



ANNUAL REPORT

2016-17

**NATIONAL INSTITUTE OF TECHNOLOGY
SILCHAR**





ANNUAL REPORT 2016-17

**NATIONAL INSTITUTE OF TECHNOLOGY
SILCHAR**

Contents

Sl. No.	Topic	Page No.
01	From the Director's Desk	
	Mission	
	Vision	
	Objectives	
	INTRODUCTION	
	Historical Background	1
	Location	2
02	Campus	2
	COUNCIL, BOG AND OTHER COMMITTEES	
	The Council	3
	Board of Governors	4
	Finance Committee	4
	Building and Works Committee	5
	The Senate	5
03	Internal Complaints Committee (ICC)	6
	Deans and HODs	6
	EDUCATION SYSTEM	
	Undergraduate (B.Tech.)	7
	Postgraduate (M.Tech./ M.Sc./ MBA)	8
	Research Programme (Ph.D.)	8
	Academic Programmes	9
04	Enrolment	10
	Admission Statistics	12
	Awards	16
	Examination Details	17
	PLACEMENT STATISTICS	19
	DEPARTMENTS	
	Civil Engineering	22
05	Mechanical Engineering	31
	Electrical Engineering	41
	Electronics & Communication Engineering	48
	Computer Science & Engineering	58
	Electronics & Instrumentation Engineering	63
	Mathematics	69
	Physics	73
06	Chemistry	78
	Humanities & Social Sciences	84
	Management Studies	89
	ACADEMIC CENTRES/ CELLS	
	Central Computer Centre	92
	Central Library	93

Sl. No.	Topic	Page No.
	CDAC	98
	Supercomputing Centre	98
	Institute-Industry Partnership Cell (IIPC)	98
	Research Promotion Cell (RPC)	98
	Indovation	99
	Startup Centre	103
07	STUDENTS' ACTIVITIES	
	Scholarship / Assistantship	104
	Students' Gymkhana	104
	General Programmes / Annual Festivals	106
08	INFRASTRUCTURE AND AMENITIES	
	Estate	110
	Vehicle Management	113
	The Hostels	114
	Health Centre	115
	Kendriya Vidyalaya	115
	KIDS-NITS	116
	Sports Complex & Gym	116
	Guest House	117
	Post Office	117
	Bank and ATMs	117
	Shopping Complex	117
	Cafeteria	117
09	RESEARCH AND CONSULTANCY	
	Research Development	118
	Ongoing Project	118
10	STAFF POSITION	121
11	TEQIP-II	
	Introduction	125
	Goal of TEQIP	125
	Objectives of TEQIP	125
	Distribution of Fund	125
	Other Activities of TEQIP	126
12	AWARDS AND ACHIEVEMENT	134
13	GLIMPSES OF ANNUAL ACTIVITIES	135
14	CORPORATE SOCIAL RESPONSIBILITY	
	Contribution to Social Development	143
	Gyansagar	143
15	ACCOUNTS	
	Audit Statement	147
	Statement of Accounts	151

From the Director's Desk...



It gives me immense pleasure to present the Annual Report of National Institute of Technology Silchar, Assam for the year 2016-17. National Institute of Technology Silchar, an institution of National Importance, erstwhile Regional Engineering College Silchar, started its academic activities in the year 1977. NIT Silchar, being one of the premier technical institutes in the country, is striving for excellence in academics, research and innovation.

In the last 40 years, the Institute has made tremendous progress in the field of engineering education. With a humble beginning in 1977, the Institute can boast of having about 3400 students including UG, PG and research scholars. I am extremely delighted to mention that in the National Institute Ranking Framework (NIRF) announced by the Ministry of HRD in 2017, NIT Silchar has ranked 53 among the Engineering Institutes in the country. It is only second to IIT Guwahati in the North

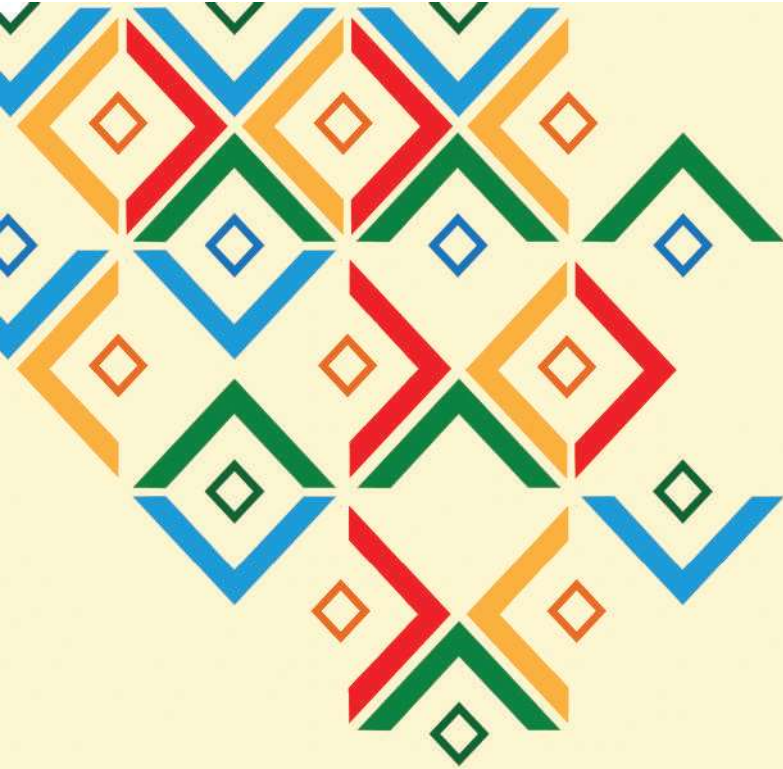
East. Previous year NIT Silchar ranked 65. Thus, there is an improvement of 12 in one year and this is really remarkable. This was possible only because of the unconditional support, cooperation and contribution of all stake holders specially faculty members, staff, students and alumni of NIT Silchar.

The Annual Report is prepared based on the various activities of the Institute during the year of reporting of 2016-17 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 of BOG, FC, B&WC, Senate, faculty, staff, students and alumni of NIT Silchar for their commitment and contribution towards the growth of the Institute.

Prof. Sivaji Bandyopadhyay from the Department of Computer Science and Engineering, Jadavpur University will assume the charge of Director of NIT Silchar on 1st Dec, 2017. I offer my heartiest congratulations to him. I am sure under his able guidance and co-operation from all, NIT Silchar would be a leading and the most sought-after technical Institute of the country.

Jai Hind!

Prof. Rajat Gupta
In-Charge Director



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.

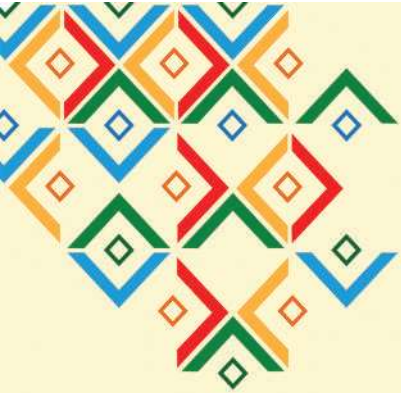
Vision

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.*





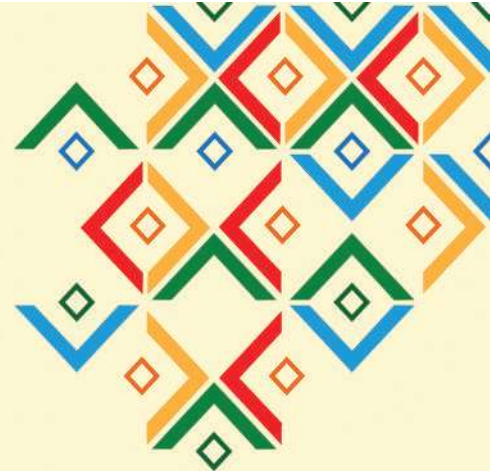
Introduction

Historical Background

In the late fifties, the Government of India decided to establish Regional Engg. Colleges (RECs) under the Quality Technical Education Policy – 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 Engg. 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 Silchar to start its academic programmes due to various constraints.

The first batch of students were admitted in 1977 in the BE program in 3 branches of Engg. namely, Civil Engg., Mechanical Engg., and Electrical Engg.. The total intake in the first batch was 60 students. The inadequate 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 programme in November 1977. Initially under 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 programme with affiliation from Gauhati University. The first batch of BE students were awarded degrees in the year 1982-83. Subsequently, two more branches, namely, Electronics and Telecommunication Engg., and Computer Science and Engg. 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 Engg. 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 a fully funded Central Government 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 remodeled its curriculum and academic activities 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 16 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 a distance of about eight kilometers 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 academic and research infrastructure, lecture theatres, laboratories, resource-centres, sports grounds, open-air theatre, hospital, food-courts and many more being embraced by the greenery, expansive teagardens and lakes.

Campus

The campus of the institute is spread over an area of 540 acres, set amidst 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 the Council

Sl. No	Members	Position
1	Minister in charge, Ministry of Human Resource Development, Govt. of India	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	Member(ex-officio)

Board of Governors

Name and Position of Board of Governors

Name and Address	Position
---	Chairperson
Prof. N. V. Deshpande, Director, till 07/09/2016 Prof. V Ramachandran, Director (In – Charge), 08/09/2016 to 20/10/2016 Prof. Rajat Gupta, Director (In – Charge), for rest of the period	Ex-officio Member
Shri Shashi Prakash Goyal, Joint Secretary, Deptt. of Higher Education, MHRD, GOI, Shastri Bhawan, New Delhi-110001	Member
Ms. Darshana M. Dabral, Financial Adviser & Jt. Secretary, Deptt. of Higher Education, MHRD, Govt. of India, New Delhi	Member
Commissioner & Secretary, Govt. of Assam, Higher Education (Tech.) Deptt., Guwahati	Member
Dr. Atul Bora, Director of Technical Education, Govt. of Assam, Guwahati	Member
Prof. S. L. Bapat, Prof. Department of Mechanical Engg., IIT Bombay	Member
Prof. Uma Bhattacharya, Deptt. of CSE, B.E.S.U., Sibpur, Howrah	Member
Prof. S. K. Kakoty, Dean of Infrastructure Planning and Management, IIT Guwahati	Member
Prof. K. M. Pandey, 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	Secretary

Finance Committee

Name and Address	Position
---	Chairman
Prof. N. V. Deshpande, Director, till 07/09/2016 Prof. V Ramachandran, Director (In – Charge), 08/09/2016 to 20/10/2016 Prof. Rajat Gupta, Director (In – Charge), for rest of the period	Ex-officio Member
Shri Shashi Prakash Goyal, Joint Secretary, Deptt. of Higher Education, MHRD, GOI, Shastri Bhawan, New Delhi-110001	Member
Ms. Darshana M. Dabral, Financial Adviser & Jt. Secretary, Deptt. of Higher Education, MHRD, Govt. of India, New Delhi	Member
Prof. S. L. Bapat, Prof. Department of Mechanical Engg., IIT Bombay	Member
Prof. S. K. Kakoty, Dean of Infrastructure Planning and Management, IIT Guwahati	Member
Prof. A. K. Barbhuiya, Registrar	Member Secretary

Building and Works Committee

Name and Address	Position
Prof. N. V. Deshpande, Director, till 07/09/2016 Prof. V Ramachandran, Director (In-Charge), 08/09/2016 to 20/10/2016 Prof. Rajat Gupta, Director (In-Charge), for rest of the period	Chairman
The Director (NITs), MHRD, Deptt. of Higher Education, C-Wing, Shastri Bhavan, New Delhi – 110001	Member
The Director, IFD, Govt. of India, MHRD, Deptt. of Higher Education, Shastri Bhavan, New Delhi – 110001	Member
Prof. U. Kumar, HOD, Civil Engg. Deptt., NIT Silchar	Member
Dr. P. Rajbongshi, Dean (P&D), NIT Silchar	Member
Superintending Engineer, PWD, Silchar Building Circle, Silchar-1	Member
Executive Engineer (Elect.), Office of the Chief Engineer, PWD (Bldg.), Assam, Chandmari, Guwahati-3	Member
Prof. A. K. Barbhuiya, Registrar	Member - Secretary

The Senate

Name and Position of Members of Senate

Name and Address	Position
Prof. N. V. Deshpande, Director, till 07/09/2016 Prof. V Ramachandran, Director (In-Charge), 08/09/2016 to 20/10/2016 Prof. Rajat Gupta, Director (In-Charge), for rest of the period	Chairman
Prof. Fazal A. Talukdar, Prof., Deptt. of ECE, NIT Silchar	Member
Prof. A. K. Sinha, Prof., Deptt. of EE, NIT Silchar	Member
Prof. K. M. Pandey, Prof., Deptt. of ME, NIT Silchar	Member
Prof. A. K. Dey, Prof., Deptt. of CE, NIT Silchar	Member
Prof. Nidul Sinha, Prof., Deptt. of EE, NIT Silchar	Member
Prof. S. Baishya, Prof., Deptt. of ECE, NIT Silchar	Member
Prof. S. Choudhury, Prof., Deptt. of CE, NIT Silchar	Member
Prof. R. D. Misra, Prof., Deptt. of ME, NIT Silchar	Member
Prof. P. S. Choudhury, Prof., Deptt. of CE, NIT Silchar	Member
Prof. Gurudas Das, Prof., Deptt. of HSS, NIT Silchar	Member
Prof. D. Chakraborty, Prof., Deptt. of CE, NIT Silchar	Member
Prof. A. I. Laskar, Prof., Deptt. of CE, NIT Silchar	Member
Prof. M. A. Ahmed, Prof., Deptt. of CE, NIT Silchar	Member
Prof. B. K. Roy, Prof., Deptt. of EE, NIT Silchar	Member
Prof. C. R. Bhattacharjee, Prof., Deptt. of Chemistry, Assam University, Silchar	Member
Prof. Sunanda Dhar, Prof., Deptt. of Electronic Sciences, Calcutta University	Member
Prof. (Ms.) Rohini M. Puneekar, Prof., Deptt. of HSS, IIT Guwahati	Member

Internal Complaint Committee

S. No	Name & Designation	Role in ICC
1	Smt. Madhuchhanda Choudhury, Associate Prof., ECE	Presiding Officer
2	Dr. Mousami Sen, Assistant Prof., Mathematics	Member - Secretary
3	Smt. Madhumita Paul, Associate Prof., ECE	Member
4	Dr.P. Rajbongshi, Assoc. Prof., CE	Member
5	Dr. Brinda Bhowmik (Shome), Assistant Prof. ECE	Member
6	Smt. Sanchita Acharjee, Secretary, Mahila Mongal Sanstha (NGO)	Member

DEANs and HoDs

Sl.No	DEANs / HODs	NAME
1	Dean (Academic Affairs)	Prof. A. K Sinha
2	Asso. Dean (Academic)	Mr. Darpahari Das Dr. P. K. Patowari
3	Dean (Alumni Relation)	Dr. N.V Dev Choudhury
4	Dean (Faculty Welfare)	Prof. A.I Laskar
5	Asso. Dean (Faculty Welfare)	Dr. T. Rahman
6	Dean (Planning & Development)	Dr. P. Rajbongshi
7	Asso. Dean (Planning & Development)	Dr. J.P Mishra Dr. Debjit Bhowmick
8	Dean (Research & Development)	Dr. Asim Roy
9	Asso. Dean (Research & Development)	Dr. Mausmi Sen
10	Dean (Student Welfare)	Prof. M.A Ahmed
11	Asso. Dean (Student Welfare)	Dr. Ganti Ramesh
12	Asso. Dean (Examination)	Mr. Bijan Nath
13	HOD, Civil Engg.	Dr. U. Kumar
14	HOD, Computer Science Engg.	Dr. Nidul Sinha
15	HOD , Chemistry	Dr. Pranjit Barman
16	HOD, Electrical Engg	Dr. Saurabh Choudhury
17	HOD, Electronics & Communication Engg	Dr. K.L Baishnab
18	HOD, Electronics & Instrumentation Engg	Dr. Rajdeep Dasgupta
19	HOD, Humanities and Social Science	Dr. Gurudas Das
20	HOD, Management Studies	Dr. Ashim Kr. Das
21	HOD, Mathematice	Dr. Santanu Roy
22	HOD, Mechanical Engg	Prof. K.M Pandey
23	HOD, Physics	Dr. Rupak Dutta
24	Co- ordinator (TEQIP)	Dr. P.J Roy
25	Chairman (Board of Hostel Management)	Prof. M.A Ahmed
26	Head, Workshop	Prof. K.M Pandey
27	Head, Training & Placement	Dr. N.V Dev Choudhury
28	Head, Central Computer Centre	Sri. Mithlesh Kumar

Education System

Undergraduate (B.Tech.)

Admission Procedure

Admissions to the first semester of all Undergraduate courses are made on the basis of seats allocated by Central Seat Allocation Board (CSAB) from the list of candidates selected by all India JEE (Main). Besides, a specified number of foreign nationals/NRIs selected under the policy laid down by Govt. of India, are admitted directly 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 indicate the 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

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 as one credit.

In each of the first year/ second year, there shall be non-credit compulsory Extra Academic Activity (EAA). The Extra Academic Activity may be N.S.S., N.C.C., or any other physical education. The curricula for B.Tech. programme includes compulsory Industrial training of 6-8 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 for normal 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

- 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

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. MBA students 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. Four years B.Tech. Programmes in the following branches of Engineering and Technology, were offered during period.
 - ❖ Civil Engineering
 - ❖ Mechanical Engineering
 - ❖ Electrical Engineering
 - ❖ Electronics & Communication Engineering
 - ❖ Computer Science & Engineering
 - ❖ Electronics & Instrumentation Engineering
- ii. Two- years M.Tech., programmes in the following branches of engineering and technology were offered during 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 (under Computer Science & Engg. Department)

- ❖ Computer Science & Engineering

M.Tech (under Electronics & Instrumentation Engineering Department)

- ❖ Instrumentation Engineering

- iii. Two- years M.Sc. & MBA programmes in the following branches of engineering and technology were offered during period.

M.Sc. (under Chemistry Department)

- ❖ Applied Chemistry

M.Sc. (under Physics Department)

- ❖ Applied Physics

M.Sc. (under Mathematics Department)

- ❖ Mathematics

MBA (under Management Studies Department)

B. Tech Enrolment

The following table shows the semester-wise, course wise enrolment with sex and caste breakup for the period 2016-17.

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
1 ST & 2 ND	Civil	42	6	32	3	15	1	4	3	1 OPPH, 1OBPH, 1 SCPH	-	109
	Mech	44	5	37	1	17	-	6	3	2OPPH, 2OBPH	-	117
	Elect.	45	7	28	2	15	2	6	3	2OPPH	2OBPH	112
	ECE	53	7	26	3	14	3	5	1	1SCPH	-	113
	CSE	38	8	22	2	13	-	6	-	1OPPH, 1 OBPH	-	91
	EIE	16	4	13	3	4	2	4	-	1OPPH, 1OBPH	-	48
	Total	238	37	158	14	78	8	31	10	14	2	590
3 RD & 4 TH	Civil	42	9	34	1	14	3	9	-	2 OPPH	-	114
	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	6	-	1 OPPH	-	98
	E&I	20	4	15	1	7	1	3	1	-	-	52
	Total	223	42	168	22	76	14	39	3	7	1	595
5 TH & 6 TH	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
	E&I	22	2	14	2	8	1	2	1	1 OPPH	-	53
	Total	271	31	160	18	83	5	33	11	9	-	621
7 TH & 8 TH	Civil	43	6	43	1	17	-	8	-	1 SCPH	-	119
	Mech	62	3	38	1	18	1	9	-	1 OPPH	-	133
	Elect.	34	1	24	4	11	-	8	-	1 OPPH	-	83
	ECE	43	6	35	1	14	7	7	1	1 OPPH	-	115
	CSE	34	5	26	1	8	2	3	-	1 OPPH	-	80
	EIE	18	3	15	2	8	1	5	-	1 OPPH	-	53
	Total	234	24	181	10	76	11	40	1	6		583
Grand Total		966	134	667	64	313	38	143	25	36	3	2389

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

PG Enrollment (2016-2017)

		Open		SC		ST		OBC		Sponsored		PH		Total		Grand Total
Sem	Branch	(Break up)		(Break up)		(Break up)		(Break up)				(Break up)				
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	boys	Girls	
1st Sem	CE	41	4	13	1	3	2	14	3	0	0	0	0	71	10	81
	ME	24	3	5	0	3	0	13	2	0	0	0	0	45	5	50
	EE	16	3	5	1	0	1	4	0	0	0	0	0	25	5	30
	ECE	8	1	3	0	1	0	3	1	0	0	0	0	15	2	17
	CSE	6	3	2	0	0	0	1	0	0	0	0	0	9	3	12
	E&I	4	0	0	1	1	0	2	1	0	0	0	0	7	2	9
	Total	99	14	28	3	8	3	37	7	0	0	0	0	172	27	199
3rd Sem	CE	38	7	11	1	4	4	20	3	3	0	0	0	76	15	91
	ME	19	1	9	0	2	0	10	1	0	0	0	0	40	2	42
	EE	9	2	2	0	1	0	1	0	0	0	0	0	13	2	15
	ECE	7	2	1	0	0	1	2	3	2	0	0	0	12	6	18
	CSE	5	3	4	1	2	0	3	1	1	0	0	1	15	6	21
	E&I	5	0	1	0	1	0	1	0	1	1	0	0	9	1	10
	Total	83	15	28	2	10	5	37	8	7	1	0	1	165	32	197
1st Sem	PHY	4	2	0	0	1	0	1	1	0	0	0	0	6	3	9
	CHEM	4	3	2	0	0	0	2	0	0	0	0	0	8	3	11
	MATHS	6	2	0	1	0	1	1	0	0	0	0	0	7	4	11
		14	7	2	1	1	1	4	1	0	0	0	0	21	10	31
3rd Sem	PHY	4	3	0	3	0	0	3	1	0	0	0	0	7	7	14
	CHEM	3	6	2	0	1	1	3	2	0	0	0	0	9	9	18
	MATHS	4	6	0	0	0	1	1	0	0	0	0	0	5	7	12
	Total	11	15	2	3	1	2	7	3	0	0	0	0	21	23	44
1st	MBA	19	7	2	3	2	1	4	8	0	0	1	0	28	19	47
	Total	19	7	2	3	2	1	4	8	0	0	1	0	28	19	47
3rd	MBA	17	12	7	0	3	2	6	3	0	0	0	0	33	17	50
	Total	17	12	7	0	3	2	6	3	0	0	0	0	33	17	50
	G.Total	243	70	69	12	25	14	95	30	7	1	1	1	440	128	568

The following is a summary table of the number, B.Tech. Students on the roll of NIT Silchar during 2016-17.

Year	CE	ME	EE	ECE	CSE	EIE	TOTAL
2 ND	109	117	112	113	91	48	590
4 TH	114	111	108	112	98	52	595
6 TH	116	130	107	117	98	53	621
8 TH	119	133	83	115	80	53	583
	458	491	410	457	367	206	TOTAL- 2389

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 - 2016-17

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Assam	OP	27	26	28	30	22	10	143
	OBC	16	19	15	16	12	8	86
	SC	9	9	9	8	8	4	47
	ST	2	5	5	3	3	2	20
	OPPH	-	1	1	-	-	1	3
	SCPH	1	-	-	1	-	-	2
	OBPH	-	1	1	-	1	-	3
Rajasthan	OP	3	2	1	1	1	3	11
	OBC	1	2	-	1	1	-	5
	SC	1	-	3	-	2	-	6
	ST	2	1	4	-	-	1	8
Bihar	OP	5	-	6	5	3	1	20
	OBC	13	10	7	1	2	4	37
	SC	3	-	1	3	-	-	7
	ST	2	-	-	1	-	-	3
	OPPH	-	-	-	-	-	1	1
	OBPH	1	-	-	-	-	-	1
UP	OP	5	12	6	5	4	1	33
	OBC	3	3	3	1	5	2	17
	SC	1	4	4	1	2	-	12
	OPPH	1	-	-	-	-	-	1
	OBPH	-	1	1	-	-	-	2
Punjab	OBC	-	1	-	-	-	-	1
Andhra Pradesh	OP	2	7	4	13	4	2	32
	OBC	1	1	2	5	-	-	9
	SC	-	1	-	3	-	-	4
	ST	-	-	-	-	1	-	1
	OPPH	-	-	1	-	-	-	1
Jharkhand	OP	-	-	1	-	-	-	1
	OBC	-	-	1	1	-	2	4
Kerala	OP	-	1	-	-	-	-	1
Mizoram	SC	-	-	-	-	-	1	1
Arunachal Pradesh	OPPH	-	1	-	-	-	-	1
Karnataka	OP	-	-	1	-	-	-	1
Gujarat	OP	1	-	1	-	1	1	4
Orissa	OP	2	-	2	-	-	1	5
	OBC	-	-	1	-	-	-	1
Maharashtra	OP	-	-	1	-	-	-	1
	OBC	-	1	-	-	-	-	1
	SC	1	-	-	-	-	-	1

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Manipur	OBC	1	-	-	-	-	-	1
	ST	-	-	-	1	1	-	2
Tamil Nadu	OP	-	-	-	-	2	-	2
Chhattisgarh	ST	-	1	-	1	-	-	2
Haryana	OP	1	-	1	-	-	-	2
	OPPH	-	-	-	-	1	-	1
Nagaland	ST	1	-	-	-	-	-	1
	OP	-	1	-	1	1	1	4
	OBC	-	1	1	3	4	-	9
Telangana	SC	1	3	-	1	1	1	7
	ST	-	2	-	-	1	1	4
Puducherry	OBC	-	-	-	1	-	-	1
	SC	-	-	-	1	-	-	1
Uttarakhand	OP	-	-	-	1	1	-	2
West Bengal	OP	-	-	-	1	1	-	2
Foreign: 9(Ninth) Nos. foreign Students Ethiopia :1 Bangladesh: 8	Open	2	-	-	3	4	-	9
DASA	Open	-	-	-	-	2	-	2
Total		109	117	112	113	91	48	590

Admission Statistics M.Tech/M.Sc/MBA

(a) Indian Students Admitted

The following table shows the course-wise admission statistics with category breakup for the year -2016-17

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	6	2	0	1	0	1	1	0	0	0	0	0	7	4	11
	PHYSICS	4	2	0	0	1	0	1	1	0	0	0	0	6	3	09
	CHEMISTRY	4	3	2	0	0	0	2	0	0	0	0	0	8	3	11
	TOTAL	14	7	2	1	1	1	4	1	0	0	0	0	21	10	31
Management Studies	MBA	19	7	2	3	2	1	4	8	1	0	0	0	28	19	47
	TOTAL	19	7	2	3	2	1	4	8	1	0	0	0	28	19	47

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	WRE	7	2	3	0	0	0	0	1	0	0	0	0	10	3	13
	SD & EQE	7	1	1	0	0	1	2	0	0	0	0	0	10	2	12
	Transportation	9	1	2	1	1	0	5	0	0	0	0	0	17	2	19
	Geotechnical	8	0	3	0	1	1	3	2	0	0	0	0	15	3	18
	Structural Engg	10	0	4	0	1	0	4	0	0	0	0	0	19	0	19
	TOTAL	41	4	13	1	3	2	14	3	0	0	0	0	71	10	81
ME	Thermal	8	2	3	0	1	0	5	0	0	0	0	0	17	2	19
	Design & Manuf.	8	1	1	0	1	0	5	1	0	0	0	0	15	2	17
	CAD-CAM & Auto.	3	0	0	0	1	0	1	0	0	0	0	0	5	0	05
	MMT	5	0	1	0	0	0	2	1	0	0	0	0	8	1	09
	TOTAL	24	3	5	0	3	0	13	2	0	0	0	0	45	5	50
EE	Control & Indu. Auto.	9	1	3	0	0	0	1	0	0	0	0	0	13	1	14
	Power & Energy Sy. Engg	7	2	2	1	0	1	3	0	0	0	0	0	12	4	16
	TOTAL	16	3	5	1	0	1	4	0	0	0	0	0	25	5	30
ECE	Microelectronics & VLSI D	5	0	1	0	1	0	0	1	0	0	0	0	7	1	08
	CSP Engg,	3	1	2	0	0	0	3	0	0	0	0	0	8	1	09
	TOTAL	8	1	3	0	1	0	3	1	0	0	0	0	15	2	17
CSE	Computer Sc. & Engg	6	3	2	0	0	0	1	0	0	0	0	0	9	3	12
	TOTAL	6	3	2	0	0	0	1	0	0	0	0	0	9	3	12
E&I	Instrumentation Engg.	4	0	0	1	1	0	2	1	0	0	0	0	7	2	09
	TOTAL	4	0	0	1	1	0	2	1	0	0	0	0	7	2	09
	GRAND TOTAL (M.TECH)	98	14	28	3	8	3	38	7	0	0	0	0	172	27	199

(b) Foreign Students Admitted

The following table shows the admission statistics of foreign students for the year 2016-17.

Sl. No.	Courses (B.Tech)	Admitted
1.	Civil Engineering	2
2.	Mechanical Engineering	-
3.	Electrical Engineering	-
4.	Electronics & Communication Engg.	3
5.	Computer Sc. & Engg.	4
6.	Electronics & Instrumentation Engg.	-
Total		9

Course-Wise Admission statistics (B.Tech-1st Year)-2016-17

Sl.No.	Courses	Intake Capacity	Admitted	Remarks
1.	Civil Engineering	120	109	
2.	Mechanical Engineering	120	117	
3.	Electrical Engineering	120	112	
4.	Electronics & Communication Engg.	120	113	
5.	Computer Sc. & Engineering	92	91	
6.	Electronics & Instrumentation Engg.	60	48	

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 2016-17.

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.	13	13
	20+5	M.Tech. in Structural Dynamics & Earthquake Engg.	12	12
	20+5	M.Tech in Transportation Engg.	19	19
	20+5	M.Tech. in Geotechnical Engg.	18	18
	20+5	M.Tech in Structural Engg.	19	19
ME	20+5	M.Tech. in Thermal Engg.	19	19
	20+5	M.Tech. in Design & Manufacturing	17	17
	10+2	M.Tech in CAD-CAM Automation	5	5
	10+2	M.Tech in Material & Manufacturing Technology	9	9
EE	20+5	M.Tech. in Power & Energy systems Engg.	16	16
	20+5	Control & Industrial Automation	14	14
ECE	10+2	M.Tech. in Microelectronics & VLSI Design	8	8
	10+2	M.Tech in Communication & Signal Processing Engg.	9	9
CSE	20+5	M.Tech. in Computer Science & Engg.	12	12
E&I	10+2	Instrumentation Engg.	9	9
PHY	20+5	M.Sc. in Applied Physics	9	9
CHEM	20+5	M.Sc. in Applied Chemistry	11	11
MATH	20+5	M.Sc. in Mathematics	11	11
MS(MBA)	60	MBA	47	47
Grand Total (M.Tech. + M.Sc. + MBA) =			277	277

*(Regular & Sponsored)

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

Courses	CE	ME	EE	ECE	CSE	E&I	PHY	CHY	MATHS	HSS	MBA	TOTAL
M.Tech	172	92	45	35	33	19						396
M.SC							23	29	23			75
MBA											97	97
Total												568

CE= Civil Engineering, ME= Mechanical Engineering, EE= Electrical Engineering,
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 2015-16 at NIT Silchar.

Courses		Branches	Total students strength (course-wise)
UG (B.Tech.)		Civil Engineering	458
		Mechanical Engineering	491
		Electrical Engineering	410
		Electronics & Communication Engg.	457
		Computer Science & Engineering	367
		Electronics & Instrumentation Engg.	206
PG	M.Tech	Postgraduate Course (all engineering department)	396
	M.Sc.	Applied Chemistry/Applied Physics/Mathematics	75
	Management studies	MBA	97
GRAND TOTAL			2957

Awards

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	Civil Engineering	AmanHarlalka

(B)	Institute Silver Medals		
Sl.No.	Title of the Medal	Awardees	
1.	Best B.Tech. Graduate in Mechanical Engineering	Geet Agarwal	
2.	Best B.Tech. Graduate in Electrical Engineering	Utkarsh Srivastava	
3.	Best B.Tech. Graduate in Electronics & Communication Engineering	KrishanuDey	
4.	Best B.Tech. Graduate in Computer Science & Engineering.	NikhitaBegani	
5	Best B.Tech. Graduate in Electronics and Instrumentation Engg.	Malobika Bora	

Sponsored awards

(C)	KalikrishnaMrinaliniKrori 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)	Electronics and Communication Engg.	KrishnanuDey

(D)	SaswataPurkayastha 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)	Civil Engg.	Faisal Karim

EXAMINATION DETAILS

* Even semester examinations were held in the month of April 2016 (both UG & PG)

* Odd semester examinations were held in the month of Nov-Dec. 2016 (both UG & PG)

Statistics of the Results

The following table shows the total student strength on the roll (course wise) of the year 2015-16 at NIT Silchar.

End semester examination Held in April-May 2016

Programe	Branch & Course	No. of Students appeared	Passed & Eligible for Degree	Failed/ Withheld	Percentage passed	Remarks
M.Tech	Civil Engg. (Water Resources Engg.)	10	10	--	100%	
	Civil Engg. (Structural Dynamics & Earthquake Engg.)	10	10	--	100%	
	Civil Engg.(Transportation Engg)	16	16	--	100%	
	Civil Engg.(Structural Engineering)	19	18	01	94.74%	
	Civil Engg.(Geotechnical Engg)	14	14	--	100%	
	Mech. Engg. (Thermal Engg.)	21	20	01	95.24%	
	Mech. Engg. (Materials & Manufacturing Technology)	09	09	--	100%	
	Mech. Engg.(Design & Manufacturing)	17	17	--	100%	
	Mech. Engg.(CAM-CAM & Automation)	06	06	--	100%	
	Electrical Engg. (Power & Energy system Engg.)	11	11	--	100%	
	Electrical Engg. (Control & Industrial Automation Engg)	05	05	--	100%	
	Electronics & Comm. Engg. (Communication & Signal Process Engineering)	12	12	--	100%	
	Electronics & Comm. Engg. (Microelectronics & VLSI Design)	10	10	--	100%	
	Computer Science & Engg	06	06	--	100%	
M.Sc	Chemistry (Applied Chemistry)	14	14	--	100%	
	Physics (Applied Physics)	13	13	--	100%	
	Mathematics	06	06	--	100%	
MBA	Master of Business Administration(MBA)	39	39	--	100%	
B.Tech.	Civil Engg.	98	92	6	93.88%	
	Mechanical Engg.	106	93	13	87.74%	
	Electrical Engg.	90	79	11	87.78%	
	Electronics & Comm. Engg.	92	86	6	93.48%	
	Computer Sc. & Engg.	96	89	7	92.71%	
	Electronics & Instrumentation	27	25	2	92.59%	

b) List of candidates qualified for the Degree of Bachelor of Technology after 13th Convocation held in May 2015 and before End semester Examination held in April 2016

Branch	Appeared	Passed
Civil Engg (B.Tech)	5	5
Mechanical Engineering (B.Tech)	1	1
Electrical Engineering (B.Tech)	20	20
Electronics & Communication Engg. (B.Tech)	7	7
Computer Science & Engg. (B.Tech)	10	10
Electronics & Instrumentation Engg (B.Tech)	1	1
Master of Business administration (MBA)	1	1
Electronics and Comm. Engg. (Microelectronics & VLSI Design) (M.Tech)	3	3

Placement Statistics

Sl. No.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total	Remarks
1.	Yodlee, Bangalore	23-26 Jul 16	8.7 LPA	-	-	-	-	2	-	-	-	2	
2.	Affine Analytics, Bangalore	27-29 Jul 16	6 LPA	-	-	-	2	1	1	-	-	4	
3.	Persistent System, Pune	28-29 Jul 16	6 LPA	-	-	-	-	5	-	-	-	5	
4.	Medlife International Pvt Ltd, Bangalore	01-03 Aug 16	11 LPA	-	-	-	-	5	-	-	-	5	
5.	Philips Innovation	4-5 Aug 16	6 LPA	-	-	-	1	6	-	-	-	7	
6.	Oracle GBU	8-9 Aug 16	9 LPA	-	-	-	-	7	-	-	-	7	
		Pool campus at Agartala											
7.	Tech Mahindra	11-13 Aug 16	3.5 LPA	8	20	8	19	6	5	-	-	66	
8.	Mphasis, Bangalore	16-19 Aug 16	4 LPA	-	-	7	19	8	2	-	-	36	
9.	CGI, Bangalore	22-24 Aug 16	6.5 LPA	1	1	-	9	5	-	-	-	16+23=39	
			3.25 LPA	-	4	3	11	2	3				
10.	Kreeti Technology	22-24 Aug 16	4 LPA	-	-	-	-	4	-	-	-	4	
11.	Amdocs	1-2 Sep 16	6 LPA	-	-	-	3	6	-	-	-	9	
		Pool campus at Agartala											
12.	SKF India Pvt Ltd, Pune	02-03 Sep 16	4.72 LPA	-	1	-	-	-	-	-	-	1	
13.	L&T ECC	5-8 Sep 16	5.11 LPA	13	-	5	1	-	6	-	-	25	
14.	Accenture	7-10 Sep 16	3.5 LPA	32	57	34	30	12	16	-	-	181	
15.	Wipro Technologies	10-12 Sep 16	3.5 LPA	3	6	4	5	3	4	-	-	25	
16.	Intellect	12-13 Sep 16	5 LPA	-	-	-	6	3	-	-	-	9	
17.	MU Sigma	15-16 Sep 16	21 LPA (for 3 Yrs)	2	-	1	2	1	3	-	-	9	
18.	Capgemini	17-18 Sep 16	6 LPA	-	-	1	2	2	-	-	-	5	
		Pool campus at Nagaland											
19.	Maruti Suzuki	22-23 Sep 16	6.5 LPA	-	4	-	-	-	-	-	-	4	
20.	ABB	23 Oct 16	5 LPA	-	-	1	-	-	-	-	-	1	
		On line Interview											
21.	Tata Motors	25-26 Sep 16	5.6 LPA	-	6	1	-	-	-	-	-	7	
22.	Sapient	3 Oct 16	5.05 LPA	-	-	-	3	3	-	-	-	6	
23.	Cummins India	3-4 Oct 16	4.15 LPA	-	3	-	-	-	-	-	-	3	
		Pool campus at AEC											
24.	IBM, Bangalore	5-8 Oct 16	3.2 LPA	-	-	2	12	2	7	-	CSE-1	23+1=24	
25.	HSBC, Pune	8-10 Oct 16	7 LPA	-	-	-	-	3	-	-	-	3	
26.	Infosys	13-15 Oct 16	3.25 - B.Tech 3.50 M. Tech	7	15	5	11	3	2		PESE-1 ECE-1+1	43+3=46	
27.	Oracle Financial Services Software Ltd.	23-25 Oct 16	4.75 LPA	-	-	-	3	3	1	-	-	7	
28.	Bajaj Electronics	3-4 Nov 16	4.58 LPA	-	-	-	-	-	-	Mktg-3	-	3	
29.	USE Ready Analytics, Bangalore	9-11 Nov 16	6 LPA	-	-	1			1	-	-	2	
30.	Concept Educations	15-17 Nov 16	3.5 LPA	-	-	-	1	-	-	-	-	1	

Sl. No.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total	Remarks
32.	Deloitte, Hyderabad	21-22 Nov 16	6.2 LPA	-	-	1	2	2	1		CSE -1	6+1=7	
33.	Safechem Industries, Kolkata	22 Nov 16	4.25 LPA	-	-	-	-	-	-	Fin-1 Mktg-2	-	3	
		Pool campus at Guwahati											
34.	Sambhav Detergent Pvt Ltd. Kolkata	22 Nov 16	2.15	-	-	-	-	-	-	HR-2	-	2	
		On line Interview											
35.	Jaro Education	25-26 Nov 16	6.66 LPA	-	-	-	-	-	-	Mktg-1		1	
36.	M&M	30 Nov-01 Dec 16	6 LPA	-	6	2	-	-	-	-	-	8	
37.	Relyon Solar Pvt Ltd. Pune	3-4 Dec 16	3.6 LPA										Result awaiting
38.	Idea Cellular	5 Dec 16	5 LPA -UG 5.5 LPA-PG	-	-	-	4	-	-	-	CSP-1	4+1=5	
39.	Avanti	6 Dec 16	4 LPA	1	-	-	-	-	-	-	-	1	
		On line Interview											
40.	Virtusa	6 Dec 17	5 LPA	-	-	-	-	1	-	-	-	1	
		Pool campus at Meghalaya											
41.	Zaloni Technologies	8-10 Dec 16	3 LPA	-	-	-	-	-	-	-	CSE-1	1	
42.	Microsoft	9-10 Dec 16	17 LPA	-	-	-	1	1	-	-	-	2	
43.	Havells India Ltd.	20 Dec 16	4.8 LPA	-	2	1	1	-	1	-	-	5	
		Pool campus at Agartala											
44.	Oil India Ltd.	22-24 Dec 16	13 LPA	2	5	-	-	-	-	-	-	7	
45.	MEDITAB	26 Dec 16	3.6 LPA	-	-	-	-	-	1	-	-	1	
		On line Interview											
46.	Bandhan Bank	29 Dec 16	3.83 LPA	-	-	-	-	-	-	HR-3 Fin-6 Mkt-3	-	12	
47.	Fiat India Automobiles Pvt Ltd	6 Jan 17	4.6 LPA	-	1	-	-	-	-	-	-	1	
		Pool campus at Agartala											
48.	First American (India)	13-14 Jan 17	6 LPA	-	-	2	-	-	-	-	-	2	
		On line Interview											
49.	Cortex Construction Solution Pvt. Ltd.	14-15 Jan 17	3.6 LPA	2	-	-	-	-	-	-	-	2	
		Pool Campus at Guwahati											
50.	Prompt Cloud	19-21 Jan 17	5.5 LPA	-	-	-	-	1	-	-	CSE-1	1+1=2	
51.	Capital Height	31 Jan -2 Feb 17	2.47 LPA	7	7	6	3	4	5	Fin-3 Mktg-7	-	32+10=42	
		On line Interview											
52.	Max Cement	21-22 Jan 17	2.16 LPA	1	1	-	-	-	1	Fin-1 Mktg-1	-	5	
53.	Samsung	19-21 Jan 17	8.88 LPA	-	-	-	-	3	-	-	-	3	
54.	Directi	22 Jan 17	14.47 LPA	-	-	-	-	1	-	-	-	1	
55.	Topcem	Jan 17	2.4 LPA	2	-	-	-	-	-	Mktg-5	-	7	
		Pool Campus at Guwahati											
56.	Pantaloons, Guwahati	24 Jan 17	4 LPA	-	-	-	-	-	-	Mktg-1	-	1	
		Pool campus at Tezpur											
57.	Axis Bank	24 Jan 17	2.6 LPA	-	-	-	-	-	-	Fin-3	-	3	
		Pool Campus at Guwahati											
58.	Book My Show	28 Jan 16	7.5 LPA	-	-	-	-	1	-	-	-	1	
59.	Cerner India	2-3 Feb 17	7.5 LPA	-	-	-	-	-	-	-	CSE-1	1	
		Interview at Kolkata											
60.	Karvy Stock Broking Ltd.	2-3 Feb 17	2.5 LPA	-	-	-	-	-	-	Fin-5	-	5	
		Pool campus at Assam University											
61.	Vedanta	10-11 Feb 17	7.95 LPA	-	6	1	-	4	4	-	-	15	
62.	Yes Bank	Feb 17	2.5 LPA	-	-	-	-	-	-	Mktg-3	-	3	

[illegible]

Departments

1. Name of the Department :-

Civil Engineering



1.1 Academic Staff

Head : Dr. Upendra Kumar

Professor	Associate Professor	Assistant Professor
Prof. Ashim Kanti Dey	Dr. Asit Kumar Das	Dr. Parthajit Roy
Prof. Satyabrata Choudhury	Dr. Upendra Kumar	Mrs. Parbin Sultana
Prof. Parthasarathi Choudhury	Dr. T. Rahman	Dr. Susmita Ghosh
Prof. A. K. Barbhuiya	Dr. P. Rajbongshi	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

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. U. Kumar	STTP on ANSYS Structural & CFD	Jointly by Innovent & CES, NIT Silchar	26th May - 1st June 2016
2	Dr. U. Kumar	STTP on Climate Change Assessment: Hydrologic Modelling and Perspective	TEQIP-II	19th - 23rd October, 2016
3	Dr. U. Kumar	STTP on Recent advances in soil and water interaction studies	TEQIP-II	24th – 28th October, 2016
5	Dr. U. Kumar	STTP on Rapid Visual Screening (RVS) of Built – up Facilities at Silchar	NIDM Ministry of Home Affairs, GOI.	04th - 06th October, 2016
6	Dr. B. S. Sil	Climate Change Assessment: Hydrologic Modelling and Perspective	TEQIP-II	19th-23th October 2016
7	Dr.D. K. Ghose	Recent advances in soil and water interaction studies. (STTP)	TEQIP-II	24th-28th October 2016
8	Dr. Prashanth J. (Joint Convener)	Research Conclave on Recent Innovations in Science and Engineering (RISE 2017)	TEQIP II	03 days (24-26 Mar 2017)
9	Dr.L.V.Prasad . M & P.J.Roy	Rapid Visual Screening (RVS) of Built-up facilities at Silchar	NIDM, New Delhi, India	4 th – 6 th October, 2016

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Dr. U. Kumar	Roll out of MSWM Manual, 2016-17 dissemination Training 'Training cum Trainers (ToT), Kolkata 9 – 13 January, 2017	GIZ, GmbH & Ministry of Urban Development, GOI
2	Mrs. Parbin Sultana	Indian Geotechnical Conference, 2016	IIT Madras
3	Mrs. Parbin Sultana	RISE 2017	NIT Silchar
5	Dr. Monowar Hussain	Indian Geotechnical Conference, IGC 2016	IIT Madras
6	Dr. Bijan Kumar Roy	Recent advances in soil and water interaction studies. (STTP). 24th-28th October 2016	NIT Silchar
7	Dr. Bijan Kumar Roy	One week workshop on 'Computational Mechanics and Modelling' 12 th -16 th November 2016.	NIT Silchar
8	Dr. L.V.Prasad .M	ANSYS – CFD & Structural, 26 th May to 1 st June 2016	NIT Silchar

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
9	Dr. L.V.Prasad .M	Climate change Assessment- Hydrologic Modelling and Perspective, 19 th to 23 rd October 2016	NIT Silchar
10	Dr. L.V.Prasad .M	Recent Advances in soil and water interaction	NIT Silchar
11	Dr. L.V.Prasad .M	Computational Mechanics and Modelling (CMM 2016)	Mechanical Department, NIT Silchar
12	Dr. L.V.Prasad .M	Colloquium on Research in Civil Engineering , 27-02-2017 to 01-03-2017	College of Engineering Kaidangoor, Kerala
13	Dr. Kh. Lakshman Singh	One week workshop on Applications of Optimization Techniques in Engineering and Technology (AOTET-2017), Held in Department of mechanical Engineering , NIT Schar, 24 feb-1 st March 2017.	NIT Schar
14	Dr. Kh. Lakshman Singh	Author workshop organized by Springer nature and NIT Schar, NIT Schar, 21 st Feb 2017.	NIT Schar
15	Dr. Kh. Lakshman Singh	International Conference on Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay, 19-21 December 2016.	IIT Bombay
16	Dr. B S Sil	MHRD-TEQIP II sponsored FDP on "Assessment of Climate and Land Use Change Impacts on Water Resurces", 29 August, -3 Sept, 2016	NIT Calicut
17	Dr. Susmita Ghosh	Recent advances in soil and water interaction studies. (STTP). 24th-28th October 2016	NIT Silchar
18	Dr. Susmita Ghosh	National Conference on 'Hydrology and Watershed Management" (NCHWM-2017), 24-25th March'2017, NIT Silchar, Assam	NIT Silchar

1.4 RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations):

b) Ph.D. Produced/Ongoing (in number): Ongoing-2

Sl. No	Name of the Supervisor	Specializations	Completed	Submitted	Ongoing
1	Dr. U. Kumar	Environmental Engineering	3		6
2	Dr. A. Sil	Structural Dynamics and Eartquake Engineering			2
3	Dr. D. K. Ghose	Water Resource Engineering			2
4	Dr. Prashanth J.	Coastal Engineering			1
5	Dr. Monowar Hussain	Geotechnical Engineering	1		2
6	Dr. B. K. Roy	Structural Engineering			1
7	Dr.L.V.Prasad .M	Structural Engineering			3
8	Dr. Kh. Lakshman Singh	Transportation Engineering			2
9	Dr.Debjit Bhowmik	Geotechnical Engineering			3
10	Dr. B. S. Sil	Water Resources Engineering			1

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Faculty name	Purpose/Linkage to an existing/new programme
1	ANSYS Structural & CFD	Dr. U. Kumar	PG & PhD Research programme
2	HYDRAULICS LAB	Dr. D. K. Ghose	Instrument: Rainfall simulator and advances hydrology
3	Geotechnical lab	Dr. Monowar Hussain	Geotechnical lab Instrument developed

d) Ongoing / Completed Sponsored Research Project :

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Condition assessment of bridges	Dr. A. Sil	SERB-DST	19	03
2	A Numerical and Experimental Study of the Behavior of Pile Foundation under Seismic Loading	Dr. Debjit Bhowmik	STIS, NITS	4.32	02
3	A study on effects of sediment load on river bank erosion in the Barak River system	Dr. Briti Sundar Sil	SERB-DST	23.5	03

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr. U. Kumar	The Korean Journal of Chemical Engineering (<i>Springer Journal</i>)	01	2017
2	Dr. U. Kumar	Carbohydrate Polymers (<i>Elsevier Journal</i>)	02	2017
3	Dr. A. Sil	ASCE, Natural hazard review	1	2017
4	Dr. D. K. Ghose	KSCE (SCIE Journal)	2	2017
5	Dr. Prashanth J.	Journal of The Institution of Engineers (India): Series A	1	2017
6	Dr. Prashanth J.	International Journal of Earth Sciences & Engineering -IJEE	2	2017
7	Dr. Prashanth J.	Indian Journal of Geo-Marine Science	1	2017
8	Dr. M. Hussain	ADBU Journal	02	2016
9	Dr.L.V.Prasad .M	GEOMATE Journal	02	2016-17
10	Dr.L.V.Prasad .M	International Journal of Sustainable Construction Engineering and Technology	02	2016-17
11	Dr. Debjit Bhowmik	Geotechnical and Geologycal Engineering	01	2017
12	Dr. Briti Sundar Sil	Water Resources Management,	01	2016

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr. M. Hussain	Resource person in "Colloquium on Research in civil engg. During 27 th to 28 th feb.2017, organized by deptt. Of civil engg. , college of engg. Kidangoor, Kerala."

1.5 PUBLICATION

a) International Journal(s):

S. Das, S. Choudhury and A.K. Dey, "Performance of Low Rise RC Buildings with Tuned Liquid Dampers (TLDS) in presence of Masonry Infill", *Asian Journal of Civil Engineering*, v. 18 No. 4 (2017), pp. 525-546, January, 2017.

P.P. Debnath and S. Choudhury, "Nonlinear Analysis of Shear Wall in Unified Performance-Based Seismic Design of Buildings", *Asian Journal of Civil Engineering*, v. 18 No. 4 (2017), pp. 633-642, January 2017.

Laskar, N., and Kumar, U., "Adsorption of crystal violet from wastewater by modified bambusa tulda" *KSCE Journal of Civil Engineering (Springer)* SCIE, SCOPUS Journal, DOI 10.1007/s12205-017-0473-5.

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

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* (Taylor & Francis), Indexed by Scopus, SCIE. doi: 10.5004/dwt.2017.21484,

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.

Mudo Puming, .Monowar Hussain, Geli Basar, Mobya Nikang (2016) "A Study on Soil Improvement by Using Rice Husk and Bentonite" *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, Issue 7, July.

Mudo Puming, Monowar Hussain, Mido Nyodu and Shivan Dakpe (2016) "Study on the Chemical Properties of Leachate and its Effect on the Geotechnical Properties of Soil" *International Journal of Engineering Technology Science and Research*, Vol. 3, Issue 7 July

Bijan Kumar. Roy, Subrata Chakraborty, Sudib Kumar Mishra (2016), Seismic vibration control of bridges with excessive isolator Displacement, *Earthquakes and Structures*, Vol. 10, No. 6, Techno Press, DOI: <http://dx.doi.org/10.12989/eas.2016.10.6.1451>

Prasad, M. L. V., et.al, Behaviour of Self Compacting Reinforced Concrete Beams Strengthened with Hybrid Fiber under Static and Cyclic Loading, *International Journal of Civil Engineering*, 17(2), 1-10, 2016

Prasad, M. L. V., Prasenjit saha and Rathish Kumar. P (2017), "Predicting Strength of SCC using ANN and MRA", *Computers and Concrete*, Techno Press, Vol.20, No.1, 2017, pp 31-35.

D. Bhowmik, D.K. Baidya, & S.P. Dasgupta, 2016, A Numerical and Experimental Study of Hollow Steel Pile in Layered Soil subjected to vertical dynamic loading, *Soil Dynamics and Earthquake Engineering*, Volume: 85, pp. 161 – 165, Elsevier.

Briti Sundar Sil and Parthasarathi Choudhury; Muskingum equation based down stream sediment flow simulation models for a river system; *International Journal of Sediment Research*; Elsevier; 2015; IF:1.6; (SCI).

Briti Sundar Sil, Angana Borah, Subhrajyoti Deb, Biplab DAS. 5. Development of river flood routing model using non-linear Muskingum equation and excel tool 'ganetxl'. *Journal of Urban and Environmental Engineering (JUEE)*. 2016. 10 (2). (scopus)

Briti Sundar Sil and Shahneen Nazreen Ali. 6. SCS- CN and GIS based Approach for Assessment of Surface Runoff to prioritize the Sub-Watersheds in the Barak River Basin. *Disaster Advances*. 2017. 10(7) (scopus)

Violina Basumatary and Briti Sundar Sil. Generation of Rainfall Intensity Duration Frequency curves for the Barak River Basin. *Meteorology Hydrology and Water Management*, 2017.

b) National Journal(s):

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. [Accepted, in press], Impact factor-1.374

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)

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)

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.

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

Arjun Sil, and T.G. Sitharam (2016) "Detection of local site conditions influencing earthquake shaking in the States of Tripura and Mizoram, North East India considering topographic gradient as a proxy for site effects using remote sensing and GIS techniques" (*Natural Hazard Review, ASCE*, DOI-10.1061/(ASCE)NH.1527-6996.0000228)

c) International Conference(s):

Nirban Laskar and Upendra Kumar, "SEM, FTIR and EDAX Studies for the Removal of Safranin Dye from Water Bodies using Modified Biomaterial - *Bambusa Tulda*", International Conference on Advanced Material Technologies (ICAMT)-2016, 27th and 28th December 2016 Dadi Institute of Engineering and Technology (DIET), Visakhapatnam, Andhra Pradesh, India.

Upendra Kumar, "Chemically modified agricultural waste material as potential bioadsorbent for toxic heavy metals—a review", Hybrid and Composite Materials, Chemical Processing (Oct 25 – 27) 2016, Hyderabad, India.

Amit Kumar Dey and Upendra Kumar, "Adsorption of Reactive Red 195 from aqueous solution onto Chemically Modified Jute (CMJ)", Hybrid and Composite Materials, Chemical Processing (Oct 25 – 27) 2016, Hyderabad, India.

Jagadeesh H. B., Geetha Kuntoji, Subba Rao, and Prashanth. J, "Development of Lagoon Type of Harbor Basin along Low Coastal Lands with Flat Sea Bed Slopes and Soft Soils", *10th International Symposium on Lowland Technology (ISLT 2016)*, held at NITK, Surathkal, India during September 15-17, 2016.

Sagar Sen and Monowar Hussain (2016) "Recycling of Fly Ash with Bentonite Used as Compacted Landfill Liner Material", *International Conference on Recycl 2016*, will be held on 1st and 2nd April 2016, IIT Guwahati, Assam, India.

A Comparative Study on Empirical and Rheological Properties of Modified Bituminous Binders, International Conference on Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay, 19-21 December 2016.

d) National Conference(s):

Seal P. R. and Sultana P., "Deterministic Seismic Hazard Analysis of a Dam Site Located at High Seismic Zone", Research Conclave on Recent Innovations in Science and Engineering, RISE 2017, Silchar, 24-26 March, 2017.

Sultana P. and Dey A. K., "Regression Analysis of Time Rate of Settlement of Soft Clay Soil", Research Conclave on Recent Innovations in Science and Engineering, RISE 2017, Silchar, 24-26 March, 2017.

Karmakar S. K., Sultana P. and Dey A. K., "Use of Jhama Columns as Replacement of Stone Columns", Indian Geotechnical Conference, IGC 2016, Chennai, 15-17 December, 2016.

Sultana P. and Dey A. K., "Estimation of Uncertainty During Reaction Loading in Plate Load Tests", Indian Geotechnical Conference, IGC 2016, Chennai, 15-17 December, 2016.

Prashanth J, Harish N and Anup D P (2016). "Properties of pervious concrete made with quarry dust." *National Conference on Sustainable Materials and Management systems in Civil Engineering (NCS2MCE'16)*, held at CBIT-Hyderabad during 15-16 December 2016, 326-330.

Subhradeep Dhar and Monowar Hussain (2016) "The tensile strength behavior of lime stabilized soft soil with inclusion of plastic fibre. *Proceeding of the Indian Geotechnical Conference*, 15-17 Dec, IIT Madras.

M.L.V.Prasad et.al, "An Experimental Investigation on SCC using paraffin wax as self curing agent", National Conference on Sustainable Materials and Management System in Civil Engineering (NCS2MCE – 2016), 15th – 16th December 2016, CBIT, Hyderabad, India.

Improvement of Bituminous Concrete Mixes using High Density Polyethylene Modified Binder. A national conference on Fifteen Years of Pradhan Mantri Gram Sadak Yojna (FYPMGSY), Indian Institute of Technology (IIT) Roorkee, August 6-7, 2016.

Use of waste Material in Soil Subgrade of Pavement, Recent Innovations in Science and Engineering (RISE 2017), NIT Silchar, March 24-26, 2017.

A Study of Cold mix Concrete using Emulsion with different types of Fillers, Recent Innovations in Science and Engineering (RISE 2017), NIT Silchar, March 24-26, 2017.

Ahmed, S. S. Barbhuiya, A.K. and Ghosh, S. Flow measurement at a river Bend using acoustic Doppler Current profiler (adcp). National Conference on 'Hydrology and Watershed Management" (NCHWM-2017), 24-25th March'2017, NIT Silchar, Assam

e) Book / Chapter:

Kashyap, D. and Ghosh, S "Model Assisted planning of groundwater Development" Chapter-16 of ASCE book on 'Sustainable water Resources" Accepted (In press).

1.6 CONSULTANCY SERVICES

Sl. No.	Faculty name	Name of the Scheme	Sponsoring Agency	Amount Earned
1	Dr. U Kumar	Design / Testing and Proof Checking	NCC Ltd. Gangwal, N F Rly, Oriental Structure, IRCON, NPCC Ltd. HCC Ltd. AGMES, Tania Constn. Etc.	Rupees Two lac twenty nine thousand two hundred five only
2	Dr. M. Hussain	Geotechnical investigation at proposed site for construction of multiutility building at national highway, near bazar, silchar,	Client: silchar municipal board, Status: completed	30,000/-

1.7 MAJOR EQUIPMENT ACQUIRED

UV Spectrophotometer -

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
		NIL		

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

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Angana Borah	Dr. B.S. Sil and Dr. U. Kumar	One Dimensional Unsteady Flow Analysis in Barak River using HEC-RAS
2	Bahnisikha Das	Dr. B.S. Sil and Dr. U. Kumar	Sediment Transport Modeling of Barak River in a Reach Between Annapurna Ghat and Badarpur Ghat using HEC-RAS
3	L Singnar	Dr. A Sil	Liquefaction potential assessment of guwahati city using first order second momen method
4	U J Dutta	Dr. A Sil	Site response studies of notable archaeological monuments in the Guwahati region, Assam

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
5	J Mazumder	Dr. A Sil	Seismic hazard studies of cachar districts
6	A zarola	Dr. A Sil	Artificial neural networks (ANN) and stochastic techniques to estimate earthquake occurrences in northeast region of india.
7	A Bhaguna	Dr. A Sil	Seismic hazard analysis of assam state
8	J Das	Dr. A Sil	Condition assessment of existing deck of bridges in the cachar district
9	G Das	Dr. A Sil	Characteristics of FBD and DDBD techniques for SMRF buildings designed for seismic Zone-V using site specific ground motion in N.E. india contest.
10	M Das	Dr. A Sil	Impact assessment of load and resistance characteristics of structurals and comparative study on time dependent failure probability during service life
11	Priya Mandal	Dr. Dillip Kumar Ghose	Experimental Investigation of Various Characteristics of Hydraulic jump in Tilting Flume
12	Tarun Kumar Sharma	Dr. Dillip Kumar Ghose	Assessment of Runoff in arid region using FFBP, LRNN, and RBFN networks
13	Mr. Momo Singh	Dr. Prashanth J.	Floodplain Modelling and Hazard Mapping
14	Mr. Jupiter Rajkumar	Dr. Prashanth J.	Determining the Optimal River Gauge Location for Flood Early Warning System using HEC-RAS
15	Subhradeep Dhar	Dr. Monowar Hussain	<i>"Modification of Subgrade soil Using Lime and Fibre" NIT Silchar Awarded(May,2016)</i>
16	Sagar Sen	Dr. Monowar Hussain	<i>"Recycling of Fly Ash with Bentonite Used as Compacted Landfill Liner Material" Awarded(May,2016)</i>
17	Naidu	Dr. Monowar Hussain	<i>"Strength and Compressibility behavior of Lime Stabilized Expansive Soil with Inclusion of Polypropylene fibre" Awarded(May,2016)</i>
18	Abhilash Singh (16-21-207)	Dr.L.V.Prasad.M	Seismic analysis of building with different shapes using different codal provisions
19	Prakhar Mishra (16-21-518)	Dr.L.V.Prasad.M	Eco-friendly SCC strength prediction using ANN
20	Mrigank Das (16-21-509)	Dr.L.V.Prasad.M	Optimisation of Location of Shear wall in Tall building using ETabs Modeling
21	Nilarghya Sarkar (16-21-505)	Dr.L.V.Prasad.M	High performance concrete Strength prediction using ANFIS
22	Sahil Kumar (16-21-317)	Dr.L.V.Prasad.M	Flexural strength studies of concrete Pavements
23	Miss Debjani Panda	Dr. Kh. Lakshman Singh	Moisture Susceptibility of Bituminous Concrete Mixes using modified bitumen
24	Tathagatha khan	Dr. Kh. Lakshman Singh	Use of Crumb Rubber and High density Polyethylene in the improvement of Bituminous Mixes
25	Tumi Muri	Dr. Kh. Lakshman Singh	Effect of Different Sizes of Crumb Rubber in Asphalt Mixes

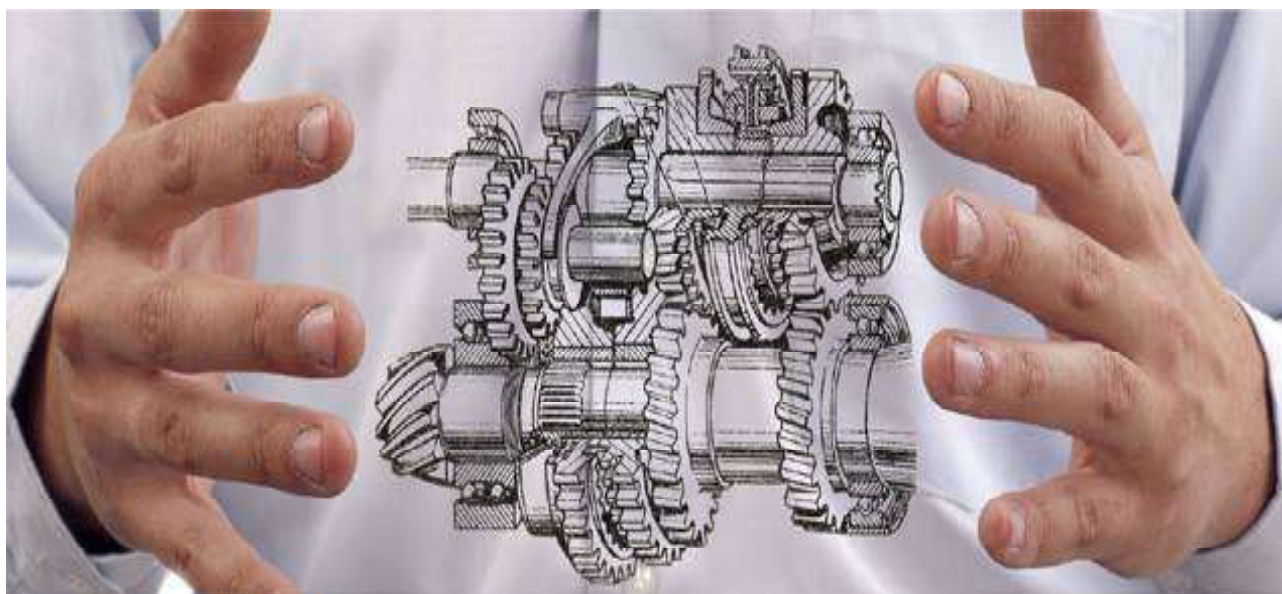
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
26	Sayef Afroz (14-21-406)	Dr. Debjit Bhowmik	A theoretical and experimental study on the behaviour of single pile subjected to lateral load in layered soil medium
27	Sriparna Roy (14-21-416)	Dr. Debjit Bhowmik	Effect of plastic strain variation on soil strength parameters
28	Partha Sarathi Nayek (14-21-405)	Dr. Debjit Bhowmik	Experimental study of low strain dynamic behaviour of saturated local sand and sand fine mixtures using Resonant Column Apparatus
29	Himadri Shakhur Saha (14-21-404)	Dr. Debjit Bhowmik	Behaviour of glass fibre reinforced soil containing varying amount of fine particles
30	Satavisha Ghosh(15-21-103)	Dr. Susmita Ghosh	Modeling of groundwater development for agricultural purpose using ARC-SWAT and MODFLOW
31	Apurba Nath (15-21-115)	Dr. Susmita Ghosh	Dam Break analysis using HEC-RAS
32	Pritam Malakar (15-21-113)	Dr. Susmita Ghosh	ANN based model of groundwater development for irrigation

1.11 Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	RUHUL AMIN MOZUMDER	Prof. A. I. Laskar (Main supervisor) and Dr. M. Hussain (Co-supervisor)	Prediction of UCS of Geopolymer Stabilized Clay and Penetrability of Cement Grout in Granular Soil

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.Kaushal Kumar Sharma	Dr. Ashish B. Deoghare
Prof. K.M. Pandey	Dr. P.K. Patowari	Dr. Sukumar Pati
Prof. R.D. Misra	Dr. K. Chakraborty	Dr. Agnimitra Biswas
	Mr. P. Choudhury	Dr. Sumit Bhowmik
	Mr. D.H. Das	Dr. Sudip Dey

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. K.M. Pandey	Computational Combustion	TEQIP - II	31-10-2016 to 05-11-2016
2	Dr. Sukumar Pati, Dr. A. Biswas, Dr. P.R. Randive	Advances in Applications of Computational Fluid Dynamics	TEQIP-II	07-11-2016 to 11-11-2016
3.	Dr. Sudip Dey, Dr. A. Biswas, Dr. Jagadish	Computational Mechanics and Modelling (CMM 2016)	TEQIP-II	12-11-2016 to 16-11-2016
4.	Dr. S.R. Maity Dr. S. Bhowmik Dr. B. Das	Advanced Joining Technologies	TEQIP - II	17 -10-2016 to 21-10- 2016

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Dr. K.M. Pandey	FMFP Conference Department of Applied Mechanics	MNIT Allahabad Dec 15 - 17, 2016
2.	Dr. Ashish B. Deoghare	National workshop on Industrial problems on Machines and Mechanisms IPRoMM-2016.	VNIT Nagpur on 22-23 December 2016
3	Dr. Agnimitra Biswas	Train the Trainer (ToT) program in connection with the capacity building for Solar Energy Awareness Programme for North-East	NIT Silchar on 18-20 January 2017
4	Dr Sudip Dey	Workshop on Computational Mechanics	IIT Bombay on 25-26 June, 2016
5	Dr Sudip Dey	Workshop on "Computational Combustion"	NIT Silchar on 31 Oct - 5 Nov, 2016

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations):
b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
04	03	

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Computational Combustion	B.Tech/ M.Tech. in thermal engineering

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1.	Establishment of Regional Test Center (RTC) - Cum Technology Back Up Unit For Solar Thermal Devices at ME Department, NIT Silchar (Assam)	Dr. Agnimitra Biswas	MNRE	73.86 lakhs	2012-17
2.	Design and development of a hybrid photo voltaic thermal (PVT) system for rural application	Dr. Biplab Das Dr. A. Biswas (i/c)	DST	14.178 lakhs	2016-19
3.	Experimental and computational analysis of heat sink application for optimal performance by developing low-cost natural filler reinforced the composite material.,	Dr. Sumit Bhowmik (PI) Dr. Biplab Das (Co-PI)	CPRI, under MoP, Govt. of India	Rs. 22.63 Lakh	2017-2019

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr. K.M.Pandey	Combustion Science and technology	2	2017
2	Dr. K.M.Pandey	Applied Thermal Energy	2	2017
3	Dr. K.M.Pandey	Solar Energy	2	2017
4	Dr. K.M.Pandey	Recent Patents in Mechanical Engineering	2	2016
5	Dr. K.M.Pandey	Solar Energy	1	2016
6	Dr. K.M.Pandey	Sustainable Cities and Society	1	2016
7	Dr. K.M.Pandey	International Journal of Hydrogen Energy	4	2016
8	Dr. K.M.Pandey	Central European Journal and Energetic Materials	1	2017
9	Dr. Ashish B. Deoghare	Advances in Mechanical Engineering	1	2017
10	Dr. Sukumar Pati	European Journal of Mechanics - B/Fluids	1	2016
11	Dr. Sukumar Pati	The Canadian Journal of Chemical Engineering	1	2016
12	Dr. Sukumar Pati	Journal of Thermal Science and Engineering Applications	1	2016
13	Dr. Sukumar Pati	Engineering Science and Technology, an International Journal	1	2016
14	Dr. Sukumar Pati	INAE Letters	1	2016
15	Dr. Sukumar Pati	Journal of the Institution of Engineers (India):Series C	5	2016
16	Dr. Agnimitra Biswas	Applied Energy	5	2016-17
17	Dr. Agnimitra Biswas	Energy Conversion and Management	5	2016-17
18	Dr. Sumit Bhowmik	Clean Technologies and Environmental Policy	1	2016-2017
19	Dr. Sumit Bhowmik	The Journal of Experimental Nanoscience	1	2017
20	Dr Sudip Dey	Applied Mathematical Modelling (Elsevier)	2	2016
21	Dr Sudip Dey	Applied Mathematical Modelling (Elsevier)	2	2017
22	Dr Sudip Dey	Composites Part B: Engineering (Elsevier)	2	2016
23	Dr Sudip Dey	Composites Part B: Engineering (Elsevier)	1	2017
24	Dr Sudip Dey	Composite Structures (Elsevier)	1	2016
25	Dr Sudip Dey	Composite Structures (Elsevier)	1	2017
26	Dr Sudip Dey	Thin Walled Structures (Elsevier)	2	2017
27	Dr Sudip Dey	Mechanics of Advanced Materials and Structures (Taylor and Francis)	1	2017
28	Dr Sudip Dey	Structural Engineering and Mechanics, <i>An International Journal</i> (Techno Press)	1	2017
29	Dr Sudip Dey	Engineering Optimization (Taylor and Francis)	1	2016

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Dr. K. M. Pandey	6th International & 43rd National Conference on Fluid Mechanics And Fluid Power (FMFP 2016), December 15-17, 2016, Also gave a Thematic Presentation on Review on Development of Combustion Process in Scramjet Engine.
1.	Dr. Ashish B. Deoghare	International Conference on Recent Trends in Engineering and Science (ICRTES 2017) on 20th & 21st January – 2017 at Government Engg. College, Jalgaon
2.	Dr. Ashish B. Deoghare	National workshop on Industrial problems on Machines and Mechanisms IPRoMM-2016. 22-23 December 2016 at VNIT Nagpur.

1.5 PUBLICATION

a) International Journal(s):

K.M. Pandey, Gautam Choubey, Fayez Ahmed, Dilbahar Hussain Laskar, Pushpdeep Ramnani, Effect of variation of hydrogen injection pressure and inlet air temperature on the flow-field of a typical double cavity scramjet combustor, International Journal of Hydrogen Energy (Accepted)

Gautam Choubey, K.M. Pandey, Effect of strut +wall injection technique on the performance of two-strut scramjet combustor, International Journal of Hydrogen Energy (2017) (Accepted)

Gautam Choubey, K.M. Pandey, Effect of parametric variation of strut layout and position on the performance of two-strut scramjet combustor, International Journal of Hydrogen Energy (2017) (Accepted)

Gautam Choubey, K.M. Pandey, Investigation on the effects of operating variables on the performance of two-strut scramjet combustor, International Journal of Hydrogen Energy (2016), Volume 41, pages 20753 -20770

Choubey G, Pandey KM, Effect of variation of angle of attack on the performance of two-strut scramjet combustor, International Journal of Hydrogen Energy (2016), Volume 41, Issue 26, 13 July 2016, Pages 11455-11470 <http://dx.doi.org/10.1016/j.ijhydene.2016.04.048> Elsevier Publications, SCIE Journal

Pinku Debnath and K.M. Pandey, Exergetic Efficiency Analysis of Hydrogen-Air Detonation in Pulse Detonation Combustor Using CFD, accepted for publication in International Journal of Spray Combustion and Dynamics, SCIE Journal, DOI: 10.1177/1756827716653344, Sage Publications, accepted for online version, SCIE Journal

Ajoy Debberma and K.M. Pandey, Numerical analysis on the effect of flow rates and jet diameters in rewetting vertical nuclear fuel bundles with jet impingements, Annals of Nuclear Energy, Volume 94, August 2016, PP.518-529 Elsevier Publications, DOI: 10.1016/j.anucene.2016.04.023, SCI Journal.

K M Pandey, S.Roga and Gautam Choubey, Numerical Investigation on Hydrogen-fuelled Scramjet Combustor with Parallel strut fuel injector at a Flight Mach number of 6, April 2016 Journal of Applied Fluid Mechanics, Vol.9 No.3 PP.1215-1220, ISSN: 1735-3572, eISSN: 1735-3645 (SCIE Journal)

Deepak Sharma and K.M. Pandey, Facile synthesis of TiO₂ nano particle and numerical investigation of nanofluids heat transfer characteristics for application in nuclear reactor using CFD Code, Nanoscience and Nanotechnology Letters (NNL) Volume 8 Number 5 May 2016 pp.365-374, SCIE Journal, American Scientific Company, California, USA.

Abhijit Dey and Krishna Murari Pandey, Characterisation Of Fly Ash and Its Reinforcement Effect on Metal Matrix Composites: A Review, Reviews on Advanced Material Science, April 2016. Vol.2 No. 44, PP.168-181, (SCIE Journal)

Abhijit Dey and Krishna Murari Pandey, Characterisation Of Fly Ash and Its Reinforcement Effect on Metal Matrix Composites: A Review, Reviews on Advanced Material Science, April 2016. Vol.2 No. 44, PP.168-181, (SCIE Journal)

Deepak Sharma and K. M. Pandey, "Numerical Investigation of Heat Transfer Characteristics in Triangular Channel in Light Water Nuclear Reactor by using CuO-Water based Nanofluids", Indian Journal of Science and Technology, Vol 9(16). DOI: 10.17485/ijst/2016/v9i16/92574. April 2016.

Debbarma, A., Pandey, K.M., Sharma, D., Choubey, G., CFD Analysis of rewetting vertical nuclear fuel rod by dispersed fluid jet impingement, *Perspectives in Science* (2016), <http://dx.doi.org/10.1016/j.pisc.2016.04.010>.

Pandey, K.M., Chaurasiya, R., A review on analysis and development of solar flat plate collector, *Renewable and Sustainable Energy Reviews*, Vol-67, PP.641, 2016

P. Debnath, K. M. Pandey, Numerical Investigation of Detonation Combustion Wave in Pulse Detonation Combustor with Ejector, *Journal of Applied Fluid Mechanics*, Vol. 10, No. 2, pp. 725-733, 2017, ISSN 1735-3572, EISSN 1735-3645

Ajoy Debbarma and Krishna Murari Pandey, CFD Study of Rewetting Nuclear Fuel Rod Bundle by Zig-Zag Jet Impingement, *Indian Journal of Science and Technology*, Vol 9(16), DOI: 10.17485/ijst/2016/v9i16/92572, April 2016.

Mahto, N.K., Choubey, G., Suneetha, L., Pandey, K.M. Effect of variation of length-to-depth ratio and Mach number on the performance of a typical double cavity scramjet combustor, *Acta Astronautica* 128, PP.540, 2016

Mujibur Rahman, Abhijit Dey and Krishna Murari Pandey, "Machinability of Cenosphere Particulate Reinforced AA6061 Aluminum Alloy Prepared by Compocasting", Part: B, *Journal of Engineering Manufacture* DOI: 10.1177/0954405417699013, Sage publications. (SCI) accepted in March 2017

A. Dey, S. Debnath and K.M. Pandey, "Optimization of EDM Process Parameters for Al6061/Cenosphere Composite using Grey based Hybrid Approach", *Trans. Nonferrous Met. Soc. China* 27 (2017) 998-1010. (SCIE)-accepted in November 2016

Abhijit Dey, Mriganav Debnath and Krishna Murari Pandey, "Analysis of effect of machining parameters during Electrical discharge machining using taguchi based multi objective PSO", *International Journal of Computational Intelligence and Applications* Vol. 16, No. 2 (2017) 1750010. DOI: 10.1142/S1469026817500109. (Web of Science: ESCI) -accepted in March 2017

Chiranjib Bhowmik, Sumit Bhowmik, Amitava Ray and Krishna Murari Pandey, Optimal Green Energy Planning For Sustainable Development: A Review" *Renewable and Sustainable Energy Review*. Vol.71, PP.796. doi.org/10.1016/j.rser.2016.12.105

P. Meshram, S. Bhardwaj, A. Dalal, S. Pati, Effects of inclination angle on natural convection heat transfer and entropy generation in square porous enclosure, *Numerical Heat Transfer, Part A: Applications* 70(2016) 1271-1296

P. Kaushik, P. K. Mondal, S. Pati, S. Chakraborty, Heat transfer and entropy generation characteristics of a nonNewtonian fluid squeezed and extruded between two parallel plates, *ASME Journal of Heat Transfer* 139(2017) 022004

C. A. Akhadkar, A. B. Deoghare, A. M. Vaidya, P. V. Walke, A New Approach for Estimation of Penalty Parameter with Tolerance Stack-Up, *International Journal of Engineering and Technology (IJET)* Vol 8.

G.R. Boob, A.B. Deoghare, P.V. Walke, Effect of Turning Process Parameters on Fatigue Life of Steel AISI 304-L. *International Journal of Materials Engineering Innovation*. Inderscience Publications.

Borthakur M.P., Biswas A. A novel least square based meshfree framework for two dimensional incompressible flows. *Computers & Fluids* 130 (2016) 37-48 (SCI), Publisher: Elsevier.

Sengupta A.R., Biswas A., Gupta R. Studies of some symmetrical and unsymmetrical blade H-Darrieus rotors with respect to starting characteristics, dynamic performances and flow physics in low wind streams. *Renewable Energy* 93 (2016) 536-547, Publisher: Elsevier.

Sengupta, A.R., Biswas, A. and Gupta, R. Vertical Axis Wind Turbines in the Built Environment- A Review. *ISESCO journal of Science and Technology*, Vol 12, No. 22, pp 11-16, 2016.

Bhowmik, S., Sahoo, P., Acharyya, S.K., Dhar, S., and Chattopadhyay, J., 2016, Effect of microstructure degradation on fracture toughness of 20MnMoNi55 steel in DBT region, *International Journal of Manufacturing, Materials and Mechanical Engineering*, 6 (3), 11-27, Scopus, DOI: 10.4018/IJMMME.2016070102

Bhowmik, C., Bhowmik, S., Ray, A., and Pandey, K.M., 2017, Optimal green energy planning for sustainable development: A review, *Renewable and Sustainable Energy Reviews*, 71, 796-813 SCIE, Impact Factor: 6.798, DOI: <http://dx.doi.org/10.1016/j.rser.2016.12>

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>

S. Dey, T. Mukhopadhyay, S. K. Sahu, S. Adhikari, Effect of cutout on stochastic natural frequency of composite curved panels, *Composites Part B: Engineering*, Vol. 105, 188-202, 2016.

T. Mukhopadhyay, A. Mahata, S. Dey, S. Adhikari, Probabilistic analysis and design of HCP Nanowires: an efficient surrogate based molecular dynamics simulation approach, *Journal of Materials Science and Technology*, Vol.32, Issue 12, 1345-1351, 2016.

T. Mukhopadhyay, S. Chakrabarty, S. Dey, R. Chowdhury, S. Adhikari, A critical assessment of Kriging model variants for high-fidelity uncertainty quantification in dynamics of composite shells, *Archives of Computational Methods in Engineering*, DOI:10.1007/s11831-016-9178-z, pp.1-24, 2016.

H. Singh, B. C. Hazarika, S. Dey, Low velocity impact responses of functionally graded plates, *Procedia Engineering*, Vol.173, pp. 264–270, 2017.

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.

b) National Journal(s):

Ghanhsyam Boob, Ashish Deoghare, Pramod Walke, To investigate the effect of turning process parameters on fatigue performance of machined Steel EN-8. *Indian Journal of Engineering & Materials Sciences*. 2017. Nisclair Publications.

R.Hirda ,Sharma, K.K., Experimental Study on the Cluster of Savonius Wind Turbine Model. *Journal of Material Science and Mechanical Engg Vol No.4, issue -4, pp 268-270, Apr-June 2016, Krishi-Sanskriti Publication, India*

c) International Conference(s):

1. Sumit Das Lala, Ajay Biswas, John Debbarma, Ashish B Deoghare. Study of hardness of the weld bead formed by partial hybrid welding by Metal inert gas welding and submerged arc welding. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore, 9-11 March, 2017.
2. Emon Barua, Saurav Das, Ashish B. Deoghare. Development of computational Tibial model to investigate stress shielding effect at healing stages. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore 9-11 March, 2017.
3. Payel Deb, Ashish B. Deoghare ,Animesh Borah, Emon Barua, Sumit Das Lala. Scaffold Development using Biomaterials: A Review. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore, 9-11 March, 2017.
4. Sumit Kumar, Ashish B. Deoghare. Modelling of Human Abdominal Artery for Blood flow Analysis. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore, 9-11 March, 2017.
5. Dhiraj S. Bombarde, Ashish B. Deoghare. Design and development of the human middle ear to examine dynamic responses. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore, 9-11 March, 2017.
6. Sandeep B. Kharat, Ashish B. Deoghare, Krishna M. Pandey. Development of Human Airways Model for CFD Analysis. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore, 9-11 March, 2017.
7. Diju Kr. Baro, Ashish B. Deoghare Investigation of cutting force and temperature variation in orthogonal cutting of cortical bones. International conference on Materials, Manufacturing and Modelling ICMMM 2017. VIT, Vellore , 9-11 March, 2017.
9. Sumit Kumar, Ashish B. Deoghare. Computational study of Human Abdominal Artery for Blood flow Analysis. Computational Science Symposium (CSS-2017). IISc Bangalore. March 16-18, 2017.
10. Dhiraj S. Bombarde, Ashish B. Deoghare. Modelling and Finite Element Analysis of Human Middle Ear. Computational Science Symposium (CSS-2017). IISc Bangalore. March 16-18, 2017.

Airways Model. Computational Science Symposium (CSS-2017). IISc Bangalore. March 16-18, 2017.

15. C A Akhadkar, Ashish B Deoghare, A M Vaidya, P V Walke Variation in the joint contact forces of kinematic mechanism on account of tolerance stack, Proc. XII IPRoMM-2016 (Challenges in Manufacturing) VNIT Nagpur, 22-23 December 2016.
16. M. Ahuja, N. V. Deshpande, S. Pati, Strength and vibration analysis of transmission housing of a tractor, Sixth international congress on Computational mechanics and simulation (ICCMS2016), IIT Bombay, Mumbai, India, June 27-July 1, 2016, 1135-1138.
17. S. R. Sahoo, S. Pati, Numerical Analysis of Thermo-hydraulic Transport Characteristics inside Raccoon Microchannels, 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power, MNNIT Allahabad, 15th to 17th December 2016
18. S. Dutta, A. K. Biswas, S. Pati, Analysis of Entropy Generation due to Natural Convection in Rhombic Enclosure, 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power, MNNIT Allahabad, 15th to 17th December 2016.
19. Sengupta A.R., Biswas A., Gupta R. Experimental analysis of a high solidity cambered blade H-rotor in low wind streams. 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016), 15-17 December 2016, NIT Allahabad, India.
20. Pushan S., Biswas A. CFD analysis of tea withering with and without effect of solar radiation. 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016), 15-17 December 2016, NIT Allahabad, India.
21. Gautam Choubey, Lakka Suneetha, K. M Pandey, Composite materials used in Scramjet- A Review, accepted for presentation in the International Conference on Processing of Materials, Minerals and Energy :PMME-2016, 29th – 30th July, 2016, PACE Institute of Technology and Sciences, Ongole, Prakasam, Andhra Pradesh, India.
22. A. Dey, B.V. Reddy, K.M. Pandey, Wire electrical discharge machining characteristics of AA6061/cenosphere aluminium matrix composites using RSM, accepted for presentation in the International Conference on Processing of Materials, Minerals and Energy:PMME-2016, 29th – 30th July, 2016, PACE Institute of Technology and Sciences, Ongole, Prakasam, Andhra Pradesh, India.
23. R. Basak, P.L. Choudhury, K M Pandey, Effect of Temperature variation on Surface Treatment of Short Jute Fiber-Reinforced Epoxy Composites, accepted for presentation in the International Conference on Processing of Materials, Minerals and Energy:PMME-2016, 29th – 30th July, 2016, PACE Institute of Technology and Sciences, Ongole, Prakasam, Andhra Pradesh, India.
24. Saroj Yadav and K M Pandey, A Comparative Thermal Analysis of Pin Fins for Improved Heat Transfer in Forced Convection, accepted for presentation in the International Conference on Processing of Materials, Minerals and Energy :PMME-2016, 29th – 30th July, 2016, PACE Institute of Technology and Sciences, Ongole, Prakasam, Andhra Pradesh, India.
25. I.B. Laskar, S. Chatterjee, K.M Pandey, Facile Synthesis And Characterization of Silver Support Zinc Oxide Nano Particles, ICCE-24 is held in July 17-23, 2016 near Haikou, Hainan Island, China.
26. Prince Kumar, Dr. K.M. Pandey, Effect on Heat Transfer Characteristics of Nanofluids flowing under laminar and Turbulent Flow Regime – A Review, International Conference on Advanced Material Technologies, 27-28 December, 2016, Dadi Institute of Engineering and Technology, Visakhapatnam, Andhra Pradesh, India.
27. R. K Yadav, K M Pandey, Review On Heat Transfer From Fins, International Conference on Advanced Material Technologies, 27-28 December, 2016, Dadi Institute of Engineering and Technology, Visakhapatnam, Andhra Pradesh, India,
28. Noor Alam, K M Pandey, Experimental Studies of Hydroxy gas (HHO) Production with Variation in Current, Voltage and Electrolyte Concentration, International Conference on Advanced Material Technologies, 27-28 December, 2016, Dadi Institute of Engineering and Technology, Visakhapatnam, Andhra Pradesh, India.
29. S.B.Kharat, A. B. Deoghare and K. M. Pandey, Airflow and Particulate Transport Through Human Airways: A Systematic Review, International Conference on Advanced Material Technologies, 27-28 December, 2016,

- 30.. S.B.Kharat, A. B. Deoghare and K. M. Pandey, Flow Analysis Through CT Scan Based Human Airways Model, Computation Science symposium, IIScBangalore March 2017.
31. S.B.Kharat, A. B. Deoghare and K. M. Pandey, Development of Human Airways Model for CFD Analysis, ICMMP, VIT Vellore, March-2017.
32. S. Dey, T. Mukhopadhyay, S. Chakraborty, R. Chowdhury, S. Adhikari, A. Karmakar, A. Spickenheuer, Stochastic natural frequency of composite plates using Kriging model, 6th International Congress on Computational Mechanics and Simulation (ICCMS 2016), held on June 27 to July 1, 2016 at Indian Institute of Technology Bombay, India.
33. B. C. Hazarika, H. Singh, S. Dey, Free vibration of functionally graded plates – A comparative study, 4th International Conference on Advances in Materials and Materials Processing (ICAMMP-IV 2016) held on November 5–7, 2016 at Indian Institute of Technology Kharagpur, India.
34. S. Dey, T. Mukhopadhyay, S. Adhikari, A meta-law for functionally graded materials based on low velocity impact parameters, 4th International Conference on Advances in Materials and Materials Processing (ICAMMP-IV 2016) held on November 5–7, 2016 at Indian Institute of Technology Kharagpur, India.
35. H. Singh, B. C. Hazarika, S. Dey, Low velocity impact responses of functionally graded plates, 11th International Symposium on plasticity and impact mechanics (IMPLAST 2016), held on Dec 11-14, 2016 at Indian Institute of Technology Delhi, India.
36. Kumar Maharshi, L. Roy, T. Mukhopadhyay, S. Dey, Stochastic dynamic behaviour of polymer hydrodynamic journal bearing, 6th International Conference on Functional Electroceramic and Polymers (ICEP-2017) held on Feb 20-22, 2017 at Indian Institute of Technology Kharagpur, India.

d) National Conference(s):

Pushan S., Biswas A. CFD analysis of tea withering with and without effect of solar radiation. 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016), 15-17 December 2016, NIT Allahabad, India.

Sengupta A.R., Biswas A., Gupta R. Experimental analysis of a high solidity cambered blade H-rotor in low wind streams. 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016), 15-17 December 2016, NIT Allahabad, India.

e) Book/Chapter:

Weeraseskera N.D. & Biswas A. Thermo-electric Generator based Waste Heat Recovery System. Publisher: Lambert Academic Publishing, May 2016. ISBN- 978-3-659-87416-1.

Roy, S., Bhowmik, S., Davim, J.P., and Kumar, K., 2016, Estimation of Mechanical and Tribological Properties of Epoxy Based Green Composites, Green Approaches to Biocomposite Materials Science and Engineering, IGI Global, 96 – 124, DOI: 10.4018/978-1-5225-0424-5.ch005;

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1.	Regional Test Center for solar thermal devices	MNRE	Rs 41,000.00

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
1.	Development of composite material from biodegradable Cashew nut shell (Anacardium occidentale). Das Lala Sumit, Deoghare Ashish Bhalchandra, Chatterjee Sushovan. Application No - 201731007338	2017
2.	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	2017
3.	Removal of fluoride using modified naturally available clay material, Vivek R. Mate, Deshpande Nishikant V., Deoghare Ashish B., Arif Wasim, Amit R. Kalita, Gawande Sandeep B., Thakare Sanjay R., Kadam Sunil R. Application No -201631027403.	2017

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1	Dr. S Chatterjee	Facile Synthesis And Characterization of Silver Support Zinc Oxide Nano Particles ,ICCE-24	Near Haikou, Hainan Island, China.	17-July 23, 2016

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

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Rajesh Chaurasiya	Dr. K. M. Pandey	CFD Analysis of heat transfer in solar flat plate collectors
2	Jitendra Kumar	Dr. K. M. Pandey	CFD Analysis of Pulse Detonation engines
3	Akhileshwar Singh	Dr. K. M. Pandey	CFD Analysis of Combustion in Scramjet engines
4	Jnanaranjan Acharya	Dr. K. M. Pandey and Dr. S. Chatterjee	CFD Analysis of aerodynamics of lightweight helicopters
5	Ravi ranjan	Dr. K. M. Pandey	Static Structural and Modal Analysis of gas turbine blades
6	Mujibur Rahman	Dr. K. M. Pandey	Numerical and experimental analysis of composite materials
7	Mriganav Debnath	Dr. K. M. Pandey	Numerical analysis of heat transfer in welding process
8	Pritam Majumdar	Dr. K. M. Pandey and Dr. N. V. Deshpande	Design and analysis of underwater vehicles
9	M. Sandeep	Dr. K. M. Pandey	Design and analysis of axial flow compressors
10	Saurav Das	Dr. Ashish B. Deoghare	Design and Development of Computational Tibial Model to Investigate Stress Shielding Effect
11.	Diju Kumar Baro	Dr. Ashish B. Deoghare	Investigation of Orthogonal Cutting Parameters of Cortical Bone- A Finite Element Approach
12	Dhiraj S. Bombarde	Dr. Ashish B. Deoghare	Three-dimensional Finite Element Modelling and Dynamic Response Analysis of Human Middle Ear.
13	Sandeep B. Kharat	Dr. Ashish B. Deoghare	Two-Phase CFD analysis of air-aerosol flow through human airways to achieve efficient patient specific drug deposition.
14	Sumit Kumar	Dr. Ashish B. Deoghare	Computational Study of Human Abdominal Artery for Blood Flow Analysis
15	Mr Soumyaranjan Sahoo	Dr. Sukumar Pati	Numerical Analysis of thermo-Hydraulic Transport Characteristics inside Corrugated Microchannel with

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
16	Mr. Vishwanath Kumar	Dr. Sukumar Pati	Hydrodynamic and Thermal Characteristics of Swirling Flow through Microchannel
17	Mr Rishabh Kumar Agarwal	Dr. Sukumar Pati	Influence of Conjugate Heat Transfer on Entropy Generation Characteristics inside a Porous Channel
18	Mr Mayank Ahuja	Prof. N. V. Despande & Dr. Sukumar Pati	Structural Optimization of Transmission Housing of a Tractor using Optistruct.
19	Mr. Ajitabh Bhaumick	Dr. Agnimitra Biswas & Mr. D.H. Das	Performance Improvement of an Organic Rankine Cycle with low grade thermal energy input from a Compound Parabolic Collector
20	Mr. T.S. Rengma	Dr. A. Biswas & Dr. D. Bhanja	Experimental and Computational Investigation of Cluster Savonius Water Turbines and its comparison with a single Savonius Water Turbine
21	Mr. S. Das	Prof. R.D. Misra & Dr. A. Biswas	Emergy analysis of biodiesel production in India from different edible and non-edible oils
22	Mr. Hirda Ram	Dr. K.K. Sharma	Performance Analysis of Savonius Vertical Axis wind turbine with various overlap and Different Array.
23	Faladrum Sharma	Dr. Sumit Bhowmik	Fabrication of coir filler reinforced epoxy composite and its response towards cyclic loading.
24	Chaiki Malakar	Dr. Sumit Bhowmik	Investigation of dynamic and machinability behaviour of bamboo filler reinforced epoxy composite.
25	Kumar Maharshi	Dr Sudip Dey & Dr Lintu Roy	Stochastic dynamic analysis of hydrodynamic journal bearing including surface roughness
26	Biswajit Roy	Dr Sudip Dey & Dr. Lintu Roy	Effect of couple stress and surface roughness on steady state behavior of plain journal bearing
27	Hariveer Singh	Dr Sudip Dey	Low velocity impact responses of functionally graded plates
28	Bulon Hazarika	Dr Sudip Dey	Free vibration of functionally graded plates - A finite element approach

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Ajoy Debbarma Ph.D (Full Time)	Dr. K. M. Pandey	Computational analysis on Rewetting of nuclear fuel clad surface during loss of coolant accident. Completed on 06-04-2017
2	Bidesh Roy	Dr. K. M. Pandey and Dr. R. D. Misra	The effect of Modified Shrouded Intake Valve on Swirl Ratio and Mean Flow Co-efficient in SI Engine
3	Pinku Debnath	Dr. K. M. Pandey	Performance Investigation of Pulse Detonation Engine and Feasibility Study of Detonation Combustion Using CFD. Completed on 04-05-2016
4	Anal Ranjan Sengupta	Dr. Agnimitra Biswas & Prof. Rajat Gupta	Performance Improvement of H-rotor Vertical Axis Wind Turbines in Low Wind Speed Conditions using Experimental and Numerical Approaches

1. Name of the Department :-

Electrical Engineering



1.1 ACADEMIC STAFF

HEAD : Dr. L.C. Saikia (01-4-2016 to 16-8-2016)
Dr. Saurabh Chaudhury (since 16-8-2016 till date)

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
Prof. A. K. Sinha	Dr. Saurabh Chaudhury	Dr. Tanmoy Malakar
Prof. B. K. Roy	Dr. N.B. Dev Choudhury	Mr. Chayan Bhattacharjee
Prof. N. Sinha		Mr. Prasanta Roy
		Dr. Raj Kumar Biswas
		Dr Lalit Chandra Saikia
		Dr. Rajeeb Dey
		Dr. Dulal Chandra Das
		Dr. J.P. Mishra
		Dr. N. Soren
		Dr. Prashant Tiwari
		Dr. Arup Kumar Goswami

Visiting Professor (If any): NIL

1.2 DISTINCTION ACHIEVED

a) By Student: 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	Saurabh Chaudhury	Learn Verilog-HDL in 3 days	Self-financed	03 days
		IET Awareness Workshop cum Membership drive and Invited Talk on SMART GRID	IET Kolkata & NIT Silchar	01 day
1	Rajeeb Dey	Design of Embedded Control System	TEQIP-II	2 days
2	T. Malakar			
3	Prasanta Roy	3 days hands on training on PLC	Mitsubishi and Department of EE	3 days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Rajeeb Dey	Recent advances in applied Mathematics – One week Workshop,	NIT Silchar
2	Rajeeb Dey	Advances and Stability analysis on Dynamical Systems – One week workshop	NIT Silchar
3	Rajeeb Dey	Intelligent Sensing, instrumentation and Control – One week National workshop	NIT Silchar
4	Rajeeb Dey	Advances and Success Stories of Robust and Adaptive Controller – 2 days workshop	IISc Bangalore.
5	Rajeeb Dey	International Conference on Soft Computing Applications (SOFA), Arad, Romania.	Aurel Valicu University & Springer Romania
6	Chayan Bhattacharjee	National Workshop of Power Electronics	IIT, Roorkee
7	Dr Lalit Chandra Saikia	Workshop on power system - Two week	NIT Silchar and / IIT Kharagpur
8.	Prof. B. K. Roy	GIAN course on “State-of-the-art Computational Methods and Software for Computer-Aided Control Systems Design and Analysis”	NIT Silchar
9.	Prof. B. K. Roy	Intelligent Sensing Instrumentation & Control (ISIC 2017)	NIT Silchar
10	Prof. B. K. Roy	Design of Embedded Control System	NIT Silchar
11	Prof. B. K. Roy	Application of Optimization Techniques in Engineering and Technology (AOTET-2017)	NIT Silchar

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations):
b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
05	03	05

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Project Lab	To motivate B.Tech/M.Tech students to take up hardware project
2	Nanoelectronics & VLSI Lab	To foster Post-Graduate research and Ph.D

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
		NIL			

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Chayan Bhattacharjee	IEEE Transactions on Power Systems	1	2016
2	Chayan Bhattacharjee	IET Transportation Electrification	2	2017
3	Chayan Bhattacharjee	Energy Conversion and Management, Elsevier	5	2016-17
4	Chayan Bhattacharjee	Journal of Renewable and Sustainable Energy Reviews, AIP	2	2017
5	Dr Lalit Chandra Saikia	IEEE Transactions on Power Systems	4	2016 and 2017
6	Dr Lalit Chandra Saikia	IET generation, transmission, and distribution	8	2016 and 2017
7	Dr Lalit Chandra Saikia	International journal of power and energy	1	2017
8	Dr Lalit Chandra Saikia	IETE Journal of research	2	2016 and 2017
9	Dr Lalit Chandra Saikia	Journal franklin Institute	1	2017
10	Rajeeb Dey	ISA Transaction	10	2016-2017
11	Rajeeb Dey	Shock and Vibration	1	2017
12	Prof. B. K. Roy	IEEE Access	2	2016-2017
13	Prof. B. K. Roy	IEEE Circuit System-II	2	2016-2017
14	Prof. B. K. Roy	Nonlinear Dynamics	4	2016-2017
15	Prof. B. K. Roy	Circuit System Signal Processing	3	2016-2017
16	Prof. B. K. Roy	International Journal of Control	2	2016-2017
17	Prof. B. K. Roy	Chaos Soliton & Fractals	1	2016-2017
18	Prof. B. K. Roy	TIMC	1	2016-2017
19	Dr. Saurabh Chaudhury	IEEE Transaction on Nanotechnology	1	2016-2017
20	Dr. Saurabh Chaudhury	Journal of Low Power Electronics	1	2017

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Rajeeb Dey	Int. Conf. Soft Computing Applications, Arad, Romania, Aug 2016
2	Dr. Saurabh Chaudhury	RISE 2017, NIT Silchar, India

1.5 PUBLICATION

a) International Journal(s):

C. Bhattacharjee, B. K. Roy, "Supervisory Control Using Fuzzy Logic for Fault Ride-Through Capability of a Hybrid System in Grid Supporting Mode", International Journal of Power and Energy Conversion, Inderscience (Accepted)

C. Bhattacharjee, B. K. Roy, "A Novel Fuzzy-Supervisory Control of a Hybrid System to Improve Contractual Grid Support with Fuzzy Proportional-Derivative and Integral (FPD+I) Control for Power Quality Improvement", IET-Generation Transmission and Distribution, (Accepted)

Asadur Rahman, Lalit Chandra Saikia, Nidul Sinha, "Automatic Generation Control of an Unequal Four Area Thermal System Using Biogeography Based Optimized 3DOF-PID Controller," *IET Generation, Transmission & Distribution* volume10(16), December 2016, pp.4118-4129.

Asadur Rahman, Lalit Chandra Saikia, Nidul Sinha, Automatic generation control of an interconnected two-area hybrid thermal system considering dish-stirling solar thermal and wind turbine system, *Renewable Energy*, Volume 105, May 2017, pp. 41-54,

Rumi Rajbongshi, Lalit Chandra Saikia, "Combined control of voltage and frequency of multi-area multi-source system incorporating solar thermal power plant using LSA optimised classical controllers", *IET Generation, Transmission & Distribution*, vol.11, No. 10, pp. 2489 – 2498, 2017.

Rajeeb Dey, Juan Carlos Martinez Garcia, Improved Delay-Range-Dependent Stability Analysis for Uncertain Retarded Systems Based on Affine Wirtinger-Inequality, *Int. J. of Robust and Nonlinear Control*, Accepted for publication, 2016 DOI: 10.1002/rnc.3723(Wiley).

Barnali Dey, A. Hossain, A. Bhattacharjee, Rajeeb Dey & R. Bera, 2016. "Function approximation based energy detection in cognitive radio using radial basis function network", *Intelligent Automation and Soft Computing*, <http://dx.doi.org/10.1080/10798587.2016.1217632>. (Taylor & Francis)

P. Roy, A. Das, B. K. Roy, Cascaded fractional order sliding mode control for trajectory control of a ball and plate system, *Transactions of the Institute of Measurement and Control*, Oct. 2016, <http://tim.sagepub.com/content/early/2016/09/15/0142331216663826.abstract>.

M. Borah, B. K. Roy, Dynamics of the Fractional-order Chaotic PMSG, its Stabilisation using Predictive Control and Circuit Validation, *IET Electric Power Applications*, Oct. 2016, <http://digital-library.theiet.org/content/journals/10.1049/iet-epa.2016.0506>.

K. Lochan, B. K. Roy, B. Subudhi, Generalized projective synchronization between controlled master and multiple slave TLFMs with modified adaptive SMC, *Transactions of the Institute of Measurement and Control*, Nov. 2016, <http://tim.sagepub.com/content/early/2016/11/10/0142331216674067.abstract>.

K. Lochan, B. K. Roy, B. Subudhi, A review on two-link flexible manipulators, *Annual Reviews in Control*, pp. 346–367, Vol. 42, 2016

K. V. Santhosh, B. K. Roy, A practically validated adaptive calibration technique for temperature measurement using resistance temperature detector, *Engineering Intelligent Systems*, Pp. 1-8, Vol. 23, No. 3 Sep. 2015.

S. Samanta, J. P. Mishra, C. Bhattacharje, B. K. Roy, Coordinated Control of an Isolated DC Microgrid with Dynamic Source Variation and Wide Load Fluctuation, *International Journal of Control Theory And Applications*, pp. 259-268, Vol. 9(39), 2016.

K. Lochan, and B. K. Roy, Trajectory Tracking Control of an AMM Modelled TLFM using Backstepping Method, *International Journal of Control Theory And Applications*, pp. 239-246, Vol. 9(39), 2016.

D. Bhattacharje, B. Malakar, P. Singh, S. Neog and B. K. Roy, Parametric sensitivity analysis of undercarriage components of a railway vehicle and their correlation to derailment safety and ride comfort , *International Journal of Control Theory And Applications*, pp. 83-94, Vol. 9(39), 2016.

N. Boruah, L. Seban, B. K. Roy, Design and Performance Comparison of Different Predictive Controllers for Magnetic Levitation System, *International Journal of Control Theory And Applications*, Pp. 103-110, Vol. 9(39), 2016.

JP Singh, PP Singh, BK Roy, Implementation for Synchronization of Chen and Liu-Yang Chaotic Systems using SMC and Active Control Schemes , *International Journal of Control Theory And Applications*, Pp. 159-169, Vol. 9(39), 2016.

PP Singh, JP Singh and BK Roy, SMC based Synchronization and Anti-synchronization of Chaotic Systems for Secure Communication and Analog Circuit Realization, *International Journal of Control Theory And Applications*, Pp. 171-183, 9(39), 2016..

JP Singh and BK Roy, A New 4-D Conservative Chaotic system with Coexistence of Hidden Chaotic Orbits, *International Journal of Control Theory And Applications*, pp. 231-238, 9(39), 2016.

JP Singh and BK Roy, The nature of Lyapunov exponents is (+, +, ", "). Is it a hyperchaotic system?, *Chaos, Solitons & Fractals*, Vol. 92, pp. 73-85, 2016

JP Singh and BK Roy, Comment on "Theoretical Analysis and Circuit Verification for Fractional-Order Chaotic Behavior in a New Hyperchaotic System", *Mathematical Problems in Engineering*, Vol. 2016, pp. 1-3, 2016.

JP Singh and BK Roy, Crisis and Inverse Crisis Route to Chaos in a New 3-D Chaotic System with Saddle, Saddle Foci and Stable Node Foci Nature of Equilibria, *Optik-International Journal for Light and Electron Optics*, VOL. 127 no. 24, pp. 11982-12002.

M. Borah, B. K. Roy, Design of Fractional-order Hyperchaotic Systems with Maximum Number of Positive Lyapunov Exponents and Their anti-synchronisation using Adaptive Control, *International Journal of Control*, Jan. 2017, <http://www.tandfonline.com/doi/abs/10.1080/00207179.2016.1269948>

M. Borah, B. K. Roy, Dynamics of the Fractional-order Chaotic PMSG, its Stabilisation using Predictive Control and Circuit Validation, *IET Electric Power Applications*, pp.1-10, ISSN 1751-8660, DOI: 10.1049/iet-epa.2016.0506, 2016.

C. Bhattacharjee, B.K. Roy, performance Analysis of fuzzy-proportional integral (PI) control for improvement in Quality and magnitude of dispatched power for weak grid-tied hybrid system, *International Conference on Signal Processing, Communication, Power and Embedded Systems (SCOPEs)-2016*,

Santhosh K V, B K Roy, Online Implementation of an adaptive calibration Technique for Displacement Measurement using LVDT, *Applied Soft Computing Journal*, Vol. 53, pp. 19-26, 2017

P. Roy, B. Kar, and B. K. Roy, Fractional order PI-PD control of liquid level in coupled two tank system and its experimental validation, *Asian Journal of Control*, vol. 19, no. 5, pp. 1-11, 2017.

P. P. Singh, JP Singh and BK Roy, NAC-based Synchronisation and Anti-synchronisation Between Hyperchaotic and Chaotic Systems, Its Analogue Circuit Design and Application, *IETE Journal of Research*, Volume 63, 2017 - Issue 6, Pages 853-869,

JP Singh and 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*, 2017, DOI: 10.1007/s40435-017-0332-8.

JP Singh and BK Roy, The simplest 4-D chaotic system with line of equilibria, chaotic 2-torus and 3-torus behaviour, *Nonlinear Dynamics*, Vol. 89, Issue 3, pp 1845-1862.

Rohit Lorenzo and Saurabh Chaudhury [2017], A Novel 9T SRAM Architecture for Low Leakage and High Performance" in *Analog Integrated Circuits & Signal Processing (ALOG)*, Springer (Accepted) 2017

Jayesh Ruikar, Ashoke Sinha and Saurabh Chaudhury [2017], "Image Quality Assessment using Edge Correlation", *International Journal of Electronics and Telecommunications*, Vol. 63, No. 1 (2017)

Rohit Lorenzo and Saurabh Chaudhury (2016), Dynamic Threshold Sleep Transistor Technique for High Speed and Low Leakage in CMOS Circuits, *Circuits, Systems and Signal Processing (CSSP)* Springer. DOI 10.1007/s00034-016-0442-0.

Rohit Lorenzo and Saurabh Chaudhury (2016), "A Novel SRAM cell architecture with Body-bias Controller for low leakage, high speed and improved stability" *Wireless Personal Communication*, Springer, September 2016

Rohit Lorenzo and Saurabh Chaudhury (2016), LCNT-An Approach to Minimize Leakage Power in CMOS Integrated Circuits", Accepted in *Microsystem Technologies*, Springer, May 2016

Robert Singh and Saurabh Chaudhury (2016). An Efficient Technique for Rice Grain Classification Using Back Propagation Neural Network and Wavelet Decomposition (Accepted) available online in *IET Computer Vision*, May 2016

Rohit Lorenzo and Saurabh Chaudhury (2016). A novel Body Bias Controller circuit for low leakage, reduced delay and improved stability. *Journal of Circuit Systems and Computers*, World Scientific Volume No.25, Issue No. 08..

Rohit Lorenzo and Saurabh Chaudhury (2016). Review of Circuit level Leakage Minimization Techniques for VLSI Circuits and Systems. (Accepted) in *IETE Technical Review* (Taylor and Francis).

b) National Journal(s): NIL

c) International Conference(s):

C. Bhattacharjee, B. K. Roy, "Performance Analysis of Fuzzy-Proportional Integral (PI) Control for Improvement in Quality and Magnitude of Dispatched Power for a Weak Grid-Tied Hybrid System", IEEE SCOPES,, Orissa, India, pp.124-129, October 2016.

S. Debbarma, L. C. Saikia, N. Sinha, B. Kar and A. Datta, "Fractional order two degree of freedom control for AGC of an interconnected multi-source power system," 2016 IEEE International Conference on Industrial Technology (ICIT), Taipei, 2016, pp. 505-510.

U. Sarma, L. C. Saikia, A. Sana and P. Dash, "Load frequency control of a multi-area, multi-source system using firefly algorithm optimized F2DOFIDD controller," 2016 IEEE Region 10 Conference (TENCON), Singapore, 2016, pp. 1475-1479.

M. Raju, L. C. Saikia and D. Saha, "Automatic generation control in competitive market conditions with moth-flame optimization based cascade controller," 2016 IEEE Region 10 Conference (TENCON), Singapore, 2016, pp. 734-738.

L. C. Saikia, H. Das, N. B. Dev Choudhury and T. Malakar, "GPRS enabled smart energy meter with in-home display and application of time of use pricing," 2016 IEEE Annual India Conference (INDICON), Bangalore, 2016, pp. 1-5.

P. Roy, S. Acharjee, A. Ram, A. Das, T. Sen, B. K. Roy, Cascaded Sliding Mode Control for Position Control of a Ball in a Ball and Plate System, IEEE Students Technology Symposium (IEEE TechSym 2016), Indian Institute of Technology, Kharagpur, India, 30 September - 02 October 2016

Manashita Borah, P. Roy, Binoy K. Roy, Synchronisation Control of a Novel Fractional-order Chaotic System with Hidden Attractor, IEEE Students Technology Symposium (IEEE TechSym 2016), Indian Institute of Technology, Kharagpur, India, 30 September - 02 October 2016.

P. Roy, S. Sarkar, B. K. Roy, and N. Singh, A Comparative Study between Fractional Order SMC and SMC Applied to Magnetic Levitation System, Indian Control Conference (ICC 2017), IIT Guwahati, 4-6 Jan 2017.

Manashita Borah, Binoy K. Roy, Hidden Attractor Dynamics of a Novel Non-equilibrium Fractional-order Chaotic System and its Synchronisation Control, Indian Control Conference (ICC 2017), IIT Guwahati, 4-6 Jan 2017

Manashita Borah, Binoy K. Roy, Switching Synchronisation Control between Integer-order and Fractional-order Dynamics of a Chaotic System, Indian Control Conference (ICC 2017), IIT Guwahati, 4-6 Jan 2017.

JP Singh, BK Roy, On control of a many equilibria hyperchaotic system, Indian Control Conference (ICC 2017), IIT Guwahati, 4-6 Jan 2017.

B. Prakash, B. K. Roy, R. K. Biswas, Design, implementation and comparison of different controllers for a rotary Inverted Pendulum, IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES),, 4-6 July 2016.

Saurabh Chaudhury and Debashish Dash, " Design of a DCTQ Processor for low area and power, " IEEE SCOPES, Orissa, India, pp.124-129, October 2016.

SMIT, Majitar, Sikkim, India. (To be published in Lecture Notes in Electrical Engineering (LNEE), Springer).

Government Engineering College, Bikaner, Rajasthan, India. (To be published in AIP conference proceedings).

d) National Conference(s):

e) Book/Chapter:

Saurabh Chaudhury and Rohit Lorenzo (2016), "Leakage Minimization in CMOS VLSI Circuits-A Brief Review", IGI Global Publications, June 2016, DOI: 10.4018/978-1-5225-0190-9.ch004

Jayesh Ruikar, Saurabh Chaudhury, A.K Sinha, Image Quality Assessment with Structural Similarity Using Wavelet Families at Various Decompositions, Springer india 2016.

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
		NIL	

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1.	Dr Lalit Chandra Saikia	TENCON 2016	Singapore	Nov 2016
2	Rajeeb Dey	SOFA 2016	Romania	Aug 2016

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

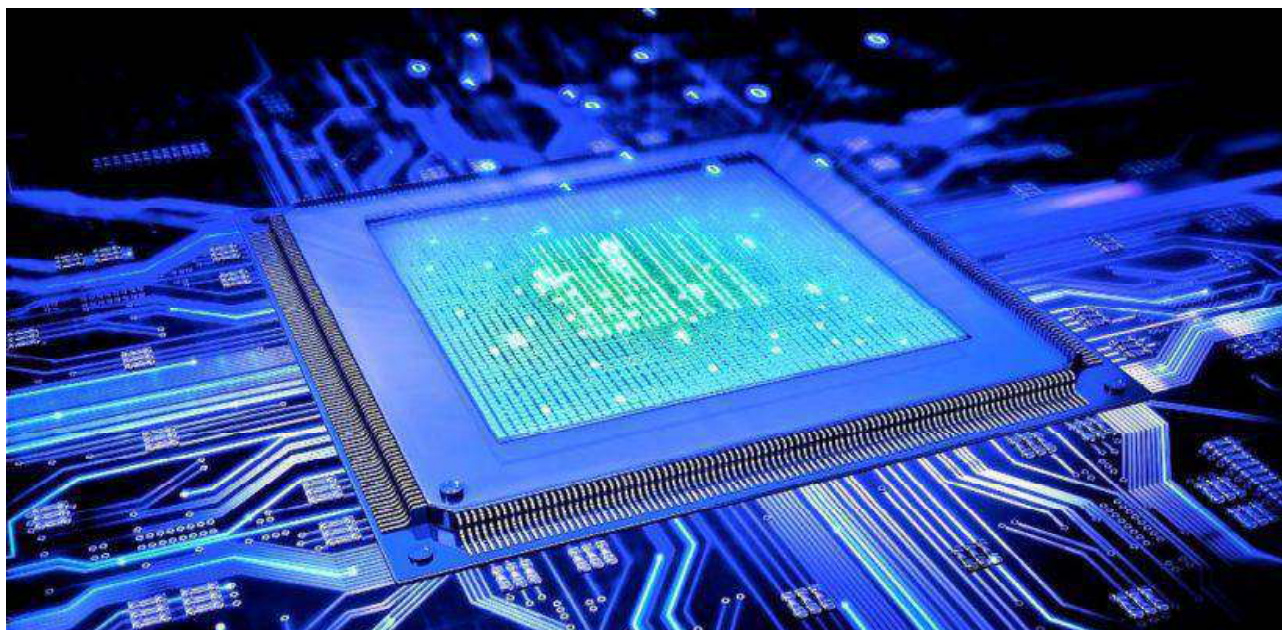
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	N. Rambabu	Dr Lalit Chandra Saikia	Demand side management Using smart AC and microgrid with BSS and wind energy
2.	Suvra Vijay	Dr Lalit Chandra Saikia	Scheduling of residential Appliances for demand side management with energy storage in smart grid environment
3	Prantik Majumder	Dr. Rajeeb Dey	An improved control strategy for shunt active filter under distorted and unbalanced conditions
4.	Binita Prakash	Prof. B. K. Roy	Sliding mode controller for inverted pendulum
5	Mithun Kumar Samal	Dr. S. Chaudhury	Swing-up and Stabilization of Cart Inverted Pendulum
6	Rahul Kamawat	Dr. S.Chaudhury	Automatic Attendance System using Biometric Fingerprint
7	Anindya Biswas	Dr. S. Chaudhury	Improved traffic Light Control Strategy By Image Processing

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Sanjoy Debbarma	Dr. Lalit Chandra Saikia	Some studies on automatic generation control of multiarea system using two degree of freedom integer and fractional order controllers
2.	Asadur rahman	Dr Lalit chandra saikia and Prof. Nidul Sinha	Automatic generation control of multiarea Power system under conventional and deregulated environment using Biogeography based optimised 3DOF controllers
3.	Mr. Piyush Pratap Singh	Prof. B. K. Roy	Use of chaos and its synchronization for better and secure communication
4	Rohit Lorenzo	Dr. S. Chaudhury	Design and Simulation of Some Leakage Minimization

1. Name of the Department :-

Electronics & Communication Engineering



1.1 ACADEMIC STAFF

HEAD : Dr. Krishna Lal Baishnab

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
Prof. Fazal Ahmed Talukdar	Dr. Madhucchanda Choudhury	Dr. Krishna Lal Baishnab
Prof. Srimanta Baishya	Mrs. Madhumita Paul	Dr. Rabul Hussain Laskar
	Dr. Prashanta Kumar Paul	Dr. Ashraf Hossain
		Dr. Trupti Ranjan Lenka
		Dr. Brinda Bhowmick
		Dr. Ujjal Chakraborty
		Dr. Banani Basu
		Dr. Koushik Guha
		Dr. Wasim Arif
		Dr. Arnab Nandi
		Dr. Susanta Kumar Tripathi
		Dr. Taimoor Khan
		Mr. Ram Kumar Karsh

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. K. L. Baishnab	15 Days Hands on training programme on VLSI Design(Analog/Digital)	Self Financed	15 Days
2.	Dr. K. L. Baishnab & Dr. K. Guha	Vendor Training of Synopsys EDA Tools under SMDP C2SD	MeitY	5 Days
3.	Dr. K. L. Baishnab & Dr. K. Guha	3 Days Workshop on Nanoscience and Technology"	TEQIP-II	3 Days
4.	Dr. Brinda Bhowmick and Dr. K. Guha	Self financed STTP on Emerging devices and VLSI physical design	Self	3 Days
5.	Dr. R. H. Laskar & Mr. Jayanta Basu	Workshop on Speech Technology solution for North-Eastern State of India (STeSNE-2017)	MeitY	2 days
6.	Dr. Arnab Nandi and Dr. Banani Basu	Workshop On Antenna & Wireless Communication	E&ICT Academy IIT Guwahati & NIT Silchar	2 Days
7.	Ujjal Chakraborty	Spoken Tutorials	IIT Bombay	Feb, 2016 to July, 2016

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. K.L. Baishnab	2 nd ZoPP Workshop under SMDP-C2SD	IIT Bombay
2.	Dr. Brinda Bhowmick	Self financed course on merging devices and VLSI physical design	NIT Silchar
3.	Dr. Brinda Bhowmick	ISTE STTP on CMOS, Mixed signal and Radio frequency VLSI design, 30 th Jan to 4 th Feb, 2017	NIT Silchar
4.	Ram Kumar Karsh	Antenna design and Wireless communication	NIT Silchar
5.	Ram Kumar Karsh	Advances in Image Processing and Soft Computing Techniques	NIT Silchar
6.	Dr. Arnab Nandi	IOT training Program, 19 th to 20 th August, 2016	CDAC Silchar
7.	Dr. Banani Basu	IOT training Program, 19 th to 20 th August, 2016	CDAC Silchar

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations):
b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
04	05	10

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
	NIL	

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1.	Special ManPower Development Programme for Chips to System Design (SMDP-C2SD)	K.L.Baishnab, Koushik Guha (Co-PI)	MeitY	97 (for NIT Silchar)	5 Yrs
2.	Heterojunction Tunnel FETs: Characterization, modelling and simulation of Electrical parameters	Prof. Srimata Baishya Dr. Brinda Bhowmick (Co_I)	CSIR	12 alkhs	2 years
3.	Development of Speech based Multi-Level Person Authentication System (Consortium Project along with IIT Guwahati and NEHU, Shillong)	Dr. R. H. Laskar	DIT, MHRD, GOI	Rs. 57.03 Lacs)	03 yrs
4.	Development of Prototype Video Surveillance System Using Face Invariant Face Recognition System	Prof. F. A. Talukdar and Dr. R. H. Laskar	BRNS, BARC	Rs. 24.9 Lacs	03 yrs
5.	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application	Dr. Arnab Nandi	SERB, DST	23.4	2 nd March, 2016 – 1 st March, 2019
6.	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with prototype development, in collaboration with IIT Kharagpur, Funded by DeitY	Prof. S. Baishya	Meity, Govt. of India	110	3 years
7.	Hetero-Junction Tunnel FETs: Characterization, Modeling, and Simulation of Electrical Parameters	Prof. S. Baishya	NCERT	8.83	2 years
8.	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with prototype development, in collaboration with IIT Kharagpur, Funded by DeitY	Prof. S. Baishya	Meity, Govt. of India	110	3 years
9.	Hetero-Junction Tunnel FETs: Characterization, Modeling, and Simulation of Electrical Parameters	Prof. S. Baishya	NCERT	8.83	2 years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Dr. Brinda Bhowmick	Naotechnology	01	2016-17
2.	Dr. Brinda Bhowmick	Journal of nanoelectronics and optoelectronics	01	2016-17
3.	Dr. Brinda Bhowmick	Silicon	01	2016-17
4.	Dr. Ashraf Hossain	Wireless Personal Communications, Springer	01	2016-17
5.	Dr. Banani Basu	IET Microwaves, Antennas & Propagation	01	2016
6.	Prof. S. Baishya	IEEE Transactions on Electron Devices	05	2016
7.	Prof. S. Baishya	IEEE Transactions on Electron Devices	01	2017
8.	Prof. S. Baishya	IEEE Transactions on Nanotechnology	01	2016
9.	Prof. S. Baishya	Microelectronics Journal	01	2016
10.	Prof. S. Baishya	Superlattices and Microstructures	01	2016
11.	Prof. S. Baishya	International Journal of Numerical Modelling: Electronic Networks, Devices and Fields	01	2017
12.	Prof. S. Baishya	IEEE Transactions on Electron Devices	05	2016

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
	NIL	

1.5 PUBLICATION

B.Sinha, S.Nath, K.L.Baishnab, "A Hybrid RFD-ACO Approach for Routing Optimization in VLSI Physical Design," *Journal of Information and Optimization Sciences, JIOS, Taylor and Francis*, 2017. (accepted).

P.Sarkar, N. M.Laskar, S.Nath, S.Chanda, K.L.Baishnab, "Offset Voltage Minimization based Circuit Sizing of CMOS OpAmp using Whale Optimization Algorithm," *Journal of Information and Optimization Sciences, JIOS, Taylor and Francis*, 2017. (accepted)

AJ Gogoi, NM Laskar, L Singh, KL Baishnab, "Throughput Optimization of Cognitive Radio Network Using Swarm Intelligence Techniques," *International Journal of Computer Science and Information Security* 14 (11), 443, 2017. (accepted)

C.L.Singh, Ch.Anandini, A.J.Gogoi, K.L.Baishnab, "Automated sizing of Low-noise CMOS analog amplifier using ALPSO optimization algorithm," *Journal of Information and Optimization Sciences, JIOS, Taylor and Francis*, 2017. (accepted)

K.L.Baishnab, P.K.Paul, N.M.Laskar, S.Nath, P.Sarkar, "Modelling and Optimization of CMOS Winner takes All Circuit for improved Slew Rate using Swarm Intelligence based techniques," *Journal of Information and Optimization Sciences, JIOS, Taylor and Francis*, 2017. (accepted)

R. Saha, B.Bhowmick, and S. Baishya, "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, March 2017. doi: 10.1109/TED.2017.2657233.

R. Gowami, B.Bhowmick "An Algorithm for Extraction of Threshold Voltage in Heterojunction TFETs", *IEEE Transactions on Nanotechnology*, vol.16, no.1, pp.90-93, Jan 2017,

R. Gowami, B.Bhowmick "An Analytical Model of Drain Current in a Nanoscale Circular Gate TFET", *IEEE Transactions on Electron Devices*, vol. 64, no.1, pp. 45-51, Jan. 2017,

P. Kumar, W. Arif, B.Bhowmick "Scaling of Dopant Segregation Schottky Barrier Using Metal Strip Buried Oxide MOSFET and its Comparison with Conventional Device", *Springer Silicon Journal*, 2016, DOI 10.1007/s12633-016-9584-5

R. Gowami, B.Bhowmick, S.Baishya "Effect of Scaling on Noise in Circular Gate TFET and its Application as a Digital Inverter", vol.53, pp16-24, July 2016, *Microelectronics journal. (Elsevier)*

S.K.Mitra, R.Goswami, B.Bhowmick "A hetero-dielectric stack gate SOI-TFET with back gate and its application as a digital inverter", Vol.92, pp 37-51, April 2016, *Superlattices Microstruct. (Elsevier)*

Barnali DEY, Ashraf HOSSAIN, Valentina. E. BALAS, R. N. BERA, "Improved Energy Detector for Spectrum Sensing Using Neuro-Fuzzy Double Threshold Technique", *Studies in Informatics and Control*, vol. 26(3), pp. 335-342, 2017.

S Debnath, A Hossain, SM Chowdhury, AK Singh, "Effective sensing radius (ESR) and performance analysis of static and mobile sensor networks", *Telecommunication Systems*, Springer, 2017, DOI: 10.1007/s11235-017-0379-z.

S. Debnath, A. Hossain, S.M Chowdhury, "Comment on "Impact of Interference on Coverage in Wireless Sensor Networks"" *Springer Wireless Personal Communications*, May 2017, DOI: 10.1007/s11277-017-4552-1.

Kumar Rajeev, Hossain Ashraf, "Optimization of Throughput of Two-Way Buffer-Aided Relaying Networks with Wireless Assisted Links", *IET Communications Journal*, 2017, DOI: 10.1049/iet-com.2016.1364.

B. Dey, A. Hossain, R. Bera, "Possible Adoption of Various Machine Learning Techniques in Cognitive Radio-A Survey" *International Journal of Advanced Intelligence Paradigms*, Inderscience, January 2017.

Hossain Ashraf, "Equal Energy Dissipation in Wireless Sensor Network", *AEU International Journal of Electronics and Communications*, Elsevier Science, vol. 71, issue 1, pp. 192-196, January 2017 (doi: <http://dx.doi.org/10.1016/j.aeue.2016.10.015>)

S. M. Chowdhury, A. Hossain, S. Debnath, "Impact of Error Control Code on Characteristic Distance in Wireless Sensor Network" *Wireless Personal Communications Journal (Springer)*, 2016, DOI 10.1007/s11277-016-3615-z

Barnali Dey, A. Hossain, A. Bhattacharjee, Rajeeb Dey, R. Bera, "Function approximation based energy detection in cognitive radio using radial basis function network", *Intelligent Automation & Soft Computing Journal (Taylor & Francis)*, 2016, DOI: 10.1080/10798587.2016.1217632

K.G. Panda, D. Agrawal, A. Nshimiyimana, A. Hossain, "Effects of environment on accuracy of ultrasonic sensor operates in millimetre range", *Perspectives in Science Journal*, Elsevier, vol. 8, pp. 574-576, September 2016, doi:10.1016/j.pisc.2016.06.024.

R. K. Karsh and R. H. Laskar (2017) Robust image hashing through DWT-SVD and spectral residual method. *EURASIP Journal on Image and Video Processing*, vol. 2017, no. 1, Springer.

R. K. Karsh, R. H. Laskar, and B. B. Richhariya (2016) Robust image hashing using ring partition-PGNMF and local features. *SpringerPlus*, vol. 5, no. 1, Springer.

A. Ganguly, S.S.Nath, G.Gope, M.Choudhury, 2017, Accepted for publication, CdS quantum dot sensitized zn oxide based solar cell using aluminium counter electrode, *Nanosystems:Phy,Chem,Math*.2017. (ESCI, indexed in Thompson Reuters).

A. Ganguly, S.S.Nath, G.Gope, M.Choudhury, 2017, Accepted for publication, ZnO based quantum dot sensitized solar cell using PVA capped lead sulphide quantum dots, *Int. J.of High Speed Electronics and Systems*. 2017.

K. Vanlalawmpuia*, Brinda Bhowmick (Shome)† and Madhuchhanda Choudhury, 2018, Accepted for publication, Optimization of Fully Depleted SiGe Channel with Raised Source/Drain Buried Oxide nMOSFET" *International Journal of High Speed Electronics and Systems* Vol. 27, Nos. 1 & 2.

S. S. Devi, A. Roy, J. Singha, R.H. Laskar, "Malaria Infected Erythrocyte Classification based on a Hybrid Classifier using Microscopic Images of Thin Blood Smear", *Multimedia Tools and Applications, Springer*, Dec 2016. DOI:10.1007/s11042-016-4264-7 [SCIE]

Devi, Salam Shuleenda, Rabul Hussain Laskar, and Shah Alam Sheikh. "Hybrid classifier based life cycle stages analysis for malaria-infected erythrocyte using thin blood smear images." *Neural Computing and Applications*: 1-19.

Devi, S. S., Singha, J., Sharma, M., & Laskar, R. H. (2017). Erythrocyte segmentation for quantification in microscopic images of thin blood smears. *Journal of Intelligent & Fuzzy Systems*, 32(4), 2847-2856.

Misra, Songhita, Rabul Hussain Laskar, Ujjwala Baruah, Tushar Kanti Das, Partha Saha, and Suman Paul Choudhury. "Analysis and extraction of LBP residual for its application in an edge detection system under controlled noise."

environment.” *Multimedia Tools and Applications* 76, no. 1 (2017): 757-784.

Roy, A., Singha, J., Manam, L., & Laskar, R. H. (2017). Combination of adaptive vector median filter and weighted mean filter for removal of high-density impulse noise from colour images. *IET Image Processing*.

Roy, Amarjit, and Rabul Hussain Laskar. “Non-casual linear prediction based adaptive filter for removal of high density impulse noise from color images.” *AEU-International Journal of Electronics and Communications* 72 (2017): 114-124.

Singha, Joyeeta, and Rabul Hussain Laskar. “Hand gesture recognition using two-level speed normalization, feature selection and classifier fusion.” *Multimedia Systems* 23.4 (2017): 499-514

A. Roy, J. Singha and R.H. Laskar, “Removal of impulse noise from gray images using fuzzy SVM based histogram fuzzy filter,” *Journal of Circuits, Systems, and Computers*, 2017 (Accepted).

Misra, Songhita, Joyeeta Singha, and R. H. Laskar. “Vision-based hand gesture recognition of alphabets, numbers, arithmetic operators and ASCII characters in order to develop a virtual text-entry interface system.” *Neural Computing and Applications* (2017): 1-19.

Roy, Amarjit, and Rabul Hussain Laskar. “Non-casual linear prediction based adaptive filter for removal of high density impulse noise from color images.” *AEU-International Journal of Electronics and Communications* 72 (2017): 114-124.

M. Islam & R. H. Laskar, “Geometric distortion correction based robust watermarking scheme in LWT-SVD domain with digital watermark extraction using SVM,” *Multimedia Tools and Applications*, DOI 10.1007/s11042-017-5035-9

Karsh, Ram Kumar, and R. H. Laskar. “Robust image hashing through DWT-SVD and spectral residual method.” *EURASIP Journal on Image and Video Processing* 2017.1 (2017): 31.

M. Islam, A. Roy, & R. H. Laskar, “Neural network based robust image watermarking technique in LWT domain”, *ISTA-2017 Special Issue - Journal of Intelligent and Fuzzy Systems* (Accepted)

Abhijyoti Ghosh, Subhradeep Chakraborty, Sudipta Chattopadhyay, Arnab Nandi and Banani Basu, “Rectangular Microstrip Antenna with Dumbbell Shaped Defected Ground Structure for Improved Cross Polarized Radiation in Wide Elevation Angle and its Theoretical Analysis,” *IET Microwaves, Antennas & Propagation (IET MAP)*, Vol. 10, Issue 1, pp. 68-78, 2016.

Abhijyoti Ghosh, Subhradeep Chakraborty, Sudipta Chattopadhyay, Arnab Nandi and Banani Basu, “Rectangular Microstrip Antenna with Dumbbell Shaped Defected Ground Structure for Improved Cross Polarized Radiation in Wide Elevation Angle and its Theoretical Analysis,” *IET Microwaves, Antennas & Propagation (IET MAP)*, Vol. 10, Issue 1, pp. 68-78, 2016.

J. Kumar, F. A. Talukdar and B. Basu, Frequency Reconfigurable E-shaped Patch Antenna for Medical Applications,” *Microwave and Optical Technology Letters (MOTL)*, Vol. 58, Issue 9, pp. 2214-2217, 2016.

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.

Ruchi and Banani Basu, “A Time Modulated Printed Dipole Antenna Array for Beam Steering Application,” *International Journal of Antennas and Propagation (Hindawi)*, Vol. 2017, Article ID 3687293, 2017. doi:10.1155/2017/3687293. Impact Factor 1.164. SCIE Indexed.

S. Baishya, Debarun Borthakur, Richik Kashyap, and Amitabh Chatterjee, “A High Precision Lumped Parameter Model for Piezoelectric Energy Harvesters,” *IEEE Sensors Journal*, doi: 10.1109/JSEN.2017.2764165, be published

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*, to be published

N. P. Maity, Reshmi Maity, and S. Baishya, “The Influence of Image Force Effect on the Accuracy of Modeling of Tunneling Current for Ultra Thin High-K Dielectric Material Ta₂O₅ Based MOS Devices,” *Key Engineering Materials*, to be published

Rajesh Saha, Brinda Bhowmick, and S. Baishya, “3D Analytical Modeling of surface potential, threshold voltage, and subthreshold swing in Dual Material Gate (DMG) SOI FinFET,” *Journal of Computational Electronics*. To be published

K. Guha, N. M. Laskar, H. J. Gogoi, A. K. Borah, K. L. Baishnab, and S. Baishya, "Novel Analytical Model for Optimizing the Pull-in Voltage in a Flexured MEMS Switch Incorporating Beam Perforation Effect," *Solid-State Electronics*, vol. 137, pp. 85-94, 2017, doi: <https://doi.org/10.1016/j.sse.2017.08.007>

: <https://doi.org/10.1016/j.mssp.2017.08.031>

Rajesh Saha, Brinda Bhowmick, and S. Baishya, "GaAs SOI FinFET: Impact of Gate Dielectric on Electrical Parameters and Application as Digital Inverter," *International Journal of Nanoparticles*, to be published

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, doi: <http://dx.doi.org/10.1a7654/EC017040749>

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, doi: <https://doi.org/10.1016/j.spmi.2017.07.022>

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, doi: <https://doi.org/10.1016/j.spmi.2017.04.001>

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, doi: [10.1109/TED.2017.2687465](https://doi.org/10.1109/TED.2017.2687465).

Rajesh Saha, Brinda Bhowmick, and S. Baishya, "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, March 2017. doi: [10.1109/TED.2017.2657233](https://doi.org/10.1109/TED.2017.2657233)

N. P. Maity, Reshmi Maity, and S. Baishya, "Influence of Image Force Effect on Tunneling Current Density for High-k Material ZrO₂ Ultra Thin Films Based MOS Devices," *Journal of Nanoelectronics and Optoelectronics*, vol. 12, pp. 67-71, no. 1, January 2017.

N. P. Maity, R. R. Thakur, Reshmi Maity, R. K. Thapa, and S. Baishya, "Analysis of Interface Charge Densities for High-k Dielectric Materials based Metal Oxide Semiconductor Devices," *International Journal of Nanoscience*, vol. 15, nos. 5 and 6, pp. 1660011-(1-6), 2016, doi: [10.1142/S0219581X16600115](https://doi.org/10.1142/S0219581X16600115)

Rajashree Das and S. Baishya, "Analysis of Electrical Parameters of Ge/Si Heterojunction GeOI FinFETs," *Procedia Computer Science*, vol. 93, pp. 132-138, 2016, doi: [10.1016/j.procs.2016.07.192](https://doi.org/10.1016/j.procs.2016.07.192)

Saurabh Agarwal, Richik Kashyap, Koushik Guha, and S. Baishya, "Modeling and analysis of capacitance in consideration of the deformation in RF MEMS shunt switch," *Superlattices and Microstructures*, available: <http://dx.doi.org/10.1016/j.spmi.2016.10.022>

Rupam Goswami, Brinda Bhowmick, and S. Baishya, "Physics-based surface potential, electric field and drain current model of a $\text{p}^+\text{-gate-drain underlap nanoscale n-TFET}$," *Int. Journal of Electroncis*, vol. 103, no. 9, pp. 1565-1579, 2016. <http://dx.doi.org/10.1080/00207217.2016.1138514>

N. P. Maity, R. R. Thakur, Reshmi Maity, R. K. Thapa, and S. Baishya, "Analysis of Interface Charge Densities for Al₂O₃ Dielectric Material based Ultra Thin MOS Devices," *Procedia Computer Science*, vol. 57, pp. 757 – 760, 2015, doi: [10.4028/www.scientific.net/AMM.860.25](https://doi.org/10.4028/www.scientific.net/AMM.860.25)

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, doi: [10.4028/www.scientific.net/AMM.860.30](https://doi.org/10.4028/www.scientific.net/AMM.860.30)

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, doi: [10.4028/www.scientific.net/AMM.860.25](https://doi.org/10.4028/www.scientific.net/AMM.860.25)

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, doi: [10.4028/www.scientific.net/AMM.860.3](https://doi.org/10.4028/www.scientific.net/AMM.860.3)

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, doi:

R. Maity, Ajay Singh, A. Islam, N. P. Maity, R. K. Thapa, and S. Baishya, "Lumped Electromechanical Modeling of Capacitive Micromachined Ultrasonic Transducers," *Materials Today: Proceedings*, vol. 3, no. 6, pp. 2289-2294, 2016.

A. Baidya, T. R. Lenka, and S. Baishya, and, "Mixed-mode simulation and analysis of 3D double gate junctionless nanowire transistor for CMOS circuit applications," *Superlattices and Microstructures*, vol. 100, pp. 14-23, Dec. 2016, doi: <http://dx.doi.org/10.1016/j.spmi.2016.08.028>

N. P. Maity, Reshmi Maity, R. K. Thapa, and S. Baishya, "A tunneling current density model for ultra thin HfO₂ high-k dielectric material based MOS devices," *Superlattices and Microstructures*, vol. 94, pp. 24-32, 2016, <http://dx.doi.org/10.1016/j.spmi.2016.04.032>

Rupam Goswami, Brinda Bhowmick, and S. Baishya, "Effect of Scaling on Noise in Circular Gate TFET and its Application as a Digital Inverter," *Microelectronics Journal*, vol. 53, pp. 16-24, 2016, doi: <http://dx.doi.org/10.1016/j.mejo.2016.04.009>

N. P. Maity, Reshmi Maity, and S. Baishya, "Tunneling Current Density Model with Ideal Barrier for Ultra Thin Films Al₂O₃ High-k Material Based MOS Devices," *Materials Focus*, vol. 5, no. 3, pp. 275-280, June 2016, doi: <https://doi.org/10.1166/mat.2016.1326>

Richik Kashyap, T. R. Lenka, and S. Baishya, "Distributed Parameter Modeling of Cantilevered d33 Mode Piezoelectric Energy Harvesters," *IEEE Transactions on Electron Devices*, vol. 63, no. 3, pp. 1281-1287, March 2016, doi: [10.1109/TED.2015.2514160](https://doi.org/10.1109/TED.2015.2514160)

Rajashree Das, Rupam Goswami, and S. Baishya, "Tri-gate heterojunction SOI Ge-FinFETs," *Superlattices and Microstructures*, vol. 91, pp. 51-61, March 2016, doi: <http://dx.doi.org/10.1016/j.spmi.2015.12.03>

Kundu, U. Chakraborty, A.K. Bhattacharjee; 2016, Design of a Compact Wideband Microstrip Antenna with Very Low VSWR for WiMAX Applications, *International Journal of Microwave and Wireless Technologies*, Vol. 9, pp. 685-690, Doi: [10.1017/S1759078716000374](https://doi.org/10.1017/S1759078716000374).

Bhowmik, U. Chakraborty, A. K. Bhattacharjee, 2016, A study on frequency tuning and miniaturization of a ground slotted rectangular microstrip patch antenna built with different dielectric substrates, *Microw. Opt. Technol. Lett.* Vol. 58, Issue. 12, pp. 2859-2864, Doi: [10.1002/mop.30164](https://doi.org/10.1002/mop.30164).

b) National Journal(s): NIL

c) International Conference(s):

C.L.Singh, Ch. Anandini, A.J.Gogoi, K.L.Baishnab, "Low-noise CMOS Differential-amplifier design using Automated-design methodology," (DevIC 2017), March, 2017, Kalyani, India

N.M.Laskar, S.Nath, S.Chanda, K.L.Baishnab, "A Low Power, High Gain OpAmp using Self-cascoding technique for Low Frequency Applications," DevIC-2017, March, 2017, Kalyani, India

G.Kalyan Chakravarthy, N.M.Laskar, S.Nath, S.Chanda, K.L.Baishnab, "Flipped Voltage Follower based High Dynamic Range Current Mirror," DevIC-2017, March, 2017, Kalyani, India

K.Putea, M.Choudhury, B.Bhowmick "Optimization of Electrical parameters in SiGe channel nMOS" accepted in Devices for Integrated Circuits (DevIC 2017)", Kalyani Government Engineering College, March 23-24, 2017.

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 Integrated Circuits (DevIC 2017)", Kalyani Government Engineering College, March 23-24, 2017.

R.Goswami, B. Bhowmick "Circular Gate Tunnel FET: optimization and noise analysis" International Conference on Advances in Computing and Communications, Elsevier (ICACC-2016), Kerala.

Prasant Singh, B.Bhowmick "Dual metal Dual dielectric based Tunnel FET With Underlap of Source and Gate" accepted in Research in Intelligent computing in Engineering, Nagpur, Maharashtra, 8-9th April, 2016

Singh Abhishek Kumar, Debnath Sunandita and Hossain Ashraf, "Efficient Deployment Strategies of Sensor Nodes in Wireless Sensor Networks," In the Proceedings of the International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT 2016), New Delhi, India, 2016.

Debnath Sunandita and Hossain Ashraf, "Impact of Boundary Effect on Coverage Fraction in Wireless Sensor Network," In the Proceedings of the International Conference on Electrical, Electronics, and Optimization Techniques

R. K. Karsh, A. Das, G.L. Swetha, A. Medhi, R. H. Laskar, U. Arya, and R. K. Agarwal, "Copy-move forgery detection using ASIFT" *IEEE International Conference on Information Processing*, Delhi Technological University, Delhi, August 2016.

R. K. Karsh, R. H. Laskar, and B. B. Richhariya, "Robust and secure hashing using Gabor filter and Markov absorption probability" *IEEE International Conference Communication and Signal Processing*, Coimbatore, India, April 2016.

A. Das, A. Medhi, R. K. Karsh, & R. H. Laskar, "Image splicing detection using Gaussian or defocus blur" *IEEE International Conference Communication and Signal Processing*, Coimbatore, India, April 2016

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.

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.

Arbab Nandi, Amit Baran Dey, Vinay Kumar Verma and Banani Basu, "A Reconfigurable Defected Ground Structure Resonator based on Coplanar Waveguide," International Conference on Communication Devices and Networking (ICCDN 2017), 3rd-4th June, 2017, Sikkim, India. SCOPUS Indexed

d) National Conference(s): NIL

e) Book/Chapter:

1. Madhuchhanda Choudhury "Synthesis Of Quantum Dots & Their Applications As Nano Gas Sensors" LAP Lambert Academic Publishing, Germany, 2017, pages: 153. (Accepted for publication)
2. Chapter Title: Slot-Loaded Microstrip Antenna: A Possible Solution for Wide Banding and Attaining Low Cross-Polarization. Book Title: Recent Developments in Intelligent Computing, Communication and Devices, pp. 113-119, 2017. Springer.
3. K. L. Baishnab, Kalayan Chakarvarthy Godogu, "Design of High Precision Analog VLSI Circuits", LAMBERT Academic Publishing, ISSN: 978-620-2-05201-6.
4. K. L. Baishnab, Kiran Maiye, "Convex Optimization on Routing in VLSI Physical Design", LAMBERT Academic Publishing, ISSN: 978-620-2-02371-9.

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
		NIL		

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

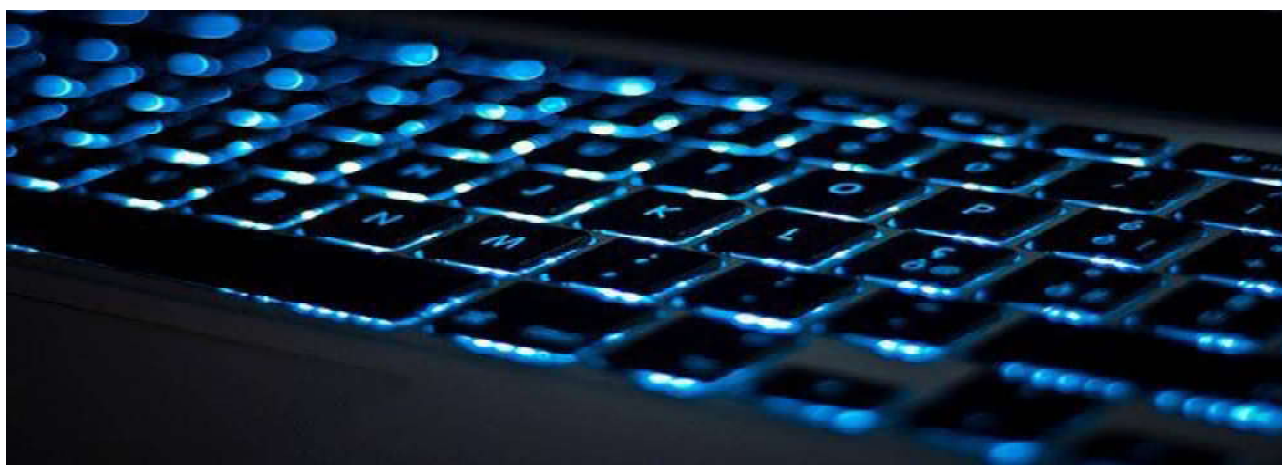
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	Dhrubajyoti Borah	Dr.B.Bhowmik	Tunnel Field Effect Transistor on Selective Buried Oxide (SELBOX) Substrate
2.	Saurav Tiwari	Prof. M. Paul and Dr.B.Bhowmik	Simulation of Graphene Nanowires Fet and comparison with different Nanowire structures
3.	V Puitea	Dr. M Choudhury and Dr. B. Bhowmik	Optimization of Electrical Parameters in Single Gate and Double Gate SiGe Channel nMOSFETs and their Application in Digital Inverter
4.	K. Anialawmpuia	Dr. Madhuchhanda Choudhury	Optimization of Electrical Parameters in Single Gate and double SiGe channel nMOSFETs and their Application in Digital Inverter
5.	Alice Celin Alphonsa	Dr. R.H.Laskar	A Study of Automatic Tonal and Non- Tonal Classification of Languages Using Spectral Features
6.	Santanu Borgohain(P/T)	Dr. R. H. Laskar	FPGA Implementation of Rank Order Filter using Multiple Winners Take All Based on Linear Programming
7.	Amit BaranDey	Dr. Arnab Nandi	Some Studies on Wideband and Flexible Metamaterial Inspired Antennas
8.	Sushmita Singh	Dr. Banani Basu	Design & Analysis of Microstrip Patch Antenna Array using Pin Diode Switches
9.	BidishaHazarika	Dr. Banani Basu	Design and Analysis of Compact, Low-Profile, Miniaturized Monopole Antenna Using Metasurface for WBAN Application.
10.	Gunturi Praveen	S. Baishya	Comparative Study between QFinFET and TrigateFinFET and Threshold Voltage Modeling of Heterojunction Tunnel FinFET with Source Overlap
11.	Suman Kumar Ram	Dr. Ujjal Chakraborty	Some studies on DRA integrated microstrip Antennas (ongoing)

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Rupam Goswami	Dr. Brinda Bhowmick	Gate Engineered and Bandgap Engineered TFETs; Simulation, Modeling and Application
2.	Barnali Dey	Dr. Ashraf Hossain	Development and Performance Studies of Computationally Intelligent Energy Detection for Spectrum Sensing in Cognitive Radio Systems
3.	Richik Kashyap	S. Baishya	Distributed Parameter Modeling and Autonomous Charge Extraction of d31 and d33 Mode Piezoelectric Energy Harvesters
4.	Ashim Kumar Biswas	Dr. Ujjal Chakraborty	Some studies on beamforming network for the application in phased array antennas.

1. Name of the Department :-

Computer Science & Engineering



1.1 ACADEMIC STAFF

HEAD : Prof. N. Sinha

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	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
		Mr. Badal Soni
		Mr. Ripon Patgiri
		Mr. Umakantha Majhi
		Dr. Shyamoshree Pal
		Dr. Shyamapada 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. A. Bhattacharjee, Mr. P. K. Nath and Mr. R. Patgiri	Cloud computing and Networking	TEQIP-II	11 th – 16 th March 2017
2	Dr. S. K. Biswas, Dr. D. Thounaojam and Mr. B. Soni	Advances in Image Processing and Soft Computing Techniques	TEQIP-II	20 th – 24 th February 2017
3	Dr. S. K. Biswas, Dr. D. Thounaojam and Mr. B. Soni	Applications of Machine Learning	TEQIP-II	20 th – 24 th March 2017

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Dr. Arup Bhattacharjee	Academic environment in Higher Technical Education: Future perspective From 30.9.2016 to 1. 10.2016	NIT Jalandhar
2	Mrs. Ujawala Barua	<ul style="list-style-type: none"> Cloud computing and Networking Advances in Image Processing and Soft Computing Techniques Applications of Machine Learning 	NIT Silchar
3	Dr. Pinki Roy	<ul style="list-style-type: none"> Cloud computing and Networking Advances in Image Processing and Soft Computing Techniques Applications of Machine Learning 	NIT Silchar
4	Dr. Samir Kumar Borgohain	<ul style="list-style-type: none"> Cloud computing and Networking Advances in Image Processing and Soft Computing Techniques Applications of Machine Learning 	NIT Silchar
5	Mr. Biswanath Dey	Short Term course on Architecting Wireless Sensor Network for IOTs 20-24 th February 2017	IIT Kharagpur
6	Mr. PanthaKanti Nath	<ul style="list-style-type: none"> Cloud computing and Networking Advances in Image Processing and Soft Computing Techniques Applications of Machine Learning 	NIT Silchar
7	Dr. Saroj Kumar Biswas		

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations):
b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
		05

c) **Research Lab/ Workshop:**

Sl. No.	Name of Lab/Workshop	Faculty name	Purpose/Linkage to an existing/new programme
1	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	Prof. Nidul Sinha	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	NIL			

f) **Chairing of Technical Section**

Sl. No.	Faculty Name	Details
1	Dr. A. Bhattacharjee	

1.5 PUBLICATION

a. **International Journal(s):**

- ChandrakantaMohapatra, Sujata Dash and **Umakanta Majhi**. "A Comprehensive Review of the Speech Dependent Features and Classification Models used in Identification of Languages". *International Journal of Computer Applications* 147(5):1-4, August 2016. Published by Foundation of Computer Science (FCS), NY, USA. Doi: 10.5120/ijca2016911052
- ChandrakantaMohapatra, Sujata Dash, Ansuman Mishra and **Umakanta Majhi**. "Performance evaluation through the use of different kernel functions in SVM for the identification of native Indian Languages." *International Journals of Control Theory and Applications*, Vol. 10, 2017. ISSN : 0974-5572.

- 3) Saroj Kr. Biswas, Debashree Devi, Manomita Chakraborty: Hybrid Case Based Reasoning System by Under Sampling and Cost Sensitive Neural Network for Classification, Journal of Organizational and End User Computing, IGI Global Accepted (**SCI journal, IF: 0.759**)
- 4) Saroj Kr. Biswas, Manomita Chakraborty, BiswajitPurakayastha: Rule Extraction from Neural Network using Classified and Misclassified Data: International Journal on Artificial Intelligence Tools, **World Scientific**, Vol. 26, No. 3 pp.1-26, 2017 (**SCI journal, IF: 0.504**)
- 5) Saroj Kr. Biswas, Manomita Chakraborty, BiswajitPurakayastha: A Rule generation Algorithm from Neural Network using Classified and Misclassified Data: International Journal of Bio-Inspired Computation,**InderScience**, Accepted, DOI: 10.1504/IJBIC.2016.10004336 (**SCI journal, IF: 1.538**)
- 6) Debashree Devi, Saroj Kr. Biswas, BiswajitPurakayastha: REDUNDANCY-DRIVEN MODIFIED TOMEK LINK BASED UNDERSAMPLING: A SOLUTION TO CLASS IMBALANCE, Pattern Recognition Letters,**Elsevier**, Vol. 93, pp. 3-12, 2017 (**SCI journal, IF: 2.002**)
- 7) Saroj Kr. Biswas, MonaliBordoloi, BiswajitPurakayastha: Review on Feature Selection and Classification using Neuro-Fuzzy Approaches, International Journal of Applied Evolutionary Computation,**IGI Global**, vol. 7 no. 4, pp. 28-44, 2016
- 8) Dalton Meitei Thounaojam, Vivek Singh Bhadouria, S Roy and K. Manglem Singh, “**Shot boundary detection using perceptual and semantic information**”, International Journal of Multimedia Information Retrieval, Volume 6, Issue 2, pp 167–174, 2017

b. **National Journal(s):** NIL

c. **International Conference(s):** NIL

d. **Book/Chapter:** NIL

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
		NIL		

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

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Banamali Das	Mr.Prabhakar Sarma Neog	Exploring A Feature Selection Algorithm using Effective Range and Class Separation for Gene Expression Dataset
2	Sonuvane Suchitra Rao	Dr. Samir Borgohain	An Automatic Annotation of Images Using Transformed Weight Normalized Compliment

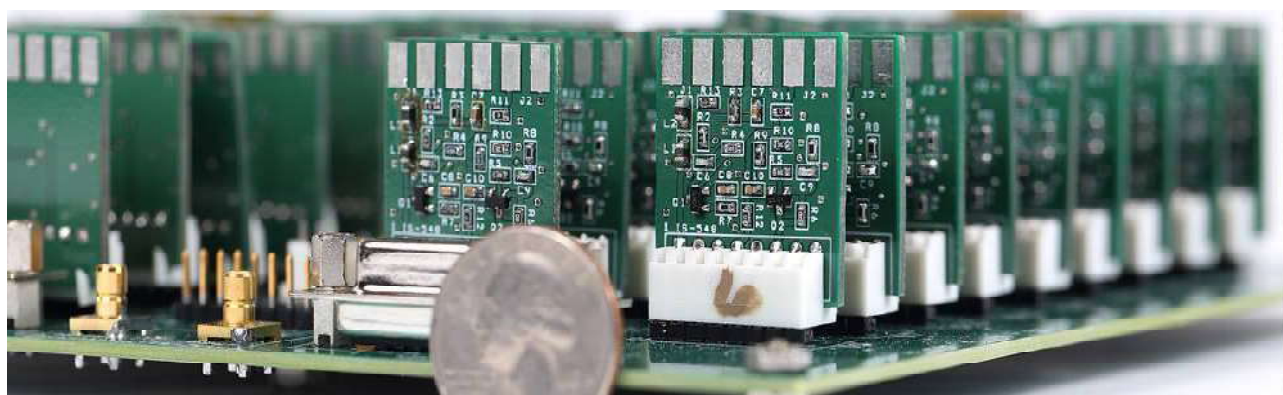
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
3	Neetu Singh	Dr. N. Sinha	Emotion Recognition from EEG Signals
4	N. Thoiba Singh	Mr.Biswanath Dey	Event Management for Ad-hoc Network Using Artificial Bee Colony Optimization and Neural Network in Wireless Ad-hoc network
5	Arka PratimMadal	Mr. Prasenjit Kr. Das	Secure Cloud Computing Architecture Based on Multi-tenant Isolation Using Identifier and Hash
6	Rajdeep Das	Mr.Ripon Patgiri	PowerScheduler: A MapReduce Scheduler
7	Rohit Pratap Singh	Mr. Ripon Patgiri	A Study of MapReduce Based Spatial Overlay Join for Large Scale Computation
8	GovinChanda	Mr. PanthaKanti Nath	List Colouring using Tabu Search
9	Alok Das	Dr.Shyamapada Mukherjee	PIGP: Plant Inspired Global Placement of Mixed-sized Hierarchal VLSI circuits
10	H. Ginkosiam Simte	Mr. Umakanta Majhi	An Intrusion Detection System Using Modified PSO Algorithm and Naïve Bayes with Kernel Density Estimation
11	Nilima Ahmed	Dr. Pinki Roy	Speech and Facial Feature Based Authentication System
12	Sujit Kumar	Dr. Biswajit Purkayastha	
13	L. C. Tamphaleima	Dr. Shyamasree Pal	Efficient approximation of curve-shaped objects in Z2 based on discrete curvature and Local Maxima and Minima Estimation
14	Shreya Binu Jacob	Dr. Saroj Kumar Biswas	Keyword Extraction from Twitter Data Using Graph Based Model
15	Manjil Mahanty	Dr.Saroj Kumar Biswas	
16	Shib Sankar Nath	Mr.Badal Soni	An efficient and Robust Copy-Move Detection in Digital Images
17	Soumi Dhar	Dr.Shyamasree Pal	A Digital Geometric approach for computing Discrete Voronoi Diagram
18	Nilesh Gharde	Dr. Dalton Meitei Thounaojam	Robust Perceptual Image Hashing Using Fuzzy Color Histogram
19	Kiran Sonavane	Mr. Badal Soni	Porting and Optimization of Multiple Sequence Alignment(MSA)on Intel Xe Phi Architecture

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Samir Kumar Borgohain	Prof. Shivashankar B. Nair	Pictorially Grounded Language and Bio-inspired Techniques for language processing

1. Name of the Department :-

Electronics & 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
		Smt. Jupitara Hazarika
		Sri Lalu Seban
		Sri Sudarsan Sahoo
		Dr. Arun Kumar Sunaniya
		Dr. Munmun Khanra
		Dr. Swagatadeb Sahoo
		Dr. Manas Kumar Bera
		Dr. Ranjay Hazra
		Dr. Sandeep Kumar

Visiting Professor (If any): Dr. Tapan Kumar Basu

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. Ranjay Hazra, Dr. Arun Kumar Sunaniya and Dr. Sandeep Kumar	Short Term Course on "Recent Trends in Communication, Signal Processing and VLSI"	TEQIP-II, NIT Silchar	5 days (14/2/2017 to 18/2/2017)
2	Munmun Khanra, Manas Kumar Bera and Swagatadeb Sahoo	One week National Workshop on "Intelligent Sensing, Instrumentation and Control,"	TEQIP Cell, NIT Silchar	January 30 to February 02, 2017
3.	Sudarsan Sahoo	Hands on Session with LabVIEW and National Instruments Hardware for Data Acquisition and Processing	Self financed	5 days
4..	Sudarsan Sahoo, S.H. Laskar, J.Hazarika	TEQIP sponsored Hands on Workshop on NI Multisim.	TEQIP-II	5 days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Dr. R. Hazra	GIAN course on State of Art computational methods and software for computer aided control systems design and analysis. (11 days from 1/12/2016 to 11/12/2016)	NIT Silchar
2	Dr. R. Hazra	Workshop on Intelligent Sensing, Instrumentation and Control (5 days from 30/01/2017 to 03/02/2017)	NIT Silchar
3	Dr. R. Hazra	Invited Lecture Series on Uncertainties in Wireless Communication: Challenges and Opportunities (2 days from 24/02/2017 to 25/02/2017)	NIT Silchar
4	Dr. R. Hazra	Workshop on Nano Science and Technology (3 days from 02/03/2017 to 04/03/2017)	NIT Silchar
5	Dr. R. Hazra	Workshop on Applications of Machine Learning (5 days from 20/03/2017 to 24/03/2017)	NIT Silchar
6	Dr. R. Hazra	STTP on Emerging Devices and VLSI Physical Design (3 days from 25/10/2016 to 27/10/2016)	NIT Silchar
7	Sudarsan sahuo	Workshop on Intelligent Sensing, Instrumentation and Control (5 days from 30/01/2017 to 03/02/2017)	NIT Silchar
8	Sudarsan sahuo	Hands-on Training cum Workshop on CRISPR/Cas9- a robust tool for genome editing.	KIIT University
9	Munmun Khanra	TEQIP sponsored Short Term Course on "Recent Trends in Communication, Signal Processing and VLSI " from 14-18 Feb., 2017	NIT Silchar
10	Dr. S. H. laskar	Hands on Workshop on NI Multisim.	NIT Silchar
11	Dr. Shahedul Haque Laskar	Workshop on Intelligent Sensing, Instrumentation and Control (5 days from 30/01/2017 to 03/02/2017)	NIT Silchar
12	Dr. Shahedul Haque Laskar	Short Term Course on "Recent Trends in Communication, Signal Processing and VLSI", 5 days (14/2/2017 to 18/2/2017)	TEQIP-II, NIT Silchar

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
13	Lalu Seban	EECI International Graduate School on Control-Nonlinear Model Predictive Control during 13.03.2017 to 17.03.2017	IIT Madras + European Embedded Control Institute
14	Dr. A. K.Sunaniya	Theory & Technology of Silicon Solar Cell	IIT Bombay
15	Dr. Manas Kumar Bera	IEEE Fall School on Modern Sliding Mode Control during 26.10.2016 to 30.10.2016	IIT Bombay
16	Dr. Manas Kumar Bera	GIAN course on Fuzzy interpolative controller and applications during 19.09.2016 to 26.09.2016	NIT Silchar
17	Dr. Manas Kumar Bera	EECI International Graduate School on Control-Nonlinear Model Predictive Control during 13.03.2017 to 17.03.2017	IIT Madras
18	Dr. Manas Kumar Bera	Short Term Course on Applications of Optimization Techniques in Engineering and Technology during 24.02.2017 to 01.03.2017	NIT Silchar

1.4 RESEARCH DEVELOPMENT

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

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

Completed	Submitted	Ongoing
		26

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	Energy and transportation Lab	<ul style="list-style-type: none"> New research To support existing Power Electronics Lab
2	VI Lab	New lab for UG , PG and research.
3	Advanced Instrumentation Lab	New lab for PG and research.

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
01	Development of battery supercapacitor hybrid energy storage for standalone solar photovoltaic power systems	Munmun Khanra	Department of Science & Technology, Govt. of India.	22.21816	3yrs
02	Design and development of wearable drug delivery device for treatment of osteoporosis	Rajdeep Dasgupta	STIS, NIT Silchar	4.75000	2 yrs.
03	Development of piezoelectric energy harvesting mat and supercapacitor based storage device for E-rickshaw.	Sudarsan Sahoo	IEDC, NIT Silchar	1 lac	1 year

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr. R. Hazra	IET Communications	01 02	2016 2017
2	Dr. R. Hazra	IEEE Communication Letters	02	2016
3	Dr. R. Hazra	IEEE Transactions on Vehicular Technology	01	2017
4	Dr. R. Hazra	Optik-International Journal for Light and Electron Optics, Elsevier	01	2017
5	Dr. R. Hazra	International Journal of Communication Systems, Wiley	01	2017
6	Munmun Khanra	ISA Transactions	03	2016-17
7	Munmun Khanra	IEEE Trans on Device and materials Reliability	01	2017
8	Munmun Khanra	IEEE Trans on Industrial Informatics	01	2017
9	Munmun Khanra	Asian journal of control	01	2017
10	Munmun Khanra	Circuits systems and signal processing	01	2017
11	Munmun Khanra	International Journal of Systems Science	01	2017
12	Munmun Khanra	International journal of circuit theory and applications	01	2017
13	Dr. Manas Kumar Bera	IEEE Transactions in Mechatronics	02	2016
14	Dr. Manas Kumar Bera	ISA Transactions	02	2016
15	Dr. Manas Kumar Bera	IEEE Transactions in Industrial Electronics	01	2017
16	Dr. Manas Kumar Bera	International Journal of Process Control	01	2017
17	Dr. S. H. Laskar	Int. Conf. of power Electronics, Intelligent Control & Energy Systems(ICPEICES)	06	2016
18	Dr. S. H. Laskar	IEEE INDICON	05	2015-16

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
	NIL	

1.5 PUBLICATION

a) International Journal(s):

1. R. Hazra and A. Tyagi, "Performance analysis of impulse-radio ultra-wideband energy detector system using cooperative dual-hop amplify and forward strategy", International Journal of Communication Systems, vol. 30, no. 4, Wiley, Jan. 2017. (SCI)
2. S. Biswas, D. Ghoshal and R. Hazra, "A new algorithm of image segmentation using curve fitting based higher order polynomial smoothing", Optik-International Journal for Light and Electron Optics, vol. 127, no. 20, Elsevier, pp. 8916-8925, Oct. 2016. (SCI)
3. AAdhikary, M Khanra, J Pal and K Biswas, 2017, "Realization of Fractional Order Elements," INAE Letters, Vol. 2, Issue 2, Springer, (<https://doi.org/10.1007/s41403-017-0020-1>).
5. A. K. Paul, Manas Kr. Bera and B. Bandyopadhyay, "Practical SOSM Controller Design for Short-Circuit Mode of Transfer in GMAW using Two Sliding Surfaces", IFAC International Conference on Advances in Control and Optimization of Dynamical System, Volume 49, Issue 1, pp.724-729, 2016
7. S.Sahoo and S.K.Sit, 2017, Dielectric relaxation of amides and tetrahydrofuran polar mixture in C6H6 from

ISSN :0304-4289

8. 2017, Dielectric relaxation Phenomena of alkyl acrylate on complexation with phenol dissolved in carbon tetrachloride under static and high frequency electric field, Indian Journal of Pure & Applied Physics, 55, 03, CSIR-NISCAIR, ISSN: 0975-1041 (Online); 0019-5596 (Print)
9. S.Sahoo and S.K.Sit, 2016, Double relaxation phenomena of nicotinamide, Benzamide and 1-propanol mixture dissolved in benzene measured at 9.385 GHz electric field, Canadian Journal of Physics, 94, 07, NRC Research Press, ISSN: 1208-6045 (print); 0008-4204 (web)
10. Lalu Seban, Namita Boruah, Binoy K. Roy, 2017, Development of FOPDT and SOPDT model from arbitrary process identification data using the properties of orthonormal basis function, Recent Advances in Electrical and Electronic Engineering, Bentham Science. (Volume, issue to be assigned)
11. Namita Boruah, Lalu Seban, Binoy K. Roy, 2017, Nonlinear model predictive control in Quadruple tank system: An event triggered approach, Recent Advances in Electrical and Electronic Engineering, Bentham Science. (Volume, issue to be assigned)
12. Neeraj Kumar Singh, Arun Kumar Sunaniya "An Adaptive Image Sharpening Scheme based on Local Intensity Variations" Signal, Image and Video Processing, Springer Vol. 11, Issue 5, Online ISSN 1863-1711 July 2017.

b) National Journal(s):

1. Barasha Mali and S.H. Laskar, "Control of DO Concentration using PID and Fuzzy Controllers", Journal of Basic and Applied Engineering Research p-ISSN: 2350-0077; e-ISSN: 2350-0255; Volume 3, Issue 7; April-June, 2016, pp. 621-623

c) International Conference(s):

1. P. Saha, and M. Khanra, "Equivalent Circuit Model of Supercapacitor for Self-Discharge Analysis - A Comparative Study," *International conference on Signal Processing, Communication, Power and Embedded System (SCOPES)*, Peralakhemundi, Odisha, India, Oct. 2-5, 2016.
2. M. A. Siddiqui, M. N. Anwar, S. H. Laskar and A. Yadav, "PID Controller Tuning of Cascade Control Systems Using Frequency Response Matching and Dominant Pole Placement Method", *4th International Conference on Signal Processing, Computing and Control, (ISPCC2017) 2017 (Accepted)*
3. Barasha Mali, S. H. Laskar, "Soft Sensor for estimation and identification of reduced dimensional quality control inputs", *Proceedings of Control Instrumentation System Conference, CISCON -2017*, pp. 1-6. (Accepted)
4. Barasha Mali, S. H. Laskar, "Partial Least Squares based Multivariate Statistical approach for Soft Sensor development in Waste Water Treatment Plants and its comparison with Principal Component Analysis" (pages-6). (Accepted)

d) National Conference(s): NIL

e) Book/Chapter: NIL

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

- a. 32-Channel MOBITA wireless EEG data acquisition system.
- b. Battery Life Cycle Testers by Bitrode Corporation (Model: FTV4-100/20-20).
- c. Quanser Equipment SRV/02 Workstation (Q8USB)
- d. DSPACE.
- e. Workstation (Dell)
- f. Video Conferencing Kit
- g. Desktop 3D Printer
- h. Carry 60 Spectrophotometer, Agilent
- i. Handheld sound analyser.
- j. Orion 3 KVA UPS

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1	Munmun Khanra	<i>IEEE International Midwest Symposium on Circuits and Systems, MWSCAS-2017</i>	Tufts University, Boston, USA	06-09 August, 2017
2	Munmun Khanra	Visit to Laboratory of Prof. Jae-Do Park, Associate Prof., Electrical Engineering Department, CU Denver	University of Colorado, Denver, USA	July 31 to August 04, 2017

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

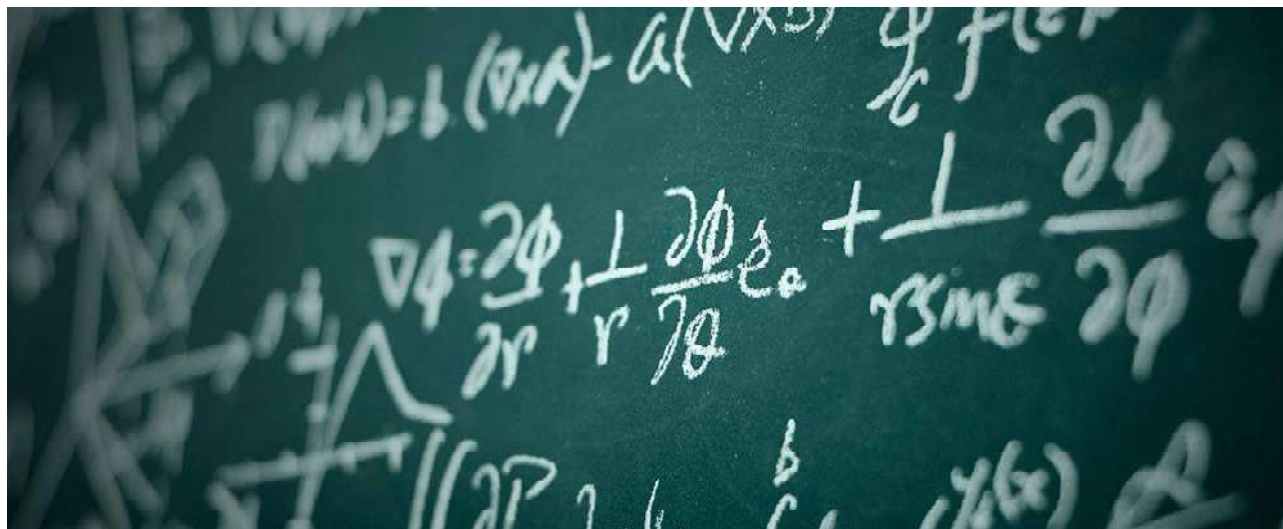
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Avaneet Kumar	Munmun Khanra	Development of ultracapacitor based photovoltaic power systems
2	Saif Uddin Barbhuiya	Arun Kumar Sunaniya	Design and performance evaluation of an improved efficiency compound semiconductor solar cell
3	Sumit Singha	Rajdeep Dasgupta	Study and application of Wireless power transfer in implanted battery less drug delivery.
4	Sudem Diamary	Arun Kumar Sunaniya	Impulsive Noise Detection and Removal in Color Image
5	Divakar Kumar	Lalu Seban	Study on relative orthonormal array
6	Ariful Mashud	Lalu Seban	Laguerre-model predictive control of continuous stirred tank reactor
7	Bapi Debnath	Sudarsan Sahoo	Fault Detection in Rolling Element Bearing
8	Ruhul Amin Laskar	S.H. Laskar & Sudarsan Sahoo	Intelligent Fault Monitoring in Rotating Machinery
9	Pinaj Nasiri	S.H. Laskar & J Hazarika	Assessment of Neuro-Cognitive Behaviour using EEG(BCI Applications)

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
	NIL		

1. Name of the Department :-

Mathematics



1.1 ACADEMIC STAFF

HEAD : Dr. Santanu Roy

Name of Faculty members:

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

Visiting Professor (If any): NIL

1.2 DISTINCTION ACHIEVED

a) By Student: 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 Pankaj Biswas, Dr Praveen Kumar Gupta, Dr B H S Raju	Recent Advances in Applied Mathematics	TEQIP- II	Five Days 22 nd February to 26 th February 2017
2	Dr Praveen Kumar Gupta, Dr Pankaj Biswas, Dr Md Maqbul	Advances in Stability Analysis on Dynamical Systems	TEQIP – II	Five Days March 08-12, 2017

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. Praveen Kumar Gupta	Presented a paper entitled “Analysis of a Mathematical Model of Hepatitis B Virus Transmission Dynamics” in TIMC-AMS conference during December 14-17, 2016.	Banaras Hindu University, Varanasi, Uttar Pradesh
2	Dr. Subrata Bera	Paper entitled “Electrokinetic flow in a surface corrugated microchannel” presented at The 3rd International Conference of Mathematics and Computing (ICMC 2017) on January 17-21, 2017.	Haldia Institute of Technology, West Bengal, India.
3	Dr.P.K.De	Paper presented in the Int'l Conf IEEE ICCIC 2016 , Dec. 15-17, 2016, Chennai. Title : “Using Goal Programming Approach to Solve Fuz	IEEE Podhigai Sub-section of Madras Section
4	Dr.P.K.De	P.K.De, A.K.Chakraborty and Mumita Deb, 'A General Formulation and Solution of Fuzzy Multi-objective Linear Programming Problems', Proceedings of IEEE ICCIC 2016. D10.1109/ICCIC.2016.7919669.	IEEE Podhigai Sub-section of Madras Section

1.4 RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations): Fuzzy Set Theory and fuzzy multiple sequence spaces, Computational Fluid Dynamics, Micro and nano Fluidics.

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

Completed	Submitted	Ongoing
	1	12

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
	NIL	

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Numerical Study on Electrokinetic Flow	Dr. Subrata Bera	SERB-DST	25.47	03 Years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
	NIL			

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
	NIL	

1.5 PUBLICATION

a) International Journal(s):

S. Saha, B. Nathand S. Roy, 2016, Some New Classes of Statistical Convergent Fuzzy Real-valued Triple Sequences, COMPUSOFT, An international journal of advanced computer technology, Vol. 5, Issue 8.

S. Saha, B. Nathand S. Roy, 2016, Some New Classes of Statistically Convergent and Cesáro Summable Fuzzy Real-valued Triple Sequences, Science PG (Mathematics and Computer Science), Vol. 1, Issue 3.

M. Nath, B. Nathand S. Roy, 2016, Some New Classes of Statistically Convergent and Cesáro Summable Fuzzy Real-valued Triple Sequences, MANTECH PUBLICATIONS, Journal of Computational Mathematics and Applied Mathematics, Vol. 1, Issue 2.

S. Saha and S. Roy, 2016, Lacunary p -Absolutely Summable Fuzzy Real-valued Triple Sequence Space, International Journal of Advanced Information Science and Technology (IJAIST), ISSN: 2319:2682, Vol. 55, Issue 55.

M. Nath, B. Nathand S. Roy, 2017, On Some New Classes of Ideal Convergent Triple Sequences of Fuzzy Numbers associated with Multiplier Sequences, Advances in Fuzzy Sets and Systems; ISSN: 0973:421X, Vol. 22, Issue. 1, pp. 1-23

Sangita Saha and Santanu Roy, 2017, Some new classes of Zweier I-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.

Sangita Saha and Santanu Roy, 2017, Some I-Convergent Triple Sequence Spaces of Fuzzy Numbers defined by Orlicz Function, International Journal of Control Theory and Applications (Scopous) ISSN: 0974:5572, Vol. 10, No. 19.

Prabhujit Mahapatra, Kedar Nath Das, Santanu Roy, October 2017, A modified competitive swarm optimizer for large scale optimization problems, Applied Soft Computing, ELSEVIER (SCIE/Scopous) Vol. 59(C), pp. 340-362.

S. Saha and S. Roy, October 2017, Classes of Multiplier Ideal Convergent Triple Sequence Spaces of Fuzzy Real Numbers defined by Orlicz Function, Kuwait Journal of science (SCIE/Scopous) (Accepted)

A. Raheem and Md. Maqbul, Oscillation Criteria for Impulsive Partial Fractional Differential Equations, Comput. Math. Appl. 73 (2017), no. 8, 1781 - 1788. (SCI)

b) National Journal(s): NIL

c) International Conference(s):

Sangita Saha and Santanu Roy, New classes of Statistically Convergent Difference Triple Sequence Spaces of Fuzzy Real Numbers, 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.

Sangita Saha and Santanu Roy, Some new classes of Statistically Pre-Cauchy Triple Sequences of Fuzzy Numbers Defined by Orlicz Function, 13th International Conference on Vibration Problems (ICOVP-2017) to be held jointly by IIT Guwahati, India and IşIK University, Istanbul Turkey, from 29th November - 2nd December, 2017 (Accepted).

Subrata Bera, S Bhattacharyya, 2017, Electrokinetic Flow in a Surface Corrugated Microchannel, The 3rd International Conference on Mathematics and Computing, Haldia Institute of Technology, West Bengal, India, January 17-21, 2017, Mathematics and Computing, pp: 278-289, Vol:655, CCIS: Springer (Book Series).

(d) National Conference(s): NIL

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
	NIL			

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

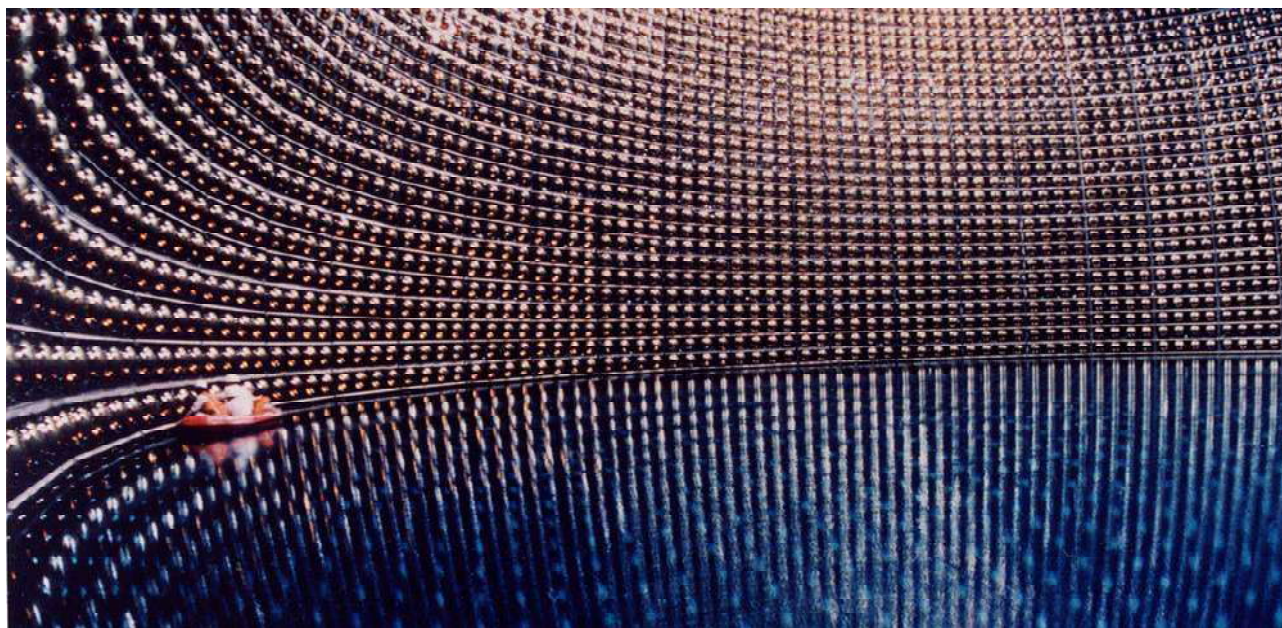
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Anupama Roy Chowdhury	Dr. Santanu Roy	A Study on Fuzzy Set Theory and Its Real Life Application
2	Satyabrata Gogoi	Dr. Santanu Roy	A study on Fuzzy Set Theory and Fuzzy real-valued multiple Sequence Spaces
3	Tahira Amin Laskar	Dr. Subrata Bera	A study of Eletro-osmotic Flow in a Rectangular Channel
4	Abhraroop Bhattacharjee	Dr. Subrata Bera	A Study on Electromagnetohydrodynamics in a Microchannel flow
5	Sanuwar Ahmed Choudhury	Dr. Md. Maqbul	Discretization method for solving partial differential equations

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Munmun Nath	Dr. Santanu Roy	A Study on Multiple Sequence Spaces of Fuzzy Real Numbers (Thesis submitted)

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. Subrat K. Barik
		Dr. Rupak Dutta
		Dr. Avijit Chowdhury
		Dr. S. R. Mohapatra
		Dr. R. G. Nair
		Dr. Subhasis Panda

Visiting Professor (If any): NIL

1.2 DISTINCTION ACHIEVED

- By Student :**
Prafulla Saha: NET-JRF, GATE, JEST qualified
Meenakshi Malakar: GATE qualified
- By Faculty Member:**
Dr. R. G. Nair

National Conference on Renewable Energy Technology and its Utilization for Rural Development held at North Eastern Hill University, Shillong, Meghalaya during 27 February-01 March 2017.

Delivered an invited talk on 'Role of Energy Band Positions of Semiconductors in New Generation Solar Cells' in the National Conference on Optics 17 held at National Institute of Calicut, Kerala during 9-11 January 2017.

Delivered an invited talk on 'Semiconductor Nanomaterials for Solar Energy Conversion' in the Second International Conference on Advanced Materials for Power Engineering (ICAMPE-2016) held at Mahatma Gandhi University, Kottayam, Kerala during 11-13 November 2016.

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. R. G. Nair	Research Conclave on Recent Innovations in Science and Engineering (RISE-2017)	TEQIP II	March 24-26, 2017
2.	Dr. A. Chowdhury	Artificial Limb Camp and Zonal Workshop	Bharat Vikas Parishad and Gyansagar, NIT Silchar	July 17, 2016 & Aug 21, 2016
3.	Dr. S. R. Mohapatra (Physics Coordinator)	DST INSPIRE internship camp for school student (Organised by Dr. S. K. Tripathy, ECE, NIT Silchar)	DST	5th - 9th July, 2016

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. R. G. Nair	Second International Conference on Advanced Materials for Power Engineering (ICAMPE-2016) 11-13 November 2016	MG University, Kerala
2.	Dr. R. G. Nair	A conference on light, OPTICS 17 9-11 Jan., 2017.	NIT Calicut
3.	Dr. R. G. Nair	National Conference on "Renewable Energy Technology and its Utilization for Rural Development" February 27 to March 01, 2017	NEHU Shillong
4.	Dr. S.K. Barik	One Week workshop on Computational Mechanics & Modelling from 12/11/16 to 16/11/16	NIT Silchar
5.	-Do-	One Week workshop on Intelligent Sensing, Instrumentation and Control from 30/1/17 to 3/2/2017.	-Do-
6.	Dr. S. R. Mohapatra	CRS User Workshop, 17-18 October, 2016	UGC DAE CSR Mumbai Centre (BARC)
7.	Dr. S. R. Mohapatra	15th Asian Conference on Solid State Ionics during November 27-30, 2016	IIT Patna
8.	Dr. Rupak Dutta	9 th International Workshop on the CKM Unitarity Triangle (CKM2016), November 28 to December 2, 2016	TIFR Mumbai
9.	Dr. Asim Roy	International Symposium for Research Scholars 2016 (ISRS-2016) December 21-23, 2016	IIT Madras

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations): Experimental & theoretical Condensed matter physics, Theoretical high energy physics, Mathematical Physics, Solar Photocatalysis and Photovoltaics

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

Completed	Submitted	Ongoing
02	NIL	05

- c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
	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 of Ag/Au ion implanted Titania/ZnO thin film and investigation of their Utility as Photoanode for Dye Sensitized Solar Cell	Dr. R. G. Nair	IUAC-UGC	6.03	2015 - 2018
2.	Fabrication and Testing of Tandem Layered Quantum Dot Sensitized Solar Cell with Elevated Absorption	Dr. R. G Nair (PI) Dr. A. Chowdhury (Co-PI)	DST-SERB	25.13	2016 - 2019
3.	Development of Physics Research Laboratories		DST-FIST	130.00	2016 - 2020

- e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name/Sponsoring Agency	No. of Paper/Project	Year
1.	Dr. S. K. Barik	Journal of Alloys and Compounds	01	2016
2.	Dr. S. R. Mohapatra	Ionics	01	2017
3.	Dr. R. G. Nair	DST-SERB	03	2016
4.	Dr. Asim Roy	Scientific Reports, Nature, Journal of Alloys and Compounds	02	2016

- f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. R. G. Nair	Second International Conference on Advanced Materials for Power Engineering (ICAMPE-2016) , 11-13 November 2016
2.	Dr. R. G. Nair	A conference on light, OPTICS 17, 9-11 Jan., 2017.
3.	Dr. R. G. Nair	National Conference on "Renewable Energy Technology and its Utilization for Rural Development", February 27 to March 01, 2017

1.5 PUBLICATION

- a) International Journal(s):

- S. Nath, S. K. Barik, R. N. P. Choudhary, 2016, "Electrical and ferroelectric characteristics of $(\text{LaLi})_{1/2}(\text{Fe}_{2/3}\text{Mo}_{1/3})\text{O}_3$ ", Journal of Materials Science: Materials in Electronics, 27, Springer

2. S. Ahmed, S. K. Barik, 2016, Preparation of novel $(\text{Sb}_{1/2}\text{Na}_{1/2})(\text{Fe}_{2/3}\text{W}_{1/3})\text{O}_3$ compound by solid state reaction technique and their multiferroic property, *Journal of Materials Science: Materials in Electronics*, 27, Springer.
3. S. Ahmed, S. K. Barik, 2017, Studies of thermal, impedance and magnetic properties of $(\text{Bi}_{1/2}\text{Na}_{1/2})(\text{Fe}_{2/3}\text{W}_{1/3})\text{O}_3$ multiferroics, *Journal of Electronic Materials*, 46 (2), Springer.
4. S. Nath, S. K. Barik, 2017, R. N. P. Choudhary, Sujit K. Barik, "Structural, dielectric and impedance characteristics of $(\text{Sm}_{0.5}\text{Li}_{0.5})(\text{Fe}_{0.5}\text{V}_{0.5})\text{O}_3$ multiferroics", *Physics Letters A*, 381, Elsevier.
5. Samrat Paul, Bijumani Rajbongshi, Birinchi Bora, Ranjith G Nair and S K Samdarshi, 2017 Organic photovoltaic cells using green-MWCNTs, *New Carbon Materials*, 32 (1), 27-34 Elsevier.
6. Ranjith G. Nair, Abinash Das, Samrat Paul, Bijumani Rajbongshi, S. K. Samdarshi, 2016 MWCNT decorated V-doped titania: An efficient visible active photocatalyst, *Journal of Alloys and Compounds*, 695, 3511-3516 Elsevier.
7. Ranjith G. Nair, Paranjyothi Baradwaj, Sanjoy Kumar Samdarshi, 2016 Design improvement and performance evaluation of solar photocatalytic reactor for industrial effluent treatment, *Ecotoxicology and environmental safety*, 134 (2) 301-307 Elsevier.
8. M K. Sanyal; B. Biswas, A. Chowdhury, B. Mallik, 2016, Spectroscopic Studies on the Effect of Some Ferrocene Derivatives in the Formation of Silver Nanoparticles, *Journal of Nanoscience and Nanotechnology*, 16(6) 6068-6077(10). ASP publishers.
9. Snigdha Bhattacharjee, Pranab Kumar Sarkar, Nandini Roy, Asim Roy, 2016, Improvement of Reliability of Polymer Nanocomposite Based Transparent Memory Device by Oxygen Vacancy Rich ZnO Nanorods, *Microelectronics Engineering*, 164, 53-58
10. Snigdha Bhattacharjee, Pranab Kumar Sarkar, Asim Roy, 2016, Polyvinyl-alcohol based devices with highly conductive, optically active boron-doped ZnO nanoparticles for efficient resistive-switching at ultralow operating voltage, *Superlattices and Microstructures*, 100, 1057-1063.
11. Pranab Kumar Sarkar, Manoj Prajapat, Arabinda Barman, Snigdha Bhattacharjee, Asim Roy, 2016, Multilevel resistance state of Cu/La2O3/Pt forming-free switching devices, *Journal of Materials Science*, 51, 4411-4418.

b) National Journal(s): NIL

c) International Conference(s): NIL

d) National Conference(s): NIL

Abinash Das, Rubi Barman and Ranjith G. Nair, Role of pH on phase transformation and Photocatalytic Performance of Titania, National Conference on Renewable Energy Technology Utilization for Rural Development and Trade Show, Organized at: North Eastern Hill University, Shillong, Meghalaya, 27th Feb. to 1st March, 2017.

e) Book/Chapter:

Ranjith G. Nair, Abinash Das, Karim Bouchmulla, Bruno Boury, Influence of V Doping on Physicochemical Properties of Mesoporous Titania with Potential Application in Solar Photocatalysis, Apple Academic Press, USA (2017).

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

1. Programmable spin coating unit (Apex Ins., Model: NXG-P2)

1.8 PATENT

Sl. No.	Details	Year
1.	Pankaj Kushuwa, Abhijit Gope, Ranjith G. Nair, N. V. Deshpande, An efficient	2016

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
	NIL			

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

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	Ruksana Begum Choudhury	Dr. A. Chowdhury	Structural, optical and electrical properties of copper phthalocyanine thin films
2.	Meenakshi Malakar	Dr. A. Chowdhury Dr. S. R. Mohapatra	Synthesis and characterization of ZnO nanoparticles and its use in resistive switching devices
3.	Rajdeep Das	Dr. A. Chowdhury	Hysteresis in current-voltage characteristics of CdS nanorods embedded in polymer matrix
4.	Rubi Barman	Dr. R. G. Nair	Physico-Chemical Characterization of Vanadium Doped Mesoporous Titania for Solar Energy Applications
5.	Jintu Pathak	Dr. R. G. Nair	Synthesis and Characterization of ZnO Nano Photocatalyst for Solar Energy Application
6.	Prasenjit Saha	Dr. S. R. Mohapatra	Insight into Impedance Spectroscopy through equivalent circuit Models
7.	Arunima Deka	Dr. S. R. Mohapatra	Observation of Meyer-Neldel rule due to thermally activated ion transport process in ionic conductors
8.	Prafulla Saha	Dr. Rupak Dutta	Perturbative approach to tri-bimaximal mixing matrix.
9.	Udit N. Kalita	Dr. Rupak Dutta	Possible modification to bimaximal mixing matrix.
10.	Nipom Sekhar Das	Dr. S. Panda	Vibration in Tibetan singing bowl and wineglass acoustics
11.	Manisha Bhadra	Dr. S. Panda	Dynamics of Double well potential
12.	Ujjal Das	Dr. Asim Roy	Resistive Switching and Multilevel Capability of MoS ₂ Based RRAM Device
13.	Rumki Nath	Dr. Asim Roy	Fabrication and Investigation of g-MoS ₂ /Si Device
14.	Kan Deka	Dr. R. G. Nair (Co-Supervisor)	CFD Modeling of Immobilized Photocatalytic Reactor for Waste Water Treatment

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Mr. Suhel Ahmed	Dr. S.K. Barik	Synthesis and Characterization of Some Alkali Metals Modified Bismuth and Antimony Ferrites
2.	Mr. Pranab Kumar Sarkar	Dr. Asim Roy	Fabrication and Characterization of Binary Metal Oxide Resistive Random Access Memory
3.	Mrs. Madhuchhanda Nath	Dr. Avijit Chowdhury & Dr. Asim Roy	Synthesis and Characterization of II-VI Semiconductor Nanostructures for Optoelectronic Applications

1. Name of the Department :-

Chemistry



1.1 ACADEMIC STAFF

HEAD : Pranjit Barman

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	NIL	Dr Siddhartha Sankar Dhar
		Dr. M. A. Zaman
		Dr. P. Barman
		Dr. R. Rano
		Dr B. H. Shambharkar
		Dr. L. Rokhum
		Dr. N. S. Moyon

Visiting Professor (If any): NIL

1.2 DISTINCTION ACHIEVED

- By Student: NIL
- 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
	NIL			

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
	NIL		

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations) : Synthesis, characterization of and application of nanostructured catalysts and their photochemical and chemical applications
- b) Ph.D. Produced/Ongoing (in number) : 6

Completed	Submitted	Ongoing
01	00	05

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
	NIL	

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	Synthesis of Indenoisoquinolinedione	Dr. L. Rokhum	SERB	16.5	2014-17
2	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	Dr. L. Rokhum	SERB	32.1	2014-18
3	Metal complexes of new Chiral Schiff bases: Design, structure, elucidation reactivity and synthetic applications	Dr. P. Barman	DST-SERB	35.0	2016-18

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1	Dr S S Dhar	Applied Catalysis A Journal of Photochemistry and Photobiology B: Biology	01 01	2017 2017
2	Dr. M.A.Zaman	Chemical Engineering Journal RSC Advances	01 01	2016 2016
3	Dr. L. Rokhum	Royal Society Open Science Organic Letters Current Applied Polymer Science	01 each	2017
4	Dr. P. Barman	Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry Chemistry of Heterocyclic Compounds Research on Chemical Intermediates (RINT) The Journal of Organic Chemistry (JOC) Journal of Coordination Chemistry	01 01 01 01 01	2016 2016 2016 2016 2016

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
	NIL	

1.5 PUBLICATION

a) International Journal(s):

Baban H Shambharkar, Arpita Paul Chowdhury, 2016, Ethylene glycol mediated synthesis of Ag_8SnS_6 nanoparticles and their exploitation in the degradation of eosin yellow and brilliant green. *RSC Adv.*, 6, 10513-10519

Arpita Paul Chowdhury, Baban H. Shambharkar, Sachin G. Ghugal, Suresh S. Umare, Ashok G. Shende, Ethylene glycol mediated synthesis of SnS quantum dots and their application towards degradation of eosin yellow and brilliant green dyes under solar irradiation, 2016 *RSC Adv.*, 6, 108290

Bappi Paul, Sethumathavan Vadivel, Siddhartha Sankar Dhar, Shyama Debbarma, M. Kumaravel, One-pot green synthesis of zinc oxide nano rice and its application as sonocatalyst for degradation of organic dye and synthesis of 2-benzimidazole derivatives, *Journal of Physics and Chemistry of Solids*, 2017, 104, 152-159.

Bishal Bhuyan, Bappi Paul, Siddhartha Sankar Dhar, Sethumathavan Vadivel, Facile hydrothermal synthesis of ultrasmall $\text{W}_{18}\text{O}_{49}$ nanoparticles and studies of their photocatalytic activity towards degradation of methylene blue, *Materials Chemistry and Physics*, 2017, 188, 1-7.

Bishal Bhuyan, Bappi Paul, S Vadivel and Siddhartha S Dhar, Preparation and characterization of WO_3 bonded imidazolium sulfonic acid chloride as novel and green ionic liquid catalyst for the synthesis of adipic acid, *RSC Advances*, 2016, 6, 99044-99052.

Bappi Paul, Bishal Bhuyan, Debraj D Purkayastha, S. Vadivel, Siddhartha Sankar Dhar, One-pot green synthesis of gold nanoparticles and studies of their anticoagulative and photocatalytic activities, *Materials Letters*, 2016, 168, 143-147.

Bappi Paul, S Vadivel, Siddhartha Sankar Dhar, $\alpha\text{-Fe}_2\text{O}_3$ immobilized benzimidazolium tribromide as novel magnetically retrievable catalyst for one-pot synthesis of highly functionalized piperidines, *Chinese Chemical Letters*, 2016, 27, 1725-1730.

Bappi Paul, Debraj Dhar Purkayastha, Siddhartha Sankar Dhar, One-pot hydrothermal synthesis and characterization of CoFe_2O_4 nanoparticles and its application as magnetically recoverable catalyst in oxidation of alcohols by periodic acid, *Materials Chemistry and Physics*, 2016, 181, 99-105.

Bappi Paul, Debraj Dhar Purkayastha, Siddhartha Sankar Dhar, Subhankar Das, Sudipta Haldar, Facile one-pot strategy to prepare $\text{Ag}/\text{Fe}_2\text{O}_3$ decorated reduced graphene oxide nanocomposite and its catalytic application in chemoselective reduction of nitroarenes, *Journal of Alloys and Compounds*, 2016, 681, 316-323.

Bishal Bhuyan, Bappi Paul and Siddhartha Sankar Dhar, CTAB promoted size-tuning synthesis of rod-like V_2O_5 nanoparticles and their catalytic studies in oxidative esterification of aldehydes, *Nanoscience and Nanotechnology Letters*, 2016, 8, 173-180.

Bappi Paul, Debraj D Purkayastha and Siddhartha Sankar Dhar, Size-controlled synthesis of NiFe_2O_4 nanospheres via a surfactant-assisted hydrothermal route and their catalytic properties in oxidation of alcohols by periodic acid, *Applied Surface Science*, 2016, 370, 469-475.

Bishal Bhuyan, Bappi Paul, Debraj D Purkayastha and Siddhartha Sankar Dhar, Facile synthesis and characterization of zinc oxide nanoparticles and studies of their catalytic activity towards ultrasound-assisted degradation of metronidazole, *Materials Letters*, 2016, 168, 158-162.

Morphological dissimilarities of ZnO nanoparticles and its effect on thermo-physical behavior of epoxy composites, Tankeswar Prasad, Sudipta Haldar, M. S. Goyat and Siddhartha S Dhar, *Polymer composites*, 2016, doi: 10.1002/pc.23914.

Bappi Paul, Bishal Bhuyan, Debraj Dhar Purkayastha, Siddhartha Sankar Dhar, Photocatalytic and antibacterial activity of gold and silver nanoparticles synthesized using biomass of *Parkia roxburghii* leaf, *Journal of Photochemistry and Photobiology B: Biology*, 2016, 154, 1-7.

Archita Bhattacharjee, M. Ahmaruzzaman, A new facile strategy for the synthesis of 1-dimensional CuO nanostructures and their reduction performance, *Materials Letters*, 2016, 171-174.

Th. Babita Devi, S. Begum, M. Ahmaruzzaman, Surfactant mediated facile fabrication of SnO₂ quantum dots and their degradation behavior of humic acid, 2016, 123-1216.

Shamima Begum, Th Babita Devi, M. Ahmaruzzaman, L-lysine monohydrate mediated facile and environment friendly synthesis of SnO₂ nanoparticles and their prospective applications as a catalyst for the reduction and photodegradation of aromatic compounds, *Journal of Environmental Chemical Engineering*, 2016, 2976-2989.

Th. Babita Devi, S. Begum, M. Ahmaruzzaman, Photo-catalytic activity of Plasmonic Ag@AgCl nanoparticles (synthesized via a green route) for the effective degradation of Victoria Blue B from aqueous phase, *Journal of Photochemistry and Photobiology: Part B Biology*, 2016, 260-270.

Archita Bhattacharjee, Th Babita Devi, Jayashree Nath, M. Ahmaruzzaman, Photodegradation of methyl violet 6B and methylene blue using tin-oxide nanoparticles (synthesized via a green route), *Journal of Photochemistry and Photobiology A: Chemistry*, 2016, 116-124. Tanur Sinha, M. Ahmaruzzaman, Photocatalytic decomposition behavior and reaction pathways of organic compounds using Cu nanoparticles synthesized via a green route, *Photochemical & Photobiological Sciences*, 2016, 127

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, Science Citation Index Expanded (SCIE), Impact factor 6.798)

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, (accepted manuscript) New Journal from Bentham Science Publication.

Diparjun Das, Gunindra Pathak, Lalthazuala Rokhum. Polymer supported DMAP: an easily recyclable organocatalyst for highly atom-economical Henry reaction under solvent-free conditions. *RSC Adv.*, 2016, 6, 104154-104163. (SCIE, Impact factor 3.289)

Gunindra Pathak, Diparjun Das and Lalthazuala Rokhum. A microwave-assisted highly practical chemoselective esterification and amidation of carboxylic acids. *RSC Adv.*, 2016, 6, 93729-93740. (SCIE, Impact factor 3.289)

Diparjun Das, Jasha Momo H Anal, Lalthazuala Rokhum. A mild and highly chemoselective iodination of alcohol using polymer supported DMAP. *J. Chem. Sci.* 2016, 128 (11), 1695-1701 (SCI, Impact Factor 1.085).

A Sulfonylation Reaction: Direct Synthesis of 2-Sulfonylindoles from Sulfonyl Hydrazides and Indoles, R. Rahaman, P. Barman, *Synlett*, 2017, 28 (06), 684-690.

Towards the Iodine Catalyzed Regioselective Sulfonylation of Unsymmetrical Ketones, N. Devi, R. Rahaman, K. Sarma, T. Khan, P. Barman, *Eur. J. Org. Chem.* 2017 (11), 1520-1525.

Synthesis of a novel six membered CNS palladacycle; TD-DFT study and catalytic activity towards microwave-assisted selective oxidation of terminal olefin to aldehydes, K. Sarma, N. Devi, D. Sutradhar, B. Sarma, A. K. Chandra, P. Barman, *Journal of Organometallic Chemistry*, 2016, 822, 20-28.

Benzyltrimethylammoniumfluoride Hydrate: An Efficient Catalyst for One Pot Synthesis of Hantzsch 1, 4 Dihydropyridines and Their Aromatization, A Khaskel, P Barman, *Heteroatom Chemistry*, 2016, 27 (2), 114-120.

Regioselective Mono and Bis Sulfonylation of Active Methylene Compounds, N Devi, R Rahaman, K. Sarma, P. Barman, *European Journal of Organic Chemistry*, 2016 (2), 384-388.

Microwave-assisted regioselective sulfonylation of indoles under solvent-and metal-free conditions, R. Rahaman, N. Devi, J. R. Bhagawati, P. Barman, *RSC Advances*, 2016, 6 (23), 18929-18935

Microwave-assisted synthesis of 3-sulfonylindoles by sulfonyl hydrazides using organic ionic base-Brønsted acid, R. Rahaman, N. Devi, K. Sarma, P. Barman, *RSC Advances* 6 (13), 10873-10879.

b) **National Journal(s):** NIL

c) **International Conference(s):** NIL

d) **National Conference(s):** NIL

e) **Book/Chapter:** NIL

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
	NIL			

1.10 M.Tech. / M.Sc. (Thesis/Project) : January - April 2017

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1	Manideepa Paul 14-48-101	Dr S S Dhar	Graphene oxide immobilized ionic liquid tribromide: An efficient catalyst for one-pot three-component synthesis of dihydrochromeno[4,3-b]pyrazolo[4,3-e]pyridine-6(7H)-ones
2	Rajashree Newar 14-48-109	Dr S S Dhar	Facile synthesis of α -Fe ₂ O ₃ , Au/ α -Fe ₂ O ₃ and Pd/ α -Fe ₂ O ₃ NPs and investigation of catalytic efficiency of α -Fe ₂ O ₃ and Au/ α -Fe ₂ O ₃ in benzylolation of aromatic substrates
3	Niharika Keot 14-48-114	Dr S S Dhar	Synthesis of novel phosphoniumtribromides and its application as catalyst for one-pot synthesis of highly functionalized piperidines
4	Sonmani Das 14-4-8-111	Dr. B. H. Shambharkar	Synthesis and characterization of Ag ₈ SnS ₆ and their exploitation in the degradation of eosin yellow activity
5	Nandita Changmai 14-4-8-103	Dr. B. H. Shambharkar	Synthesis and characterization of Ag doped CdCO ₃ and investigation of their photocatalytic activity
6	Ms. Joly Gogoi	Dr. M.A.Zaman	Facile synthesis of SnO ₂ nanoparticles and their application as a catalyst for the degradation and reduction of organic compounds
7	Ms. Soumi Dutta Gupta	Dr. M.A.Zaman	Bioinspired facile and green synthesis of Silver and Copper nanoparticles for enhanced reduction of aromatic nitro-compounds
8	Ms. Anusuya Boruah	Dr. M.A.Zaman	Facile green synthesis of iron nanoparticles and iron loaded activated carbon nanocomposite using Ocimum Tenuiflorum (tulsi) extract and their photocatalytic activities
9	Ms. Priyanka Dey	Dr. M.A.Zaman	Synthesis of Silver nanoparticles and Silver loaded activated carbon nanocomposite for wastewater treatment and its antimicrobial assay
10	Ms. Minaskhi Dutta	Dr. M.A.Zaman	Synthesis and characterisation of SnO ₂ loaded activated carbon nanocomposite and its applications towards removal of Fe(III), As(III) and fluoride from aqueous phase
11	Mr. Jitupon Gogoi	Dr. N. S. Moyon	Effect of solvent on the fluorescence properties of 2,4 (1H,3H)-quinazolinedione

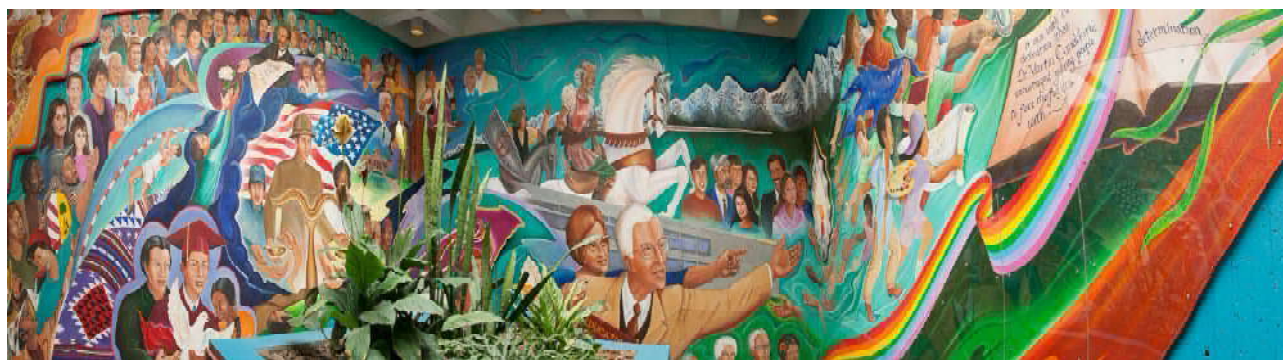
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
12	Mr. Sandip Rabidas	Dr. L. Rokhum	A magnetically retrievable KI/Fe ₃ O ₄ Nanocatalyst for Atom-economical Henry reaction under Solvent free conditions
13	Ms. Juri Kalita	Dr. L. Rokhum	Nano-Fe ₃ O ₄ @silica sulfuric acid: A magnetically retrievable heterogeneous catalyst for protection and deprotection of alcohols under solvent-free conditions
14	Bhaskar Mahanta	Dr. L. Rokhum	Bio-inspired synthesis of silver nanoparticles and studies of their photocatalytic activities.
15	Tuhina Khan	Dr. P. Barman	Regioselective sulfenylation of unsymmetrical ketones by using Electrophilic and Nucleophilic Sulfur Sources as Sulfenylating Agents.
16	Pranjal Saikia	Dr. P. Barman	Studies on the Synthesis and Characterization of Well-Dispersed Palladium Nanoparticles and Ni Schiff Base Complex.

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Ms. Tanur Sinha	Dr. M.A.Zaman	Sustainable fabrication of various noble metallic and bimetallic nano structured materials and their efficacy for the remediation of industrially emerging pollutants- A green approach
2	Ms. Archita Bhattacharjee	Dr. M.A.Zaman	Facile Synthetic Strategies for the Development of Metal-oxide Nanostructures and their Applications for Photocatalytic Degradation and Reduction of Hazardous Organic Compounds
3	Mr. Juned Khanam Ahmed	Dr. M.A.Zaman	Agro-based Waste and Nano Sorbents: Fabrication and Characterization for the Sequestration of Hazardous Dyes and N-heterocycles from Aqueous Solution, and Refractory Sulfur Compounds from Diesel.
4	Kuladip Sarma	Dr. P. 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 : Prof. Gurudas Das

Name of Faculty members:

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

Visiting Professor (If any): NIL

1.2 DISTINCTION ACHIEVED

a) By Student: NIL

b) By Faculty Member:

Avishek Ray : Awarded the Associateship of the UGC Inter-University Centre for Humanities & Social Sciences, at Indian Institute of Advanced Study (IIAS), Shimla, 2017. The Associateship involves staying 1 month each in 3 consecutive years (2018-20) at IIAS.

Avishek Ray: Delivered invited talks and public lectures at IIT Roorkee, Ambedkar University (New Delhi), Mahidol University, (Thailand), Centre for Policy Research (New Delhi), Tribhuban University (Nepal), School of Oriental & African Studies (SOAS, London), Manchester University (UK), St.

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	Avishek Ray	GIAN Course: Ideologies & Nationalism in South Asia	MHRD	6 days
2	Avishek Ray	GIAN Course: Conquest of Knowledge: The British in India	MHRD	7 days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1	Dibyakusum Ray	<i>De-centring English Studies: Studying Literature in the Global South. International Conference.</i> Jan 19-21, 2017.	Utkal University, Bhubaneswar
2	Dibyakusum Ray	<i>Talking Films and More: a Workshop on Film Criticism and Criticism.</i> June 2-9, 2016	Dept. of Mass Communication. Assam University, Silchar
3	Gurudas Das	Sustainable Development in North East India: Stakeholders' Consultation. July 12-13, 2016	United Nations Development Programme (UNDP), Vivanta Hotel, Guwahati
4	Gurudas Das	Act East from India's North-East: How to Reap the Dividend. 9 August, 2016.	ASEAN Study Centre, ICSSR-NERC, Shillong
5	Gurudas Das	<i>A Social Mapping of Infrastructure, Logistics and India's Look East Policy. August 31 and September 1, 2016</i>	MCRG, Kolkata
5	Gurudas Das	India-Myanmar-Thailand Trilateral Relationship: Way Towards A Stronger ASEAN-India Partnership. September 22-23, 2016	ASEAN Study Centre, Chulalongkorn University, Bangkok, Thailand
6	Gurudas Das	Economic Dependence of Northeast India and its Bordering Nations. November 8-9, 2016	Department of Economics, Assam University
7	Gurudas Das	On Borders and Borderlands: Negotiating "Margins" under Globalization. Feb 7-8, 2017	Institute of Development Studies, Kolkata
8	Gurudas Das	Digitalization and Rural Development in North East India: Issues, Challenges and Way Forward. Feb 13-15, 2017	Department of Social Work and Centre for Bangladesh Studies, Assam University, Silchar
9	Gurudas Das	Integrating BIMSTEC 2017: Interplay of Overlapping "Sub-Regional Forums" in South and South-East Asia". March 23, 2017	Indian Chamber of Commerce (ICC), Agartala, Tripura
10	Gurudas Das	India-Japan Cooperation in North Eastern Region. 29-30 March, 2017	ICRIER and India Foundation, Kaziranga, Assam
11	Avishek Ray	<i>National Seminar on Anthropological Histories and Tribal Worlds in India, 27-29 March 2017</i>	Indian Institute of Advanced Study (IIAS), Shimla
12	Avishek Ray	<i>International Conference on Thinking Literature across Continents, 25-27 March 2017</i>	Dept. of English, North Bengal University
13	Avishek Ray	<i>International Seminar on Indian Art Heritage in a Changing World, 27 Feb-1 Mar 2017</i>	Banaras Hindu University
14	Avishek Ray	<i>Dynamic Borderlands: Livelihoods, Communities and Flows, 12-14 December 2016</i>	5th Conference of the Asian Borderlands Research Network, Kathmandu, Nepal
15	Avishek Ray	<i>Comics Forum 2016, 3-4 November 2016</i>	Leeds, United Kingdom

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
16	Avishek Ray	<i>National Conference on Interdisciplinarity</i> , 22-23 July 2016	NIT Meghalaya, Shillong
17	Avishek Ray	<i>National Seminar on Re-interpretations of the Past: The Discourse of Cultural Identity in South Asia</i> , 17-18 March 2016	Dept. of English, North Eastern Hill University (NEHU), Shillong

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations) :
b) Ph.D. Produced/Ongoing (in number) :

Completed	Submitted	Ongoing
	02	13

- c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
	NIL	

- d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1	The Third Generation's Inheritance of the Memory of Partition (1947): A Comparative Study across Spatial Axes	Avishek Ray	UGC	2	12 months

- e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
	NIL			

- f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1	Gurudas Das	Chaired a session in the seminar on "A Social Mapping of Infrastructure, Logistics and India's Look East Policy" held during August 31 and September 1, 2016. Organized by MCRG Kolkata
2	Gurudas Das	Chaired a session in the seminar on "Economic Dependence of Northeast India and its Bordering Nations" held during November 8-9, 2016. Organized by the Department of Economics, Assam University, Silchar
3	Gurudas das	Chaired a session in the seminar on "Digitalization and Rural Development in North East India: Issues, Challenges and Way Forward" held during Feb 13-15, 2017. Organized by the Department of Social Work and the Centre for Bangladesh Studies, Assam University, Silchar
4	Avishek Ray	Chaired a session on 'Literature & Interdisciplinarity', at the <i>National Conference on Interdisciplinarity</i> , NIT Meghalaya, Shillong, 22-23 July 2016

1.5 PUBLICATION

- a) International Journal(s):

Dibyakusum Ray, 2017, "The True-Weird and the Dreadful Large: Horror Literature Post-Millennia," *Palgrave*

Amlan Baishya and Dibyakusum Ray, 2017, "The Liminal in a Diptych: A Study of Roots and the Ruminant in Bob Dylan and Kabir," *Rupkatha Journal of Interdisciplinary Studies in Humanities*, Vol. IX, No. 1, Aesthetics MS, Scopus, <http://rupkatha.com/v9n1s05/>

Dibyakusum Ray, 2017, "Hindi, Hindu, Horror: Politics of the Bollywood Horror Cinema," *The Economic and Political Weekly*, Vol 52, Issue 7, Scopus, <http://www.epw.in/journal/2017/7/book-reviews/hindi-hindu-horror.html>

Dibyakusum Ray, 2016, "The Mute, the Stoic and the Rebel: Animals in the Work of Mikhail Bulgakov and Nabarun Bhattacharya," *Rupkatha Journal of Interdisciplinary Studies in Humanities*, Vol. VIII, No. 3, Aesthetics MS, Scopus, <http://rupkatha.com/mute-stoic-rebel-animals-works-mikhail-bulgakov-nabarun-bhattacharya/>

Gurudas Das (with Tanuj Mathur and Ujjwal Kanti Paul), 2016, "Linking "satisfaction" to "intention-to-sell" and "sales performance" of individual agents in the health insurance market: Empirical evidence from India", in the *Journal of Global Scholars of Marketing Science*, Vol 26, Issue 2, PP 109-128 <http://www.tandfonline.com/loi/rgam20>

Gurudas Das (with Ujjwal K. Paul, Tanuj Mathur & Avijit Debnath), 2016, "Economic efficiency and its effect on cost: a case study of organic pineapple in India's northeast", in *Organic Agriculture*, Vol 7, Springer, Scopus. <https://link.springer.com/content/pdf/10.1007/s13165-016-0156-4.pdf>

Gurudas Das (Tanuj Mathur & Ujjwal Kanti Paul), 2016, "Convenience, Satisfaction, and Post-Purchase Behavior in India's Health Insurance Market", *Journal of Global Marketing*, Vol 29, No 4, <http://www.tandfonline.com/loi/wglo20>, , Scopus; Thomson Reuters.

Gurudas Das & Avishek Ray (with Ujjwal Kanti Paul and Tanuj Mathur, 2017, "Is the Organic System Economically Viable? The Case of Pineapple in India's Northeast", *International Journal of Fruit Science*, Vol 17, No 3, pp. 269-79. Scopus

Gurudas Das (with Ujjwal Kanti Paul, Avijit Debnath and Tanuj Mathur), 2017, "Market Integration and Price Leadership in India's Onion Market", *Review of Market Integration*, Vol 8, No 1&2, SAGE Publications <http://rmi.sagepub.com>

Avishek Ray, '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 (2017), pp. 51-60

Avishek Ray, 'The Aesthetic Gaze: Siting Nineteenth Century Indian Travel Writing', in *The Rupkatha Journal on Interdisciplinary Studies in Humanities*, Vol. 8: 4 (2016), pp. 122-29

Avishek Ray, 'The Trajectory of a Viral Image: On the Afterlife of the Alan Kurdi Image', in *Sinestesieonline: Il Parlaggio* (online), Issue: 16/ Year: 5 (2016) | <http://goo.gl/ZbVJ1m>

Avishek Ray, 'Human Values and the Legal Articulation of 'Vagabond'', in *Journal of Human Values* (SAGE), Vol. 22: 3 (2016), pp. 194-201

b) National Journal(s):

Avishek Ray, '(Neo-)Hinduism and Reception of the 'Other': Examining the Discursive Rhetoric of Tolerance'. *Journal of History and Culture*, Vol. 3 (2016), pp. 56-65

c) International Conference(s):

Dibyakusum Ray, "Harbart and K: a Discourse of Hybridity in New English Studies," *De-centring English Studies: Studying Literature in the Global South*, Utkal University, Bhubaneswar, 19-21 January, 2017.

Gurudas Das, "Northeastern Region: India's Continental Pivot to ASEAN" , *India-Myanmar-Thailand Trilateral Relationship: Way Towards A Stronger ASEAN-India Partnership*, ASEAN Study Centre, Chulalongkorn University, Bangkok, Thailand, September 22-23, 2016

Gurudas Das, "The Strategy of Regional/Sub-Regional Cooperation for the Development of Frontier Regions: The Case of India's North East", *Economic Dependence of Northeast India and its Bordering Nations*, Department of Economics, Assam University, November 8-9, 2016.

Gurudas Das, ""They"—live in/ guard—"Our" border: Borderland vs Homeland perspectives in India's North East", *On Borders and Borderlands: Negotiating "Margins" under Globalization*, Institute of Development Studies Kolkata, Kolkata, Feb 7-8, 2017.

Gurudas Das, "Perspective of North East India: Emerging opportunities from economic cooperation of South and South East Asia", *Integrating BIMSTEC 2017: Interplay of Overlapping "Sub-Regional Forums" in South and South-East Asia*, Indian Chamber of Commerce (ICC), Agartala, March 23, 2017.

Gurudas Das, “Cross-border Cooperation for Development of India’s North East”, *India-Japan Cooperation in North Eastern Region*, ICRIER and India Foundation , 29-30 March, 2017.

d) National Conference(s):

Dibyakusum Ray, “...Her Eyes in Extreme Close-ups...: The Watcher, the Watched and a Poetry of Anxiety,” Talking Films and More: a Workshop on Film Criticism and Criticism. Dept. of Mass Communication, Assam University, Silchar, June 2-9, 2016.

e) Book/Chapter:

Gurudas Das (with Subodh Chandra Das and Ujjwal Paul), 2016, “Look East Policy: Economic Engagements with ASEAN and East Asian Countries”, in Gurudas Das and C J Thomas, (eds), *Look East to Act East Policy: Implications for India’s Northeast*, Routledge, London.

Gurudas Das, 2016, “India’s Myanmar Policy: Implications for India’s Northeast”, in Gurudas Das and C J Thomas, (eds), *Look East to Act East Policy: Implications for India’s Northeast*, Routledge, London.

Gurudas Das (with Ujjwal Paul and Tanuj Mathur), 2016, “Making “Act East Policy” to work for the development of Northeastern Region of India”, in Gurudas Das and C J Thomas, (eds), *Look East to Act East Policy: Implications for India’s Northeast*, Routledge, London.

Gurudas Das (with Ujjwal Kanti Paul), 2017, “Reaping Dividend from India’s Act East Policy: What North-East can Offer?”, in C Joshua Thomas and K Sarda, (eds), *Act East and India’s North-East*, Pentagon Press, New Delhi.

Avishek Ray, [Encyclopedia Entry] ‘Hinduism and Families’, Shehan, C.L. (ed.), *The Encyclopedia of Family Studies*, Malden: Wiley-Blackwell, 2016, pp. 1049-53

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/ Programme	Place	Date
1	Avishek Ray	Charles Wallace India Trust Fellowship	Institute of Advanced Studies in the Humanities (IASH), Edinburgh University, Scotland	Sep-Dec 2016
2	Gurudas Das	India-Myanmar-Thailand Trilateral Relationship: Way Towards A Stronger ASEAN-India Partnership	ASEAN Study Centre, Chulalongkorn University, Bangkok, Thailand	22-23 September, 2016

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

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
	NIL		

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
	NIL		

1. Name of the Department :-

Management Studies



1.1 ACADEMIC STAFF

HEAD : Dr. Ashim Kumar Das

Name of Faculty members:

Professor	Associate Professor	Assistant Professor
NIL	NIL	Dr. Ashim Kr. Das
		Dr. Soma Panja

Visiting Professor (If any):
1. Dr. Rajat Bashya , Retired Professor, IIT- Delhi
2. Dr. Mansi Rastogi

1.2 DISTINCTION ACHIEVED

- a) **By Student** : Raj Kamal Roy, S. Rakesh Singh & MD Hussain Nawaz (MBA 3rd Semester) Won 2nd Prize in Wizard off the pitch at IIM- Calcutta on 6-8 January 2017.
- 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.K Das Dr. S. Panja	Case Methods - Learning, Teaching & Writing	NIT Silchar	2 Days 6-7 May, 2016
2.	Dr. A.K Das	Digital Marketing	Self Finance	2 Days 12-13 May, 2016

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
	NIL		

1.4 RESEARCH DEVELOPMENT

- a) Ph.D. Programme (Specializations):
b) Ph.D. Produced/Ongoing (in number):

Completed	Submitted	Ongoing
	NIL	

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
	NIL	

d) Ongoing/Completed Sponsored Research Project:

Sl. No.	Project Title	Principal Investigator(s)	Funding Agency	Cost in lakhs	Duration
1.	Developing Sustainable Financial System of NIT Silchar	Dr. Soma Panja	NIT Silchar	4.75	2 Years
2.	Innovation & Entrepreneurship Development Centre (IEDC)	Dr. Ashim Kr. Das	D.S.T., Govt. of India	50.00	5 Years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
	NIL			

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
	NIL	

1.5 PUBLICATION

- a) International Journal(s): NIL
b) National Journal(s): NIL
c) International Conference(s): NIL
d) National Conference(s): NIL
e) Book/Chapter: NIL

1.6 CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
	NIL		

1.7 MAJOR EQUIPMENT ACQUIRED

NIL

1.8 PATENT

Sl. No.	Details	Year
	NIL	

1.9 VISITS TO ABROAD

Sl.No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
	NIL			

1.10 MBA (Thesis/Project)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis/Project
1.	Brajen Das	Dr. Soma Panja	A Study on Price Discovery of Brant Crude Oil with reference to NCDEX India
2.	Kundan Dwivedy	Dr. Soma Panja	Fundamental Analysis of I.O.C.L.
3.	Angarag Sharma	Dr. Soma Panja	Determination of Technical Efficiency of a Group of Companies Listed in NSE
4.	Syed Tariq Habib	Dr. Soma Panja	A Study of RAR of Portfolio by considering P/E Ratio.
5.	Rashmi Kumari Pathak	Dr. Soma Panja	Coefficient of Optimism, A base for heuristic selection of portfolio considering NIFTY as underlying Index.
6.	Barnali Barman	Dr. A.K Das	A Study on Livelihood of Tea Garden Workers in Barak Valley (Assam)
7.	Darshana Singha	Dr. A.K Das	Service Delivery and the Implementation of the Government Welfare Schemes in the Tea Garden of Barak Valley
8.	Nasiur Rohman	Dr. A.K Das	A Study on Status of Workers in Unorganized Sector with special emphasis on Construction Sector in Barak Valley.
9.	Sahida Arabi Chowdhury	Dr. A.K Das	Status of NPA in North-Eastern Region with reference to SBI

1.11 Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
	NIL		

Academic Centres & Cells

Central Computer Centre

Head : Mr. Kumar Mithilesh (M.C.A.), Sr. Tech. Officer.

Staff : Technical Staff

- (i) Abhishek Palit (contractual), M.C.A.
- (ii) Rupak Ranjan Deb (contractual), Diploma
- (iii) Nazmul Haque Laskar (contractual), M.Tech.
- (iv) Abinash Bhar (contractual).

Attendant

- (i) Ms. Champabati Balmiki

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.

4. Facilities provided by Central Computer Centre :

- Campus wide Internet connectivity: Providing / Maintaining internet facility around campus through LAN (5500 nos. approx) and Wi-Fi (90 access points) on required basis.
- Institution mail service: Creating and looking after personal Institute mail of all employees and students. Presently around 4000 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 LIBRARY

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, 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. A. K. Sinha, 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 and also from North-East India. The following table presents the collections of the library for the year 2016-17.

The total collection of library as on 31st March 2017 stands as follows:

Sl. No.	Name of Resources	As on 31 st March 2015	As on 31 st March 2016	As on 31 st March 2017
1.	Books	92588	94319	96683
2.	Print Journals	116	99	97
3.	Bound Volumes	5417	5468	5468
4.	CD-ROMs	4013	4274	4297
5.	Databases	21	17	10
6.	Videos	909	909	909
7.	ISI Code (Printed)	8627	8627	8627
8.	Book Bank (General)	9235	9235	9235
9.	Book Bank (SC/ST)	8154	8180	8180
10.	IRC Codes	152	152	152
11.	Thesis	54	70	92
12.	Project & Dissertation	246	365	425
13.	Reports/Annual Reports	353	399	423

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

Printed Journals / Magazines

During the year Library reviewed the printed journal/magazine and stopped subscribing 5 printed journals which were not used by the users and are also available on open access. Library added 7 new printed journals; all total 97 printed journals were subscribed during the year.

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

In addition to the 15 databases provided by E-ShodhShindhu, NIT Silchar has renewed 10 databases including Springer, Taylor & Francis, Mathscinet, Royal Society of Chemistry, Indiatat.com and Proquest Dissertation and Thesis Database. NIT Silchar also subscribed a few new e-resource/ database/ e-journals like LNCS, IEEE SWEBOOK, Nature.com, SIAM and Sage-EMS.

Further, NIT Silchar also procured the Research tools like Scopus and Discovery tools Fed Gate and Ezproxy. 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-ShodhShindhu.

Usage Statistics of Electronic Resources

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

Uses Statistics from 2014 to 2016

Sl. No.	Source	Year wise download statistics		
		2014	2015	2016
1.	ACS	4240	6725	5926
2.	ACM	1225	1689	2090
3.	ASCE	4155	6523	5902
4.	ASME	1997	1433	2762
5.	Elsevier Science Direct	103,067	127,004	1,43,521
6.	IEEE (450+ Jnls)	73476	74420	40,314
7.	Springer Link (1400+ Jnls)	12315	16370	17,477
8.	AMS	358	3218	2230
9.	Taylor & Francis	4959	5781	5714

3. BUDGETARY DETAILS :

Central Library received a projected allocation of 3.00 crore under Plan-Head and 11 lacs under Non-Plan during the financial year 2016-17. Out of the allocation of Plan funds ¹ 18,81,245.00 have been utilized for purchase of books and ¹ 1,16,36,047.45 for renewal as well as purchase of new e-resources/databases. Out of Non-Plan grant, Rs. 4,15,410.00 has been utilized for purpose of binding and for purchase of library materials, AMC of RFID system, ERMSS and rest for day-to-day operation of the library. The comparative statement of detailed expenditure incurred on books, journals, newspaper, binding etc. for the year 2014-15 to 2016-17 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	18,81,245.00	-----	-----	1,16,36,047.45	4,15,410.00	-----

4. MEMBERSHIP:

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

Sl. No.	Members	2014-15	2015-16	2016-17
01.	BTech	2226	2340	2458
02.	MTech	372	394	423
03.	MBA	71	101	97
04.	MSc	47	82	95
05.	PhD	170	263	284
06.	Academic Staff (Teaching)	199 (including Contractual)	165 (including Contractual)	166 (including Contractual)
07.	Non-Academic	55	130	108
Total		3140	3475	3631

5. LIBRARY SERVICES:

Circulation service

The books circulation service is kept open for 40 hours a week. The Library issued 25011 numbers of books during the year 2016-17.

Resource Sharing

The library maintains excellent relations with libraries of libraries in Sothern Assam like Assam University, and other local college for exchange of books, journals, and other print and non-print materials 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. In addition, library is an Institutional member of British Council Library, American Library & avails the service of ILL.

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 and also the foreign students. 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, 515 students availed this facility and borrowed 3850 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. 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

Manpower Development

As a part of our commitment for manpower development in the region & to promote LIS service in the Institute & in the NE Region during the reporting year the Dr. Kishor Chandra Satpathy, Librarian successfully organized the following programmes:

1. Workshop on "Role of ICT for Preservation of Indigenous Knowledge in North Eastern Region" <http://piknei.blogspot.in/> on 15-17 Mar 2017 at IGNCA, New Delhi
2. Springer Nature Author Workshop on "Scholarly Publishing" on 21.03.17 at NIT Silchar.
3. Internship Programme for the Students of DLIS, Assam University, Silchar from 26.10.16-03.11.16.
4. Invited Lecture on "Higher Education Opportunity in Germany" on 26.10.16.
5. UEP-2016 on "Managing Research Pathways – Search, Discover & Innovate" on 05.10.16
6. UEP-2016 on "IEEE Xplore Digital Library: Delivering Research Better Than Ever", "To make the best out of Wiley Online Library" & "Cambridge Platform Cambridge Core and Cambridge Content" on 20.09.16
7. UEP-2016 on "Managing Research Pathways – Search, Discover & Innovate" & "Web of Science, JCR (Impact Factor) & EndNote" on 15.09.16
8. Summer Training Programme for the Students of DLIS, ICFAI University, Tripura on 27.06.16 -8.07.16



7. LIBRARY STAFF ACTIVITIES

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

Honours, Awards, Prizes

- Dr Kishor Chandra Satpathy, Librarian received certificate of Appreciation for ILN in recognition for the work as the country Ambassador for India, for the International Librarians Network in 2016. (<http://www.Interlibnet.org>)

Books Published

The following books were edited by Dr Kishor Chandra Satpathy, Librarian:

- Digital Library & Open Access Initiatives: Responses, Strategies and Emerging Trends published by Shankar's Book Agency, Patna, New Delhi, 2017. (ISBN: 978-81-9322-10-5)

- Emerging Trends and Human Resource Management in Library and Information Centers published by Shankar's Book Agency Pvt. Ltd, New Delhi, 2017, (ISBN 9789381893111)
- Electronic Resource Management in 21st Century: Issues and Challenges published by Shankar's Book Agency Pvt. Ltd, New Delhi, 2016 (ISBN 9789381893104)

Paper Published

- Singha, Krishnamati&Satpathy, K C, "Training: a strategic tool for boosting up skills of LIS Professionals- a case study" in the Proc. "Information Technology in Libraries", ed. Mani, G. Naga [et.al] (New Delhi: AGRI-BIOVET Press), 2016: 22-32. (ISBN 9789384502447)

Project Undertaken

- Dr Kishor Chandra Satpathy, Librarian has undertaken a FICCI-Royal Academy of Engineering (Newton Bhabha Fund) – Thapar University, Patiala Lead joint Research Project entitled the "Innovative Research in pedagogy with Mini-MOOCs blended with instruction strategies to enhance quality in Higher Education".

Conference / Meeting Attended

- Dr. K. C. Satpathy, participated in the round 2015 A of the International Librarians Network peer mentoring program from March to June 2016.
- Mrs. KrishnamatiSingha attended the National Conference on "Information Technology in Libraries (ITIL)" held at GITAM University from 23-24, December, 2016 and presented the paper entitled "Training: A strategic tool for boosting up skills of LIS professionals – A case study of NIT Silchar".

Invited Lecture / Resource Person:

- Delivered two lectures in three day National Workshop on "Information Marketing for the Transformation of Traditional Library Users to Electronic Library Users in Digital era" from 16-18 May, 2016 organized by National Institute of Technology Manipur.

Other Activities:

- Dr. K. C. Satpathy, nominated as the member of the International Advisory Committee for the International Symposium on Knowledge and Communication at 10-11 June, 2016 at SVKM's NarseeMonjee Institute of Management Studies And KhonKaen University, KhonKaen, Thailand.

Training of Library Staff

- As a part of staff development policy of the institute, following staff attended the training programme in respective domains areas as such:
- Mrs. KrishnamatiSingha, Assistant Librarian attended the National Workshop of OSSLM at IIT Kharagpur from 13-18 June 2016.
- Mr. HimadriShekhar Chakraborty and Mr. SatyabrataGoswami attended National Workshop-cum-Training Programme on "Koha" from 21-23 June 2016 at Mizoram University, Aizawl.
- Mrs. KrishnamatiSingha, Mr. HimadriShekhar Chakraborty, Mr. SatyabrataGoswami, Miss SwarnikaDey, Mr. Anwar Hussain Laskar and Mr. Aminul Islam attended the "Springer Nature Author Workshop" on 21st February 2017 jointly organized by NIT Silchar and Springer.
- Mrs. KrishnamatiSingha, Mr. HimadriShekhar Chakraborty, Mr. SatyabrataGoswami, Miss SwarnikaDey, Mr. Anwar Hussain Laskar and Mr. Aminul Islam attended the "Role of ICT in Preservation of Indigenous Knowledge in North-Eastern Region" from 15-17 March, 2017, jointly organized by IGNCA, New Delhi, TERI, New Delhi and NIT Silchar.

8. NEW INITIATIVES:

The Library has taken initiative to incorporate KOHA – open source software for database of library. Library has migrated the database from LIBSYS to KOHA. Library has also taken initiative for creating an IR (institutional repositories) with D-Space Software to collect, organizes, manage and provide access to scholarly publications.

CDAC

The 11th centre of C-DAC, the premier R&D institution of the Ministry of Electronics & Information Technology, was set up in NIT, Silchar in 2014. This centre run independently by CDAC is the nodal agency for proliferation of CDAC technologies, and capacity building in the North East. It has jointly carried out several programs with NIT, Silchar, viz., (1) Deployment of C-DAC research lab-kits in educational institutes of the North East and (2) Capacity Building through Internship in the Area of SCADA and Automation. Besides these C-DAC implements e-Governance projects for governments of NE states, notable among them being (1) Deployment of e-Aushadhi (a Drug & Vaccine Distribution Management System) in the NE states and (2) Deployment of NERS (National Emergency Response System) in the NE states.

Supercomputing Centre

Supercomputing Centre, NITS is the Centre of Excellence in High Performance Computing inaugurated on 05 April 2015 and it is first of its kind in North East having state-of-the-art Supercomputing Centre build 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, 84TB storage capacity connected by Storage node, management node and Infini band of 56Gbps connectivity.

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 Institute-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:

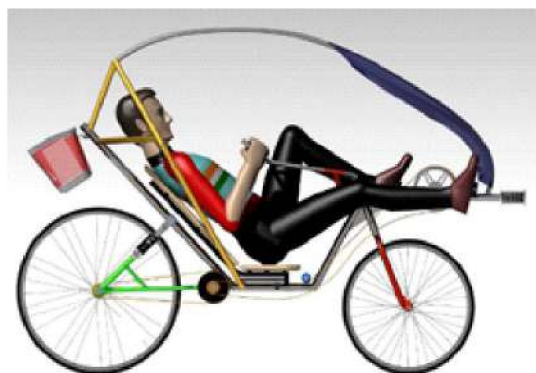
The Indovation Lab has made notable achievements in a very short span of time since its inception. Some of the activities and achievements of Indovation Lab are as follows:

- Startup Centre: 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
- Renewable Mission: Solar Tree, Solar Water Heater, Solar powered Wheel Chair, Solar Maintenance etc.
- Prototype development: DC Fan, The project of UAV (Unmanned Aerial Vehicle) or drone, Arsenic and Iron Removal Plant, Low cost e-health monitoring system etc.

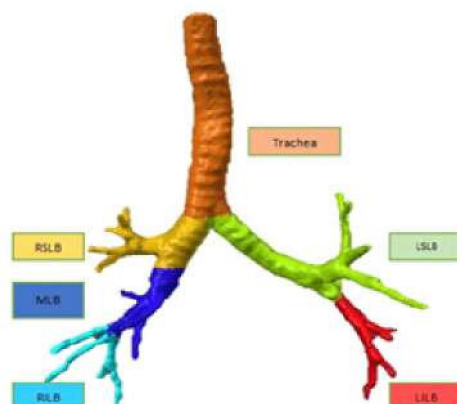
Following are the list of activities under Indovation Lab. , NIT Silchar during the reporting year:

- 1) Developed Mobile App for 'Poll Friend' for online monitoring of Presiding Officers data for Assam State Assembly Election held in April 2016.
- 2) Development of Low cost e-health monitoring system by B.Tech. student under Dr. Wasim Arif.
- 3) Prof. P.M Padole's visited and interacted with the research scholars and faculty at Indovation Lab, NIT Silchar.
- 4) Interaction with Orthopedic Surgeon from Silchar various Hospital
- 5) Three Dimensional (3D) Bio-Model development of pelvic bone and vertebral column. Prototype of bio-models and mechanical components developed using 3D Printing Technology
- 6) Inauguration of 'Solar operated water purification pilot plant' at Naga Punji, 14 August 2016 By Mr. Vishwanathan S. IAS District Collector





- 7) Training on fiber extraction and making cloth from Pineapple and Banana leaf during May to July 2016.
- 8) Distribution of Bamboo water Filter (10 numbers) to needy peoples on 14 August 2016.
- 9) Human Powered Semi-Recumbent Bicycle: Human Powered Vehicles solve this problem since they are more economic, versatile and efficient mode of transportation with no fossil fuel consumption.
- 10) Modelling of Human Abdominal Artery for Blood flow Analysis: A precise CAD model of human airways is modelled using Computed Tomography (CT) scan data.
- 11) All India Radio Tweeted about cloths made from Pineapple Leaf extraction
- 12) Products Fabricated with the aid of technical support from Indovation Lab, NIT Silchar
- 13) **Fertilizer sprayer:**
- 14) The large scale community based one 'solar operated such purification pilot plant' capacity 2000 liters per day is installed villages near to National Institute of Technology Silchar, Assam)
- 15) Patent Filed: Two patents are filed :
 1. Patent Application number: 201631027403 dated: 11-08-2016 'Removal of Fluoride using Modified Naturally Available Clay Material'
 2. Patent Application number: 201731037542, dated: 24.10.2017, 'Easy Biometric Attendance System (EBatS)'



Collage:



- Prof. P.M. Padole's visited and interacted with the research scholars and faculty at Innovation Lab



- Interaction with Orthopedic Surgeon from Silchar various Hospital



- Three Dimensional (3D) Bio-Model development of pelvic bone and vertebral column.



- Inauguration of 'Solar operated water purification pilot plant' at Naga Punji, 14 August 2016 By Mr. Vishwanathan



- Training on fiber extraction and making cloth from Pineapple and Banana leaf during May to July 2016.



- Distribution of Bamboo water Filter (10 numbers) to needy peoples on 14 August 2016.



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. WasimArif, Assistant Professor, ECE

Joint Co-coordinators : Prof. AshimKantiDey, Professor, CE

Prof. M Ali Ahmed, Prof., CE

Prof. A K Barbhuyia, Prof., CE

Startup Centre of NIT Silchar was inaugurated by Hon'ble Chief Minister of Assam, Shri SarbanandaSonowal on 5th September, 2016.

Three of our startups, including two student startups have registered under DIPP, GoI and now officially recognized as StartUp under GoI. Two of the startups have bagged national recognition by winning competitions and angel funding.

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 through intermediary stages of innovation, incubation and entrepreneurship.

Startup Centre invites budding technopreneurs from the institute to start their own ventures with innovative product, process etc. and be a part of the economic growth of the nation.

The Call for Startup proposal for nest session is in progress.

Students' Activities

Scholarship / Assistantship Awarded to the students during 2016-17 :

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	183316.00	4	
2.	Govt. Of Bihar	Bihar	7008140.00	102	
3.	Telangana	Telangana	95420.00	3	
4.	HDFC, Lodha, Mumbai	HDFC	25000.00	1	
5.	NEPCO	NEPCO	72000.00	2	
6.	Central Sector Scholarship	All India	2749022.00	19	
7.	New Scholarship Scheme for Disable Studenta.	Govt. of Assa.	468000.00	13	
Total -			10600898.00	147	

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.

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 2016-2017 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 2016-17

Sl. No.	Name	Sch. No.	Portfolio	Contact No.	Tenure
1.	Prof. M. A. Ahmed	---	President	9435635060	
2.	LAKSHMI NARAYAN PRASAD	13-1-1-027	VICE PRESIDENT (GYMKHANA)	8721079064	1year
3.	YASHASH GAURAV	13-1-3-077	GS (GYMKHANA)	9085981051	1year
4.	SAURABH SHAH	13-1-4-120	GS (AUDIT AND ALUMNI AFFAIRS)	8822727576	1year
5.	RAJEEB KUMAR MALIK	14-1-2-101	SECRETARY, TECHNICAL	8135037871	1year
6.	DIBYAJYOTI CHANGMAI	13-1-1-020	GS (CULTURAL)	7896242916	1year
7.	DEV MANAS	14-1-2-027	SECRETARY, LITERARY, PUBLICATION AND FINE ARTS	8135044969	1year
8.	VAIRHAV KHATRI	14-1-2-031	SECRETARY, PHOTOGRAPHY	8133811683	1year

Sl. No.	Name	Sch. No.	Portfolio	Contact No.	Tenure
9.	SIDDHARTHA PRATIM HAZARIKA	14-1-6-008	SECRETARY, MUSIC CLUB	7578826614	1year
10.	RAKTIM SHARMA	14-1-5-035	SECRETARY, DRAMATIC CLUB	8486648071	1year
11.	DEEPAK KRISHAN SHUKLA	14-1-2-024	SECRETARY, DANCE CLUB	9127523113	1year
12.	PRANJAL PROTIM GOGOI	13-1-5-017	GS (SPORTS)	9706873959	1year
13.	ARUN KUMAR	14-1-1-066	SECRETARY, ATHLETICS AND GYMNASIUM	9085658453	1year
14.	PARTHA PRATIM SARMAH	14-1-6-009	SECRETARY, INDOOR GAMES	8812050148	1year
15.	AJEET CHOUDHARY	14-1-6-040	SECRETARY, CRICKET CLUB	9085319084	1year
16.	DHRITIMAN DUTTA	14-1-2-015	SECRETARY, TENNIS	9401935728	1year
17.	UDANGCHA BARO	14-1-2-111	SECRETARY, FOOTBALL	9706386003	1year
18.	ANKIT SAINI	14-1-6-037	SECRETARY, BASKETBALL SECRETARY, TREKKING AND MOUNTAINEERING	8133802837	1year
	ABDUL RAHMAN	14-1-4-052		7577825502	
	IPSITA SAIKIA	14-1-5-051	GIRLS REPRESENTATIVE	9435536852	
	BHANU BORO	14-1-5-078	GIRLS REPRESENTATIVE	8011371577	
	DIBYA JYOTI KOIRI	15-4-8-106	PG/PHD REPRESENTATIVE		
	SUMIT KUMAR	15-2-2-304	PG/PHD REPRESENTATIVE		

LIST OF FACULTY ADVISORS OF GYMKHANA UNION BODY 2016-17

Sl. No.	Name	Sch. No.	Portfolio	Contact No.	Faculty Advisor
1.	Prof. M. A. Ahmed	---	President	9435725087	--
2.	LAKSHMI NARAYAN PRASAD	13-1-1-027	VICE PRESIDENT (GYMKHANA)	8721079064	Dr.WasimArif
3.	YASHASH GAURAV	13-1-3-077	GS (GYMKHANA)	9085981051	Dr. N.B. Singh
4.	SAURABH SHAH	13-1-4-120	GS (AUDIT AND ALUMNI AFFAIRS)	8822727576	Mr. Ganesh Kesari
5.	RAJEEB KUMAR MALIK	14-1-2-101	SECRETARY, TECHNICAL	8135037871	Dr.SudarsanSahoo
6.	DIBYAJYOTI CHANGMAI	13-1-1-020	GS (CULTURAL)	7896242916	Dr.Dillip Kumar Ghose
7.	DEV MANAS	14-1-2-027	SECRETARY, LITERARY, PUBLICATION AND FINE ARTS	8135044969	Dr.NalinBehari Dev Choudhury
8.	VAIBHAV KHATRI	14-1-2-031	SECRETARY, PHOTOGRAPHY CLUB	8133811683	Dr. N .B. Singh
9.	SIDDHARTHA PRATIM HAZARIKA	14-1-6-008	SECRETARY, MUSIC CLUB	7578826614	Mrs. Jupitara Hazarika
10.	RAKTIM SHARMA	14-1-5-035	SECRETARY, DRAMATIC CLUB	8486648071	P.S. Neog
11.	DEEPAK KRISHAN SHUKLA	14-1-2-024	SECRETARY, DANCE CLUB	9127523113	Dr.P.R.Randive
12.	PRANJAL PROTIM GOGOI	13-1-5-017	GS (SPORTS)	9706873959	UmakantaMajhi
13.	ARUN KUMAR	14-1-1-066	SECRETARY, ATHLETICS AND GYMNASIUM	9085658453	Dr.Prasanth.J
14.	PARTHA PRATIM SARMAH	14-1-6-009	SECRETARY, INDOOR GAMES	8812050148	Mr. LaluSeban

Sl. No.	Name	Sch. No.	Portfolio	Contact No.	Faculty Advisor
15.	AJEET CHOUDHARY	14-1-6-040	SECRETARY, CRICKET CLUB	9085319084	Dr.MunmunKhanra
16.	DHRITIMAN DUTTA	14-1-2-015	SECRETARY, TENNIS	9401935728	Dr. P.R. Randive
17.	UDANGCHA BARO	14-1-2-111	SECRETARY, FOOTBALL	9706386003	Dr.Biplab Das
18.	ANKIT SAINI	14-1-6-037	SECRETARY, BASKETBALL SECRETARY, TREKKING AND MOUNTAINEERING	8133802837	Dr.SudarsanSahoo
19.	ABDUL RAHMAN	14-1-4-052	GIRLS REPRESENTATIVE	7577825502	Dr.KedarNath Das
	IPSITA SAIKIA	14-1-5-051		9435536852	Dr.JuthikaMahanta
	BHANU BORO	14-1-5-078	GIRLS REPRESENTATIVE	8011371577	Dr.JuthikaMahanta
	DIBYA JYOTI KOIRI	15-4-8-106	PG/PHD REPRESENTATIVE		
	SUMIT KUMAR	15-2-2-304	PG/PHD REPRESENTATIVE		

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 2016-17 organized an orientation session for the freshmen batch of 2016-2020. 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 2016-20 batch, this proved to be highly beneficial to them for the upcoming years of their college life.

iii) HINDI DIWAS:

MANTHAN'16, 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.

iv) ALUMNI MEET:

Alumni Meet'16 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 sixth incarnation, this meet was dedicated to the pass out batch of 1990 & 1991.

v) INDEPENDENCE DAY 2016:

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 that set a remarkable example of synchronization.

vi) RABINDRANATH TAGORE MEMORIAL DAY:

The ILLUMINITS organized Rabindranath Tagore Memorial Day on the 75th death anniversary of Rabindranath Tagore, India's most beloved and revered poet i.e. on the 7th of August 2016. 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.

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) TECNOESIS 16:

Tecnoesis 2K16 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 2k16. It was the selfless effort and pure devotion of the Tecnoesis 2k16 team which made it a success.

ix) EKTA DAUD :

A marathon was organized in the college by Gymkhana Union body on August 14, 2016. Huge number of students participated in the marathon thereby depicting unity and harmony among them. The winners of the marathon were awarded with cash prizes.

x) Freedom March :

A "CANDLE LIGHT FREEDOM MARCH - YaadKaroQurbani" was organized by the Gymkhana Union Body of NIT Silchar in collaboration with the NIT Silchar administration on 14/08/2016 to extend its tribute to the Freedom Fighters of our Nation.

xi) REPUBLIC DAY '16:

Like every other year, our institute celebrated 66th Republic Day on 26th January, 2016. 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. ASME also organised a photo exhibition of Indian scientists and their contributions since the ancient ages, depicting the scientific progress of our nation.

xii) 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.

xiii) INCANDESCENCE'16:

NIT Silchar celebrated its annual cultural fest Incandescence'16 from 18th February-20th 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

Diem, Papa CJ(Comedian),Alobo Naga,PrateekKuhad, Spunk, DJ Sanju andZephyrtonegraced the 19th night. The satirical poems, the hilarious jokes and the bewitching musical extravaganza created an enrapturing atmosphere. On the 20th 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. Underside, Guthrie Govan created an electrifying atmosphere. The 4-day celebrations had been a huge success and surely enlightened one and all.

xiv) BANDWAGON:

The Music Club organized Bandwagon – Cross genre Band Competition,. The evening was worth the efforts put in by the organizers and was enjoyed by everyone to the fullest.

xv) RAKSHABANDHAN CELEBRATIONS:

Considering the great importance of this traditional festival, the Rakshabandhan Celebrationwas organised in the college on with a view to make everyoneaware of the true significance of the occasion.

xvi) JANMASHTAMI:



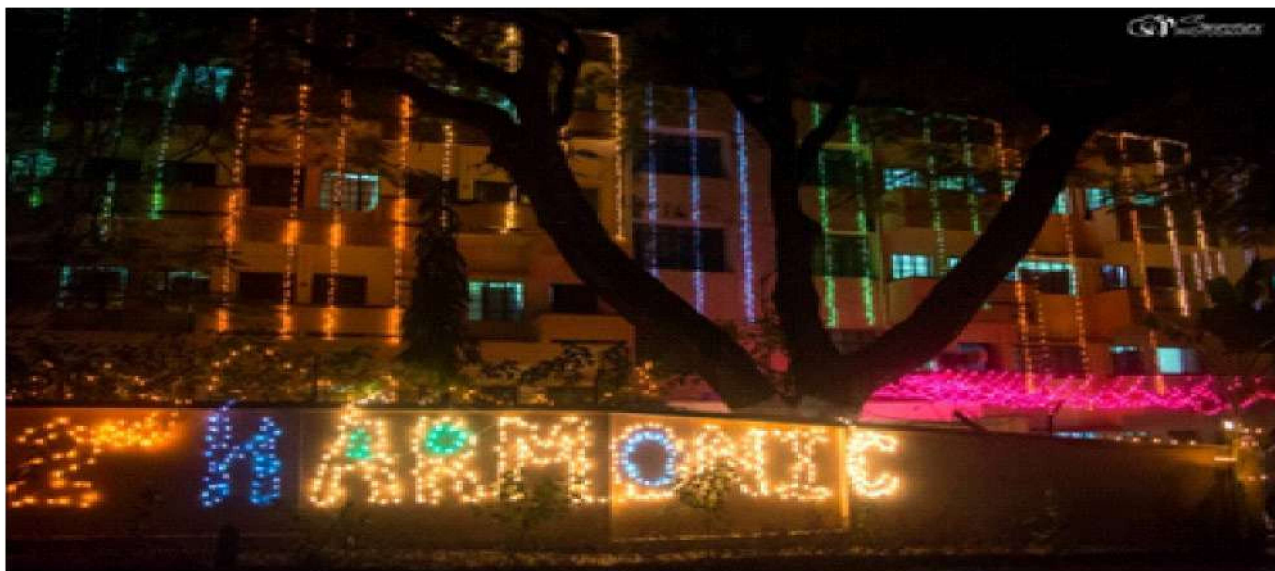
The festival of the birthday of Lord Krishna,Janmashtami, was celebrated on 25th August with great enthusiasm. A puja for Lord Krishna was organized on that auspiciousday in Hostel -7, which was followed by the most exciting “Dahi-Handi” competition,which involves the breaking of an earthen pot raised 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.

xvii) DURGA PUJA:

To seek the blessings of the Goddess of strength, MaaDurga, a 3-day celebration of Durga Puja was organised by the combined effort of the Durga Puja Committee and Gymkhana Students' Union Body from 8th of October to 10th of October 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 MaaDurga on the way to her heavenly abode.



xviii) DIWALI:



The whole campus of NIT Silchar was glowing with the shine of the magnificent diya and colourful lights, on the pristine occasion of Diwali which was celebrated on the 29th October 2016. On that day the students got actively involved in making beautiful Rangolis and decorating their hostels thereby creating an amazing festive mood throughout the campus.

vix) North East Sports Meet 2017

For the 1st time, NIT Silchar organized the North East Sports Meet in its campus from January 20th to January 22nd. Sports events like Table Tennis, Foot Ball, Chess and Athletics were conducted for both man and women on that event. Participants from all over North East joined the event.

xx) 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 from 1st September 2016 to 15th September 2016 and again in 1st November 2016.

xxi) 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.

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 Policy - 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 Borakhai 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.

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 : Outsource.
- (b) Security management of the campus : Outsource.
- (c) Maintenance of civil & electrical : Departmentally.

5. Staff structure

(A) Administrative:

SI No.	Staff/officers	Designation	Remarks
1.	Dr. P. Rajbongshi	Dean (P&D)	Regular
2.	Dr. DebjitBhowmik	Associate Dean (P&D)	Regular
3.	Dr. J. P. Mishra	Associate Dean (P&D)	Regular
4.	Mr. DebasishDey	Engineer	Regular
5.	Mr. Si Kumar Chauhan	Asst Engineer (E)	Regular
6.	Mr. Dhrubojyoti Chakraborty,	Asst Engineer (C)	Contractual
7.	MR. Rahul Suklabaidya	Junior Engineer (C)	Contractual
8.	Mr. SwapanBaishnab	Junior Engineer (E)	Contractual
9.	Mr. Bapon Sinha	Junior Engineer (E)	Contractual
10.	Mr. Tapan Kumar Roy	Junior Engineer (E)	Contractual

(B) Supporting:

1.	Mr. Debabrata Barman	Sr. Assistant	Regular
2.	Mr. Subasish Barman	Technician	Regular
3.	Mr. Ashok Kurmi	Technician	Regular
4.	Mr. Jiban Kami	Attendant SG-II	Regular
5.	Mr. Abdul Malik Mazumder	Attendant SG-I	Regular
6.	Mr. Monoj Gopal Deb	Attendant SG-II	Regular

6. Infrastructure

(a) Staff quarters:

Name of building	Area (Sqm)
Director's Bungalow	195.00
Professor quarters 7 units	1169.00
Asst. Prof. quarters 6 units	868.00
Type-D quarters 12 units	1344.00
Type-C quarters 8 units	480.00
Type-A quarters 12 units	540.00
Lecturer's quarters 15 units	1200.00
Teachers' Flat 12 units	590.00
Grade-III quarters 56 units	3600.00
Grade-IV quarters 30 units	1350.00

Name of building	Area (Sqm)
Type-VI(EL) Prof. qtrs. 12 units (new)	2466.00
Type-V(E) Asst Prof. qtrs. 21 units (old)	2787.00
Type-V(E) Asst Prof. qtrs. 21 units (new)	2787.00
Type-IV(E) Lecturer qtrs. 30 units (old)	2556.40
Type-IV(E) Lecturer qtrs. 30 units (new)	2556.40
Type-III – 100 units	9923.04
KendriyalaVidyalaya qtrs.	1183.38

(b) Hostels:

Name of building	Area (Sqm)
Boys Hostel No.1	3600.00
Boys Hostel No.2	2620.00
Boys Hostel No.3	2620.00
Boys Hostel No.4	5030.00
Boys Hostel No.5	2894.00
Boys Hostel No.6	7950.00
Boys Hostel No.7	7950.00
Boys Hostel No.8	20654.52
Boys Hostel No.9	23560.00
Girls Hostel No.1	2114.00
Girls Hostel No.2	3303.00
Girls Hostel No.3	3303.00
300 capacity P.G Hostel & 100 capacity Married Scholar Hostel	12060.00

(c) Academic bldgs., Guest House, KID-NITS School, Post Office, KV School etc.

Name of building	Area (Sqm)
New Administrative building	8846.36
Expansion of classroom	6974.00
Mechanical Workshop building	2588.00
Mechanical Department	1895.00
Civil Engg. Dept	2799.00
Electrical Engg. Dept.	1647.00
ETE building	1137.00
Central Store / Estate Branch	800.00
Library building (old)	975.60
Dispensary building	156.00
Vertical Expansion Dispensary building	189.00
Old Administrative building	800.00
NIT Café	416.00
Classroom Expansion Pt. II	2800.00
Expansion of Physics Dept (ground floor)	470.00
Expansion of Physics Dept (first floor)	164.00
Expansion of Chemistry Dept (first floor)	470.00
Expansion of Chemistry Dept (ground floor)	164.00
CSE & ETE building (G+2)	7935.70
Humanities Dept (first floor)	105.00
Mathematics Dept (ground & first floor)	195.00
Training & placement dept (second floor)	386.00

Name of building	Area (Sqm)
Students Activity Centre	1145.00
Kendriyala Vidyalaya	4642.70
New Library building	9212.00
Guest House (old)	216.00
Guest House (new)	4079.17
Post Office	118.57
Earthquake Engineering Laboratory	2734.00
Production Engineering Lab under Mech. Engg. Dept.	5361.00
New Academic building	7935.70
KID-NITS School	152.64
NABL building	790.56
Expansion of Electrical Engg. Dept	1152.41
Eat-Out Dhaba	970.91

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)	Maruti Car	For Office Use
2.	AS11B- 0930	Tata Bus	For staff & students
3.	AS11B- 2703	Tata Bus	For staff & students
4.	AS11C- 0043	Ambassador Car	For office use
5.	AS11E- 2416	Maruti Van	For differently abled staff & students
6.	AS11AC- 5027 (Ambulance)	Maruti Van	Medical purpose for staff & students
7.	AS11D- 7736 Donated by NIT Alumni	Tata Indigo Car	For T&P, Academic & Office purpose
8.	AS11D- 2701/2702	Tractor & Tractor	Estate Branch
9.	New Vehicle Applied for Registration Donated by NIT Alumni	Traveller (Force) 9 seater Mini Bus	For T&P and other misc. 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), 2 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	Department	From	To
1	Dr. T.R. Lenka	ECE	03/03/2015	04/09/2017
	Dr. Pankaj Kumar Biswas	Mathematics	04/09/2017	Till Date
2	Dr. B.S. Sil	Civil	18/01/2016	Till Date
3.	Dr. N. Bhupendro Singh	HSS	3/11/2015	10/09/2017
	Dr. D. K. Ghose	Civil	11/09/2017	Till Date
4.	Dr. Ashraf Hossain	ECE	28/04/2015	04/09/2017
	Dr. R. Hazra	ECE	04/09/2017	Till Date
5.	Dr. S.S. Dhar	Chemistry	08/08/2014	31/08/2017
	Dr. N. Ahir	Civil	01/09/2017	Till Date
6	Mr. Saroj Kr Biswas	CSE	24/02/2015	04/09/2017
	Dr. Jagadish	Mechanical	05/09/2017	Till Date
7	Dr. Arup Kr Goswami	EE	10/02/2015	04/09/2017
	Dr. P.K. Gupta	Mathematics	05/09/2017	Till Date
8.	Dr. R.G Nair	Physics	04/02/2016	Till Date
GH-1	Dr. Nirmala Soren	EE	06/04/2015	Till Date
GH-2	Dr. Juthika Mohanta	Mathematics	10/04/2015	22/05/2017
	Dr. Munmun Khanra	E&I	23/05/2017	Till Date
GH-3	Dr. Banani Basu	ECE	18/07/2016	Till Date
PG Hostel	Dr. Sushovan Chatterjee	ME	10/02/2015	02/11/2016
	Dr.A.K. Sunaniya	E&I	03/11/2016	Till Date
MSH	Dr. Sukumar Pati	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

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 Senior Medical Officer and other qualified Medical Officers to attend the medical needs of the students, staffs and their families. The Health Centre apart from providing allopathic medicine services also offers Ayurvedic treatment, Dental treatment, Dressing and fast-aid, pushing saline and injection, dispensing medicines, ECG, Physiotherapy, Laboratory facilities (Blood & Urine test) etc. Patients suffering from serious illness, requiring intensive care, are referred to the Silchar Medical College & Hospital (SMCH), which is about two kilometers from the campus. There is also a students' counselor who offers counseling to the students. Ambulance facility is also available round the clock for any medical emergency.

KENDRIYA VIDYALAYA

The 5th Academic Session 2016-17 commenced from 1st April 2016. The Total Enrolment position of Students was 797. 88 students in class I and 8 students in other classes were admitted in that Academic Year.

In 2016-17 total 38 students appeared in CBSE Class-X Board Exam and 19 students appeared in Class-XII Board Exam. The result was splendid with 100% passed with good quality. In class-X, 06 students secured 10 CGPA. They are: i) Abu Mahammad Jamil Laskar ii) Pinakshi Das iii) RoselinMazumder iv) SamratSaha v) Srilekhabhattacharjeevi) TahmeenaNoorie. In Class-XII Miss SuchismitaBhattacharjee secured 1st position in Vidyalaya Level obtaining 92.6% & 10 students secured above 75% marks.

The major achievement in Sports was 3 students Participated in KVS National Sports Meet. They are: i) HadiUjjaman Choudhury of Class IX-B in Rope Skipping ii) Abhinav Ghosh, Class IX-A in Chess iii) Raj Sutradhar Class VII-A in Taekwondo.

The students of the Vidyalaya participated in Maths Olympiad, Science Olympiad, English and Computer Olympiad and some students brought laurels for the vidyalaya. The achievement is like this: In Maths Olympiad 1 Gold, Science Olympiad 05 Gold, 4 Silver and 3 Bronze, English Olympiad 2 Gold and 1 Silver and in Computer Olympiad

In 2016 the students participated in KVS Regional Social Science Exhibition held at KV Silchar and secured 2nd position in group dance.

Apart from students, teacher also brought laurel for the Vidyalaya. Mrs. Lipika Choudhury Dutta, PRT was awarded with KVS National Incentive Award 2016.

A great achievement of the Vidyalaya was that in 2016-17, KV NIT Silchar was famed with “HaritVidyalaya Award - 2016” 1st position in KVS Silchar Region.

In 2016-17, this Vidyalaya hosted many Regional Level programme like:

- i) Training programme for KVS Regional Level Scout Master and Guide Captains 2016 held w.e.f 17.04.2016 – 23.04.2016.
- ii) KVS Regional Youth Parliament held on 09.08.2016 for KVS Silchar Region in which approx. 250 students from 5 KVS participated.
- iii) 44th Jawaharlal Nehru National Science Mathematics and Environment Exhibition for Children 2016-17 held on 18.01.2017.

In 2016, Sh. Hemchandra Joshi, TGT SST, Sh. Kumar Roshan, TGT SST, Sh. Sanjeev Kumar Malviya, PRT, Sh. Pravesh, PRT and Sh. Sanjeev Kumar, PRT joined the Vidyalaya on transfer. In that year Sh. Hemchandra Joshi, TGT (SST), got transferred and Sh. Sanjeev Kumar, PRT & Sh. Kumar Roshan, TGT (SST) resigned the Job.

The infrastructure is concerned, this Vidyalaya is well equipped with various types of facilities like 3 Science Labs, 01 E-class Room, Language Lab, Yoga Room, Music Room, Dance Room, Work Education Room, Art Room, CMP Resource Room, 2 Computer Labs. Also the Vidyalaya has well-furnished building protected with strong boundary wall.

A group of highly qualified teachers have been working for the all-round development of the students.

This KV 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

The total number of students is 94. The number of teaching staff is 05 and there are two (2) non-teaching staffs. 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 School Committee was held on October 10, 2016. The parents-teacher meet has been organized twice. 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 Dumbbells 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. There is a Sub-way Outlet adjacent to the NITS-Café that caters the need and demand of the international students as well as others.

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 students 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,
- (x) Physics

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

Completed	Submitted	Ongoing
31	33	278
(i.e. degree was awarded in 15 th Convocation held on 25.05.2017)		

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	Synthesis of indenoisoquinolineones	Dr. Lalthazuala Rokhum	1,650,000	30-06-14	SERB
2	Pose invariant face recognition algorithm development for face based prototype vide surveillance system (VSS)	Prof. F.A Talukdar	2,499,800	22-07-14	DAE/ BRNS
3	Evaluation of Non- linear fatigue damage in Asphalt Materials	Dr. P. Rajbongshi	4,179,200	19-09-14	SERB
4	Special Manpower Development Programme for Chips to System Design-Release of Funds by CEERI Pilani to RC's and PI's (SMDP)	Dr. K.L. Baishnab	997,200,000	15-12-14	DeitY
5	L- Moments Based Regional Extreme Rainfall & Flood Frequency Analysis for Hydro-meteorological	Prof. P.S. Choudhury	3,083,200	10-06-15	AICTE

Sl. NO.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Total amount sanctioned in Rupees	Date of sanctioning the grant	Name of Funding Agency
6	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application.	Dr Arnab Nandi	2,340,400	08-07-15	SERB
7	Advanced Manufacturing and Material Testing	Dr. P.K. Patowari	21,000,000	22-08-15	DST
8	Analysis of Brain Waves and Development of Intelligent model for Silent Speech Recognition.	Prof. Nidul Sinha	2,500,000	02-09-15	DEIT
9	Vishveshwarya Ph.D Scheme for Electronics and IT at NIT Silchar	Dr. K.L. Baishnab	30,990,000	10-09-15	MLA
10	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	603,000	08-09-15	IUAC, UGC
11	Unnat Bharat Abhiyan	Dr. A.K.Goswami	175,000	22-09-15	MHRD
12	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with Prototype Development.	Prof S. Baishya	11,000,000	30-09-15	DeitY
13	A Study on Measure Theoretical approach to Convergence of sequences in Probabilistic normed Spaces	Dr. Mausumi Sen	1,535,520	14-10-15	SERB
14	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	Dr. Lalthazuala Rokhum	300,000	23-01-16	SERB
15	"Metal Complexes of New Chiral Schiff Bases: Design, Structure Elucidation, Reactivity and Synthetic Applications"	Dr. Pranjit Barman	3,504,600	02-03-16	SERB
16	Innovation and Entrepreneurship Development Centre (IEDC) at NIT Silchar.	Dr Ashim Das	1,330,000	10-03-16	DST
17	Effects on Variation in input-excitation on the performance of limited-sensors based operational model analysis.	Dr Nirmalendu Debnath	3,166,612	18-03-16	SERB
18	Effect of metal doped TiO ₂ on photoanode and lead free organic-inorganic metal halide perovskite on photovoltaic performance	Dr. S.K.Tripathy	4,238,585	22-03-16	SERB
19	Development of Battery Supercapacitor Hybrid Energy Storage System for Stand Alone Solar Photovoltaic Power System	Dr. Munmun Khanra	2,221,816	28-11-16	DST
20	Fabrication and Testing of Tandem Layered Quantum Dot Sensitized	Dr. Ranjith G Nair	2,513,390	08-12-16	SERB

Sl. NO.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Total amount sanctioned in Rupees	Date of sanctioning the grant	Name of Funding Agency
21	Development of EBG Structured Printed Antennas for Ultrawide Band Communication and Futuristic Modelling for prediction of performance Parameters using Computational Techniques.	Dr. Taimoor Khan	1,627,560	27-12-16	SERB
22	Design and Development of a hybrid photo voltaic(PVT) system for rural application	DrBiplab Das	1,417,800	17-01-17	MST
23	Condition Assessment &Reliability of Existing Bridges	Dr. Arjun Sil	1,909,600	04-02-17	SERB
24	The Third Generation's Inheritance of the Memory of Participation (1947) A comparative study Across Spatial Axes.	Dr. Avishek Ray	200,000	29-03-17	ICSSR
25	Bamboo bricks/laminates from BMFs for low cost housing structures for NE Himalayan region	Dr. S Halder	4,491,000	31-03-17	NMHS
26	Numeric Study on Electrokinetic Floe through Polyelectrolyte coated Nanopore	Dr. Subrata Bera	2,547,140	19-04-17	SERB
27	Design and Development of heat pipe embedded solar collector based latent heat storage system.	Dr. Biplab Das	2,721,000	03-05-17	SERB
28	Hetero-junction Tunnel FETs: characterization, modelling and simulation of electrical parameters	Prof. S. Baishya	482,667	16-05-17	CSIR
29	A study on Effects of sediment load on river bank erosion in the Barak River System.	Dr. Briti Sundar Sil	2,244,460	03-06-17	SERB
30	Spectrofluorimetric Studies on representative Nitrogen-Heterocyclic Drugs and their interaction with DNA Nucleotides	Dr. S. Moyon	3,309,000	06-06-17	SERB
31	Experimental and Computational analysis of heat Sink application for optimal performance by developing low cost natural filler.	Dr. Sumit Bhowmik	2,263,000	04-08-17	CPRI
32	Containerized Tricycles and Clean Silchar Initiatives - My City My Responsibility	Dr. Agnimitra Biswas	1,518,000	23-10-17	GoA
		Grand Total =	1,120,762,350		

STAFF POSITION

I. Chief Academic & Executive Officer (Position as on 31.03.17)

Position	Name
Director	Prof. N. V. Deshpande, Director, till 07/09/2016 Prof. V Ramachandran, Director (In – Charge), 08/09/2016 to 20/10/2016 Prof. Rajat Gupta, Director (In – Charge), for rest of the period

II. Administrative Staff : (Position as on 31.03.17).

Name of the post	Sanctioned Strength	Staff in Position
Registrar	1	1
Deputy Registrar	2	1
Assistant Registrar	4	3
Librarian	1	1
Deputy Librarian	1	0
Assistant Librarian	1	1
SAS Officer	2	1
Sr. Technical Officer	1	1
Technical Officer	1	0
Executive Engineer	1	0
Engineer	2	1
Sr. Medical Officer	1	1
Medical Officer	1	0
Security Officer	1	0
Total	20	11

III. Academic Staff: (Position as on 31.03.17)

Name of the post	Sanctioned Strength	Staff in Position
Professor	25	16
Associate Professor	55	19
Assistant Professor	122	111
Trainee Teacher	--	2
Total	202	148

IV. Faculty Position as on 31.03.17 (Department -wise break up)

Sl. No	Department	Professor	Associate Professor	Assistant Professor	Trainee Teacher	Total
1	Civil Engineering	7	4	16	1	28
2	Mechanical Engineering	3	5	16	0	24
3	Electrical Engineering	3	2	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	1	10	0	11

Sl. No	Department	Professor	Associate Professor	Assistant Professor	Trainee Teacher	Total
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	6	0	7
11	Management Studies	0	0	1	0	1
Total		16	19	111	2	148

V. Ministerial Higher Staff (as on 31.03.2017)

Name of the post	Sanctioned Strength	Staff in Position
Superintendent/Accountant/ Secretary	7	0
Sr. Superintendent/Accountant/ Secretary	5	1
Superintendent/Accountant/ Secretary (SG-II)	4	0
Total	16	1

VI. Technical Higher Staff (as on 31.03.2017)

Name of the post	Sanctioned Strength	Staff in Position
Technical Assistant / SAS Assistant / Junior Engineer	28	1
Sr. Technical Assistant / Sr. SAS Assistant / Assistant Engineer	21	1
Technical Assistant / SAS Assistant / Assistant Engineer (SG-II)	13	0
Total	62	2

VII. Ministerial Lower Staff (as on 31.03.2017).

Name of the post	Sanctioned Strength	Staff in Position
Junior Assistant	16	0
Senior Assistant / Stenographer	12	1
Assistant (SG-II) / Senior Stenographer	7	10
Total	35	11

VIII. Technical Lower Staff (as on 31.03.2017)

Name of the post	Sanctioned Strength	Staff in Position
Technician/Laboratory Asstt./Work Asstt	28	3
Sr. Technician/ Laboratory Asstt./Work Asstt	21	1
Technician/ Laboratory Asstt./ Work Asstt. (SG – II)	13	10
Total	62	14

IX. Supporting Staff (as on 31.03.2017)

Name of the post	Sanctioned Strength	Staff in Position
Supporting Staff (Attendant / Mali/Security Guard)	31	80
Total	31	80

X. Fresh Appointments Teaching (From 01.04.16 to 31.3.17)

Sl. No.	Name	Designation	Department	Date of Joining
1	Dr. Swagatadeb Sahoo	Assistant Professor	Electronics and Instrumentation Engineering	11-Jul-16
2	Dr. Manas Kumar Bera	Assistant Professor	Electronics and Instrumentation Engineering	18-Jul-16
3	Dr. Shyamapada Mukherjee	Assistant Professor	Computer Science and Engineering	21-Jul-16
4	Dr. Ranjay Hazra	Assistant Professor	Electronics and Instrumentation Engineering	01-Aug-16
5	Dr. Sandeep Kumar	Assistant Professor	Electronics and Instrumentation Engineering	23-Aug-16

XI. Appointments of Non-Teaching (Contractual) (During 2016 - 2017)

S. No.	Name	Designation	Date of Joining
1	Dr. Neelam Prasad Yadav	Counsellor (Part Time)	15-June-16
2	Ms. Paulomi Chakraborty	Counsellor (Part Time)	15-June-16
3	Dr. Suborna Bhattacharjee	Medical Officer	20-July-16

XII. Appointments of Teaching (Contractual) (During 2016 - 2017)

Sl. No.	Name	Designation	Department
1.	Mr. Pratanu Kumar Goswami	Assistant Professor (Contractual)	Electrical Engg
2.	Mr. Bivas Roy	Assistant Professor (Contractual)	Electrical Engg
3.	Mr. Arindam Das	Assistant Professor (Contractual)	Electrical Engg
4.	Mr. Soumya Samanta	Assistant Professor (Contractual)	Electrical Engg
5.	Ms. Sharbari Deb	Assistant Professor (Contractual)	Electrical Engg
6.	Mr. Pranju Chakrapani	Assistant Professor (Contractual)	Electrical Engg
7.	Mr. Biswajit Pal	Assistant Professor (Contractual)	Civil Engg
8.	Mr. Santanu Mallik	Assistant Professor (Contractual)	Civil Engg
9.	Ms. Baishali Nandi	Assistant Professor (Contractual)	Civil Engg
10.	Mr. Mantu Majumder	Assistant Professor (Contractual)	Civil Engg
11.	Ms. Reshmi Basak	Assistant Professor (Contractual)	Mechanical Engg
12.	Mr. Prabhakar Jha	Assistant Professor (Contractual)	Mechanical Engg
13.	Mr. Nitish Kumar	Assistant Professor (Contractual)	Mechanical Engg
14.	Mr. Nitish Bhardwaj	Assistant Professor (Contractual)	Mechanical Engg
15.	Mr. Soumya Sikdar	Assistant Professor (Contractual)	Mechanical Engg
16.	Mr. Khem Prosad Sharma	Assistant Professor (Contractual)	Computer Science & Engg
17.	Md. Zaved Iqbal Ahmed	Assistant Professor (Contractual)	Computer Science & Engg
18.	Mr. Saurav Roy	Assistant Professor (Contractual)	Electronics & Communication Engg
19.	Mr. Manish Sharma	Assistant Professor (Contractual)	Electronics & Communication Engg
20.	Ms. Swagata Devi	Assistant Professor (Contractual)	Electronics & Communication Engg
21.	Prasenjit Das	Temporary Faculty	Computer Science & Engineering
22.	Bahnishikha Dutta	Temporary Faculty	Computer Science & Engineering
23.	Irshad Hussain	Temporary Faculty	Computer Science & Engineering
24.	Md. Zaved Iqbal Ahmed	Assistant Professor (Contractual)	Computer Science & Engineering
25.	Rumi Rajbongshi	Temporary Faculty	Electrical Engineering
26.	Arunima Dutta	Temporary Faculty	Electrical Engineering
27.	Arka Das	Temporary Faculty	Electrical Engineering
28.	Chandan Dawo	Temporary Faculty	Electronics & Instrumentation Engineering

Sl. No.	Name	Designation	Department
29.	Mr. Ritwik Chattaraj	Temporary Faculty	Electronics & Instrumentation Engineering
30.	Mr. Rupam Goswami	Temporary Faculty	Electronics & Communication Engineering
31.	Mr. Chandrajit Choudhury	Temporary Faculty	Electronics & Communication Engineering
32.	Mr. Amlan Nag	Temporary Faculty	Electronics & Communication Engineering
33.	Mr. Palash Dey	Temporary Faculty	Civil Engineering
34.	Mr. Ruhul Amin Mazumder	Temporary Faculty	Civil Engineering
35.	Mr. Tarique Aman Mazumder	Temporary Faculty	Civil Engineering
36.	Mr. Abhijit Chakraborty	Temporary Faculty	DOMS
37.	Mr. Ujjwal Kanti Paul	Temporary Faculty	DOMS
38.	Ms. Tanaya Nayak	Temporary Faculty	DOMS
39.	Mr. Rama Koteswara Rao Kondasani	Temporary Faculty	DOMS
40.	Ms. Sona Srivasta	Temporary Faculty	DOMS
41.	Mr. Subroto Chowdhury	Temporary Faculty	HSS

XIII. Retirement / Resignation (From 01.04.16 to 31.3.17)

Sl. No.	Name	Designation	Date of Retirement / Resignation
1	Mr. Babul Kr. Nath	Tech. Assistant (SG-II)	30-April-16
2	Mr. Sudip Chakraborty	Assistant (SG-I)	30-June-16
3	Mr. Pradyut Deb	Stenographer (SG-I)	31-July-16
4	Mr. Kashi Goala	Attendant (SG - II)	31-July-16
5	Mr. Kumud Deb	Sr. Attendant	31-Aug-16
6	Mr. Behari Rabidas	Attendant (SG - I)	30-Sep-16
7	Mr. Priyabrata Nath	Pharmacist (SG - I)	31-Oct-16
8	Mr. Motilal Kurmi	Attendant (SG - II)	30-Nov-16
9	Mr. Dipak Roy	Secretary (SG - II)	31-Jan-17
10	Mr. Ramendra Narayan Biswas	Technical Assistant (SG - II)	31-Jan-17
11	Mr. Bipul Ch. Das	Assistant (SG - I)	31-Jan-17
12	Mr. Nibulal Kanu	Attendant (SG - II)	31-Jan-17
13	Mr. Ashu Das	Attendant (SG - II)	31-Jan-17
14	Ms. Ilabati Chakraborty	Attendant (SG - II)	31-Jan-17
15	Ms. Ranjana Jha	Assistant Registrar	13-Jan-17
16	Mr. Jogesh Chandra Rabidas	Assistant (SG-I)	31-March-17
17	Mr. Ram Bikash Sonar	Attendant (SG-II)	31-March-17

XIV. Death In Harness (From 01.04.16 to 31.3.17)

Sl. No.	Name	Designation	Date of Expiry
1	Mr. Parimal Kr. Das	Attendant (SG-II)	26/11/16
2	Mr. Mintu Chakraborty	Work Assistant (SG-II)	02/09/16

XV. Voluntary Retirement Scheme (From 01.04.16 to 31.3.17)

Sl. No.	Name	Designation	Date of Retirement / Resignation
1	Mr. Anil Kumar Biswas	Technical Assistant (SG-II)	31/03/17

TEQIP-II

Introduction to TEQIP

Technical Education Quality improvement Programme (TEQIP) is a World Bank and MHRD funded project for the technical Institutions.

Around 206 Technical Institutions (CFIs/ Govt. Institutions/ Private Institutions) in India are supported by TEQIP program among which NIT Silchar is one of them.

The TEQIP project is broadly divided into two Sub-components.

- A) Sub-component 1.1: TEQIP-I
- B) Sub-component 1.2: TEQIP-II

NIT Silchar has successfully completed sub-component 1.1 in the previous TEQIP Phase I. Presently NITS is under TEQIP Phase II of the sub-component 1.2.

National Project Implementation Unit (NPIU) is the coordinator for implementation of TEQIP Project in the country

Goal of TEQIP

To scale up and support ongoing efforts of the GOI to improve quality of technical education and enhance existing capacities of the institution to become dynamic, demand driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring at the local, state, national and international levels. It has a clear focus on the objectives to improve the overall quality of existing engineering education

Objectives of TEQIP

- Strengthening Institutions to produce high quality engineers for better employment.
- Scaling up post-graduate education and demand-driven research and development and innovation.
- Establishment centre of excellence (CoE) for focused application research.
- Training of faculty for effective teaching.
- Enhancing Institution and system management effectiveness

TEQIP – II NIT Silchar & Fund allocation under Sub-Component 1.2

Total Fund Allocation= Rs 1250 + Rs 500 (Additional Grant Sanctioned) = Rs 1750 in Lakhs

Total fund Allocation under MNITs- Rs 150 Lacs

Distribution of Fund received as per Sub Component 1.2 of TEQIP-II, Project Implementation Plan.

Activities	Percentage	Amount in Lakhs
Procurement of Good	45	787.50
Provide Teaching and Research Assistantships for significantly increasing enrolment in existing and new Master's and Doctoral programmes in Engineering disciplines	20	350
Enhancement of R & D and institutional consultancy activities	5	87.50
Expenditure on faculty and Staff development for improved competence based on Training Needs Analysis.	10	175
Enhanced interaction with Industry	5	87.50
Institutional Management Capacity enhancement	2	35
Implementation of Institutional academic reforms	1	17.50
Academic support for weak students	2	35
Incremental operating cost	10	175

Modernizing NITs

Activity	Total Fund Received under MNITS Amount in Lacs	Expenditure as on 31 st March 2017 Amount in Lacs
Procurement for MNITs	Rs.150	Rs 150.35

In-house workshops organized under the aegis of TEQIP -II at NIT Silchar 2016-2017

Sl	From	To	Topic	Deptt.	Type	Coordinator
1	18-05-2016	19-05-2016	Rethinking Inter-disciplinarily: Bridging the rift	HSS	Faculty Development Program	Dr. Avishek Ray.
2	19-05-2016	20-05-2016	Effective teaching in English in a multilingual classroom	HSS	Faculty Development Program	Dr. Dibyakusum Roy
3	19-07-2016	20-07-2016	Service Regulation & Accounts Training	Accounts Accounts	Staff Development Programme	Ms. Ranajana Jha
4	20-07-2016	20-07-2016	Design & Development of Renewal Energy Systems	E&I	FSD	Dr. Rajdeep Dasgupta Dr. M Khanra
5	04-09-2016	04-09-2016	Workshop on GDP	Administration	Staff Development Programme	Mr. Pulak Nath
6	19-10-2016	23-10-2016	Workshop on climate change assessment: Hydrologic modelling perspective.	CE	Faculty Development Program	Dr. B S Sil Dr. P J Roy Dr. Biplab Das Dr. Arjun Sil
7	17-10-2016	21-10-2016	Workshop on Advance join tech	ME	Faculty Development Program	Dr. S K Maity Dr. Sumit Bhowmik Dr. Biplab Das
8	24-10-2016	28-10-2016	Recent advance in soil & water interaction studies	CE	Faculty Development Program	Dr. D K Ghose
9	31-10-2016	05-11-2016	Computational Combustion	ME	Faculty Development Program	Prof. K M Pandey
10	12/11/2016	16-11-2016	Computational Mechanic & Modelling	ME	Faculty Development Program	Dr. Sudip Dey Dr. Agnimitra Biswas Dr Jagdigh
11	07-11-2016	11-11-2016	Advance in Application of Computational Fluid Dynamics	ME	Faculty Development Program	Dr. Sukumar Pati
12	07-11-2016	07-11-2016	Application welding Technique	ME	Faculty Development Program	Dr. P K Patowari
13	19-11-2016	19-11-2016	TEDx at NITS	EE	Industry Institute Interaction	Dr. N B Dev Choudhury
14	18-01-2017	20-01-2017	Hand-on workshop on NI Multisim	E&I	Industry Institute Interaction	Dr. Sudarsan Sahoo Dr. S H Laskar Mrs. Jupitara Hazarika
15	28-01-2017	29-01-2017	TATA Motors	T&P	Industry Institute Interaction	Dr. N B Dev Choudhury
16	30-01-2017	03-02-2017	Intelligent sensing ,Instrumentation and Control	E&I	Faculty Development Program	Dr. Manas Kr Bera Dr. Swagatadeb Sahoo Dr. Munmun Khanra
17	12-02-2017	13-02-2017	Design of Embedded Control System	EE	Faculty Development Program	Dr. Rajeeb Dey
18	14-02-2017	19-02-2017	Recent Trends in Communication Signal Processing and VLSI	E&I	Faculty Development Program	Dr. Ranjay Hazra Dr. Arun Sunaiya Dr. Sandeep Kumar
19	20-02-2017	24-02-2017	Advance in Image Processing	CSE	Faculty Development Program	Dr. S K Biswas

SI	From	To	Topic	Deptt.	Type	Coordinator
20	22-02-2017	26-02-2017	Recent Advance in Applied Mathematics	Mathematics	Faculty Development Program	Dr. Pankaj Biswas Dr. P K Gupta Dr. BHS Raju
21	23-02-2017	25-02-2017	Lecture Series on Uncertainties in wireless communication: Challenges and opportunities.	ECE	Faculty Development Program	Dr. Wasim Arif Dr. K L Baishnab
22	24-02-2017	01-03-2017	Application of optimization Techniques in Engineering	ME	Faculty Development Program	Dr. S K Pattanayak
23	02-03-2017	04-03-2014	On Nano Science and Technology	ECE	Faculty Development Program	Dr. K L Baishnab
24	04-03-2017	06-03-2017	Reservation & RTI	Administration	Staff Development Programme	Mr. Rajib Kahar
25	06-03-2017	11-03-2017	Cloud Computing & Networking	CSE	Faculty Development Program	Dr. Arup Bhattacharjee Mr. Pantha K Nath Mr. Ripon Patgiri
26	08-03-2017	12-03-20 17	Advance in Stability Analysis on Dynamical System	Mathematics	Faculty Development Program	Dr. Parveen Kumar Gupta Dr. P Biswas Dr. Md Maqbul
27	12-03-2017	16-03-2017	Recent Trend on Optimization Techniques in Science and Engineering	Mathematics	Faculty Development Program	Dr. Kedar Nath Das
28	20-03-2017	24-03-2017	Machine Learning Technique	CSE	Faculty Development Program	Mr. Badal Soni
29	24-03-2017	25-03-2017	National Conference Hydrology and Watershed Management	CE	Faculty Development Program	Prof. P S Choudhury Dr. P J Roy
30	24-03-2017	26-03-2017	Research Conclave on Recent Innovation in Science & Engineering-	Institutional	Faculty Development Program	Dr. R G Nair

Outside Conference/Seminar/Workshops Attended by Faculty 2016-2017 under TEQIP-II

SI.No	Name	Designatio	Deptt	Duration	Venue	Topic
1	Dr. Subrata Bera	Asst. Professor	Mathematics	17-21 Jan 17	HIT, West Bengal	Electronic kinetic flow in a surface corrugated micro channel
2	Lalu Seban	Asst. Professor	E&IE	13-16 Mar 17	IIT Madras	Nonlinear model predictive control
3	Dr. Manas Kumar Bera	Asst. Professor	E&IE	13-16 Mar 17	IIT Madras	Nonlinear model predictive control
4	Dr. Prashanth J	Asst. Professor	CE	15-16 Dec 16	Hyderabad	Properties of pervious concrete made with quarry dust
5	Dr. B.S. Sil	Asst. Professor	CE	12-16 Dec 16	Roorkee	Adv. Hydrologic Modelling and climate change
6	Dr. K M Pandey	Professor	ME	27-28 Jan 17	Goa	The Impact of work role on job stress of software professional at IBM India Pvt Ltd Gurgaon
7	Prof. M. Ali Ahmed	Professor	CE	11-16 July 16	Tamil Naidu	Recent trends in transportation engineering
8	Dr. T.R Lenka	Asst. Professor	ECE	03 Mar 17	IIT Kanpur	Invited talk on Modelling and Simulations of GaN- Based MOSHEMT for high power electronics
9	Dr. Ranjith G. Nair	Asst. Professor	Physics	11-13 Nov 16	MGU Kottayam	Second International Conference on Advanced Materials for power

Sl.No	Name	Designatio	Deptt	Duration	Venue	Topic
10	Dr. Arnab Nandi	Asst. Professor	ECE	11 June 16	Kolkata	Women Safety (WOSAF)
11	Dr. B.S. Sil	Asst. Professor	CE	29 Aug-3 Sep 16	NIT Calicut	Assessment of climate and land use change impacts on water resource
12	Dr. Swagatadeb Sahoo	Asst. Professor	E&IE	24-25 Sep 16	NIT Rourkela	Micro sensors and Signal Conditioning
13	Munmun Khanra	Asst. Professor	E&IE	3-5 Oct 16	Odisha	Signal Processing communication. Power and embedded system
14	Dr. Banani Basu	Asst. Professor	ECE	11 June 16	Kolkata	Women Safety (WOSAF)
15	Dr. Nitesh A.	Asst. Professor	CE	16-20 May 16	NIT Hamirpur	Landslide Hazard and related phenomena
16	Dr. M L V Prasad	Asst. Professor	CE	17-18 June 16	Tamil Naidu	Eco- efficient fiber reinforced SCC for replacements of cement and natural sand with waste materials
17	Dr. Upendra Kumar	Associate Professor	CE	25-27 Oct 16	Hyderabad	Chemically modified agricultural waste material as potential bioadsorbent for toxic heavy metals – a review
18	Dr. Dulal Ch. Das	Asst. Professor	EE	28-29 Sep 16	NIT Rourkela	Control of renewable power system
19	Kedar Nath Das	Asst. Professor	Mathematics	23-24 Dec 16	Punjab	A systematic review of software testing using evolutionary techniques
20	Dr. Nitesh A.	Asst. Professor	CE	19-29 Dec 16	MNIT Jaipur	Analysis of Nonlinear problems by the finite element method
21	Dr. Parthajit Roy	Asst. Professor	CE	29 Aug-3 Sep 16	NIT Calicut	Assessment of climate and land use change impacts on water resource
22	Dr. Manas Kumar Bera	Asst. Professor	E&IE	26-30 Oct 16	IIT Bombay	Modern Sliding Mode Control
23	Dr. Praveen Kumar Gupta	Asst. Professor	Mathematics	14-17 Dec 16	BHU Varanasi	Analysis of a Mathematical Model of Hepatitis B Virus

Outside Conference/Seminar/Workshops Attended by Student 2016-2017 under TEQIP-III

Sl. No	Name	Reg No.	M.Tech / Ph.D/ B.Tech / M.Sc	Deptt	Duration	Venue	Topic
1	Rituparna Mitra	14-3-03-111	PhD	EE	25-27 Nov 16	Bikaner, Rajasthan	Power transformer Failure analysis using interval type-2 Fuzzy set theory based fault tree analysis.
2	Somnath Pal	13-1-2-112	B.Tech	ME	15-17 Dec 16	MNNIT, Allahabad	Modelling of phase change material used as a latent heat thermal reservoir.
3	Dhiman Dutta	14-3-22-102	PhD	Mathematics	28-30 Dec 16	AMITY, Jaipur	Multi-item fixed charged solid shipment problem with type- 2 fuzzy

Sl. No	Name	Reg No.	M.Tech / Ph.D/ B.Tech / M.Sc	Deptt	Duration	Venue	Topic
4	Debashish Dash		PhD		12-16 Dec 16	JNU, New Delhi	Quantum Transport Atom Transistor.
5	Sangita Saha	15-3-22-103	PhD	Mathematics	27-28 Jan 17	Belgaun, Goa	Some I – convergent triple Sequence Spaces of fuzzy numbers defined by Orlicz Function
6	Mayur Barman	15-3-03-126	PhD	EE	27-28 Jan 17	Belgaun, Goa	Artificial and particle transport through human airways A systematic review
7	Kharat Sandeep Bhagwan	15-22-303	M.Tech	ME	27-28 Dec 16	DIET, A.P	Airflow and particle Transport through human Airways.
8	Noor Alam	15-3-02-110	PhD	ME	27-28 Dec 16	DIET, A.P	Experiment study of hydroxyl gas.....
9	Manjula G Nair	15-3-24-102	PhD	Physics	27-30 Nov 16	IIT, Patna	Structural and electrical studies on plastic
10	Rajeev N	16-3-24-102	PhD	Physics	12-16 Dec 16	Delhi	Symposium
11	Ratnesh Kumar Yadav	15-22-117	M.Tech	ME	27-28 Dec 16	DIET, A.P	Review on heat transfer from Fins
12	Sumit Kumar	15-22-304	M.Tech	ME	6-11 Feb 17	IIT, Kanpur	GIAN course on Computational Cardio-Vascular Fluid Dynamics
13	Pankaj Kumar Kushwaha	13-1-2-024	B.Tech	ME	15 Jan 2017	Delhi, Gurgaon	Hult Prize
14	Aman Patel	15-1-2-100	M.Tech	ME	15 Jan 2017	Delhi, Gurgaon	Hult Prize
15	Vaibhav Tayal	14-1-4-053		ECE	15 Jan 2017	Delhi, Gurgaon	Hult Prize
16	Hariveer Singh	15-22-301	M.tech	ME	12-14 Dec 16	IIT, Delhi	Low Velocity impact responses of FGM plate
17	Ravi Ranjan Kumar	16-3-02-101	PhD	ME	27-28 Dec 16	Visakhapatnam	Static structural and modal analysis of gas turbine blade
18	Deepak Kumar Panda	15-3-04-120	PhD	ECE	13-17 Feb 17	IIT, Kanpur	Modeling and simulation of Nano- Transistors
19	HMSM Mazarbhuiya	15-3-02-119	PhD	ME	27-28 Dec 16	Visakhapatnam	SSS analysis of high pressure gas turbine blade using FEA
20	Suyel Namasudra	14-3-05-104	PhD	CSE	3-4 Feb 17	Tamil Naidu	Cloud Computing Fundamentals and research issues
21	Bablu Kumar Mandal	15-22-305	M.Tech	ME	12-14 Nov 16	Ranchi	A decision making approach. For selection of rapid prototyping process using MACBETH method

Sl. No	Name	Reg No.	M.Tech / Ph.D/ B.Tech / M.Sc	Deptt	Duration	Venue	Topic
22	Bulon Ch Hazarika	15-22-308	PhD	ME	5-7 Nov 16	IIT, Kharagpur	Free Vibration of functionally graded plates
23	Jay Prakash Singh	14-303-103	PhD	EE	4-6 Jan 17	IIT, Guwahati	On control of a many Equilibrium Hyper chaotic System
24	Anirudh Nath	15-3-03-105	PhD	EE	13-16 Mar 17	IIT, Madras	Nonlinear model predictive control
25	Namita Boruah	15-3-03-107	PhD	EE	13-16 Mar 17	IIT, Madras	Nonlinear model predictive control
26	Suman Sutradhar	12-3-3-114	PhD	EE	16-18 Dec 16	Bengaluru	MILP for Hydrothermal Scheduling Problem Considering Transmission Loss
27	Abinash Das	15-3-24-103	PhD	Physics	14-16 Dec 16	VIT, Vellore	Role of PH on phase Transformation and Photo catalytic Performance of Titania
28	Anurag Das	12-1-4-038	B.Tech	ECE	6-8 April 16	Tamil Naidu	Image splicing detection using Gaussian or defocus Blur
29	Dhiman Dutta	14-3-22-102	PhD	Mathematics	22-24 Dec 16	Jaipur	A new method for solving multi-item multi- object solid fixed charged shipment model with type 2 variables
30	Shashank Shekar	15-24-203	M.Tech	ECE	1-10 Sep 16	IIT Kanpur	Cognitive Radio & Wireless Comm.
31	Chandrashekar Rai	15-24-205	M.Tech	ECE	1-10 Sep 16	IIT Kanpur	Cognitive Radio & Wireless Comm.
32	Debashish Dash	15-3-03-121	PhD	EE	12-16 Dec	New Delhi	Quantum Transport Atom to transistor
33	Ajoy Dutta	15-3-22-101	PhD	Mathematics	28-30 Nov 16	IIT, Madras	A study of HIV/AIDS epidemic model using homotopy analysis method
34	Jay Prakash Singh	14-303-103	PhD	EE	17-18 Oct 16	Karnataka	A new 4-D Conservative Chaotic system with Coexistence of Hidden chaotic orbits
35	Kshetrimayum Lochan	13-303-103	PhD	EE	17-18 Oct 16	Karnataka	Trajectory Tracking Control of an AMM modeled TLFM using Back stepping Method
36	Namita Boruah	15-3-03-107	PhD	EE	17-18 Oct 16	Karnataka	Design and performance comparison of different predictive controllers for magnetic levitation system
37	Rupam Goswami	14-3-04-103	PhD	ECE	6-8 Sep 16	Kochi, Kerala	Circular Gate Tunnel FET: Optimization and noise

Sl. No	Name	Reg No.	M.Tech / Ph.D/ B.Tech / M.Sc	Deptt	Duration	Venue	Topic
38	Rinku Rabidas	14-3-04-109	PhD	ECE	6-8 Sep 16	Kochi, Kerala	A study of different texture features based on local operator for benign malignant mass classification
39	Rajashree Das	14-3-04-108	PhD	ECE	6-8 Sep 16	Kochi, Kerala	Analysis of electrical parameters of Ge/Si heterojunction GeOI
40	Biplab Dhar	15-3-22-104	PhD	Mathematics	14-17 Dec 16	BHU Varanasi	Mathematical modelling of allergic asthma and specific immunotherapy
41	Israfil Hussain		PhD		16-17 Dec 16	Coimbatore	Frequency control of an isolated Hybrid power system
42	Nirban Laskar		PhD	CE	27-28 Dec 16	Vishakhapatnam	SEM, FTIR & EDAX studies for the removal of safranin Dye from water bodies using modified Biomaterial
43	Noor Alam		PhD		27-28 Dec 16	Vishakhapatnam	Experimental study of Hydroxy Gas(HHO)
44	HMSM Mazarbhuiya	15-3-02-119	PhD	ME	27-28 Dec 16	Vishakhapatnam	Steady state structural analysis of High pressure gas turbine blade using FEA
45	Hariveer Singh		PhD		12-14 Dec 16	IIT, Delhi	Low Velocity impact responses of FGM Plate
46	Shashank Shekar	15-24-203	M.Tech	ECE	25-26 Dec 16	Ranchi	Performance Analysis of TRDMA
47	Bishal Podder	15-3-02-116	PhD	ME	22 Dec 16	MNRE (Govt. of India)	National workshop on testing standardization and certification for renewable energy sector
48	Subir Kr Maiti	15-3-23-102	PhD	Chemistry	20-26 Dec 16	Jadavpur (WB)	Crystallization technique XRD Technique
49	Vishal Kumar	12-1-4-044	B.Tech	ECE	6-8 Apr 16		
50	Mayur Barman	15-3-03-126	PhD	EE	27-28 Jan 17	Belgoan (Goa)	Artificial Neural Network Based Electricity Price Forecasting Using Levenberg Marquardt Algorithm
51	Namita Boruah	15-3-03-107	PhD	EE	13-16 Mar 17	Chennai	Course on Nonlinear Model Predictive Control
52	Chandrashekar Rai	15-24-205	M.Tech	ECE	2-3 Feb 17	Noida	Optimization of secondary user capacity under efficient Bandwidth In CR Through ALC-PSO

Sl. No	Name	Reg No.	M.Tech / Ph.D/ B.Tech / M.Sc	Deptt	Duration	Venue	Topic
53	Binoy Kumar Baroi	15-22-216	M.Tech	ME	17-19 Mar 17	Hyderabad	Electric Discharge Machining of titanium grade 2 alloy and its parametric study
54	Sumit Kumar	15-22-304	M.Tech	ME	9-11 Mar 17	Vellore	Modelling of Human Abdominal artery for blood flow analysis
55	Payel Deb	15-3-02-103	PhD	ME	9-11 Mar 17	Vellore	Scaffold development using Biomaterial
56	Dhiraj Sanghavijay Bombarde	15-22-214	M.Tech	ME	9-11 Mar 17	Vellore	Design & development of the human middle ear to examine dynamic responses
57	Sumit Das Lala	15-3-02-102	PhD	ME	9-11 Mar 17	Vellore	Study of hardnen of the weld bead formed by partial hybrid welding by MIG&SAW...
58	Emon Barua	15-3-02-121	PhD	ME	9-11 Mar 17	Vellore	Develop of computational tibial model to investigate stress shielding effect at mailing stage
59	Lakshman Kumar	15-22-401	M.Tech	ME	16-18 Mar 17	Bangalore	Parametric optimization of AWJM process using GSA and BA algorithm
60	Kharat Sandeep Bhagwan	15-22-303	M.Tech	ME	9-11 Mar 17	Vellore	Development of human airways model for CFD Analysis

Procurement Report for the financial Year 2016-2017 under TEQIP-II

Packages Procured under Sub-Component 1.2

Package Code	Package Name	Mode	Actual Amount in Lacs (Rs)
TEQIP-II/NITS/192	Manual- NITS/TEQIP-II/Computational Lab/E&I/2016	Direct Contract	2435649
TEQIP-II/NITS/193	Manual- NITS/TEQIP-II/Institutional/Desktop PC/2016	Direct Contract	2435649
TEQIP-II/NITS/194	Manual- NITS/TEQIP-II/Institutional/Celling mounted projector/2016	Direct Contract	1694628
TEQIP-II/NITS/195	Manual-NITS/TEQIP-II/CE/Advance Computational Lab/AnsysAcad.Research /2016	Direct Contract	2117768
TEQIP-II/NITS/196	Manual- NITS/TEQIP-II/CE/Modflow /2016	Direct Contract	444150
TEQIP-II/NITS/197	Manual- NITS/TEQIP-II/EE/Power System Lab/MI Power/2016	Direct Contract	2200000
TEQIP-II/NITS/198	Manual-NITS/TEQIP-II/E&I/Photonics Simulation & Design Software /2016	Direct Contract	1765632

Package Code	Package Name	Mode	Actual Amount in Lacs (Rs)
TEQIP-II/NITS/200	Manual-NITS/TEQIP-II/ECE/RF Design/ADS Software/2016	Direct Contract	945000
TEQIP-II/NITS/201	Manual-NITS/TEQIP-II/ECE/Communication Lab/System View/2016	Direct Contract	945000
TEQIP-II/NITS/202	Manual-NITS/TEQIP-II/ECE/TCAD Lab/ Silvacro TCAD/2016	Direct Contract	1556125
TEQIP-II/NITS/203	Manual-NITS/TEQIP-II/ECE/Mimics/2016	Direct Contract	425000
TEQIP-II/NITS/204	Manual-NITS/TEQIP-II/Laptop/2016	Direct Contract	83187
TEQIP-II/NITS/205	Manual-NITS/TEQIP-II/Institutional/Ceiling Mount Kit & Projector Screen/2016	Shopping	853023
TEQIP-II/NITS/124	Modernizing/EE/2-DOF Serial flexible link robot	Direct Contract	1680000
TEQIP-II/NITS/134	Modernizing/ME/Autoclave Reactor	Shopping	534375
TEQIP-II/NITS/190	Modernizing/CE/SPSS	Direct Contract	926812
TEQIP-II/NITS/133	Modernizing/CE/MX Road STAAD Pro/STAAD Foundation	Direct Contract	1728000

Packages Procured under Modernizing NITs

Package Code	Package Name	Mode	Actual Amount in Lacs (Rs)
TEQIP-II/NITS/131	Modernizing/CE/StructuralLab/Atena	Direct Contract	845000
TEQIP-II/NITS/161	Modernizing/Institutional/Workstation	Direct Contract	1865949
TEQIP-II/NITS/140	Modernizing/ECE/COVENTORWARE & MEMS	Direct Contract	1591649
TEQIP-II/NITS/159	Modernizing/Inst/Video Conferencing Unit	Direct Contract	2457000
TEQIP-II/NITS/163	Modernizing/EE/DigSILENT Power factory Software	Direct Contract	787500
TEQIP-II/NITS/189	Modernizing/ECE/Synopsis TCAD	Direct Contract	1020000
TEQIP-II/NITS/165	Modernizing/ECE/NI Communication Lab	Direct Contract	2466903
TEQIP-II/NITS/141	Modernizing/ECE/Ansys	Direct Contract	2104725
TEQIP-II/NITS/143	Modernizing/E&I/dSPACE	Direct Contract	1453000
TEQIP-II/NITS/125	Modernizing/CE/Environmental Lab/Aquaspec	Direct Contract	431156

Awards and Achievements

- NIT Silchar has secured 53rd position amongst all the engineering universities in India as per NIRF 2017 data. It is also the 9th amongst all the NITs as per the same ranking, with a score of 42.73
- Below is a comprehensive list of the awards and achievements of the NITS student fraternity, 2016-17.

Date	Event	Position Secured	Place
02/09/2016	NIT Conclave	Runner up	NIT Rourkela
02/11/2016	Inter Technical College Debate competition.	1 st Position	Assam Engg. College Assam.
2016-2017	Joy Paul memorial Debate	2 nd Position	Assam University
February 2017	Inter Institutional Debate Competition	3 rd Position	Gurucharan College Silchar
Jan 2017	North-east Sports Meet Chess & TT	1 st Position	NIT Silchar
02/04/2017	Inter NIT Sports Meet 2016-17, Chess & TT (Men's)	1 st position in Chess & Runner Up in TT (Men's)	NIT Srinagar
2016-17	Blood Donation Camp. Donated 326 units of blood in 2 camps	4 th position in all over Assam	Assam State Transfusion Council
06-11-2016	10th Edition of K R N Memorial Assam State Wado Karate Championship 2016	1 gold, 3 silver & 5 bronze	DTRP Indoor Stadium, Guwahati, Assam
10-12-2016	10th Senior State Karate Championship-2016	1 Bronze	Borbhujiya High School Chabua District, Assam
12-02-2017	T. G Baruah Memorial 6th Edition of Youth & U-21 Years State Karate Championship	1 silver & 3 bronze	DTRP Indoor Stadium, Guwahati, Assam
27-03-2017	Inter Club Karate Championship Organised by DSA, Physical Feast 2017	7 gold, 3 silver & 5 bronze	DTRP Indoor Stadium, Guwahati, Assam
09-04-2017	14 Black Belt Inductees		SAC building NIT Silchar

Glimpses of Annual Activities



Posua-The Spring Fest- 2016



14th Convocation of NIT Silchar - 2016



Convocation-2016



Convocation-2016



International Day of Yoga-2016



International Day of Yoga-2016





Fresher's welcome party- 2016



Independence Day 2016



Independence Day Parade 2016



Blood Donation Camp 15th August 2016



Dahi Handi: Celebration of Krishna Janmashthami 2016



Manthan16: Celebration of National Language Day



Inaugural Ceremony of Annual Techno Cultural Fest: Technosis 2016



Technosis 2016



7th Alumni Meet 2016



7th Alumni Meet 2016



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



Swachhta Pakhwara 2016



Cloth Donation Camp 2016



Republic Day Parade 2017



Republic Day 2017



Blood Donation Camp 26th January 2017



North East Sports Meet 2017



North East Sports Meet 2017



North East Sports Meet 2017



North East Sports Meet 2017



North East Sports Meet 2017



Inauguration of Bharat Ratna Dr. APJ Abdul Kalam Library & Research Centre



Inauguration of Bharat Ratna Dr. APJ Abdul Kalam Library & Research Centre



Inauguration of Start up Centre at NIT Silchar



Performance by students at the inaugural ceremony of Bharat Ratna Dr. APJ Abdul Kalam Library & Research Centre & Start up Centre of NIT Silchar



Honorable Chief Minister of Assam Shri. Sarbananda Sonowal Planting a tree during the inaugural ceremony of Bharat Ratna Dr. APJ Abdul Kalam Library & Research Centre



Bir Radha Sherpa performing in Natraj, Incandescence 2017



Glitterati, the fashion show: Incandescence 2017



Papa CJ, The Stand-up Comedian in Incandescence 2017



PrateekKuhad Performing in Incandescence 2017



Guthrie Govan Performing in Incandescence 2017



Deprador:Incandescence 2017



Student performing in Incandescence 2017



National Innovation Summit 2016



National Innovation Summit 2016



Self Defense Workshop for Women



Self Defense Workshop for Women



Rangoli Making Competition 2016



Mountaineering and Tracking Camp 2017 at Sikkim



Mountaineering and Tracking Camp 2017 at Sikkim



Inter NIT Sports Meet 2016-17 at NIT Srinagar

Corporate Social Responsibility

In spite 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 its surroundings 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.
- **Kendriya Vidyalaya 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 a minimal 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 such as teaching program, National Institute of Technology Silchar- Certificate in Information Technology program (NIT-CIT), cloth donation drive, Ekprayas, green campus initiative (paper bag preparation), artificial limb camps and annual function prayas 2017.

In teaching program, seven nearby villages are covered such as Babu Tilla, Madhu Tilla, Tambu Tilla, Sadhu Tilla, Fakir Tilla, Bel Tilla, Borakhai Teagarde. Under this program around 50 student volunteers from NIT went to the schools of these villages on every weekend and contributed to their knowledge development. This program also extended to the Lower Primary School of our NIT campus where girl student-volunteers went to teach on weekends. Under skill development program, essential basics of computers were taught to a batch of 30 underprivileged villagers. Over a period of six months a dedicated team of student volunteers developed the course framework and taught for three hours on weekends. The successful attendees were awarded a certificate on the annual program of gyansagar. Like every year, on 20th November 2016, Gyansagar conducted a cloth donation camp. About 1700 number of clothes were collected from NITS fraternity. In this event student volunteers donated clothes to the needy people of the villages. In ek-prayas program the volunteers motivated the school drop-out kids to regain their interest in learning through games and refreshments. As a green campus initiative an attempt was made to use the used-papers for preparation of carry bags as a replacement for plastics. Around 250 paper bags of different sizes and shapes were prepared and tested their strength. The annual program of gyansagar, Prayas 2 was organized on 8th May 2017 which witnessed the participation of 250 village kids from the nearby villages. For this event various competitions like drawing competition, dance competition, Craft model competition was conducted among the students who are benefited under gyansagar teaching program. The kids were awarded with certificates and gifts for their enthusiasm and participation. Two Artificial Limb Camps and Zonal Workshops were conducted by gyansagar on July 17, 2016 and August 21, 2016, respectively in collaboration with Bharat Vikas Parishad, Silchar branch at NIT Silchar. Around 20 beneficiaries having an orthopedic disability were provided with artificial limbs on







Accounts & Financial Statements

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

STATEMENT OF ONGOING PROJECT ACCOUNTS (2016-17)

Sl. No.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Opening Balance as on 01.04. 2016	GRANT RECEIVED DURING THE YEAR	INTEREST / OTHER RECEIPTS DURING THE YEAR	TOTAL	EXPENDITURE DURING THE YEAR	Refunded to Ministry	Balance as on 31.03.2017
MCIT:									
1	Development of Speech Based Multi level Person Authentication System	Shri R.H. Laskar	84,004	-		84,004	48,487	35,517	0
2	Vishveshwarya Ph.D Scheme for Electronics and IT at NIT Silchar	Sri K.L. Baishnab	15,90,920	35,30,875	32,716	51,54,511	46,93,536	0	4,60,975
3	(SMDP) Special Manpower Development Programme for Chips to System Design-Release of Funds by CEERI Pilani to RC's and PI's	Sri K.L. Baishnab	14,00,791	1,80,000	2,46,280	18,27,071	15,40,681	0	2,86,390
TOTAL			30,75,715	37,10,875	2,78,996	70,65,586	62,82,704	35,517	7,47,365
DST :									
4	Management of TUC	Shri F.A Talukdar	6,463	-	328	6,791	0		6,791
5	Power Quality Assessment and Improvement in Barak Valley, Assam	Shri A.K. Goswami	1,23,494	-	6,143	1,29,637	61,000	68,637	0
6	Advanced Manufacturing and Material Testing	Shri P.K. Patowari	146,90,685	-	7,47,431	154,38,116	0	0	154,38,116
7	Innovation and Entrepreneurship Development Centre(IEDC) at NIT Silchar.	Dr. Ashim Das	5,30,000	8,00,000	40,913	13,70,913	4,83,707	0	8,87,206
8	Development of Battery Supercapacitor Hybrid Energy Storage System for Stand Alone Solar Photovoltaic Power	Dr. Munmun Khanra	0	10,86,166	21,156	11,07,322	44,500	0	10,62,822
9	Design and Development of a hybrid photo voltaic(PVT) system for rural application	Dr Biplab Das	0	10,19,600		10,19,600	0	0	10,19,600
TOTAL			153,50,642	29,05,766	8,15,971	190,72,379	5,89,207	68,637	184,14,535
MOESC:									
10	L- Moments Based Regional Extreme Rainfall & Flood Frequency Analysis for Hydro- ...	Shri P.S. Choudhury	22,925	-	1,167	24,092	0	0	24,092
11	Behaviour Of Clay Dampers under Impact Loading	Shri A.K. Dey	3,55,707	-	14,579	3,70,286	1,63,688	0	2,06,598
TOTAL			3,78,632	0	15,746	3,94,378	1,63,688	0	2,30,690
AICTE (RPS):									
12	Studies of Co-operative Assistance to Nucleophilic	Shri P. Barman	15,784	-	317	16,101	0	0	16,101
13	Development of Surface Modified Adsorbents for The Removal of CR(VI)	Md. Ahmaruzzaman	3,59,315	-	7,221	3,66,536	0	0	3,66,536
14	Study of Bi-Layered Perovskite Oxides: Thin Film for Non-Volatile Ferroelectric Memory Applications	Shri Asim Roy	1,08,079	-	2,172	1,10,251	0	0	1,10,251
15	Investigation Of Some Binary Metal Oxide Material for Resistive Switching Memory Applications	Shri Fazal A. Talukdar	5,02,892	-	10,106	5,12,998	0	0	5,12,998
16	Development of An Enzymatic Process for Production of Microalgaeeal Biodiesel	Shri S. Chatterjee	24,825	-	478	25,303	2,500	0	22,803
17	Design , Simulation and Implementation of Carbon Nanotube Based Fet Logics	Shri S. Choudhury	1,14,384	-	2,299	1,16,683	0	0	1,16,683
18	Automatic Generation Control of Autonomous Hybrid Generation System	Shri Dulal Ch. Das	1,53,641	-	3,087	1,56,728	0	0	1,56,728
19	Utility of Paratransit Modes in Regional Passenger Transportation	Shri M.A Ahmed	6,721	-	135	6,856	0	0	6,856

Sl. No.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Opening Balance as on 01.04. 2016	GRANT RECEIVED DURING THE YEAR	INTEREST / OTHER RECEIPTS DURING THE YEAR	TOTAL	EXPENDITURE DURING THE YEAR	Refunded to Ministry	Balance as on 31.03.2017
ICSSR :									
20	Agricultural Development and Environment Issues in the North Eastern Region: A Case Study of Manipur	Shri N. B. Singh	1,09,617	-		1,09,617	1,07,700	1,917	0
TOTAL			1,09,617	0	0	1,09,617	1,07,700	1,917	0
AICTE (MODROB):									
21	Modernisation of Thin Film Laboratory	Shri Asim Roy	10,775	-	252	11,027	0	0	11,027
22	Up Gradation Of Highway Engineering Laboratory	Shri D.N. Bhattacharjee	8,37,114	-	19,578	8,56,692	0	0	8,56,692
23	Heat Transfer Lab	Shri R. D. Misra	4,95,752	-	11,595	5,07,347	0	0	5,07,347
TOTAL			13,43,641	0	31,425	13,75,066	0	0	13,75,066
IBM:									
24	Extension Of NLP	Dr. S. Borgohain	7,83,094	-	15,737	7,98,831	0	0	7,98,831
TOTAL			7,83,094	0	15,737	7,98,831	0	0	7,98,831
MNRE:									
25	Regional Test Centre cum Technology Back-up Unit.....	Shri Agnimitra Biswas	9,15,951	-	3,82,461	12,98,412	12,26,097	0	72,315
TOTAL			9,15,951	0	3,82,461	12,98,412	12,26,097	0	72,315
SERB :									
26	Synthesis of indenoisoquinolineones	Dr. Lalthazuala Rokhum	2,42,006	6,00,000	4,917	8,46,923	4,28,400		4,18,523
27	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	Dr. Lalthazuala Rokhum	5,27,126	5,00,000	10,278	10,37,404	6,66,808		3,70,596
28	Evaluation of Non- linear fatigue damage in AsphaltMAaterials	Dr. P. Rajbongshi	30,23,101	-	58,164	30,81,265	2,37,600	0	28,43,665
29	A Study on Measure Theoretical approach to Convergence of sequences in Probabilistic normed Spaces	Dr. Mausumi Sen	2,48,284	-	3,026	2,51,310	2,29,786	0	21,524
30	"Metal Complexes of New Chiral Schiff Bases: Design, Structure Elucidation, Reactivity and Synthetic Applications"	Dr. Pranjit Barman	18,34,800	-	34,629	18,69,429	3,88,550	0	14,80,879
31	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application.	Dr. Arnab Nandi	20,95,407	-	27,442	21,22,849	18,23,411	0	2,99,438
32	Effects on Variation in input-excitation on the performance of limited-sensors based operational model analysis.	Dr. Nirmalendu Debnath	22,41,945	-	43,818	22,85,763	2,36,065	0	20,49,698
33	Fabrication and Testing of Tandem Layered Quantum Dot Sensitized Solar Cell with Evated Absorption.	Dr. Ranjith G Nair		13,03,726	8,464	13,12,190	84,312		12,27,878
34	Development of EBG Structured Printed Antennas for Ultrawide Band Communication and Futuristic Modelling for prediction of performance Parameters using Computational Techniques.	Dr. Taimoor Khan	0	5,28,000	2,485	5,30,485	50,728		4,79,757
35	Condition Assessment & Reliability of Existing Bridges	Dr. Arjun Sil	0	2,50,000	837	2,50,837	0		2,50,837
36	Numeric Study on Electrokinetic Floe through Polyelectrolyte coated Nanopore	Dr. Subrata Bera	0	10,49,590	1,758	10,51,348	0		10,51,348
37	Effect of metal doped Ti O2 on photoanode and lead free organic-inorganic metal halide perovskite on photovoltaic perfo .	Dr. S.K. Tripathy	0	35,53,265		35,53,265	0		35,53,265

Sl. No.	NAME OF THE PROJECT	PROJECT CO-ORDINATOR	Opening Balance as on 01.04. 2016	GRANT RECEIVED DURING THE YEAR	INTEREST / OTHER RECEIPTS DURING THE YEAR	TOTAL	EXPENDITURE DURING THE YEAR	Refunded to Ministry	Balance as on 31.03.2017
BRNS:									
38	Pose invariant face recognition algorithm development for face based prototype vide surveillance system (VSS)	Shri F.A. Talukdar	15,51,105	-	27,116	15,78,221	3,91,080	0	11,87,141
TOTAL			15,51,105	-	27,116	15,78,221	3,91,080	-	11,87,141
NRDA :									
39	Feasibility Studies on Use of Non Standard Local Materials in Rural Roads at Bishnupur District of Manipur.	Dr P. Rajbongshi	2,97,432	-	3,327	3,00,759	2,46,400		54,359
TOTAL			2,97,432	-	3,327	3,00,759	2,46,400	-	54,359
DIET :									
40	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with Prototype Development.	Prof. S. Baishya	26,57,094	-	47,122	27,04,216	5,67,229	0	21,36,987
41	Analysis of Brain Waves and Development of Intelligent model for Silent Speech Recognition.	Dr. Nidul Sinha	22,36,101	-	37,377	22,73,478	13,14,669		9,58,809
TOTAL			48,93,195	-	84,499	49,77,694	18,81,898	-	30,95,796
UGC :									
42	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	66,067	1,68,000	1,270	2,35,337	2,19,382	0	15,955
TOTAL			66,067	1,68,000	1,270	2,35,337	2,19,382	-	15,955
GRAND TOTAL			402,63,401	145,69,222	18,78,181	567,10,804	152,56,316	1,06,071	413,48,417

FINANCIAL STATUS

1. Analysis of Plan, Non-Plan Grants (Rupees in Lacs)

SI No.	Particulars	Non Plan	Plan
1	Opening balance as on 01.04.2016	0.00	521.07
2	Grants-in-aid received from GOI during the year 2016-17	3650.00	9215.60
3	IRG during the year 2016-17	1669.57	23.37
4	Total (1+2+3)	5319.57	9760.04
5	Expenditure during the year 2016-17	5319.57	5703.60
6	Balance as on 01.04.17	0.00	4056.44

2. Sources of Funds

Plan : Rs. 9215.60 Lac

Non Plan : Rs. 3650.00 Lac

TEQIP-II : Rs. 400.00 Lac

3. Expenditure Position for Staff

SI No.	Head of Expenditure	Rupees in Lacs
1	Pay & Allowances	2366.00
2	Pay of Adhoc Staff/ Visiting Teachers	349.96
3	Pay of Muster Roll	128.03
4	Medical Expenses including reimbursement	36.44
5	Leave Salary	93.47
6	Bonus	17.07
7	Expenditure on Death cum retirement Gratuity	142.38
8	Contribution to New Pension Scheme	89.63
9	Pension	574.52
10	LTC Expenditure	19.28
11	HTC Expenditure	20.33
12	Security Services	202.68
13	House Keeping	103.89
14	Professional Development Allowance	47.32
15	Staff Welfare Expenses	9.93
16	Children Education Allowance	17.03

4. Technical Education Quality Improvement Programme - Phase-II [TEQIP-II]

SI No.	Particulars	Rupees in Lacs
1	Opening balance as on 01.04.2016	114.82
2	Grants-in-aid received from GOI during the year 2016-17	400
3	IRG during the year 2016-17	11.09
4	Total (1+2+3)	525.91
5	Expenditure during the year 2016-17	418.16

Annual Accounts

for the financial year 2016-17



**National Institute of Technology
Silchar**

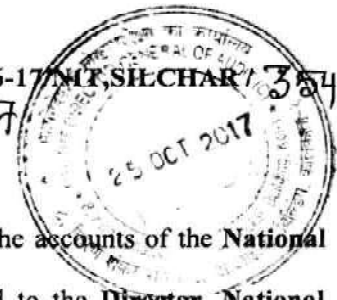


SPEED POST

भारतीय लेखा तथा लेखा-परीक्षा विभाग
महा निदेशक, लेखा-परीक्षा का कार्यालय,
केन्द्रीय, कोलकाता

INDIAN AUDIT AND ACCOUNTS DEPARTMENT
OFFICE OF THE DIRECTOR GENERAL OF AUDIT,
CENTRAL, KOLKATA.

No: OA II (AB)/AR/2016-17/MT, SILCHAR 384
Date: 26-10-2017



A copy of the Separate Audit Report alongwith Annexure on the accounts of the National Institute of Technology, Silchar, for the year 2016-17 is forwarded to the Director, National Institute of Technology, Silchar, Assam 788010, for information and necessary action.

Arrangement may please be made for preparation of Hindi Version of the Separate Audit Report with Annexure at your end and sending the same directly to the Ministry.

It may please be ensured that the Audited Accounts and the Separate Audit Report along with Annexure are placed before the apex body for consideration and adoption before the same are sent to the Government for being placed in Parliament.

Two copies of the printed Annual Report for the year 2016-17 (both English and Hindi Version) containing the Audited Accounts and the Separate Audit Report along with Annexure, as laid before Parliament, may please be forwarded to this office for necessary action at this end.

Encl.: As stated

Deputy Director (Inspection)

Registrar
26/10/17



भारतीय लेखा तथा लेखा-परीक्षा विभाग
महा निदेशक, लेखा-परीक्षा का कार्यालय,
केन्द्रीय, कोलकाता

**INDIAN AUDIT AND ACCOUNTS DEPARTMENT
OFFICE OF THE DIRECTOR GENERAL OF AUDIT,
CENTRAL, KOLKATA.**

No: OA II (AB)/AR/2016-17/NIT,SILCHAR / 363

Date: 25-10-2017

To
The Secretary,
Ministry of Human Resource Development,
Government of India,
Department of Higher Education,
Shastri Bhawan, New Delhi
New Delhi - 110001

**Subject: Separate Audit Report on the accounts of the National Institute of Technology,
Silchar, Assam for the year 2016-17**

Sir,

I am to forward herewith the Separate Audit Report in the prescribed format introduced by the C & A.G of India on the accounts of the **National Institute of Technology, Silchar, Assam** for the year 2016-17. A copy of the annual accounts of the organisation for the year 2016-17 is also enclosed.

2. Two copies of Separate Audit Report (both English and Hindi Version), as presented before Parliament, may please be forwarded to this office for necessary action at this end.
3. The dates of laying the audited accounts and the Separate Audit Reports for the years 2016-17 on the Tables of both the Houses of Parliament may also please be communicated to this office.

Yours faithfully,

(P.K.Singh)

**Director General of Audit
Central: Kolkata**

Encl.: As stated

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of the National Institute of Technology, Silchar for the year ended 31 March 2017.

We have audited the attached Balance Sheet of the **National Institute of Technology, Silchar** Assam as at 31 March 2017, the Income and Expenditure account for the year ended on that date under Section-19(2) of the Comptroller and Auditor General's (Duties, Power and Conditions of Service) Act, 1971 read with Section 22(2) of the National Institute of Technology Act 2007. These financial statements are the responsibility of the Institute's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.

3. We have conducted our audit in accordance with Auditing Standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

- i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
- ii. The Balance Sheet and Income and Expenditure Account/Receipt and Payment Account dealt with by this report have been drawn up in the format prescribed by the Ministry of Human Resource Development, Government of India vide order No. 29-4/2012-FD dated 17 April 2015.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Institute as required under Section - 22(2) of the NIT Act, 2007 in so far as it appears from our examination of books.
- iv. We further report that

Comments on Accounts

A Income & Expenditure Account

1.1 Expenditure

1.1.1 Depreciation (Schedule-4): ₹120.75 crore

The above head was overstated by ₹1.33 lakh due to excess charging of depreciation on Fixed Assets acquired during the year but wrongly taken under other heads of Fixed Assets resulting in understatement of surplus by ₹1.33 lakh for the year ended 31 March 2017.

B General

2.1 Designated/Earmarked/Endowment Fund (Schedule-2): ₹71.78 crore

(a) The funds above represented by the assets under the head 'Interest accrued but not due' for ₹9.45 crore whereas in Loans, Advance and Deposits (Schedule-8) the same head exhibited an amount of ₹9.42 crore resulting in discrepancy of ₹0.03 crore.

(b) In Schedule-2A (Endowment Funds) of the above head, no accumulated interest has been earned under eight funds (Student Welfare Fund, Institute Development Fund, Employees Welfare Fund, Department Promotion Fund, Virtual Classroom, NMEICT

Fund, Pension Fund and Student Aid Fund) which clearly indicates that those funds were not invested. However, expenditure of an amount of ₹1.06 crore had been incurred in respect of NMEICT Fund (₹0.04 crore), Pension Fund (₹1.00 crore) and Student Aid Fund (₹0.02 crore) out of fund balance and not out of accumulated interest which is in contravention with the detailed guidelines prescribed by the MHRD where it has been stated that the expenditure incurred should be borne out of accumulated interest earned from the investment of the fund.

2.2 The Institute had adopted written down value method instead of straight line method for charging of depreciation at the rates which have not been prescribed by the MHRD in the new format of accounts. Despite mention in previous year's audit report, the Institute had not followed the rates and method of New Format of Accounts. Even the impact of departure from the prescribed rates and method had also not been disclosed as per AS-5 in 'Notes on Accounts'.

2.3 Current Liabilities & Provisions (Schedule-3): ₹83.17 crore

The above head was overstated by ₹6.92 lakh as Sundry creditors (₹6.92 lakh) which were lying unclaimed for more than 3 years to 5 years, had not been credited into Capital Fund after conducting review of those unclaimed liabilities by debiting Current Liabilities.

2.4 Current Assets (Schedule-7): ₹91.95 crore

The above head included Sundry Debtors as on March 2017 of ₹0.68 lakh lying irrecoverable for a period ranging from 3 years to more than 5 years. Since the recovery prospect of the amount appears to be remote, necessary provision for Bad and Doubtful Debts need be made.

2.5 The Institute had charged depreciation on the assets procured under the head "Other Assets" at different rates. However, the basis of charging depreciation on the assets under the said head was not disclosed in the "Notes to Accounts". The Institute

should also disclose the detail of assets under 'Other Fixed Assets' as exhibition of 'Other Fixed Assets' is not permissible as per detailed guidelines of MHRD.

2.6 Despite mention in previous years' audit reports, the Institute had not provided any liability towards the retirement benefits payable to the officials/staffs on actuarial basis. The accounting policy of the Institute stated that retirement benefits are paid on actual basis which is not in conformity with MHRD guidelines and Accounting Standard-15 which require that liability of retirement benefits should be provided on actuarial basis.

2.7 Short Term Deposit of ₹1.45 crore with Banks was booked under Schedule 6 'Investment – others' instead of under Schedule-7 'Current Assets'. This resulted in overstatement of Investment by ₹1.45 crore and understatement of Current Assets to that extent.

2.8 BRS in respect of SBI A/c No. 10521277068 disclosed that one cheque (No. 551854) amounting to ₹0.16 lakh issued on January 2016 had become time barred. So the time barred cheque should have been written back in Accounts but the same had not been done at the end of 2016-17.

2.9 Due to mis-classification of head of Fixed Assets, the value of Fixed Assets had not been properly exhibited in its actual head of Fixed Assets as detailed below:

Sl. No.	Name of Assets	Head of Fixed Assets where the value has been shown	Head of Fixed Assets where the value should have been shown.	Value of Fixed Assets.
1.	Cricket Pitch Roller	Gym Equipment	Field Equipments	₹0.45 lakh
2.	(a) Air Conditioners (b) Air Conditioners	(a) Office Equipment (b) Lab Equipment	(a) Furniture and Fixtures (b) Furniture and Fixtures	(a) ₹18.07 lakh (b) ₹0.49 lakh

3.	Refrigerators + Aqua Guard	Office Equipment	Furniture and Fixtures	₹1.25 lakh
4.	Refrigerator Deep Freezer	Electrical Installation & Equipments	Furniture and Fixtures	₹0.35 lakh
5.	Air Conditioner	-Do-	-Do-	₹1.68 lakh
6.	UPS online & UPS 1000 VA	-Do-	-Do-	₹4.67 lakh

C Grants-in-Aid

The Institute is mainly financed by the grants-in-aid from the Government of India. During the year (2016-17) the Institute had received total grant of ₹12865.60 Lakh (Plan ₹9215.60 lakh + Non Plan ₹3650.00 lakh). Out of that total grant, the Institute had spent ₹10034.03 lakh (Plan ₹4821.12 lakh and Non Plan ₹5212.91 lakh). Thus, an amount of ₹2831.57 lakh (₹12865.60 – ₹10034.03 lakh) remained unutilised. However, the Institute had incurred an excess expenditure of ₹1562.91 lakh against Non-plan grant, which was met up from the internal revenue.

Besides above, the Institute had received main Project Grants from various authorities of ₹151.24 lakh (Ministry of Communication and Information Technology: ₹39.11 lakh, Department of Science and Technology: ₹29.06 lakh, Ministry of New and Renewable energy ₹3.54 lakh, Science and Energy Research Board ₹77.85 lakh and University of Grand Commission ₹1.68 lakh). The Institute had spent ₹152.31 lakh, resulting in excess expenditure of ₹1.07 lakh which was spent out of the unspent balance of previous year.

D Net Effect

The net impact of the comments given in the preceding paragraphs is that the Excess of Income over Expenditure was understated by ₹1.33 lakh for the year ended 31 March 2017.

E. Management Letter:

Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, National Institute of Technology, Silchar through a management letter issued separately for remedial/corrective action.

v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and Income and Expenditure Account dealt with by this report are in agreement with the books of accounts.

vi. In our opinion and to the best of our information and to the explanations given to us, the said financial statements, read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in the Annexure to this Audit Report, give a true and fair view in conformity with accounting principles generally accepted in India

- a. in so far as it relates to the Balance Sheet, of the state of affairs of according the National Institute of Technology, Silchar as at 31 March 2017 and
- b. in so far as it relates to Income and Expenditure Account of the surplus for the year ended on that date.

For and on behalf of the C&AG of India



Place:- Kolkata
Date:- 25.10.2017

(P.K.Singh)
Director General of Audit
Central :: Kolkata

Annexure

A. Adequacy of Internal Audit System

The Internal Auditing System is not adequate due to the following as below:

- a) There is no Internal Audit Department of the Institute however only one internal Audit Officer was appointed on 24.10.2012 on contractual basis and there is no staff to assist the Internal Audit Officer.
- b) In absence of Internal Audit Department no internal audit was conducted. Draft Internal Audit Manual has been prepared but yet to be approved.

B. Adequacy of Internal Control System

Internal Control System is not adequate in the following areas:

- a) Fidelity bonds has not been obtained from the employees handling cash and stores.
- b) Petty cash is not being maintained.
- c) All disbursements are not made by cheques.
- d) Fixed Asset Register in respect of the Sponsored Projects as well as of the Institute is not maintained.

C. System of Physical Verification of Assets

- a) The Institute had not maintained any Fixed Assets Register as per Form 40 of GFR showing there in details of Fixed Assets procured/possessed since inception to 2016-17. As such actual position of Fixed Assets could not be verified in audit. Further, the Institute had also not maintained Fixed Assets Register in respect of Sponsored Projects.
- b) Physical Verification of Library Books & Journals was conducted in 2014-15. But Physical verification was not conducted after 2014-15.
- c) **Statutory Liabilities:** The Institute was regular in payment of Statutory Dues.

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
BALANCE SHEET AS AT 31ST MARCH 2017

Amount in Rupees

SOURCES OF FUND	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
CORPUS / CAPITAL FUND	1	5,145,124,685	5,348,478,242
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	2	717,838,490	361,008,384
CURRENT LIABILITIES & PROVISIONS	3	831,675,411	259,378,835
TOTAL		6,694,638,586	5,968,865,461

APPLICATION OF FUNDS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
FIXED ASSETS			
Tangible Assets		3,390,368,683	3,527,852,182
Intangible Assets	4	23,075,127	26,487,987
Capital Works-In-Progress		1,813,279,291	1,472,387,777
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5	354,151,012	354,144,046
INVESTMENTS - OTHERS	6	19,020,822	18,620,822
CURRENT ASSETS	7	919,486,377	345,197,907
LOANS, ADVANCES & DEPOSITS	8	175,257,274	224,174,740
TOTAL		6,694,638,586	5,968,865,461

SIGNIFICANT ACCOUNTING POLICIES	23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24

Dated, Silchar
The 22nd June 2017

Registrar

Director

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

Amount in Rupees

PARTICULARS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
INCOME			
Academic Receipts	9	196,077,691	171,498,740
Grants /Subsidies	10	468,825,924	467,332,776
Income from Investment	11	375,067	432,637
Interest Earned	12	3,362,377	4,566,547
Other Income	13	299,683,502	249,508,736
Prior Period Income	14	-	-
TOTAL (A)		968,324,561	893,339,436

APPLICATION OF FUNDS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
EXPENDITURE			
Staff Payment & Benefits (Establishment Expenses)	15	421,796,352	414,639,385
Academic Expenses	16	112,947,385	103,601,711
Administrative and General Expenses	17	64,151,676	68,216,825
Transportation Expenses	18	2,434,259	1,679,930
Repairs & Maintenance	19	14,863,139	14,381,152
Finance Costs	20	22,326	26,996
Depreciation	4	261,682,212	186,378,648
Other Expenses	21	19,566,403	20,638,749
Prior Period Expenses	22	-	1,555,072
TOTAL (B)		897,463,752	811,118,468
<u>Balance being excess of Income over Expenditure (A-B)</u>		70,860,809	82,220,968
Transferred to Corpus Fund		70,860,809	82,220,969
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 22nd June 2017

Registrar

Director

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE - 1 : CORPUS / CAPITAL FUND

<i>Amount in Rupees</i>		
Particulars	CURRENT YEAR	PREVIOUS YEAR
A. CAPITAL FUND : Balance at the beginning of the year	4,945,213,081	4,247,846,595
Less: Reappropriation of Capital Fund of earlier year	4,940,118	-
Less: Excess of Expenditure over Income transferred from Income & Exp A/C		-
Less: Depreciation on Capital Assets	261,682,212.00	-186378648
Total	4,678,590,751	4,061,467,947
Add: Grants from Govt. of India to the extent utilized for Capital expenditure	466,533,934	883,745,134
Total	5,145,124,685	4,945,213,081
Add: TEQIP Phase- I Fund		103,165,960
Add: Earth Quake Engineering NPEEE	Shifted to SH-3	1,427,878
Add: Opeing balance of Sponsored Project (AICTE & R&D) Fund		45,736,694
Addition during the year agsinst Sponsored Projects		3,342,187
Total	-	153,672,719
BALANCE AT THE YEAR END (A)	5,145,124,685	5,098,885,800
B. CORPUS FUND ACCOUNT		
Balance as at the beginning of the year		158,822,817
Add: Contributions Towards Corpus Fund		3,205,925
Add: Surplus of Income over Expenditure	Shifted to Earmarked Fund	82,220,969
Add: Interest against investment & Savings a/c		12,586
Add: Accrued Interest		5,330,145
BALANCE AT THE YEAR END (B)	-	249,592,442
BALANCE AT THE YEAR END (A+B)	5,145,124,685	5,348,478,242

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Particulars	Fund wise Breakup					Amount in Rupees	
	Pension Fund	Depreciation Fund	Maintenance Fund	Staff Dev. Fund	Student Welfare Fund	Current Year	Previous Year
Total							
: A.							
Opening Balance	1,171,351	145,583,173	143,885,734	14,240,726	375,494	305,256,478	172,686,704
Additions during the year	8,890,894	679,448	71,824	559,741	116,295	10,318,202	35,945,015
Income from Investments made of the funds							2,282,722
Accrued Interest on Investments/Advances		10,397,109	10,704,904	876,669		21,978,682	17,503,853
Interest on Savings Bank a/c.		109,645	182,919	92,940		385,504	2,016,582
Other additions : Tempo Loan recovered							110,000,000
Others additions: Receivable amount Recd							2,806,015
Less : Receivable from Institute Account						0	0
Total (A)	10,062,245	156,769,375	154,845,381	15,770,076	491,789	337,938,866	343,240,891
Utilization / Expenditure towards objective of funds							
Capital Expenditure						-	-
Revenue Expenditure	10,062,245					10,062,245	37,984,413
Temporary loan to Institute							
Total (B)	10,062,245	-	-	-	-	10,062,245	37,984,413
Closing balance at the year end (1) (A-B)	0	156,769,375	154,845,381	15,770,076	491,789	327,876,621	305,256,478
presented by							
Cash and Bank Balances (Including MOD)	-	5,086,912	3,785,017	1,963,199	-	10,835,128	-
Investment	-	124,958,489	113,500,000	9,775,374	-	248,233,863	-
Interest accrued but not due	-	25,642,769	37,209,046	3,084,684	-	65,936,499	-
S Receivable		397,711	279,494	66,678			
Balance lying with Institute A/c	0	683,494	71,824	880,141	491,789	2,127,248	-
Total	0	156,769,375	154,845,381	15,770,076	491,789	327,132,738	-

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Particulars		Fund wise Breakup					Total	
		Instt. Dev. Fund	Employees Welfare Fund	Deptt. Promotion	Virtual Class Room	NMEICT Fund	Current Year	Previous Year
: A.		1,601,969	400,493	1,601,969	191,656	500,724	4,296,811	3,143,182
Opening Balance		465,178	116,294	465,178	0	35,000	1,081,650	1,444,747
Additions during the year		-	-	-	-	-	-	-
Income from Investments made of the funds		-	-	-	-	-	-	-
Accrued Interest on Investments/Advances		-	-	-	-	-	-	-
Interest on Savings Bank a/c.		-	-	-	-	-	-	-
Other additions (specify nature)		-	-	-	-	-	-	-
Total (A)		2,067,147	516,787	2,067,147	191,656	535,724	5,378,461	4,587,929
Utilization /Expenditure towards objective of funds								
Capital Expenditure		-	-	-	-	425,305	425,305	291,118
Revenue Expenditure		-	-	-	-	425,305	425,305	291,118
Total (B)		-	-	-	-	110,419	4,953,156	4,296,811
Closing balance at the year end (2): (A-B)		2,067,147	516,787	2,067,147	191,656	110,419	4,953,156	4,296,811
presented by								
Cash and Bank Balances		-	-	-	-	-	-	-
Investment		-	-	-	-	-	-	-
Interest accrued but not due		-	-	-	-	-	-	-
Balance lying with Institute A/c		2,067,147	516,787	2,067,147	191,656	110,419	4,953,156	4,296,811
Total		2,067,147	516,787	2,067,147	191,656	110,419	4,953,156	4,296,811

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

Particulars		Fund wise Breakup					Total	
		Gratuity Fund	Student Aid Fund	Corpus Fund			Current Year	Previous Year
A :								
Opening Balance		48,554,300	2,900,795	249,592,442	-	-	301,047,537	46,873,889
Additions during the year			893,000	3,030,589			3,923,589	1,320,052
Income from Investments made of the funds				7,467.00			7,467	0
Accrued Interest on Investments/Advances				8,441,097			8,441,097	3,184,189
Interest on Savings Bank a/c.		201,737		688,566			890,303	349,952
Other additions (Transd from Gratuity Fund)		-	-	48,756,037	-	-	48,756,037	-
Surplus of Income & Expenditure A/c transferred				70,860,809			70,860,809	
Total (A)		48,756,037	3,793,795	381,377,007	-	-	433,926,839	51,728,082
Utilization /Expenditure towards objective of funds								
Capital Expenditure		-	-		-	-	-	-
Revenue Expenditure		-	162,089				162,089	272,987
Transferred to Corpus Fund		48,756,037					48,756,037	
Total (B)		48,756,037	162,089	-	-	-	48,918,126	272,987
Closing balance at the year end (3): (A-B)		0	3,631,706	381,377,007	-	-	385,008,713	51,455,095
presented by								
Cash and Bank Balances (Including MOD)		0	-	88,646,249	-	-	88,646,249	-
Investment		0	-	105,917,149	-	-	105,917,149	-
Interest accrued but not due		0	-	28,538,153	-	-	28,538,153	-
IS Receivable				363,152				
Balance lying with Institute A/c		-	3,631,706	87,051,044			90,682,750	-
Total		0	3,631,706	310,515,747	-	-	313,784,301	-
Closing balance at the year end (1+2+3)		2,067,147	160,917,868	538,289,535	15,961,732	602,208	717,838,490	361,008,384

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE : 2A : ENDOWMENT FUNDS

Sl. No.	Name of the Endowment Fund	Opening Balance		Addition during the year		Total		Expenditure on the object during the year	Closing Balance		Total (10+11)
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	
1.	2	3	4	5	6	7	8	9	10	11	12
1.	Depreciation Fund	121,447,072	24,136,101	679,448	10,506,754	122,126,520	34,642,855	-	122,126,520	34,642,855	156,769,375
2	Maintenance Fund	119,588,380	24,297,354	71,824	10,887,823	119,660,204	35,185,177		119,660,204	35,185,177	154,845,381
3	Staff Dev. Fund	11,354,534	2,886,192	559,741	969,609	11,914,275	3,855,801	-	11,914,275	3,855,801	15,770,076
4	Gratuity Fund	38,056,147	10,498,153	-	201,737	38,056,147	10,699,890	48,756,037	-10,699,890	10,699,890	-
5	Student Welfare Fund	375,494	-	116,295	-	491,789	-		491,789	-	491,789
6	Instt. Dev. Fund	1,601,969	-	465,178	-	2,067,147	-		2,067,147	-	2,067,147
7	Employees Welfare Fund	400,493	-	116,294	-	516,787	-		516,787	-	516,787
8	Deptt. Promotion Fund	1,601,969	-	465,178	-	2,067,147	-		2,067,147	-	2,067,147
9	Virtual Class Room	191,656	-	-	-	191,656	-		191,656	-	191,656
10	NMEICT Fund	500,724	-	35,000	-	535,724	-	425,305	110,419	-	110,419
11	Pension Fund	1,171,351	-	8,890,894	-	10,062,245	-	10,062,245	-	-	-
12	Student Aid Fund	2,900,795	-	893,000		3,793,795	-	162,089	3,631,706	-	3,631,706
13	Corpus Fund	232,560,071	17,032,371	122,647,435	9,137,130	355,207,506	26,169,501	-	355,207,506	26,169,501	381,377,007
	TOTAL	531,750,655	78,850,171	134,940,287	31,703,053	666,690,942	110,553,224	59,405,676	607,285,266	110,553,224	717,838,490

Note: Accumulated Balance of Corpus Fund shifted from Capital/Corpus Fund-Sch-1

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE : 3 : CURRENT LIABILITIES AND PROVISIONS

PARTICULARS	Amount in Rupees	
	CURRENT YEAR	PREVIOUS YEAR
A. CURRENT LIABILITIES		
1. Deposits from staff	2,906,811	2,123,499
2. Deposits from Students	37,454,926	28,204,126
3. Sundry Creditors		
a) For Goods & Services	23,464,580	7,879,556
b) Others	11,933,005	-
4. Deposits - Others (including EMD, Security Deposit & Project)	30,691,995	32,568,984
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS,NPS)	4,533,073	144,633
Liabilities against Sponsored Project(Performance Security)		-
6. Other Current Liabilities		-
a) Sponsored Project Liability (Including P Tax and others)	132,363	-
b) Receipts against sponsored projects	41,348,417	40,263,401
c) Receipts against sponsored fellowships & Scholarship	4,941,577	2,754,780
d) Unutilized Grants		
Under Plan Grants	405,644,842	52,107,888
Under Non-Plan Grants	0	-
e) TEQIP-I & Previous Sponsored Projects	153,672,719	-
f) Other funds	5,026,704	3,159,469
g) Other liabilities	109,924,399	90,172,499
Total (A)	831,675,411	259,378,835
B. PROVISIONS		
1. For Taxation		-
2. Gratuity		-
3. Superannuation Pension		-
4. Accumulated Leave encashment		-
5. Trade Warranties/Claims		-
6. Provosion for Works and Plan others		-
Total (B)	0	-
TOTAL (A+B)	831,675,411	259,378,835

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE : 3A : SPONSORED PROJECTS

Amount in Rupees

Sl. No.	Name of the Project	Opening Balance		Receipts/ Recoveries during the year		Total	Expenditure during the year	Refund to Ministry	Closing Balance	
		Credit	Debit	Grants & Loans	Interest				Credit	Debit
1	2	3	4	5	6	7	8	9	10	11
A	MCIT, GoI	3,075,715	-	3,910,875	78,996	7,065,586	6,282,704	35,517	747,365	-
B	DST, GoI	15,350,642	-	2,905,766	815,971	19,072,379	589,207	68,637	18,414,535	-
C	MNRE, GoI	915,951	-	354,395	3,066	1,273,412	1,201,097	-	72,315	-
D	MoESc., GoI	378,632	-	-	15,746	394,378	163,688	-	230,690	-
E	ICSSR, GoI	109,617	-	-	-	109,617	107,700	1,917	0	-
F	SERB, GoI	10,212,669	-	7,784,581	195,818	18,193,068	4,145,660	-	14,047,408	-
G	IBM	783,094	-	-	15,737	798,831	-	-	798,831	-
H	AICTE -RPS	1,285,641	-	-	25,815	1,311,456	2,500	-	1,308,956	-
I	AICTE -MODROBS	1,343,641	-	-	31,425	1,375,066	-	-	1,375,066	-
J	BRNS	1,551,105	-	-	27,116	1,578,221	391,080	-	1,187,141	-
K	NRRDA	297,432	-	-	3,327	300,759	246,400	-	54,359	-
L	DEITY	4,893,195	-	-	84,499	4,977,694	1,881,898	-	3,095,796	-
M	UGC	66,067	-	168,000	1,270	235,337	219,382	-	15,955	-
TOTAL		40,263,401	-	15,123,617	1,298,786	56,685,804	15,231,316	106,071	41,348,417	-

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE - 3 (1): SPONSORED PROJECTS FUNDS

Particulars	Fund wise Breakup							Total	
	MCIT	DST	MOES	ICSSR	M NRE	DIET	BRNS	Current Year	Previous Year
Part A:									
i) Opening Balance	3,075,715	15,350,642	378,632	109,617	915,951	4,893,195	1,551,105	26,274,857	3,630,216
ii) Additions during the year	3,710,875	2,905,766	0	0	0	0	0	6,616,641	29,254,472
iii) Interest on Savings Bank a/c.	78,996	815,971	15,746	0	3,066	84,499	27,116	1,025,394	435,141
iv) Other additions - Loan / Adjustments	200,000	0	0	0	354,395	0	0	554,395	0
Total (A)	7,065,586	19,072,379	394,378	109,617	1,273,412	4,977,694	1,578,221	34,471,287	33,319,829
Utilization /Expenditure towards objective of funds									
Capital Expenditure									
Equipment		160,250	163,688		783,000	997,500		2,104,438	1,626,697
Computer		129,900	0			175,739		305,639	99,000
Software		0						0	99,999
Furniture		55,365						55,365	13,400
Other Cost								0	0
Revenue Expenditure									
Refunded to Sanctioning authority	35,517	243,692		107,700	418,097	708,659	391,080	8,151,932	3,739,001
		68,637		1,917				106,071	1,466,875
Total (B)	6,318,221	657,844	163,688	109,617	1,201,097	1,881,898	391,080	10,773,445	7,044,972
Closing balance at the year end (1) (A-B)	747,365	18,414,535	230,690	0	72,315	3,095,796	1,187,141	23,747,842	26,274,857

SCHEDULE - 3 (1): SPONSORED PROJECTS FUNDS

Particulars	Fund wise Breakup							Amount in Rupees	
	AICTE - RPS	AICTE - MODROB	I B M Project	S E R B	NRRDA	UGC		Current Year	Previous Year
: A.									
1) Opening Balance	1,285,641	1,343,641	783,094	10,212,669	297,432	66,067	0	13,988,544	9,221,211
2) Additions during the year				7,784,581		168,000		7,952,581	7,403,219
3) Interest on Savings Bank a/c.	25,815	31,425	15,737	195,818	3,327			273,392	312,882
4) Other additions (specify nature)								0	0
Total (A)	1,311,456	1,375,066	798,831	18,193,068	300,759	235,337	0	22,214,517	16,937,312
Utilization / Expenditure towards objective of funds									
Capital Expenditure				1,531,694				1,531,694	1,503,091
Equipment				43,260				43,260	0
Computer								0	0
Software								0	0
Furniture								0	0
Books								0	0
Revenue Expenditure	2,500			2,570,706	246,400	219,382		3,038,988	1,085,816
Refunded to Sanctioning authority								0	359,861
Total (B)	2,500	0	0	4,145,660	246,400	219,382	0	4,613,942	2,948,768
Closing balance at the year end (2): (A-B)	1,308,956	1,375,066	798,831	14,047,408	54,359	15,955	0	17,600,575	13,988,544
Closing balance at the year end (1+2)	2,056,321	19,789,601	1,029,521	14,047,408	126,674	3,111,751	1,187,141	41,348,417	40,263,401

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE : 3B : SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

Amount in Rupees

Sl. No.	Name of the Sponsors	Opening Balance		Transaction during the year		Closing Balance as on 31.03.17	
		Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8
1	Various Agencies	2,754,780	-	12,592,728	10,405,931	4,941,577	-
Total		2,754,780	-	12,592,728	10,405,931	4,941,577	-

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

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
A. Plan Grants : Government of India		
Balance Brought forward	52,107,888	285,301,371
Add: Receipts during the year	921,560,000	740,000,000
Add Other additions	2,336,812	7,884,427
Total (a)	976,004,700	1,033,185,798
Less: Capital expenditure of last year (Net off depreciation)		
Less: Utilized for Revenue Expenditure	103,825,924	97,332,776
Less: Utilized for Capital Expenditure	466,533,934	883,745,134
Total (b)	570,359,858	981,077,910
Unutilized carried forward (a-b)	405,644,842	52,107,888
B. Grants : NON- PLAN		
Balance Brought forward		-
Add: Receipts during the year	365,000,000	370,000,000
Total (c)	365,000,000	370,000,000
Less: Refunds		
Less: Utilized for Revenue Expenditure	365,000,000	370,000,000
Less: Utilized for Capital Expenditure		
Total (d)	365,000,000	370,000,000
Unutilized carried forward (c-d)	-	-
GRAND TOTAL (A+B)	405,644,842	52,107,888

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE 4 - FIXED ASSETS

Assets Heads	Gross Block			Depreciation for the Year 2016-17			Net Block	
	Opening Balance as on 01.04.2016	Additions	Deduction	Cl. Balance	Dep Opening Balance	Deductions/ Adjustment	Total Depreciations	31.03.2017
TANGIBLE ASSETS								
Land	866458	0	0	866458	0	0	0	866458
Site & Campus Development	579322442	2352185	0	60284627	14836039	2237090	17073129	43211498
Buildings	3098313620	59980529	5768950	3152525199	406404431	139171603	545576034	2606949165
Roads & Bridges	76191658	2371553	0	78563211	10798105	3355248	14153353	64409858
Tubewells & Water Supply	228455368	79937	42029141	186506164	23247684	8167752	31415436	155090728
Electrical Installation & Equipment	30726542	957793	0	31684335	15239356	2411440	17650796	14033539
Plant & Machinery	70447877	37942150	0	108390027	37872200	10303210	48175410	60214617
Scientific & Laboratory Equipment	282105931.1	17962137	0	300068068.1	118370890	25716592	144087482	155980586.1
Office Equipment	20652365	1991082	0	22643447	8504344	2030110	10534454	12108993
Audio Visual Equipment	7572134	2284801	0	9856935	3360043	884988	4245031	5611904
Computers & Peripherals	150792204	3543445	61000	154274649	106063154	14212540	120275694	33998955
Furniture, Fixtures & Fittings	136812450	5139922	0	141952372	49445303	8987274	58432577	83519795
Vehicles	5126107	0	0	5126107	3795000	266222	4061222	1064885
Lib. Books & Scientific Journals	57476627	1257581	0	58734208	39455562	5540840	44996402	13737806
Other Assets	76385502	14587754	5811904	85161352	37778952	11850250	48757416	36403936
Total (A)	4299857285	150450869	53670995	4396637159	875171063	235135159	1109434436	3287202723
Capital Works in Progress (B)	1472387777	391746214	50854700	1813279291	0	0	0	1813279291
INTANGIBLE ASSETS :								
Computer Software	42870698	524201	0	43394899	16424891	4020612	20445503	22949396
E-Journals	55050620	22526441	0	77577061	55050620	22526441	77577061	0
Patents	42180	83551	0	125731	0	0	0	125731
Total (C)	97963498	23134193	0	121097691	71475511	26547053	98022564	23075127
TEQIP I Assets (D)	103165960	0	0	103165960	0	0	0	103165960
Grand Total (A+B+C+D)	5973374520	565331276	104525695	6434180101	946646574	261682212	1207457000	5226723101
						871786		5026727946

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

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

Particulars	Amount in Rupees					
	Op Balance 01.04.2016	Additions	Gross	Amortization	Net Block 2016-17	Net Block 2015-16
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	-	-	-	-	-	-
Patents Pending in respect of Patents applied for:						
1. Expenditure incurred during 2009-10 to 2012-13	-	-	-	-	-	-
2. Expenditure incurred during 2013-14	-	-	-	-	-	-
3. Expenditure incurred during 2014-15	-	-	-	-	-	-
4. Expenditure incurred during 2015-16	42,180	-	42,180	-	-	42,180
5. Expenditure incurred during 2016-17	-	83,551	83,551	-	83,551	-
Total	42,180	83,551	125,731	-	83,551	42,180
C. Grand Total (A+B)	42,180	83,551	125,731	-	83,551	42,180

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

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 (Merged from Gratuity Fund)	105,917,149	74,342,196
Investment of Depreciation Fund	124,958,489	124,958,489
Investment of Gratuity Fund (Merged to Corpus Fund)	0	31,567,987
Investment of Maintenance Fund	113,500,000	113,500,000
Investment of Staff Development Fund	9,775,374	9,775,374
7. Others		-
Total	354,151,012	354,144,046

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.)	4,520,822	4,120,822
Total	19,020,822	18,620,822

SCHEDULE SHOWING INVESTMENTS OF EARMARKED AND OTHER FUNDS AS ON 31.03.2017

Sl. No.	Bank	F.D No	Date	Face Value as on 01.04.16	Addition during 2016-17	Matured during 2016-17	Face Value as on 31.03.17	Accrued Interest upto 31.03.16	Accrued Interest received during 2016-17	Int. on TDS receivable 31/03/2017	Net Accrued Interests upto 31.03.17
Corpus Fund											
	SBI	32269515122	31.03.12	4,567,987	-	-	4,567,987	1,924,215	572,515	-	2,496,730
	SBI	32323115747	23.04.12	2,500,000	-	-	2,500,000	1,048,292	310,478	-	1,358,770
	Vijaya Bank	800603311003251	08.02.17	20,000,000	-	-	20,000,000	4,166,866	1,733,837	-	5,900,703
	Bank of India	503945110000247	24.04.14	4,500,000	-	-	4,500,000	834,789	374,295	57,591	1,151,493
	SBI	32115408694	31.12.11	2,650,000	-	-	2,650,000	1,242,787	338,534	-	1,581,321
	SBI	32269399181	31.03.12	2,185,757	-	-	2,185,757	923,284	274,340	-	1,197,624
	SBI	32323116853	23.04.12	1,500,000	-	-	1,500,000	661,279	186,132	-	847,411
	SBI	33761329398	31.03.14	55,000,000	-	-	55,000,000	7,231,421	3,531,479	193,609	10,569,291
	Canara Bank	3050401001159-1	19.04.14	13,000,000	-	-	13,000,000	2,426,679	1,119,022	111,902	3,433,799
	Canara Bank	3050401001507		6,439		-	6,439	546	465.0	-	1,011
	Canara Bank	3050401001507/2	25/04/2016		6,966		6,966		501	50	451
	Total			105,910,183	6,966	0	105,917,149	20,460,158	8,441,598	0	28,538,604
Depreciation Fund											
	SBI	32313779663	23.04.12	7,400,000	-	-	7,400,000	3,113,941	829,490	92,166	3,851,265
	SBI	32313798610	23.04.12	9,000,000	-	-	9,000,000	3,787,228	891,888	112,094	4,567,022
	SBI	32313799432	23.04.12	9,000,000	-	-	9,000,000	3,787,228	891,888	112,094	4,567,022
	Bank of India	503945110000250	24.04.14	6,000,000	-	-	6,000,000	1,113,052	500,090	50,009	1,563,133
	IDBI	293106000022376	30.11.15	7,938,512		-	7,938,512	207,757	630,626	-	838,383
	IDBI	293106000022400	30.11.15	10,206,659		-	10,206,659	251,535	754,387	-	1,005,922
	IDBI	293106000022419	30.11.15	10,206,659		-	10,206,659	251,535	754,387	-	1,005,922
	IDBI	293106000022428	30.11.15	10,206,659		-	10,206,659	251,535	754,387	-	1,005,922
	Vijaya Bank	800603311004287	05.09.15	7,000,000		-	7,000,000	326,653	559,220	-	885,873
	Vijaya Bank	800603311004288	05.09.15	6,000,000		-	6,000,000	279,989	479,331	-	759,320
	Vijaya Bank	800603311004285	05.09.15	9,000,000		-	9,000,000	419,983	718,996	-	1,138,979
	Vijaya Bank	800603311004286	05.09.15	9,000,000		-	9,000,000	419,983	718,996	-	1,138,979
	Vijaya Bank	800603311004284	05.09.15	9,000,000		-	9,000,000	419,983	718,996	-	1,138,979
	PNB	311000DP00015494	05.09.15	9,000,000		-	9,000,000	417,969	716,656	18,809	1,115,816
	PNB	311000DP00015500	05.09.15	6,000,000		-	6,000,000	278,646	477,771	12,539	743,878
	Total			124,958,489	0	0	124,958,489	15,327,017	10,397,109	0	25,326,415

SCHEDULE SHOWING INVESTMENTS OF EARMARKED AND OTHER FUNDS AS ON 31.03.2017

Bank	F.D No	Date	Face Value as on 01.04.16	Addition during 2016-17	Matured during 2016-17	Face Value as on 31.03.17	Accrued Interest upto 31.03.16	Accrued Interest during 2016-17	Accrued Interest received during 16-17	Int. on TDS receivable 31/03/2017	Net Accrued Interests Upto 31.03.17
	Maintenance Fund										0
PNB	31100DA00003195	30.12.11	12,500,000		-	12,500,000	5,921,481	1,616,447	-		7,537,928
PNB	31100DA00003186	30.12.11	12,800,000		-	12,800,000	6,063,596	1,655,242	-		7,718,838
PNB	31100DP00015519	05.09.15	8,000,000		-	8,000,000	371,528	637,028	-	16,719	991,837
PNB	31100DP00015528	05.09.15	7,000,000		-	7,000,000	325,087	557,400	-	14,629	867,858
SBI	32313794525	23.04.12	6,700,000		-	6,700,000	2,819,380	751,024	-		3,570,404
SBI	32313795314	23.04.12	9,000,000		-	9,000,000	3,787,228	779,795	-		4,567,023
SBI	32313796146	23.04.12	9,000,000		-	9,000,000	3,787,228	779,795	-		4,567,023
Bank of India	503945110000249	24.04.14	8,500,000		-	8,500,000	1,576,823	678,685	-	67,869	2,187,639
Indian Bank	6370094889	04.09.15	6,000,000		-	6,000,000	319,693	491,980	-	27,497	784,176
Indian Bank	6370094584	04.09.15	7,000,000		-	7,000,000	372,975	573,976	-	32,080	914,871
Indian Bank	6370094302	04.09.15	8,500,000		-	8,500,000	452,898	696,971	-	38,954	1,110,915
Indian Bank	6370094546	04.09.15	9,000,000		-	9,000,000	479,539	737,970	-	41,246	1,176,263
Indian Bank	6370094296	04.09.15	9,500,000		-	9,500,000	506,180	748,591	-	40,500	1,214,271
	Total		113,500,000	0	-	113,500,000	26,783,636	10,704,904	0	279,494	37,209,046
	Staff Development Fund										0
SBI	32115415012	31.12.11	700,000	-	-	700,000	328,744	80,447	-		409,191
SBI	32269400369	31.03.12	675,374	-	-	675,374	285,285	84,768	-		370,053
SBI	32323059473	23.04.12	400,000	-	-	400,000	176,595	44,668	-		221,263
Bank of India	503945110000248	18.04.14	8,000,000	-	-	8,000,000	1,484,069	666,786	-	66,678	2,084,177
	Total		9,775,374	-	-	9,775,374	2,274,693	876,669	0	66,678	3,084,684
	NONPLAN/Plan										0
SBI	35593385121	24.02.16	5,000,000			5,000,000	38,542	387,984	-		426,526
SBI	35593383394	24.02.16	5,000,000			5,000,000	38,542	387,984	-		426,526
Bank of India	503945110000251	18.04.14	4,500,000		-	4,500,000	834,789	375,067	-	37,507	1,172,349
Axis Bank	Stock TDR against LC	31.03.16	4,120,822	3,600,000	3,200,000	4,520,822	60,594	282,535	2,898		340,231
	Total		18,620,822	3,600,000	3,200,000	19,020,822	972,467	1,433,570	2,898	37,507	2,365,632
	Grand Total		372,764,868	3,606,966	3,200,000	373,171,834	65,817,971	31,853,850	2,898	1,144,542	96,524,381

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

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	165,642
b) Others		-
3. CASH AND BANK BALANCES		
Cash in hand	15,322	8,108
<u>Cash at Bank:</u>		
A) With Scheduled Banks:		
In Current Accounts	677,215,479	198,857,444
In Savings Accounts	242,186,904	146,166,713
4. POST OFFICE - SAVINGS ACCOUNTS		-
Total	919,486,377	345,197,907

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE : 7 (A) ANNEXURE - CURRENT ASSETS

Amount in Rupees

PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
With Scheduled Banks:		
In Current Accounts		
SBI-10521277057 (NON PLAN}	-9,681,449	161,948,433
Non Plan Auto Sweep A/c	141,985,058	
SBI-10521277068 (PLAN GRANT)	-37,559,296	36,909,011
Plan Auto Sweep A/c	582,471,166	
Total	677,215,479	198,857,444
In Savings Accounts		
SBI-10521277818(CORPUS FUND)	64,249	78,743,795
SBI Auto Sweep A/c (Corpus Fund)	88,582,000	
SBI-10521278197(GRATUITY FUND)	-	9,012,151
SBI-30052416379(STAFF DEV FUN)	1,963,199	1,870,259
SBI-30052438520(DEPRECIATION FUND)	51,912	4,977,267
SBI Auto Sweep A/c (Dep. Fund)	5,035,000	
SBI-30052443879(MAINT.FUND)	3,785,017	3,602,098
AXIS-10049704315 (PLAN)	12,154,412	617,944
SBI-10521278244 (SCHOLARSHIP)	201,308	3,434,818
SBI Auto Sweep A/c (Scholarship))	5,462,000	
SBI-30432905766 (OBC)	-	1,085,211
SBI-30763009570(NONPLAN FEE)	536,464	2,527,689
SBI Auto Sweep A/c (FEE A/c)	82,570,318	
SBI-36535392913 (AWARD FUND)	300,000	
SBI-36017852338 (START UP INDIA FUND)	1,000	
SBI-30293190682(TUC)	6,791	6,463
SBI-35538434664 (IEDC)	887,206	530,000
SBI-30033506221 (SMDP)	293,209	1,405,738
SBI-31965903903 (DST)		202,477
SBI-34671803739 (AM&MT)	15,438,116	14,690,685
SBI-30780415571(RPS SCHEME)	23,242,029	21,730,515
SBI-30780416041(MODROBS)	1,375,066	1,343,641
SBI-31306562769(BEHAVIOUR OF CLAY/MoESc)	213,516	363,037
SBI-31306566082(REG EXTREME RAINFALL)	24,092	22,925
Total	242,186,904	146,166,713

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2017

SCHEDULE : 8 : LOANS, ADVANCE AND DEPOSITS

Amount in Rupees		
PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
1. Advances to employees (Non-interest bearing) :		
Festival Advance	303,050	426,770
HTC Advance	86,199	-
LTC Advance	104,000	151,377
Other Advance To Employees	500,000	-
Recoverable Advance	5,004,701	76,096
TA Advance		44,000
2. Long Term Advances to employees: (Interest bearing) :		
a) Vehicle Loan		-
b) Home Loan		-
c) Soft Loan	572,906	1,193,052
3. Advances & other amt recoverable in cash or in kind or for value to be received :		
a) On Capital Account		-
Deposit Work	17,084,358	100,165,462
Secured Advance	38,850,000	23,250,000
Advance - PHE Water Supply	124	80,061
Margin Money for LC	7,557,341	8,582,732
Mobilisation Adv- NCC Ltd		15,000,000
b) Suppliers/Firm		-
c) Others		
i) Electricity Consumption Receivable	291,842	393,976
ii) House Rent receivable	53,773	28,548
iii) Shop & Canteen Rent receivable	146,577	23,930
iv) Advance Tax		-
v) Receivable against Start Up India (Project)	77,182	
vi) Receivable from SBI (Against Saswat Chakraborty)	14,000	
4. Prepaid Expenses :		
a) Insurance	798,288	479,038
b) Against E Journal	0	4,499,786
c) Digital Library		-
d) Printed Journal		-
e) AMC		352,177
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	
6. Income Accrued :		
a) On investments from Earmarked / Endowment Fund	94,158,749	64,845,504
b) On Investment - Others	2,365,632	972,467
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	1,107,035	
g) TDS Receivable- Sponsored Project	755	
h) TDS Receivable- Others (Non Plan)	395,214	
8. Claims receivable :	2,458,100	328,517

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 9- ACADEMIC RECEIPTS

<i>Amount in Rupees</i>		
FEES FROM STUDENTS	Current Year	Previous Year
Academic		
1. Tuition fee	171,839,042	150,218,283
2. Admission fee	3,997,500	3,059,400
3. Enrolment fee		-
4. Library Admission fee	3,159,500	3,043,200
5. Laboratory fee - I T System fee	6,318,000	6,139,750
6. Art & Craft fee		-
7. Registration fee / Institutional fee		-
8. Syllabus fee		-
Total (A)	185,314,042	162,460,633
Examinations		
1. Admission test fee		
2. Annual Examination fee	4,540,800	3,246,900
3. Mark sheet, certificate fee		-
4. Entrance fee		-
Total (B)	4,540,800	3,246,900
Others Fees		
1. Identity card fee		
2. Fine/Miscelleneuos fee	729,129	1,037,421
3. Medical fee	1,924,740	1,838,160
4. Transportation fee	2,601,180	1,836,626
5. Hostel fee - Light & Water charges		-
6. Migration fee		
7. Summer term course fee	240,000	107,000
8. Verification fee		-
Total (C)	5,495,049	4,819,207
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)	0	0
Other Academic Receipts		
1. Registration fee for workshops, programmes	26,300	227,000
2. Registration fee (Academic Staff College)		-
3. Training & Placement	701,500	745,000
Total (E)	727,800	972,000

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 10- GRANTS/SUBSIDIES (IRRECOVERABLE GRANTS RECEIVED)

Particulars	Current Year					Previous Year			Amount in Rupees
	PLAN		Total Plan	Non Plan MHRD	Current Year Total	Plan	Non Plan	Total Balance	
		MHRD							
Balance B/F	52,107,888		52,107,888	-		52,107,888	285,301,371	0	285,301,371
Id: Receipts during the year	921,560,000		921,560,000	365,000,000		1,286,560,000	740,000,000	370,000,000	1,110,000,000
Id: Interest earned	2,336,812		2,336,812	-		2,336,812	7,884,427	-	7,884,427
Total	976,004,700		976,004,700	365,000,000		1,341,004,700	1,033,185,798	370,000,000	1,403,185,798
Ass: Refund to Ministry	-		-	-		-	-	-	-
Balance	976,004,700		976,004,700	365,000,000		1,341,004,700	1,033,185,798	370,000,000	1,403,185,798
Ass: Utilized for Capital expenditure (A)	466,533,934		466,533,934	-		466,533,934	883,745,134	-	883,745,134
Balance	509,470,766		509,470,766	365,000,000		874,470,766	149,440,664	370,000,000	519,440,664
Ass: Utilized for Revenue expenditure (B)	103,825,924		103,825,924	365,000,000		468,825,924	97,332,776	370,000,000	467,332,776
Balance C/F	405,644,842		405,644,842	0		405,644,842	52,107,888	0	52,107,888

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 11 - INCOME FROM INVESTMENT

Amount in Rupees

Particulars	Earmarked/Endowment Funds		Other Investments	
	Current Year	Previous Year	Current Year	Previous Year
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	2,282,722		-
3 Income accrued but not due on Term Deposits	29,313,245	20,688,042	375,067	432,637
4 Interest on Savings Bank Accounts	1,275,807	2,366,534		-
5 Others (Specify)		-		-
Total	30,596,519	25,337,298	375,067	432,637
Transferred to Earmarked/Endowment Funds	30,596,519	25,337,298		
Balance		-		

SCHEDULE 12: INTEREST EARNED

Amount in Rupees

Particulars	Current Year	Previous Year
1 On Savings Accounts with scheduled banks :		
Against fee free account no. 30763009570	93,867	388,483
Against Scholarship account no. 10521278244	96,562	148,932
Against Auto Sweep A/c (Non Plan)	2,969,010	2,311,638
Against Auto Sweep A/c (Fees A/c)	94,993	1,552,626
Others		21,380
Total (A)	3,254,432	4,423,059
2 On Loans :		
a. Employees/Staff - Interest on Soft Loan	107,361	143,488
b. Others - Against Interest recovery of LTC/HTC	584	-
Total (B)	107,945	143,488
3 On Debtors and Other Receivables		
Total (C)	0	-
Grand Total (A+B+C)	3,362,377	4,566,547

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	6,127,000	5,907,000
2. License fee	2,315,350	2,269,341
3. Hire Charges of Auditorium/Play ground/Convention Centre, Shop etc.	1,376,259	1,181,392
4. Guest House Rent	1,433,080	1,388,575
5. Electricity charges recovered	5,971,322	6,834,882
6. Light & Water charges recovered	6,127,000	5,907,000
Total	23,350,011	23,488,190
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 Carnibval		-
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 sepoerately disclosed)		-
Total	0	-
D. Others		
1. Income from consultancy		
2. RTI Fees	656	2,198
3. Income from Royalty		-
4. Sale of application form (Recruitment)	81,850	266,345
5. Misc. receipts (Sale of Tender Form, waste paper, etc.)	354,747	372,800
6. Profit on sale/disposal of Assets		-
a) Owned assets		28,896
b) Assets received free of cost		
7. Others (Lake)	367,500	-
Pension Fund Contribution	10,062,245	37,984,413
KIDS NITS Fund Contribution (Appropriation)	602,403	
Capital Fund appropriation against Depreciation	261,682,212	186,378,648
a) Misc. Receipts	3,181,878	987,246
Total	276,333,491	226,020,546
Grand Total (A+B+C+D)	299,683,502	249,508,736

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	-	-

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 15 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

(Amount in Rupees)

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
A) Salaries and Wages						
i) Teaching & Admin		183,104,257	183,104,257		156,900,725	156900725
ii) Group B & C		24,947,549	24,947,549		31,495,451	31495451
iii) Group D		28,208,353	28,208,353		33,168,736	33168736
B) Other Adhoc						
i) Salary of outsourced staff		14,624,892	14,624,892		13,929,345	13929345
ii) Salary of Contractual Teaching & Admin		20,041,960	20,041,960		24,383,968	24383968
iii) Salary of M R Staff		11,293,040	11,293,040		11,627,166	11627166
C) Allowances & Bonus						
i) Bonus		1,706,880	1,706,880		706,666	706666
ii) Cumulative Professional Dev. Allowance		4,731,934	4,731,934		3,094,591	3094591
D) Contribution to Other Fund						
i) NPS Contribution		8,963,150	8,963,150		7,433,964	7433964
ii) Pension contribution (Deputation)		79,406	79,406		361,848	361848
iii) EPF Contribution (Employer)		1,509,791	1,509,791		3,691,657	3691657
iv) EPF Contribution FFW Workers' Society		127,047				
E) Staff Welfare Expenses						
i) Mobile & Telephone expenditure		992,861	992,861		620,401	620401
F) Retirement and Terminal Benefits						
i) Death cum Retirement Gratuity		14,237,567	14,237,567		21,161,937	21161937
ii) Pension		51,082,760	51,082,760		47,023,083	47023083
iii) Commuted Pension		6,290,214	6,290,214		9,889,120	9889120
iv) Leave Encashment		9,347,355	9,347,355		13,335,332	13335332
v) Leave Salary (Deputation)			0		-	-
G) LTC facility						
i) Home Travel Concession		2,032,900	2,032,900		921,791	921791
ii) Leave Travel Concession		1,928,286	1,928,286		3,466,553	3466553
H) Medical facility						
i) Medical Reimbursement		2,578,556	2,578,556		2,743,043	2743043
ii) Medicine & Dispensary expenses		1,064,671	1,064,671		1,956,574	1956574
I) Children Education Allowances		1,703,474	1,703,474		1,800,000	1800000
J) Honorarium		329,000	329,000		1,099,460	1099460
K) Others :						
i) Security Services		20,268,295	20,268,295		17,747,196	17747196
ii) House Keeping		10,262,461	10,262,461		5,476,779	5476779
ii) Joining Time TA		126,788	126,788		268,428	268428
iii) Relocation Charges		212,905	212,905		335,571	335571
			-			
Total	-	421,796,352	421,669,305	-	414,639,385	414,639,385

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 15 A - EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

Amount in Rupees

Particulars	Pension	Gratuity	Leave Encashment	Total
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 Hometwon on Retirement	-	-	-	-
E. Deposit Linked Insuerance Paymenty	-	-	-	-
Total (A+B+C+D+E)	-	-	-	-

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 16- ACADEMIC EXPENSES

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Laboratories expenses		792,952	792,952	-	1,080,815	1,080,815
b) Field work/Participation in Conferences		0	0	-	-	-
c) Expenses on Seminars/workshops		241,997	241,997	-	885,500	885,500
d) Payment to visiting faculty		242,000	242,000	-	173,381	173,381
e) Examination		2,539,995	2,539,995	-	2,284,765	2,284,765
f) Students Welfare expenses - Student Internship			0	-	-	-
g) Admission expenses			0	-	-	-
h) Convocation expenses		2,271,065	2,271,065	-	2,257,639	2,257,639
i) Publications			0	-	-	-
j) Stipend/Merit-cum-Merit Scholarship	102,725,604	1,070,890	103,796,494	95,236,830	-	95,236,830
k) Subscription expenses			0	-	-	-
l) Contingency to Ph.D. Scholars		1,178,534	1,178,534	-	482,678	482,678
m) Students Project		229,333	229,333	-	432,079	432,079
n) Library Contingency		35,620	35,620	-	144,614	144,614
o) Industry Institute Partnership exp			0	-	-	-
p) STIS Project Exp	750,006	0	750,006	-	-	-
q) Internship Exp		65,577	65,577	-	78,840	78,840
r) Industry Visit (MBA)		113,812	113,812	-	-	-
s) Student Orientation Program			0	-	-	-
t) Summer Term Course Expenses		690,000	690,000	-	-	-
Total	103,475,610	9,471,775	112,947,385	95,236,830	8,364,881	103,601,711

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES

	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
A. Infrastructure						
a) Electricity		32,292,318	32,292,318	-	29,527,346	29,527,346
b) Water Charges		8,674,507	8,674,507	-	5,021,727	5,021,727
c) Insurance		-	-	-	-	-
d) Rent, Rates Taxes (including Property Tax)		-	-	-	-	-
B. Communication						
e) Postage and Stationery		203,758	203,758	-	144,060	144,060
f) Telephone, Fax and Internet Charges		2,106,037	2,106,037	-	2,843,090	2,843,090
C. Others						
g) Printing and Stationery (consumption)		2,299,749	2,299,749	-	2,009,455	2,009,455
h) Travelling and Conveyance Expenses		2,931,223	2,931,223	-	5,709,063	5,709,063
i) Hospitality		392,402	392,402	-	279,961	279,961
j) Auditors Remuneration		551,900	551,900	-	398,105	398,105
k) Professional Charges - Legal fee		487,319	487,319	-	1,082,252	1,082,252
l) Advertisement and Publicity		1,185,074	1,185,074	-	2,160,287	2,160,287
m) Magazines & Journals - News paper		9,328	9,328	-	39,536	39,536
n) Training & Placement exemses		286,914	286,914	-	705,866	705,866
o) Board & Committee meeting		2,591,828	2,591,828	-	4,165,243	4,165,243
p) Computer Consumable		333,706	333,706	-	472,264	472,264
q) Initiative to foster Social Responsibility		-	-	-	-	-
r) Misc. Expenses		211,931	211,931	-	119,855	119,855
s) Leverage		-	-	-	-	-
t) Gyan Sagar expenses		67,132	67,132	-	49,971	49,971
u) Celebration of National Day		1,306,332	1,306,332	-	718,461	718,461
v) NCC & NSS Activity		249,991	249,991	-	340,115	340,115
w) Promotion of Rashtra Bhasha		174,996	174,996	-	495,950	495,950
x) Consumable expenses		266,801	266,801	-	610,989	610,989
y) Academic Audit Exp		453,434	453,434	-	470,023	470,023
z) Contingency Exp		71,060	71,060	-	554,121	554,121
aa) Border Village Developemt Exp		-	-	-	-	-
bb) Tranist House Rent		250,000	250,000	-	61,770	61,770
cc) Adward & Prizes		155,000	155,000	-	191,600	191,600
dd) ETH Project Exp		-	-	-	16,800	16,800
ee) HPC Cell Expenses		-	-	-	-	-
ff) Incubation Centre CDAC		1,812,913	1,812,913	-	2,166,000	2,166,000
gg) Innovation Lab Exp		351,008	351,008	-	1,033,247	1,033,247
hh) Other Admin Exp		2,649,584	2,649,584	-	1,764,402	1,764,402
ii) Registration/Nomination fee		50,000	50,000	-	158,550	158,550
jj) RPC Project Exp		245,510	245,510	-	633,954	633,954
kk) Short Term Training Program		-	-	-	188,103	188,103
ll) Smart Card Facility		-	-	-	-	-
mm) Telemedicine Project (CDAC)		-	-	-	-	-
nn) Upgradation of Supporting Staff		-	-	-	442,250	442,250
oo) Mobilization expenditure	337,600		337,600	2,445,712	-	2,445,712
pp) NSDL Service Charges		31,467	31,467	-	27,354	27,354
qq) Gymkhana Expenditure		678,073	678,073	-	1,070,233	1,070,233
rr) Swachh Bharat Mission Exp		-	-	-	99,110	99,110
ss) Insuarncce Against Assets		442,781	442,781			

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 18 - TRANSPORTATION EXPENSES

Particulars	Current Year			Current Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1. Vehicles (owned by Institution)			0			-
a) Running Expenses		2,301,362	2,301,362	-	1,556,959	1,556,959
b) Insurance Expenses		132,897	132,897	-	122,971	122,971
2. Vehicles taken by Rent/Lease			0	-	-	-
a) Rent/Lease Expenses			0	-	-	-
3. Vehicle (Taxi) hiring Expenses			0	-	-	-
TOTAL	0	2,434,259	2,434,259	-	1,679,930	1,679,930

SCHEDULE 19 - REPAIRS & MAINTENANCE

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Buildings		5,227,408	5,227,408	-	6,128,971	6,128,971
b) Furniture & Fixtures		157,120	157,120	-	439,918	439,918
c) Plant & Machinery			0	-	-	-
d) Office Equipment		1,899,009	1,899,009	-	991,043	991,043
e) Scientific Equipment - (Digital Labrary)		373,875	373,875	-	-	-
f) Audio Visual Equipment			0	-	-	-
g) Cleaning Materials & Casual work		552,276	552,276	-	309,805	309,805
h) Book Binding Charges			0	-	91,950	91,950
i) Gardening		196,403	196,403	-	1,068,104	1,068,104
j) Estate Maintenance (Electrical)		2,376,510	2,376,510	-	1,714,874	1,714,874
k) Bio Gas Contingency expenses			0	-	14,340	14,340
l) D.G. Set		3,433,494	3,433,494	-	3,047,970	3,047,970
m) Networking		299,941	299,941	-	243,101	243,101
n) Guest House Maintenances		347,103	347,103	-	331,076	331,076
TOTAL	0	14,863,139	14,863,139	-	14,381,152	14,381,152

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 20 - FINANCE COSTS

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Bank Charges	12,714	9,612	22,326	18,885	8,111	26,996
b) Others				-	-	-
TOTAL	12,714	9,612	22,326	18,885	8,111	26,996

SCHEDULE 21 - OTHER EXPENSES

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Provision for Bad and Doubtful Debts/Advances				-	-	-
b) Irrecoverable Balances/Written-off				-	-	-
c) Grants to Kendriya Vidyalaya	-	18,964,000	18,964,000	-	20,000,000	20,000,000
d) Support/Salaries to NITS-KIDS staff	-	602,403	602,403	-	638,749	638,749
TOTAL	-	19,566,403	19,566,403	-	20,638,749	20,638,749

SCHEDULE 22 - PRIOR PERIOD EXPENSES

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1) Establishment Expenses (CEA)			-	-	1,555,072	1,555,072
2) Academic Expenses			-	-	-	-
3) Administrative Expenses			-	-	-	-
4) Transportation Expenses			-	-	-	-
5) Repair & Maintenance			-	-	-	-
6) Others			-	-	-	-

❖ 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 to 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 2016-17 also, due to the fact that, change in method and rate of depreciation on the assets procured prior to 2014-15 will attracts complicity.

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, earlier setup by credit to Capital Fund with separate entity and merged with the Fixed Assets of the Institution has been shifted to the Current Liabilities (Schedule No.3.A.6) from the Capital Fund during the year 2016-17 in compliance to the audit observation on accounts of 2015-16.

- 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

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 INVESTMENTS:

To the extent not immediately required for the expenditure, the amounts available against such funds are invested in fixed term 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 funds as 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

❖ CONTINGENT LIABILITIES AND NOTE TO ACCOUNTS (ILLUSTRATIVE) ❖

SCHEDULE: 24

1. **CONTINGENT LIABILITIES** : There is no contingent liability.
2. **CAPITAL COMMITMENTS** : The value of the ongoing contract works remaining to be executed on Capital account and not provided for amounted to Rs.3750.47 lacs as on 31.03.17.
3. **FIXED ASSETS:**
 - 3.1 Addition in the year to Fixed Assets in Schedule 4 include Assets purchased out of Plan Funds Rs.4665.34 lac. The assets have been set up by credit to Capital Fund.
 - 3.2 In the Balance Sheet as on 31.03.17 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 and D 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 and 49 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 2017, 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 2016-17 have been attached with the Institute accounts. The balance Rs.7.22 lacs in respect of 4 members is yet to be transferred to NSDL due to non allotment of PRA numbers till date.
9. Pension Fund Contribution (Schedule-2): During the year a total amount of Rs.100.62 Lacs has been appropriated as other 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. 4666.17 Lacs includes Rs. 508.55 Lac being adjustment of WIP. Expenditure incurred against Patent from IRG amounting Rs. 0.84 Lacs also taken into account. Thus total capital expenditure of Rs.4665.34 Lac booked as capital expenditure from Plan Grant 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 to Rs. 23.37 lacs has been utilized fully, the unspent balance under Plan Grant Rs.4056.44 Lac is only against received grants.
13. Capital/Corpus Fund (Schedule-1) : As per audit observation on the accounts of 2015-16, the corpus fund has been regrouped under Earmarked/Endowment fund in Schedule-2.
14. Fixed Assets (Schedule-4) : In compliance to the Audit Observation on accounts of 2015-16, assets acquired under Tube Wells and Water Supply head are reclassified in the respective heads of assets. Also revenue nature of expenditure amounting to Rs.58.12 Lac against operation and maintenance of Networking which was capitalized during 2015-16 has been rectified with due effect in the Capital Fund A/c for Rs. 49.40 lac (net of depreciation for Rs.8.72 Lac).

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

RECEIPTS			Amount in Rupees	
Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
Opening Balances:		I. Expenses:		
a) Cash Balances	8,108	a) Establishment expenses (Sch-15)	407,527,344	404,230,305
b) Bank Balance		b) Academic Expenses (Sch-16)	102,760,568	93,070,111
i. In Current Accounts	198,857,444	c) Administrative Expenses (Sch-17)	55,539,954	61,283,632
ii. Savings Account	146,166,713	d) Transportation Expenses (Sch-18)	1,708,695	1,381,954
		e) Repairs & Maintenance (Sch-19)	11,687,834	11,574,721
		f) Finance Cost	22,326	26,996
		g) Prior Period Expenses	0	1,555,072
		h) Other Expenses (Sch-21)	19,516,971	20,588,349
		II. Payments against Earmarked/Endowment Funds		1,489,788
			623,111	
		III. Payments against Sponsored Projects	15,231,316	8,167,004
		Misc Payments against Grant/Conference		
		IV. Payments against Sponsored Scholarships	10,255,931	10,508,244
		V. Investments and Deposits made		
		a) Out of Earmarked	0	110,000,000
		b) Out of own funds(Investments-others)	3,600,000	30,849,752
		VI. Term Deposits with Schedule Banks		
		VII. Expenditure on Fixed Assets and Capital Works- in -Progress		
		a) Fixed Assets	70,255,142	101,544,480

RECEIPT AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

RECEIPTS		Amonut in Rupees				
		Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
I. Income on Investments from				b) Capital works -in- Progress	267,025,050	425,728,449
i) Earmarked/Endowment funds		587,241	2,366,534	Viii. Other Payments including statutory	51,202,239	68,864,614
b) Other investments				IX. Refund of Grants (Sponsored Projects)	106,071	1,826,736
I. Interest received :				X. Deposits and Advances	159,843,710	500,379,466
a) Bank Deposit						
b) Loans and Advances		1,578,273	-			
c) Savings Bank Account		285,422	558,795			
d) Interest on Auto Sweep A/c		2,969,594	3,864,264			
e) Against Project Account		1,298,786	748,023	XI. Other Payments	173,543,151	401,188,037
Investments encashed						
Term Deposits with Scheduled Banks		3,200,000	17,377,927	XII. Closing balances		
encashed				a) Cash in hands	15,322	8,108
Other income (including prior Period		27,767,395	25,634,677	b) Bank balances		
Income) (Sch-13)				i. In Current Accounts	677,215,479	198,857,444
Deposits and Advances				iii. Savings Account	242,186,904	146,166,713
Plant Machinery & Equipment						
Other Deposits (S Debtors)		461,379	3,172,073			
Loans & Advances		152,102,639	220,107,881			
II. Miscellaneous Receipts including Statutory		76,605,131	92,778,321			
Receipts						
Any other Receipts		127,850,351	77,464,057.80			
TOTAL		2,269,867,118	2,599,289,975	TOTAL	2,269,867,118	2,599,289,975

Director
 Registrar

SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS

FOR THE YEAR ENDED 31ST MARCH 2017

RECEIPTS :

<i>Amount in Rupees</i>		
Particulars	Current Year	Previous Year
PLAN GRANT : RECEIVED FROM GOVT OF INDIA:	921,560,000	740,000,000
NON PLAN GRANT: RECEIVED FROM GOVT OF INDIA	365,000,000	370,000,000
GRANTS-IN-AID RECEIVABLE FROM GOVT OF INDIA:		
Grant Receivable Plan	-	490,000,000
Grant Receivable Non Plan	-	120,000,000
Total	1,286,560,000	1,720,000,000
Academic Receipts		
Academic Fee		
Tuition Fees	172,372,790	164,473,594
Admission Fee	3,877,500	3,058,900
Library Fee	3,099,500	3,042,700
I.T System Fee	6,198,000	6,138,750
Examination Fee	4,420,800	3,246,400
Late Fine/Penalty	283,629	512,371
Misc Fees	385,500	525,050
Medical Facility Fee	1,888,740	1,837,860
Transportation Fees	2,565,180	1,836,326
Summer Term Course Fee	240,000	107,000
Other Academic Receipts		
Training & Placement Fee	581,500	745,000
Short Term Training Programme Fee	26,300	217,500
Development Fee	2,319,000	1,602,000
Total	198,258,439	187,343,451
EARMARKED / ENDOWMENT FUND:		
Pension Fund Contribution	7,439,584	34,872,570
Depreciation Fund		56,884,201
Maintenance Fund		55,294,806
Staff Dev Fund		1,392,865
NMEICT Fund	35,000	417,270
Student Aid Fund	785,000	1,074,000
Total (A)	8,259,584	149,935,712
CORPUS FUND :		
Corpus Fund	4,119	
Corpus fee received from Students	785,000	1,578,000
Migration fee (Charged under income of Corpus Fund)	3,200	40,631
Institute Share from Transcript fee	321,720	263,655
Corpus Fund interest on Savings Bank	688,566	12,586
Received from Development fee		900,000
Total (B)	1,802,605	2,794,872
Grand Total (A+B)	10,062,189	152,730,584

Particulars	Current Year	Previous Year
SPONSORED PROJECTS:		
Grants Received against Sponsored Projects(Including Loan from Institute)		
MICT : GOI	3,910,875	5,132,022
SERB : GOI	7,784,581	6,972,152
DST: GOI	2,905,766	15,230,000
MNRE: GOI	354,395	2,317,250
BRNS:		1,645,200
NRRDA		365,000
DIETY		4,930,000
UGC	168,000	66,067
Total	15,123,617	36,657,691
OTHER MISC. GRANTS/SPONSHORSHIP:		
Received from SERB (DST)		856,274
Received from CBSE	145,741	223,496
Manish Roy Memorial Scholarship Fund	10,000	
NRDC Grants	200,000	
PMMMNT SCHEME		2,200,000
Faculty Development Programme		220,000
Visveswariya PhD Scheme		110,000
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	750,000
INSPIRE Internship	370	900,000
Total	7,531,669	5,259,770
VI. Receipts against sposored Fellowships and Scholarships:		
Outside Scholarship Payable	12,385,728	11,408,366
Doctoral Fellowship (ICSSR)	207,000	
Total	12,592,728	11,408,366
INTEREST RECEIVED FROM EARMARKED FUND:		
Depreciation Fund Interest on Savings Account	109,645	995,689
Maintenance Fund Interest on Savings Account	182,919	991,472
Staff Dev Fund Interest on Savings Account	92,940	29,421
Gratuity Fund Interest on Savings Account	201,737	349,952
Total	587,241	2,366,534
SH-12 Interest Earned		
Interest on Saving A/c		
Interest on Fees A/c	188,860	388,483
Interest on Scholarship A/c	96,562	148,932
Interest on Savings Bank A/c		21,380

Particulars	Current Year	Previous Year
Interest Others		
Interest on (Auto Sweep) Non Plan	2,969,010	2,311,638
Interest on Auto Sweep A/c (Fee)	-	1,552,626
Interest Others	584	
Total	2,969,594	3,864,264
Interest Against Project A/c		
Interest on SavingA/c (Sponsored projects a/c.)	1,298,786	748,023
Total	1,298,786	748,023
Investment with scheduled banks		
Investment (Nonplan Fees)		14,000
Investment (Plan- Margin Money A/C)	3,200,000	17,363,927
Total	3,200,000	17,377,927
Other Income (Including Prior Period Income)		
Income From Land & Building		
License Fee	2,261,577	2,240,793
Hire Charges for Shops Canten and Office	1,229,682	1,157,462
Seat Rent/Hostel Room Rent	6,007,000	5,906,000
Guest House Room Rent	1,433,080	1,254,875
Electricity Consumption Receipts	5,679,480	6,428,879
Light & Water (Hostel)	6,007,000	5,906,000
RTI Fees	656	2,198
Application Fee	81,850	266,345
Tender Form Fee	354,747	372,800
Scrap Sale		28,896
Misc Receipts	3,181,878	953,433
Institute Overhead on Consultancy	1,162,945	1,116,996
Lake Fishing Rights	367,500	
Total	27,767,395	25,634,677
Margin Money for LC	1,578,273	0
Total	1,578,273	0
OTHER DEPOSITS:		
Solar Regional Test Centre		927,654
Lab Equipment		848,929
Accrued Interest on Fee A/c Investment		1,265
Accrued Interest on LC Investment	2,898	25,806
Electricity Consumption Receivable	393,976	
House Rent Recivable	28,548	8,734
Shops & Canteen Rent Recivable	23,930	44,593
From CDAC	12,027	
Advance Tax		1,263,619
Receivable against SocPros		9,500
Claims against RTC Project		41,973
Grand Total	461,379	3,172,073

Particulars	Current Year	Previous Year
<u>Loans,Advances & Deposits</u>		
<u>Sundry Debtors</u>		
Panorama International	1,166,736	
Godrej & Boyce Mfg Co Ltd	905,000	
Advance to Employees		
HTC Advance	508,585	560,284
LTC Advance	1,300,306	1,168,113
Other Advance To Employees		
Recoverable Advance	3,409,990	12,891,074
Recoverable Advance (Project)	373,000	14,570
TA Advance	1,514,645	557,825
Soft Loan (Staff)	977,507	1,337,932
Festival Advance	869,720	713,450
Medical Advance		370,500
Other Salary Advance	1,121,000	
Loan to CSAB	358,300	435,476
Deposit Work		
Secured Advance Recovery	94,550,000	156,117,000
Mobilisation Advance	15,000,000	41,300,000
Advavce Recovery against Works		1,263,500
Advance to PHE (Water Supply)		282
Advance Recovery from Firm		2,946,225
Receivable from CSAB	22,480,000	
Receivable from CCMT	6,440,000	
Loan to CCB/CCMT	232,850	201,650
AIU Workshop	20,000	180,000
Loan to TEQIP (Recovery)	875,000	50,000
Total	152,102,639	220,107,881
<u>MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS:</u>		
Provision -TAX:		
VAT	16,616,188	30,374,736
Vat Project	72,398	
Income Tax (Against Salary & Contrats)	32,215,559	32,069,341
Income Tax -Project	27,974	
Professional Tax	841,040	1,008,695
Professional Tax (Project	34,402	
Service Tax	10,500	342,321
Labour Cess	2,685,437	5,118,105
GSLI	680,850	897,240
EPF Subscription MR Employee	1,357,341	455,649
EPF Subscription FW Workers Society	276,217	22,596
GPF Advance Recovery	1,667,875	2,562,118
GPF	250,000	105,000
GPF Subscription	10,906,200	11,817,900
NPS Subscription	8,963,150	8,004,620
Total	76,605,131	92,778,321

Particulars	Current Year	Previous Year
OTHER DEPOSITS:		
Hostel Caution Money	7,680,000	9,797,280
Institute Caution Money	3,950,000	5,364,000
Sundry Creditors		
Godrej Mfg Co. Ltd		2,952,349
M/s Sify Technologies Ltd	3,564,672	
Shree Ganesh Associates	38,000	7,500
Nurul Hussain Barbhuiya	20,000	55,037
AK Choudhury		68,223
NESS Pvt Ltd		236,804
NCC Ltd	24,782,056	
DHR Holding Pvt Ltd	19,663	
Panorama International	102,127	
Earnest Money Deposit	1,827,312	8,123,574
Security Deposit	1,614,801	11,642,991
SD Project	56,416	32,080
Load Security		4,906
Alumini Association Fee	785,000	1,079,000
Deposit Remittance	1,147,195	1,547,440
Deposit Remittance (project)	18,170	
Recovery of Licence Fee & Electricity (Project)	3,099	
Other Payables (Projects)	5,645	
CCTV Payable	883,250	850,108
Group Insurance Claim	1,818,429	1,575,416
Gymkhana	6,203,000	6,132,760
Hostel Management	2,946,500	2,955,450
Hostel Welfare		30
Institute Share on Consultancy	239,413	165,857
Leave Encashment Payable (Other Org)	218,389	957,921
Mess Dues	533,408	
Liability Towards DCRG	100,000	300,000
L.I.C.I Payable	4,747,791	5,418,567
NPS Subscription & Contribution (Other Org)		186,836
Pension Fund Contribution (Other Org)	120,750	317,449
Mediclaime Insurance	1,646,820	1,690,095
Mess Advance		175,330
Mess Establishment	5,433,000	5,812,990
Processing Charges	474,400	826,700
Refundable Excess Deposit	52,579,080	383,741
Student Mediclaime	797,788	98,302
Transcript Fee	893,700	764,735
Verification fee	171,400	54,700
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		15,917
Unclassified receipts	32,300	42,512
Plan interest on Auto Sweep	1,386,091	2,369,124
Plan Interet on Mobilization Adv	375,205	5,075,671
Plan Grant (Axis Bank & Others)	292,981	382,663

SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2017

PAYMENTS :

<i>Amount in Rupees</i>		
Particulars	Current Year	Previous Year
Establishment Expenses		
Salary Teach & Admin	183,168,150	156,900,725
Salary Class-III	24,947,549	31,495,451
Salary Class-IV	28,208,353	33,168,736
Salary of Cont. Staff (Teach/admin/III/IV)	17,166,067	22,203,081
Salary of MR Staff	10,333,968	10,648,414
Salary of Outsourced Staff	14,500,250	12,815,315
Bonus	1,706,880	706,666
Professional Dev Allowance	4,349,284	2,815,791
NPS Contribution	8,213,370	7,433,964
Pension Contribution (Depu)	79,406	361,848
EPF Contribution on FFW Workers	127,047	3,560,805
EPF Contribution on MR Salary	1,381,674	
Mobile & Telephone Bill Reimbursement	381,413	51,027
Death Cum Ret. Gratuity	14,237,567	21,161,937
Pension	48,982,902	47,023,083
Commuted Pension	6,290,214	9,889,120
Leave Encashment	9,283,462	13,335,332
Home Travel Concession	1,717,990	573,618
Leave Travel Concession	1,822,599	3,251,748
Medical Reimbursement	1,767,248	2,743,043
Medicine & Dispensary Exp	850,373	1,927,163
Honorarium/Sitting Fees	329,000	1,069,460
Security Services	18,528,270	16,058,615
House Keeping	8,814,615	4,431,364
Joining Time T.A	126,788	268,428
Relocation Charges (Transportation)	212,905	335,571
Total	407,527,344	404,230,305
Academic Expenses		
Lab Consumable	657,990	842,503
Seminer & Conferences	96,032	669,592
Visiting Faculty Remuneration	206,000	138,700
Examination Expenses	2,151,313	1,759,281
Convocation Expenses	2,239,995	2,061,735
Stipend to M.Tech/ Ph.D	94,506,095	86,047,363
Contingency to Phd	1,178,534	428,142
Student Project Expenses	229,333	364,771

Particulars	Current Year	Previous Year
Internship Exp	65,577	78,840
Industry Visit (MBA)	113,812	
STIS Project	590,267	
Summer Term Course Exp	690,000	544,570
Total	102,760,568	93,070,111
Administrative Expenses		
Electricity & Power Charges	29,730,203	27,034,818
Water and Electricity Charges to PHE	7,922,965	5,021,727
Postage Exp	203,758	144,060
Internet Expenses	2,029,845	2,433,418
Telephone Charges	68,470	402,621
Printing and Stationary Exp	2,165,764	1,895,780
Local Conveyance	10,740	9,950
TA/DA Expenses	2,783,421	5,478,773
Hospitality Exp/Refreshment	320,485	232,215
Audit Fees	551,900	398,105
Professional Fee & Legal Exp	487,319	1,046,252
Advertisement Expenses	1,090,130	2,160,287
News Paper & Periodicals	9,328	39,536
Training & Placement Expenses	267,529	519,547
Board & Committee Meeting	2,043,780	2,740,042
Computer Consumable Exp	271,028	350,739
Miscellaneous Exp	164,683	110,322
Gyan Sagar Exp	10,862	49,971
Celebration of National Day	611,048	281,089
NCC & NSS Activities	153,874	75,989
Promotion of Rashtriya Bhasha	121,171	495,950
Consumable	223,669	547,084
Academic Audit Expenses	336,709	250,167
Contingency Expenses		554,121
Transit House Rent	250,000	61,770
Award & Prizes	155,000	191,600
ETH - Project Exp		16,800
Incubation Centre (CDAC)		2,166,000
Innovation Lab Exp	252,458	789,251
Other Admin Exp	2,347,404	1,479,052
Registration/Nomination Fee	50,000	158,550
RPC Project Exp	119,462	497,136
Short Term Training Programme		89,668
Upgradation of Supporting Staff		442,250
Junior Engg Staff Salary	337,600	1,687,695
Mobilisation Exp		644,517
NSDL Service Charges	31,467	27,354
Gymkhana Expenditure	417,882	759,426

Particulars	Current Year	Previous Year
Transportation Expenses		
Vehicle Running Expenses	1,612,055	1,299,426
Insurance Exp- Vehilces	96,640	82,528
Total	1,708,695	1,381,954
Repairs and Maintenance Expenses		
Repairs & Maintenace- Building & Others	3,972,895	4,371,639
Maintenance of Furniture & Fixtures	157,120	413,333
Repairs and Maintenace- Tools Equipments	1,001,550	875,882
Maintenance of Digital Library	174,850	
Casual Work & Carriage	547,016	226,996
Gardening & Horticulture	100,000	565,018
Repairs & Maintenance- Electricity	2,065,438	1,484,701
Maintenance of D.G Set	3,069,324	3,047,970
Manitenance of Networking	299,941	243,101
Repairs & Maintenace of Guest House	299,700	254,131
Book Binding Expenses		91,950
Total	11,687,834	11,574,721
Finance Cost		
Bank Charges	22,326	26,996
Total	22,326	26,996
Prior Period Expenses		
Prior Period Exp (CEA)		1,555,072
Total	0	1,555,072
Other Expenses		
Support to NITS KIDS School	552,971	588,349
Support to Kendriya Vidyalaya	18,964,000	20,000,000
Total	19,516,971	20,588,349
<u>EARMARKED FUND / ENDOWMENT FUND :</u>		
Corpus Fee	12,000	544,000
Pension fund Contribution	11,717	476,013
NMICT Awareness Program Fund	425,305	212,938
Student Aid Fund	174,089	256,837
Total	623,111	1,489,788
<u>SPONSORED PROJECTS:</u>		
Expenditure against Sponsored Projects		
Capital Expenditure		
Equipment	3,636,132	3,129,788
Computer	348,899	99,000
Software	0	99,999
Furniture	55,365	13,400
Revenue Expenditure	11,190,920	4,824,817
Total	15,231,316	8,167,004

Particulars	Current Year	Previous Year
<u>FELLOWSHIP / SCHOLARSHIP :</u>		
Outside Scholarship Payable	10,048,931	10,508,244
Doctoral Fellowship (ICSSR)	207,000	
Total	10,255,931	10,508,244
<u>INVESTMENTS & DEPOSITS:</u>		
<u>OUT OF EARMARKED/ENDOWMENT FUNDS;</u>		
Investment of Depreciation Fund		55,000,000
Investment of Maintenance Fund		55,000,000
Total	0	110,000,000
<u>OUT OF OWN FUNDS;</u>		
Investment KIDs NITS		10,000,000
Investment- LC Margin Money A/C	3,600,000	20,849,752
Total	3,600,000	30,849,752
<u>EXPENDITURE ON FIXED ASSETS</u>		
Software Developments	524,201	4,724,755
E-Journals	16,861,558	7,079,757
Patent and Copyright	83,551	42,180
<u>Buildings</u>		
Boys Hostel No.7		153,500
Girls Hostel-2		141,790
Guest House (Old)		153,071
Hostels Including Spcl Repair		1,140,691
Institute Building Renovation	490,683	651,139
Production Engg Lab		564,830
Security Barack - II		318,896
Lecturers Quarter		1,127,229
Staff Quarters (Type A,C,D)	55,061	351,297
Staff Quarters Type IV 30 Units	1,855,447	957,781
Central School Building & quarters	52,144	
Sports Complex & Auditorium	478,837	
<u>Roads & Bridges</u>		
Renovation of Internal Road and gate	1,420,044	
<u>Campus Development</u>		
Campus Development/Beautifcation	1,956,453	628,116
Childrens Park		30,375
Renovation of Internal Road & Gate		2,128,861
Boat Club		311,850
Security Wall	75,015	171,944
Sports Field Volley Ball/Tennies	320,717	901,221

Particulars	Current Year	Previous Year
<u>Plant, Machinery & Equipments</u>		
Audio Visual Equipments	2,284,801	1,323,464
Electrical Equipments	957,793	4,473,391
Equipments of Health Centre	1,047,375	
Lab Equipments	15,625,401	40,943,713
Gym Equipment	45,000	655,450
L T Line & UG Cabeling	1,438,830	4,191,697
Solar Street Lighting	429,000	
Furniture Including Hostels	5,139,922	14,687,364
Office Equipments	1,991,082	1,632,559
Computer Pheriphrals Including Projects	3,543,445	1,381,190
Books	1,102,428	1,863,909
Water Supply Scheme		313,400
Childrens Park Equipments		81,000
Networking	12,476,354	8,418,060
Total	70,255,142	101,544,480
<u>CAPITAL WORK IN PROGRESS:</u>		
Boys Hostel-9 (WIP)	258,844,615	276,286,951
Library Building (WIP)	116,840	
Married Scholar Hostels (WIP)		3,719,415
New Academic Building(WIP)		39,197,875
New Admin Building(WIP)	835,819	
Non Faculty Staff Qtrs-100 Nos.(WIP)		1,507,282
Type (VI)Qtr 12 Units (WIP)		15,651,562
Type (V)Qtr 20 Units (WIP)	822,766	24,659,155
Sports Complex (WIP)		2,159,629
Health Care Centre (WIP)	6,405,010	20,386,538
Expansion of E.E Building (WIP)		7,065,023
Auditorium Building		11,140,364
Eatout Dhaba		8,870,275
NABL Accrediated Lab Bldg (WIP)		4,719,872
Earthquake Engg Lab Bldg		10,364,508
Total	267,025,050	425,728,449
<u>PROVISIONS : (TAX)</u>		
VAT	15,063,036	30,326,152
Vat (project)	72,398	
Income Tax (Against Salary & Contrats)	32,397,202	8,905,326
Income Tax (Project)	27,974	23,164,015
Professional Tax	752,862	1,008,695
Professional Tax (Project)	17,449	
Service Tax	10,500	342,321
Labour Cess Payable	2,860,818	5,118,105

Particulars	Current Year	Previous Year
Refund to Ministry		
Refund from Project Account	106,071	1,826,736
Total	106,071	1,826,736
<u>Loans,Advances & Deposits</u>		
<u>Sundry Debtors</u>		
Panorama International	1,248,700	
Godrej & Boyce Mfg Co Ltd	905,000	
Advance to Employees		
HTC Advance	802,400	559,400
LTC Advance	1,423,200	1,796,700
Other Advance To Employees		
Recoverable Advance	15,539,903	23,943,871
Recoverable Advance (Project)	373,000	
TA Advance	1,636,400	843,600
Soft Loan (Staff)	250,000	1,425,000
Festival Advance	746,000	848,500
Medical & Other Advance	500,000	370,500
Other Salary Advance	1,121,000	
Receivable from Saswat Chakraborty	14,000	
Prepaid Insurance Exp	798,288	
Security Deposit (LPG- Hostel)	46,200	
<u>Advances & Other Receivable on Capital A/c</u>		
Deposit Work		
Deposit Work-33 KV Substation		492,034
Deposit Work-CPWD Central School		2,360,000
Deposit Work-CPWD Non/faculty Qtrs		100,000,000
Deposit Work-CPWD New Admin Building		115,000,000
Deposit Work-CPWD Swage Disopl. Sytm	6,400,000	22,730,000
Deposit Work-HPL Married Sch Hostel		30,525,593
Deposit Work-PHE-Agmn Water Supply		6,725,740
Deposit Work-PHE- Water Supply Scheme		
Deposit Work - APDCL		
Secured Advance	125,150,000	177,410,500
Margin Money for LC against Equipment	2,889,619	8,582,732
Advance to Firms/Suppliers		6,660,296
Adv to Firm- PHE Water Supply		105,000
Total	159,843,710	500,379,466

Particulars	Current Year	Previous Year
Current Liabilities & Provisions		
Hostel Caution Money	2,450,000	3,945,000
Institute Caution Money	1,579,000	1,820,000
Creditors for Goods& Services (Incl.EMD & SD)		
Godrej Mfg Co Ltd		2,952,349
IL&FS Technologies		1,204,575
S.M Khetwat		323,495
M/s Agni Power & Electronics Pvt. Ltd.	544,400	544,400
M/s A.K.Choudhury		68,223
NCC Ltd	16,797,056	
Nurul Hussain Barbhuiya	75,037	
Shree Gonesh Associates	38,000	
Earnest Money Deposit	4,183,358	6,914,595
Security Deposit	1,980,569	9,480,871
GSLI Payable	733,230	837,710
EPF Subscription MR Employees	1,357,341	455,649
EPF Subscription FFW Workers' Society	113,312	
GPF Advance Recovery	1,521,942	2,818,968
GPF Payable (Others)	250,000	632,000
GPF Subscription Payable (Others)		105,000
GPF Subscription Payable	10,043,100	12,108,000
NPS Subscription Payable	8,213,370	8,569,040
Vishveshwaraia PhD Scheme		110,000
PMMNT Fund	230,725	988,628
SIS Library		209,075
DST (SERB Project)		556,294
CBSE Fund	49,741	158,496
NRDC Fund		260,000
Business Environment Law Curriculum Fund		600,000
WNL Library		173,659
INDEST 2014, Library		685,803
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	95,000
CCTV Payable	486,631	436,460
Deposit Remittance	321,330	535,538
Group Insurance Claim	1,569,260	1,615,241
Gymkhana	296,605	5,104,020

Particulars	Current Year	Previous Year
Hostel Management	2,889,000	2,614,000
Hostel Welfare		60
Institute Share on Consultancy		165,857
Liability Towards DCRG	50,000	50,000
L.I.C.I Payable	4,353,618	5,474,368
NPS Subscription & Contribution (Other Org)		325,752
Mediclaime Insurance	1,695,532	1,689,148
Mess Advance		430,362
Mess Dues	403,183	
Mess Establishment	1,899,842	474,758
Processing Charges	407,500	684,400
Refundable Excess Deposit	52,417,413	351,949
Student Mediclaime	608,373	98,912
Transcript Fee	660,700	803,935
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		47,606,094
Provision Plan Others	2,377,615	154,656,054
Consultancy Cell CE Department	15,917	150,000
Payable to Depreciation Fund		1,484,687
Payable to Maintenance Fund Fund		245,049
Depreciation Fund (Loan Refunded)		55,000,000
Maintenance Fund (Loan Refunded)		55,000,000
Staff Development Fund Payable		1,076,279
Verification Fee	1,000	94,000
Refund from RPS Project A/c		41,973
Prepaid E-Journals		4,499,786
Prepaid AMC		352,177
Prepaid Insurance		479,038

Particulars	Current Year	Previous Year
<u>Other Receivable</u>		
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	50,000
TDS Receivable (I Tax) including Project	358,462	
Loan to SMDP Project	200,000	
<u>Claims Receivable</u>		
Receivable GH1		33,000
Receivable against AIU Workshop Library		200,000
Receivable Hostel 8		40,000
EPF Subscription MR Employees (Recoverable)		2,708,310
Total	173,543,151	401,188,037

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

GPF and NPS ACCOUNT BALANCE SHEET AS AT MARCH 31, 2017

(Amount in Rupees)						
LIABILITIES		Current Year	Previous Year	ASSETS	Current Year	Previous Year
PITAL FUND (GPF):				INVESTMENT:		
Opening Balance		276,117,142	288,708,602	Investment with Bank	245,713,141	241,750,812
Less: Final Payment		15,917,817	47,213,813	Interest accrued on FD	17,893,125	3,071,546
Less: Fund towards Penion Fund transferred		8,156,843	6,927,606			
Balance		252,042,482	234,567,183	CURRENT ASSETS:		
Add: Excess prov. of Pension fund cont. reverted		0	9,760,708	Advance to Subscriber	4,908,987	4,887,731
Add: GPF Subscription		10,727,597	11,185,900	Receivable from Institute against NPS Sub & Contr	1,499,560	-
Add: GPF Subscription (Other Org)		260,000	272,000	Receivable from Institute against GPF Subs.	868,247	-
Add: Excess payment recovered		11,717	18,646	TDS receivable	126,893	
Add: Excess of Income Over Exp		21,621,516	20,312,705	GPF Advance receivable from Institute	135,186	
Total Capital Fund		284,663,312	276,117,142			
CURRENT LIABILITIES & PROVISIONS:				CASH AT BANK	15,740,149	29200048.71
S Account:						
Opening Balance		2,792,996	1,556,538			
Add: Subscription & Contribution (Received)		17,926,300	14,867,928			
Add: Subscription & Contribution (Other Org)		113,156	408,668			
Less: Paid during the year (NSDL)		18,610,476	14,040,138			
Closing Balances		2,221,976	2,792,996			
Total		286,885,288	278,910,138	Total	286,885,288	278,910,138

Date: 22nd June, 2017
Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

GPF & NPS ACCOUNT
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2017

(Amount in Rupees)						
EXPENDITURE		Current Year	Previous Year	INCOME	Current Year	Previous Year
Bank Commission		1.00	950	Interest Earned on Investment	3,451,283	16,820,167
Excess of Income over Expenditure		21,621,516	20,312,705	Interest Accrued on Investment	15,440,034	3,071,546
				Interest received on S/B A/c	942,287	414,323
				Interest Received against Autosweep	1,787,913	7,619.00
Total		21,621,517	20,313,655	Total	21,621,517	20,313,655

Date: 22nd June, 2017
Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

GPF & NPS ACCOUNTS

RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2017

(Amount in Rupees)					
RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
Opening Balance: (As on 01.04.2016)	29,200,049	7,295,514			
Cash at Bank			ACCUMULATED FUND:		
	9,783,100	11,185,900	GPF Adv./Withdrawal		3,406,600
GPF Subscription	260,000	272,000	Advace to Subscriber	1,604,540	10,796,185
GPF Subscription Received (Other Org)	-	-	0 Pension Fund Contrb. Paid	0	0
GPF Subscription payable	-	-	GPF Subscription	24,074,660	47,213,813.00
Leave salary payable from other Organisation	-	-	Final payment	0	727,987.00
Pension Fund Contrb. Other Org	-	-	Leave salary other Organisation transferred	0	6,927,606.00
GPF Advance recovery	1,524,348	3,305,903	Acculated Capital Fund	9,174,060	6,890,335
NPS Subscription (Institute)	8,213,370	7,433,964	NPS Subscription (Institute)	9,174,060	6,890,335
NPS Contribution (Institute)	8,213,370	7,433,964	NPS Contribution (Institute)	131,178	129,734
NPS Subscription (Other Org)	56,578	204,334	NPS Subscription (Other Org)	131,178	129,734
NPS Contribution (Other Org)	56,578	204,334	NPS Contribution (Other Org)	19,484	
Voluntary Deposit	-	-	TDS Receivable		
Pension Fund Contrb. Refunded	11,717.00		INVESTMENT		
GPF Subscription Receivable (2014-15)	-	922,100.00	Investment during the year	0	230,000,000
NPS Contribution Receivable (2014-15)	-	1,135,076.00			
NPS Subscription Receivable (2014-15)	-	1,135,076.00	EXPENSES		
Final payment	-	-	Bank Charges	1	950
Accumulated Capital Fund	-	18,646.00	Unclassified Receipts (Transferred):		
VESTMENT			Unclassified Receipts (Transferred):		25,094.00
Investment Matured	-	251,524,932			
Interest Received (Maturity)	-	33,685,356	Closing Balance:		
TEREST			Cash at Bank	15,740,149	29,200,049
Interest Received against FD	-	15,751,787			
Interest Received against Autosweep	1,787,913	7,619			
Interest on SB A/c	942,287	414,323			
CURRENT LIABILITY					
Unclassified Receipts		25,094			
Total	60,049,310	342,338,422	Total	60,049,310	342,338,422

te: 22nd June, 2017
ce: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

1003

Schedule of Investment & Interest accrued of G P Fund upto 31.03.2017

S. No.	Name of Bank	Fixed Deposit/Bond Account No	Dated	Face Value as on 31/03/2016	Addition during 2016-17	Matured during the year 16-17	Face Value as on 31/03/2017	Accrued Int. earned upto 2015-16	Interest Recvd during the Year	Accrued intt. Earned during 2016-17	Accrued Int. Recd during 2016-17	Int. on TDS Receivable 31.03.2017	Net accrued Int. upto 31.03.17.
1	IDBI	0293106000022385	11/24/2015	5,670,366	-	-	5,670,366	155,623	-	454,349	-	-	609,972
2	IDBI	0293106000022394	11/24/2015	5,670,366	-	-	5,670,366	155,623	-	454,349	-	-	609,972
3	IDBI	0293106000023694	4/2/2016	4,000,000	-	-	4,000,000	48,333	-	317,258	-	-	365,591
4	IDBI	0293106000023700	4/2/2016	9,000,000	-	-	9,000,000	108,750	-	713,831	-	-	822,581
5	IDBI	0293106000023719	4/2/2016	9,000,000	-	-	9,000,000	108,750	-	713,831	-	-	822,581
6	IDBI	0293106000023728	4/2/2016	9,000,000	-	-	9,000,000	108,750	-	713,831	-	-	822,581
7	IDBI	0293106000023737	4/2/2016	9,000,000	-	-	9,000,000	108,750	-	713,831	-	-	822,581
8	Vijaya Bank	800603311004617	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
9	Vijaya Bank	800603311004619	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
10	Vijaya Bank	800603311004616	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
11	Vijaya Bank	800603311004618	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
12	Vijaya Bank	800603311004614	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
13	Vijaya Bank	800603311004615	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
14	Vijaya Bank	800603311004612	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
15	Vijaya Bank	800603311004613	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
16	Vijaya Bank	800603311004610	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
17	Vijaya Bank	800603311004611	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
18	Vijaya Bank	800603311004622	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
19	Vijaya Bank	800603311004620	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
20	Vijaya Bank	800603311004621	4/2/2016	9,000,000	-	-	9,000,000	110,625	-	692,181	-	-	802,806
21	Vijaya Bank	800603311004609	4/2/2016	3,000,000	-	-	3,000,000	36,875	-	230,727	-	-	267,602
22	Canara Bank	3050401001158/9	18/2/2016	380,360	-	380,360	-	3,521	23,771	-	3,521	-	-
23	Canara Bank	3050401001158/10	2/18/2017	-	407,652	-	407,652	-	-	3,360	-	336	3,024
24	Canara Bank	3050401001509	25.04.2015	29,720	-	29,720	-	2,516	-85	-	2,516	-	-
25	Canara Bank	3050401001509/2	25/04/2016	-	32,151	-	32,151	-	-	2,310	-	231	2,079
26	Canara Bank	3050401001691/1	06.02.2016	9,000,000	-	9,000,000	-	106,562	611,472	-	106,562	-	-
27	Canara Bank	3050401001691/7	06.02.2017	-	9,645,663	-	9,645,663	-	-	101,681	-	9,525.00	92,156
28	Canara Bank	3050401001691/2	06.02.2016	9,000,000	-	9,000,000	-	102,688	615,346	-	102,688	-	-
29	Canara Bank	3050401001691/8	08.02.2017	-	9,645,683	-	9,645,683	-	-	97,984	-	9,558.00	88,426
30	Canara Bank	3050401001691/3	06.02.2016	9,000,000	-	9,000,000	-	100,750	617,284	-	100,750	-	-
31	Canara Bank	3050401001691/9	09.02.2017	-	9,645,693	-	9,645,693	-	-	96,135	-	9,616.00	86,519
32	Canara Bank	3050401001691/4	06.02.2016	9,000,000	-	9,000,000	-	98,812	619,222	-	98,812	-	-
33	Canara Bank	3050401001691/10	10.02.2017	-	9,645,703	-	9,645,703	-	-	94,287	-	9,645.00	84,642
34	Canara Bank	3050401001691/5	06.02.2016	9,000,000	-	9,000,000	-	96,875	618,108	-	96,875	-	-
35	Canara Bank	3050401001691/11	11.02.2017	-	9,645,713	-	9,645,713	-	-	92,438	-	9,675.00	82,763
36	Canara Bank	3050401001691/6	06.02.2016	5,000,000	-	5,000,000	-	52,743	346,165	-	52,743	-	-
37	Canara Bank	3050401001691/12	12.02.2017	-	5,358,736	-	5,358,736	-	-	50,327	-	5,402	44,925
38	Canara Bank	3050401001836/1	10.03.2017	-	345,415	-	345,415	-	-	1,390	-	-	1,390
39	UCO Bank	20130310035245	6/2/2016	9,000,000	-	-	9,000,000	106,875	-	715,393	-	-	822,268
40	UCO Bank	20130310035252	6/2/2016	9,000,000	-	-	9,000,000	106,875	-	715,393	-	-	822,268
41	UCO Bank	20130310035269	6/2/2016	2,000,000	-	-	2,000,000	23,750	-	158,976	-	-	182,726
Total Rs.				241,750,812	54,372,409	50,410,080	245,713,141	3,071,546	3,451,283	15,440,034	564,467	53,988	17,893,125

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II] BALANCE SHEET AS AT 31ST MARCH, 2017

S. No.	PARICULARS	SCHEDULE No.	CURRENT YEAR Rs	PREVIOUS YEAR Rs
A	<u>SOURCE OF FUNDS:</u>			
	Opening Balance		150,000,000	125,000,000
	1) Amount received from: Govt of India		25,000,000	25,000,000
	2) Received from Govt.of India under Modernisation		15,000,000	-
	3) Contribution from:		-	-
	<u>3) Less: Excess of Expenditure over income:</u>			
	As per last Account Rs.8,09,96,317.56			
	Add during the year Rs. 50,62,570.00		86,058,888	80,996,318
	TOTAL		103,941,112	69,003,682
B	<u>APPLICATION OF FUNDS</u>			
	1) Fixed Assets	I	93,165,801	57,521,326
	2) Investment	II	-	-
	2) Work in progress - Scheme work under implement		-	-
	TOTAL		93,165,801	57,521,326
	<u>3) A. Current Assets, Loans and Advances</u>			
	a) Cash Balance	III		
	b) Bank Balance		5,254,369	11,510,687
	c) Advance for Capital Goods	IV	-	-
	d) Loans and Advances	V	5,549,273	-
	TOTAL (A)		10,803,642	11,510,687
	<u>B. Less: Curent Liabilities</u>			
	Earnest Money Deposit Etc	VI	28,331	28,331
	Net Current Assets (A - B)		10,775,311	11,482,356
	TOTAL		103,941,112	69,003,682

Place: Silchar
Date: 22nd June, 2017

Registrar
NIT Silchar

Director
NIT Silchar

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31ST MARCH, 2017

(Amount in Rs.)

EXPENDITURE		INCOME	
Previous Year	Particulars	Previous Year	Particulars
	Incremental Operating Cost		
688,180	(a) Operation & Maintenance	90,083	Interest earned
10,000	(b) Consumables	-	Other income
105,000	(c) Salary		
1,542,514	Industry Institute Interaction		
9,667,032	Teaching & Research Assistantship	14,606,962	Excess of Expenditure over Income
909,395	Faculty & staff Development		
-	Research & Development		
142,104	Academic Support for weak students		
20,720	Institutional Mgt. Capacity Enhancement		
1,612,100	Institutional Reforms		
14,697,045	Total Rs.	14,697,045	Total Rs.
			6,172,109

Place: Silchar
Date: 22nd June, 2017

Registrar
NIT Silchar

Director
NIT Silchar

SCHEDULE - I

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - PHASE-II [TEQIP-II]

SCHEDULE FOR FIXED ASSETS as on 31st March, 2017

(Amount in Rs.)

Sl	Particulars	Gross Balance as on 01/04/2016	Addition during the year	Deletion during the year	Gross Balance as on 31/03/2017
1	Equipment	48,262,699	21,808,328		70,071,027
2	Equipment: under Modernisation	0	13,836,147		13,836,147
3	Furniture	-	-	-	-
4	Books & LRs & Software	9,258,627	-	-	9,258,627
5	Minor Works	-	-	-	-
	Total	57,521,326	35,644,475	0	93,165,801

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]

Schedules forming part of Balance Sheet as at 31st March, 2017

(Amount in Rs.)

Current Assets: Investment	<u>Schedule II</u>	Current Year	Previous year
TDR		-	-
Total		0	0

Current Assets, Loans and Advances:	<u>Schedule III</u>	Current Year	Previous year
Cash in Hand		0	0
Cash at Bank (SBI, NIT Branch)		5,254,369	11,510,687
Total		5,254,369	11,510,687

Advance for Capital Goods	<u>Schedule IV</u>	Current Year	Previous year
		-	-
Total		0	0

Loans and Advances:	<u>Schedule V</u>	Current Year	Previous year
A Advance		-	-
Advance to Firm		-	-
Advances		5,549,273	-
Total		5,549,273	0

Current Liabilities :	<u>Schedule VI</u>	Current Year	Previous year
EARNEST MONEY DEPOSIT:			
Geophyer Enterprise (India)		25,045	25,045
Deposit Remittance (Uncashed/Stale Cheque)		3,286	3,286
TOTAL		28,331	28,331

**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE - II]
RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2017**

Previous Year	RECEIPT	Current Year	Previous Year	PAYMENT	Current Year
	Opening Balance :				
-	i) Cash in Hand	-	100,000	Equipment	21,808,328
1,217,649	ii) Cash at Bank	11,510,687	-	Modernisation: Equipment	13,836,147
				Books & LRs & Software	-
25,000,000	Grants-in-Aid:			Investment:	-
	Received from Govt. of India	25,000,000	130,000	Investment	-
	Received from Govt. Modernisation	15,000,000		Loan from Institute	-
	Investment:			Indirect Expenditure:	
	Investment			Incremental Operating Cost:	
			688,180	(a) Operation & Maintenance	1,361,492
			10,000	(b) Consumables	10,233
			105,000	(c) Salary	-
90,083	Other Receipts:		1,542,514	Industry Institute Interaction	460,667
	Interest Earned	1,109,539	9,667,032	Teaching & Research Assistanceship	924,615
	Accrued Interest on Investment	-	909,395	Faculty & staff Development	1,602,770
	Other Receipt :			Research & Development	54,485
	T A Advance	226,960	142,104	Academic Support for weak students	145,821
142,000	Advance to Firm	-	20,720	Institutional Management Capacity	220,976
1,511,000	Advances (for workshop etc)	1,702,727	1,612,100	Institutional Reforms	1,391,050
	VAT	843,790		Other Payments :	
624	Professional Tax	-		T A Advance	226,960
21,100	Income Tax	-		Advance to Firm	-
	Earnest Money Deposit	350,206	142,000	Advances (for workshop etc)	7,252,000
130,000	Loan from Institute	908,750	1,511,000	VAT	843,790
	Deposit remittance	-		Professional Tax	-
	Other Misc. Receipt	34,200	624	Income Tax	350,206
			21,100	Earnest Money	908,750
			-	Deposit remittance	-
			-	Other Misc. Payments	34,200
				Closing balance :	
				Cash in hand	-
			11,510,687	Cash at Bank (SBI, NIT Br)	5,254,369
28,112,456	TOTAL Rs.	56,686,859	28,112,456	TOTAL Rs.	56,686,859

Director
NIT Silchar

Registrar
NIT Silchar

Place: Silchar
Date: 22nd June, 2017

NOTES

This image shows a full page of blank white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing or drawing. There are no margins, text, or other markings on the page.

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.





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