 for their hard work and full dedication put to their work-place.

Another great achievement of the Vidyalaya was that repetitively in the year 2017-18, KV NIT Silchar was awarded with the Green School or “Harit Vidyalaya Award-2017”-1st position out of 29 Vidyalayas presently working under KVS Silchar Region. During the session 2017-18, this Vidyalaya hosted many Regional Level programs like:

i) Rajya Puraskar Testing Camp for Guides- 2017 held between 18.07.2017 to 22.07.2017 in which 93 guide students from different KVs were trained.

ii) 30th KVS Regional Level Youth Parliament - 2017 held on 21.08.2017 for KVS Silchar Region in which 277 students from five different KVs participated.

iii) 45thJawaharlal Nehru National Science Mathematics and Environment Exhibition for Children 2017-18 (KVS Silchar Regional Level) held on 29.01.2018 in which 125 students from 21 Vidyalaya participated. Regarding the Staff details, a total of eleven permanent teachers joined the Vidyalaya in the year 2017. Out of them, three teachers joined as PGTs, three other teachers joined as TGTs and the rest five teachers joined as PRTs in October 2017. One of the PRT teachers out of them has resigned from the post on ground of joining service in some other department.

The Vidyalaya has got a state-of-the-art infrastructure that is well equipped with various facilities including 3 well-furnished Science Labs, 1 E-class Room, Language Lab., Yoga Room, Games Room, Music Room, Dance Room, Work Education Room, Art Room, Medical Room, CMP Resource Room, 2 Computer Labs, 1 Mathematics Lab, 1 junior science lab, 1 huge library with very good stock of books. Clean and well-maintained bathrooms are situated in all corners of the building. The Vidyalaya has got well-furnished building protected with strong boundary walls all around and a beautiful garden in the front.

A group of highly qualified teachers are engaged in devoted work round the corner for all-round development of the students in the Vidyalaya. This School is running with proper plan guided by KVS Regional Office, Silchar to achieve all the targets.

KIDS-NITS

NIT Silchar has a school for the kids of the campus as well as nearby areas that runs three classes viz. Nursery, KG 1 and KG .Apart from celebrating Independence Day, Republic Day, Teachers' Day and Children's Day, the school has also organized Drawing and Sports Competition among the kids.The parents-teacher meet has been organized. The school has also organized Health Check-up for the school kids in NITS Health Centre.

SPORTS COMPLEX & GYM

The Sports Complex, NIT Silchar has training facilities for all the students and staff of this Institute. It has excellent infrastructure facilities for both outdoor and indoor games and sports. The outdoor games include Football, Cricket, Tennis, BasketBall (concrete) and Tennis. Flood Light facility is provided to all the outdoor games. The Indoor Games Complex (IGC) provides the following facilities:

Volleyball, Kabaddi, Kho-Kho, Basket Ball (concrete) and Tennis with Flood Light facility, Chess, Caroms, yoga room, Shuttle badminton with concrete flooring, Table Tennis, Weightlifting and 08, 16, & 21 stations multi-Gyms, Vibration belt, Rowing Machine, 0505 Treadmills, Bench for Incline & Decline, Twisting machine, Iron weight plates, Rubber weight plates, Iron Rod Dumbells etc. It has separate rooms for changing with bathroom and toilets attached. All the clubs of the institute such as literary club, photography club, Dramatic club, Gyansagar club, and Music club are there in the sports complex. It has the New Auditorium with 5000 seating capacity and a big stage.

GUEST HOUSE

The Institute Guest House, flanked by green lawns and colourful horticulture remains a pleasant haven for the Institute Guests, whether from academia or alumni or parents of the students. The state-of-the-art Guest House with all modern infrastructures is one of its kind in the North East. Some renowned personalities of the Nation in the likes of Former President of India and Bharat Ratna recipient Late Shri APJ Abdul Kalam and Hon'ble Minister of Railways, Shri Suresh PrabhakarPrabhu are eminent guests who stayed in the Guest House during their visit to this Valley.

POST OFFICE

The Institute has a sub Post Office within the campus. The sub Post Office has facilities like registration, money order, and speed post. The post office functions from 9.30 AM to 2.30 PM. Students and staff and people from the surrounding villages take advantage of the facilities of this Post Office.

BANK AND ATMS

A fully computerized full-fledged core-banking branch of State bank of India with ATM facility operates in this campus. The students, staff and people of the villages surrounding the campus avail the facilities of the Bank. There is one ATM of Punjab National Bank in the campus.

SHOPPING COMPLEX

There is one Shopping Complex inside the campus for tea, snacks, books etc. Almost all the household items required by both the students and faculties are available here.

CAFETARIA

A full-fledged Canteen, named NITS Café, is in operation catering quality foods to students, staff and visitors.

RESEARCH & CONSULTANCY

Research and consultancy is one of the most vital activities of the Institute since its inception. The Institute encourages R & C works that synchronises with the global technical advancements, with special emphasis on development of North-eastern region. The synergy of R & C facilities along with the diverse expertise of the faculty and dedicated students, the Institute is touching new heights of Innovation in terms of research. The Research & Promotion Cell (RPC) further helps to identify the young budding student researchers (UG/PG) and provide a unique platform to promote their innovative ideas. The academic curricula of all the disciplines is designed according to the current Industry needs and an initiative has been taken to establish a research park comprising of different pioneers of the Industry through MoUs.

RESEARCH DEVELOPMENT:

a) Ph.D. Programme (specializations): In-

(i) Civil Engineering,
(ii) Mechanical Engineering,
(iii) Electrical Engineering,
(iv) Electronics& Communication Engineering,
(v) Computer Science and Engineering,
(vi) Electronics and Instrumentation Engineering,
(vii) Humanities and Social Sciences,
(viii) Mathematics,
(ix) Chemistry,

b) Ph.D. Produced/ Ongoing (in number):

Completed	Submitted	Ongoing
41 (i.e Degree was awarded during the 16th Convocation of the Institute held on 23-06-2018)	48	425

c) Ongoing Sponsored Research Project:

ONGOING PROJECT:

Sl. NO.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Total amount sanctioned in Rupees	Date of sanctioning the grant	Name of Funding Agency
1.	Visvesvaraya PhD Scheme for Electronics and IT at National Institute of Technology Silchar	Dr. K.L. Baishnab, Department of Electronics & Communication Engineering	Rs. 30,990,000/-	10-09-2015	Ministry of Communication & Information Technology
2.	Special Manpower Development Programme for CHIPS to System Design (SMDP-C2SD)	Dr. K.L. Baishnab, Department of Electronics & Communication Engineering	Rs. 997,200,000/-	15-12-2014	DeitY
3.	Innovation and Entrepreneurship Development Centre (IEDC) at NIT Silchar	Dr. Ashim Kumar Das, Department of Management Studies	Rs. 13,30,000/-	10-03-2016	Department of Science & Technology

Sl. NO.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Total amount sanctioned in Rupees	Date of sanctioning the grant	Name of Funding Agency
4.	Standardisation of Measurement Protocol for overall Heat Transfer Co Efficient (U-Value) for Building Materials & Components for Indian Subcontinent	Dr. Biplab Das, Department of Mechanical Engineering	Rs. 16,99,500/-	22-03-2018	Department of Science & Technology
5.	The Third Generation's Inheritance of the Memory of Partition(1947): A Comparative study Across Spatial Axes	Dr. Avishek Ray, Department of Humanities & Social Sciences	Rs. 2,00,000/-	29-03-2017	ICSSR
6.	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	Dr. Lalthazuala Rokhum, Department of Chemistry	Rs. 32,16,000/-	21-07-2014	Science and Engineering Research Board
7.	A Study on Measure Theoritical approach to Convergence of sequenxes in Probalistic normed Spaces	Dr. Mausumi Sen, Department of Mathematics	Rs. 15,35,520/-	14-10-2015	Science and Engineering Research Board
8.	Fabrication and Testing of Tandem Layered Quantum Dot Sensitized Solar Cell with Elevated Absorption	Dr. Ranjith G Nair, Department of Physics	Rs. 25,13,390/-	08-12-2016	Science and Engineering Research Board
9.	Condition Assessment & Reliability of Existing Bridges (Indian Railway & Others) in North East India due to earthquake and deterioration hazards	Dr. Arjun Sil, Department of Civil Engineering	Rs. 19,09,600/-	04-02-2017	Science and Engineering Research Board
10.	Numeric Study on Electrokinetic Flow through Polyelectrolyte coated Nanopore	Dr. Subrata Bera, Department of Mathematics	Rs. 25,47,140/-	16-02-2017	Science and Engineering Research Board
11.	Effect of metal doped TiO2 on photoanode and lead free organic-inorganic metal halide perovskite on photovoltaic performance of petovskite solar cell: experimental and theoretical approach	Dr. S.K.Tripathy, Department of Electronics & Communication Engineering	Rs. 42,38,585/-	22-03-2017	Science and Engineering Research Board
12.	Design and Development of Heat Pipe Embeded solar collector based latent heat storage system for domestic application	Dr. Biplab Das, Department of Mechanical Engineering	Rs. 27,21,000/-	09-03-2017	Science and Engineering Research Board
13.	A study on Effects of Sediment Load on river bank erosion in the Barak River System	Dr. Briti Sundar Sil, Department of Civil Engineering	Rs. 22,44,460/-	03-07-2017	Science and Engineering Research Board
14.	Spectroflurimetric Studies on Representative Nitrogen Heterocyclic Drugs and Their Interation with DNA Nucleotides	Dr N S Moyon, Department of Chemistry.	Rs. 33,09,000/-	06-07-2017	Science and Engineering Research Board
15.	Effects of variations in input-excitation on the performance of limited-sensors based operational model analysis	Dr. Nirmalendu Debnath, Department Civil Engineering	Rs. 31,66,612/-	18-03-2016	Science and Engineering Research Board

Sl. NO.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Total amount sanctioned in Rupees	Date of sanctioning the grant	Name of Funding Agency
16.	Metal Complexes of New Chiral Schiff Bases: Design, Structure Elucidation, Reactivity and Synthetic Applications	Dr. Pranjit Barman, Department of Chemistry	Rs. 35,04,600/-	02-03-2016	Science and Engineering Research Board
17.	Nano Structured Metal Oxides Immobilized Ionic Liquids as Green Catalysts for selective Organic Transformations	Dr. S. S. Dhar, Department of Chemistry	Rs. 28,64,430/-	12-03-2018	Science and Engineering Research Board
18.	Advanced Manufacturing and Material Testing	Dr P.K. Patowari, Department of Mechanical Engineering	Rs. 2,10,00,000/-	20-08-2015	Department of Science & Technology
19.	Design and development of a hybrid photo voltaic (PVT) system for rural applications	Dr. Biplab Das, Department of Mechanical Engineering	Rs. 14,17,800/-	17-01-2017	Department of Science & Technology
20.	Development of Battery Supercapacitor Hybrid Energy Storage System for Stand-alone Solar Photovoltaic Power System	Dr. Munmun Khanra, Department of Electronics & Instrumentation Engineering	Rs. 22,21,816/-	28-11-2016	Department of Science & Technology
21.	Pose invariant face recognition algorithm development for face based prototype vide surveilance system (VSS)	Prof. Fazal A. Talukdar, Department of Electronics & Communication Engineering	Rs. 24,99,880/-	22-07-2014	Board of Research in Nuclear Sciences
22.	Energetic Ion Beam Assisted Synthesis of Ag/Au Ion Implanted Titania/Zno Thin Film and Investigation of Their Utility As photoanode for Dye Sensitized Solar Cell	Dr. Ranjith G Nair, Department of Physics	Rs. 6,03,000/-	08-09-2015	Inter-University Accelerator Centre- UGC
23.	Experimental and Computational Analysis of Heat Sink Application for optimal performance by developing low cost natural filler reinforced composite material	Dr. Sumit Bhowmik, Department of Mechanical Engineering	Rs. 22,63,000/-	04-08-2017	Central Power Research Institute
24.	Bamboo Bricks/Laminates From BMFs for low cost housing structures for NE Himalayan Region	Dr. Sudipta Halder, Department of Mechanical Engineering	Rs. 44,91,000/-	31-03-2017	National Mission oh Himalayan Studies
25.	Making Containerized Tricycles under clean Silchar Initiative- My city My responsibility	Dr. Sujit Nath, Department of Mechanical Engineering	Rs. 15,18,000/-	23-10-2017	Government of Assam
26.	Hetero-Junction Tunnel FETs: Characterization Modelling and Simulation of Electrical Parameters	Prof. S. Baishya, Department of Electronics & Communication Engineering	Rs. 9,54,667/-	16-05-2017	Council of Scientific and Industrial Research
27.	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with Prototype Development	Prof. S. Baishya, Department of Electronics & Communication Engineering	Rs. 11,00,000/-	30-09-2015	DeitY
28.	Analysis of Brain Waves and Development of Intelligent model for Silent Speech Recognitio	Prof. Nidul Sinha, Department of Electrical Engineering	Rs. 25,00,000/-	02-09-2015	DeitY
29.	Synthesis of indenoisoquinolinedione	Dr. Lalthazuala Rokhum, Department of Chemistry	Rs. 1650000/-	30-06-2014	Science and Engineering Research Board

Sl. NO.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Total amount sanctioned in Rupees	Date of sanctioning the grant	Name of Funding Agency
30.	Development of EBG Structured Printed Antennas for Ultrawide Band Communication and Futuristic Modelling for prediction of performance Parameters using Computational Techniques	Dr. Taimoor Khan, Department of Electronics & Communication Engineering	Rs. 16,27,560/-	27-12-2016	Science and Engineering Research Board
31.	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application	Dr. Arnab Nandi, Department of Electronics & Communication Engineering	Rs. 23,40,000/-	08-07-2015	Science and Engineering Research Board
32.	Development & Testing of hybrid solar photovoltaic thermal (PVT) Air system for the composite environment of Northeast India for tea drying applications	Dr. Biplab Das, Department of Mechanical Engineering	Rs. 30,02,560/-	10-03-2018	Science and Engineering Research Board
33.	Installation of Solar Thermal Systems Industry at NIT Silchar for Testing & Research work	Dr. Agnimitra Biswas, Department of Mechanical Engineering	Rs. 73,86,150/-	26-03-2013	MNRE
34.	Unnat Bharat Abhiyan	Dr. Arup Kumar Goswami, Department of Electrical Engineering	Rs. 1,75,000/-	22-09-2015	MHRD

STAFF POSITION

I. Chief Academic & Executive Officer (Position as on 31.03.18)

Position	Name
Director	Prof. Sivaji Bandyopadhyay

II. Administrative Staff : (Position as on 31.03.18).

Name of the post	Sanctioned Strength	Staff in Position
Registrar	1	1
Deputy Registrar	3	1
Assistant Registrar	6	2
Librarian	1	1
Deputy Librarian	1	0
Assistant Librarian	1	1
SAS Officer	2	1
Sr. Technical Officer	1	1
Technical Officer	2	0
Executive Engineer	1	0
Engineer	2	0
Sr. Medical Officer	1	0
Medical Officer	2	1
Hindi Officer	1	0
Security Officer	2	0
Total	37	8

III. Academic Staff: (Position as on 31.03.18)

Name of the post	Sanctioned Strength	Staff in Position
Professor	282	15
Associate Professor		18
Assistant Professor		109
Trainee Teacher	0	2
Total	282	144

IV. Faculty Position as on 31.03.18 (Department -wise break up)

S. No	Department	Professor	Associate Professor	Assistant Professor	Trainee Teacher	Total
1	Civil Engineering	7	3	16	1	27
2	Mechanical Engineering	3	5	16	0	24
3	Electrical Engineering	2	3	11	0	16
4	Electronics and Communication Engineering	2	3	14	1	20
5	Computer Science and Engineering	0	1	14	0	15
6	Electronics and Instrumentation Engineering	0	0	9	0	9
7	Mathematics	0	2	10	0	12
8	Physics	0	1	6	0	7
9	Chemistry	0	0	7	0	7
10	Humanities and Social Sciences	1	0	4	0	5
11	Management Studies	0	0	2	0	2
Total		**15**	**18**	**109**	**2**	**144**

V. Ministerial Higher Staff (as on 31.03.2018)

Name of the post	Sanctioned Strength	Staff in Position
Superintendent/Accountant/ Secretary	9	0
Sr. Superintendent/Accountant/ Secretary	8	1
Superintendent/Accountant/ Secretary (SG-II)	5	0
Jr. Hindi Translator	1	0
Total	**23**	**1**

VI. Technical Higher Staff (as on 31.03.2018)

Name of the post	Sanctioned Strength	Staff in Position
Technical Assistant / SAS Assistant / Junior Engineer	38	1
Sr. Technical Assistant / Sr. SAS Assistant / Assistant Engineer	28	1
Technical Assistant / SAS Assistant / Assistant Engineer (SG-II)	13	0
Total	**79**	**2**

VII. Ministerial Lower Staff (as on 31.03.2018).

Name of the post	Sanctioned Strength	Staff in Position
Junior Assistant	20	0
Senior Assistant / Stenographer	16	1
Assistant (SG-II) / Senior Stenographer/Assistant (SG-I)/ Stenographer(SG-I)	11	5
Hindi Typist	1	0
Total	**48**	**6**

VIII. Technical Lower Staff (as on 31.03.2018)

Name of the post	Sanctioned Strength	Staff in Position
Technician/Laboratory Asstt./Work Asstt	38	3
Sr. Technician/ Laboratory Asstt./Work Asstt	28	1
Technician/ Laboratory Asstt./ Work Asstt. (SG – II & SG-I)	19	7
Total	**85**	**11**

IX. Supporting Staff (as on 31.03.2018)

Name of the post	Sanctioned Strength	Staff in Position
Supporting Staff (Attendant / Mali/Security Guard)	41	69
Total	**41**	**69**

X. Fresh Appointments Teaching (From 01.04.17 to 31.3.18)

S. No.	Name	Designation	Department	Date of Joining
Nil				

XI. Appointments of Non-Teaching (Contractual) (During 2017 - 2018)

S. No.	Name	Designation	Date of Joining
Nil			

XII. Appointments of Teaching (Contractual) (During 2017 - 2018)

Sl. No.	Name	Designation	Department
1.	Mr. Prasenjit Kumar Das	Assistant Professor (Contractual)	Computer Science & Engineering
2.	Ms. Bahnishikha Dutta	Temporary Faculty	
3.	Irshed Hussain	Temporary Faculty	
4.	Ms. Saswati Rakshit	Temporary Faculty	
5.	Ms. Puja Sarkar	Temporary Faculty	
6.	Ms. Upasana Talukdar	Temporary Faculty	
7.	Mr. SoumyaSamanta	Assistant Professor (Contractual)	Electrical Engineering
8.	Ms. Rumi Rajbongshi	Temporary Faculty	
9.	Mr. Bivas Roy	Assistant Professor (Contractual)	
10.	Mr. Arunima Dutta	Assistant Professor (Contractual)	
11.	Mr. Arka Das	Temporary Faculty	
12.	Mr. Nayan Kumar	Temporary Faculty	
13.	Mr. Ankit Kumar Singh	Temporary Faculty	
14.	Mr.Chiranjit Adhikary	Temporary Faculty	
15.	Ms. Anulekha Saha	Temporary Faculty	
16.	Mr. Suman Sutradhar	Temporary Faculty	

Sl. No.	Name	Designation	Department
17.	Mr. Arindam Das	Temporary Faculty	
18.	Mr. Radhe Gobinda Debnath	Temporary Faculty	
19.	Ms. K. Lochan	Temporary Faculty	
20.	Mr. Partha Pratim Paul	Temporary Faculty	
21.	Mr. Avatar Singh	Temporary Faculty	
22.	Mr. ChandanDawo	Temporary Faculty	Electronics & Instrumentation Engineering
23.	Mr. Bivas Roy	Temporary Faculty	
24.	Mr. Surajit Sarkar	Temporary Faculty	
25.	Mr. Ritwik Chattaraj	Temporary Faculty	
26.	Mr. Kalyan Bhattacharjee	Temporary Faculty	
27.	Mr. Anupam Sarma	Temporary Faculty	
28.	Mr. RupamGoswami	Temporary Faculty	Electronics & Communication Engineering
29.	Mr. Chandrajit Choudhury	Temporary Faculty	
30.	Mr. Amlan Nag	Temporary Faculty	
31.	Mr. Saurav Roy	Temporary Faculty	
32.	Ms. Swagata Devi	Temporary Faculty	
33.	Ms. Salam Shuleenda Devi	Temporary Faculty	
34.	Mr. Manalee Dev Sharma	Temporary Faculty	
35.	Ms. Karabi Baruah	Temporary Faculty	
36.	Dr. Jayendra Kumar	Temporary Faculty	
37.	Mr. Arkka Bhattacherjee	Temporary Faculty	
38.	Ms. Osor Pertin	Temporary Faculty	
39.	Mr. Abhijit Chakraborty	Temporary Faculty	Management Studies
40.	Mr. Ujjwal Kanti Paul	Temporary Faculty	
41.	Ms. Tanaya Nayak	Temporary Faculty	
42.	Mr. Rama Koteswara Rao Kondasani	Temporary Faculty	
43.	Mr. L. A. Meetei	Temporary Faculty	
44.	Ms. Manisha Goswami	Guest Faculty	
45.	Dr. Manasi Rastogi	Guest Faculty	
46.	Ms. Sona Srivasta	Temporary Faculty	
47.	Mr. Saroj Kumar Koiri	Temporary Faculty	
48.	Mr. Subhadeep Mukherjee	Temporary Faculty	
49.	Mr. Saurav Dey	Temporary Faculty	
50.	Mr. Sivadasan M	Temporary Faculty	Mechanical Engineering
51.	Dr. Anal Rajan Sengupta	Temporary Faculty	
52.	Mr. Deepak Sharma	Temporary Faculty	
53.	Mr. Gautam Choubey	Temporary Faculty	

Sl. No.	Name	Designation	Department
54.	Mr. Abhijit Dey	Temporary Faculty	
55.	Mr. Prabhakar Jha	Temporary Faculty	
56.	Dr. Kh. Shantakumar Singh	Temporary Faculty	Physics
57.	Mrs. Piya Biswas	Temporary Faculty	Civil Engineering
58.	Mr. Subhash Sabu	Temporary Faculty	
59.	Mr. Rimen Jamatia	Temporary Faculty	
60.	Mr. Mehboob Elahi Laskar	Temporary Faculty	
61.	Mr. Debasish Dutta	Temporary Faculty	
62.	Mr. Rajasubramaniam S	Temporary Faculty	
63.	Mr. Sukanta Das	Temporary Faculty	
64.	Mr. Biswajit Roy	Temporary Faculty	
65.	Mr. Subhash sarmah	Temporary Faculty	
66.	Mr. Palash Dey	Temporary Faculty	
67.	Mr. Ruhul Amin Mazumder	Temporary Faculty	
68.	Mr. Tarique Aman Mazumder	Temporary Faculty	
69.	Dr. Sutanuka Banerjee	Temporary Faculty	Humanities & Social Sciences
70.	Mr. Subroto Chowdhury	Temporary Faculty	
71.	Dr. Rajashree Dutta Purkayastha	Temporary Faculty	
72.	Dr. Sutapa Chakraborty	Temporary Faculty	Chemistry
73.	Dr. Najrul Hussain	Temporary Faculty	
74.	Dr. Dipannita Das	Temporary Faculty	
75.	Dr. Balaji Roy	Temporary Faculty	Maths

XIII. Retirement / Resignation (From 01.04.17 to 31.3.18)

Sl. No.	Name	Designation	Date of Retirement / Resignation
1	Mr. Bijan Bhattacharjee	Technician (SG – I)	30/04/2017
2	Mr. Ranjit Gope	Technician (SG – I)	30/04/2017
3	Ms. Janak N. Nunia	Assistant (SG-I)	30/06/2017
4	Mr. Ram Singhasan Chauhan	Assistant (SG-I)	31/07/2017
5	Mr. Rajendra Kr. Pandey	Attendant (SG-I)	31/08/2017
6	Mr. Anuj Kr. Paul	Attendant (SG-I)	31/09/2017
7	Mr. Sukesh Rn. Deb	Attendant (SG-I)	31/10/2017
8	Ms. Sandhya Rani Deb	Attendant (SG-II)	31/10/2017
9	Mr. Makkadas Ali Barbhuiya	Assistant (SG-I)	30/11/2017
10	Mr. Sudipta Bhattacharjee	Stenographer (SG - I)	31/12/2017
11	Mr. Samsur Uddin Mazumder	Attendant (SG-I)	31/12/2017

Sl. No.	Name	Designation	Date of Retirement / Resignation
12	Mr. Matakkir Ali Laskar	Attendant (SG-II)	31/12/2017
13	Mr. Surendra Ch. Roy	Attendant (SG-II)	31/12/2017
14	Mr. Tamiz Uddin Laskar	Attendant (SG-II)	31/01/2018
15	Mr. Dilip Kr. Nag	Technician (SG - I)	31/01/2018
16	Mr. Debasish Dey	Engineer	28/02/2018
17	Mr. Pijush Bhattacharjee	Assistant Registrar	28/02/2018

XIV. Death In Harness (From 01.04.17 to 31.3.18)

Sl. No.	Name	Designation	Date of Expiry
1	Dr. Ashok Kr. Sinha	Professor	12/11/2017
2	Dr. P. Rajbongshi	Associate Professor	17/09/2017

XV. Voluntary Retirement Scheme (From 01.04.17 to 31.3.18)

S.. No.	Name	Designation	Date of Retirement / Resignation
1	Dr. Tuithug Shimreiphy Dutta	Sr. Medical Officer	31/01/2018
2	Mr. Ajoy Moni Nath	Attendant (SG-II)	31/10/2017
3	Mr. Atul Ch. Deb	Attendant (SG-II)	31/12/2017

TEQIP-II

Introduction to TEQIP-III

Technical Education Quality improvement Programme (TEQIP) is a World Bank and MHRD funded project for the technical Institutions for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States (SCS) and support to strengthen few affiliated technical universities to improve their policy, academic and management practices.

TEQIP seeks to enhance quality and equity in participating engineering education institutions and improve the efficiency of the engineering education system in focus states. The Project supports two components:

- **Component - 1:** Improving quality and equity in engineering institutions in focus states
  - **Sub-component 1.1**: Institutional Development for Participating Institutions

    An estimated 90 Engineering Education institutions meeting (progressively) the enabling mechanisms and based on quality of Institutional Development Proposals (IDPs), will be selected.
  - **Sub-component 1.2**: Widening Impact through ATUs in focus states

    An estimated 8 ATUs meeting the enabling mechanisms will be selected with matching contribution equal to project allocation.
  - **Sub-component 1.3**: Twinning Arrangements to Build Capacity and Improve Performance of Participating Institutions and ATUs

    Institutions (already participated in TEQIP-I and/or II)/ATUs will be selected on a competitive basis based on pre-defined eligibility criteria. The evaluation will be based on quality of IDPs. The proposal should include establishing a mentoring system for twinning arrangements to build the capacity and improvement in performance of institution/ATUs participating under sub-component 1.1/1.2 respectively.
- **Component - 2:** System Level initiatives to strengthen sector governance and performance
  - This component will support MHRD and key apex bodies in engineering education, including AICTE and NBA, to strengthen the overall system of engineering education.

    NIT Silchar has successfully completed Phase I and Phase II of TEQIP project. Presently NIT Silchar is under TEQIP phase III, Sub - Component 1.3. Under Twinning arrangements NIT Silchar is selected as Mentor Institute for Gauhati University Institute of Science Technology (GUIST), Gauhati.

TEQIP-III: Project Scope

Only the Government and Government aided AICTE approved Engineering institutions/Engineering faculty/ Engineering Teaching Department/Constituent Institutions of Universities/Deemed to be Universities and new centrally funded institutions in SCS will be the part of the project.

An estimated 200 Government and Government funded Engineering institutions including Affiliating Technical Universities (ATUs) will be selected under different sub-components in one or two cycles.

TEQIP-III: Project Objectives

The Project will focus on the following objectives:

- Improving quality and equity in engineering institutions in focus states viz. 7 Low Income States (LIS), eight states in the North-East of India, three Hill states viz. Himachal Pradesh, Jammu & Kashmir, Uttarakhand and Andaman and Nicobar Islands (a union territory (UT))
- System-level initiatives to strengthen sector governance and performance which include widening the scope of Affiliating Technical Universities (ATUs) to improve their policy, academic and management practices towards affiliated institutions, and
- Twinning Arrangements to Build Capacity and Improve Performance of institutions and ATUs participating in focus states.

TEQIP-III NIT Silchar Fund Allocation under Sub- Component 1.3

Total Fund Allocation = 700 lacs

Indicative Category-wise Funding for Key Activities of NIT Silchar under Subcomponent 1.3

Sl. No	Key activities	Category of Expenditure (Head of expenditure)	Description	% of share	Percentage (%)	Cost (Rs. in lacs)
1	Procurement of Goods (equipment, furniture, books LRs, software and minor items) and civil works for improvement in teaching, training and learning facilities	Procurement	Books and LRs	15	Up to 50%	350
			Equipment	15		
			Furniture	5		
			Services	10		
			Civil Works	5		
2	Improvement in Teaching, Learning and Research competence' ▪ Improve student learning ▪ Student employability ▪ Increasing faculty productivity and motivation ▪ Establishing a twinning system o Twining arrangements with institutions under Subcomponent 1.1 to build capacity and improved performance o Individual institutional mentors	Academic	Improve student learning	10	At least 40%	280
			Student employability	10		
			Increasing faculty productivity and motivation	10		
			Establishing a twinning system	10		
3	Incremental Operating Cost	IOC			Up to 10%	70
	TOTAL				**100**	**700**

Outside Conferences/seminar/worksops attended by Faculty. (April 17 – Mar 18)

Sl	Name	Deptt	Topic	Date	Venue/Place
1	Dr. Dulal Ch. Das	EE	Demand response strategy for frequency control of parabolic dish solar thermal diesel based microgrid.	7-8 Dec 17	Palladam, India
2	Dr.Trupti Ranjan Lenka	ECE	Device optimization of E- Mode N polar GaN MOS-HEMT for Low noise RFR & Microwave applications and Dielectric Modulated AlGaAs/ GaAs HEMT for Label free detection of Biomolecules.	11-15 Dec 17	IIT, Delhi
3	Mr. Lalu Seban	E&IE	Development of parsimonious orthonormal basis function models using particle swarm optimization.	6-8 Dec 17	IIT, Kanpur

Sl	Name	Deptt	Topic	Date	Venue/Place
4	Dr. Wasim Arif	ECE	Impact of residual time distribution of spectrum holes on handoff rate in cognitive radio network.	2-3 Dec 17	Kolkata
5	Dr Biswajit Purkayastha	CSE	Workshop on Remotely Sensed Big Data Analysis and Mining (RSBDAM)	23-24 Jan 18	ISI Kolkata
6	Dr. Shyamapada Mukherjee	CSE	Workshop on Remotely Sensed Big Data Analysis and Mining (RSBDAM)	23-24 Jan 18	ISI Kolkata
7	Dr. D. K. Ghose	CE	International Conference on smart computing & Informatics (SCI-2018)	27-28 Jan 18	Vijayawada
8	Dr. Saroj Kr. Biswas	CSE	Workshop on Remotely Sensed Big Data Analysis and Mining (RSBDAM)	23-24 Jan 18	ISI Kolkata
9	Dr. Banani Basu	ECE	CPW Fed frequency reconfigurable dual band antenna using PIN Diode	29-31 March 18	Coimbatore
10	Dr. Arnab Nandi	ECE	Design of Reconfigurable Defected Ground structure resonator for C,X and Ku Band application	29-31 March 18	Coimbatore
11	Shyamapada Mukherjee	CSE	Global placement for large- scale Mixed – size design VLSI circuit using Plant Model.	29-31 March 18	Coimbatore
12	Sujit Kumar Pattanayak	ME	Conceptualization of Inspection Fixture for front Axle beam of a Truck	21-23 Dec 17	Surat
13	Ripon Patgiri	CSE	Elastic: A Large Scale Elastic Array Data Structure	4-6 Jan18	Coimbatore
14	Briti Sundar Sil	CE	Application of SWAT model in stream flow discharge in a River Basin	16-17 Feb 18	Tezpur University
15	Dr. Arnab Nandi	ECE	Workshop on accreditation for engineering programme under NBA	24 Jan 18	Guwahati
16	Dr. Arnab Nandi	ECE	Workshop on Outcome based education (OBE)	08-09 Feb 18	Delhi
17	Dr. Ranjay Hazra	EIE	Workshop on Outcome based education (OBE)	27-28 Mar 18	Guwahati
18	Dr. Manas Kumar Bera	EIE	Workshop on Outcome based education (OBE)	27-28 Mar 18	Guwahati
19	Dr. Wasim Arif	ECE	STTP on Entrepreneurship, Innovation and Incubation	20-21 Mar 18	Guwahati
20	Dr. Jagadish	ME	A multi criteria decision making approach for rapid prototyping process selection	17 Mar 18	Hyderabad
21	Dr.Trupti Ranjan Lenka	ECE	National PARAM Shavak user summit	15-16 Feb 18	Goa
22	Dr. Koushik Guha	ECE	National PARAM Shavak user summit	15-16 Feb 18	Goa
23	Dr. Saroj Kumar Biswas	CSE	National PARAM Shavak user summit	15-16 Feb 18	Goa
24	Shyamapada Mukherjee	CSE	National PARAM Shavak user summit	15-16 Feb 18	Goa

In House worksops organized under the aegis of TEQIP-III at NIT Silchar in 2017-2018

Sl. No.	Date	Topic	Deptt.	Coordinator	Type
1	18-20 Aug 2017	PLC Mitsubishi	EE	Dr. B.K. Roy	Training
2	25 – 26 Aug 2017	Train the trainer (MOOCS)	EE	Dr. NBD Choudhury & Dr. Kishor Ch Satpathy	Workshop
3	02 –03 Sep 2017	Electronics system design and manufacturing using Orcad PSpice	EE	Dr.T. Malakar & Mr. C. Bhattacharjee	Workshop
4	11-15 Sep 2017	Advances in Neural Network and its Application	CSE	Dr.Pinki Roy & Dr. S.K. Biswas	Workshop
5	06– 10 Oct 2017	Modeling River Flow Processes	CE	Dr.P.J. Roy & Dr.P. Choudhury	Hands on Training
6	26 Oct 2017	Institute Industry Interaction	EE	Dr. NBD Choudhury	Industry Interaction
7	23-24 Jan 2018	Expert Lecture under Induction Program	ME	Dr. Sukumar Pati	Expert Lecture
8	24 Jan 2018	Image processing and its applications	ECE & CSE	Dr. K.L.Baisnab	Invited Talk
9	25 Jan 2018	Invited Talk on Data Science	CSE	Dr. S. K. Biswas & Dr. S.Mukherjee	Invited Talk
10	13-17 Feb 2018	Recent advances on water and environment studies	CE	Dr. D.K.Ghose	STTP
11	16-19 Feb 2018	Students event	All Students	Dr. N. B. Singh	Students event
12	12-16 Mar 2018	Recent trends in communication signal processing and solid state device	EIE	Dr.R Hazra, Dr. A.K Sunaniya, Mr. Sudarsan Sahoo	STTP
13	21-26 Mar 2018	Data Acquisition and LabView Applications	EIE	Dr.S.H.Laskar	STTP
14	23 Mar 2018	3rd Meet initiated by Mitsubishi	EE	Dr. B.K. Roy	Training
15	28 Mar 2018	Expert lecture by eminent environment specialist	ME	Dr. Sukumar Pati	Expert Lecture
16	26-30 Mar 18	Industry Academic workshop on Advanced Materials Fabrication and Characterization Techniques(AMFCT-2018)	Physics	Dr. Ranjith G. Nair	workshop

Outside Conferences/seminar/worksops attended by Students. (April 17 - Mar 18)

Name of Student	Scholar No	Designation	Department	Date	Venue	Topic
Shulanki Pal	15-3-01-113	PhD	CE	7-8 March 18	IIT Roorkee	Utilization of structural vibration response using tuned liquid damper under random earthquake
Pankaj Prakash	16-23-209	M.Tech	EE	18-22 Feb 18	Hyderabad	Fractional order memsistor based chaotic jerk system with no equisition point and its FO back stepping control
Radhe Tado	16-22-303	M.Tech	ME	22-23 Feb 18	Mumbai	Computational study of blood flow analysis for coronary Artery disease
Monoja Kumar Sahu	15-3-02-122	PhD	ME	10-11 Feb 18	Vishakapatnam	Numeric Investigation of Thermal Hydroluic performance of Channel with protrusions by turbulent cross flow jet
Gopal Chandra Pal	16-22-110	M.Tech	ME	10-11 Feb 18	Vishakapatnam	Numeric Study of unsteady natural convection from a pair of cylinders in an elctosure with sinusodial bottom wall
Bandi Venkata Ramana Reddy	16-3-02-104	PhD	ME	24-25 Jan 18	Guntur	Characterization of small termed Al-Alloys
Parag Jyoti Bera	14-1-2-033	B.Tech	ME	10-11 Feb 18	Vishakapatnam	Comparative study between packed bed thermal energy storage systems using phase change material encapsulatic
Chiranjib Bhowmik	14-3-02-102	PhD	ME	4-6 Jan 18	Jadavpur University	Selection of green energy sources : An Entropy Approach
Lakka Suneetha	16-3-02-105	PhD	ME	24-25 Jan 18	ANUG, AP	Advances in Flame stabilizarion process on dual mode scramjet
Saurabh Tripathi	16-22-104	M.Tech	ME	10-11 Feb 18	Vishakapatnam	Computational study on effect of obstacles pulse detonation engine
Bappa Mondal	16-3-02-106	PhD	ME	10-11 Feb 18	Vishakapatnam	Numerical Investigation of effect of obstacle on mixing length of micromixes
Suman Kumar Ram	16-24-209	M.Tech	ECE	15-17 March 18	IIT Dhanbad	A dual band microstrip antenna integratted with RDRA for uplink & downlink Cband communication
Wangkheirakpam Vandana Devi	16-24-106	M.Tech	ECE	15-16 Feb 18	Erode, India	Optimization of N+ heterp packet doped dual metal vertical TFET

Name of Student	Scholar No	Designation	Department	Date	Venue	Topic
Rishikanta Mayengbam	16-3-04-107	PhD	ECE	10-11 Feb 18	Vishakapatnam	First principles calculation of structural electronic and optical properties of CdAl2Te4S.C
Anand Jee	16-24-2081	M.Tech	ECE	22-23 Feb 18	Delhi	Analysis of link maintenance probability for cognitive radio
Rohit Pratap Singh	17-3-05-112	PhD	CSE	1-5 Jan 18	IIT Guwahati	Workshop on Modeling and Verification of cyber physical systems
Subhajit Das	17-3-06-102	PhD	E&IE	5-11 March 18	NIT Mizoram	Workshop on VLSI Design using FPGA tools
Prabhujit Mohapatra	13-3-22-101	PhD	Math	8-9 Feb 18	New Delhi	CSO Techinique for solving economic dispatch problem considering the constrainsla
Subhradeep Dhar	16-3-01-105	PhD	CE	14-16 Dec 17	IIT Guwahati	Performance evaluation of lime stabilised sub grade soil using light weight deflectometer
Abhinaba Paul	15-3-01-110	PhD	CE	14-16 Dec 17	IIT Guwahati	Experimental Model Study.
Utpal Maity	16-21-203	M.Tech	CE	18-27 Dec 17	IIT Guwahati	Risk based damage tollerent seismic design of structure
Mayank Sukhija	16-21-319	M. Tech	CE	8-11 March 18	IIT Guwahati	A comparative study on permeability characterization of Bituminous mixes under field and Lab Conditions
Partha Pratim Sarkar	18-03-01-104	PhD	CE	17-18 March 18	IIT Roorkee	Workshop on SWARM and evolutionary algorithms.
Utsab Rakshit	16-23-211	M.Tech	EE	3-4 Nov 17	Hyderabad	Study on longitudial forces of a freight train for different types of wagon connectors
Chinmaya Behera	15-3-03-128	PhD	EE	15-17 Dec 17	IIT Roorkee	A fuzzy based crew selection
Debasis Tripathy	15-3-03-102	PhD	EE	23-24 Dec 17	IIT BBSR	Performance comparison of SMO Based Fuzzy PID Controller for Load freq. control
Rajesh Panda	16-3-03-102	PhD	EE	14-16 March 18	New Delhi	Profit maximization by joint operation of solar battery storage system in a Ren.Int. dereguated power system
Debasis Dash	15-3-03-121	PhD	EE	6-8 Dec 17	IIT Roorkee	A density functional theory based analysis on the structural electronic and mechanical properties.

Name of Student	Scholar No	Designation	Department	Date	Venue	Topic
Saumitra Barman	16-23-202	M.Tech	EE	18-22 Feb 18	Hyderabad	Design and implementation of an IDA PBC for grid connected inverter used photorol system
Anirudh Nath	15-3-03-105	PhD	EE	18-22 Feb 18	Telangana	Physiological models and control for type 1 Diabetes Mellitus: A brief review
Lokeswar Patnaik	17-3-02-113	PhD	ME	21-23 Dec 17	SVNIT Surat	Effect of roller burnishing on surface roughness and micro hardness of AA6082 alloy using Box
Pradeep Kumar Karsh	16-3-02-102	PhD	ME	28-30 Dec 17	IIT Kharagpur	Stochastic frequency response function analysis of functioning
Vaishali	16-22-401	M.Tech	ME	28-30 Dec 17	IIT Kharagpur	Effect of skewness on stochastic natural frequency of sandwich plates
Abhijeet Kumar	16-22-305	M.Tech	ME	29 Nov-2 Dec 17	IIT Guwahati	PNN based stochastic natural frequency analysis of FGP
Shivani Verma	14-1-2-016	B.Tech	ME	22-23 Feb 18	Mumbai	Design and fabrication of smart ovadruped robot
Sumit Kumar Mehta	17-3-02-115	PhD	ME	10-11 Feb 18	Vishakapatnam	Thermo hydraulic analysis for flow through triangular corrugerted channel
Dhiraj Raj	16-22-409	M.Tech	ME	24-25 Jan 18	Andhra Pradesh	Laser Beam Micromachining of Metals: A Review
Navin Niraj	16-22-208	M.Tech	ME	15-18 March 18	Hyderabad	Tribological behaviour of magnesium matrix composite preforced composite with fly ash cerospehere
Ajay Kumar Yadav	16-22-214	M.Tech	ME	15-18 March 18	Hyderabad	Aluminium metal matrix composite with rice Husis as reinforcement : A review
Netrananda Behera	16-22-204	M.Tech	ME	16-18 March 18	Hyderabad	Modeling and simulation of interface stabilising in metal matrix composite subjected to off axis loading using cohesive cone model under elected temperature
Sanjay Kumar Gupta	15-3-02-101	PhD	ME	27-30 Dec 17	Hyderabad	Study on flow bonding critical heat flow enhancement of Al2O3/ water Nanofluid
Chiranjibi Champatiray	16-22-202	M. Tech	ME	23-24 March 18	Jaipur	Supplier selection using multi objective optimization based on ratio Analysis (MOORA)

Name of Student	Scholar No	Designation	Department	Date	Venue	Topic
Girija Sankar Murmu	16-2-2-206	M. Tech	ME	23-24 March 18	Jaipur	Taguctic based sis sigma to optimize turning process by effects of machinery parameters
Shyamal Das	17-3-02-117	PhD	ME	26 Feb-2 Mar 18	NIT Agartala	Engine combustion and emission diagnostics
Suman Kumar Ram	16-24-209	M.Tech	ECE	15-17 March 18	Dhanbad	A dual band microstrip antenna integratted with RDRA for uplink & downlink Cband communication
Rizwan Ahmed	15-1-4-045	B.Tech	ECE	30-31 Dec 17	Kolkata	Compact Dual band monopole antenna with improved bandwidth for wimax and WLAn application
Rohan Kumar Gupta	16-24-202	M. Tech	ECE	24-25 Feb 18	MANIT Bhopal	Lifetime enhancement of WSN using evolutionary clustering and routing algorithms
Monali Bordoloi	15-3-05-107	PhD	CSE	20-21 Dec 17	Hyderabad	Sentiment analysis of product using machine learning techiniques
Heisnam Rohen Singh	14-3-05-109	PhD	CSE	20-21 Dec 17	Hyderabad	Transparent neuro fuzzy model for linguistic variables selection and rule based classification
Saswati Debnath	15-3-05-106	PhD	CSE	20-21 Dec 17	Hyderabad	Isolated word recognition based on different statistical analysis and earthquake selection
Rajdeep Ghosh	14-3-05-105	PhD	CSE	26 Feb-2 Mar 18	IIT Guwahati	GIAN Course on Brain computer interfaces for speech communication
Pratap Khuntia	16-3-06-104	PhD	E&IE	15-17 March 18	ISM Dhanbad	Resource sharing for device to device comm underlying cellular NCF
Arpita Paul Chowdhury	15-3-23-105	PhD	Chemistry	19-20 Jan 18	Kolkata	Synthesis and characterisation of Biocl…..
Ajoy Dutta	15-3-22-101	PhD	Mathematics	1-3 Dec 17	VIT Vellore	Approximate analytical solution of HIV/AIDS dynamic model during primary interaction
Sangita Saha	15-3-22-103	PhD	Mathematics	29 Dec - 2 Dec 17	IIT Guwahati	Some New classes of satisfactory pre cauchey triple sequences of fuzzy numbers designed by Orliez function

Name of Student	Scholar No	Designation	Department	Date	Venue	Topic
Sri Srinivasa Raju Modampuri	16-47-108	M.Sc	Mathematics	27-28 March 18	NIT Warangal	Forced convection past a sphere for liquid metals.
Amar Kumar Barik	15-3-03-103	PhD	EE	28-30 March 18	Odisha	Active power management of isolated renewable microgrid….using SSA
Ankit Shahi	16-23-103	M.Tech	EE	28-30 March 18	Odisha	A study & analysis of fuzzy based P&U mppt scheme in pmsg based wind turbine
Debasis Tripathy	15-3-03-102	PhD	EE	28-30 March 18	Odisha	Spider monkey optimization based fuzzy 2D-PID contolles for LFC in two area multi source
Monoja Kumar Sahu	15-3-02-122	PhD	ME	23-24 March 18	Coimbatore	Numerical investigation of thermal hydroluic performance of channel with protrusions by turbulent cross flow jet
Noor Alam	15-3-02-110	PhD	ME	23-24 March 18	Coimbatore	Mumerical investigation of combustion phenomena in pulse detevation engine with different fuels.
Amiya Dey	16-3-04-102	PhD	ECE	2-3 Dec 17	Kolkata	Competency of MLID decorrector receiver for users in engine user DS-CDMA system
Ankur Jain	15-3-03-112	PhD	EE	26-27 March 18	MNIT Jaipur	Trade off between quality of control and quality of service for networked vehicles cruise control
Dhiraj Raj	16-22-409	M.Tech	ME	22-Feb-18	IIT Kanpur	Scanning Election Microscope (W-SEM)

Awards and Achievements

- NIT SIlchar has secured 57thposition amongst all the engineering universities in India as per NIRF 2018 data. It is also the 12thamongst all the NITs as per the same ranking, with a score of 43.09.

Below is a comprehensive list of the awards and achievements of the NITS student fraternity, 2016-17.

Date	Event	Position Secured	Place
11/10/2017	Inter college Football Tournament	Winner	SMC Silchar
12/01/2018	All India Inter NIT tournament of Kabaddi	Reached Quarter Final	NIT Suratkhal
26/01/2018	Spring Fest (Cultural Team)	2nd & 3rdPosittion	IIT Kharagpur
22/02/2018	All India Inter NIT tournament of Table Tennis & Chess (Boys & Girls)	3rd Position in TT & Chess (Boys) and 6th position in Chess (Girls)	NIT Kurukshetra
12-02-2017	T. G Baruah Memorial 7th Edition of Youth & U-21 Years State Karate Championship	3rd Position	DTRP Indoor Stadium, Guwahati, Assam
2017	Voluntary Blood Donation	4thposition	Assam State AIDS Control Society and Assam State Blood Transfusion Council
2017	NIT Conclave	1stposition	
2017	NPTEL Examination	5thposition	IIT Kharagpur,
2017	Inter NIT Chess Championship	3rd position	New Delhi
2017	National Level Quiz Competition	1st position	New Delhi
2017	Startup Center	AAU RARE AWARD	AAU, West Bengal
2017	Startup Center	TOP 300 Startup of India	Festival of Innovation and Entrepreneurship 2018 at Rashtrapati Bhawan

Glimpses of Annual Activities



Posua-The Spring Fest- 2017



NIT Conclave 2017



Governor Assam at NIT Conclave



16th Convocation of NIT Silchar - 2017



Convocation-2017



Spring tales :Rangmanch The drama competition



CACTAS performance



Orientation Program -2017



Orientation Program - 2017



Fresher's Welcome Party- 2017



Fresher's welcome party- 2017



Independence Day Celebrations Nukkad-2017



Independence Day Parade 2017



Blood Donation Camp 15th August 2017



Independence Day Parade by the NCC cadets of NIT Silchar 2017



Dahi Handi: Celebration of Krishna Janmashthami 2017



Dahi Handi: Celebration of Krishna Janmashthami 2017



Hindi Diwas 2017



Hindi Diwas 2017



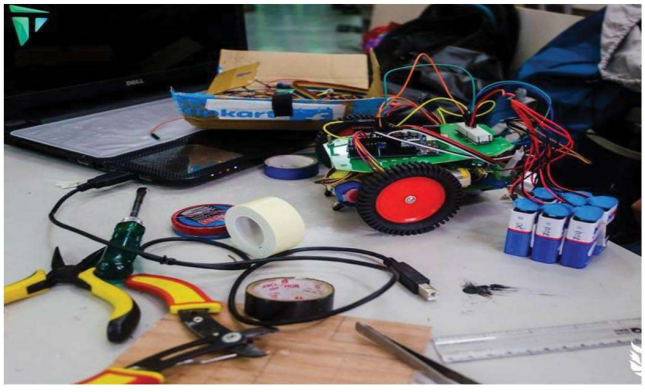
Prize distribution Ceremony of Annual Techno Cultural Fest: Technosis 2017



Moti Khan at Technosis 2017



Nalayak Band at SPARK, during Technosis 2017



Robowar at Tecnoesis 2018



Tecnoesis 2017



8th Alumni Meet 2017



8th Alumni Meet 2017



National Education Day



National Education Day



Run for Unity (Ekta Daud):
Celebration of Rashtriya Ekta Saptah



Run for Unity (Ekta Daud):
Celebration of Rashtriya Ekta Saptah



Inter hostel Volley ball tournament



Inter hostel football tournament



Magh Bihu celebration



Swachhta Pakhwara 2017



Swachhta Pakhwara 2017



Kaladarshan



Republic Day 2018



Republic Day Parade 2018



Blood Donation Camp 26th January 2018



Athleton- 2018



Athleton- 2018



Athleton- 2018



Foundation day



Plantation at Foundation day



National Youth Day 2018



National Youth Day 2018



Candle March



Cloth Donation



Rabindranath



Rabindranath



Vigilance Awareness week 2017



Vigilance Awareness week 2017



Inaugural Ceremony of Incandescence 2018



Inaugural Ceremony of Incandescence 2018



Performance in Natraj, Incandesence 2018



The Stand-up Comedian in Incandescence 2018



Guest Lecturer in Incandescence 2018



Performance in Incandescence 2018



Glitterati, the fashion show: Incandescence 2018



Herfunmoula Performing in Incandescence 2018



A student performing in Incandescence 2018



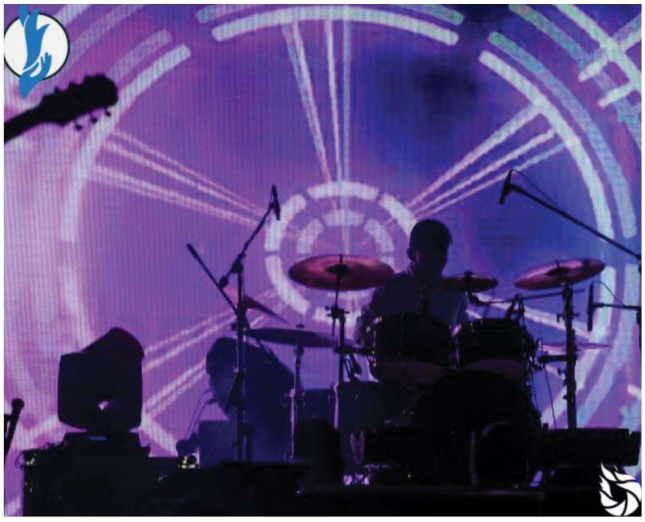
As we keep searching Performing in Incandescence 2018



Prom Night: Incandescence 2018



Incandescence 2018



Student performing in Incandescence 2018



Student performing in Incandescence 2018



Deprador : Incandescence 2018



Gajendra Verma at Incandesence 2018



Self Defense Workshop for Women



Self Defense Workshop for Women



Mass tree plantation



Mass tree plantation

Corporate Social Responsibility

Inspite of numerous hurdles, the devotion towards serving the society at large has remained firm for the Institute and can be understood by the various developmental activities carried under the flagship of Corporate Social

Responsibility. The Institute has undertaken various measures to improve the socio-economic conditions of the nearby villages and North-eastern region at large. Certain contributions of the Institute towards social development are listed below:

Contribution to Social Development

• **Adoption of border villages to develop these as Model villages:** The institute has adopted numerous villages from itssurroundings in order to turn it into a model of development for the rest of the region. Priorities like transportation, education, health & family welfare, drinking water, power (including non-conventional energy), information technology etc. has been identified and worked upon. To sensitize local village people on health issues, the Institute's Health Centre and its staff have organized various health camps and blood donation camps in and around villages and remote areas of Cachar district.

• **KendriyaVidyalaya NIT, Silchar:** KV NITS has been a long cherished desire of the people of Silchar; but it would have remained a distant dream until it was materialized on 21.04. 2012 by signing the MOU with KVS. It is a project sector school under institute of Higher Learning.

• **NITS-KIDS School:** The Institute has established a Kids School in its campus for imparting lower primary education with aminimal course fee to the children of nearby areas.

• **Telemedicine:** The Institute has taken effective measures to begin telemedicine program in order to flourish a healthy society.It works in three divisions – Educational outreach, NITS-CIT (NIT Silchar Certification in Information Technology) and Awareness & Projects.

Gyansagar

Gyansagar is a society service wing of NIT Silchar volunteered by the students of institute. Since last seven years,

Gyansagar has put its effort towards the development of the under-privileged people of the nearby villages. In this academic year Gyansagar has organized various events which are listed below.

1) Teaching Programs:

i) Education Outreach Program :

Under this program the student volunteers of Gyansagarwent to the nearby villages and teach the village students. The schools which are covered under this program are Borahkhai High Secondary School, Baniya Memorial High School, Barakvelly High Secondary School, M.E. School, Borakhai Garden, M.E. School, Silliguri.



ii) EK-Prayas:

This is a special program conducted by Gyansagar volunteers for the nearby village kid at KV, NIT Silchar campus. Here the students apart from study are also indulged in games and different other activities like dancing, painting, etc.



2) Skill Development Program:

i) NITS-CIT (National Institute of Technology Certificate in Information Technology):

In today's world, the need to possess basic computer skills is becoming extremely crucial. Considering the above Gyansagar has conducted a course on basic computer knowledge in which all essential basics were taught. A batch of 25 students comprising of college staff, working adults as well as people from distant villages were trained under the program for a period one year.



3) Other Social Initiatives

i) Cloth Donation program:

On 11th November 2017, a cloth donation drive was successfullyorganized at the nearby villages of NIT Silchar.After the formal inauguration, a team of 25 volunteers of Gyansagar went to the nearby villages for distributing the clothes. Around 2800 clothes (in number) were collected from our campus and they were properly washed and sorted before the camp was organised.The cloth donation drives had covered key areas in the villages namely Silcoorie (Ward No.7), Silcoorie Purana Bazartilla (Ward No. 8), Maartila (Silcoorie), Goaalmara (Near B.Ed. College), Patthartilla (Sildubi), Barik Nagar, Dharmakhaal.









ii) Artificial Limb Camp:

Gyansagar, the social wing of NIT Silchar along with Dr. A. Chowdhury has successfully organized a "Artificial Limb Camp" on 17th December 2017 in collaboration with Bharat VikasParishad, Silchar branch. The beneficiaries having orthopaedic disability were identified for remedial measures.

Annual Accounts

for the financial year 2017-18

National Institute of Technology Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
BALANCE SHEET AS AT 31ST MARCH 2018

Amount in Rupees

SOURCES OF FUND	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
CORPUS / CAPITAL FUND	1	5,221,339,119	5,145,124,685
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	2	845,652,184	717838490
CURRENT LIABILITIES & PROVISIONS	3	1,342,007,009	831,675,411
TOTAL		**7,408,998,313**	**6,694,638,586**

APPLICATION OF FUNDS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
FIXED ASSETS			
Tangible Assets		4,163,170,610	3,390,368,683
Intangible Assets	4	29,401,694	23,075,127
Capital Works-In-Progress		1,167,778,989	1,813,279,291
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5	354,144,573	354,151,012
INVESTMENTS - OTHERS	6	16,483,451	19,020,822
CURRENT ASSETS	7	1,454,641,974	919,486,377
LOANS, ADVANCES & DEPOSITS	8	223,377,021	175,257,274
TOTAL		**7,408,998,313**	**6,694,638,586**

SIGNIFICANT ACCOUNTING POLICIES	23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24

Dated, Silchar
The 18th June 2018

Registrar **Director**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31ST MARCH 2018

Amount in Rupees

PARTICULARS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
INCOME			
Academic Receipts	9	202,248,833	196,077,691
Grants /Subsidies	10	617,425,649	468,825,924
Income from Investment	11	404,375	375,067
Interest Earned	12	7,007,198	3,362,377
Other Income	13	302,752,950	299,683,502
Prior Period Income	14	-	-
TOTAL (A)		**1,129,839,004**	**968,324,561**

APPLICATION OF FUNDS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
EXPENDITURE			
Staff Payment & Benefits (Establishment Expenses)	15	544,221,101	421,796,352
Academic Expenses	16	126,425,156	112,947,385
Administrative and General Expenses	17	61,977,902	64,151,676
Transportation Expenses	18	2,402,370	2,434,259
Repairs & Maintenance	19	18,752,148	14,863,139
Finance Costs	20	-	22,326
Depreciation	4	250,239,808	261,682,212
Other Expenses	21	33,233,851	19,566,403
Prior Period Expenses	22	-	-
TOTAL (B)		**1,037,252,335**	**897,463,752**
Balance being excess of Income over Expenditure (A-B)		**92,586,669**	**70,860,809**
Transferred to Corpus Fund		92,586,669	70,860,809
Building Fund		-	-
Others (specify)		-	-
Balance Being Surplus / (deficit) Carried to Capital Fund		-	**-**
SIGNIFICANT ACCOUNTING POLICIES	23		
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24		

Dated, Silchar
The 18th June 2018

Registrar **Director**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE - 1 : CORPUS / CAPITAL FUND

Amount

	Particulars	CURRENT YEAR	PRE
A.	**CAPITAL FUND : Balance at the beginning of the year**	**5,145,124,685**	
Less:	Reappropriation of Capital Fund of earlier year	-	
Less:	Excess of Expenditure over Income transferred from Income & Exp A/C	-	
Less:	Depreciation on Capital Assets	250239808	
	Total	**4,894,884,877**	
Add:	Grants from Govt. of India to the extent utilized for Capital expenditure	**311,977,753**	
Add:	Reappropriation of Capital Fund of earlier year against refund to Minisrty	**13,784,185**	
Add:	Unclaimed Liability W/off	**692,304**	
	BALANCE AT THE YEAR END	**5,221,339,119**	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Amount i

Particulars	Fund wise Breakup					To
	Pension Fund	Depreciation Fund	Maintenance Fund	Staff Dev. Fund	Student Welfare Fund	Current Year
(1): A.						
a) Opening Balance	-	156,769,375	154,845,381	15,770,076	491,789	327,876,621
b) Additions during the year	23,358,451	769,500	-	769,500	66,723	24,964,174
c) Income from Investments made of the funds	-				-	-
d) Accrued Interest on Investments	-	10,364,176	10,883,560	728,489	-	21,976,225
e) Interest on Savings Bank a/c.		2,491	47,924	73,126	-	123,541
g) Others additions: Receivable amount Recd	-	-	-	-	-	-
Total (A)	**23,358,451**	**167,905,542**	**165,776,865**	**17,341,191**	**558,512**	**374,940,561**
B : Utilization /Expenditure towards objective of funds						
i) Capital Expenditure						-
ii) Revenue Expenditure	23,358,451	-	-	-	-	23,358,451
iii)Temporary loan to Institute	-	-	-	-	-	-
Total (B)	**23,358,451**	**-**	**-**	**-**	**-**	**23,358,451**
Closing balance at the year end (1) (A-B)	**-**	**167,905,542**	**165,776,865**	**17,341,191**	**558,512**	**351,582,110**
Represented by						
Cash and Bank Balances (Including MOD)	-	5,089,403	3,832,941	2,036,325	-	10,958,669
Investment	-	124,958,489	113,500,000	9,775,374	-	248,233,863
Interest accrued but not due	-	35,005,843	47,440,931	3,742,255	-	86,189,029
TDS Receivable	-	1,082,459	931,169	137,596	-	2,151,224
Balance lying with Institute A/c	-	1,769,348	71,824	1,649,641	558,512	4,049,325
Total	**-**	**167,905,542**	**165,776,865**	**17,341,191**	**558,512**	**351,582,110**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Amount i

Particulars	Fund wise Breakup					To
	Instt. Dev. Fund	Employees Welfare Fund	Deptt. Promotion	Virtual Class Room	NMEICT Fund	Current Year
(2) : A.						
a) Opening Balance	2,067,147	516,787	2,067,147	191,656	110,419	4,953,156
b) Additions during the year	266,892	66,724	266,892	-	78,565	679,073
c) Income from Investments made of the funds	-	-	-	-	-	-
d) Accrued Interest on Investments/Advances	-	-	-	-	-	-
e) Interest on Savings Bank a/c.	-	-	-	-	-	-
f) Other additions (specify nature)	-	-	-	-	-	-
Total (A)	**2,334,039**	**583,511**	**2,334,039**	**191,656**	**188,984**	**5,632,229**
B : Utilization /Expenditure towards objective of funds						
i) Capital Expenditure	-	-	-	-		-
ii) Revenue Expenditure	-	30,000	-	-	21,565	51,565
Total (B)	**-**	**30,000**	**-**	**-**	**21,565**	**51,565**
Closing balance at the year end (2): (A-B)	**2,334,039**	**553,511**	**2,334,039**	**191,656**	**167,419**	**5,580,664**
Represented by						
Cash and Bank Balances	-	-	-	-	-	-
Investment	-	-	-	-	-	-
Interest accrued but not due	-	-	-	-	-	-
Balance lying with Institute A/c	2,334,039	**553,511**	**2,334,039**	**191,656**	**167,419**	5,580,664
Total	**2,334,039**	**553,511**	**2,334,039**	**191,656**	**167,419**	**5,580,664**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Amount i

Particulars	Fund wise Breakup					To
	Gratuity Fund	Student Aid Fund	Corpus Fund			Current Year
(3) : A.						
a) Opening Balance	-	3,631,706	381,377,007	-	-	385,008,713
b) Additions during the year	-	1,026,000	3,148,863			4,174,863
c) Income from Investments made of the funds	-	-	-			-
d) Accrued Interest on Investments/Advances	-	-	6,717,186			6,717,186
e) Interest on Savings Bank a/c.	-	-	1,979			1,979
f) Other additions (Trans. from Graturity Fund)	-	-	-	-	-	-
g) Surplus of Income & Expenditure A/c transferred		-	92,586,669			92,586,669
Total (A)	**-**	**4,657,706**	**483,831,704**	**-**	**-**	**488,489,410**
B : Utilization /Expenditure towards objective of funds						
i) Capital Expenditure	-	-	-	-	-	-
ii) Revenue Expenditure	-	-	-	-	-	-
iii) Transferred to Corpus Fund	-	-	-	-	-	-
Total (B)	**-**	**-**	**-**	**-**	**-**	**-**
Closing balance at the year end (3): (A-B)	**-**	**4,657,706**	**483,831,704**	**-**	**-**	**488,489,410**
Represented by						
Cash and Bank Balances (Including MOD)	-	-	89,147,315	-	-	89,147,315
Investment	-	-	105,910,710	-	-	105,910,710
Interest accrued but not due	-	-	35,156,492	-	-	35,156,492
TDS Receivable			462,450			462,450
Balance lying with Institute A/c	-	4,657,706	253,154,737			257,812,443
Total	**-**	**4,657,706**	**483,831,704**	**-**	**-**	**488,489,410**
Closing balance at the year end (1+2+3)	**2,334,039**	**173,116,759**	**651,942,608**	**17,532,847**	**725,931**	**845,652,184**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 2A : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Sl. No.	Name of the Endowment	Opening Balance		Addition during the year		Total		Expenditure on the object during the year	Closing Balance	
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumu Intere
1	2	3	4	5	6	7	8	9	10	
1	Depreciation Fund	122,126,520	34,642,855	769,500	10,366,667	122,896,020	45,009,522	-	122,896,020	45,00
2	Maintenance Fund	119,660,204	35,185,177	-	10,931,484	119,660,204	46,116,661		119,660,204	46,11
3	Staff Dev. Fund	11,914,275	3,855,801	769,500	801,615	12,683,775	4,657,416	-	12,683,775	4,65
4	Student Welfare Fund	491,789	-	66,723	-	558,512	-		558,512	
5	Instt. Dev. Fund	2,067,147	-	266,892	-	2,334,039	-		2,334,039	
6	Employees Welfare Fund	516,787	-	66,724	-	583,511	-	30,000	553,511	
7	Deptt. Promotion Fund	2,067,147	-	266,892	-	2,334,039	-		2,334,039	
8	Virtual Class Room	191,656	-	-	-	191,656	-		191,656	
9	NMEICT Fund	110,419	-	78,565	-	188,984	-	21,565	167,419	
10	Pension Fund	-	-	23,358,451	-	23,358,451	-	23,358,451	-	
11	Student Aid Fund	3,631,706	-	1,026,000		4,657,706	-		4,657,706	
12	Corpus Fund	355,207,506	26,169,501	95,735,532	6,719,165	450,943,038	32,888,666	-	450,943,038	32,88
	TOTAL	**617,985,156**	**99,853,334**	**122,404,779**	**28,818,931**	**740,389,935**	**128,672,265**	**23,410,016**	**716,979,919**	**128,67**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 3 : CURRENT LIABILITIES AND PROVISIONS

Amoun

PARTICULARS	CURRENT YEAR	PRE
A. CURRENT LIABILITIES		
1. Deposits from staff	2,919,205	
2. Deposits from Students	33,296,926	
3. **Sundry Creditors:**		
a) For Goods & Services	77,521,206	
b) Others	13,421,246	
4. Deposits - Others (including EMD, Security Deposit & Project)	19,820,136	
5. Statutory Liabilities (GSLI, P Tax, EPF, CPF)	158,033	
6. **Other Current Liabilities:**		
a) Sponsored Project Liability (Including P Tax and others)	1,401,842	
b) Receipts against sponsored projects	44,998,994	
c) Receipts against sponsored fellowships & Scholarship	2,623,150	
d) **Unutilized Grants :-**		
Under Non Recurring Grants (OH-35)	500,395,222	
Under Recurring Grants (OH-31)	-	
Under Recurring Grants (OH-36)	173,998,427	
e) Sponsored Projects (Previous)	50,506,759	
f) TEQIP PHASE-I	103,165,960	
g) TEQIP PHASE-II	96,064,457	
h) Other funds	11,827,239	
i) Other liabilities	209,888,208	
Total (A)	**1,342,007,009**	
B. PROVISIONS		
1. For Taxation		
2. Gratuity		
3. Superannuation Pension		
4. Others if any		
Total (B)	**-**	
TOTAL (A+B)	**1,342,007,009**	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 3A : SPONSORED PROJECTS FUND

Sl. No.	Name of the Project	Opening Balance		Receipts/ Recoveries during the year		Total	Expenditure during the year	Refund to Ministry/ Loan	Clos
		Credit	Debit	Grants /Loan	Interest/ Other Receipts				Credi
1	2	3	4	5	6	7	8	9	10
A	MCIT, GoI	747,365	-	4,733,989	43,884	5,525,238	4,558,006	200,000	767
B	DST, GoI	18,414,535	-	467,279	758,722	19,640,536	1,507,141	-	18,133
C	MNRE, GoI	72,315	-	83,572	28,349	184,236	83,572	-	100
D	MoESc., GoI	230,690	-	-	20,322	251,012	-	225,177	25
E	ICSSR	-	-	80,000	4,406	84,406	6,000	-	78
F	SERB, GoI	14,047,408	-	10,038,810	793,293	24,879,511	10,983,474	-	13,896
G	IBM	798,831	-	-	39,886	838,717	-	-	838
H	AICTE -RPS	1,308,956	-	-	63,052	1,372,008	6,528	156,728	1,208
I	AICTE -MODROBS	1,375,066	-	-	100,384	1,475,450	-	-	1,475
J	BRNS	1,187,141	-	386,795	71,988	1,645,924	443,328	-	1,202
K	NRRDA	54,359	-	-	1,835	56,194	23,632	-	32
L	DEITY	3,095,796	-	-	146,216	3,242,012	1,628,968	-	1,613
M	UGC	15,955	-	197,556	3,114	216,625	151,000	-	65
N	CPRI	-	-	1,497,000	57,775	1,554,775	70,161	-	1,484
O	NMHS	-	-	2,072,000	35,421	2,107,421	78,886	-	2,028
P	DDMA	-	-	1,518,000	60,854	1,578,854	35,663	-	1,543
Q	CSIR	-	-	482,667	21,671	504,338		-	504
TOTAL		**41,348,417**	**-**	**21,557,668**	**2,251,172**	**65,157,257**	**19,576,359**	**581,905**	**44,998**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE - 3 (1): SPONSORED PROJECTS FUNDS

Particulars	Fund wise Breakup									
	M C I T	D S T	M O E S	ICSSR	M N R E	DIETY	CPRI	NMHS	BRNS	Currer
(1): A.										
a) Opening Balance	747,365	18,414,535	230,690	-	72,315	3,095,796	-	-	1,187,141	23,74
b) Additions during the year	4,733,989	467,279	-	80,000	-	-	1,497,000	2,072,000	386,795	9,23
c) Interest on Savings Bank a/c.	43,884	755,522	20,322	4,406	5,349	146,216	57,775	35,421	71,988	1,14
d) Other additions	-	3,200	-	-	23,000	-	-	-	-	2
e) Loan from Institute	-	-	-	-	83,572	-	-	-	-	8
Total (A)	**5,525,238**	**19,640,536**	**251,012**	**84,406**	**184,236**	**3,242,012**	**1,554,775**	**2,107,421**	**1,645,924**	**34,23**
B : Utilization /Expenditure towards objective of funds										
i) Capital Expenditure										
Equipment	-	684,984	-	-	-	1,113,331	-	-	-	1,79
Computer	-	-	-	-	-	-	-	-	-	
Software	-	-	-	-	-	-	-	-	-	
Furniture	-	96,611	-	-	-	-	-	-	-	9
Other Cost	-	-	-	-	-	-	-	-	-	
ii) Revenue Expenditure	4,558,006	725,546	-	6,000	83,572	515,637	70,161	78,886	443,328	6,48
iii) Refunded to Ministry	-	-	225,177	-	-	-	-	-	-	22
iv) Refund of Loan to Institute	200,000	-			-	-	-	-	-	20
Total (B)	**4,758,006**	**1,507,141**	**225,177**	**6,000**	**83,572**	**1,628,968**	**70,161**	**78,886**	**443,328**	**8,80**
Closing balance at the year end (1) (A-B)	**767,232**	**18,133,395**	**25,835**	**78,406**	**100,664**	**1,613,044**	**1,484,614**	**2,028,535**	**1,202,596**	**25,43**

SCHEDULE - 3 (1): SPONSORED PROJECTS FUNDS

A

Particulars	Fund wise Breakup									
	AICTE - RPS	AICTE - MODROB	I B M Project	S E R B	NRRDA	UGC	DDMA	CSIR	-	Currer
(2) : A.										
a) Opening Balance	1,308,956	1,375,066	798,831	14,047,408	54,359	15,955	-	-	-	17,6(
b) Additions during the year	-	-	-	10,038,810	-	197,556	1,518,000	482,667	-	12,2:
c) Interest on Savings Bank a/c.	63,052	100,384	39,886	793,293	1,835	3,114	60,854	21,671	-	1,0
d) Other additions (specify nature)	-	-	-	-	-	-	-	-	-	
Total (A)	**1,372,008**	**1,475,450**	**838,717**	**24,879,511**	**56,194**	**216,625**	**1,578,854**	**504,338**	**-**	**30,9**
B : Utilization /Expenditure towards objective of funds										
i) Capital Expenditure										
Equipment	-	-	-	6,747,104	-	-	-	-	-	6,7
Computer	-	-	-	-	-	-	-	-	-	
Software	-	-	-	-	-	-	-	-	-	
Furniture	-	-	-	-	-	-	-	-	-	
Books	-	-	-	-	-	-	-	-	-	
ii) Revenue Expenditure	6,528	-	-	4,236,370	23,632	151,000	35,663	-	-	4,4
iii) Refunded to Sanctioning authority	156,728		-	-		-	-	-	-	1
Total (B)	**163,256**	**-**	**-**	**10,983,474**	**23,632**	**151,000**	**35,663**	**-**	**-**	**11,3**
Closing balance at the year end (2): (A-B)	**1,208,752**	**1,475,450**	**838,717**	**13,896,038**	**32,562**	**65,625**	**1,543,191**	**504,338**	**-**	**19,5**
Closing balance at the year end (1+2)	**1,975,984**	**19,608,845**	**864,552**	**13,974,444**	**133,226**	**1,678,669**	**3,027,805**	**2,532,873**	**1,202,596**	**44,9**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 3B : SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

Amoun

Sl. No.	Name of the Sponsors	Opening Balance		Transaction during the year		Closing Bala 31.03	
		Credit	Debit	Credit	Debit	Credit	
1	2	3	4	5	6	7	
1	Various Agencies	4,941,577	-	2,191,500	4,509,927	2,623,150	
Total		4,941,577	-	2,191,500	4,509,927	2,623,150	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 3C : UNUTILIZED GRANTS FROM UGC, GOVT. OF INDIA AND STATE GOVT.

Am

PARTICULARS	CURRENT YEAR	PREVI
A. Plan Grants : Government of India		
Balance Brought forward		
Add: Receipts during the year		
Add Other additions		
Total (a)		
Less: Capital expenditure of last year (Net off depreciation)		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital Expenditure		
Total (b)		
Unutilized carried forward (a-b)		
	Refer to Schedule-10	
B. Grants : NON- PLAN		
Balance Brought forward		
Add: Receipts during the year		
Total (c)		
Less: Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital Expenditure		
Total (d)		
Unutilized carried forward (c-d)		
GRAND TOTAL (A+B)		

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

SCHEDULE 4 - FIXED ASSETS

Amount in

S. No	Assets Heads	Gross Block				Depreciation for the Year 2017-18				
	TANGIBLE ASSETS	Opening Balance as on 01.04.2017	Additions	Deduction	Cl. Balance	Dep Opening Balance	Depreciation for the Year	Deductions/ Adjustment	Total Depreciations	31.03.2
1	Land	866,458	-	-	866,458	-	-	-	-	86
2	Site & Campus Development	60,284,627			60,284,627	17,073,129	2,160,574	-	19,233,703	41,05
3	Buildings	3,152,525,199	814,821,101		3,967,346,300	545,576,034	133,247,182	-	678,823,216	3,288,52
4	Roads & Bridges	78,563,211			78,563,211	14,153,353	3,220,492	-	17,373,845	61,18
5	Tubewells & Water Supply	186,506,164			186,506,164	31,415,436	7,754,538	-	39,169,974	147,33
5a	Sewerage & Drainage	-	58,425,054		58,425,054				-	58,42
6	Electrical Installation & Equipment	31,684,335	2,525,420	467,231	33,742,524	17,650,796	2,320,672	-155,077	20,126,545	13,61
7	Plant & Machinery	108,390,027	45,000	45,000	108,390,027	48,175,410	9,032,194	-	57,207,604	51,18
8	Scientific & Laboratory Equipment	300,068,068	17,624,056	2,637,588	315,054,536	144,087,482	24,113,232	1,627	168,199,087	146,85
9	Office Equipment	22,643,447		1,932,183	20,711,264	10,534,454	1,557,628	202,637	11,889,445	8,82
10	Audio Visual Equipment	9,856,935	501,710		10,358,645	4,245,031	858,388	-	5,103,419	5,25
11	Computers & Peripherials	154,274,649	1,786,823		156,061,472	120,275,694	10,462,982	-49,187	130,787,863	25,27
12	Furniture, Fixtures & Fittings	141,952,372	420,350		142,372,722	58,432,577	8,366,310	-	66,798,887	75,57
13	Vehicles	5,126,107			5,126,107	4,061,222	212,978	-	4,274,200	85
14	Lib. Books & Scientific Journals	58,734,208	3,857,232		62,591,440	44,996,402	4,296,320	-	49,292,722	13,29
15	Other Assets	85,161,352			85,161,352	48,757,416	10,583,784		59,341,200	25,82
	Total (A)	**4,396,637,159**	**900,006,746**	**5,082,002**	**5,291,561,903**	**1,109,434,436**	**218,187,274**	**-**	**1,327,621,710**	**3,963,94**
16	**Capital Works in Progress (B)**	**1,813,279,291**	**219,691,898**	**865,192,200**	**1,167,778,989**	**-**	**-**	**-**	-	**1,167,77**
	INTANGIBLE ASSETS :									
17	Computer Software	43,394,899	944,000	-	44,338,899	20,445,503	3,516,118	-	23,961,621	20,37
18	E- Books		8,772,895		8,772,895				-	8,77
19	E-Journals	77,577,061	28,536,416	-	106,113,477	77,577,061	28,536,416	-	106,113,477	
20	Patents	125,731	125,790	-	251,521	-		-	-	25
	Total (C)	**121,097,691**	**38,379,101**	**-**	**159,476,792**	**98,022,564**	**32,052,534**	**-**	**130,075,098**	**29,40**
20	**TEQIP I Assets (D)**	**103,165,960**	**-**	**-**	**103,165,960**	**-**	**-**	**-**	-	**103,16**
21	**TEQIP I Assets (E)**	**-**	**96,064,457**	**-**	**96,064,457**	**-**	**-**	**-**	-	**96,06**
	Grand Total (A+B+C+D+E)	**6,434,180,101**	**1,254,142,202**	**870,274,202**	**6,818,048,101**	**1,207,457,000**	**250,239,808**	**-**	**1,457,696,808**	**5,360,35**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

SCHEDULE 4(C) (I) - PATENTS AND COPYRIGHTS

Particulars	Op Balance 01.04.2017	Additions	Gross	Amortization	Net Bloc 2017-18
A. Patents Granted					
1. Balance as on 31.03.2016 of Patents obtained in 2008-09 (Original Value - Rs.)	-	-	-	-	-
2. Balance as on 31.03.2016 of Patents obtained in 2010-11 (Original Value - Rs.)	-	-	-	-	-
3. Balance as on 31.03.2016 of Patents obtained in 2012-13 (Original Value - Rs.)	-	-	-	-	-
4. Patents granted during the Current Year	-	-	-	-	-
Total	-	-	-	-	-

Particulars	Op Balance	Additions	Gross	Amortization	Net Bloc 2017-18
B. Patents Pending in respect of Patents applied for:					
1. Expenditure incurred during 2013-14	-	-	-	-	-
2. Expenditure incurred during 2014-15	-	-	-	-	-
3. Expenditure incurred during 2015-16	42,180	-	42,180.00	-	42,1
4. Expenditure incurred during 2016-17	83,551	-	83,551.00	-	83,5
5. Expenditure incurred during 2017-18	-	125,790	125,790.00	-	125,7
Total	125,731	125,790	251,521	-	251,5
Grand Total (A+B)	**125,731**	**125,790**	**251,521**	**-**	**251,5**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 5 : INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. In Central Government Securities	-	-
2. In State Government Securities	-	-
3. Other approved Securities	-	-
4. Shares	-	-
5. Debantures and Bonds	-	-
6. **Term Deposits with Banks**		
Investment of Corpus Fund	105,910,710	105,917,149
Investment of Depreciation Fund	124,958,489	124,958,489
Investment of Maintenance Fund	113,500,000	113,500,000
Investment of Staff Development Fund	9,775,374	9,775,374
7. Others	-	-
Total	**354,144,573**	**354,151,012**

SCHEDULE : 6 : INVESTMENTS - OTHERS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. In Central Government Securities	-	-
2. In State Government Securities	-	-
3. Other approved Securities	-	-
4. Shares	-	-
5. Debantures and Bonds	-	-
6. Term Deposits with Banks	-	-
Short Term Deposit (Fee)	-	-
Short Term Deposit	14,500,000	14,500,000
7. Others : Margin Money Account (L.C.)	1,983,451	4,520,822
Total	**16,483,451**	**19,020,822**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE SHOWING INVESTMENTS OF EARMARKED AND OTHER FUNDS AS ON 31.03.2018
(Corresponding to Schedule - 5 & 6)

Sl No.	Bank	F.D No	Date	Face Value as on 01.04.17	Addition during 2017-18	Matured during 2017-18	Face Value as on 31.03.18	Accrued Interest Upto 31.03.17	Accrued Interest during 2017-18	Accrued Intt. Recd. during 2017-18	TDS receiva 2017-
		Corpus Fund									
1	SBI (Gratuity)	32269515122	31.03.12	4,567,987	-	-	4,567,987	2,496,730	653,281	-	
2	SBI (Gratuity)	32323115747	23.04.12	2,500,000	-	-	2,500,000	1,358,770	351,818	-	
3	Vijaya Bank	800603311003251	08.02.17	20,000,000	-	-	20,000,000	5,900,703	1,454,190	-	
4	Bank of India	503945110000247	24.04.14	4,500,000	-	-	4,500,000	1,151,493	402,895	-	40
5	SBI	32115408694	31.12.11	2,650,000	-	-	2,650,000	1,581,321	237,448	-	
6	SBI	32269399181	31.03.12	2,185,757	-	-	2,185,757	1,197,624	314,964	-	
7	SBI	32323116853	23.04.12	1,500,000	-	-	1,500,000	847,411	176,847	-	
8	SBI	33761329398	31.03.14	55,000,000	-	-	55,000,000	10,569,291	2,536,192	-	
9	Canara Bank	3050401001159-1	19.04.14	13,000,000	-	-	13,000,000	3,433,799	590,050	-	59
10	Canara Bank	3050401001507		6,439	-	6,439	-	-	-	-	
11	Canara Bank	3050401001507/2	25.04.16	6,966	-	-	6,966	1,462	-499		
	Total			**105,917,149**	**-**	**6,439**	**105,910,710**	**28,538,604**	**6,717,186**	**-**	**99**
		Depreciation Fund									
1	SBI	32313779663	23.04.12	7,400,000	-	-	7,400,000	3,851,265	995,594	-	199
2	SBI	32313798610	23.04.12	9,000,000	-	-	9,000,000	4,567,022	1,079,280	-	215
3	SBI	32313799432	23.04.12	9,000,000	-	-	9,000,000	4,567,022	1,079,280	-	215
4	Bank of India	503945110000250	24.04.14	6,000,000	-	-	6,000,000	1,563,133	539,165	-	53
5	IDBI	293106000022376	30.11.15	7,938,512	-	-	7,938,512	838,383	616,784	-	
6	IDBI	293106000022400	30.11.15	10,206,659	-	-	10,206,659	1,005,922	719,185	-	
7	IDBI	293106000022419	30.11.15	10,206,659	-	-	10,206,659	1,005,922	719,185	-	
8	IDBI	293106000022428	30.11.15	10,206,659	-	-	10,206,659	1,005,922	719,185	-	
9	Vijaya Bank	800603311004287	05.09.15	7,000,000	-	-	7,000,000	885,873	495,059	-	
10	Vijaya Bank	800603311004288	05.09.15	6,000,000	-	-	6,000,000	759,320	424,336	-	
11	Vijaya Bank	800603311004285	05.09.15	9,000,000	-	-	9,000,000	1,138,979	636,505	-	
12	Vijaya Bank	800603311004286	05.09.15	9,000,000	-	-	9,000,000	1,138,979	636,505	-	
13	Vijaya Bank	800603311004284	05.09.15	9,000,000	-	-	9,000,000	1,138,979	636,505	-	
14	PNB	311000DP00015494	05.09.15	9,000,000	-	-	9,000,000	1,115,816	589,325	-	
19	PNB	311000DP00015500	05.09.15	6,000,000	-	-	6,000,000	743,878	478,283	-	
	Total			**124,958,489**	**-**	**-**	**124,958,489**	**25,326,415**	**10,364,176**	**-**	**684**

Sl No.	Bank	F.D No	Date	Face Value as on 01.04.17	Addition during 2017-18	Matured during 2017-18	Face Value as on 31.03.18	Accrued Interest Upto 31.03.17	Accrued Interest during 2017-18	Accrued Intt. Recd. during 2017-18	TDS receiva 2017-
		Maintenance Fund									
1	PNB	311000DA00003195	30.12.11	12,500,000	-	-	12,500,000	7,537,928	1,620,191	-	
2	PNB	311000DA00003186	30.12.11	12,800,000	-	-	12,800,000	7,718,838	1,659,076	-	
3	PNB	311000DP00015519	05.09.15	8,000,000	-	-	8,000,000	991,837	637,710	-	
4	PNB	311000DP00015528	05.09.15	7,000,000	-	-	7,000,000	867,858	557,996	-	
5	SBI	32313794525	23.04.12	6,700,000	-	-	6,700,000	3,570,404	901,416	-	90
6	SBI	32313795314	23.04.12	9,000,000	-	-	9,000,000	4,567,023	1,025,229	-	107
7	SBI	32313796146	23.04.12	9,000,000	-	-	9,000,000	4,567,023	1,025,229	-	107
8	Bank of India	503945110000249	24.04.14	8,500,000	-	-	8,500,000	2,187,639	560,569	-	56
9	Indian Bank	6370094889	04.09.15	6,000,000	-	-	6,000,000	784,176	471,150	-	47,1
10	Indian Bank	6370094584	04.09.15	7,000,000	-	-	7,000,000	914,871	549,675	-	54,9
11	Indian Bank	6370094302	04.09.15	8,500,000	-	-	8,500,000	1,110,915	667,462	-	66,7
12	Indian Bank	6370094546	04.09.15	9,000,000	-	-	9,000,000	1,176,263	599,768	-	59,9
13	Indian Bank	6370094296	04.09.15	9,500,000	-	-	9,500,000	1,214,271	608,089	-	60,8
	Total			**113,500,000**	**-**	**-**	**113,500,000**	**37,209,046**	**10,883,560**	**-**	**651**
		Staff Development Fund									
1	SBI	32115415012	31.12.11	700,000	-	-	700,000	409,191	65,247	-	17,8
2	SBI	32269400369	31.03.12	675,374	-	-	675,374	370,053	97,319	-	
3	SBI	32323059473	23.04.12	400,000	-	-	400,000	221,263	35,024	-	
4	Bank of India	503945110000248	18.04.14	8,000,000	-	-	8,000,000	2,084,177	530,899	-	53
	Total			**9,775,374**	**-**	**-**	**9,775,374**	**3,084,684**	**728,489**	**-**	**70**
		NONPLAN/Plan									
1	SBI	35593385121	24.02.16	5,000,000	-	-	5,000,000	426,526	374,582	-	
2	SBI	35593383394	24.02.16	5,000,000	-	-	5,000,000	426,526	374,582	-	
3	Bank of India	503945110000251	18.04.14	4,500,000	-	-	4,500,000	1,172,349	404,375	-	40
4	Axis Bank	Stock TDR against LC	31.03.16	4,520,822	-	2,537,371	1,983,451	340,231	113,974	150,977	
	Total			**19,020,822**	**-**	**2,537,371**	**16,483,451**	**2,365,632**	**1,267,513**	**150,977**	**40,**
	Grand Total			**373,171,834**	**-**	**2,543,810**	**370,628,024**	**96,524,381**	**29,960,924**	**150,977**	**1,547,**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 7 : CURRENT ASSETS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. STOCKS:		
a) Storers and spares	-	-
b) Loose Tools	-	-
c) Publications	-	-
d) Laboratory Chemicals	-	-
e) Building materials	-	-
f) Electrical Materials	-	-
g) Stationery	-	-
h) Water supply materials	-	-
2. SUNDRY DEBTORS	**-**	**-**
a) Debts outstanding for a period exceeding six months	68,672	68,672
b) Others	-	-
3. CASH AND BANK BALANCES	**-**	**-**
Cash in hand	51,225	15,322
Cash at Bank:	-	-
A) With Scheduled Banks:	**-**	**-**
In Current Accounts	1,237,567,862	677,215,479
In Savings Accounts	216,954,214	242,186,904
Total	**1,454,641,974**	**919,486,377**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 7 (A) ANNEXURE - CURRENT ASSETS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
With Scheduled Banks:		
In Current Accounts		
SBI-10521277057 (NON PLAN}	-37,579,938	-9,681,449
Non Plan Auto Sweep A/c	84,725,840	141,985,058
SBI-10521277068 (PLAN GRANT)	7,669,343	-37,559,296
Plan Auto Sweep A/c	1,182,752,618	582,471,166
Total	**1,237,567,862**	**677,215,479**
In Savings Accounts		
SBI-10521277818(CORPUS FUND)	51,315	64,249
SBI Auto Sweep A/c (Corpus Fund)	89,096,000	88,582,000
SBI-30052416379(STAFF DEV FUN)	2,036,325	1,963,199
SBI-30052438520(DEPRECIATION FUND)	54,403	51,912
SBI Auto Sweep A/c (Dep. Fund)	5,035,000	5,035,000
SBI-30052443879(MAINT.FUND)	59,941	3,785,017
AXIS-10049704315 (PLAN)	19,117,342	12,154,412
SBI-10521278244 (SCHOLARSHIP)	195,458	201,308
SBI Auto Sweep A/c (Scholarship))	3,280,626	5,462,000
SBI Auto Sweep A/c (Maint. Fund)	3,773,000	-
SBI-30763009570(NONPLAN FEE)	501,267	536,464
SBI Auto Sweep A/c (FEE A/c)	62,824,000	82,570,318
SBI-36535392913 (AWARD FUND)	440,592	300,000
SBI-36017852338 (START UP INDIA FUND)	865	1,000
SBI-30293190682(TUC)	7,043	6,791
SBI-35538434664 (IEDC)	677,657	887,206
SBI-30033506221 (SMDP)	278,052	293,209
SBI-34671803739 (AM&MT)	364,964	15,438,116
SBI-30780415571(RPS SCHEME)	-1,383,940	23,242,029
Project Auto Sweep A/C	28,644,900	-
SBI-30780416041(MODROBS)	57,117	1,375,066
SBI-31306562769(BEHAVIOUR OF CLAY/MoESc)	764	213,516
SBI-37093726031 (NHMS)	1,816,535	-
SBI-31306566082(REG EXTREME RAINFALL)	24,989	24,092
Total	**216,954,214**	**242,186,904**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 8 : LOANS, ADVANCE AND DEPOSITS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. Advances to employees (Non-interest bearing) :		
Festival Advance	289,064	303,050
HTC Advance	74,200	86,199
LTC Advance	160,000	104,000
Other Advance To Employees	-	500,000
Recoverable Advance	5,721,910	5,004,701
TA Advance	145,252	
2. Long Term Advances to employees: (Interest bearing) :		
a) Vehicle Loan	-	
b) Home Loan	-	
c) Soft Loan	1,086,333	572,906
3. Advances & other amt recoverable in cash or in kind or for value to be received :		
a) On Capital Account		
Deposit Work	13,584,358	17,084,358
Secured Advance	4,000,000	38,850,000
Advance - PHE Water Supply	124	124
Margin Money for LC	12,269,447	7,557,341
Adv- NCC Ltd	10,551,076	
b) Suppliers/Firm		
c) Others		
i) Electricity Consumption Receivable	455,012	291,842
ii) House Rent / Licence Fee receivable	143,892	53,773
iii) Shop & Canteen Rent receivable	18,272	146,577
iv) Advance Tax		
v) Receivable against Start Up India (Project)	1,561,301	77,182
vi) Receivable from SBI (Against Saswat Chakraborty)	-	14,000

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2018

SCHEDULE : 8 : LOANS, ADVANCE AND DEPOSITS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
4. Prepaid Expenses :		
a) Insurance	798,621	798,288
b) Against E Journal	19,695,197	-
c) Digital Library		
d) Printed Journal		
e) AMC		
5. Deposits :		
a) Telephone		
b) Lease Rent		
c) Electricity	400,854	400,854
d) AICTE		
e) SBI ATM (TDR)	10,000	10,000
f) Security for POL	162,084	162,084
g) Security against LPG	46,200	46,200
6. Income Accrued :		
a) On investments from Earmarked / Endowment Fund	121,345,521	94,158,749
b) On Investment - Others	3,441,730	2,365,632
c) On Loans and Advances		
d) Others (including income due unrealized)		
7. Other - Current assets receivable from UGC /Sponsored projects :		
a) Debit balances in Sponsored Projects		
b) Debit balances in sponsored Fellowship & Scholarships		
c) Grants receivable		
d) Grants receivable from UGC	-	
e) Recoverable from MR Staff (EPF Subscription)	2,708,310	2,708,310
f) TDS Receivable- Earmarked Fund	2,613,674	1,107,035
g) TDS Receivable- Sponsored Project	755	755
h) TDS Receivable- Others (Non Plan)	516,807	395,214
8. Claims receivable :	**21,577,027**	**2,458,100**
Total (A)	**223,377,021**	**175,257,274**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 9- ACADEMIC RECEIPTS

Amount in Rupees

FEES FROM STUDENTS	Current Year	Previous Year
Academic		
1. Tuition fee	175,565,207	171,839,042
2. Admission fee	4,912,000	3,997,500
3. Enrolment fee		
4. Library Admission fee	3,247,400	3,159,500
5. Laboratory fee - I T System fee	6,456,500	6,318,000
6. Art & Craft fee		
7. Registration fee / Institutional fee		
8. Syllabus fee		
Total (A)	**190,181,107**	**185,314,042**
Examinations		
1. Admission test fee		
2. Annual Examination fee	6,763,100	4,540,800
3. Mark sheet, certificate fee		
4. Entrance fee		
Total (B)	**6,763,100**	**4,540,800**
Others Fees		
1. Identity card fee		
2. Fine/Miscelleneuos fee	686,826	729,129
3. Medical fee	1,935,900	1,924,740
4. Transportation fee	1,935,900	2,601,180
5. Hostel fee - Light & Water charges		
6. Migration fee		
7. Summer term course fee		240,000
8. Verification fee		
Total (C)	**4,558,626**	**5,495,049**
Sale of Publications		
1. Sale of Admission forms		
2. Sale of syllabus and question paper, etc.		
3. Sale of prospectus including admission forms		
Total (D)	**-**	**-**
Other Academic Receipts		
1. Registration fee for workshops, programmes		26,300
2. Registration fee (Academic Staff College)		
3. Training & Placement	746,000	701,500
Total (E)	**746,000**	**727,800**
Grand Total (A+B+C+D+E)	**202,248,833**	**196,077,691**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 10- GRANTS/SUBSIDIES (IRRECOVERABLE GRANTS RECEIVED)

Particulars	Current Year				Previous Year	
	OH-35 (Creation of Assets)	OH-31 (Recurring General)	OH-36 (Salaries)	Current Year Total	Plan	Non Plan
Balance B/F	395,770,766	9,874,076	-	405,644,842	52,107,888	-
Add: Receipts during the year	419,950,000	143,400,000	638,150,000	1,201,500,000	921,560,000	365,000,00
Add: Interest earned	10,436,394		-	10,436,394	2,336,812	-
Total	**826,157,160**	**153,274,076**	**638,150,000**	**1,617,581,236**	**976,004,700**	**365,000,00**
Less: Adjustment against refund to Ministry in F.Y 2013-14	13,784,185	-	-	13,784,185	-	-
Balance	**812,372,975**	**153,274,076**	**638,150,000**	**1,603,797,051**	**976,004,700**	**365,000,00**
Less: Utilized for Capital expenditure (A)	311,977,753			311,977,753	466,533,934	-
Balance	**500,395,222**	**153,274,076**	**638,150,000**	**1,291,819,298**	**509,470,766**	**365,000,00**
Less: Utilized for Revenue expenditure (B)	-	153,274,076	464,151,573	617,425,649	103,825,924	365,000,00
Balance C/F (C)	**500,395,222**	**-**	**173,998,427**	**674,393,649**	**405,644,842**	**-**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

Schedule 11 - INCOME FROM INVESTMENT

Amount in

Particulars	Earmarked/Endowment Funds		Other Inves	
	Current Year	Previous Year	Current Year	P
1 Interest				
a. On Government Securities				
b. Other Bonds/Debentures				
2 Interest on Term Deposits				
Interest on Stock Term Deposits from AXIS Bank				
Interest on Term Deposits against short term deposits.		7,467		
3 Income accrued but not due on Term Deposits	28,693,411	29,313,245	404,375	
4 Interest on Savings Bank Accounts	125,520	1,275,807		
5 Others (Specify)				
Total	**28,818,931**	**30,596,519**	**404,375**	
Transferred to Earmarked/Endowment Funds	**28,818,931**	30,596,519		
Balance	**-**	**-**	**404,375**	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 12: INTEREST EARNED

Amount in Rupees

Particulars	Current Year	Previous Year
1 **On Savings Accounts with scheduled banks :**		
Against fee account no. 30763009570	43,386	93,867
Against Scholarship account no. 10521278244	61,203	96,562
Against Auto Sweep A/c (Non Plan)	3,195,627	2,969,010
Against Auto Sweep A/c (Fees A/c)	3,706,982	94,993
Others		
Total (A)	**7,007,198**	**3,254,432**
2 **On Loans :**		
a. Employees/Staff - Interest on Soft Loan		107,361
b. Others - Against Interest recovery of LTC/HTC		584
Total (B)	**-**	**107,945**
3 **On Debtors and Other Receivables**		
Total (C)	**-**	**-**
Grand Total (A+B+C)	**7,007,198**	**3,362,377**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 13- OTHER INCOME

Amount in Rupees

A. Income from Land & Buildings	Current Year	Previous Year
1. Hostel room Rent	6,277,750	6,127,000
2. License fee	2,391,929	2,315,350
3. Hire Charges of Auditorium/Play ground/Convention Centre, Shop etc.	2,095,384	1,376,259
4. Guest House Rent	1,840,330	1,433,080
5. Electricity charges recovered	5,491,562	5,971,322
6. Light & Water charges recovered	6,277,750	6,127,000
Total	**24,374,705**	**23,350,011**
B. Sale of Institute's Publications		
C. Income from holding events		
1. Gross Receipts from annual function/Sports Carnival		
Less: Direct expenditure incurred on the annual function/Sports Carnival		
2. Gross Receipts from fetes		
Less: Direct expenditure incurred on the fetes		
3. Gross Receipts for educational tours		
Less: Direct expenditure incurred on the tours		
4. Others (to be specified and separately disclosed)		
Total	-	-
D. Others		
1. Institute Overhead (Project)	1,665,937	
2. RTI Fees	712	656
3. Income from Royalty		
4. Sale of application form (Recruitment)	1,479,384	81,850
5. Misc. receipts (Sale of Tender Form, waste paper, etc.)	957,102	354,747
6. Profit on sale/disposal of Assets		
a) Owned assets		
b) Assets received free of cost		
7. Others (Lake)		367,500
8. Pension Fund Contribution	23,358,451	10,062,245
9. KIDS NITS Fund Contribution (Appropriation)	676,851	602,403
10. Capital Fund appropriation against Depreciation	250,239,808	261,682,212
a) Misc. Receipts		3,181,878
Total	**278,378,245**	**276,333,491**
Grand Total (A+B+C+D)	**302,752,950**	**299,683,502**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 14- PRIOR PERIOD INCOME *Amount in Rupees*

Particulars	Current Year	Previous Year
1. Academic Receipts	-	-
2. Income from Investments	-	-
3. Interest earned	-	-
4. Other Income	-	-
Total	**-**	**-**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 15 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

(Amou

Particulars	Current Year			Previous Ye	
	Plan	Non Plan	Total	Plan	Non Plan
A) Salaries and Wages					
i) Teaching & Admin	-	243,902,769	243,902,769		183,104,257
ii) Group B & C		22,203,970	22,203,970		24,947,549
iii) Group D		39,807,526	39,807,526		28,208,353
B) Other Adhoc	-	-	-		
i) Salary of outsourced staff		249,284	249,284		14,624,892
ii) Salary of Contractual Teaching & Admin		34,547,596	34,547,596		20,041,960
iii) Salary of M R Staff		18,813,313	18,813,313		11,293,040
C) Allowances & Bonus	-	-	-		
i) Bonus		914,992	914,992		1,706,880
ii) Cumulative Professional Dev. Allowance		12,282,620	12,282,620		4,731,934
D) Contribution to Other Fund	-	-	-		
i) NPS Contribution		12,730,342	12,730,342		8,963,150
ii) Pension contribution (Deputation)		69,972	69,972		79,406
iii) EPF Contribution(Employer) MR & Others		3,022,629	3,022,629		1,509,791
iv) EPF Contribution FFW Workers' Society		307,906	307,906		127,047
E) Staff Welfare Expenses	-	-	-		
i) Mobile & Telephone expenditure		809,250	809,250		992,861
F) Retirement and Terminal Benefits	-	-	-		
i) Death cum Retirement Gratuity		15,722,465	15,722,465		14,237,567
ii) Pension		55,981,703	55,981,703		51,082,760
iii) Commuted Pension		7,891,657	7,891,657		6,290,214

iv) Leave Encashment		6,663,385	6,663,385		9,347,355
v) Leave Salary (Deputation)		-	-		
G) LTC facility	-	-	-		
i) Home Travel Concession		2,249,228	2,249,228		2,032,900
ii) Leave Travel Concession		3,014,933	3,014,933		1,928,286
H) Medical facility	-	-	-		
i) Medical Reimbursement		2,905,418	2,905,418		2,578,556
ii) Medicine & Dispensery expenses		798,363	798,363		1,064,671
I) Children Education Allowances		1,922,370	1,922,370		1,703,474
J) Honorarium		698,333	698,333		329,000
K) Others :	-	-	-		
i) Security Services		30,311,670	30,311,670		20,268,295
ii) House Keeping		26,382,522	26,382,522		10,262,461
ii) Joining Time TA		2,725	2,725		126,788
iii) Relocation Charges		14,160	14,160		212,905
			-		
Total	**-**	**544,221,101**	**544,221,101**	**-**	**421,796,352**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 15 A - EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

An

Particulars	Pension	Gratuity	Leave Encashme
Opening Balance as on……..	-	-	
Addition : Capitalized value of Contributions received from other Organisations	-	-	
Total (a)	-	-	
Less : Actual payment during the year (b)	-	-	
Balance Available on 31.03…….. (a-b)	-	-	
Provision required on 31.03…….. As per Actuarial Valuation (d)	-	-	
A. Provision to be made in the Current year (d-c)	-	-	
B. Contribution to New Pension Scheme	-	-	
C. Medical Reimbursement to Retired Employees	-	-	
D. Travel to Hometown on Retirement	-	-	
E. Deposit Linked Insurance Payment	-	-	
Total (A+B+C+D+E)	-	-	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 16- ACADEMIC EXPENSES

Amount in Rupe

Particulars	Current Year			Previous Yea	
	Plan	Non Plan	Total	Plan	Non Plan
a) Laboratories expenses		998,920	998,920		792,952
b) Field work/Participation in Conferences			-		
c) Expenses on Seminars/workshops		69,521	69,521		241,997
d) Payment to visiting faculty		348,792	348,792		242,000
e) Examination		2,939,307	2,939,307		2,539,995
f) Students Welfare expenses - Student Internship			-		
g) Admission expenses			-		
h) Convocation expenses		2,766,253	2,766,253		2,271,065
i) Publications			-		
j) Stipend/Means-cum-Merit Scholarship		118,364,948	118,364,948	102,725,604	1,070,890
k) Subscription expenses			-		
l) Contingency to Ph.D. Scholars			-		1,178,534
m) Students Project		237,632	237,632		229,333
n) Library Contingency		217,010	217,010		35,620
o) Industry Institute Partnership exp			-		
p) STIS Project Exp		482,773	482,773	750,006	-
q) Internship Exp			-		65,577
r) Industry Visit (MBA)			-		113,812
s) Student Orientation Program			-		
t) Summer Term Course Expenses			-		690,000
Total	**-**	**126,425,156**	**126,425,156**	**103,475,610**	**9,471,775**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES

Amount in Rupe

	Current Year			Previous Yea	
A. Insfrastructure	**Plan**	**Non-Plan**	**Total**	**Plan**	**Non-Plan**
a) Electricity		32,627,942	32,627,942		32,292,318
b) Water Charges		7,675,104	7,675,104		8,674,507
c) Insurance			-		
d) Rent, Rates Taxes (including Property Tax)			-		
B. Communication			-		
e) Postage and Stationery		330,956	330,956		203,758
f) Telephone, Fax and Internet Charges		835,029	835,029		2,106,037
C. Others			-		
g) Printing and Stationery (consumption)		1,087,017	1,087,017		2,299,749
h) Travelling and Conveyance Expenses		1,298,027	1,298,027		2,931,223
i) Hospitality		276,751	276,751		392,402
j) Auditors Remuneration		668,520	668,520		551,900
k) Professional Charges - Legal fee		349,392	349,392		487,319
i) Advertisement and Publicity		3,404,375	3,404,375		1,185,074
m) Magazines & Journals - News paper		16,673	16,673		9,328
n) Training & Placement expenses		476,406	476,406		286,914
o) Board & Committee meeting		3,161,526	3,161,526		2,591,828
p) Computer Consumable		246,663	246,663		333,706
q) Initiative to foster Social Responsibility			-		
r) Misc. Expenses		63,737	63,737		211,931
s) Liverage			-		-
t) Gyan Sagar expenses		88,363	88,363		67,132
u) Celebration of National Day		1,268,703	1,268,703		1,306,332

v) NCC & NSS Activity		474,354	474,354		249,99
w) Promotion of Rashtra Bhasha		217,960	217,960		174,99
x) Consumable expenses		352,006	352,006		266,80
y) Academic Audit Exp		131,200	131,200		453,43
z) Contingency Exp			-		71,06
aa) Border Village Developemt Exp		250,000	250,000		
bb) Transit House Rent			-		250,00
cc) Award & Prizes			-		155,00
dd) ETH Project Exp			-		-
ee) HPC Cell Expenses			-		-
ff) Incubation Centre CDAC			-		1,812,91
gg) Innovation Lab Exp		181,234	181,234		351,00
hh) Other Admin Exp		1,609,555	1,609,555		2,649,58
ii) Registration/Nomination fee		13,570	13,570		50,00
jj) RPC Project Exp			-		245,51
kk) Short Term Training Program			-		-
ll) Smart Card Facilty			-		-
mm) Telemedicine Project (CDAC)			-		-
nn) Upgradation of Supporting Staff			-		-
oo) Mobilization expenditure			-	337,600	
pp) NSDL Service Charges		23,260	23,260		31,46
qq) Gymkhana Expenditure		1,376,488	1,376,488		678,07
rr) Swachh Bharat Mission Exp			-		
ss)Insurance against Assets		798,288	798,288		442,78
tt) NITs Conclave Exp		2,674,802	2,674,802		
TOTAL	**-**	**61,977,902**	**61,977,902**	**337,600**	**63,814,07**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 18 - TRANSPORTATION EXPENSES

Amount in

Particulars	Current Year			Current Yea		
	Plan	Non-Plan	Total	Plan	Non-Plan	
1. Vehicles (owned by Institution)	-		-			
a) Running Expenses	-	2,284,203	2,284,203	-	2,301,362	
b) Insurance Expenses	-	118,167	118,167	-	132,897	
2. Vehicles taken by Rent/Lease	-	-	-	-	-	
a) Rent/Lease Expenses	-	-	-	-	-	
3. Vehicle (Taxi) hiring Expenses	-	-	-	-	-	
TOTAL	**-**	**2,402,370**	**2,402,370**	**-**	**2,434,259**	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 19 - REPAIRS & MAINTENANCE

Amount in

Particulars	Current Year			Previous Yea	
	Plan	Non-Plan	Total	Plan	Non-Plan
a) Buildings	-	7,727,279	7,727,279	-	5,227,408
b) Furniture & Fixtures	-	389,977	389,977	-	157,120
c) Plant & Machinery	-		-	-	-
d) Office Equipment	-	816,769	816,769	-	1,899,009
e) Scientific Equipment - (Digital Labrary)	-		-	-	373,875
f) Audio Visual Equipment	-		-	-	-
g) Cleaning Materials & Casual work	-	47,929	47,929	-	552,276
h) Book Binding Charges	-		-	-	-
i) Gardening	-	99,531	99,531	-	196,403
j) Estate Maintenance (Electrical)	-	1,941,321	1,941,321	-	2,376,510
k) Bio Gas Contingency expenses	-		-	-	-
l) D.G. Set	-	4,494,316	4,494,316	-	3,433,494
m) Networking	-	2,926,672	2,926,672	-	299,941
n) Guest House Maintenances	-	308,354	308,354	-	347,103
TOTAL	**-**	**18,752,148**	**18,752,148**	**-**	**14,863,139**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 20 - FINANCE COSTS

Amount i

Particulars	Current Year			Previous Yea	
	Plan	Non-Plan	Total	Plan	Non-Plan
a) Bank Charges		-	-	12,714	9,612
b) Others	-	-	-	-	-
TOTAL	**-**	**-**	**-**	**12,714**	**9,612**

SCHEDULE 21 - OTHER EXPENSES

Particulars	Current Year			Previous Yea	
	Plan	Non-Plan	Total	Plan	Non-Plan
a) Provision for Bad and Doubtful Debts/Advar	-	-	-	-	-
b) Irrecoverable Balances/Written-off	-	-	-	-	-
c) Grants to Kendriya Vidyalaya	-	32,557,000	32,557,000	-	18,964,000
d) Support/Salaries to NITS-KIDS staff	-	676,851	676,851	-	602,403
TOTAL	**-**	**33,233,851**	**33,233,851**	**-**	**19,566,403**

SCHEDULE 22 - PRIOR PERIOD EXPENSES

Particulars	Current Year			Previous Yea	
	Plan	Non-Plan	Total	Plan	Non-Plan
1) Establishment Expenses (CEA)	-	-	-	-	-
2) Academic Expenses	-	-	-	-	-
3) Administrative Expenses	-	-	-	-	-
4) Transportation Expenses	-	-	-	-	-
5) Repair & Maintenance	-	-	-	-	-
6) Others			-		
TOTAL	**-**		**-**	**-**	**-**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
RECEIPTS AND PAYMENTS ACCOUNT FOR FOR THE YEAR ENDED 31ST MARCH 2018

Amonu

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year
I. Opening Balances:			**I. Expenses:**	
a) Cash Balances	15,322	8,108	a) Establishment expenses (Sch-15)	-
b) Bank Balance			b) Academic Expenses (Sch-16)	-
i. In Current Accounts	677,215,479	198,857,444	c) Administrative Expenses (Sch-17)	-
ii. Savings Account	242,186,904	146,166,713	d) Transportation Expenses (Sch-18)	-
			e) Repairs & Maintenance (Sch-19)	-
			f) Finance Cost	-
II. Grants Received:			g) Prior Period Expenses	-
a) Non Recurring Grant: From Govt of India	419,950,000	921,560,000	h) Other Expenses (Sch-21)	-
b) Recurring Grant: From Govt of India	781,550,000	365,000,000	**II. Payments against**	
			Earmarked/Endowment Funds	-
Grants-in-Aid Receivable :				
a) Non Recurring Grant: From Govt of India	-	-	**III. Payments against Sponsored Projects**	19,576,359
b) Recurring Grant: From Govt of India	-	-	Misc Payments against Grant/Conference	
			IV. Payments against Sponsored Scholarship	-
III. Academic Receipts	-	198,258,439		
			V. Investments and Deposits made	
IV. Receipts against Earmarked/Endowmwnt	-	10,062,189	a) Out of Earmarked	-
Funds			b) Out of own funds(Investments-others)	-
V. Receipts against Sponsored Project:			VI. Term Deposits with Schedule Banks	
Grants Received from AICTE/GOI	21,474,096	15,123,617		
Other Misc Receipts against Conference	-	7,531,669		
VI. Receipts against sposored Fellowships &	-	12,592,728	**VII. Expenditure on Fixed Assets and Capital Works- in -Prog**	
Scholarships			a) Fixed Assets	-

RECEIPT AND PAYMENTS ACCOUNT FOR FOR THE YEAR ENDED 31ST MARCH 2018

Amonu

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year
VII. Income on Investments from			**b) Capital works -in- Progress**	-
a) Earmarked/Endowment funds	-	587,241		
b) Other investments			Viii. Other Payments including statutory	-
VIII. **Interest received** :			IX. Refund of Grants (Sponsored Projects)	381,905
a) Bank Deposit				
b) Loans and Advances	-	1,578,273	**X. Deposits and Advances**	-
c) Savings Bank Account	-	285,422		
d) Interest on Auto Sweep A/c	-	2,969,594		
e) Against Project Account	2,256,119	1,298,786		
IX. Investments encashed			**XI. Other Payments**	-
X. Term Deposits with Scheduled Banks encashed	-	3,200,000	XII. **Closing balances**	
XI. Other income (including prior Period Income) (Sch-13)	-	27,767,395	**a) Cash in hands**	51,225
			b) Bank balances	
XII. **Deposits and Advances**			i. In Current Accounts	1,237,567,862
Plant Machinery & Equipment			iii. Savings Account	216,954,214
Other Deposits (S Debtors)	-	461,379		
Loans & Advances	-	152,102,639		
XIII. Miscellenous Receipts including Statutory Receipts	-	76,605,131		
XIV. Any other Receipts	-	127,850,351		
TOTAL	**2,144,647,920.00**	**2,269,867,118**	**TOTAL**	

Dated, Silchar
The 18th June 2018

Registrar

Directo

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS
FOR THE YEAR ENDED 31ST MARCH 2018

RECEIPTS :	***Amount in Rupees***	
Particulars	**Current Year**	**Previous Year**
NON RECURRING GRANT : RECEIVED FROM GOVT OF INDIA:	419,950,000	921,560,000
RECURRING GRANT: RECEIVED FROM GOVT OF INDIA	781,550,000	365,000,000
GRANTS-IN-AID RECEIVABLE FROM GOVT OF INDIA:		
Grant Receivable Plan	-	-
Grant Receivable Non Plan	-	-
Total	**1,201,500,000**	**1,286,560,000**
Academic Receipts		
Academic Fee		
Tuition Fees		172,372,790
Admission Fee		3,877,500
Library Fee		3,099,500
I.T System Fee		6,198,000
Examination Fee		4,420,800
Late Fine/Penalty		283,629
Misc Fees		385,500
Medical Facility Fee		1,888,740
Transportation Fees		2,565,180
Summer Term Course Fee		240,000
Other Academic Receipts		
Training & Placement Fee		581,500
Short Term Training Programme Fee		26,300
Development Fee		2,319,000
Total	**-**	**198,258,439**
EARMARKED / ENDOWMENT FUND:		
Pension Fund Contribution		7,439,584
Depreciation Fund		
Maintenance Fund		
Staff Dev Fund		
NMEICT Fund		35,000
Student Aid Fund		785,000
Total (A)	**-**	**8,259,584**
CORPUS FUND :		
Corpus Fund		4,119
Corpus fee received from Students		785,000
Migration fee (Charged under income of Corpus Fund)		3,200
Institute Share from Transcript fee		321,720
Corpus Fund interest on Savings Bank		688,566
Received from Development fee		
Total (B)	**-**	**1,802,605**
Grand Total (A+B)	**-**	**10,062,189**

SPONSORED PROJECTS:		
Grants Received against Sponsored Projects:		
MCIT : GoI	4,733,989	3,910,875
SERB : GoI	10,038,810	7,784,581
DST: GoI	467,279	2,905,766
MNRE: GoI	-	354,395
BRNS: GoI	386,795	
NRRDA		
DIETY		
UGC	197,556	168,000
ICSSR	80,000	
CPRI	1,497,000	
NMHS	2,072,000	
DDMA	1,518,000	
CSIR	482,667	
Total	**21,474,096**	**15,123,617**
OTHER MISC. GRANTS/SPONSHORSHIP:		
Received from SERB (DST)		
Received from CBSE		145,741
Manish Roy Memorial Scholarship Fund		10,000
NRDC Grants		200,000
PMMMNT SCHEME		
Faculty Development Programme		
Visveswariya PhD Scheme		
NRFCC BRNS Projects		386,795
Assam Disaster Management GHY		162,000
IGNCA		480,375
IIBM GHY		188,463
VLSI Hands on Training		63,000
GIAN Course Fee		329,100
GIAN FUND		3,808,000
IIT GATE		109,075
MOOC'S Project (Library)		80,000
NRRDA Project		273,750
NISE-Solar Energy Awareness Fund		270,000
START UP India		375,000
Business Emviroment Law Curriculam		650,000
INSPIRE Internship		370
Total	**-**	**7,531,669**
VI. Receipts against sposored Fellowships and Scholarships:		
Outside Scholarship Payable		12,385,728
Doctoral Fellowship (ICSSR)		207,000
Total	**-**	**12,592,728**

INTEREST RECEIVED FROM EARMARKED FUND:		
Depreciation Fund Interest on Savings Account		109,645
Maintenance Fund Interest on Savings Account		182,919
Staff Dev Fund Interest on Savings Account		92,940
Gratuity Fund Interest on Savings Account		201,737
Total	**-**	**587,241**
SH-12 Interest Earned		
Interest on Saving A/c		
Interest on Fees A/c		188,860
Interest on Scholarship A/c		96,562
Interest on Savings Bank A/c		
Total	**-**	**285,422**
Interest Others		
Interest on (Auto Sweep) Non Plan		2,969,010
Interest on Auto Sweep A/c (Fee)		-
Interest Others		584
Total	**-**	**2,969,594**
Interest Against Project A/c		
Interest on SavingA/c (Sponsored projects a/c.)	2,229,919	1,298,786
Misc Receipts (DST)	3,200	
Testinh Fee (MNRE)	23,000	
Total	**2,256,119**	**1,298,786**
Investment with scheduled banks		
Investment (Nonplan Fees)		
Investment (Plan- Margin Money A/C)		3,200,000
Total	**-**	**3,200,000**
Other Income (Incuding Prior Period Income)		
Income From Land & Building		
License Fee		2,261,577
Hire Charges for Shops Canten and Office		1,229,682
Seat Rent/Hostel Room Rent		6,007,000
Guest House Room Rent		1,433,080
Electricity Consumption Receipts		5,679,480
Light & Water (Hostel)		6,007,000
RTI Fees		656
Application Fee		81,850
Tender Form Fee		354,747
Scrap Sale		
Misc Receipts		3,181,878
Institute Overhead on Consultancy		1,162,945
Lake Fishing Rights		367,500
Total	**-**	**27,767,395**
Margin Money for LC		1,578,273
Total	**-**	**1,578,273**

OTHER DEPOSITS:		
Solar Regional Test Centre		
Lab Equipment		
Accrued Interest on Fee A/c Investment		
Accrued Interest on LC Investment		2,898
Electricity Consumpation Receivable		393,976
House Rent Recivable		28,548
Shops & Canteen Rent Recivable		23,930
From CDAC		12,027
Advance Tax		
Receivable against SocPros		
Claims against RTC Project		
Grand Total	**-**	**461,379**
Loans,Advances & Deposits		
Sundry Debtors		
Panorama International		1,166,736
Godrej & Boyce Mfg Co Ltd		905,000
Advance to Employees		
HTC Advance		508,585
LTC Advance		1,300,306
Other Advance To Employees		
Recoverable Advance		3,409,990
Recoverable Advance (Project)		373,000
TA Advance		1,514,645
Soft Loan (Staff)		977,507
Festival Advance		869,720
Medical Advance		
Other Salary Advance		1,121,000
Loan to CSAB		358,300
Deposit Work		
Secured Advance Recovery		94,550,000
Mobilisation Advance		15,000,000
Advavce Recovery against Works		
Advance to PHE (Water Supply)		
Advance Recovery from Firm		
Receivable from CSAB		22,480,000
Receivable from CCMT		6,440,000
Loan to CCB/CCMT		232,850
AIU Workshop		20,000
Loan to TEQIP (Recovery)		875,000
Total	**-**	**152,102,639**

MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS:		
Provision -TAX:		
VAT		16,616,188
Vat Project		72,398
Income Tax (Against Salary & Contrats)		32,215,559
Income Tax -Project		27,974
Professional Tax		841,040
Professional Tax (Project		34,402
Service Tax		10,500
Labour Cess		2,685,437
GSLI		680,850
EPF Subscription MR Employee		1,357,341
EPF Subscription FW Workers Society		276,217
GPF Advance Recovery		1,667,875
GPF		250,000
GPF Subscription		10,906,200
NPS Subscription		8,963,150
Total	**-**	**76,605,131**
OTHER DEPOSITS:		
Hostel Caution Money		7,680,000
Institute Caution Money		3,950,000
Sundry Creditors		
Godrej Mfg Co. Ltd		
M/s Sify Technologies Ltd		3,564,672
Shree Ganesh Associates		38,000
Nurul Hussain Barbhuiya		20,000
AK Choudhury		
NESS Pvt Ltd		
NCC Ltd		24,782,056
DHR Holding Pvt Ltd		19,663
Panorama International		102,127
Earnest Money Deposit		1,827,312
Security Deposit		1,614,801
SD Project		56,416
Load Security		
Alumini Association Fee		785,000
Deposit Remittance		1,147,195
Deposit Remittance (project)		18,170
Recovery of Licence Fee & Electricity (Project)		3,099
Other Payables (Projects)		5,645
CCTV Payable		883,250
Group Insurance Claim		1,818,429

Gymkhana		6,203,000
Hostel Management		2,946,500
Hostel Welfare		
Institute Share on Consultancy		239,413
Leave Encashment Payable (Other Org)		218,389
Mess Dues		533,408
Liability Towards DCRG		100,000
L.I.C.I Payable		4,747,791
NPS Subscription & Contribution (Other Org)		
Pension Fund Contribution (Other Org)		120,750
Mediclaim Insurance		1,646,820
Mess Advance		
Mess Establishment		5,433,000
Processing Charges		474,400
Refundable Excess Deposit		52,579,080
Student Mediclaim		797,788
Transcript Fee		893,700
Verification fee		171,400
Counselling Fee (DASA)		100,000
Computer (Receipts from Project A/c)		61,000
Self Finance Course		37,000
Recovery against Trainee Teachers (RD)		144,500
Consultancy charges payable to Civil Engg. Department		
Unclassified receipts		32,300
Plan interest on Auto Sweep		1,386,091
Plan Interet on Mobilization Adv		375,205
Plan Grant (Axis Bank & Others)		292,981
Total	**-**	**127,850,351**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS
FOR THE YEAR ENDED 31ST MARCH 2018

PAYMENTS :	*Amount in Rupees*	
Particulars	**Current Year**	**Previous Year**
Establishment Expenses		
Salary Teach & Admin		183,168,150
Salary Class-III		24,947,549
Salary Class-IV		28,208,353
Salary of Cont. Staff (Teach/admin/III/IV)		17,166,067
Salary of MR Staff		10,333,968
Salary of Outsourced Staff		14,500,250
Bonus		1,706,880
Professional Dev Allowance		4,349,284
NPS Contribution		8,213,370
Pension Contribution (Depu)		79,406
EPF Contribution on FFW Workers		127,047
EPF Contribution on MR Salary		1,381,674
Mobile & Telephone Bill Reimbursement		381,413
Death Cum Ret. Gratuity		14,237,567
Pension		48,982,902
Commuted Pension		6,290,214
Leave Encashment		9,283,462
Home Travel Concession		1,717,990
Leave Travel Concession		1,822,599
Medical Reimbursement		1,767,248
Medicine & Dispensary Exp		850,373
Honorarium/Sitting Fees		329,000
Security Services		18,528,270
House Keeping		8,814,615
Joining Time T.A		126,788
Relocation Charges (Transportation)		212,905
Total	**-**	**407,527,344**

Academic Expenses		
Lab Consumable		657,990
Seminer & Conferences		96,032
Visiting Faculty Remuneration		206,000
Examination Expenses		2,151,313
Convocation Expenses		2,239,995
Stipend to M.Tech/ Ph.D		94,506,095
Contingency to Phd		1,178,534
Student Project Expenses		229,333
Library Contingency		35,620
Internship Exp		65,577
Industry Visit (MBA)		113,812
STIS Project		590,267
Summer Term Course Exp		690,000
Total	**-**	**102,760,568**
Administrative Expenses		
Electricity & Power Charges		29,730,203
Water and Electricity Charges to PHE		7,922,965
Postage Exp		203,758
Internet Expenses		2,029,845
Telephone Charges		68,470
Printing and Stationary Exp		2,165,764
Local Conveyance		10,740
TA/DA Expenses		2,783,421
Hospitality Exp/Refreshment		320,485
Audit Fees		551,900
Professional Fee & Legal Exp		487,319
Advertisement Expenses		1,090,130
News Paper & Periodicals		9,328
Training & Placement Expenses		267,529
Board & Committee Meeting		2,043,780
Computer Consumable Exp		271,028
Miscellanous Exp		164,683
Gyan Sagar Exp		10,862
Celebration of National Day		611,048
NCC & NSS Activities		153,874
Promotion of Rashtriya Bhasha		121,171
Consumable		223,669

Academic Audit Expenses		336,709
Contingency Expenses		
Transit House Rent		250,000
Award & Prizes		155,000
ETH - Project Exp		
Incubation Centre (CDAC)		
Innovation Lab Exp		252,458
Other Admin Exp		2,347,404
Registration/Nomination Fee		50,000
RPC Project Exp		119,462
Short Term Training Programme		
Upgradation of Supporting Staff		
Junior Engg Staff Salary		337,600
Mobilisation Exp		
NSDL Service Charges		31,467
Gymkhana Expenditure		417,882
Total	**-**	**55,539,954**
Transportation Expenses		
Vehicle Running Expenses		1,612,055
Insurance Exp- Vehilces		96,640
Total	**-**	**1,708,695**
Repairs and Maintenance Expenses		
Repairs & Maintenace- Building & Others		3,972,895
Maintenance of Furniture & Fixtures		157,120
Repairs and Maintenace- Tools Equipments		1,001,550
Maintenance of Digital Library		174,850
Casual Work & Carriage		547,016
Gardening & Horticulture		100,000
Repairs & Maintenance- Electricity		2,065,438
Maintenance of D.G Set		3,069,324
Manitenance of Networking		299,941
Repairs & Maintenace of Guest House		299,700
Book Binding Expenses		
Total	**-**	**11,687,834**
Finance Cost		
Bank Charges		22,326
Total	**-**	**22,326**

Prior Period Expenses		
Prior Period Exp (CEA)		
Total	**-**	**-**
Other Expenses		
Support to NITS KIDS School		552,971
Support to Kendriya Vidyalaya		18,964,000
Total	**-**	**19,516,971**
EARMARKED FUND / ENDOWMENT FUND :		
Corpus Fee		12,000
Pension fund Contribution		11,717
NMICT Awareness Program Fund		425,305
Student Aid Fund		174,089
Total	**-**	**623,111**
SPONSORED PROJECTS:		
Expenditure against Sponsored Projects		
Capital Expenditure		
Equipment	8,545,419	3,636,132
Computer	-	348,899
Software	-	-
Furniture	-	55,365
Books	96,611	
Revenue Expenditure	**10,934,329**	11,190,920
Total	**19,576,359**	**15,231,316**
FELLOWSHIP / SCHOLARSHIP :		
Outside Scholarship Payable		10,048,931
Doctoral Fellowship (ICSSR)		207,000
Total	**-**	**10,255,931**
INVESTMENTS & DEPOSITS:		
OUT OF EARMARKED/ENDOWMENT FUNDS;		
Investment of Depreciation Fund		
Investment of Maintenace Fund		
Total	**-**	**-**
OUT OF OWN FUNDS;		
Investment KIDs NITS		
Investment- LC Margin Money A/C		3,600,000
Total	**-**	**3,600,000**

EXPENDITURE ON FIXED ASSETS		
Software Developments		524,201
E-Journals		16,861,558
Patent and Copyright		83,551
Buildings		
Boys Hostel No.7		
Girls Hostel-2		
Guest House (Old)		
Hostels Including Spcl Repair		
Institute Building Renovation		490,683
Production Engg Lab		
Security Barack - II		
Lecturers Quarter		
Staff Quarters (Type A,C,D)		55,061
Staff Quarters Type IV 30 Units		1,855,447
Central School Building & quarters		52,144
Sports Complex & Auditorium		478,837
Roads & Bridges		
Renovation of Internal Road and gate		1,420,044
Campus Development		
Campus Development/Beautifcation		1,956,453
Childrens Park		
Renovation of Internal Road & Gate		
Boat Club		
Security Wall		75,015
Sports Field Volley Ball/Tennies		320,717
Plant, Machinery & Equipments		
Audio Visual Equipments		2,284,801
Electrical Equipments		957,793
Equipments of Health Centre		1,047,375
Lab Equipments		15,625,401
Gym Equipment		45,000
L T Line & UG Cabeling		1,438,830
Solar Street Lighting		429,000
Furniture Including Hostels		5,139,922
Office Equipments		1,991,082
Computer Pheriphrals Including Projects		3,543,445
Books		1,102,428
Water Supply Scheme		
Childrens Park Equipments		
Networking		12,476,354
Total	**-**	**70,255,142**

CAPITAL WORK IN PROGRESS:		
Boys Hostel-9 (WIP)		258,844,615
Library Building (WIP)		116,840
Married Scholar Hostels (WIP)		
New Academic Building(WIP)		
New Admin Building(WIP)		835,819
Non Faculty Staff Qtrs-100 Nos.(WIP)		
Type (VI)Qtr 12 Units (WIP)		
Type (V)Qtr 20 Units (WIP)		822,766
Sports Complex (WIP)		
Health Care Centre (WIP)		6,405,010
Expansion of E.E Building (WIP)		
Auditorium Building		
Eatout Dhaba		
NABL Accrediated Lab Bldg (WIP)		
Earthquake Engg Lab Bldg		
Total	**-**	**267,025,050**
PROVISIONS : (TAX)		
VAT		15,063,036
Vat (project)		72,398
Income Tax (Against Salary & Contrats)		32,397,202
Income Tax (Project)		27,974
Professional Tax		752,862
Professional Tax (Project)		17,449
Service Tax		10,500
Labour Cess Payable		2,860,818
Total	**-**	**51,202,239**
Refund to Ministry (Project A/C)		
Refund from Project Account	381,905	106,071
Total	**381,905**	**106,071**
Loans,Advances & Deposits		
Sundry Debtors		
Panorama International		1,248,700
Godrej & Boyce Mfg Co Ltd		905,000
Advance to Employees		
HTC Advance		802,400
LTC Advance		1,423,200

Other Advance To Employees		
Recoverable Advance		15,539,903
Recoverable Advance (Project)		373,000
TA Advance		1,636,400
Soft Loan (Staff)		250,000
Festival Advance		746,000
Medical & Other Advance		500,000
Other Salary Advance		1,121,000
Receivable from Saswat Chakraborty		14,000
Prepaid Insurance Exp		798,288
Security Deposit (LPG- Hostel)		46,200
Advances & Other Receivable on Capital A/c		
Deposit Work		
Deposit Work-33 KV Substation		
Deposit Work-CPWD Central School		
Deposit Work-CPWD Non/faculty Qtrs		
Deposit Work-CPWD New Admin Building		
Deposit Work-CPWD Swage Disopl. Sytm		6,400,000
Deposit Work-HPL Married Sch Hostel		
Deposit Work-PHE-Agmn Water Supply		
Deposit Work-PHE- Water Supply Scheme		
Deposit Work - APDCL		
Secured Advance		125,150,000
Margin Money for LC against Equipment		2,889,619
Advance to Firms/Suppliers		
Adv to Firm- PHE Water Supply		
Total	**-**	**159,843,710**
Current Liabilities & Provisions		
Hostel Caution Money		2,450,000
Institute Caution Money		1,579,000
Creditors for Goods& Services (Incl.EMD & SD)		
Godrej Mfg Co Ltd		
IL&FS Technologies		
S.M Khetwat		
M/s Agni Power & Electronics Pvt. Ltd.		544,400
M/s A.K.Choudhury		
NCC Ltd		16,797,056
Nurul Hussain Barbhuiya		75,037
Shree Gonesh Associates		38,000
Earnest Money Deposit		4,183,358
Security Deposit		1,980,569
GSLI Payable		733,230

EPF Subscription MR Employees		1,357,341
EPF Subscription FFW Workers' Society		113,312
GPF Advance Recovery		1,521,942
GPF Payable (Others)		250,000
GPF Subscription Payable (Others)		
GPF Subscription Payable		10,043,100
NPS Subscription Payable		8,213,370
Vishveshwaraiya PhD Scheme		
PMMNT Fund		230,725
SIS Library		
DST (SERB Project)		
CBSE Fund		49,741
NRDC Fund		
Business Environment Law Cirriculum Fund		
WNL Library		
INDEST 2014, Library		
INSPIRE		900,370
GIAN Course Fee		43,000
GIAN Fund		3,808,000
NISE Solar Energy Awareness Fund		261,163
Manish Roy Memorial Fund		10,000
START UP India		441,758
Alumini Association Fee		12,000
CCTV Payable		486,631
Deposit Remittance		321,330
Group Insurance Claim		1,569,260
Gymkhana		296,605
Hostel Management		2,889,000
Hostel Welfare		
Institute Share on Consultancy		
Liability Towards DCRG		50,000
L.I.C.I Payable		4,353,618
NPS Subscription & Contribution (Other Org)		
Mediclaim Insurance		1,695,532
Mess Advance		
Mess Dues		403,183
Mess Establishment		1,899,842
Processing Charges		407,500
Refundable Excess Deposit		52,417,413
Student Mediclaim		608,373
Transcript Fee		660,700
Children Education Allowance Payable		1,768,513

Electricity & Power Charges Payable		2,492,528
Contractual Staff Salary Payable		3,606,892
MR Staff Salary Payable		978,752
Security Service Charges Payable		1,688,581
Stipend to M.Tech/ Ph.D Payable		9,189,467
Support to NITS KIDS Staff Payable		50,400
Telephone Charges payable		575,672
Vehicle Repair Expenses Payable		129,181
Unclassified Receipts		28,642
EPF Contb MR Staff Payable		130,852
House Keeping Charges Payable		1,045,015
PhD Contingency Payable		54,536
Self Finance Course		37,000
Provision Non Plan Others		
Provision Plan Others		2,377,615
Consultancy Cell CE Department		15,917
Payable to Depreciation Fund		
Payable to Maintenance Fund Fund		
Depreciation Fund (Loan Refunded)		
Maintenance Fund (Loan Refunded)		
Staff Development Fund Payable		
Verification Fee		1,000
Refund from RPS Project A/c		
Prepaid E-Journals		
Prepaid AMC		
Prepaid Insurance		
Other Receivable		
Loan to CSAB		358,300
Receivable from CCMT		6,440,000
Receivable CSAB		17,080,000
Loan Solar RTC Project		354,395
Loan to TEQIP		885,972
TDS Receivable (I Tax) including Project		358,462
Loan to SMDP Project		200,000
Claims Receivable		
Receivable GH1		
Receivable against AIU Workshop Library		
Receivable Hostel 8		
EPF Subscription MR Employees (Recoverable)		
Total	**-**	**173,543,151**

		325761938	Balance
NON-RECURRING GRANT 112-35	722011104.00	221615882	500395222.00
NON RECURRING GRANT 789-35	67645432.00	67645432.00	
NON-RECURRING GRANT 796-35	26064230.00	26064230.00	
PLAN GRANT INTEREST-Accrued	113974.00	113974.00	
PLAN GRANT INTEREST (Auto Sweep)	9959683.00	9959683.00	
PLAN GRANT INTEREST-Others	362737.00	362737.00	
		325761938	
		0	

Total Capital Expenditure
Gross Assets as on 31.03.18
Gross Assets as on 01.04.17
Total Addition
Less: Patent Appication
Net Additon from Plan Grant
Add: Assets Deletion of 100kvp
Add: Refund to Ministry

		Utilization	
RECURRING GRANT 112-31	138904039.00	138904039.00	0.00
RECURRING GRANT 112-36	578075000.00	404076573	173998427.00
RECURRING GRANT 789-31	10076111.00	10076111.00	0.00
RECURRING GRANT 789-36	40775000.00	40775000.00	0.00
RECURRING GRANT 796-31	4293926.00	4293926.00	0.00
RECURRING GRANT 796-36	19300000.00	19300000.00	0.00
Grand Total	**1617581236.00**	617425649	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 15 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

Particulars		
i) Teaching & Admin	36	243,902,769
ii) Group B & C	36	22,203,970
iii) Group D	36	39,807,526
i) Salary of outsourced staff	36	249,284
ii) Salary of Contractual Teaching & Admin	36	34,547,596
iii) Salary of M R Staff	36	18,813,313
i) Bonus	36	914,992
ii) Cumulative Professional Dev. Allowance	36	12,282,620
i) NPS Contribution	36	12,730,342
ii) Pension contribution (Deputation)	36	69,972
iii) EPF Contribution(Employer) MR & Others	36	3,022,629
iv) EPF Contribution FFW Workers' Society	36	307,906
i) Mobile & Telephone expenditure	36	809,250
i) Death cum Retirement Gratuity	36	15,722,465
ii) Pension	36	32,623,252
iii) Commuted Pension	36	7,891,657
iv) Leave Encashment	36	6,663,385
i) Home Travel Concession	36	2,249,228
ii) Leave Travel Concession	36	3,014,933
i) Medical Reimbursement	36	2,905,418
ii) Medicine & Dispensery expenses	36	798,363
I) Children Education Allowances	36	1,922,370
J) Honorarium	**36**	698,333

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 21 - OTHER EXPENSES

Amount

Particulars	Current Year			Previous Y	
	Plan	Non-Plan	Total	Plan	Non-Plan
a) Provision for Bad and Doubtful Debts/Advances	-	-	-	-	-
b) Irrecoverable Balances/Written-off	-	-	-	-	-
c) Grants to Kendriya Vidyalaya	-	32,557,000	32,557,000	-	18,964,000
d) Support/Salaries to NITS-KIDS staff	-	676,851	676,851	-	602,403
TOTAL	**-**	**33,233,851**	**33,233,851**	**-**	**19,566,403**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
RECEIPTS AND PAYMENTS ACCOUNT FOR FOR THE YEAR ENDED 31ST MARCH 2018

Amonut

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year
I. Opening Balances:			**I. Expenses:**	
a) Cash Balances	15,322	8,108	a) Establishment expenses	454,223,11
b) Bank Balance			b) Academic Expenses	114,293,93
i. Current Accounts	677,215,479	198,857,444	c) Administrative Expenses	52,971,11
ii. Savings Account	242,186,904	146,166,713	d) Transportation Expenses	2,036,88
			e) Repairs & Maintenance	16,398,19
			f) Finance Cost	38,36
II. Grants Received:			g) Prior Period Expenses	-
a) Non Recurring Grant: From Govt of India	419,950,000	921,560,000	h) Other Expenses	33,176,65
b) Recurring Grant: From Govt of India	781,550,000	365,000,000	**II. Payments against**	
			Earmarked/Endowment Funds	63,56
Grants-in-Aid Receivable :				
a) Non Recurring Grant: From Govt of India	-	-	**III. Payments against Sponsored Projects**	17,868,51
b) Recurring Grant: From Govt of India	-	-	Misc Payments against Grant/Conference	
			IV. Payments against Sponsored Scholarship	4,509,92
III. Academic Receipts	202,486,784	198,258,439		
			V. Investments and Deposits made	
IV. Receipts against Earmarked/Endowmwnt	6,679,400	10,062,189	a) Out of Earmarked	-
Funds			b) Out of own funds(Investments-others)	-
V. Receipts against Sponsored Project:			VI. Term Deposits with Schedule Banks	
Grants Received from AICTE/GOI	21,474,096	15,123,617		
Other Misc Receipts against Conference	14,590,334	7,531,669		
VI. Receipts against sposored Fellowships &	2,191,500	12,592,728	**VII. Expenditure on Fixed Assets and Capital Works- in -Progre**	
Scholarships			a) Fixed Assets	72,025,94

RECEIPT AND PAYMENTS ACCOUNT FOR FOR THE YEAR ENDED 31ST MARCH 2018

Amonut

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year
VII. Income on Investments from			**b) Capital works -in- Progress**	139,148,44
a) Earmarked/Endowment funds	123,541.00	587,241		
b) Other investments			Viii. Other Payments including statutory	45,399,35
VIII. **Interest received** :			IX. Refund of Grants (Sponsored Projects)	381,90
a) Bank Deposit				
b) Loans and Advances	7,557,341	1,578,273	**X. Deposits and Advances**	114,593,12
c) Savings Bank Account	104,589	285,422		
d) Interest on Auto Sweep A/c	6,902,609	2,969,594		
e) Against Project Account	2,251,172	1,298,786		
IX. Investments encashed			**XI. Other Payments**	180,374,16
X. Term Deposits with Scheduled Banks encashed	2,537,371	3,200,000	XII. **Closing balances**	
XI. Other income (including prior Period Income)	26,436,932	27,767,395	**a) Cash in hands**	51,22
			b) Bank balances	
XII. **Deposits and Advances**			i. Current Accounts	1,237,567,86
Plant Machinery & Equipment			ii. Savings Account	216,954,21
Other Deposits (S Debtors)	657,169	461,379		
Loans & Advances	111,516,838	152,102,639		
XIII. Miscellenous Receipts including Statutory Receipts	64,931,994	76,605,131		
XIV. Any other Receipts	110,717,136	127,850,351		
TOTAL	**2,702,076,510**	**2,269,867,118**	**TOTAL**	**2,702,076,51**

Dated, Silchar
The 18th June 2018

Registrar

Directo

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS
FOR THE YEAR ENDED 31ST MARCH 2018

RECEIPTS :	*Amount in Rupees*	
Particulars	**Current Year**	**Previous Year**
GRANTS-IN-AID RECEIVED FROM GOVT OF INDIA:		
NON RECURRING GRANT : RECEIVED FROM GOVT OF INDIA:	419,950,000	921,560,000
RECURRING GRANT: RECEIVED FROM GOVT OF INDIA	781,550,000	365,000,000
GRANTS-IN-AID RECEIVABLE FROM GOVT OF INDIA:		
Grant Receivable Plan	-	-
Grant Receivable Non Plan	-	-
Total	**1,201,500,000**	**1,286,560,000**
Academic Receipts		
Academic Fee		
Tuition Fees	174,763,358	172,372,790
Admission Fee	4,675,000	3,877,500
Library Fee	3,128,900	3,099,500
I.T System Fee	6,219,500	6,198,000
Examination Fee	6,526,100	4,420,800
Late Fine/Penalty	160,296	283,629
Misc Fees	408,030	385,500
Medical Facility Fee	1,864,800	1,888,740
Transportation Fees	1,864,800	2,565,180
Summer Term Course Fee		240,000
Other Academic Receipts		
Training & Placement Fee	509,000	581,500
Short Term Training Programme Fee		26,300
Development Fee	2,367,000	2,319,000
Initial Fee	-	
Total	**202,486,784**	**198,258,439**
EARMARKED / ENDOWMENT FUND:		
Pension Fund Contribution	4,507,569	7,439,584
Depreciation Fund	-	
Maintenance Fund	-	
Staff Dev Fund	-	
NMEICT Fund	78,565	35,000
Student Aid Fund	795,000	785,000
Total (A)	**5,381,134**	**8,259,584**
CORPUS FUND :		
Corpus Fund	46,582	4,119
Corpus fee received from Students	795,000	785,000
Migration fee (Charged under income of Corpus Fund)	2,200	3,200
Institute Share from Transcript fee & Verification Fee	452,505	321,720
Corpus Fund interest on Savings Bank	1,979	688,566
Received from Development fee		
Total (B)	**1,298,266**	**1,802,605**
Grand Total (A+B)	**6,679,400**	**10,062,189**

SPONSORED PROJECTS:		
Grants Received against Sponsored Projects:		
MCIT : GoI	4,733,989	3,910,875
SERB : GoI	10,038,810	7,784,581
DST: GoI	467,279	2,905,766
MNRE: GoI		354,395
BRNS: GoI	386,795	
UGC	197,556	168,000
ICSSR	80,000	
CPRI	1,497,000	
NMHS	2,072,000	
DDMA	1,518,000	
CSIR	482,667	
Total	**21,474,096**	**15,123,617**
OTHER MISC. GRANTS/SPONSHORSHIP:		
Received from SERB (DST)	157,548	
Received from CBSE	72,000	145,741
Manish Roy Memorial Scholarship Fund	8,316	10,000
K.K Mrinalini Kroni Gold Medal Fund	4,160	
Abhijit Hom Choudhury Memorial Award Fund	15,315	
Saswata Purkayastha Memorial Fund	126,801	
NRDC Grants		200,000
DST- FIST	8,800,000	
Unnat Bharat Abhiyaan	175,000	
DST- Inspire Scholarship	350,000	
NRFCC BRNS Projects		386,795
Assam Disaster Management GHY		162,000
IGNCA	95,257	480,375
IIBM GHY		188,463
VLSI Hands on Training		63,000
GIAN Course Fee	336,850	329,100
GIAN FUND	3,808,000	3,808,000
IIT GATE	101,250	109,075
MOOC'S Project (Library)		80,000
NRRDA Project		273,750
NISE-Solar Energy Awareness Fund	516,163	270,000
START UP India	49	375,000
West Bengal JEE	23,625	
Business Emviroment Law Curriculam		650,000
INSPIRE Internship		370
Total	**14,590,334**	**7,531,669**
VI. Receipts against sposored Fellowships and Scholarships:		
Outside Scholarship Payable	2,191,500	12,385,728
Doctoral Fellowship (ICSSR)		207,000
Total	**2,191,500**	**12,592,728**

INTEREST RECEIVED FROM EARMARKED FUND:		
Depreciation Fund Interest on Savings Account	2,491	109,645
Maintenance Fund Interest on Savings Account	47,924	182,919
Staff Dev Fund Interest on Savings Account	73,126	92,940
Gratuity Fund Interest on Savings Account		201,737
Total	**123,541**	**587,241**
Interest Earned		
Interest on Saving A/c		
Interest on Fees A/c	43,386	188,860
Interest on Scholarship A/c	61,203	96,562
Interest on Savings Bank A/c		
Total	**104,589**	**285,422**
Interest Others		
Interest on (Auto Sweep) Non Plan	3,195,627	2,969,010
Interest on Auto Sweep A/c (Fee)	3,706,982	-
Interest Others		584
Total	**6,902,609**	**2,969,594**
Interest Against Project A/c		
Interest on SavingA/c & Auto Sweep (Sponsored projects a/c.)	2,224,972	1,298,786
Misc Receipts	26,200	
Total	**2,251,172**	**1,298,786**
Investment with scheduled banks		
Investment (Nonplan Fees)		
Investment (Plan- Margin Money A/C)	2,537,371	3,200,000
Total	**2,537,371**	**3,200,000**
Other Income (Incuding Prior Period Income)		
Income From Land & Building		
License Fee	2,248,037	2,261,577
Hire Charges for Shops Canten and Office	2,077,112	1,229,682
Seat Rent/Hostel Room Rent	6,040,750	6,007,000
Guest House Room Rent	1,899,792	1,433,080
Electricity Consumption Receipts	4,701,837	5,679,480
Light & Water (Hostel)	6,040,750	6,007,000
Other Income		
RTI Fees	712	656
Application Fee	1,479,384	81,850
Tender Form Fee	168,300	354,747
Institute Overhead on Project	324,225	
Misc Receipts	788,802	3,181,878
Institute Overhead on Consultancy	667,231	1,162,945
Lake Fishing Rights		367,500
Total	**26,436,932**	**27,767,395**
Margin Money for LC	7,557,341	1,578,273
Total	**7,557,341**	**1,578,273**

OTHER DEPOSITS:		
Accrued Interest on LC Investment	150,977	2,898
Electricity Consumpation Receivable	291,842	393,976
House Rent/Licence Fee Recivable	53,773	28,548
Shops & Canteen Rent Recivable	146,577	23,930
From CDAC		12,027
Receivable from SBI (Sashwata Chakraorty)	14,000	
Grand Total	**657,169**	**461,379**
Loans,Advances & Deposits		
Sundry Debtors		
Panorama International	400,000	1,166,736
Godrej & Boyce Mfg Co Ltd		905,000
Advance to Employees		
HTC Advance	1,466,977	508,585
LTC Advance	2,053,493	1,300,306
Other Advance To Employees		
Recoverable Advance	8,986,749	3,409,990
Recoverable Advance (Project)	44,337	373,000
TA Advance	3,961,269	1,514,645
Soft Loan (Staff)	825,588	977,507
Festival Advance	716,986	869,720
Medical Advance	600,000	
Other Salary Advance		1,121,000
Loan to CSAB		358,300
Deposit Work		
Secured Advance Recovery	41,907,760	94,550,000
Mobilisation Advance		15,000,000
Adv to NCC Ltd	3,948,924	
Adv to Dipak Nath	4,942,000	
Adv to Firm - Gangwal Engg. & Const. Co Pvt Ltd	6,405,000	
Receivable from CSAB against Fee	24,818,657	22,480,000
Receivable from CCMT against Fee	7,040,000	6,440,000
Receivable from CCMT-Others	395,000	
Receivable from CCMN	342,500	
Receivable from CP Fund (Against Pension Contb.)	1,463,027	
Receivable from NIDM	126,087	
Receivable from Consultancy Cell	7,129	
Loan to CSAB	415,275	
Loan to SMDP Project	200,000	
Loan to CCB/CCMT		232,850
AIU Workshop		20,000
Loan to TEQIP (Recovery)	450,080	875,000
Total	**111,516,838**	**152,102,639**

MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS:		
Provision -TAX:		
VAT	6,684,662	16,616,188
Vat Project	107,989	72,398
Income Tax (Against Salary & Contracts)	29,860,116	32,215,559
Income Tax -Project	33,000	27,974
Professional Tax	778,060	841,040
Professional Tax (Project	10,402	34,402
Service Tax		10,500
Labour Cess	1,491,473	2,685,437
GSLI	609,500	680,850
EPF Subscription MR Employee	1,765,929	1,357,341
EPF Subscription FW Workers Society	95,281	276,217
EPF Subscription Contractual Staff	1,313,422	
GPF Advance Recovery	1,404,327	1,667,875
GPF		250,000
GPF Subscription (Institute & Other org)	10,896,750	10,906,200
CPF Subscription	58,727	
NPS Subscription	9,822,356	8,963,150
Total	**64,931,994**	**76,605,131**
CURRENT LIABILITIES		
OTHER DEPOSITS FROM STUDENTS:		
Hostel Caution Money	2,650,000	7,680,000
Institute Caution Money	4,005,000	3,950,000
Sundry Creditors & Others		
CIS Bureaus Services Pvt Ltd	782,168	
M/s Sify Technologies Ltd		3,564,672
Shree Ganesh Associates	324,130	38,000
Nurul Hussain Barbhuiya	44,142	20,000
Niharendu Bhattacharjee	1,317,889	
T.K Das & Co.	2,052,676	
NCC Ltd	33,172,788	24,782,056
Trishul Security & Services	402,552	
Gulanur Hussain Choudhury	1,072,697	
M/s New Air Conditioner	5,248	
DHR Holding Pvt Ltd		19,663
Panorama International		102,127
Earnest Money Deposit	3,427,749	1,827,312
Security Deposit	4,182,136	1,614,801
SD Project	12,738	56,416
Load Security from Nielit, Guwahati	149,730	
Alumini Association Fee	795,000	785,000
CSIR- NISTADS	70,472	
Deposit Remittance	1,028,309	1,147,195
Deposit Remittance (project)	96,611	18,170

Recovery of Electricity Charges (Project)	28,053	3,099
Recovery of Licence Fee (Project)	26139	
Other Payables (Projects)		5,645
CCTV Payable	891,124	883,250
DASA	25,000	
Group Insurance Claim	971,241	1,818,429
Gymkhana	6,209,500	6,203,000
Hostel Management	275,500	2,946,500
JEE - Main	31,900	
Institute Share on Consultancy		239,413
Leave Encashment Payable (Other Org)	53,496	218,389
Mess Dues		533,408
Liability Towards DCRG	410,000	100,000
L.I.C.I Payable	4,494,682	4,747,791
Pension Fund Contribution (Other Org)	90,850	120,750
Mediclaim Insurance	1,684,640	1,646,820
Mess Advance	27,000	
Mess Establishment	5,870,500	5,433,000
Processing Charges	223,525	474,400
Refundable Excess Deposit	386,059	52,579,080
Student Mediclaim	1,482,661	797,788
Transcript Fee	773,600	893,700
RPS Project A/c	2,816,767	
Verification fee	185,500	171,400
Ishan Bikash -2016	13,100	
Counselling Fee (DASA)		100,000
DST FIST (Adv Mfg for LC Margin Money) (Project A/c)	15,700,000	61,000
Self Finance Course (STTP- Applied Fine Element)	55,500	37,000
Recovery against Trainee Teachers (RD)	220,800	144,500
Refundable to CCMN	92,500	
Unclassified receipts (Institute)	275,697	32,300
Unclassified receipts (Project A/c)	20,000	
SSC - Exam	505,000	
ASME Travel Grant (Project A/c)	206,847	
IUSSTF Base Fellowship (Project A/c)	590,500	
Tezpur University Exam	165,000	
Plan interest on Auto Sweep	9,959,683	1,386,091
Plan Interet on Mobilization Adv		375,205
Plan Grant (Axis Bank & Others)	362,737	292,981
Total	**110,717,136**	**127,850,351**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS
FOR THE YEAR ENDED 31ST MARCH 2018

PAYMENTS :	*Amount in Rupees*	
Particulars	**Current Year**	**Previous Year**
Establishment Expenses		
Salary Teach & Admin	192,724,822	183,168,150
Salary Class-III	16,568,382	24,947,549
Salary Class-IV	31,434,283	28,208,353
Salary of Cont. Staff (Teach/admin/III/IV)	31,185,664	17,166,067
Salary of MR Staff	17,364,635	10,333,968
Salary of Outsourced Staff	249,284	14,500,250
Bonus	914,992	1,706,880
Professional Dev Allowance	11,409,569	4,349,284
NPS Contribution	9,822,356	8,213,370
CPF Contribution	58,727	
Pension Contribution (Depu)		79,406
EPF Contribution on FFW Workers	307,906	127,047
EPF Contribution on MR Salary	1,880,425	1,381,674
EPF Contribution on Contract Staff Salary	1,142,204	
Mobile & Telephone Bill Reimbursement	280,471	381,413
Death Cum Ret. Gratuity	15,722,465	14,237,567
Pension	55,981,703	48,982,902
Commuted Pension	7,891,657	6,290,214
Leave Encashment	6,663,385	9,283,462
Home Travel Concession	1,794,427	1,717,990
Leave Travel Concession	2,576,499	1,822,599
Medical Reimbursement	2,432,764	1,767,248
Medicine & Dispensary Exp	716,395	850,373
Children Education Allowance	92,253	
Honorarium/Sitting Fees	698,333	329,000
Security Services	21,840,344	18,528,270
House Keeping	22,452,289	8,814,615
Joining Time T.A	2,725	126,788
Relocation Charges (Transportation)	14,160	212,905
Total	**454,223,119**	**407,527,344**
Academic Expenses		
Lab Consumable	823,615	657,990
Seminer & Conferences	43,998	96,032
Visiting Faculty Remuneration	317,500	206,000
Examination Expenses	2,332,773	2,151,313
Convocation Expenses	2,582,824	2,239,995
Stipend to M.Tech/ Ph.D	107,387,221	94,506,095

Contingency to Phd		1,178,534
Student Project Expenses	133,084	229,333
Library Contingency	190,151	35,620
Internship Exp		65,577
Industry Visit (MBA)		113,812
STIS Project	482,773	590,267
Summer Term Course Exp		690,000
Total	**114,293,939**	**102,760,568**
Administrative Expenses		
Electricity & Power Charges	30,255,418	29,730,203
Water and Electricity Charges to PHE	6,457,831	7,922,965
Postage Exp	330,956	203,758
Internet Expenses	769,274	2,029,845
Telephone Charges	64,793	68,470
Printing and Stationary Exp	983,985	2,165,764
Local Conveyance	4,730	10,740
TA/DA Expenses	1,234,684	2,783,421
Hospitality Exp/Refreshment	265,975	320,485
Audit Fees	668,520	551,900
Professional Fee & Legal Exp	349,392	487,319
Advertisement Expenses	3,313,972	1,090,130
News Paper & Periodicals	16,673	9,328
Training & Placement Expenses	466,558	267,529
Board & Committee Meeting	988,838	2,043,780
Computer Consumable Exp	198,846	271,028
Miscellanous Exp	62,085	164,683
Gyan Sagar Exp	55,841	10,862
Celebration of National Day	904,146	611,048
NCC & NSS Activities	300,011	153,874
Promotion of Rashtriya Bhasha	181,220	121,171
Consumable	302,354	223,669
Academic Audit Expenses	106,200	336,709
Transit House Rent	250,000	250,000
Award & Prizes		155,000
Innovation Lab Exp	9,846	252,458
Other Admin Exp	1,107,245	2,347,404
Registration/Nomination Fee	13,570	50,000
RPC Project Exp		119,462
Junior Engg Staff Salary		337,600
NSDL Service Charges	23,260	
Gymkhana Expenditure	610,090	31,467
NIT Conclave	2,674,802	417,882
Total	**52,971,115**	**55,539,954**

Transportation Expenses		
Vehicle Running Expenses	1,918,720	1,612,055
Insurance Exp- Vehilces	118,167	96,640
Total	**2,036,887**	**1,708,695**
Repairs and Maintenance Expenses		
Repairs & Maintenace- Building & Others	6,355,543	3,972,895
Maintenance of Furniture & Fixtures	389,977	157,120
Repairs and Maintenace- Tools & Equipments	698,161	1,001,550
Maintenance of Digital Library		174,850
Casual Work & Carriage	20,730	547,016
Gardening & Horticulture		100,000
Repairs & Maintenance- Electricity	1,787,489	2,065,438
Maintenance of D.G Set	3,921,270	3,069,324
Manitenance of Networking	2,926,672	299,941
Repairs & Maintenace of Guest House	298,354	299,700
Book Binding Expenses		
Total	**16,398,196**	**11,687,834**
Finance Cost		
Bank Charges	38,360	22,326
Total	**38,360**	**22,326**
Prior Period Expenses		
Total	**-**	**-**
Other Expenses		
Support to NITS KIDS School	619,651	552,971
Support to Kendriya Vidyalaya	32,557,000	18,964,000
Total	**33,176,651**	**19,516,971**
EARMARKED FUND / ENDOWMENT FUND :		
Corpus Fee	6,000	12,000
Pension fund Contribution		11,717
NMICT Awareness Program Fund	21,565	425,305
Student Aid Fund	6,000	174,089
Employees' Welfare Fund	30,000	
Total	**63,565**	**623,111**
SPONSORED PROJECTS:		
Expenditure against Sponsored Projects		
Capital Expenditure		
Equipment	7,645,914	3,636,132
Computer		348,899
Furniture		55,365
Books	96,611	
Revenue Expenditure	**10,125,990**	11,190,920
Total	**17,868,515**	**15,231,316**

FELLOWSHIP / SCHOLARSHIP :		
Outside Scholarship Payable	4,509,927	10,048,931
Doctoral Fellowship (ICSSR)		207,000
Total	**4,509,927**	**10,255,931**
INVESTMENTS & DEPOSITS:		
OUT OF EARMARKED/ENDOWMENT FUNDS;		
Total	-	-
OUT OF OWN FUNDS;		
Investment- LC Margin Money A/C		3,600,000
Total	-	**3,600,000**
EXPENDITURE ON FIXED ASSETS		
Software Developments	944,000	524,201
E-Journals	28,536,416	16,861,558
E-Books	8,772,895	
Patent and Copyright	125,790	83,551
Buildings		
NABL Lab Building	993,504	
Institute Building Renovation	494,988	490,683
Married Scholar Hostels	415,000	
Staff Quarters Type VI	1,657,432	
Girls Hostel No.3	9,097,257	
Staff Quarters (Type A,C,D)		55,061
Staff Quarters Type IV 30 Units		1,855,447
Central School Building & quarters		52,144
Sports Complex & Auditorium		478,837
Roads & Bridges		
Renovation of Internal Road and gate		1,420,044
Campus Development		
Campus Development/Beautifcation		1,956,453
Security Wall		75,015
Sports Field Volley Ball/Tennies		320,717
Plant, Machinery & Equipments		
Audio Visual Equipments	501,710	2,284,801
Electrical Equipments	543,747	957,793
Equipments of Health Centre		1,047,375
Lab Equipments	14,947,458	15,625,401
Gym Equipment		45,000
L T Line & UG Cabeling		1,438,830
Solar Street Lighting		429,000
Furniture Including Hostels	420,350	5,139,922
Office Equipments		1,991,082
Computer Pheriphrals Including Projects	1,319,592	3,543,445
Books	3,255,803	1,102,428
Networking		12,476,354
Total	**72,025,942**	**70,255,142**

CAPITAL WORK IN PROGRESS:		
Boys Hostel-9 (WIP)	70,512,811	258,844,615
Library Building (WIP)	1,150,000	116,840
New Academic Building(WIP)	29,386,067	
New Admin Building(WIP)	1,040,000	835,819
Type (V)Qtr 20 Units (WIP)	17,695,411	822,766
Health Care Centre (WIP)		6,405,010
Expansion of E.E Building (WIP)	7,174,533	
Eatout Dhaba	8,384,671	
Earthquake Engg Lab Bldg	3,804,952	
Total	**139,148,445**	**267,025,050**
PROVISIONS : (TAX)		
VAT	11,648,986	15,063,036
Vat (project)	107,989	72,398
Income Tax (Against Salary & Contrats)	30,855,140	32,397,202
Income Tax (Project)	33,000	27,974
Professional Tax	738,337	752,862
Professional Tax (Project)	27,355	17,449
Service Tax		10,500
Labour Cess Payable	1,988,551	2,860,818
Total	**45,399,358**	**51,202,239**
Refund to Ministry (Project A/C)		
Refund from Project Account	381,905	106,071
Total	**381,905**	**106,071**
Loans,Advances & Deposits		
Sundry Debtors		
Panorama International	400,000	1,248,700
Godrej & Boyce Mfg Co Ltd		905,000
Advance to Employees		
HTC Advance	1,807,200	802,400
LTC Advance	2,431,000	1,423,200
Other Advance To Employees		
Recoverable Advance	18,916,573	15,539,903
Recoverable Advance (Project)	388,000	373,000
TA Advance	5,024,900	1,636,400
Soft Loan (Staff)	1,250,000	250,000
Festival Advance	703,000	746,000
Medical & Other Advance	100,000	500,000
Other Salary Advance		1,121,000
Receivable from Saswat Chakraborty		14,000
Prepaid Insurance Exp		798,288
Security Deposit (LPG- Hostel)		46,200

Advances & Other Receivable on Capital A/c		
Deposit Work		
Deposit Work-CPWD Swage Disopl. Sytm		6,400,000
Secured Advance	29,756,000	125,150,000
Margin Money for LC against Equipment	12,269,447	2,889,619
Advance to NCC Ltd	14,500,000	
Advance to Dipak Nath	4,942,000	
Advance to Gangwal Engg Co Pvt Ltd	6,405,000	
DST FIST (Adv Mfg for LC Margin Money) (Project A/c)	15,700,000	
Total	**114,593,120**	**159,843,710**
Current Liabilities & Provisions		
Hostel Caution Money	8,840,000	2,450,000
Institute Caution Money	2,868,000	1,579,000
Creditors for Goods& Services (Incl.EMD & SD)		
M/s Sify Technologies	2,111,400	
M/s Panorama International	102,127	
M/s Agni Power & Electronics Pvt. Ltd.		544,400
M/s P.T Books International	155,153	
Niharendu Bhattacharjee	1,751,422	
T.K Das & Co.	2,052,676	
M/s Trishul Security & Services Pvt Ltd	402,552	
Gulanur Hussain Choudhury	358,483	
M/s NCC Ltd		16,797,056
Nurul Hussain Barbhuiya	30,692	75,037
Shree Gonesh Associates	159,096	38,000
Earnest Money Deposit	807,445	4,183,358
Security Deposit	17,824,029	1,980,569
GSLI Payable	614,550	733,230
EPF Subscription MR Employees	1,765,844	1,357,341
EPF Subscription FFW Workers' Society	280,782	113,312
EPF Subscription Contract Staff	1,103,958	
GPF Advance Recovery	1,550,260	1,521,942
GPF Payable (Others)	380,000	250,000
GPF Subscription Payable	11,379,850	10,043,100
CPF Subscription Payable	58,727	
NPS Subscription Payable	10,572,136	8,213,370
NRFCC BRNS Projects	386,795	
PMMNT Fund	787,904	230,725
Sashwata Purkayastha Adard Fund	14,000	
Fund from Assam Disaster Management	162,000	
ASME Travel Grant (Project A/c)	206,847	
IUSSTF Base Fellowship (Project A/c)	590,500	
Electricity Recovery (Project A/c)	29,875	
Recovery of Licence Fee (Project)	27416	
Payable to R.G Nair (Project A/c)	5645	

Loan refund to Institute (Project A/c)	200000	
CBSE Fund		49,741
NRDC Fund	199,864	
Business Environment Law Cirriculum Fund	537,169	
IGNICA	575,632	
VSLI Hands on Training	63,000	
IIT Gate Exam	210,325	
Unnat Bharat Abhiyaan	41,613	
INSPIRE		900,370
GIAN Course Fee	312,526	43,000
GIAN Fund	3,674,411	3,808,000
NISE Solar Energy Awareness Fund	525,000	261,163
Manish Roy Memorial Fund		10,000
START UP India	184	441,758
DST Inspire Scholarship	276,064	
Alumini Association Fee	6,000	12,000
CCTV Payable	348,030	486,631
Deposit Remittance	851,998	321,330
Deposit Remittance (Project A/c)	114,781	
Group Insurance Claim	1,380,364	1,569,260
Gymkhana	3,900,415	296,605
Hostel Management	3,262,000	2,889,000
Hostel Welfare	224,510	
Liability Towards DCRG	150,000	50,000
L.I.C.I Payable	4,886,634	4,353,618
Mediclaim Insurance	1,760,004	1,695,532
Mess Advance	26,000	
Mess Dues	26,000	403,183
Mess Establishment	3,495,603	1,899,842
Processing Charges	38,000	407,500
Refundable Excess Deposit	4,941,244	52,417,413
Student Mediclaim	1,288,191	608,373
Transcript Fee	852,900	660,700
Pension Payable	2,099,858	
Advertisement Exp Payable	94,944	
DG Set Maintenance Payable	364,170	
Gardening & Horticulture Exp Payable	96,403	
Repairs & Maintenane Electricity Payable	177,480	
Repairs & Maintenane Build & Others Payable	487,563	
Repairs & Maintenane Tools & Equip. Payable	418,656	
Water & Electricity Charges to PHE Payable	751,542	
RPS Project A/c	2,816,767	
NPS Contribution Payable	749,780	
Administrative Exp Payable	34,457	
Celebration of National Day Exp Payable	511,190	
HTC/LTC Exp Payable	42,710	
Medical Reimbursment Exp Payable	811,308	

Printing & Stationery Exp Payable	31,549	
Refreshment Exp Payable	2,256	
STIS Project Exp Payable	159,739	
Ishan Bikash-2016 Payable	13,100	
CPDA Exp Payable	161,339	
Digital Library Exp Payable	199,025	
E-Journal Subscriton Exp Payable	1,165,097	
Guest House Maint. Exp Payable	14,053	
Payable to Lalu Seban	39,888	
SSC Exam Exp Payable	505,000	
Tezpur University Exam Exp Payable	165,000	
Children Education Allowance Payable	1,758,233	1,768,513
Electricity & Power Charges Payable	2,562,115	2,492,528
Contractual Staff Salary Payable	3,000,535	3,606,892
MR Staff Salary Payable	959,072	978,752
Security Service Charges Payable	1,740,025	1,688,581
Stipend to M.Tech/ Ph.D Payable	9,440,399	9,189,467
Support to NITS KIDS Staff Payable	49,432	50,400
Telephone Charges payable	616,445	575,672
Vehicle Repair Expenses Payable	467,683	129,181
Unclassified Receipts	17,000	28,642
EPF Contb MR Staff Payable	128,117	130,852
House Keeping Charges Payable	1,448,246	1,045,015
PhD Contingency Payable		54,536
Self Finance Course		37,000
Provision Plan Others		2,377,615
Consultancy Cell CE Department		15,917
Verification Fee	327,700	1,000
Prepaid E-Journals	19,695,197	
Prepaid Insurance	798,621	
Other Receivable		
Receivable from Startup India Project	1,484,119	
Receivable from CCMN	342,500	
Receivable from CCMT	195,000	
Loan to CSAB	415,275	358,300
Receivable from CCMT against Fee	7,040,000	6,440,000
Receivable CSAB	13,555,000	17,080,000
Loan Solar RTC Project	37,000	354,395
Loan to TEQIP	541,794	885,972
TDS Receivable (I Tax) including Project	81,155	358,462
Loan to SMDP Project		200,000
IIT GHY Project Adv (Project A/c)	212,000	
Total	**180,374,163**	**173,543,151**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
GPF and NPS ACCOUNT
BALANCE SHEET AS AT MARCH 31, 2018

(A

LIABILITIES	Current Year	Previous Year	ASSETS	Current Year
CAPITAL FUND (GPF):			**INVESTMENT:**	
Opening Balance	284,663,312	276,117,142	Investment with Bank	236,713,14
Less: Final Payment	27,951,499	15,917,817	Interest accrued on FD	32,229,56
Less: Fund towards Penion Fund transferred	23,358,451	8,156,843		
Balance	233,353,362	252,042,482	**CURRENT ASSETS:**	
Add: GPF Subscription	10,516,750	10,727,597	Advance to Subscriber	3,995,66
Add: GPF Subscription (Other Org)	445,000	260,000	Receivable from Institute (NPS Sub & Contr)	-
Add: Excess payment recovered	-	11,717	Receivable from Institute against GPF Subs.	-
Add: Excess of Income Over Exp	16,195,859	21,621,516	TDS receivable	398,86
Capital Fund	260,510,970	284,663,312	GPF Advance receivable from Institute	-
CURRENT LIABILITIES & PROVISIONS:				
Pension Fund Contribution Payable (2017-18)	18,850,882			
Total	**279,361,852**			
NPS Account:			**CASH AT BANK**	**7,052,80**
Opening Balance	2,221,976	2,792,996		
Add: Subscription & Contribution (Received)	19,644,712	17,926,300		
Add: Subscription & Contribution (Other Org)	-	113,156		
Less: Paid during the year (NSDL)	20,838,506	18,610,476		
Total (Payable to NSDL)	1,028,182	2,221,976		
Grand Total	**280,390,034**	**286,885,288**	**Grand Total**	**280,390,03**

Date: 18th June, 2018
Place: Silchar

Registrar
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
GPF & NPS ACCOUNT
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2018

(A

EXPENDITURE	Current Year	Previous Year	INCOME	Current Year
Bank Commission	266	1	Interest Received on FD	433,741
Excess of Income over Expenditure	**16,195,859**	21,621,516	Interest Accrued on Investment	15,411,216
			Interest received on Savings Account	23,139
			Interest Received against Autosweep	328,028
Total	**16,196,124**	**21,621,517**	**Total**	**16,196,124**

Date: 18th June, 2018
Place: Silchar

Registrar
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
GPF & NPS ACCOUNTS
RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2018

(Amount in Rupees)

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year
Opening Balance: (As on 01.04.2017)				
Cash at Bank	15,740,149	29,200,049	**ACCUMULATED FUND:**	
ACCUMULATED FUND:			**GPF Adv./Withdrawal**	
GPF Subscription	10,516,750	9,783,100	GPF Withdrawal	
GPF Subscription Received (Other Org)	445,000	260,000	Adavce to Subscriber	776,000
GPF Subscription payable	-	-	Pension Fund Contrb. Paid	4,507,569
Leave salary payable from other Organisation	-	-	GPF Subscription	-
Pension Fund Contrb. Other Org	-	-	Final payment	28,295,499
GPF Advance recovery	1,649,327	1,524,348	Leave salary other Organisation transferred	
NPS Subscription (Institute)	9,822,356	8,213,370	Acculated Capital Fund	
NPS Contribution (Institute)	9,822,356	8,213,370	NPS Subscription (Institute)	10,419,253
NPS Subscription (Other Org)	-	56,578	NPS Contribution (Institute)	10,419,253
NPS Contribution (Other Org)	-	56,578	NPS Subscription (Other Org)	-
GPF Subscription recovery	384,000		NPS Contribution (Other Org)	-
Pension Fund Contrb. Refunded	-	11,717	TDS Receivable	
GPF Subscription Receivable (2016-17)	868,247	-	Deposit Remittence	1,463,027
NPS Contribution Receivable (2016-17)	749,780	-	**INVESTEMENT**	-
NPS Subscription Receivable (2016-17)	749,780	-	Investment during the year	
GPF Advance Receivable (2016-17)	135,186	-	**EXPENSES**	
Accumulated Capital Fund		-	Bank Charges	266
INVESTMENT			Unclassified Receipts (Transferred):	-
Investment Matured	9,000,000	-		
Accrued Interest Received (Maturity)	802,806	-		
INTEREST			**Closing Balance:**	
Interest Received against FD	433,741	-	Cash at Bank	7,052,805
Interest Received against Autosweep	328,028	1,787,913		
Interest on SB A/c	23,139	942,287		
CURRENT LIABILITY				
Deposit Remittance	1,463,027			
Total	**62,933,672**	**60,049,310**	**Total**	**62,933,672**

Date: 18th June, 2018
Place: Silchar

Registrar
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
Schedule of Investment & Interest accrued of G P Fund upto 31.03.2018

Sl	Name of Bank	Fixed Deposit/Bond Account No	Dated	Face Value as on 31/03/2017	Addition during 17-18	Matured during the year 17-18	Face Value as on 31/03/2018	Accrued Int. earned upto 2016-17	Interest Recvd 2017-18	Accrued intt. Earned during 17-18	Accrued Int. Recd duing 17-18	TDS Receivable 2017-18	Net accrued Int. upto 31.03.18	Re 2
1	IDBI	0293106000022385	11/24/2015	5,670,366	-	-	5,670,366	609,972		454,335	-	-	1,064,307	
2	IDBI	0293106000022394	11/24/2015	5,670,366	-	-	5,670,366	609,972		454,335	-	-	1,064,307	
3	IDBI	0293106000023694	4/2/2016	4,000,000	-	-	4,000,000	365,591		308,029	-	-	673,620	
4	IDBI	0293106000023700	4/2/2016	9,000,000	-	-	9,000,000	822,581		689,008	-	-	1,511,589	
5	IDBI	0293106000023719	4/2/2016	9,000,000	-	-	9,000,000	822,581		689,008	-	-	1,511,589	
6	IDBI	0293106000023728	4/2/2016	9,000,000	-	-	9,000,000	822,581		689,008	-	-	1,511,589	
7	IDBI	0293106000023737	4/2/2016	9,000,000	-	-	9,000,000	822,581		689,008	-	-	1,511,589	
8	Vijaya Bank	800603311004617	4/2/2016	9,000,000	-	9,000,000	-	802,806	433,741	-	802,806		-	
9	Vijaya Bank	800603311004619	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
10	Vijaya Bank	800603311004616	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
11	Vijaya Bank	800603311004618	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
12	Vijaya Bank	800603311004614	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
13	Vijaya Bank	800603311004615	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
14	Vijaya Bank	800603311004612	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
15	Vijaya Bank	800603311004613	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
16	Vijaya Bank	800603311004610	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
17	Vijaya Bank	800603311004611	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
18	Vijaya Bank	800603311004622	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
19	Vijaya Bank	800603311004620	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
20	Vijaya Bank	800603311004621	4/2/2016	9,000,000	-	-	9,000,000	802,806		534,098	-	-	1,336,904	
21	Vijaya Bank	800603311004609	4/2/2016	3,000,000	-	-	3,000,000	267,602		183,459	-	-	451,061	
22	Canara Bank	3050401001158/10	2/18/2017	407,652	-	-	407,652	3,024		25,494		2,549	25,969	
23	Canara Bank	3050401001509/2	25/04/2016	32,151	-		32,151	2,079		2,437		17	4,499	
24	Canara Bank	3050401001691/7	06.02.2017	9,645,663	-	-	9,645,663	92,156		588,190		58,819	621,527	
25	Canara Bank	3050401001691/8	08.02.2017	9,645,683	-	-	9,645,683	88,426		586,332		58,633	616,125	
26	Canara Bank	3050401001691/9	09.02.2017	9,645,693	-	-	9,645,693	86,519		584,472		58,447	612,544	
27	Canara Bank	3050401001691/10	10.02.2017	9,645,703	-	-	9,645,703	84,642		580,754		58,075	607,321	
28	Canara Bank	3050401001691/11	11.02.2017	9,645,713	-	-	9,645,713	82,763		580,754			663,517	
29	Canara Bank	3050401001691/12	12.02.2017	5,358,736	-	-	5,358,736	44,925		328,839		32,884	340,880	
30	Canara Bank	3050401001836/1	10.03.2017	345,415	-	-	345,415	1,390		25,487		2,549	24,328	
31	UCO Bank	20130310035245	6/2/2016	9,000,000	-	-	9,000,000	822,268		694,008			1,516,276	
32	UCO Bank	20130310035252	6/2/2016	9,000,000	-	-	9,000,000	822,268		694,008			1,516,276	
33	UCO Bank	20130310035269	6/2/2016	2,000,000	-	-	2,000,000	182,726		155,075			337,801	
Total Rs.				**245,713,141**	**-**	**9,000,000**	**236,713,141**	**17,893,125**	**433,741**	**15,411,216**	**802,806**	**271,973**	**32,229,562**	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]
BALANCE SHEET AS AT 31ST MARCH, 2018

(Amount in Rs.)

S. No.	PARICULARS	SCHEDULE No.	CURRENT YEAR Rs	PREVIOUS YEAR Rs
A	**SOURCE OF FUNDS:**			
	Opening Balance:		190,000,000	150,000,000
	1) Amount received from: Govt of India		-	25,000,000
	2) Received from Govt.of India under Modernisation		-	15,000,000
	3) Contribution from:			-
	3) Less: Excess of Expenditure over income:			
	As per last Account Rs.8,60,58,887.56			
	Add during the year Rs. 78,76,655.00		93,935,543	86,058,888
	TOTAL		**96,064,457**	**103,941,112**
B	**APPLICATION OF FUNDS**			
	1) Fixed Assets	I	96,064,457	93,165,801
	2) Investment	II	-	-
	2) Work in progress - Scheme work under implement		-	-
	TOTAL		**96,064,457**	**93,165,801**
	3) **A. Current Assets, Loans and Advances**			
	a) Cash Balance	III		
	b) Bank Balance		-	5,254,369
	c) Advance for Capital Goods	IV		-
	d) Loans and Advances	V	-	5,549,273
	TOTAL (A)		**-**	**10,803,642**
	B. Less: Curent Liabilities	VI		
	Earnest Money Deposit Etc		-	28,331
	Net Current Assets (A - B)		**-**	**10,775,311**
	TOTAL		**96,064,457**	**103,941,112**

Place: Silchar
Date:18th June, 2018

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31ST MARCH, 2018

(A

EXPENDITURE			INCOME	
Previous Year	**Particulars**	**Amount Rs.**	**Previous Year**	**Particulars**
	Incremental Operating Cost			
1,361,492	(a) Operation & Maintenance	366,770	1,109,539	Interest earned
10,233	(b) Consumables	-	-	Other income
-	(c) Salary	-		
460,667	Industry Institute Interaction	352,041		
924,615	Teaching & Research Assistantship	705,420	5,062,570	**Excess of Expenditure over Income**
1,602,770	Faculty & staff Development	5,464,610		
54,485	Research & Development	987,282		
145,821	Acedemic Support for weak students	-		
220,976	Institutional Mgt. Capacity Enhancement	-		
1,391,050	Institutional Reforms	-		
-	Other Payments (Corpus)	46,582		
6,172,109	**Total Rs.**	**7,922,705**	**6,172,109**	**Total Rs.**

Place: Silchar
Date: 18th June, 2018

Registrar
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - PHASE-II [TEQIP-II] SCHEDULE - I
SCHEDULE FOR FIXED ASSETS as on 31st March, 2018

Sl	Particulars	Gross Balance as on 01/04/2017	Addition during the year	Deletion during the year	Gross 31
1	Equipment	70,071,027	1,680,000		
2	Equipment: under Modernisation	13,836,147	1,218,656		
3	Furniture	-	-	-	
4	Books, LRs & Software	9,258,627	-	-	
5	Minor Works	-	-	-	
Total		**93,165,801**	**2,898,656**	**-**	

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]
Schedules forming part of Balance Sheet as at 31st March, 2018

(Amount in Rs.)

Current Assets: Investment	Schedule II	Current Year	Previous year
STDR		-	-
Total		**-**	**-**

Current Assets, Loans and Advances:	Schedule III	Current Year	Previous year
Cash in Hand		-	-
Cash at Bank (SBI, NIT Branch)		-	5,254,369
Total		**-**	**5,254,369**

Advance for Capital Goods	Schedule IV	Current Year	Previous year
		-	-
Total		**-**	**-**

Loans and Advances:	Schedule V	Current Year	Previous year
T A Advance		-	-
Advance to Firm		-	-
Advances		-	5,549,273
Total		**-**	**5,549,273**

Current Liabilities :	Schedule VI	Current Year	Previous year
EARNEST MONEY DEPOSIT:			
Zephyer Enterprise (India)		-	25,045
Deposit Remittance (Uncashed/Stale		-	3,286
TOTAL		**-**	**28,331**

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE - II]
RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2018

Previous Year	RECEIPT	Current Year	Previous Year	PAYMENT
	Opening Balance :		21,808,328	Equipment
-	i) Cash in Hand	-	13,836,147	Modernisation: Equipment
11,510,687	ii) Cash at Bank	5,254,369	-	Books & LRs & Software
				Investment:
			-	Investment
	Grants-in-Aid:		-	Loan from Institute
25,000,000	Received from Govt. of India	-		**Indirect Expenditure:**
15,000,000	Received from GoI: Modernisation	-		**Incremental Operating Cost:**
	Investment:		1,361,492	(a) Operation & Maintenance
-	Investment	-	10,233	(b) Consumables
			-	(c) Salary
	Other Receipts:		460,667	Industry Institute Interaction
1,109,539	Interest Earned	46,050	924,615	Teaching & Research Assistanceship
-	Accrued Interest on Investment	-	1,602,770	Faculty & staff Development
			54,485	Research & Development
	Other Receipt :		145,821	Acedemic Support for weak students
226,960	T A Advance	-	220,976	Institutional Management Capacity
-	Advance to Firm	-	1,391,050	Institutional Reforms
1,702,727	Advances (for workshop etc)	5,549,273		
843,790	VAT	8,251		**Other Payments :**
350,206	Income Tax	12,634	226,960	T A Advance
908,750	Earnest Money Deposit	-	7,252,000	Advances (for workshop etc)
-	Deposit remittence	322	843,790	VAT
34,200	Other Misc. Receipt	-	350,206	Income Tax
			908,750	Earnest Money
			-	Deposit remittence
			34,200	Other Misc. Payments(Corpus)
				Closing balance :
			-	Cash in hand
			5,254,369	Cash at Bank (SBI, NIT Br)
56,686,859	**TOTAL Rs.**	**10,870,899**	**56,686,859**	**TOTAL Rs.**

Place: Silchar
Date: 18th June, 2018

Registrar
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
Technical Education Quality Improvement Programme of Government of India (EAP), under TEQIP-III
Consolidation of Sub-Component 1.1,1.2,1.3 and Component 2

Month/Quarter/Year : September/Q2/2017-2018

Sub - Component	Total Funds allocated /Project Life Allocation (PLA) in Q2	Cumulative Exp. since Inception till 17-06-2018	Exp. in September	Total Cumulative Exp. Upto September in quarter Q2	Total Cumulative Exp. Upto September in Fin Year 2018	Payments Under processing in September	Total Advance in September
	A	B	C	D	E	F	G
1.3.1.1 - Equipments	-	-	-	-	-	-	-
1.3.1.2 - Learning resources	-	-	-	-	-	-	-
1.3.1.3 - Furniture	-	-	-	-	-	-	-
1.3.1.4 - Minor civil works	-	-	-	-	-	-	-
1.3.2.1 - Improve students learning	100,000	341,288	-	-	3,360	-	-
1.3.2.10 - Services	-	-	-	-	-	-	-
1.3.2.11 - Industry-Institute Interaction	200,000	440,969	-	-	45,654	-	-
1.3.2.2 - Assistantships	500,000	-	-	-	-	-	-
1.3.2.3 - Graduates employability	300,000	-	-	-	-	-	-
1.3.2.4 - Faculty/staff development and motivation	400,000	1,122,160	-	-	458,210	-	-
1.3.2.5 - Research and development	400,000	2,020,753	-	-	1,020,800	-	-
1.3.2.6 - MOOCs and digital learning	100,000	-	-	-	-	-	-
1.3.2.7 - Mentoring/Twinning system	200,000	83,195	-	-	83,195	-	-
1.3.2.8 - Reforms and governance	1,000,000	172,722	-	-	166,564	-	-
1.3.2.9 - Management capacity development	-	-	-	-	-	-	-
1.3.3.1 - Consumables	100,000	10,095	-	-	10,095	-	-
1.3.3.2 - Operation & maintenance of equipments	50,000	-	-	-	-	-	-
1.3.3.3 - Office expenses	115,000	219,580	-	-	219,580	-	-
1.3.3.4 - Meetings	20,000	528,674	-	-	521,074	-	-
1.3.3.5 - Hiring of vehicles	20,000	-	-	-	-	-	-
1.3.3.6 - Travel cost	120,000	258,299	-	-	258,299	-	-
1.3.3.7 - Salary	120,000	-	-	-	-	-	-
Total (A):	3,745,000	5,197,735	-	-	2,786,831	-	-

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
Technical Education Quality Improvement Programme of Government of India (EAP), under TEQIP-III
Consolidation of Sub-Component 1.1,1.2,1.3 and Component 2

Month/Quarter/Year : December/Q3/2017-2018

Sub - Component	Total Funds allocated /Project Life Allocation (PLA) in Q3	Cumulative Exp. since Inception till 17-06-2018	Exp. in December	Total Cumulative Exp. Upto December in quarter Q3	Total Cumulative Exp. Upto December in Fin Year 2018	Payments Under processing in December	Total Advance in December
	A	B	C	D	E	F	G
1.3.1.1 - Equipments	6,500,000	-	-	-	-	-	-
1.3.1.2 - Learning resources	5,000,000	-	-	-	-	-	-
1.3.1.3 - Furniture	-	-	-	-	-	-	-
1.3.1.4 - Minor civil works	-	-	-	-	-	-	-
1.3.2.1 - Improve students learning	1,050,000	341,288	-	-	3,360	-	-
1.3.2.10 - Services	-	-	-	-	-	-	-
1.3.2.11 - Industry-Institute Interaction	700,000	440,969	-	-	45,654	-	-
1.3.2.2 - Assistantships	500,000	-	-	-	-	-	-
1.3.2.3 - Graduates employability	700,000	-	-	-	-	-	-
1.3.2.4 - Faculty/staff development and motivation	750,000	1,122,160	-	-	458,210	-	-
1.3.2.5 - Research and development	1,100,000	2,020,753	65,527	348,238	1,020,800	-	-
1.3.2.6 - MOOCs and digital learning	750,000	-	-	-	-	-	-
1.3.2.7 - Mentoring/Twinning system	200,000	83,195	-	-	83,195	-	-
1.3.2.8 - Reforms and governance	1,300,000	172,722	117,182	117,182	166,564	-	-
1.3.2.9 - Management capacity development	-	-	-	-	-	-	-
1.3.3.1 - Consumables	100,000	10,095	10,095	10,095	10,095	-	-
1.3.3.2 - Operation & maintenance of equipments	50,000	-	-	-	-	-	-
1.3.3.3 - Office expenses	80,000	219,580	219,000	219,580	219,580	-	-
1.3.3.4 - Meetings	820,000	528,674	521,074	521,074	521,074	-	-
1.3.3.5 - Hiring of vehicles	20,000	-	-	-	-	-	-
1.3.3.6 - Travel cost	120,000	258,299	130,204	169,246	258,299	-	-
1.3.3.7 - Salary	120,000	-	-	-	-	-	-
Total (B):	19,860,000	5,197,735	1,063,082	1,385,415	2,786,831	-	-

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

Technical Education Quality Improvement Programme of Government of India (EAP), under TEQIP-III

Consolidation of Sub-Component 1.1,1.2,1.3 and Component 2

Month/Quarter/Year : March/Q4/2017-2018

Sub - Component	Total Funds allocated /Project Life Allocation (PLA) in Q4	Cumulative Exp. since Inception till 17-06-2018	Exp. in March	Total Cumulative Exp. Upto March in quarter Q4	Total Cumulative Exp. Upto March in Fin Year 2018	Payments Under processing in March	Total Advance in March
	A	B	C	D	E	F	G
1.3.1.1 - Equipments	650,000	-	-	-	-	-	-
1.3.1.2 - Learning resources	2,600,000	-	-	-	-	-	-
1.3.1.3 - Furniture	-	-	-	-	-	-	-
1.3.1.4 - Minor civil works	-	-	-	-	-	-	-
1.3.2.1 - Improve students learning	422,500	341,288	-	3,360	3,360	3,045	-
1.3.2.10 - Services	130,000	-	-	-	-	-	-
1.3.2.11 - Industry-Institute Interaction	800,000	440,969	-	45,654	45,654	-	200,000
1.3.2.2 - Assistantships	-	-	-	-	-	-	-
1.3.2.3 - Graduates employability	975,000	-	-	-	-	-	-
1.3.2.4 - Faculty/staff development and motivation	1,300,000	1,122,160	392,716	458,210	458,210	-	140,000
1.3.2.5 - Research and development	2,700,000	2,020,753	274,357	672,562	1,020,800	8,466	-
1.3.2.6 - MOOCs and digital learning	-	-	-	-	-	-	-
1.3.2.7 - Mentoring/Twinning system	130,000	83,195	41,210	83,195	83,195	-	-
1.3.2.8 - Reforms and governance	195,000	172,722	49,382	49,382	166,564	-	-
1.3.2.9 - Management capacity development	195,000	-	-	-	-	-	-
1.3.3.1 - Consumables	32,500	10,095	-	-	10,095	-	-
1.3.3.2 - Operation & maintenance of equipments	32,500	-	-	-	-	-	-
1.3.3.3 - Office expenses	78,000	219,580	-	-	219,580	-	-
1.3.3.4 - Meetings	100,000	528,674	-	-	521,074	-	-
1.3.3.5 - Hiring of vehicles	19,500	-	-	-	-	-	-
1.3.3.6 - Travel cost	195,000	258,299	-	89,053	258,299	-	-
1.3.3.7 - Salary	117,000	-	-	-	-	-	-
Total (C):	10,672,000	5,197,735	757,665	1,401,416	2,786,831	11,511	340,000
Grand Total (A+B+C)	**34,277,000**	**15,593,205**	**1,820,747**	**2,786,831**	**8,360,493**	**11,511**	**340,000**

Dated, Silchar
The 18th June 2018

Nodal Officer (Finance)

Registrar

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

SIGNIFICANT ACCOUNTING POLICIES
SCHEDULE: 23

1. BASIS FOR PREPARATION OF ACCOUNTS

The financial statements are prepared under the Historical cost convention and on the basis of Generally Accepted Accounting Principles in India. Institute's accounts are maintained on accrual system of accounting in terms of the New System.

2. REVENUE RECOGNITION

2.1 Fees from students (except Tuition Fees), Sale of admission Forms,Interest on Savings Bank account are accounted on cash basis. Tuition Fees collected separately for each semester is accounted on accrual basis.

2.2 Income from Land, Buildings & other Property and Interest on Investments are accounted on accrual basis.

2.3 Interest on interest bearing advances staff for Soft Loan is accounted on actual basis every year.

3. FIXED ASSETS AND DEPRECIATION

3.1 Fixed assets are stated at cost of acquisition including inward freight, duties and taxes and incidental and direct expenses related to acquisition and commissioning.

3.2 Depreciation on Fixed assets is provided on written down value method as followed in earlier years, at the rates mentioned below. As regard to Govt. of India guidelines for providing depreciation on straight line method, the same could not be given effect during 2017-18 also, due to the fact that, change in method and rate of depreciation on the assets procured prior to 2014-15 will attracts complicacy.

Tangible Assets		Rate of Depreciation
1.	Land	0%
2.	Site Development	5%
3.	Buildings	5%
4.	Roads & Bridges	5%
5.	Tube wells & Water Supply	5%
6.	Electrical Installation and equipment	15%
7.	Plant & Machinery	15%
8.	Scientific & Laboratory Equipment	15%
9.	Office Equipment	15%
10.	Audio Visual Equipment	15%
11.	Computers & peripherals	30%
12.	Furniture, Fixtures & Fittings	10%
13.	Vehicles	20%
14.	Lib. Books & Scientific journals	30%

Intangible Assets (amortization):		
1.	E-Journals	100%
2.	Computer Software	15%

3.3 Depreciation is worked out 100% on the opening balance and proportionately on additions during the year. The amount of depreciation has been adjusted with the Capital Fund account and simultaneously shown under "Other Income" in the Income & Expenditure A/c.

3.4 Assets created out of Sponsored Projects funds, are setup by credit to Current Liabilities (Schedule No. 3.A), with separate entity and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets.

3.5 Electronic Journals (E-journals) are separated from Library Books in view of the limited benefit that could be derived from the on-line access provided. E-journals are not in a tangible form, but temporarily capitalized in view of the magnitude of expenditure and the benefit derived in terms of perpetual knowledge of academic and Research Scholars, Depreciation is provided in respect of E-journals at a higher rate of 100% as against depreciation of 30% provided in respect of Library Books, since the access is permitted for a specific period only.

4. **STOCKS:** Expenditure on purchase of chemicals, glassware, publications other stores as revenue expenditure, they are valued at cost.

5. **RETIREMENT BENEFITS**

Retirement benefits of employees appointed prior to the year 2004 are entitled to pension and terminal benefits such as Gratuity, commuted value of pension, Leave encashment etc., are shown at actual as per provisions made by the Institute in annual Budget as Grants in Aid and provided for as per orders of the Govt. of India and paid as per schemes as applicable from time to time. Employees appointed after 2004 are governed by the New Pension Scheme to whom on a monthly basis matching employers contribution is paid from the salary grants provided under Non-plan Grant duly budgeted. Value of pension and gratuity received from previous employers of the Institution's employees, who have been absorbed in the Institution, is credited to the respective Provision Accounts.

6. **INVESTMENT**

Institute has invested temporary surplus in Multi Option Deposit Scheme and Term Deposits with banks. Investments are stated at cost. A schedule showing details of Investments of various funds annexed with the statement of accounts.

7. Earmarked/ Endowment Funds.

The following long term funds are earmarked for specific purpose. Most of the funds have separate bank account. Those with large balances also have investments in term deposits with Banks. The income from Investment/advances, interest on savings Bank Accounts are credited to the respective Funds. The expenditure and advances are debited to the fund. The balance in the respective funds is carried forward and is represented on the assets side by the balance at Bank, Investments and accrued interest.

7.1 **CORPUS FUND**is created in compliance with Govt. of India, MHRD, Department of Higher Education, New Delhi vide letter no. F.21-7/2006-TS.III dated 31.03.2006. This fund is in the nature of Endowment Fund. Income from the investments of the fund is added to the fund. The balance in the Corpus Fund which is carried forward is represented by the balance in a separate bank Account, investment in Fixed deposits with the Bank and Accrued interest on investments. Surplus of Institute Revenue Generation is transferred to Corpus fund account and this fund is administered as per guidelines of the BOG.

8. **GOVERNEMENT GRANTS**

8.1 Government Grants are accounted on accrual basis (as per date of sanction letters).

8.2 To the extent utilized towards capital expenditure, (on accrual basis) government grants are transferred to the Capital fund.

8.3 Government Grants for meeting revenue Expenditure (on accrual basis) are treated utilized and simultaneously transferred to Income & Expenditure a/c as Income from Grants and Subsidies.

8.4 Unutilized grants including advances paid out of such grants are carried forward and exhibited as liability in the Balance Sheet.

9. **INVESTMENTS OF EARMARKED FUNDS AND INTEREST INCOME ACCRUED ON SUCH INVETSMENTS:**

To the extent not immediately required for the expenditure, the amounts available against such funds are invested in fixed term deposits with Banks, leaving the balance in savings Bank Accounts.

Interest received, interest accrued due and interest accrued but not due on such investments are added to the respective fundsas income of the institution.

10. **SPONSORED PROJECTS**

In respect of ongoing Sponsored Projects, the amount received from sponsors is credited to the head "Current Liabilities and Provisions- Current Liabilities-Other Liabilities-Receipt against ongoing sponsored projects". As and when expenditure is incurred/ advances are paid against such projects, or the concerned project account is debited with allocated overhead charges, the liability account is debited.

11. The Institution itself also awards Scholarships to M.Tech./ M.Sc. & Ph.D. scholars, which are accounted as academic expenses.

Registrar Director

SCHEDULE: 24
CONTINGENT LIABILITIES AND NOTE TO ACCOUNTS (ILLUSTRATIVE)

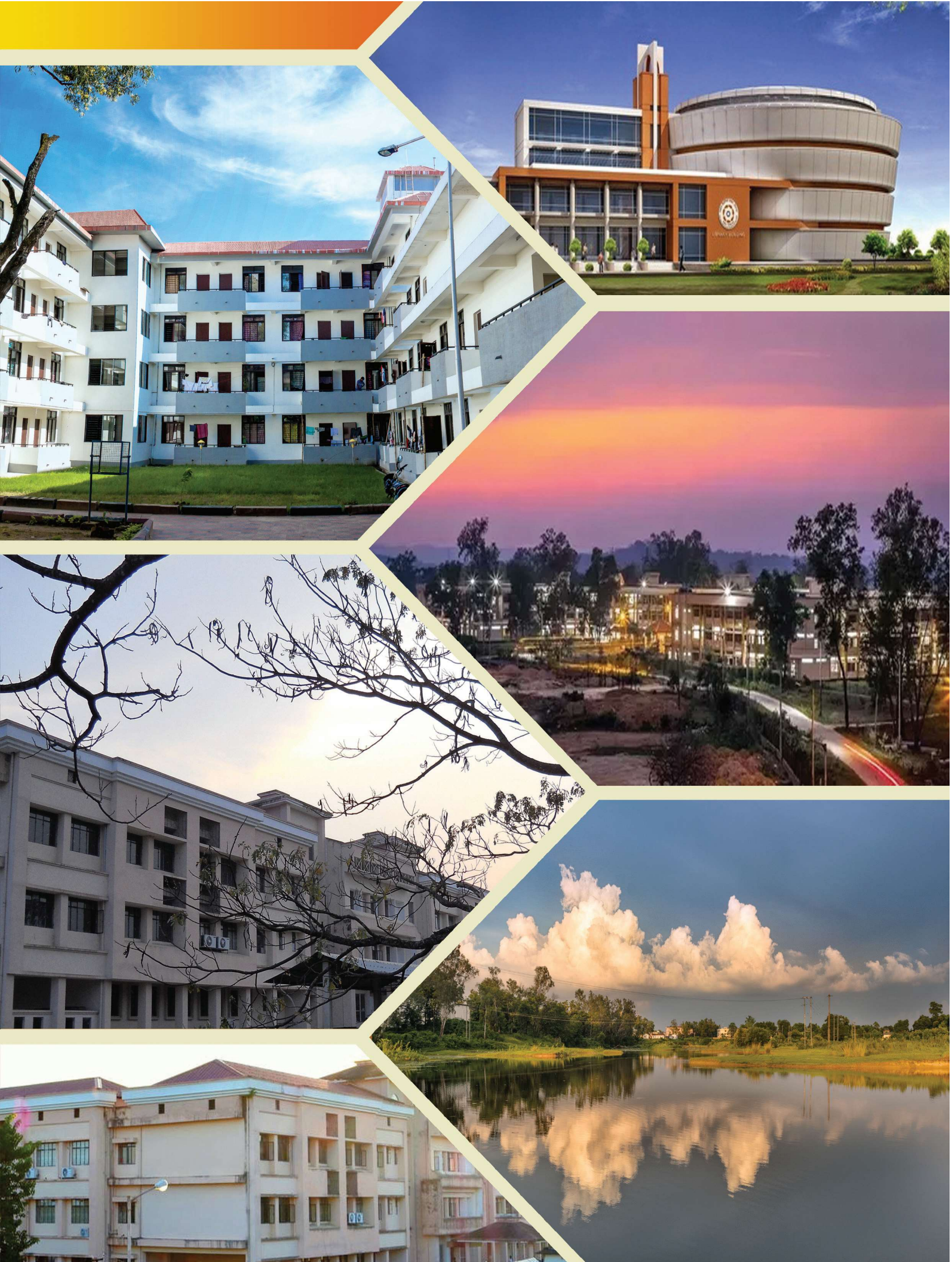
1. **CONTINGENT LIABILITIES:**There is no contingent liability during the year under report.
2. **CAPITAL COMMITMENTS:**The value of the ongoing contract works remaining to be executed on Capital account and not provided for amounted to Rs.1764.00lacs as on 31.03.18.
3. **FIXED ASSETS:**
   - 3.1 Addition in the year to Fixed Assets in Schedule 4 includes Assets purchased out of Plan Funds Rs.2876.78 Lakh. The assets have been set up by credit to Capital Fund.
   - 3.2 In the Balance Sheet as on 31.03.18 and the Balance Sheets of earlier years, fixed assets created out of Plan funds were exhibited distinctly. The additions during the years, from plan and other funds, and the depreciation on those additions respectively have been exhibited in the Sub Schedules A,B,C,D& E to the main schedules of Fixed Assets (Schedules 4).
4. **CURRENT ASSETS, LOANS, ADVANCES AND DEPOSITS**

   In the opinion of the management, the current assets, Loans, Advances and Deposits have a value on realization in the ordinary course, equal to at least the aggregate amount shown in the Balance Sheet.
5. The details of the Balances in the Savings Bank accounts, Current accounts with Banks are depicted in Schedule 7A of Schedule of Current assets. The details of Investment with banks against various funds are annexed separately in page no. 17 & 18 of the Annual Accounts.
6. Figures in the Final accounts have been rounded off to the nearest rupee.
7. Schedules 1 to 22 are annexed to and form an integral part of Balance Sheet at 31st March 2018, and the Income & Expenditure account for the year ended on that date.
8. Provident fund accounts and the New Pension Scheme account are separated from the Institute Accounts. A Receipt & Payments Account, an Income & expenditure Account and a balance sheet of the Provident fund Accounts as well as the New Pension Schemes for the year 2017-18 have been attached with the Institute accounts.The balance held in New Pension Scheme in the Institution in respect of 3 members amounting to Rs.10.28 lakhare yet to be transferred to NSDL due to non-allotment of PRA number till date.
9. Pension Fund Contribution(Schedule-2): During the year a total amount of Rs.233.58 Lacs has been appropriated as income from the Pension Fund Contribution and the same has been stated as revenue expenditure against the Pension Fund (Endowment Fund).
10. Fixed Assets (Schedule-4): Addition of fixed assets during the year amounting to Rs.12490.60 Lac includes Rs.8651.92 Lac being adjustment of WIP and Rs.960.64 lakhs against TEQIP-II. Expenditure incurred against Patent from IRG amounting Rs. 1.26 Lac also taken into account. Thus total capital expenditure of Rs.2876.78 Lac booked as capital expenditure from Plan Grant (OH-35) only.
11. A statement showing the details of investment and interest accrued is annexed, which is corresponding to Schedule 5 and 6.
12. Grants and Subsidies (Schedule-10): Interest earned on Plan Grant fund investment amounting Rs.104.36lacs has been utilized fully, the balance under Non Recurring Grant (OH-35) is Rs.5003.95 lakh and Recurring Grant under (OH-36) is Rs.1739.98 lakhs as on 31.03.2018.
13. TEQIP III project has been allotted to the Institute during the year. The project is implemented as a Central Sector Scheme implying that it is 100% funded by the Union Govt. and implemented by the Central Government machinery. With this background MHRD has developed Direct Fund Transfer System through PFMS. Accordingly the Institute is registered on PFMS and all the transaction under TEQIP III are made through PFMS. A consolidated statement showing details of expenditure under TEQIP III is annexed with the Books of Account.
14. The Institute had spent an amount of Rs.162.32 lakh through foreign currency transaction against procurement of Equipment and other expenses.

Registrar Director

NOTES

NOTES





National Institute of Technology Silchar
Cachar, - 788010, Assam
Ph. No. : 03842-224879
Fax : 03842-224797
E-mail : director@nits.ac.in
website : nits.ac.in