NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

ANNUAL REPORT 2015-16

ANNUAL REPORT
2015-2016

NATIONAL INSTITUTE OF TECHNOLOGY
SILCHAR

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From The Director's Desk...

It is my pleasure to present the Annual Report for the year 2015-16. The National Institute of Technology Silchar, erstwhile Regional Engineering College Silchar started its academic activities from the year 1977. Within a span of about 39 years the Institute has developed in manifolds. The vision of NIT Silchar is: establishing unique identity by development of high quality human and knowledge resources in diverse areas of technologies to meet local, national, and global economic and social need and human society at large in self-sustained manner and the mission is: to train and transform young men and women into responsible thinking 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. NIT Silchar family has been working untiringly to achieve the vision and mission of the Institute.

This Annual Report highlighted the major achievements of the year 2015-16. I express my sincere gratitude to the Ministry of Human Resource Development, Government of India for its support for the development of the Institute and also express my gratitude to the State Government for all necessary cooperation. I am 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.

I am sure NIT Silchar would be a leading technical Institute of the country in the coming years with the support of all.

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.

Institute Overview/ Education System

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 access.

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 Resource Development	Member(ex-officio)

Board of Governors

Name and Position of Board of Governors

Name and Address	Position
---	Chairman
Prof. N. V. Deshpande, Director, NIT Silchar	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
One Prof. (nominee of the Senate) – vacant	Member
One Assistant Prof. (nominee of the Senate) - vacant	Member
Sri. J. Patro, Registrar, (1st April'15 to 30th April'15) Prof. A. K. Barbhuiya, Registrar (w.e.f 30th April'15)	Secretary

Finance Committee

Name and Address	Position
---	Chairman
Prof. N.V. Deshpande, Director, NIT Silchar (Ex-officio)	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
Sri. J. Patro, Registrar, (1st April'15 to 30th April'15) Prof. A. K. Barbhuiya, Registrar (w.e.f. 30th April'15)	Member-Secy

Building and Works Committee

Name and Position of Members of Building and Works Committee

Name and Address	Position
Prof. N. V. Deshpande, Director, NIT Silchar	Chairperson
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
Prof. 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
Sri. J. Patro, Registrar, (1st April'15 to 30th April'15) Sri. A. K. Barbhuiya, Registrar, NIT Silchar	Member-Secy

The Senate

Name and Position of Members of Senate

Name and Address	Position
Prof. N. V. Deshpande, Director, NIT Silchar	Chairperson
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

Name and Address	Position
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. Punekar, Prof., Deptt. of HSS Deptt., IIT Guwahati	Member
Prof. Rajat Gupta (on deputation, NIT Srinagar)	Member
Prof. A. K. Barbhuiya, Prof., Deptt. Of CE & Registrar, NIT Silchar	Member Secretary

Internal Complaint Committee

A Committee has been formed to look into the issues pertaining to Sexual Harassment of Women at workplace. In accordance with the Govt. of India Gazette, Part – II, Section – 1, No. 18, the Sexual Harassment of Women at work place (Prevention, Prohibition and Redressal) Act, 2013 (No 14 of 2013), "An Act to provide protection against Sexual Harassment of women at work place and for the prevention and redresal of complaints Sexual Harassment and for matters concerned therewith or incidental thereto", the following committee has been constituted to examine complaints of Women employees/ Girls student of the Institute pertaining to the said matter. The members of the Committee are as follows:

Sl. 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	Smt. Ranjana Jha, Assistant Registrar (Accounts)	Member
5	Dr. Shahin Ara Begum, NGO	Member

There were awareness programmes organized to sensitize the students, researchers, faculties and other staff members of the institute against sexual harassment at workplace. All the complaints filed under the Act have been addressed by the Committee members.

DEANs AND HODs

Dean (Academic Affairs)	:	Prof. A. K. Sinha
Asso. Dean (Academic)	:	Dr. P. K. Patowari (from 10/08/2015) & Mr. Darpahari Das (from 21/04/2015)
Dean (Alumni Relation)	:	Dr. N. B. D. Choudhury (from10/08/2015)
Dean (Faculty Welfare)	:	Dr. A. I. Laskar (from 28/08/2015)
Asso. Dean (Faculty Welfare)	:	Dr. T. Raheman Laskar (from 10/08/2015)
Dean (Planning & Development)	:	Dr. P. Rajbongshi (from 30/09/2015)
Asso. Dean (Planning & Development)	:	Dr. J. P. Mishra, EE & Dr. Debjit Bhowmik (from 29/02/16)
Dean (Research & Development)	:	Dr. Asim Roy
Asso. Dean (Research & Development)	:	Dr. Mausumi Sen (from 28/08/2015)
Dean (Student Welfare)	:	Prof. M. A. Ahmed (from 21/04/2015)
Asso. Dean (Student Welfare)	:	Dr. Saurabh Chaudhury (from 27/08/2015) & Dr. Ganti Ramesh (from 14/08/2015)
Asso. Dean (Examination)	:	Mr. Bijan Nath
HOD, Civil Engg.	:	Dr. U. Kumar
HOD, Computer Science Engg.	:	Dr. Nidul Sinha
HOD, Chemistry	:	Dr. Pranjit Barman
HOD, Electrical Engg.	:	Dr. B. K. Roy (till 08.05.2015) & Dr. L. C. Saikia (from 09.05.2015)
HOD, Electronics & Communication Engg.	:	Dr. K. L. Baishnab
HOD, Electronics & Instrumentation Engg.	:	Dr. S. H. Laskar (till 11.01.2016) & Dr. Rajdeep Dasgupta (from 12.01.2016)
HOD, Humanities and Social Sciences	:	Dr. Gurudas Das
HOD, Management Studies	:	Dr. Asim Kumar Das
HOD, Mathematics	:	Mr. Bijan Nath (till 30.09.2015) & Dr. Santanu Roy (from 01.10.2016)
HOD, Mechanical Engg.	:	Dr. P. K. Patowari (upto 20.05.2015) & Dr. K. M. Pandey (w.e.f. 20.05.2015)
HOD, Physics	:	Dr. Subrat K. Barik (till 02.08.2015) & Dr. Rupak Dutta (from 03.08.2015)
Co-ordinator (TEQIP)	:	Dr. P. Roy
Chairman (Board of Hostel Management)	:	Dr. M. A. Ahmed
Head, Workshop	:	Dr. K. M. Pandey
Head, Training & Placement	:	Dr. N. B. D. Choudhury, FIC
Head, Central Computer Centre	:	Sri Mithlesh Kumar
Head, Central Library	:	Dr. Kishore Chandra Satpathy

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 AIEEE/ 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 cases as decided by the Senate on the recommendation of the DUPC. All subjects will have a credit count 'C'. Teaching of subjects will be reckoned in terms of credits. One hour lecture or tutorial class is designated as 2 credits while one hour practical class is designated 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 improvement.

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

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

The M.Tech. regulations provide the necessary guidelines for the two years regular Postgraduate programme and three years part-time programme in Engg. disciplines.

Similarly the M.Sc./MBA regulations provide guidelines for 2 years (4 semesters) M.Sc./MBA course.

Academic Procedure

M.Tech.

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

M.Sc. (Chemistry, Mathematics, Physics)

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

MBA

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

Programme Structure

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

The 3rd and 4th semester mostly constitute the project work for M.Tech. while for M.Sc./MBA, the project work spans over the fourth semester. 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.

Table: Details of Project work, Seminar and Technical Writing

Course	Number of semesters	Typical credit per semester	Total course credit	Project work credit	Semester assigned for project	Industrial Training
B.Tech. (4 years) pre-2012	8	32-54	350-390	10	7th and 8th	6-8 weeks
B.Tech. (4 years) w.e.f. 2012 batch	8	32-48	320	15-20	7th and 8th	6-8 weeks (Audit)
M.Tech. (2 years)	4	24-32	Min 96	Min 32	3rd and 4th	-
M.Sc. (2 years)	4	26-30	Min 96	12-18	4th	-
MBA (2 years)	4	Min 36	150	2	4th	-
Ph.D. (Full time, with PG degree)	Min 4	Min 18				
Ph.D. (Part time, with PG degree)	Min 6	Min 18				
Ph.D. (Full time, with Bachelor degree)	Min 6	Min 42				
Ph.D. (Part time, with Bachelor degree)	Min 8	Min 42				

Examination Details

* Even semester examinations held in the month of April-May 2015(both UG & PG)
* Odd semester examinations held in the month of Nov 2015 (both UG & PG).

Statistics of the Results

a) Summary of Results of End semester examination Held in April-May 2015

Programme	Branch & Course	Number Appeared	Number Passed	Percentage passed
M.Tech.	Civil Engg. (Water Resources Engg.)	17	16	94.12%
	Civil Engg. (Structural Dynamics & Earthquake Engg.)	14	14	100%
	Civil Engg. (Transportation Engg.)	14	14	100%
	Civil Engg. (Structural Engg.)	20	20	100%
	Civil Engg. (Geotechnical Engg.)	18	18	100%
	Mech. Engg. (Thermal Engg.)	20	20	100%
	Mech. Engg. (Materials & Manufacturing Technology)	08	08	100%
	Mech. Engg. (Design & Manufacturing)	18	18	100%

Programme	Branch & Course	Number Appeared	Number Passed	Percentage passed
	Mech. Engg.(CAD-CAM & Automation)	07	07	100%
	Electrical Engg. (Power & Energy system Engg.)	14	14	100%
	Electrical Engg. (Control & Industrial Automation Engg)	12	12	100%
	Electronics & Comm. Engg. (Communication & Signal Process Engg.)	08	08	100%
	Electronics & Comm. Engg. (Microelectronics & VLSI Design)	14	14	100%
	Computer Science & Engg	13	13	100%
	Chemistry (Applied Chemistry)	15	15	100%
M.Sc.	Physics (Applied Physics)	08	08	100%
	Mathematics	07	07	100%
MBA	Master of Business Administration(MBA)	31	30	96.77
	Civil Engg.	101	94	93.07%
	Mechanical Engg.	101	97	96.04%
	Electrical Engg.	94	77	81.91%
B.Tech.	Electronics & Comm. Engg.	98	89	90.82%
	Computer Sc. & Engg.	95	82	86.32%
	Electronics & Instrumentation	25	24	96.00%

b) List of candidates qualified for the Degree of Bachelor of Technology after 12th Convocation held in May 2014 and before End semester Examination held in April-May, 2015

Branch	Appeared	Passed
Civil Engg (B.Tech.)	11	11
Mechanical Engg. (B.Tech.)	10	10
Electrical Engg. (B.Tech.)	11	11
Electronics & Communication Engg. (B.Tech.)	09	09
Computer Science & Engg. (B.Tech.)	17	17

Enrolment

Undergraduate

Table: Semester-wise, course wise enrolment with sex and caste breakup for the period 2015-16

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

Sem	Branch	Open (Breakup)		OBC (Breakup)		SC (Breakup)		ST (Breakup)		PH		Total Enrolment
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1ST & 2ND	CE	44	9	35	1	15	4	9	-	2 OPPH	-	119
	ME	49	3	35	-	16	2	7	1	2 OPPH	-	115
	EE	31	9	36	7	14	4	6	1	1 OBPH	1 OPPH	110
	ECE	41	14	28	8	15	2	9	-	1 OPPH	-	118
	CSE	40	4	20	5	12	2	6	-	1 OPPH	-	90
	EIE	21	4	16	1	7	1	3	1	-	-	54
	Total	**226**	**43**	**170**	**22**	**79**	**15**	**40**	**3**	**7**	**1**	**606**
3RD & 4TH	CE	44	5	31	6	14	3	8	3	1 OPPH	-	115
	ME	60	4	35	-	18	-	8	1	3 OPPH	-	129
	EE	48	4	29	1	15	1	6	2	2 OPPH	-	108
	ECE	52	8	26	7	15	-	7	2	0 OPPH	-	117
	CSE	45	7	25	2	13	-	4	2	2 OPPH	-	100
	E&I	22	2	14	2	8	1	3	1	1 OPPH	-	54
	Total	**271**	**30**	**160**	**18**	**83**	**5**	**36**	**11**	**9**	**-**	**623**
5TH & 6TH	CE	43	6	43	1	17	-	8	-	1 SCPH	-	119
	ME	62	3	38	1	18	1	9	-	1 OPPH	-	133
	EE	34	1	24	4	11	-	8	-	1OPPH	-	83
	ECE	44	6	35	1	14	7	7	1	1OPPH	-	116
	CSE	33	5	26	1	8	2	3	-	1 OPPH	-	79
	EIE	18	3	15	2	8	1	5	-	1OPPH	-	53
	Total	**234**	**24**	**181**	**10**	**76**	**11**	**40**	**1**	**6**		**583**

Sem	Branch	Open (Breakup)		OBC (Breakup)		SC (Breakup)		ST (Breakup)		PH		Total Enrolment
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
7TH & 8TH	CE	51	03	23	01	11	01	07	-	1 OPPH	-	98
	ME	58	02	26	-	12	-	05	01	2 OPPH 1 OBPH	-	107
	EE	47	04	20	02	12	-	03	01	1 OBPH 1 SCPH	-	91
	ECE	44	04	22	02	11	01	06	01	1 OPPH	-	92
	CSE	51	06	19	02	10	02	05	01	1 OPPH	-	97
	EIE	09	03	08	-	04	-	02	-	1 OPPH	-	27
	Total	**260**	**22**	**118**	**07**	**60**	**04**	**28**	**04**	**09**	**-**	**512**
Grand Total		**991**	**119**	**629**	**57**	**298**	**35**	**144**	**19**	**31**	**1**	**2324**

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

Table: Number of B.Tech. students on the roll of NIT Silchar during 2015-16.

Year	CE	ME	EE	ECE	CSE	EIE	TOTAL
2ND	119	115	110	118	90	54	606
4TH	115	129	108	117	100	54	623
6TH	119	133	83	116	79	53	583
8TH	98	107	91	92	97	27	512
	451	**484**	**392**	**443**	**366**	**188**	**TOTAL- 2324**

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

Postgraduate

Table: Course admission statistics of PG Programmes (M.Tech., M.Sc. & MBA)

Sem	Branch	Open (break-up)		OBC (Break-up)		SC (break-up)		ST (break-up)		PH (break-up)		Total
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
1st sem	CE	42	9	20	4	13	1	4	4	-	-	97
	ME	24	1	12	1	9	-	2	-	-	-	49
	EE	13	5	1	-	3	1	1	-	-	-	24
	ECE	10	2	2	3	2	-	-	1	-	-	20
	CSE	6	3	3	1	2	1	2	-	-	1(OP)	19
	E&I	6	1	1	-	1	-	1	-	-	-	10
Total		101	21	39	9	30	03	10	05	-	01	219

Sem	Branch	Open (break-up)		OBC (Break-up)		SC (break-up)		ST (break-up)		PH (break-up)		Total
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
3rd Sem	CE	37	10	11	1	6	-	4	1	-	-	70
	ME	29	3	9	-	8	1	2	2	-	-	54
	EE	6	1	6	2	1	-	-	-	-	-	16
	ECE	15	-	4	-	1	1	1	-	-	-	22
	CSE	2	1	3	-	2	-	1	-	-	-	9
Total		89	15	33	03	18	02	08	03	-	-	171
Grand Total		190	36	72	12	48	05	18	08	-	01	390
M.Sc.												
1st Sem	PHY	4	3	3	1	-	3	-	-	-	-	14
	CHEM	3	6	3	2	2	-	1	1	-	-	18
	MATHS	4	6	3	-	-	-	-	1	-	-	14
Total		11	15	09	03	02	03	01	02	-	-	46
3rd Sem	PHY	3	2	2	3	2	1	-	-	-	-	13
	CHEM	1	7	2	3	-	1	-	-	-	-	14
	MATHS	2	3	1	-	-	-	-	-	-	-	6
Total		06	12	05	06	02	02	-	-	-	-	33
Grand Total		17	27	14	09	04	05	01	02	-	-	79
MBA												
1st sem	MBA	17	12	6	3	7	1	3	2	-	-	51
3rd Sem	MBA	11	14	9	2	1	1	2	1	-	-	41
Grand Total		28	26	15	05	08	02	05	03	-	-	92

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

Table: Total number of PG students on the roll of NIT Silchar during 2015-16

Courses	CE	ME	EE	ECE	CSE	E&I	PHY	CHY	MATHS	HSS	MBA	TOTAL
M.Tech.	167	103	40	42	28	10						390
M.Sc.							27	32	20			79
MBA											92	92
Total												**561**

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

Admission Statistics

Table: Indian students admitted into B.Tech. course (state-wise and branch-wise admission statistics with category breakup for the year 2015-16)

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Assam	OP	30	27	24	26	22	12	141
	OBC	17	18	19	19	14	9	96
	SC	9	9	9	8	7	5	47
	ST	4	5	5	5	3	1	23
	OPPH	--	1	1	1	--	--	3
	SCPH	--	--	--		--	--	0
Rajasthan	OP	3	3	3	4	6	1	20
	OBC	1	1	2	--	3	--	7
	SC	1	1	2	1	1	--	6
	ST	3	3	1	1	--	1	9
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Bihar	OP	10	5	2	1	3	3	24
	OBC	14	9	17	3	4	3	50
	SC	6	2	3	1	1	1	14
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
UP	OP	7	4	4	7	2	4	28
	OBC	3	2	2	3	--	1	11
	SC	1	3	3	2	2	--	11
	ST	--	--	--	--	--	--	0
	OPPH	2	1	--	--	--	--	3
	SCPH	--	--	--	--	--	--	0
AP	OP	--	2	--	12	5	1	20
	OBC	1	3	3	8	2	1	18
	SC	--	2	--	3	1	--	6
	ST	--	--	--	2	--	--	2
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
	OBCPH	--	--	1	--	--	--	1
Jharkhand	OP	--	--	--	--	--	1	1
	OBC	--	1	--	--	--	--	1
	SC	--	--	--	--	--	1	1
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Tripura	OP	--	--	--	--	--	--	0
	OBC	--	--	--	--	--	--	0
	SC	1	--	--	--	--	--	1
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Delhi	OP	1	--	--	--	--	1	2
	OBC	--	--	--	--	--	--	0
	SC	--	--	1	--	--	--	1
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Kerala	OP	--	--	--	--	1	--	1
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	--	--	0
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Mizoram	OP	--	--	--	--	--	--	0
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	--	--	0
	ST	1	--	--	--	--	--	1
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Arunachal Pradesh	OP	--	--	--	--	1	--	1
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	--	--	0
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Meghalaya	OP	--	1	--	--	--	--	1
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	1	--	1
	ST	1	--	--	--	--	--	1
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0

Name of state	Category	CE	ME	EE	ECE	CSE	E&I	Total
Karnataka	OP	--	--	--	--	--	--	0
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	--	--	0
	ST	--	--	--	1	--	--	1
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Gujarat	OP	--	1	--	--	--	--	1
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	1	--	1
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Orissa	OP	--	7	4	1	1	2	15
	OBC	--	--	--	--	--	--	0
	SC	--	--	--	--	--	--	0
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	1	--	1
	SCPH	--	--	--	--	--	--	0
Maharashtra	OP	--	--	--	1	--	--	1
	OBC	--	--	--	--	--	--	0
	SC	--	1	--	1	--	--	2
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Manipur	OP	--	--	--	--	--	--	0
	OBC	--	--	--	--	--	--	0
	SC	1	--	--	--	--	--	1
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Tamilnadu	OP	--	--	--	--	--	--	0
	OBC	--	--	--	--	--	1	1
	SC	--	--	--	--	--	--	0
	ST	--	--	--	--	--	--	0
	OPPH	--	--	--	--	--	--	0
	SCPH	--	--	--	--	--	--	0
Total		**119**	**115**	**110**	**118**	**90**	**54**	**606**

Table: Course-wise Admission Statistics (B.Tech.-1st Year)-2015-16

Sl.No.	Courses	Intake Capacity	Admitted
1.	Civil Engineering	120	119
2.	Mechanical Engineering	120	115
3.	Electrical Engineering	120	110
4.	Electronics & Communication Engineering	120	118
5.	Computer Sc. & Engineering	92	90
6.	Electronics & Instrumentation Engineering	60	54
	Total	**632**	**606**

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 -2015-16

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	Water Resource Engg.	5	4	2	1	0	2	3	0	-	-	-	-	10	7	17
	Structural Dynamics & Earthquake Engineering	7	2	3	0	2	0	3	2	-	-	-	-	15	4	19
	Transportation Engg.	8	2	3	0	1	0	4	1	-	-	2	-	18	3	21
	Geotechnical Engg.	10	0	3	0	0	2	5	0	-	-	-	-	18	2	20
	Structural Engg.	9	1	2	0	1	0	5	1	-	-	1	0	18	2	20
	TOTAL	**39**	**9**	**13**	**1**	**4**	**4**	**20**	**4**			**3**		**79**	**18**	**97**
Mechanical	Thermal Engineering	7	1	3	0	1	0	5	0	-	-	-	-	16	1	17
	Design & Manufacturing	8	0	4	0	0	0	4	0	-	-	-	-	16	0	16
	CAD-CAM Automation.	4	0	2	0	1	0	1	1	-	-	-	-	8	1	09
	TOTAL	**19**	**1**	**9**	**0**	**2**	**0**	**10**	**1**	**-**	**-**	**-**	**-**	**40**	**2**	**42**
Electrical	Control & Industrial Automation	7	3	1	0	0	0	0	0	-	-	-	-	8	3	11
	Power & Energy system Engg.	6	2	2	1	1	0	1	0	-	-	-	-	10	3	13
	TOTAL	**13**	**5**	**3**	**1**	**1**	**0**	**1**	**0**	**-**	**-**	**-**	**-**	**18**	**6**	**24**
ECE.	Microelectronics & VLSI Design	4	1	1	0	0	1	1	2			1	-	7	4	11
	TOTAL	**4**	**1**	**1**	**0**	**0**	**1**	**1**	**2**	**-**	**-**	**1**	**-**	**7**	**4**	**11**

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	
CSE	Computer Science & Engineering	5	3	2	1	2	0	3	1		1 (op)	1		13	6	19
	TOTAL	**5**	**3**	**2**	**1**	**2**	**0**	**3**	**1**	**-**	**01**	**1**	**-**	**13**	**6**	**19**
E&I	Instrumentation Engineering	5	-	1	0	1	0	1	0	-	-	1	1	09	01	10
	TOTAL	**5**	**-**	**1**	**0**	**1**	**0**	**1**	**0**	**-**	**-**	**1**	**1**	**9**	**1**	**10**
	GRAND TOTAL (M.Tech.)	**94**	**20**	**30**	**3**	**10**	**5**	**39**	**9**		**01**	**7**	**1**	**180**	**39**	**219**
M.Sc.	Mathematics	4	6	-	-	0	1	3	0	-	-	-	-	7	7	14
	Applied Physics	4	3	-	3	-	-	3	1	-	-	-	-	7	7	14
	Applied Chemistry	3	6	2	-	1	1	3	2	-	-	-	-	9	9	18
	TOTAL	**11**	**15**	**2**	**3**	**1**	**2**	**9**	**3**	**-**	**-**	**-**	**-**	**23**	**23**	**46**
Management Studies	Master of Business Administration	17	12	7	1	3	2	6	3	-	-	-	-	33	18	51
	TOTAL	**17**	**12**	**7**	**1**	**3**	**2**	**6**	**3**	**-**	**-**	**-**	**-**	**33**	**18**	**51**

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 2015-16.

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.	17	17
	20+5	M.Tech. in Structural Dynamics &Earthquake Engg.	19	19
	20+5	M.Tech. in Transportation Engg.	21	21
	20+5	M.Tech. in Geotechnical Engg.	20	20
	20+5	M.Tech. in Structural Engg.	20	20
ME	20+5	M.Tech. in Thermal Engg.	17	17
	20+5	M.Tech. in Design & Manufacturing	16	16
	10+2	M.Tech. in CAD-CAM Automation	9	9
	10+2	M.Tech. in Material & Manufacturing Technology	7	7
EE	20+5	M.Tech. in Power & Energy system& Engg.	11	11
	20+5	M. Tech. in Control & Industrial Automation	13	13
ECE	10+2	M.Tech. in Micro-Electronics & VLSI Design	11	11
	10+2	M.Tech. in Communication & Signal Processing	9	9
CSE	20+5	M.Tech. in Computer Science & Engg.	19	19
E&I	10+2	M. Tech. in Instrumentation Engg.	10	10
PHY	20+5	M.Sc. in Applied Physics	14	14

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
CHEM	20+5	M.Sc. in Applied Chemistry	18	18
MATH	20+5	M.Sc. in Mathematics	14	14
MS(MBA)	60	MBA	51	51
Grand Total (M.Tech. + M.Sc. + MBA) =			**316**	**316**

***(Regular & Sponsored)**

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

Table: Total student strength on the roll (course wise) of the year 2015-16 at NIT Silchar.

		Branches	Total students strength (course-wise)
UG (B.Tech.)		Civil Engg.	451
		Mechanical Engg.	484
		Electrical Engg.	392
		Electronics & Communication Engg.	443
		Computer Science& Engg.	366
		Electronics & Instrumentation Engg.	188
PG	M.Tech.	Postgraduate Course (all Engg. department)	390
	M.Sc.	Applied Chemistry/Applied Physics/Mathematics	79
	Management studies	MBA	92
Total		**(B.Tech. + M.Tech. +M.Sc.+ MBA)**	**= 2885**

Table: PhD students enrolled/registered department-wise for the year 2015-16 at NIT Silchar

Sl.No.	Department	Regular	Part-time	Total
1	Civil Engg.	20	1	21
2	Mechanical Engg.	20	2	22
3	Electrical Engg.	20	8	28
4	Electronics & Communication Engg.	25	1	26
5	Computer Sc. & Engg.	8	1	9
6	Electronics & Instrumentation Engg.	7	0	7
7	Humanities & Social sciences	0	0	0
8	Mathematics	4	0	4
9	Chemistry	4	3	7
10	Physics	4	0	4
11	Management Studies	0	0	0
	Total	**112**	**16**	**128**

Awards

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

(A) Institute Gold Medal

Sl.No.	Title of the Medal	Department	Awardee
1.	Best Graduate	Electrical Engg.	Prantika Sarma

(B) Institute Silver Medals

Sl.No.	Title of the Medal	Awardees
1.	Best Graduate in Mechanical Engg.	Vivek Jain Surana
2.	Best Graduate in Civil Engg.	Debanjana Gupta
3.	Best Graduate in Electronics & Communication Engg.	Vishal Bora
4.	Best Graduate in Electronics & Instrumentation Engg.	Ritusmita Borkotoky
5	Best Graduate in Computer Science & Engg..	Kishan Sen Laskar

Sponsored awards-

(C) Kalikrishna Mrinalini Krori Gold Medal

Sl.No.	Title of the Medal	Department	Awardee
1.	Best Graduate on overall performance, (Instituted by Dr. K.D Krori, Guwahati)	Mechanical Engg.	Anupam Choubey

(D) Saswata Purkayastha Memorial Gold Medal

Sl.No.	Title of the Medal	Department	Awardees
1.	Best Graduate on overall performance, (Instituted by Shree Niharend Purkayastha, Silchar)	Electronics & Communication Engg.	Himanshu Sharma

Academic Programmes Offered

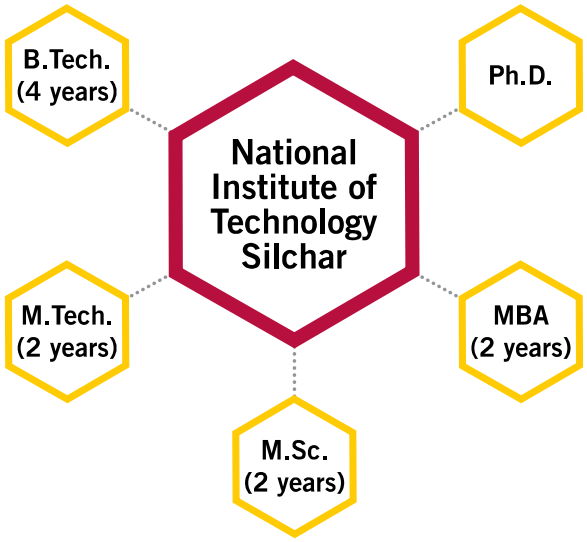
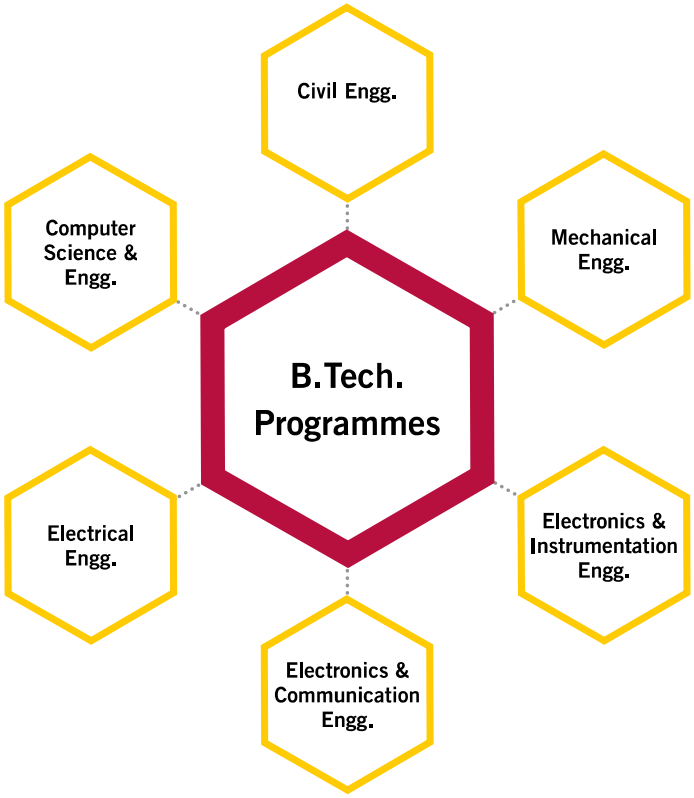


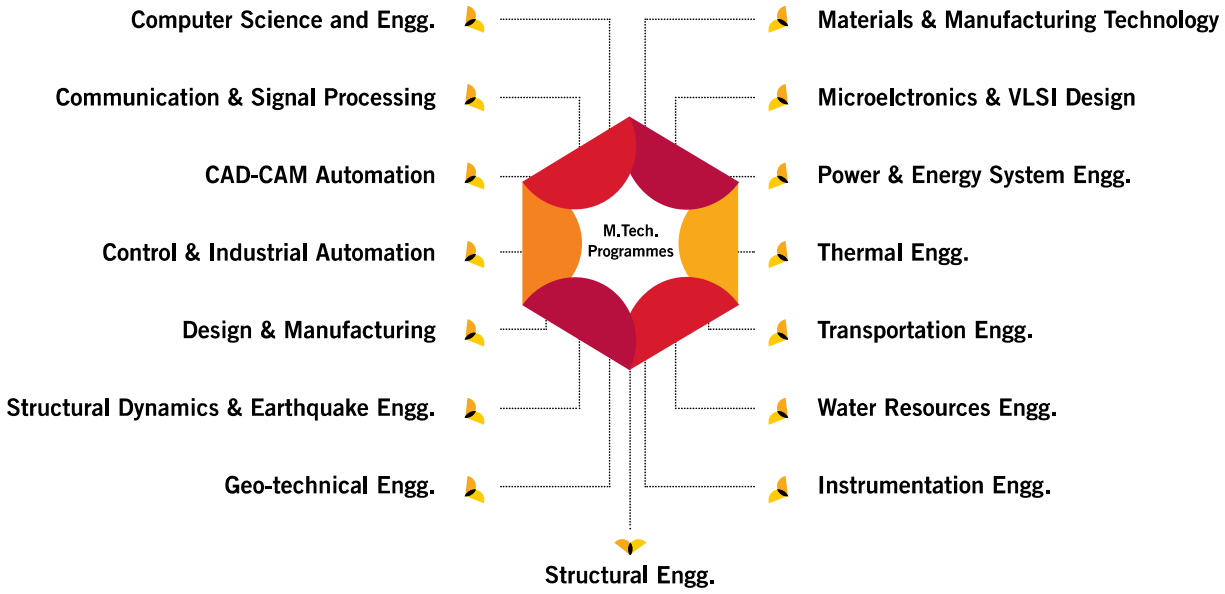
Figure 1: Programmes Offered at NIT Silchar

B.Tech. Programmes Offered at NIT Silchar



B.Tech. Programmes Offered at NIT Silchar

M.Tech. Programmes Offered at NIT Silchar



M.Tech. Programmes Offered at NIT Silchar

Other Postgraduate Programmes Offered at NIT Silchar

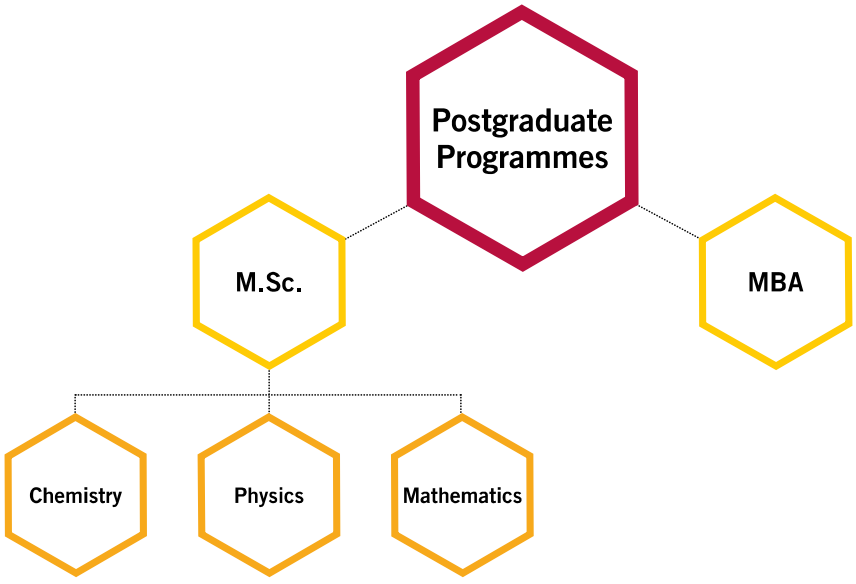


Figure 4: Other Postgraduate Programmes Offered at NIT Silchar

Training and Placement

The Training and Placement Centre has been actively performing and coordinating a number of professional activities for the students. Some of the major activities relating to the students are Practical Training, Internship Programmes and Campus Placement. Like previous years the Centre had a series of such activities during the academic year 2015-16.

Practical Training

Practical Training is an integral part of Engg. education that aims at making students familiar with the culture and environment of industries and getting practical knowledge on working of equipment, plants and processes which cannot be accommodated or explained in a laboratory. Students are exposed to the concept of plant management and organization at first hand. Practical Training for the B.Tech. students is arranged in different organizations/industries throughout the country during May-July 2015 who had completed pre-final year studies. Considerable time of Practical Training at the end of 3rd Year is completed by each student before appearing at the final examination.

Campus Placement

During the academic session 2015-16, 64 companies from different sectors visited the institute for campus placement. In all, 502 offers have been issued to our students. The list of companies who have visited the institute and the record of placement for the academic year 2015-16 are given below:

Placement Statistics

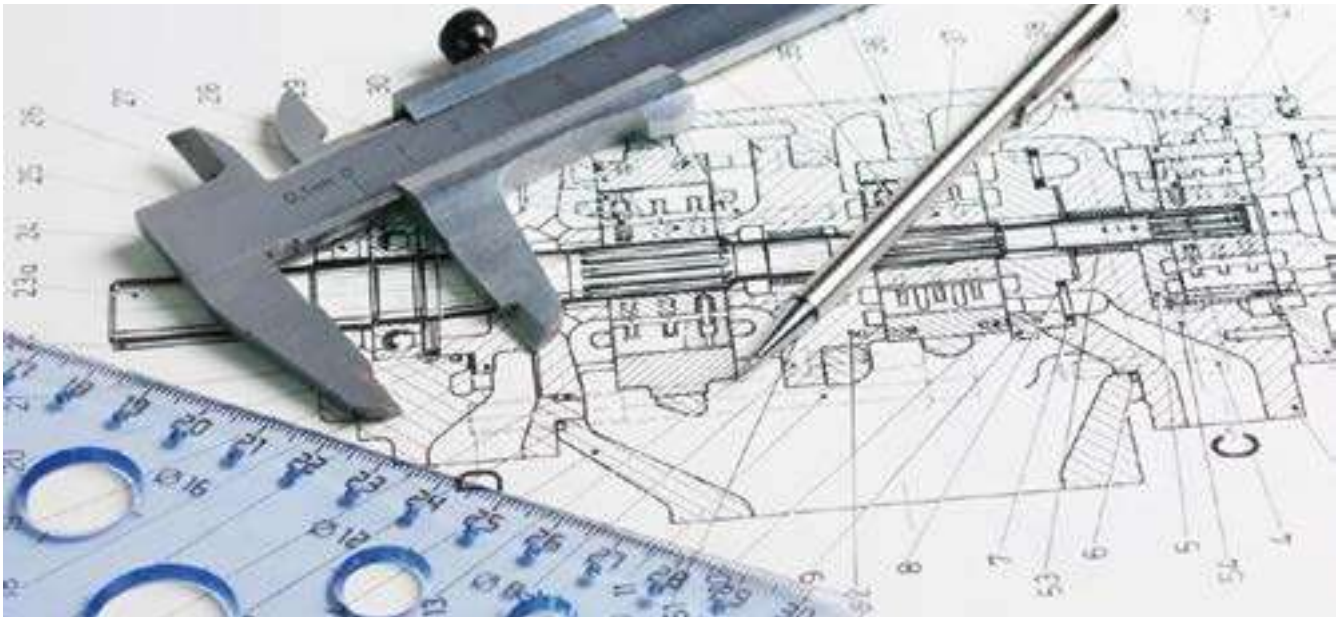
Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total
1.	ITC,PCPB, Kolkata	28-29 Jul 15	8.84 LPA	-	1	-	-	-	-	-	-	1
2.	Incture Technologies, Bangalore	31 Jul-01 Aug 15	5 LPA	-	-	2	2	-	1	-	-	5
3.	UNISYS India, Bangalore	2-4 Aug 15	6.2 LPA	-	-	-	-	13	-	-	-	13
4.	MU Sigma	5-6 Aug 15	18 Lac (for 3 yrs)	2	3	2	5	2	-	-	-	14
5.	Intellect design Arena (Polaris)	5-6 Aug 15	5 LPA	-	-	-	2	6	-	-	-	8
6.	Wells Fargo, Hyderabad	23-24 Aug 15	8 LPA	-	-	1	1	8				10
7.	L & T Info Tech.	26-29 Aug 15	3.5 LPA	-	-	-	-	-	-	-	-	0
8.	IBM, Bangalore	29 Aug -01 Sep 15	3.15 LPA(UG) 3.47 LPA(PG)	13	21	22	18	6	4	-	PESE-3& ECE-3+2 =5	84+8
9.	Book my show, Bangalore	03 Sep 15 On line Interview	4 LPA	-	-	-	-	2	-	-	-	2
10.	Philips, India	3-4 Sep 15	6 LPA	-	-	-	4	4	-	-	-	8
11.	Goldman Sachs	5-6 Sep 15	11 LPA				1	2				3
		Pre Placement Offer		-	-	-	-	4	-	-	-	4
12.	ZS Associates	10 Sep 15	5.3 LPA	1	1		2	1	-	-	--	5
		Interview at Kolkata										
13.	Accenture	11 -13 Sep 15	3.5 LPA	24	27	14	19	8	4	-	(TPT-3,GEO-3(PESE-2,Th-1CSP-1) =10	96+10
14.	Tata Motors	16-19 Sep 15	5.62 LPA	-	9	2	-	-	-	-		11
15.	SKF Bearing	23-25 Sep 15	4.25 LPA	-	1	-	-	-	-	-		1
16.	National Instruments	21-22 Sep 15	9.75 LPA	-	-	0	0	0	0	0	0	0
17.	L & T ECC	21-24 Sep 15	5 LPA	15	4	11	-	-	4	-	TPT-1	34+1
18.	TCS	24-27 Sep 15	3.33LPA(UG) 3.5 LPA(PG)	-	2	3	-	1	2	-	PESE-1 CIA-1 ECE(CSP)-1	8+3
19.	Avanti Learning Centres	4-7 Oct 15	4 LPA	2		2	-	-	-	-	-	4

Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total
20.	Yodlee	8 Oct 15	5.5 LPA	-	-	-	-	1	-	-	-	1
		Pool campus at Kolkata										
21.	Infosys	11-14 Oct 15	3.25 B.Tech. 3.5 M.Tech.	8	8	9	12	3	-	-	Geo.Tech-1 DM-1 Ther-2	40+4
22.	Maruti Suzuki	13 Oct 15	6.5 LPA	-	4	-	-	-	-	-	-	4
		Pool campus at Agartala										
23.	Zaloni Technologies,	16-17 Oct 15	2.91 LPA	-	-	-	1	1	-	-	-	2
24.	Oracle Financial Service	1-3 Nov 15	5 LPA	-	-	-	RA	RA	-	-	-	
25.	Ericsson Global, Kolkata	4-5 Nov 15	3.45 LPA	-	-	-	8	5	-	-	-	13
26.	Tata Technologies, Pune	3-5 Nov 15	4 LPA	-	3	-	-	-	-	-	-	3
27.	Vedanta Aluminium, Odisha	13-14 Nov 15	7.5 LPA	1	3	-	-	-	1	-	-	5
28.	HP Soft zone, Bangalore	18-21 Nov 15	3.5 LPA	-	-	8	1	1	-	-	-	10
29.	UNISYS	18-19Nov 15	4.07 LPA	-	-	-	-	-	-	HR-3 Fin-1	-	4
		Pool campus at Assam University										
30.	Resonance, Kota	21-22 Nov 15	4.8 LPA	RA	RA	RA	RA	RA	RA	-	RA	
31.	Fiat India Automobile Ltd.	8 Dec 15	4.6	-	1	-	-	-	-	-	-	1
		Pool Campus at Agartala										
32.	Anglo Eastern	13 Dec 15	5.4 LPA	-	4	-	-	-	-	-	-	4
		Pool Campus at Guwahati										
33.	Dabur, India	9 Dec 15	3 LPA	-	-	-	-	-	-	Mktg-2	-	2
		Interview at Kolkata Office										
34.	Vodafone, India	16 Dec 15	4.01 LPA	-	-	-	-	-	-	Mktg-2	-	2
		Pool campus at Assam University										
35.	Godrej, Mumbai	21-22 Dec 15	7.3 LPA	-	-	1	-	-	-	-	-	1
36.	Jaro Education	7 Jan 16	6.06 LPA	-	-	-	-	-	-	Mktg-1	-	1
		Pool campus at Kolkata										
37.	Idea Cellular, Kolkata	7-8 Jan 16	5 LPA	-	-	-	4	-	-	-	ECE-(CSP &VLSI) 1+1=2	6
38.	Green Thumbs,New Delhi	8 Jan 15	2.55 LPA	-	-	-	-	-	-	HR-3		3
		On line Interview										
39.	ManTrucks, India	11 Jan 16	3.8 LPA	-	-	-	-	-	-	Mktg-1	-	1
		Pool campus at Guwahati										
40.	Axis Bank	12 Jan 16	3.49 LPA	-	-	-	-	-	-	Mktg-2 Fin-2	-	4
41.	Eveready Industry, Kolkata	12-13 Jan 16	3.5 LPA	-	2	-	-	-	-	-	-	2
42.	SUBROS Ltd.	15-17 Jan 16	3.5 LPA	-	5	-	-	-	-	-	-	5
43.	Reliance Jio Infocomm Ltd.	17-19 Jan 15	5 LPA	-	-	-	8	1	-	-	-	9
44.	PWC ,New Delhi (Price Waterhouse Coopers)	19-20 Jan 16	4 LPA	-	-	-	-	RA	-	-	-	
45.	IP Infusion, Bangalore	21-22 Jan 16	5.5 LPA	-	-	RA	RA	RA	RA	-	-	
46.	Brahmos Aerospace	22-24 Jan 16	10.1 LPA	-	1	-	1	-	-	-	-	2
47.	Bharat Electronics Ltd Gaziabad	29-30 Jan 16	7.6 LPA	-	-	-	1	-	-	-	-	1
48.	DS Group (NCR)	02-03 Feb 16	4 LPA	-	3	1	-	-	-	-	-	
49.	KEC International	8-10 Feb 16	4.75 LPA	2	-	4	-	-	-	-	-	6
50.	Qness Software, Bangalore	08 Feb 16	3 LPA	-	-	-	-	-	-	Fin-3	-	3
51.	Sankalp Semiconductors	19-20 Feb 16	4 LPA	-	-	-	-	-	-	-	-	-
52.	Cumi- Murugappa Group,Chennai	19-20 Feb 16	4.3 LPA	-	5	-	-	-	-	-	-	5
53.	Samsung R&D ,Noida	22-25 Feb 16	7.5 LPA	-	-	-	-	7	-	-	-	7
54.	Tractors India Private Ltd	23 Feb 16	5.1 LPA		1							1

Sl.	Name of Organization	Date of visit	CTC Offered	CE	ME	EE	ECE	CSE	EI	MBA	M.Tech.	Total
55.	First American India	26-28 Feb 16	6.5 LPA	-	-	1	1	-	-	-	-	2
56.	BPCL, Mumbai	01-02 Mar 16	11.5 LPA	-	3	3	-	-	-	-	-	6
57.	Pradan	9-10 Mar 16	2.8 LPA	1	1	-	-	1	-	-		3
58.	Capital Height	10 &12 Mar 16	3 LPA	5	8	1	4	8	4	Fin-7 Mktg-1	-	30+8
		On line Interview										
59.	Oil India Ltd.	10-11 Mar 16	7.5 LPA	1	3	1	-	-	-	-	-	5
60.	HSCC Ltd , New Delhi	17-20 Mar 16	6.5	RA	RA	RA	-	-	-	-	-	
61.	WSP Group, Bangalore	13 Mar 116	4 LPA	-	-	-	-	-	-	-	CE(TPT)-2	2
62.	Mahindra & Mahindra	31 Mar-02 Apr 16	5.72 LPA	-	7	-	-	-	-	-	-	7
63.	Pune In statute of Business Management	14 Apr 16	3.42 LPA	-	-	-	-	-	-	HR-3 Fin-2 Mktg-2	-	7
		On line Interview										
64.	HPCL	20-22 Apr 16	11 LPA	-	6	-	-	-	2	-	-	8
Total No of eligible students				70	78	68	74	68	19	28	169	377 (B.Tech.)
Total No. Of Job offers (till date)				75	137	88	95	85	22	35	30	502 (B.Tech.)
Total No. Of Job Placed				54	80	55	63	62	17	24	24	331 (B.Tech.)
Average Job Placed % (B.Tech. –87.79 %)				77.14	102.56	80.88	83.78	91.76	89.47	85.71	14.20	
Average Job Offer % (B.Tech. –133.15%)				107.14	175.64	129.41	127.02	125	115.78	125	16.57	
Average Salary (B.Tech. – 4.48 LPA)				3.92	5.58	4.21	4.18	5.45	4.53	3.39	3.76	
Highest package				B.Tech. - 11.5 LPA			M.Tech. - 5 LPA			MBA - 6.06 LPA		
Average Package				B.Tech. - 4.48LPA		M.Tech. - 3.76 LPA			MBA - 3.39LPA			

Departments / Centres & Cells

Civil Engineeirng



Academic Staff

Head: Prof. A. I. Laskar, Ph.D. (from 01.04.2015 to 20.05.2015)
Dr. U. Kumar, Ph.D. (from 20.05.2015 to till date)

Faculty Members

Prof.	Associate Prof.	Assistant Prof.
Prof. A. I. Laskar, Ph.D.	Dr. A. K. Das, Ph.D.	Dr. P. Roy, Ph.D.
Prof. S. Choudhury, Ph.D.	Dr. P. Rajbangshi, Ph.D.	Ms. N. Borthakur, M.Tech.
Prof. A. K. Dey, Ph.D.	Dr. U. Kumar, Ph.D.	Mr. P. Das, M.Tech.
Prof. P. S. Choudhury, Ph.D.	Dr. T. Rahman, Ph.D.	Mrs. P. Sultana, M.Tech.
Prof. D. Chakraborty, Ph.D.		Dr. A. Sil, Ph.D.
Prof. M. A. Ahmed, Ph.D.		Dr. N. Ahir, Ph.D.
Prof. A. K. Barbhuiya, Ph.D.		Dr. N. Debnath, Ph.D.
		Dr. D. Bhowmik, Ph.D.
		Dr. M. Hussain, Ph.D.
		Dr. M. L. V. Prasad, Ph.D.
		Dr. B. S. Sil, Ph.D.
		Dr. Kh. L. Singh, Ph.D.
		Dr. D. K. Ghose, Ph.D.
		Dr. S. Ghose, Ph.D.
		Dr. B. K. Roy, Ph.D.
		Dr. Prasanth J., Ph.D.

DISTINCTION ACHIEVED

(a) By Faculty Members

(i) Dr. N. Debnath

- Short-listed for final-phase (presentation) for the prestigious Young Engineers Award 2015 awarded by Indian National Academy of Engineering (INAE).

(ii) Dr. A. Sil

- IGS-SardarResham Singh Memorial Award-2015, Confer by Indian Geotechnical Society.
- Nominated for the "Best Citizen of India" Award (2016).
- Bharat Jyoti Award (2015) by India International Friendship Society (IIFS).
- Honorary Member in International Advisory Committee in-VIF Board of Trustees.
- Young Faculty Award (2015), in the Category of Engineering (Civil) of the VIFFA 2015.
- Selected & included second time for Marquis Who's Who in the world, 33 edition, 2015.

SEMINAR, SYMPOSIA, SHORT TERM COURSE, WORKSHOPS

(a) Conducted by Faculty Members

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. U. Kumar	One week Self-financed course on Recent Advancements in Environmental Engineering	Self-financed	March19-23, 2016
		Organized a Seminar on Evolutionary Algorithms for Multi Objective Optimization in Water Resources Management	Civil Engg. Society, NIT Silchar	September 14, 2015
		Organized One day Seminar on Water Quality Management: Groundwater Protection and Remediation	NIT Silchar	August 21, 2015
		Organized One day Seminar on Recent Advancements in Civil and Environmental Engineering	NIT Silchar	August 20, 2015
		Organized One week STTP as Organizing Chairman on Applied Finite Element Theory and Practice	Self-financed	August 03- 07, 2015
2.	Dr. A. I. Laskar	Concrete Paving Block Manufacturing	NIT Silchar	One week
3.	Dr. P. Rajbongshi	Skill Development Workshop on Paving Block Manufacturing and Masonry Works	NIT Silchar	June07-08, 2015
4.	Mr. P. Das	Two week ISTE STTP on Introduction to Structural Engineering	MHRD, GoI	January 04-09, 2016

(b) Participated by Faculty Members

Sl. No.	Name of Faculty	Details of the program	Organizing Institute
1.	Dr. U. Kumar	One Week Self-financed course on Recent Advancements in Environmental Engineering, March19-23, 2016	NIT Silchar
		Seminar on Evolutionary Algorithms for Multi Objective Optimization in Water Resources Management, September 14, 2015	NIT Silchar
		One day Seminar on Water Quality Management: Groundwater Protection and Remediation, August 21, 2015	NIT Silchar

Sl. No.	Name of Faculty	Details of the program	Organizing Institute
		One day a Seminar on Recent Advancements in Civil and Environmental Engineering, August 20, 2015	NIT Silchar
		Two week ISTE STTP on Introduction to Structural Engineering,January 04-09, 2016	National Mission on Education through ICT (MHRD, GoI)
2.	Mrs. P. Sultana	Applied Finite Element: Theory & Practice, August 03- 07, 2015	NIT Silchar
3.	Mrs. N. Borthakur	Applied Finite Element: Theory & Practice, August 03- 07, 2015	NIT Silchar
4.	Dr. Kh. L. Singh	International Conference on Emerging Trends in Science and Engineering Research (ETSER-2015), December 02-04, 2015	NIT Manipur
		Two Week ISTE STTP on Introduction to Structural Engineering from January 04-09, 2016	National Mission on Education through ICT (MHRD, GoI)
		One week course on Recent Advancements in Environmental Engineering, March19-23, 2016,	Department of Civil Engineering, NIT Silchar
5.	Dr. M. Hussain	Recent Advancements in Environmental Engineering, March19-23, 2016	Department of Civil Engineering, NIT Silchar
		Biological Treatment of Solid Waste	IIT Guwahati
		Introduction to Structural Engineering, January 2016	IIT Kharagpur
6.	Dr. M. L. V. Prasad	Applied Finite Element Theory and Practice, August 03- 07, 2015	NIT Silchar
		Introduction to Structural Engineering, January 2016	IIT Kharagpur
		Recent Advances in Environmental Engineering, March19-23, 2016	NIT Silchar
7.	Dr. P. Rajbongshi	Reliability Theory and Its Applications in Real Life Problems	ISI, Kolkatta and NIT Silchar
		Innovative Technologies in Transportation Engineering	IIT Guwahati
8.	Mr. P. Das	One week ISTE STTP for Coordinators on Introduction to Structural Engineering, September 28 – October 02, 2015	IIT Kharagpur
9.	Dr. D. Bhowmik	Two week ISTE STTP on Structural Engineering	IIT Kharagpur
		One week course on Recent Advancement in Environmental Engineering, March19-23, 2016	NIT Silchar
10.	Dr. D. K. Ghose	GAIN (Global Initiative For Academic Networks), December 28, 2015 – January 16, 2016	IIT Bhubaneswar
11.	Dr. Prashanth J.	Recent Advances in Environmental Engineering, March19-23, 2016	NIT Silchar
12.	Dr. A. Sil	Recent Advances in Environmental Engineering, March19-23, 2016	NIT Silchar
13.	Dr. N. Ahir	ISTE STTP on Introduction to Structural Engineering, January 04-09, 2016	NMEICT
		Recent Advances in Environmental Engineering, March19-23, 2016	NIT Silchar
14.	Dr. S. Ghosh	ISWT course on Hydrodynamics of Riverbed Erosionand Scourat Structures	IIT Kharagpur
		Workshop on Recent Advancement in Environmental Engineering, March19-23, 2016	NIT Silchar
15.	Dr. B. S. Sil	Research Opportunities in Hydrology and Water Resources under Climate Change, April 03,2015	IIT Guwahati

RESEARCH DEVELOPMENT

(a) Ph.D. Programme (Specializations)

Water Resource Engineering, Geotechnical Engineering, Earthquake Engineering, Structural Engineering, Environmental Engineering, Transportation Engineering.

(b) Ph.D. Produced / On-going (in number)

Completed	Submitted	Ongoing
00	02	41

(c) Research Lab / Workshop

Sl. No.	Name of Lab/Workshop	Purpose / Linkage to an existing/new programme
1.	Structural Engineering Laboratory	UG, PG & Research Work
2.	Concrete Laboratory	UG, PG & Research Work
3.	Highway Laboratory	UG, PG & Research Work
4.	Hydraulics Laboratory	UG, PG & Research Work
5.	Environment Engineering Laboratory	UG, PG & Research Work
6.	Surveying Laboratory	UG Programme
7.	Soil Dynamics Laboratory	UG, PG & Research Work
8.	Advanced Computational Laboratory	PG & Research Work
9.	UG Computational Laboratory	UG Programme
10.	Geotechnical Engineering Laboratory	UG, PG & Research Work
11.	Geology Laboratory	UG Programme
12.	GIS Laboratory	PG & Research Work
13.	Water Resources Engineering Laboratory	PG & Research Work
14.	Research Scholar Laboratory	Computational Research Works for Ph.D. Students

(d) On-going / Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Sustainable Water Management: Indo-Hungarian Inter-Governmental Science & Technology Joint Research Project (A/F)	Dr. A.K. Barbhuiya Dr. U. Kumar Dr. P.S. Choudury Dr. P.J. Roy	Indo-Hungarian Strategic Research Fund (IHSRF), supported by the Government of India and Hungary	145.88	3 years
2.	Development of Portable Cold Mix Plant for Regular Maintenance of Black Top Roads	Dr. Kh. L. Singh	Science, Technology and Innovation Scheme, NIT Silchar	4.84	1.5 year
3.	Effect of Variations in Input-excitation on the Performance of Limited-sensors based Operational Modal Analysis	Dr. N. Debnath	Department of Science & Technology (DST)	32 (approx.)	3 years (ongoing)
4.	Performance Improvement of Soft Soil Using Lime and Fibre	Dr. M. Hussain	NIT Silchar, MHRD	2.25	2 years (2016-18)
5.	Feasibility Studies on Use of Non Standard Local Materials in Rural Roads of Manipur	Dr. P. Rajbongshi	NRRDA, Ministry of Rural Road Development, New Delhi	9.125	1 year (on-going)

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
6.	A Numerical and Experimental Study and Behaviour under Pile Foundation under Seismic Loading	Dr. D. Bhowmik	STIS, NIT Silchar	4.32	2years
7.	Development of an Integrated Hydrological-mathematical Model to Determine Flood Discharge in and around Silchar City	Dr. B. S. Sil	STIS, NIT Silchar	3.70	2 years

(e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. U. Kumar	Colloids and Surface A: Physicochemical and Engg. Aspects(Elsevier Journal)	01	2015
		The Korean Journal of Chemical Engg. (Springer Journal)	01	2015
		Cogent Engg. (Taylor & Francis)	01	2016
		Chemistry International	01	2015
		American Chemical Science Journal	01	2015
		International Research Journal of Pure and Applied Chemistry	01	2015-16
2.	Dr. A. K. Barbhuiya	Sadhana Springer	02	2015-16
		Journal of Hydraulics Engg.	01	2016
3.	Dr. M. Hussain	ADBU Journal	03	2015
4.	Dr. M. L. V. Prasad	Advances in Structural Engg.	03	2015
		Advances in Structural Engg.	01	2016
		International Journal of Civil Engg.	01	2016
5.	Dr. S. Choudhury	J. of the IE(I), Series A	01	2015
6.	Dr. A. Sil	International Journal of Geotechnical Earthquake Engg. (IJGEE)	01	2014
		ESRJ-Earth Sciences Research Journal, Departamento de Geociencias, Universidad Nacional de Colombia	02	2016
		American Journal of Civil Engg. as a Lead Guest Editor (Science PG) for a special issue	01	2014
7.	Dr. B. S. Sil	Journal of Mountain Science	01	2015
		Water Resources Management	01	2015

(f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. U. Kumar	Seminar on Water Quality Management: Groundwater Protection and Remediation at NIT Silchar on August 21, 2015
		Seminar on Evolutionary Algorithms for Multi Objective Optimization in Water Resources Management at NIT Silchar on September 14, 2015
		Seminar on Recent Advancements in Civil and Environmental Engg. at NIT Silchar on August 20, 2015
2.	Dr. M. L. V. Prasad	Technical Session co-chair for Three-day International Conference on Innovations in Structural Engg. (IC-ISE-2015) December 15, 2015

PUBLICATIONS

(a) International Journal(s)

1. U. Kumar & J. Acharya, (February 2015), Removal of Pb(II) from wastewater by Rice Husk, Research Journal of Chemistry and Environment,Vol. 19(2), pp. 30–38. ISSN: 0972-0626[Impact factor = 0.636]. Indexed by SCI Journal, SCOPUS. www.worldresearchjournals.com
2. U. Kumar, B. Kumar & J. Acharya, (2015), SEM, EDAX and FTIR study of rice husk for the sorption of lead(II) ions from wastewater, Asian Journal of Chemistry, SCI Expanded Journal, Materials Research Innovations. Indexed by SCOPUS, PROQQUEST, EBSCO host, CNKI etc.(Accepted).
3. B. Kumar & U. Kumar, (2015), Adsorption of malachite green in aqueous solution onto sodium carbonate treated rice husk, The Korean Journal of Chemical Engg., (Springer), Vol. 32(8), pp. 1655-1666, Impact factor = 1.166, Indexed by SCI and SCIE, SCOPUS. DOI: 10.1007/s11814-014-0351-5.
4. S. Kiran, U. Kumar & A.K. Dey, (2015), Three Dimensional Numerical Simulation of Vortex Structures in Barak River, Applied Mechanics and Materials, Vol. 772 (2015) pp. 120-124, Trans Tech Publications, Switzerland. Doi: 10.4028. Indexed by Elsevier: SCOPUS, ISI Thomson Reuters (Web of Science). www.scientific.net/AMM.772.120
5. R.A. Mazumder & A.I. Laskar, (2015), Prediction of unconfined compressive strength of stabilized soil by geopolymer binder, Computers and Geotechnic, Vol. 69, pp. 291-300, Elsevier.
6. B.K. Singhi, A.I. Laskar & M.A. Ahmed, (2015), Soil stabilization by alkali activated slag, fly ash and their blending, Arabian journal of Science Engg., Vol. 41, pp. 393-400, Springer.
7. S. Mustafa, N. Debnath & A. Dutta, (2015), Bayesian probabilistic approach for model updating and damage detection for a large truss bridge, International Journal of Steel Structures (SCI-indexed), Vol. 15 (2), Springer Publication, dx.doi.org/10.1007%2Fs13296-015-6016-3.
8. M. Hussain & S.K. Dash, (2015), Influence of Lime on Shrinkage Behaviour of Soils, Journal of Materials in Civil Engg., ASCE, DOI: 10.1061/(ASCE)MT.1943-5533.0001301. © 2015
9. M. Hussain & S.K. Dash, (2015), The Influence of Lime on Compaction Behaviour of Soils, Environmental Geotechnics, ICE, U.K, 2015, 00(1), 001–000 http://dx.doi.org/10.1680/envgeo.14.00015Paper 14.00015,
10. M.L.V. Prasad et.al., (2015), Prediction of the Moment – Curvature Relationship of Confined Fiber Reinforced Self Compacting Concrete, International Journal of Cement Wapno Beton. Vol. 5, (STOWARZYSZENIE PRODUCENTOW CEMENTU) Foundation Cement, Lime, Concrete, Poland. http://www.cementwapnobeton.pl/en/?s=11&action=getArchJurnal&jid=209
11. M.L.V. Prasad et.al., (2016), Self Compacting Reinforced Concrete Beam Strengthened with Natural Fibre under Cyclic Loading, International Journal of Computers and Concrete , Techno Press, South Korea. (Accepted). http://www.techno-press.org/papers/?page=status&code=CAC50772C&hashkey=3b89451d5dcdf65616a9a2932f0478ec&reply=0
12. S. Thongram & P. Rajbongshi, (2016), Probability and Reliability Aspects in Pavement Engg., International Journal of Latest Technology in Engg., Management & Applied Science (IJLTEMAS), Vol. 5(3).
13. S. Thongram & P. Rajbongshi, (2016), Reliability Based Deterministic Design Approach in Asphalt Pavements, International Journal of Innovative Research in Science, Engg. and Technology (IJIRSET), Vol. 5(3).
14. G. Engleng & P. Rajbongshi, (2016), Predictive Strain Model for Mechanistic-Empirical Rutting Design of Asphalt Pavements, International Journal of Latest Technology in Engg., Management & Applied Science (IJLTEMAS), Vol. 5(2).
15. G. Engleng & P. Rajbongshi, (2016), Strain Transfer Function for Mechanistic-Empirical Fatigue Design of Asphalt Pavements, International Journalof Innovative Research in Science, Engg. and Technology (IJIRSET), Vol. 5(2).

16. G. Engleng & P. Rajbongshi, (2016), Probabilistic Predictive Strain Calculation in Asphalt Pavements, International Journal of Innovative Research in Science and Engg. (IJIRSE), Vol. 2(2).

17. G. Engleng & P. Rajbongshi, (2015), Asphalt Stiffness Reduction and Stress-Strain Calculation in Pavement Structures, International Journal of Pavement Research and Technology, Vol. 8(5).

18. R. D. Wahengbam & P. Rajbongshi, (2015), Approach for Dynamic Stiffness Evaluation in Asphalt Concrete, Construction and Building Materials, Vol. 96.

19. K. Kalita & P. Rajbongshi, (2015), Variability Characterization of Input Parameters in Pavement Performance Evaluation, Journal of Road Materials and Pavement Design, Vol. 16(1).

20. P.P. Debnath & S. Choudhury, (2015), Effect of Unreinforced Masonry Infill on Floor Amplification and Other Parameters in Frame-Wall Buildings, Journal of Mechanics Based Design of Structures and Machines, Vol.43 pp. 450-465, Taylors & Francis. DOI: 10.1080/15397734.2015.1025961.

21. A. Sil & 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)Accepted.

22. A. Sil, T.G. Sitharam & S.T. Haidar, (2015), Probabilistic models for forecasting earthquake in North East region of India. Bulletin of the Seismological Society of America, Vol.105 (6), pp. 2910-2927, SSAPublication, Impact Factor-2.32 (DOI:10.1785/0120140361).

23. A. Sil & T.G. Sitharam, (2015), Site specific design response spectrum proposed for the capital city of Agartala, Tripura, Geomatics,Natural Hazards and Risk, Taylor & Francis, Impact Factor-1.31 (Accepted).

24. T. Longmailai & A. Sil, (2015), Simulation Model Proposed For Estimation Of Modal Displacement of RC Building Located In Seismic Zone-V Is-1893-2002 From Known Parameters, Asian Journal of Current Engg. and Maths, Vol.4(2), pp. 20-23.

25. J. Haloi & A. Sil, (2015), Seismic Site Classification of a Bridge Site over River Barak on Silchar Bypass Road, International Journal of Advanced Earth Science and Engg., Vol.4 (1), pp. 275-282.

26. M.P. Singh & A. Sil, (2015), Behaviour of Jute Fiber Reinforced Concrete Beam Under Cyclic Loading, International Journal of Advance and Innovation Research, Vol.2 (II), pp. 65-70.ISSN:2394-7780.

27. A. Chakraborty & A. Sil, (2015), Experimental Study of Unreinforced and Reinforced Soil Retaining Wall using Shake Table Facility, Journal of Civil Engg. and Environmental Technology, Vol.2 (12), pp.13-21.

28. T.G. Sitharam & A. Sil, (2015), Characterization of major seismic source zones and evaluation of seismicity parameters in North East India, Journal of Soil Dynamics & Earthquake Engg., Elsevier (under review).

29. A. Sil, (2015), Selection of model and simulation of rock level motion for indo- Bangladesh border earthquake (1988) of magnitude (mw 5.9) in Northeast India(communicated).

30. A. Sil & J. Haloi, (2015), Site Specific Ground Response Analysis of a Proposed Bridge Site over River Barak along Silchar Bypass Road, India, Journal of Risk and Uncertainty, ASCE, (under review).

31. A. Sil & T. Longmailai, (2015), Reliability Assessment of a Four Storey Residential Building Seismically Located in Zone V as per IS: 1893-2002, Journal of Building Engg., Elsevier (under review).

32. A. Sil & J. Haloi, (2015), Empirical Correlations with SPT-N for Estimating Shear Wave Velocity Applicable to any Region (submitted to ASCE special publication).

33. D. Bhowmik, D.K. Baidya & S.P. Dasgupta, (2016), A Numerical and Experimental Study of Hollow Steel Pile in Layered Soil subjected to vertical dynamics loading, Soil Dynamics and Earthquake Engg., Elsevier Ltd.

34. N. Borthakur & B. Bhagowati, (2015), Effect of lime and flyash on Engg. properties of expansive soils, International Journal of Research in Science and Technology, Vol. 2, Issue 2(1), Indian Academician and Research Association.

35. N. Borthakur & A. Saha, (2015), Lateral Load Carrying Capacity of Micropiles. International Journal of Research in Science and Technology, Vol. 2, Issue 2 (1), Indian Academician and Research Association.

36. N. Borthakur & Achu V, (2015), Effect of Water Table on Ground Response Analysis. International Journal of Research in Science and Technology. Vol. 2, Issue 2 (1), Indian Academician and Research Association.

37. N. Borthakur & P. Srivastava, (2015), Comparative Study of Load Settlement Behaviour of Micropile Raft Foundation in Cohesive Soil. International Journal of Research in Science and Technology, Vol. 2, Issue 2 (1), Indian Academician and Research Association.

38. N. Borthakur & S. Sadhukhan, (2015), Experimental study on uplift capacity of Micropile. International Journal of Research in Science and Technology, Vol. 2, Issue 2 (1), Indian Academician and Research Association.

39. P. Biswas & A.K. Barbhuiya, (2016), Experimental study on scour and 3D dimensional flow field at horizontal forced bend, Environmental Fluid Mechanics, Springer (communicated).

40. S. D. Yanglem & A.K. Barbhuiya, (2016), Bridge Pier Scour on Cohesive Soil; A Review, Sadhana, Springer (under review).

41. V. N. Bagri & A.K. Barbhuiya,(2015), Application of remote sensing and GIS in preparing groundwater prospect map of Ujjain district, (Madhya Pradesh), Journal of Civil Engg. and Environmental Technology, Vol.2(8),Print ISSN: 2349-8404.

42. A. K. Barbhuiya & S. Banik, (2015), Suitability Analysis for Agricultural Land Based on GIS Technique, Journal of Basic and Applied Engg. Research, Vol. 2(9), Print ISSN: 2350-0077.

43. P. Samal & A. K. Barbhuiya, (2015), Watershed Management Of Rushikulya River Using GIS, Journal of Civil Engg. and Environmental Technology (JCEET), Vol. 2(5), Print ISSN: 2349-8404.

44. B. Singhi, A.I. Laskar & M.A. Ahmed, (2015), Investigation on Soil–Geopolymer with Slag, Fly Ash and their Blending, Arabian Journal for Science and Engg., Springer.

45. B.S. Sil & P. Choudhury, (2015), Muskingum equation based down stream sediment flow simulation models for a river system, International Journal of Sediment Research, Elsevier, DOI: 10.1016/j.ijsrc.2014.12.002.

(b) National Journal(s)

1. D. Boro, M.A. Ahmed & A. Goswami, (2015), Impact of On-Street Parking on Traffic Flow Characteristics, Journal of Civil Engg. and Environmental Technology (JCEET), Vol. 2(7), pp.555-559.

2. A. Goswami, M.A. Ahmed & D. Boro, (2015), Traffic Management Study in Silchar, Assam, International Journal of Advance and Innovative Research, Vol. 2(1), pp. 43 – 49.

3. S. Sen, M.A. Ahmed & D. Das, (2016), A case study on On-street Parking Demand Estimation for 4-wheelers in Urban CBD, Journal of Basic and Applied Engg. Research, Vol.3(3), pp. 254-258.

4. T. A. Mazumder, M. A. Ahmed & R.A. Mozumder, (2016), Modelling short distance Itra-Town user Mode Choice: an Artificial Neural Network Approach, Journal of Basic and Applied Engg. Research, Vol.3(3), pp. 286-289.

5. P. Hait & P. Das, (2015), A Numerical Study on Steel Fibre Reinforced Concrete Beam Column, Journal of Civil Engg. and Environmental Technology, Vol. 2(7), Krishi Sanskriti Publications, www.krishisanskriti.org

6. M. Mandal & P. Das, (2015), Seismic Analysis of Beam Column Joints in Reinforced Concrete Moment Resisting Frames, Journal of Civil Engg. and Environmental Technology, Vol. 2(7), Krishi Sanskriti Publications, www.krishisanskriti.org

7. S. Das & P. Das, (2015), Analyitical Investigation of Exterior Beam-Column Joint Using Fiber Reinforced Concrete, Journal of Civil Engg. and Environmental Technology, Vol. 2(7), Krishi Sanskriti Publications, www.krishisanskriti.org

8. S. Nath & P. Das, (2015), Effect of Floor Height in Multi-Storied R.C. Frame Buildings, Journal of Civil Engg. and Environmental Technology, Vol. 2(9), Krishi Sanskriti Publications, www.krishisanskriti.org

9. P. Das & N. Zomleen, (2015), Effects of Masonry Infill in R.C. Structure, Journal of Civil Engg. and Environmental Technology, Vol. 2(5), Krishi Sanskriti Publications, www.krishisanskriti.org

(c) International Conference(s)

1. A. Singha & P. Sultana, Stabilization of organic soil using lime, International Conference on Latest Trends Practices in Management, Technology & Social Science, Manali, April 28, 2015.

2. K.C. Jena & P. Sultana, Effect of rainfall intensity on Soil Erosion and Mitigation using round cover, International Conference on Latest Trends Practices in Management, Technology & Social Science, Manali, April 28, 2015.

3. Kh. L. Singh & T. Yabe, A Laboratory Study on Some Index Properties of Locally Available Soil Mixed with Stone, International Conference on Emerging Trends in Science and Engg. Research (ETSER-2015), National Institute of Technology, Manipur, December 2-4, 2015.

4. P. Chakraborty & N. Debnath, Seismic performance of 3D asymetric framed buildings using lightweight concrete compared to normal-weight concrete, 7th International Conference on Emerging Technologies in Civil Engg., Architecture and Environmental Engg. for Global Sustainability (CEAEGS – 2015), New Delhi (India), April 4-5, 2015.

5. K. Bharadwaj, B. Mandol & N. Debnath, Performance of supplemental viscous damper in eccentric steel and RC 3D framed building, 7th International Conference on Emerging Technologies in Civil Engg., Architecture and Environmental Engg. for Global Sustainability (CEAEGS – 2015), New Delhi (India), April 4-5, 2015.

6. N. Debnath, A. Dutta & S.K. Deb, Multi-modal passive-vibration control of bridges under general loading-condition,12th International Conference on Vibration Problems, IIT-Guwahati (India), December 14-17, 2015.

7. A. Das & N. Debnath, Bayesian Probabilistic Finite Element Model Updating of the UCF (University of Central Florida) Benchmark Structure, International Conference On Recent Advances in Civil Engg., Architecture and Environmental Engg. for Sustainable Development (CEAESD- 2016), New Delhi (India), February 6, 2016.

8. S. Sen & M. Hussain, Recycling of Fly Ash with Bentonite Used as Compacted Landfill Liner Material International Conference on Recycl 2016, IIT Guwahati, Assam, India.April 1-2, 2016.

9. M.L.V. Prasad, et.al., Eco- friendly Fiber Reinforced Self Compacting Concrete using Quarry Rock Dust and Foundry Sand, International Conference on Innovations in Structural Engg. (IC-ISE -2015),Hyderabad, Telangana, India, December 14-16, 2015.

10. M.L.V. Prasad, et.al., A Study on Bamboo Reinforced Concrete, International Conference on Innovations in Structural Engg. (IC-ISE -2015). Hyderabad, Telangana, India, December 14-16, 2015.

11. D. Mukharjee, & P. Rajbongshi, Studies on elastic behavior and strain characteristics in asphalt pavement due to soil stabilization, International Conference on Sustainable Energy & Built Environment, School of Mechanical and Building Science, VIT University, 2015.

12. M. Paul & P. Rajbongshi, Descriptive analysis of age difference in gap selection by pedestrian at uncontrolled road sections, International Conference on Current Researches in Management, Technology and Social Science, IARA Lonavala, March 2015.

13. M.K. Gautam & P. Rajbongshi, Prediction of fatigue life of asphalt pavement, International Conference on Latest Trends Practices in Management, Technology & Social Science, Manali, April, 2015.

14. S. Gowda & P. Rajbongshi, Design Gradation of Surface Layer for Porous Asphalt Pavements, International Conference on Innovative Strategies being Adopted in Management Technology & Social Sciences, Indian Academicians and Researchers Association, Kohima, February 14, 2015.

15. P. Kumar & P. Rajbongshi, Assessment of skid resistance value on bituminous mix sample, International Conference on Current Researches in Management, Technology and Social Science, IARA Lonavala, March 2015.
16. J. Das & P. Rajbongshi, Laboratory studies of bituminous mixes using reclaimed asphalt materials, International Conference on Current Researches in Management, Technology and Social Science, IARA Lonavala, March 2015.
17. A.K. Chaudhary & S. Choudhury, A Study on Base Isolation Using Geosynthetics, 1st International Conference on Disaster Mitigation and Management for Sustainable Development and Risk Reduction – ICDMSDR -2016, NIT Tiruchirappalli , India, February 22-24, 2016.
18. A. Iqbal & S. Choudhury, Effect of Infill of Performance of Steel Frame Buildings, International Conference on Sustainable Design, Engg. and Construction, SDEC-2016, Cochin, India, May 14-16, 2016 (Accepted).
19. A. Nitesh K. Ashok, & S.K. Thakkar, Effect of Stiffness, Mass and Damping on the Vibration Based System Identification of Buildings, International Conference on Earthquake Engg. and Seismology, IZIIS - 50, Skopje, Macedonia, 2015.
20. A. Nitesh & M. Anupindi, SSI and Shear - Wall Interaction for Earthquake Resistant RC Buildings, International Conference on Earthquake Engg. and Seismology, IZIIS - 50, Skopje, Macedonia 2015.
21. M. Anupindi & A. Nitesh, Design Charts for SSI Considerations for RC Buildings with Symmetric and Asymmetric Plans, International Conference on Earthquake Engg. and Seismology, IZIIS – 50, Skopje, Macedonia 2015.
22. A. Nitesh & A. Verma, Comparison of FRF from Experimental and Numerical Model of RC Column, International Conference on Earthquake Engg. and Seismology, IZIIS – 50, Skopje, Macedonia 2015.
23. A. Verma & A. Nitesh, FRF - Based Model - Updating and Material Identification of Scaled Models of RC Column, International Conference on Earthquake Engg. and Seismology, IZIIS – 50, Skopje, Macedonia, 2015.
24. P. Biswas & A.K. Barbhuiya, Experimental study on scour at 90 horizontal forced bend and its protection using riprap, International Conference On Water Resources, Coastal And Ocean Engg. (ICWRCOE 2015), Aquatic Procedia 4., 2015.
25. S. Sen, M.A. Ahmed & D. Das, A case study on On-street Parking Demand Estimation for 4-wheelers in Urban CBD, International Conference on Innovative Research (CIME-2016), Jawaharlal Nehru University, New Delhi, March 19-20, 2016.
26. T.A. Mazumder, M. A. Ahmed & R.A. Mozumder, Modelling short distance Itra-Town user Mode Choice: an Artificial Neural Network Approach, International Conference on Innovative Research (CIME-2016) Jawaharlal Nehru University, New Delhi, March 19-20, 2016.
27. S.N. Ali & B.S. Sil, Prioritization of ungauged catchments using Snyder Unit Hydrograph and GIS in Barak basin, India, Hydro 2015 International, IIT Roorkee, December17-19, 2015.
28. B. Das and B.S. Sil, Multiple Inflow River Flood Routing Using ANN, Hydro 2015 International, IIT Roorkee, December 17-19, 2015.
29. A. Bora & B.S. Sil, Estimation of Muskingum flood routing parameters using GANetXL, Hydro 2015 International, IIT Roorkee, December17-19, 2015.
30. A. Sarkar, M. Anupindi & A. Nitesh, Towards Generation of Design Charts for SSI Parameters for Earthquake - Resistant RC Buildings through ANN and Optimization, Proceedings of International Conference on Sustainable Energy and Built Environment, V.I.T. University Chapter, Vellore, Tamil Nadu, India, 2015.
31. A. Sarkar, M. Anupindi & A. Nitesh, SSI Parameters for Low to High Rise Earthquake - Resistant RC Buildings, Proceedings of International Conference on Sustainable Energy and Built Environment, V.I.T. University Chapter, Vellore, Tamil Nadu, India, 2015.

32. K. Mog, A. Nitesh & K. Ashok, Updating of Numerical Model of a RC Column, Proceedings of International Conference on Sustainable Energy and Built Environment, V.I.T. University Chapter, Vellore, Tamil Nadu, India, 2015.
33. A. Nitesh, & J. Debnath, Issue and Solution in Modeling of Scaled - Numerical Model of Earthquake - Resistant RC Buildings, Proceedings of International Conference on Sustainable Energy and Built Environment, V.I.T. University Chapter, Vellore, Tamil Nadu, India, 2015.

(d) National Conference(s)

1. P. Sultana & R. Manikandan, Behavior in joint spacing and settlement of pile raft foundation resting on joint Hock-Brown Rocks. 50th Indian Geotechnical Conference, Pune, December 17-19, 2015.
2. M. Hussain & S.K. Dash, Influence of lime on swell behavior of soils. Indian Geotechnical Conference,Pune, Maharashtra, India. December 17-19, 2015.
3. D. Mukharjee & P. Rajbongshi, Determination of elastic modulus of subgrade layer due to application of soil lime stabilization, National Conference on Technological Innovation for Sustainable Infrastructure, NIT Calicut, March 2015.
4. M. Paul & P. Rajbongshi, Pedestrian demographic behavior on gap acceptance at uncontrolled road sections, National Conference on Technological Innovation for Sustainable Infrastructure, NIT Calicut, March 2015.
5. P. Kumar & P. Rajbongshi, Surface characteristics of bituminous mixes based on aggregate textures, National Conference on Technological Innovation for Sustainable Infrastructure, NIT Calicut, March 2015.
6. J. Das & P. Rajbongshi, Bituminous mix design using reclaimed asphalt materials, National Conference on Technological Innovation for Sustainable Infrastructure, NIT Calicut, March 2015.
7. A. Iqbal & S. Choudhury, Effect of Infill of Performance of Steel Frame Buildings, (Paper No. SE-02), Recent Advances in Civil Engg., RACE-2016, SVNIT Surat, India, March 5-6, 2016.
8. U.J. Dutta & A. Sil, Ground response analysis: A Comprehensive Review, 50th Indian Geotechnical Conference (IGC-2015), 2015.
9. N. Borthakur & Achu V., Effect of water table in soil amplification, 50th Indian Geotechnical Conference, Pune, India, December 17-19, 2015.
10. N. Borthakur & A. Saha, Lateral Load capacity of Vertical Micropile, 50th Indian Geotechnical Conference, Pune, India, December 17-19, 2015.
11. N. Borthakur & S. Sudhukhan, Behaviour of single Micropiles and Micropile Groups subjected to uplift loading. 50th Indian Geotechnical Conference, Pune, India, December 17-19, 2015.
12. N. Borthakur & B. Bhagowati, Impact of Cyclic wetting-drying cycle on swelling behavior of lime and fly ash stabilized expensive soil. 50th Indian Geotechnical Conference, Pune, India, December 17-19, 2015.
13. S. Ghosh & J.K. Ghosh, GPS Based Estimation of Real Time Agricultural Water Demand, 24th ISRS Annual Convention and National Symposium on Converging Space Technologies for National Development, Jaipur, India, November 3-5, 2004.
14. S. Sen, M.A. Ahmed & Debasish Das, Estimation of Parking Accumulation Profile and the Parking Demand for 4-wheelers in Urban CBD: A case Study, Proceedings of National Conference on Recent Advances in Civil Engg., RACE 2016, SVNIT, Surat, India, March 5-6, 2016.

(e) Book/ Chapter(s)

1. D. Kashyap & S. Ghosh, 'Model Assisted planning of groundwater Development' Chapter-16 of ASCE book on Sustainable Water Resources, ASCE (In Press).
2. A. I. Laskar, (2015), Concrete Technology Practices, Narosa Publishing House, New Delhi, ISBN 978-81-8487-408-2.

CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned (Rs)
1.	Various consultancy works related to Environmental Engg.; Design of Water and Wastewater System; Water, Soil and Civil Engg. Material Testing, Analysis and Design time to time	Various Government Sector, Public Sector and Private Sector companies	126.74 lacs
2.	Geotechnical investigation at proposed site for construction of multiutility building at National Highway, near Bazar, Silchar	Silchar Municipal Board	30,000
3.	Pipeline Survey, Development of Reservoir for Rain Water Harvesting	Assam University, Silchar	34.2 lacs
4	Concrete Mix Design	State and Central Government Organisation	2.00 lacs
5	Proof Checking	Assam PWD, Railway	1.00 lac

MAJOR EQUIPMENT ACQUIRED

Self-Compacting Concrete Testing Setup, AIM 334-U, AIM 334-L, AIM 334-V,AIM 334-F (Aimil Ltd. A-8, Mohan Co-operative Industrial Estate, Mathura Road, New Delhi -110044).

M.TECH. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Kamal Suklabaidya	Dr. U. Kumar	Dye Removal by Betel Nut Fibre
2.	Kiran		CFD of Sediment Transport at a River Bend
3.	M. Eliza	Dr. A. I. Laskar	Cyclic Flexural Behavior of RCC Beam with Substrate and Overlay Concrete
4.	M. Sharma		Cyclic Behavior of Beam Column Joint Incorporating Chopped Basalt Fibers
3.	K. C.Jena	Mrs. P. Sultana	Mitigation of Soil Erosion Using Straw Geotextiles as Surface Cover
4.	Manikandan R.		A Study in Arch Dam Design & Analysis on Jointed Rock Foundation
5.	Ch.A.K.Singha		Stabilization of Organic Soil with Fly Ash
6.	S. Thounasjam		Prediction of Ultimate Bearing Capacity &Reliability Analysis of Bored Cast-in-situ Pile
7.	S. Paul		Stabilization of Organic Soil using Lime
8.	Tumiori (on-going)	Dr. Kh. L. Singh	Effect of Different Sizes of Crumb Rubber in Asphalt Mixes
9.	Debjani Panda (on-going)		Evaluation of Strength Characteristics of Bituminous Mixes using Waste Polyethylene
10.	Tathagatha Khan (on-going)		Use of Crumb Rubber and High Density Polyethylene in the Improvement of Bituminous Mixes

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
11.	Karabi Bharadawaj	Dr. N. Debnath	Vibration Reduction of Steel 3D Framed Building using Supplemental Viscous Damper (completed)
12.	Bapi Mondal		Studies on Performance of Supplemental Viscous Damper in 3D RC Framed Building (completed)
13.	Probhakar Chakraborty		Comparative Study on Structural Performance between Lightweight and Normal weight RC 3D Framed Building (completed)
14.	Subhradeep Dhar	Dr. M. Hussain	Modification of Sub grade Soil Using Lime and Fibre
15.	Sagar Sen		Recycling of Fly Ash with Bentonite Used as Compacted Landfill Liner Material
16.	Naidu		Strength and Compressibility Behavior of Lime Stabilized Expansive Soil with Inclusion of Polypropylene Fibre
17.	Pha Yayek		Lateral Response of Pile Foundation on Transmission Tower
18.	Mary Talom		Influence of Inorganic Salt on Geotechnical Properties of Fly Ash-Bentonite Mixtures Use for MSW Landfill Liner
19.	Kunjari Mog	Dr. N. Ahir	Modal - Based Updating of a Scaled Model of a RC Column
20.	Abir Sarkar		Soil - Structure Interaction for Low to High Rise RC Building Using ANN
21	Jhuma Debnath		Scaled - Models for Earthquake Resistant RC Buildings
22.	Madhavi Anupindi		Design Tables for SSI Considerations for Earthquake - Resistant RC Buildings Using ANN
23.	Ajay Verma		FRF - Based Updating of a Scaled Model of a RC Column and Its Material Identification
24.	Bindesh Nonia	Dr. T. Rehman	A Comparative Study of Ad-Shaped Tunnel for Different Types of Soil
25.	Ricky L. Changte		Comparative Study of Different Shapes of Tunnel Section
26.	Tushar Nayak		Soil Bridge Sub-structure Interaction
27.	Monjur Ahmed		Dynamic Impact Analysis of Vehicle Bridge Interaction
28.	Jahida Anam Mazumder		Seismic Hazard Analysis of Barak Valley
29.	Pankaj Kundu	Dr. M. L. V. Prasad	Experimental Study on Bamboo Based Reinforced Cement Concrete
30.	Endow Mazumder		Use of Viscous Damper as an Energy Dissipative Device in Steel Structures
31.	Abhishek Kamisetty		Comparison of Strength Characteristics of Conventional and Self-cured Concrete
32.	Subhra Das	Dr. S. Choudhury	Performance of RC Frame Building with TLD
33.	Md. Taslim		A Study on Soft Storey Buildings
34.	Nibir Pawan Borah		A Study on Time Period of RC Frame Buildings
35.	Akbar Ali Ahmed		A Study on Earthen Dam
36.	Tamal Ghosh		A Study on Performance of RC Beam-Column Joint
37.	Gagan Singh		Base Isolation with Geotextiles
38.	Nabapallab Deka		A Study on Column Size in Performance-Based Design
39.	Vijay Krishna Kotapati		Unified Performance-Based Design of Steel Frame Buildings
40.	Ram Chandra Gollar		Vulnerability Study of School Buildings at Silchar Town

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
41.	Himadri Shekher Saha	Dr. D. Bhowmik	Effect of Fibre Reinforcement on the Behavior of Sand with Different Fine Content
42.	Partha Sarathi Nayak		Effect of Plastic and Non-plastic Fine Particles in Dynamic Properties of Cohesion less Soil
43.	Shriparna Roy		Numerical Simulation of Dynamic Properties of Local Soil Varied with Plastic Strain
44.	Sayef Afroz		A Study of the Nonlinear Behavior of Laterally Loaded Piles in Layered Soil Medium
45.	Vidya Niwas Bagri	Dr. A. K. Barbhuiya	Application of Remote Sensing and GIS in Groundwater Prospect Mapping of Ujjain District (M.P.)
46.	Sourav Banik		Land Use Suitability Analysis of Agricultural Crop Land Using GIS and AHP Technique in Cachar District ,Assam
47.	Padmini Samal		Watershed Management Of Rushikulya River Using GIS.
48.	Shahneen Nazreen Ali	Dr. B. S. Sil	Estimation of Runoff and Prioritization of Sub-watersheds in Barak River Basin using spatial techniques
49.	Bahnisikha Das		Sediment transport modeling of Barak River in a reach between Annapurna ghat and Badarpur ghat using HEC-RAS
50.	Angana Bora		One dimensional unsteady flow analysis in the Barak River using HEC-RAS
51.	Pritam Hait	Mr. P. Das	A Numerical & Experimental Study on Steel Fiber Reinforced Concrete Beam Column Joint
52.	Sujoy Das		A Study On Beam-Column Joint Using Fiber Reinforced Concrete
53.	Nabam Zomleen		Effect of Masonry Infill in R.C. Structures
54.	Snehansu Nath		Effect of Storey Height and Number of Storey in Design of Multi-Storied Building
55.	Mitali Mandal		Seismic Analysis of Beam Column Joints in Reinforced Concrete Moment Resisting Frames

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Binod Kumar	Dr. U. Kumar	Removal of Dyes from Aqueous Solution Using Rice Husk
2.	Binod Singhi	Dr. M. A. Ahmed & Dr. A. I. Laskar	Stabilization of Clayey Soil by Geopolymer Binder
2.	Pritam Hait	Dr. N. Debnath & Dr. S. Choudhury	Structural Engg. Under Earthquake Loading
3.	Snehansu Nath	Dr. N. Debnath & Dr. S. Choudhury	Structural Engg. Under Earthquake Loading
4.	Prasenjit Saha	Dr. M. L. V. Prasad	Behavior of Eco-SCC in Static and Dynamic Loading
5.	Gobin Engleng	Dr. P. Rajbongshi	Development of Strains Transfer Functions and Asphalt Stiffness Reduction Models in Asphalt Pavements.

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
6.	N. Maheshkumar Singh	Dr. T. Rehman	Estimation of Seismic Hazard and its Application in North-East India
7.	Sayan Kumar Shaw		Site Specific Seismic Study of Bridge in North-East India
8.	Abir Sarkar	Dr. D. Bhowmik	Reliability Based Study of Foundation Under Dynamic Loading
9.	M. H. Mazumder	Dr. A. K. Barbhuiya	Live-bed Scour at Bridge Abutments
10.	Yanglem Sonia Devi		Bridge Pier Scour in Cohesive Soil
11.	Piya Biswas		Riverbank Erosion and Its Counter Measures
12.	Shubrajyoti Deb	Dr. B. S. Sil	Hydraulic Modeling

Computer Science & Engineering

Academic Staff

Head: Dr. Nidul Sinha, Ph.D.

Faculty Members

Prof.	Associate Prof.	Assistant Prof.
Dr. N. Sinha, Ph.D.	Dr. B. Purkayastha, Ph.D.	Dr. A. Bhattacharjee, Ph.D.
	Mrs. U. Baruah, M.Tech.	Dr. P. Roy, Ph.D.
	Mr. S. K. Borgohain, M.Tech.	Mr. P. S. Neog, M.Tech.
	Mr. B. Dey, M.Tech.	Mr. P. K. Nath, M.Tech.
	Dr. S. K. Biswas, Ph.D.	Mr. B. Soni, M.Tech.
	Mr. D. M. Thounaojam, M.Tech.	Mr. R. Patgiri, M.Tech.
	Mr. U. Majhi, M.Tech.	Mr. A. K. Trivedi, M.Tech.
	Mr. Sounak Chakraborty, M.Tech.	Mr. Saptarshi Chakraborty, M.Tech.
	Mr. P. K. Das, M.Tech.	Ms. S. Bhattacharjee, M.Tech.
	Ms. E. Barlaskar, M.Tech.	Dr. S. Paul, Ph.D.
	Mr. A. Ahmed, M.Tech.	Mr. M. Shekhar, M.Tech.
	Mrs. P. Singh, M.Tech.	

Visiting Prof.: Prof. Ashok Deshpande, UC, Berkeley

DISTINCTION ACHIEVED

a) By Student

Sl . No.	Student's Name	Award
1.	Prinkesh Sharma (Batch 2015)	Codewarz Champion
2.	Akash Deep, Yogesh Chauhan, Harsh V. Ladha, Sumit DT	Google Code Jam Qualified

b) By Faculty Member

Sl. No.	Faculty Name	Award
1.	Dr. Pinky Roy	• Young Scientist Award (female category) Computer Science 2015 Specialization Awarded by Venus International Foundation, VIFRA2015 • Rastriya Gaurav Award 2015 Awarded by India International Friendship Society, IIFS New Delhi December 2015

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Mr. R. Patgiri	ISTE Workshop on Introduction to Design of Algorithms	NMEICT, MHRD	6 days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Mrs. U. Baruah	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur
2.	Mr. P.K. Nath	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur
3.	Mr. D.M. Thounaojam	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur
4.	Mr. B. Soni	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur
5.	Mr. S. Chakraborty	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur
6.	Mr. P.K. Das	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur
7.	Ms. S. Bhattacharya	ISTE Workshop on Introduction to Design of Algorithm	IIT Kharagpur

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

Machine Intelligence, Cognition in Neuroscience, Computer Networks and related areas, Artificial Intelligence, Data Mining, Applications of Machine Learning Algorithms in different domains, Mathematical Imaging, Soft Computing Techniques and Application in Big Data, Optimization, Speech Processing, Cloud Computing, Big Data, Digital Geometry, Image Analysis and its application, Natural Language Processing.

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

Completed	Submitted	Ongoing
01	02	22

c) Research Lab/ Workshop:

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Brainwave Analysis Laboratory	R & D Laboratory

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	NLP	Mr. S. K. Borgohain	IBM Shared University	10000 USD	2 years
2.	Analysis of Brain Waves and development of intelligent model for Silent Speech Recognition	Dr. N. Sinha	DieTy	25	2 years
3.	Implementation of a Rainfall forecasting model for Silchar weather Station	Dr. S. Biswas	NIT Silchar (Under STIS Scheme)	04	2 years
4.	Development of Speech based Multi-level Authentication System	Mrs. U. Baruah with IIT Guwahati (Co-PI)	DieTy	57.93	3years
5.	Development of android child e-health care system for N-E Region using fuzzy logic	Dr. S. Biswas (Co-PI)	NIT Silchar (Under STIS Scheme)	04	2 years

(e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Mr. Arif Ahmed	Future Generation Computer Systems	01	2016
		Wireless Communications and Mobile Computing	01	2016

PUBLICATIONS

a) International Journal(s)

1. P. Dash, L.C. Saikia & N. Sinha, (June 2015), Automatic Generation Control of Multi Area Thermal System Using Bat Algorithm Optimized PD-PID Cascade controller, ISA Transaction, Elsevier, Vol. 68, pp. 364–372, doi:10.1016/j. ijepes.2014.12.063 (Accepted).
2. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2015), Optimal Estimation of Power System Harmonics Using a Hybrid Firefly Algorithm Based Least Square Method, Soft Computing Journal Springer, pp. 1-14.
3. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2015), Variable Constraint Based Least Mean Square Algorithm for Power System Harmonic Parameter Estimation, International Journal of Electrical Power and Energy System (IJEPES), Vol. 73,pp. 218-228, Elsevier.
4. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2016), Robust Estimation of Power System Harmonics Using a Hybrid Firefly Based Recursive Least Square Algorithm, International Journal of Electrical Power and Energy Systems (IJEPES), Vol. 80(C), pp. 287-296,Elsevier.
5. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2016), Several Variants of Kalman Filter Algorithm for Power System Harmonic Estimation, International Journal of Electrical Power and Energy Systems (IJEPES), Vol. 78(C), pp. 793-800, Elsevier.
6. M. Sarkar, K. Saha, S. Namasudra & P. Roy, (August 2015), An Efficient and Time Saving Web Service Based Android Application, International Journal of Computer Science and Engg. (SSRG – IJCSE).
7. S.K. Biswas, M. Bordoloi, H.R. Singh & B. Purkayastha, (2016), A Neuro-fuzzy Rule-based Classifier Using Important Features and Top Linguistic Features, International Journal of Intelligent Information Technologies (IJIIT), IGI Global (in press).
8. S.K. Biswas, N. Sinha, B. Purakayastha & L. Marbaniang, (2015), Weather Prediction by Integrating Recurrent Neural Network Dynamics into Case Based Reasoning, International Journal of Knowledge Based Computer Systems, PublishingIndia.com (in press).

9. S.K. Biswas, N. Sinha & B. Purakayastha, (2015), Recent trends in CBR, challenges and future directions: a critical review, International Journal of Knowledge Based Computer Systems, PublishingIndia.com (in press).

10. S.K. Biswas, B. Baruah, N. Sinha & B. Purakayastha, (2015), A Hybrid CBR Classification Model by Integrating ANN into CBR, International Journal of Services Technology and Management, Inderscience (in press).

11. S.K. Biswas, B. Baruah, B. Purakayastha & M. Chakraborty, (2015), An ANN Based Classification Algorithm for Swine Flu Diagnosis, International Journal of Knowledge Based Computer Systems(in press).

12. S.K. Biswas, L. Marbaniang, B. Purkayastha, M. Chakraborty, H.R. Singh & M. Bordoloi, (2015), Rainfall Forecasting by Relevant Attributes Using Artificial Neural Networks– A Comparative Study, International Journal of Big Data Intelligence, Inderscience (in press).

13. D. Dev & R. Patgiri, (2015), Dr. Hadoop : An Infinite Scalable Metadata Management for Hadoop—How the baby elephant becomes immortal!, Springer – Frontiers of Information Technology & Electronic Engg., Vol. 17(1), DOI: http://dx.doi.org//10.1631/FITEE.1500015

14. S. Chakraborty, (2015), Prototype Application In Android Platform For System Administration Of HPC Clusters, International Journal of Information Technology, Control and Automation (IJITCA), Vol.5 (1).

15. P. K. Das & P. Kumar, (March 2015), A Novel Image Cryptography Approach Based On Genetic Algorithm, IJESRT, ISSN 2277-9655.

16. S. Banerjee & P. K. Das, (March 2015), Security Issues Survey In cloud Computing, IJETT, Vol. 21(3).

17. U. Sinha, H. S. Das & M. Shekhar, (July-September 2015),Survey on Human Activity Recognition Techniques for Video Surveillance, International Journal of Computer Science and Technology (IJCST), Vol. 6(3), ISSN : 0976-8491 (Online) | ISSN : 2229-4333 (Print).

18. U. Sinha & M. Shekhar, (March 2015), Comparison of Various Cloud Simulation tools available in Cloud Computing,International Journal of Advanced Research in Computer And Communication Engg. (IJARCCE), Vol. 4(3), ISSN (Online) 2278-1021 ISSN (Print) 2319-5940.

b) International Conference(s)

1. S. Namasudra & P. Roy, Size based Access control Model in cloud computing, International Conference: Electrical, Electronics, Signals, Communication & Optimization-EESCO, 6th ICISA 2015, Visakhapatnam, Andhra Pradesh, India, January 24-25, 2015.

2. I. Hussain & P. Roy, A Survey of Classification Techniques using Fuzzy Neural Networks for Speech Recognition, 17th International Workshop on Combinatorial Image Analysis, Kolkata, India, November 24-27, 2015(Accepted with major revision and revised Version submitted on August 31, 2015).

3. D. Dev & R. Patgiri, HAR+: Archive and Metadata Distribution! Why Not Both?, International Conference on Computer Communication and Informatics-IEEE, 2015.

4. D. Dev & R. Patgiri, A Survey of Different Technologies and Recent Challenges of BigData, Proceedings of 3rd International Conference on Advanced Computing, Networking and Informatics, Vol. 44 of the series Smart Innovation, Systems and Technologies, pp. 537-548, September 03, 2015.

5. S. Debnath, B. Soni & P. K. Das, Text-constrained Speaker Verification using Fuzzy C Means Vector Quantization, 4th IEEE International Conference on Communication and Signal Processing-ICCSP, 2015.

6. H. S. Devi, R. Laishram & D.M. Thounaojam, Face Recognition using R-KDA with Non-Linear SVM for Multi-View Database, 11th International Conference on Data Mining and Warehousing, ICDMW, Bangalore, India, August 21-23, 2015.

7. P. Joshi, A. Nivangune, R. Kumar, S. Kumar, R. Ramesh, S. Pani & A. Chesum, Understanding the Challenges in Mobile Computation Offloading to Cloud through Experimentation, 2nd ACM International Conference on Mobile Software Engg. and Systems.

M.TECH. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Bhaskar Jyoti Saikia	Mrs. U. Baruah	A PSO-ICA Based Wavelet Method of Speech Signal Denoising
2.	Lakshahira Konwar	Mr. P. S. Neog	A Recommender Testbed: Towards a Production System
3.	Manoj Pant	Mr. B. Dey	A multi-hop Routing Protocol for Wireless Sensor Network based on Grid Clustering
4.	Dipayan Dev	Mr. R. Patgiri	Dr. Hadoop: Giving wings to the Baby Elephant An infinite Scalable Metadata Management for Hadoop
5.	Ananya Sen Gupta	Mr. D. M. Thounaojam	Shot Boundary Detection using Maximally Stable External Regions
6.	Ratishchandra Huidrom	Mr. S. Chakraborty	Automated Lung Segmentation for Juxta-Pleural Nodules
7.	Yumnam Surajkanta	Mr. U. Majhi & Mr. A. Trivedi	Intrusion Detection using Naïve Bayes with Kernel Density Estimation
8.	Monali Bordoloi	Dr. S. K. Biswas	Simultaneous Feature Selection and Fuzzy Rule Generation for Classification and Prediction by Neuro-Fuzzy Model
9.	Saswati Debnath	Mr. B. Soni	Vector Quantization based Modelling Technique in Text-Dependent Speaker Verification System in Controlled and Uncontrolled Environment
10.	Dinesh Kumar Sah	Mr. P. K. Nath	Light path Routing and Wavelength Assignment in Translucent Optical Network through ILP Technique
11.	Sulabh Kariyar	Mr. S. K. Borgohain	Lexical cohesion based Text Summation using Lexical Graphs and Artificial Immune Systems
12.	Manomita Chakraborty	Dr. B. Purakayastha	Efficient Data Mining using Neural Network: symbolic representation
13.	Abhijit Das	Dr. A. Bhattacharya	A study of peer Dynamics in Bit Torrent Protocol

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Mr. Saroj Biswas	Dr. N. Sinha & Dr. B. Purkayastha	Some Studies On Intelligent Techniques Using Standard CBR and Hybrid CBR With ANNs in Classification and Prediction

Electrical Engineering

Academic Staff

Head: Prof. B. K. Roy, Ph.D. (from 01.04.2015 to 08.05.2015)

Dr. L. C. Saikia, Ph.D. (from 09.05.2015 to till date)

Faculty Members

Prof.	Associate Prof.	Assistant Prof.
Prof. A. K. Sinha, Ph.D.	Dr. S. Choudhury,Ph.D.	Dr. L. C. Saikia, Ph.D.
Prof. N. Sinha, Ph.D.	Dr. N. B. D. Choudhury, Ph.D.	Dr. J.P. Mishra, Ph.D.
Prof. B. K. Roy, Ph.D.		Dr. T. Malakar, Ph.D.
		Dr. A. K. Goswami, Ph.D.
		Dr. D.C. Das, Ph.D.
		Mr. C. Bhattacharjee, M.Tech.
		Dr. P. K. Tiwari, Ph.D.
		Mr. P. Roy, M.Tech.
		Dr. N. Soren, Ph.D.
		Dr. R. Dey, Ph.D.
		Dr. R. K. Biswas, Ph.D.
		Miss. B. Mali, M.Tech.
		Mr. S. Bhakta, M.Tech.
		Mr. H. J. Khuman, M.Tech.
		Miss. W. Tasnin, M.Tech.
		Miss. R. Rajbongshi, M.Tech.
		Mr. S. Suklabaidya, M.Tech.

DISTINCTION ACHIEVED

a) By Student

1. Prantika Sarma awarded the Institute Gold Medal for securing the highest Cumulative Performance Index (CPI) among all the students of the batch receiving the degrees of Bachelor of Technology.

b) By Faculty Member

1. Dr. A.K. Goswami, Visiting Scientist under international collaborative/exchange programme at Middle East Technical University Turkey.
2. Dr. R. Dey, Post Doctorate Fellowship (TWAS-CONACYT).

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. L. C. Saikia	Workshop on Advanced fuzzy logic (February 1-8, 2016)	TEQIP-II	6 days
2.	Dr. S. Choudury	STTP on Learn Verilog HDL (March 29-31, 2016)	Self-financed	1 day

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Ms. B. Mali	Advanced fuzzy logic	NIT Silchar
2.	Dr. L.C. Saikia	WOSA 2016	NBA, New Delhi
3.	Dr. J.P. Mishra	INDICON-15	JMI, New Delhi
4.	Mr. P. Roy	ISACCC-15	Assam university
		CMJ-2016	Jadavpur university
5.	Dr. R. Dey	CCE-2015	CINVESTAV Mexico
6.	Prof. A.K. Sinha	Three workshops attended	NIT Nagpur, NIT Delhi, NIT Patna
7.	Dr. N.B.D. Choudhury	MFIIS 2015	Kolkata

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

Power Electronic Converter/Inverter; AGC; Smart Grid; Power System Optimization; Signal Processing; Low Power VLSI Design; Nano Electronics(specially CNT and Nano-wires); Image Processing; Power Electronics Application in renewable based power generation and control; Coordination of Renewable Energy Resources; Electric Drives; Control System; Stability and Control of Time Delay System; Dynamics and Stability of Neural Network; Application of Delay Feedback Controlin robotics and motion control; Power Quality Improvement in Distributed Generation System; Soft Computing Techniques and Application; Power System Economics; Deregulated Power System; Power System Planning, Reliability and Congestion Management; Market Planning and Pricing; Power Quality; Competitive Power Market with Renewable Energy Resources; AGC under Conventional and Deregulated Environment; Application of Soft Computing Tools to Power Generation and Control Wind/Solar PV/Solar Thermal base Hybrid Energy System; Industrial Automation; Intelligent Control; Robust and H-Infinity Control; Decentralized Control for Interconnected Power System under Deregulated Power Market Scenario; Non-Linear Control Design and Applications; Integrated Rural Energy Planning; Micro Grid Inverter Control; Electric Hybrid Vehicles.

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

Completed	Submitted	Ongoing
04	03	43

c) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Power quality assessment and improvement in Barak Valley	Dr. A.K. Goswami	DST Fast Track	9.87	2012-15
2.	Design of smart energy meter	Dr. L.C. Saikia Dr. T. Malakar (CoPI) Dr. N.B.D. Chaudury (CoPI)	NIT Silchar	2.7	2016-18
3.	Design and implementation of fast charging mechanism/circuit for lead acid battery used for electric vehicle	Dr. N.B.D. Choudhury Dr. L.C. Saikia (CoPI)	NIT Silchar	2.7	2016-18
4.	Synthesis of Polyaniline metal sulphide nano-composites and investigation of their photovoltaic characteristics	Dr. B.H. Shambaskar Dr. J.P. Mishra (CoPI)	NIT Silchar	4.3	2016-18

d) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. N.B.D. Choudhury	IEEE-Transaction on Power System	01	2015-16
		Electric Power Components and system-Taylor and Francis	04	
		IET- Generation, Transmission and Distribution	04	
		IET- Science, measurement and technology	03	
		International transaction on electrical energy systems (Wiley)	03	
		International Journal of Power and Energy systems(Elsevier)	01	
		IET- Generation, Transmission and Distribution	04	2015-16
2.	Dr. L.C. Saikia	IEEE- Transaction on Power System	02	
		IJEPES	04	
		IEEE- Transaction on Power System	02	2015-16
3.	Dr. P.K. Tiwari	IET- Generation, Transmission and Distribution	02	
		Renewable and sustainable energy reviews(Elsevier)	01	
		IET- Generation, Transmission and Distribution	03	2015-16
4.	Dr. T. Malakar	IET-RPG	04	
		IJEPES	02	
		Electric Power Components and system-Taylor and Francis	03	
		International Journal of Power and energy conversion, Inderscience	01	
		Applied energy, Elsevier	01	
		IJEPES	01	2015-16
5.	Dr. D.C. Das	Energy conversion and management	02	
		IEEE transaction on Power Systems	01	
		Energy Systems	01	
		IET	01	2015-16
6.	Dr. A.K. Goswami	IJEPES	02	
		IE-EPSR	01	
		IEEE-PD	01	
		EPCS-Taylor and Francis	01	

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
		IEEE- Tans. On Nanotech	01	2015-16
7.	Dr. S. Choudury	IET-Circuit, systems and drives	02	
		JLOPE	01	
		ISA transaction	06	2015-16
8.	Dr. R. Dey	Int. Journal of Robust and Nonlinear Control	02	
		Asian Journal of Control	01	
		Journal of Franklin Inst.	01	
		Shock and vibration	01	
		Security and communication network	01	
		Image processing-Springer	01	2015-16
9.	Dr. A.K. Sinha	Energy conversion and management (Elsevier)	03	2015-16
10.	Mr. C. Bhattacharjee	Journal of Renewable, and Sustainable Energy (AIP)	01	
		Renewable and sustainable energy reviews	09	2015-16
11.	Mr. S. Bhakta	Sustainable energy tech. and assessments	01	
		Energy conversion and management	01	
12.	Mr. S. Suklabaidya	IEEE-ICAIM	01	2015-16

PUBLICATIONS

a) International Journal(s)

1. K.V. Santhosh & B.K. Roy, (2015), A practically validated adaptive calibration technique using optimized artificial neural network for level measurement by capacitance level sensor, Measurement and Control, SAGE Publication, Vol. 48(7), pp. 217-224.
2. K.V. Santhosh & B.K. Roy, (2015), FPGA Implementation of Oxygen Level Monitoring in Oxygen Cylinder, International Journal of Bio-Science and Bio-Technology, Vol. 7(5), pp. 225-234.
3. L. Seban, K. Velswamy, B.K. Roy & T.K. Radhakrishnan, (2015), GOBE-ARMA based model predictive control for an ideal reactive distillation column, Ecotoxicology and Environmental Safety, Elsevier, Vol. 121, pp. 110-115.
4. N. Boruah, L. Seban & B.K. Roy, (2015), Fuzzy based multiple model predictive control design and performance analysis of magnetic elevator system, International Journal of Applied Sciences and Engg. Research, Vol. 4(5), pp. 750-757.
5. K. Lochan & B.K. Roy, (2015), Position Control of Two-link Flexible Manipulator using Low Chattering SMC Techniques, International Journal of Control Theory And Applications, Vol. 8(3), pp. 1137-1145.
6. J.P. Singh & B.K. Roy, (2015), A Novel Asymmetric Hyperchaotic System and its Circuit Validation, International Journal of Control Theory And Applications, Vol. 8(3), pp.1005-1013.
7. J.P. Singh & B.K. Roy, (2015), Analysis of an One Equilibrium Novel Hyperchaotic System and its Circuit Validation, International Journal of Control Theory And Applications, Vol. 8(3), pp. 1015-1023.
8. K.V. Santhosh & B.K. Roy, (2015), A Practically Validated Intelligent Calibration Technique using Optimized ANN for Ultrasonic Flow meter, International Journal on Electrical Engg. and Informatics, Vol. 7(3), pp. 379-393.
9. P.P. Singh, J.P. Singh & B.K. Roy, (2015), Synchronization of Chaotic Systems using NAC and Its Application to Secure Communication, International Journal of Control Theory And Applications, Vol. 8(3), pp. 995-1003.
10. A. Sarkar & B.K. Roy, (2015), Image Based Faults Inspection of Cigarette Packets on LabVIEW Platform, International Journal of Control Theory And Applications, Vol. 8(3), pp. 1071-1080.
11. A. Sarkar & B.K. Roy, (2015), Comparative Study of Counting Algorithms and Its Performance Analysis, International Journal of Control Theory And Applications, Vol. 8(3), pp. 1181-1188.
12. C. Bhattacharjee & B.K. Roy, (January 2016), Advanced fuzzy power extraction control of wind energy conversion system for power quality improvement in a grid tied hybrid generation system, IET Generation Transmission & Distribution, Vol. 11, pp. 1-9.

13. P. Roy & B.K. Roy, (January 2016), Fractional Order PI Control Applied to Level Control in Coupled Two Tank MIMO System with Experimental Validation, Control Engg. Practice, Vol. 48, pp. 119–135.

14. P. Roy & B.K. Roy, (March 2016), Dual Mode Adaptive Fractional Order PI Controller with Feedforward Controller Based on Variable Parameter Model for Quadruple Tank Process, ISA Transactions (in press).

15. M. Borah, P.P. Singh & B.K. Roy, (March 2016), Improved Chaotic Dynamics of a Fractional-Order System, its Chaos-Suppressed Synchronisation and Circuit Implementation, Circuits Systems and Signal Processing, Special Issue.

16. R. Lorenzo & S. Chaudhury, (2016), A novel Body Bias Conroller circuit for low leakage, reduced delay and improved stability, Journal of Circuit Systems and Computers, World Scientific (accepted).

17. R. Lorenzo & S. Chaudhury, (2016), Review of Circuit level Leakage Minimization Techniques for VLSI Circuits and Systems, IETE Technical Review, Taylor and Francis (accepted).

18. R. Lorenzo & S. Chaudhury, (February 2016), A novel low leakage body biasing technique for CMOS Circuits, Canadian Journal of Pure and Applied Sciences, Vol. 10(1), pp. 3827-3834.

19. S.K. Sinha & S. Chaudhury, (2015), Effect of Device Parameters on Carbon Nanotube Field Effect Transistor in Nanometer Regime, Journal of Nano Research, Vol. 36, pp. 64.

20. R. Lorenzo & S. Chaudhury, (June 2015), Body Biasing Scheme to Control Leakage, Speed and Stability in SRAM Cell Design, IJCA Proceedings on International Conference on Computing, Communication and Sensor Network CCSN, 2014(1), pp. 11-15.

21. S.K. Sinha & S. Chaudhury, (2015), Analysis of different parameters of channel material and temperature on threshold voltage of CNTFET, Materials Science in Semiconductor Processing, Vol.31, pp. 431-438, Elsevier.

22. P. Dash, L.C. Saikia & N. Sinha, (June 2015), Automatic generation control of multi area thermal system using Bat algorithm optimized PD–PID cascade controller, International Journal of Electrical Power & Energy Systems, Vol 68, pp. 364-372.

23. Y. Sharma & L.C. Saikia, (December 2015), Automatic Generation Control of a Multi-area ST - Thermal Power system Using Grey Wolf Optimizer Algorithm Based Classical Controllers, International Journal of Electrical Power & Energy Systems, Vol.73, pp. 853-862.

24. A. Rahman, L.C. Saikia & N. Sinha, (2015), Load frequency control of a hydro-thermal system under deregulated environment using biogeography-based optimised three-degree-of-freedom integral-derivative controller, IET Generation, Transmission & Distribution, DOI: 10.1049/iet-gtd.2015.0317, pp. 1-10.

25. S. Datta, J.P. Mishra & A.K. Roy (March 2015), Fault Ride Through capability Improvement and Unbalanced Grid Voltage Mitigation of Grid-Connected DFIG-based WECS using Nine Switch Converter,Wulfenia,Vol.22(3), pp. 183-197,Landesm-Andesm-Useum Karnten, Index-1561-882X.

26. R. Dey, S. Ghosh, G. Ray, A. Rakshit & V.E. Balas, (2015), Improved Delay range dependent stability analysis of time delay system with norm bounded uncertainty, ISA Transaction, http://dx.doi.org/10.1016/j.isatra.2015.06.0122015, Elsevier.

27. P. Pal, R. Dey, R.K. Biswas & S. Bhakta, (Novemebr 2015), Optimal PID Controller Design for Speed Control of a Separately excited DC motor: A Firefly based Optimization approach, International Journal of Soft Computing, Mathematics and Control (IJSCMC), Vol. 4(4).

28. T. Malakar, A. Rajan, K. Jeevan, P. Dhar, (2016), A day ahead price sensitive reactive power dispatch with minimum control, International Journal of Electrical Power and Energy Systems, Vol. 81, pp. 427-443, Elsevier.

29. A. Rajan & T. Malakar, (2016), Exchange market algorithm based optimum reactive power dispatch, Applied Soft Computing, Vol. 43, pp. 320-336, Elsevier.

30. A. Rajan & T. Malakar, (2015), Optimal reactive power dispatch using hybrid Nelder–Mead simplex based firefly algorithm, International Journal of Electrical Power and Energy Systems, Vol. 66, pp. 9-24, Elsevier.

31. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2016), Robust Estimation of Power System Harmonics Using a Hybrid Firefly Based Recursive Least Square Algorithm, International Journal of Electrical Power and Energy Systems, Vol. 80, pp 287-96, SCI Journal.
32. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2016), Several Variants of Kalman Filter Algorithm for Power System Harmonic Estimation, International Journal of Electrical Power and Energy Systems, Vol. 78, pp. 793-800, SCI Journal.
33. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (September 2015), Optimal estimation of power system harmonics using a hybrid Firefly algorithm-based least square method, Soft Computing, Springer, SCI Journal.
34. A.K. Goswami, C.P. Gupta & G.K. Singh, (April-June 2015), Voltage sag mitigation strategies for an Indian Power Systems: A Case Study, Journal of the Institution of Engineers (India): Series B, Vol. 96(2), pp. 165-78, Springer.
35. S.K. Singh, A.K. Goswami & N. Sinha, (2015), Power System Harmonic Parameter Estimation Using Bilinear Recursive Least Square (BRLS) Algorithm , International Journal of Electrical Power and Energy Systems, Vol. 67, pp. 1-10, SCI Journal.
36. S. Deb, S.Gope & A.K. Goswami, (2015), Congestion Management Considering Wind Energy Sources using Evolutionary Algorithm, International Journal of Electrical Power Components and Systems, Vol 43(7), pp. 723-32, SCI Journal.
37. D. Patel , A.K. Goswami & S.K. Singh, (2015), Voltage Sag Mitigation in an Indian Distribution Systems using Dynamic Voltage Restorer, International Journal of Electrical Power and Energy Systems, Vol. 71, pp 231-241, SCI Journal.
38. S.K. Singh, N. Sinha, A.K. Goswami & N. Sinha, (2015), Variable Constraint Based Least Mean Square Algorithm for Power System Harmonic Parameter Estimation, International Journal of Electrical Power and Energy Systems, Vol. 73, pp. 218-228, SCI Journal.
39. C. Bhattacharjee & B.K. Roy, (2016), Advanced fuzzy power extraction control of wind energy conversion system for power quality improvement in a grid tied hybrid generation system, IET Generation, Transmission & Distribution, Vol. 10(5).
40. P. Roy & B.K. Roy, (March 2016), Fractional order PI control applied to level control in coupled two tank MIMO system with experimental validation, Control Engg. Practice, Vol. 48, pp. 119–135.
41. P. Roy & B.K. Roy, Dual mode adaptive fractional order PI controller with feed forward controller based on variable parameter model for quadruple tank process. ISA Transactions. (Available online 28 March 2016 In Press, Corrected Proof).
42. S. Bhakta, V. Mukherjee & B. Shaw, (2015), Techno-economic analysis and performance assessment of standalone photovoltaic/wind/hybrid power system in Lakshadweep islands of India, Journal of Renewable and Sustainable Energy (AIP), Vol. 7(6),ISSN: 1941-7012, (SCI-E). http://dx.doi.org/10.1063/1.4936298.
43. S. Bhakta, V. Mukherjee & B. Shaw, (2015), Techno-Economic Analysis of Standalone PV/Wind Hybrid System for Application in Isolated Hamlets of North-East India, Journal of Renewable and Sustainable Energy (AIP), Vol. 7(2), ISSN: 1941-7012, (SCI-E). http://dx.doi.org/10.1063/1.4918792.
44. A. Abhindranath & P.K. Tiwari, (2015), Social Welfare Calculation and Comparison for Different Operating Strategy of Wind-pumped Storage Hybrid Plant in Competitive Power Market, Procedia Technology,Vol. 21, pp. 68–75, Smart Grid Technologies.
45. S. Dawn & P.K. Tiwari, (September 2016), Improvement of economic profit by optimal allocation of TCSC & UPFC with wind power generators in double auction competitive power market, International Journal of Electrical Power & Energy Systems, Vol. 80, pp. 190–201.

b) National Journal(s)

1. S. Datta, J.P. Mishra & A.K. Roy, (July 2015), Modified Speed Sensor-less Grid Connected DFIG based WECS, Indian Journal of Science & Technology, Vol. 8(16), pp. 1-12. Indian Society for Education and Environment. DOI: 10.17485/ijst/2015/v8i16/58537, ISSN (Print): 0974-6846.ISSN (Online): 0974-5645.

2. S. Datta, J.P. Mishra & A.K. Roy, (August 2015), Performance Analysis of a Speed Sensor Less Grid Connected DFIG based Wind Energy Conversion System Using Nine Switch Converter, Indian Journal of Science & Technology. Vol. 8(17), pp. 1-12, Indian Society for Education and Environment.DOI: 10.17485/ijst/2015/v8i17/58577ISSN (Print): 0974-6846 ISSN (Online): 0974-5645.

3. S. Datta, J.P. Mishra & A.K. Roy, Performance Analysis of a DFIG based Variable Speed Wind Energy Conversion System,Discovery Journal, Vol.47 (216), pp. 29-36, Discovery Publication(International Scientific Research Magazine). ISSN: 2278-5469 & EISSN:2278-5054.

c) International Conference(s)

1. L. Majhi , P. Roy & B.K. Roy, Design of PID and FOPID Controllers tuned by Firefly Algorithm for Magnetic Levitation System, Proceedings of Fourth International Conference on Soft Computing for Problem Solving Advances in Intelligent Systems and Computing, December 25-27, 2014, Vol. 335, pp. 417-430, 2015.

2. K. Lochan, S. Baidhya & B.K. Roy, Comparison of Chattering in Single Link Flexible Manipulators with Sliding mode Controllers, IEEE International Conference on Energy, Power & Energy, Shillong, June 12-13, 2015.

3. K. Lochan, S. Baidhya & B.K. Roy, Control of Rotational Base Single Link Flexible Manipulator using different SMC Techniques for Variable Payloads, IEEE International Conference on Energy, Power & Energy, Shillong, June 12-13, 2015.

4. S. Baidhya, K. Lochan & B.K. Roy, Modeling and Sliding Mode Control of Flexible Link Flexible Joint Robot Manipulator, 2nd International Conference of Robotics Society of India (Advances in Robotics), BITS Goa, July 02-04, 2015.

5. K. Lochan, S. Baidhya & B.K. Roy, Sliding Mode and Adaptive Sliding Mode Control Approaches of Two Link Flexible Manipulators, 2nd International Conference of Robotics Society of India (Advances in Robotics), BITS Goa, July 02-04, 2015.

6. L. Seban & B.K. Roy, Combining deterministic generalized orthonormal basis filters with stochastic ARMA filters: A State space approach, 34th Chinese Control Conference, Hangzhou, China, July 28-30, 2015.

7. K.V. Santhosh & B.K. Roy, Adaptive Calibration of Turbine Flow Measurement using ANN, International Symposium on Advance Computing and Communication (ISACC), September 14-15, 2015.

8. P. Roy & B.K. Roy, Multi-fault Diagnosis in Three Coupled Tank System using Unknown Input Observer, Fourth International Conference on Advances in Control & Optimisation of Dynamical Systems (ACODS), February 1-5, 2016.

9. P. Roy & B.K. Roy, Level Control of Two Tank System by Fractional Order Integral State Feedback Controller Tuned by PSO with Experimental Validation, IEEE First International Conference on Control, Measurement and Instrumentation, Jadavpur University, Kolkata, India, January 2016.

10. P.P. Singh, J.P. Singh, M. Borah & B.K. Roy, On the Construction of a New Chaotic System, Fourth International Conference on Advances in Control & Optimisation of Dynamical Systems (ACODS), February 1-5, 2016.

11. J.P. Singh & B.K. Roy, A Novel hyperchaotic System with Stable and Unstable Line of Equilibria and Sigma Shaped Poincare Map, Fourth International Conference on Advances in Control & Optimisation of Dynamical Systems (ACODS), February 1-5, 2016.

12. L. Seban, N. Boruah, B.K. Roy, Modified Single Layer Economic Model Predictive Control and Application to Shell and Tube Heat Exchanger, Fourth International Conference on Advances in Control & Optimisation of Dynamical Systems (ACODS), February 1-5, 2016.

13. K. Lochan & B.K. Roy, SMC Controlled Chaotic Trajectory Tracking of Two-Link Flexible Manipulatorwith PID Sliding Surface, Fourth International Conference on Advances in Control & Optimisation of Dynamical Systems (ACODS), February 1-5, 2016.

14. R. Lorenzo & S. Chaudhury, Low Leakage and Minimum Enery Consumption in CMOS logic Circuits, IEEE International Conference EDCAV 2015, NIT Mehgalaya, Shillong, January 2015.

15. D.C. Das, et.al., Performance analysis of Solar PV-diesel based autonomous hybrid power system using FFA and CSA optimized controller, TENCON 2015 IEEE Region 10 Conference, IEEE, 2015.

16. H. Das & L.C. Saikia, An Economic GSM Enabled Smart Energy Meter and Automation of Home Appliances, International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE), 2015, Shillong, India (Accepted for Publication).

17. S. Debbarma, A, Nath, U. Sarma & L.C. Saikia, Cuckoo search algorithm based two degree of freedom controller for multi-area thermal system, International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE), 2015, Shillong, India.

18. A. Rahman, S.K. Sahu & L.C. Saikia, AGC of a Multi-Area Thermal-CCGT System Using Cuckoo Search Optimized Classical Controllers, International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE), 2015, Shillong, India (Accepted for Publication).

19. S. Debbarma, L.C Saikia, N. Sinha & B. Kar, Fractional order two degree of freedom control for AGC of an interconnected multi-source power system, 17th IEEE Conference on Industrial Technology, March 14-17, 2016 (ICIT 2016) (Accepted.

20. S. Datta, J.P. Mishra & A.K. Roy, Unbalance and Non-linear Stator Voltage Control of a Grid Connected DFIG based WECS using NSC, 12th IEEE INDICON 2015, Jamia Millia Islamia, New Delhi, India, December 17-20, 2015.

21. S. Sharma, J.P. Mishra & S. Datta, Sliding Mode Power Control of a DFIG based Variable Speed Wind Energy Conversion System, 12th IEEE INDICON 2015, Jamia Millia Islamia, New Delhi, India, December 17-20, 2015.

22. S. Datta, J.P. Mishra & A.K. Roy, Modified Speed Sensor-less Grid Connected DFIG based Wind Energy Conversion System for Decoupled Control of Active and Reactive Power, IEEE-International Conference on Power and Advanced Control Engg. (ICPACE), Bangalore, India, August 12-14 2015.

23. N.S. Reddy, P. Pal, S. Saketh M. & R. Dey, Optimal PID controller design of an Inverted Pendulum Dynamics: A Hybrid Pole-Placement & Firefly Algorithm Approach, IEEE CMI, January 8-10 2016, Kolkata, India.

24. R. Dey, S. Ghosh, E. Gyurkovics & G. Ray, Delay dependent stabilitycriterion for Linear System with time-varying state delay, IFAC ROCOND 2015, July 8-11 2015, Bratislava, Slovakia.

25. P. Roy, B. Kar, A. Kumar & B.K. Roy, Level Control of Two Tank System by Fractional Order Integral State Feedback Controller Tuned by PSO with Experimental Validation, IEEE First International Conference on Control, Measurement and Instrumentation, January 2016, Jadavpur University, Kolkata, India.

26. P. Roy, M. Borah, L. Majhi & N. Singh, Design and Implementation of FOPID Controllers by PSO, GSA and PSOGSA for MagLev System, IEEE International Symposium on Advanced Computing and Communication, September 2015, Assam University, Silchar India. url: http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7377307.

27. S. Sutradhar, N.B.D. Choudhury, & N. Sinha, Grey Wolf Optimizer for short term hydrothermal scheduling problems, Michael Faraday IET International Summit, MFIIS 2015, September 12-13, 2015, Kolkata, India, pp. 1-6.

28. S. Sutradhar, N.B.D. Choudhury, & N. Sinha, Mixed Integer Non-linear programming for hydrothermal scheduling problem, Annual IEEE India Conference (INDICON), New Delhi, December 17-20, 2015, Pages 1-6.

MAJOR EQUIPMENT ACQUIRED

Matlab Software.

M.TECH. THESIS

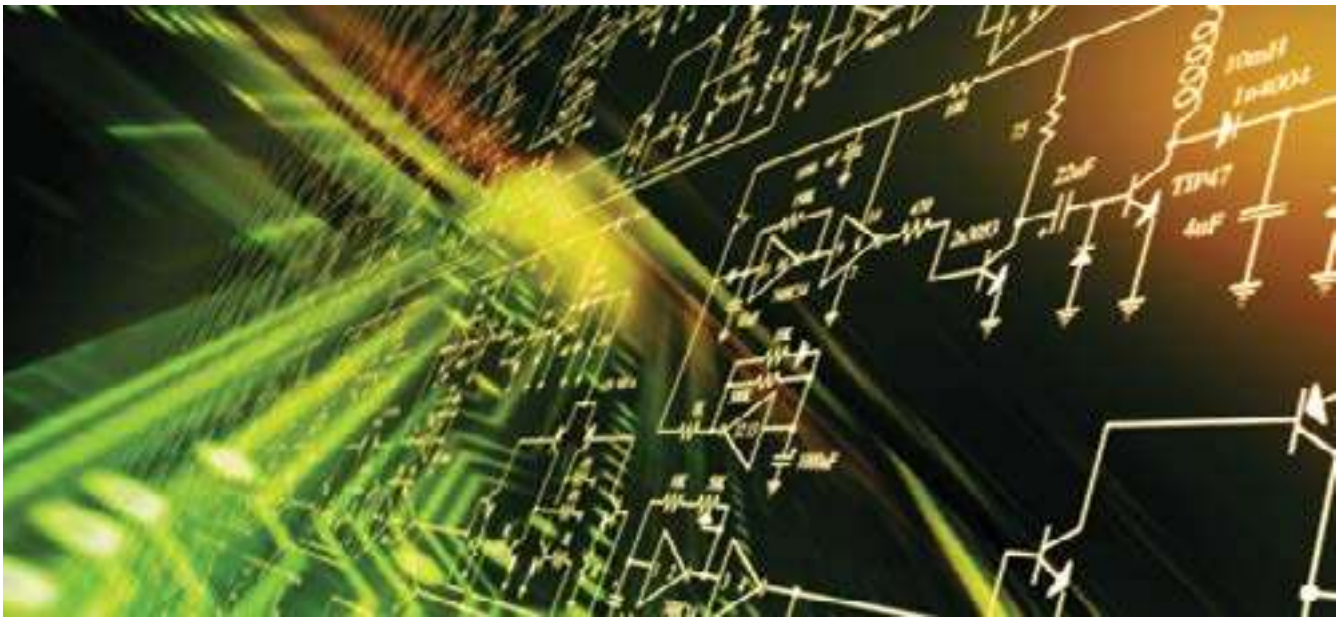
Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Vishnu V. Upputolla	Dr. N. Sinha	Automatic Generation Control Of A Standalone Hybrid Power System With Controlled Charging Of Plug-In Hybrid Electric Vehicle Loads
2.	Arun A.	Dr. P.K. Tiwari	Optimal Operating Strategy Of Wind-Pumped Storage Hybrid Plant Considering System Frequency And Energy Level Of PSH Plant Under Competitive Power Market Environment
3.	Papu Rabha	Dr. A.K. Sinha	Comparative Study Of The Methods Of Inclusion Of Synchronized Phasor Measurements In Power System Estimation
4.	Chaw Chuaong Shyam	Dr. A.K. Sinha	Strategic Optimal Allocation Of Phasor Measurement Unit For Full Network Observability
5.	Hareesh Sriramoju	Dr. D.C. Das	FA Based Reactive Power Control Of Wind-Fuel Cell-Diesel Based Isolated Hybrid Power System
6.	Yatin Sharma	Dr. L.C. Saikia	Some Studies On Automatic Generation Control(AGC) OF Multi Area Solar Thermal-Thermal And Solar Thermal-Hydrothermal Power System
7.	Subhendu Kumar Sahoo	Dr. C. Bhattacharjee	Supervisory Control Of Power Management In A Grid Connected Wind-Solar PV-Battery Based Hybrid Generation System
8.	Scion Samantray	Dr. N.B.D Choudhury	Optimal Placement And Sizing Of Facts Controllers Using Multi-Objective Artificial Bee Colony Algorithm
9.	Shijagurumayum Santosh Sharma	Dr. J.P. Mishra	Sliding Mode Power Control Of DFIG Based Variable Speed Wind Energy Conversion System
10.	Shivaraman Mudaliyar	Dr. N. Sinha	Some Studies On Small Signal Stability Analysis Of Solar-Concentrated Ocean Thermal Energy Conversion System
11.	Ujjwal Ghatak	Dr. T. Malakar	Some Studies On Development Of A Fast And Reliable Load Flow Solution Algorithm For Electric Power Distribution System
12.	Jagannath Patra	Dr. A.K. Goswami	Power Quality Assessment And Improvement In Barak Valley
13.	Basant Kumar Sethi	Dr. A.K. Goswami	Design And Implementation Of Single Phase Pure Sine Wave Inverter For Photovolatic Application
14.	Subhash Kumar Mandal	Dr. B.K. Roy	Study On Chaos In Smart Grid, IEEE 14 Bus System And Detection Of Chaos In New Smart Grid Power System
15.	Anirudh Nath	Dr. S. Choudhury	Design And Real-Time Implementation Of Different Fuzzy Logic Control Approaches For A Magnetic Ball Levitation System
16.	Jagannath Samantaray	Dr. B.K. Roy	An Improvement On Sliding Mode Controller Design To Reduce Chattering And Reaching Time
17.	Surajit Suklabaidya	Dr. B.K. Roy	Tip Position Control Of Flexible Manipulator Using Fuzzy Adaptive Sliding Mode Control
18.	Namita Boruah	Mr. L. Seban	Design And Performance Analysis Of Different Controllers For Magnetic Levitation System

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
19.	Bagdevi Moharana	Mr. S. Sahoo	Adaptive Algorithm Based Active Technique For Acoustic Noise Control And Its Performance Analysis
20.	E. Limhachan Kikon	Mr. S. Sahoo	Active Noise Control In A Laboratory Duct
21.	Prabhas Ranjan Naik	Mr. S.K. Pattanayak	Biomechnaical Modeling, Control And Simulation Of Tiger Crab (Scylla Serrata)- A Biomimetic Approach
22.	Pravin Kumar	Mr. P. Roy	Speed Control Of DC Servo Motor By PI And FOPI Controller With Experimental Validation
23.	Rudra Prasad Martha	Mr. L. Seban	Closed Loop Identification And Adaptive Control For Shell And Tube Heat Exchanger
24.	Saurav Chakrabarty	Dr.B.K. Roy	Design And Implementation Of An Automated Fault Detection, Diagnosis And Control For FMCG
25.	Puskar Prakash Arya	Mr. P. Roy	Design Of Controllers Of Fopid Family For Integer Order As Well As Fractional Order Plants
26.	Arvind Kumar Prajapati	Dr. B.K. Roy	An Unknown Input Fault Detection Observer And Fault Tolerant Controller In Presence Of Multiple Sensors And Actuators Fault

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Sanjeet Kunar Sinha	Dr.S. Choudhury	Studies on Carbon Nanotube and Nanowire FET Devices and its application in future VLSI
2.	Santosh Kumar Singh	Dr. N. Sinha Dr. A.K. Goswami	Some Studies on Power System Frequency and Harmonics Estimation Methods based on Digital Signal Processing and Soft Computing Techniques
3.	Puja Dash	Dr. L.C. Saikia Dr. N. Sinha	Some Studies on the Performance of Heuristically Optimized Controllers on Automatic Generation Control of Interconnected Power Systems
4.	Piyush Pratap Singh	Dr. B.K. Roy	Synchronizations of Chaotic Systems, Circuit Design, Simulation and Application

Electronics & Communication Engineering



Academic Staff

Head: Dr. K.L. Baishnab, Ph.D.

Faculty Members

Prof.	Associate Prof.	Assistant Prof.
Prof. F. A. Talukdar, Ph.D.	Mr. P. K. Paul, M.Tech.	Dr. K. L. Baishnab, Ph.D.
Prof. S. Baishya, Ph.D.	Dr. M. Choudhury, Ph.D.	Dr. R. H. Laskar, Ph.D.
	Mrs. M. Paul, M.Tech.	Dr. B. Bhowmick, Ph.D.
		Dr. W. Arif, Ph.D.
		Mr. K. Guha, M.Tech.
		Dr. T. R. Lenka, Ph.D.
		Dr. A. Hossain, Ph.D.
		Mr. R. K. Karsh, M.Tech.
		Mr. G. P. Keshri, M.Tech.
		Dr. B. Basu, Ph.D.
		Dr. T. Khan, Ph.D.
		Dr. S. K. Tripathy, M.Tech.
		Dr. A. Nandi, Ph.D.
		Dr. U. Chakraborty, Ph.D.
		Ms. S. Choudhury, M.Tech. (Contractual)

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

(a) Conducted by Faculty Member: In the Department

Sl. No.	Title	Date	Organizer	Co-ordinator	Funding agency
Self-Sponsored Workshop/ Short term Courses					
1	Two Day Hands-On Workshop On Embedded Systems In The IoT Era	October 12-14, 2015	Deptt. of ECE, NITS	Prof. F.A. Talukdar Dr. K. L. Baishnab Dr. R. H. Laskar	Intel Corporation
2	Hands On Training Programme On VLSI Design (Analog/Digital) Using Cadence Suite/Synopsys	May 11 - June 11, 2015	Deptt. of ECE, NITS	Dr. K. L. Baishnab	Self
3	One Week Self-Financed Short Term Training Program OnMicroelectronics And VLSI Design	March 21-26, 2016	Deptt. of ECE, NITS	Dr. T. R. Lenka	Self
Institute/TEQIP Sponsored					
4	Three Days Workshop On Recent Trends In Microelectronics & MEMS Technologies	April 10-12, 2015	Deptt. of ECE, NITS	Dr. T. Khan	TEQIP-II
5	Three Days Expert Lecture Series In Electronics And Communication Engg.	February 12-14, 2016	Deptt. of ECE, NITS	Dr. T. Khan & Dr. R. H. Laskar	TEQIP-II

(b) In Other Department

Sl.No.	Title	Date	Convener	Funding agency
1	Summer Training On High Performance Computing	June 15 - July 15, 2015	Dr. T. R. Lenka	Self-funding
2	One Week Hands On Training High Performance Computing	March 25-31, 2015	Dr. T. R. Lenka	Self-Funding
3	Four Days Workshop On Multi Agent System And Its Application In Engg.at NIT Silchar with Prof. Rainer Unland From German Was Main Experts	April 01-04, 2016	Dr. W. Arif Dr. A. Midya Mr. R. Patgori	Under the aegis of PMMM-NMTT, Department of Higher Education, GoI and TEQIP-II

(c) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program
1.	Dr. T.R. Lenka	Attended IEEE International Conference on Electron Devices and Solid State Circuits 2015, Singapore, June 1-4, 2015
2.	Dr. K.L. Baishnab	WOSA-2016 March 18 -20, 2016 at New Delhi
3.	Dr. K.L. Baishnab	ZOPP workshop at IISC Bangalore 2015

(d) Faculty Development Program Organized

Sl. No.	Name of Faculty	Details of the Program
1.	Dr. B. Basu Mr. K. Guha	Recent Trends in Microwave and Antenna Technology, DST Sponsored FDP held on May 18-22, 2015

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

MEMS; Semiconductor Device, Modelling and Simulations; Nano Technology; Electronic Circuits; Communication Engg.; Wireless Technologies; Power Electronics; RF & Microwave Engg.; Antenna & Wave Propagation; Applied Electromagnetic; Antenna Array processing; Signal Processing; Speech Processing; Image and Video Processing; Biomedical Signal Processing; Microelectronics & VLSI Design; Ad-hoc & Sensor Networks; Digital System Design; Soft Computing Techniques in Electronics and CommunicationEngg.; Radar Engg. & Radar SignalProcessing; Optoelectronic Materials and Photonics.

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

Completed	Submitted	Ongoing	Left/ Terminated
03	06	49	03

c) Research Lab/ Workshop:

Sl.No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Innovation Lab	To promote Innovation and entrepreneurship
2.	Robotics Lab	To encourage robotics and automation among students to design innovative automated products.
3.	Advanced Communication Lab	For PG and PhD Scholar Research work
4.	VLSI Lab	-Do-
5.	Speech Processing Lab	-Do-
6.	Computational Lab	-Do-
7.	TCAD Lab	-Do-
8.	MEMS Lab	-Do-
9.	DSP Lab	-Do-
10.	Advanced Electronic Circuit lab	-Do-
11.	Antenna & Microwave Lab	-Do-
12.	Wireless communication Lab	-Do-

d) Ongoing/completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Status
1.	NRDC-NITS-IFC	Dr. W. Arif	NRDC, New Delhi	08	Ongoing
2.	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with prototype development	Prof S. Baishya Co-Investigator: Dr. W. Arif	DeitY	110	Ongoing
3.	Investigation of Some Binary Metal Oxide material for Resistive Switching Memory	Prof. F.A. Talukdar	AICTE	18.40	Ongoing
4.	Development of speech based multilevel person Authentication System	Dr. R.H. Laskar	DIT, MHRD	57.93	Completed March 2016
5.	Development of Prototype Video Surveillance System using Face Recognition	Prof. F.A. Talukdar & Dr. R.H. Laskar	BRNS, BARC	24.9	Ongoing
6.	Visvesvaraya Ph.D. Scheme	Dr. K.L. Baishnab (Nodal Officer)	DeitY	300	Ongoing

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Status
7.	VLSI SMDP-C2SD	Dr. K.L.Baishnab (PI) Mr. K. Guha (Co-PI)	DeitY	176	Ongoing
8.	Size Based Cloud Computing	Dr. K.L. Baishnab Co-PI	Deity	Recommended Rs 50 Lacs	
9.	Design and Implementation of Smart Visual System using Analog/ Mixed VLSI	Dr. K.L. Baishnab PI	Deity	Recommended Rs 60 Lacs	

(e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. W. Arif	Springer WPC	01	2015
2.	Dr. W. Arif	SPIN-2015	03	2015
3.	Dr. A. Hossain	Elsevier Journal of Computers & Electrical Engg.	01	2015
4.	Dr. J. Chakraborty	Applied Soft Computing	02	2015
5.	Dr. J. Chakraborty	Defence Science Journal	01	2015
6.	Dr. S.K. Tripathy	International Journal of Electrical Power and Energy Systems	01	2015
7.	Dr. T. Khan	Journal of Electromagnetic Waves and Applications, Taylor and Frances	01	2015
8.	Dr. T. Khan	Journal of The Institution of Engineers (India): Series B	01	2016
9.	Dr. T. Khan	British Journal of Applied Science & Technology	01	2016

(f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Prof. F.A. Talukdar	Delivered expert lecture on Engg. Challenges for Knowledge Era during 48th Engineers Day at IE(I), Silchar Local Centre
2.	Prof. F.A. Talukdar	Delivered expert lecture during National Workshop on Emerging Trends in Information Technology in University Management from 25-27 August, 2015 at NIT Silchar
3.	Prof. F.A. Talukdar	Delivered expert lecture during the workshop on teachers training under PMMM-NMTT at Assam University in January 2016
4.	Prof. F.A. Talukdar	Delivered expert lectures on Accreditation to facultyand students before PG Accreditation visit (two one day event)
5.	Dr. K.L. Baishnab	Delivered expert lecture during the workshop on teachers training under PMMM-NMTT at Assam University in January 2016
6.	Dr. K.L. Baishnab	Delivered expert lecture during the National workshop on Recent trends in Information and Technology in University Management during August 25-27th 2015 at NIT Silchar

PUBLICATIONS

a) International Journal(s)

1. K. Guha, M. Kumar & S. Baishya, (December 2015), A modified capacitance model of RF MEMS shunt switch incorporating fringing field effects of perforated beam,Journal of Solid State Electronics, Elsevier, Vol. 114, , pp. 35–42.

2. A. Ghosh, S. Chakraborty, S. Chattopadhyay, A. Nandi & B. 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), (In Press).

3. Ruchi, A. Nandi & B. Basu, (2015), Design of Beam Forming Network for Time Modulated Linear Array with Artificial Bees Colony Algorithm,International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (Wiley), Vol. 28(5), pp. 508-521.

4. R. Swain, K. Jena & T. R. Lenka, Modeling of forward gate leakage current in MOSHEMT using Trap Assisted Tunneling and Poole-Frenkel Emission, IEEE Trans on Electron Devices.

5. K. Jena, R. Swain & T. R. Lenka, (2016), Effect of thin gate dielectrics on DC, RF and Linearity Characteristics of Lattice-Matched AlInN/AlN/GaN MOSHEMT, IET Circuits, Devices & Systems.

6. B. Shougaijam, R. Swain, C. Ngangbam & T.R. Lenka, Enhanced Photodetection by Glancing Angle Deposited Vertically Aligned TiO2 Nanowires, IEEE Trans. on Nanotechnology.

7. R. Kashyap, T. R. Lenka & S. Baishya, (2016) Distributed Parameter Modeling of Cantilevered d33 Mode Piezoelectric Energy Harvesters, IEEE Transactions on Electron Devices, Vol. 63(3), pp.1281-1287.

8. R. Swain, K. Jena & T.R. Lenka, (2016), Model Development for I-V and Transconductance Characteristics of Normally-off AlN/GaN MOSHEMT, Semiconductors, Vol. 50(3), pp. 384–389,ISSN 1063-7826, Springer.

9. R. Swain, K. Jena & T.R. Lenka, (2016), Modeling of Capacitance and Threshold Voltage for ultra-thin normally-off AlGaN/GaN MOSHEMT, Pramana-Journal of Physics, Springer.

10. K. Jena, R. Swain & T.R. Lenka, (2015), Impact of AlN Spacer on Analog Performance of Lattice-Matched AlInN/AlN/GaN MOSHEMT, Journal of Electronic Materials, pp. 1-6.

11. R. Kashyap, T.R. Lenka & S. Baishya, (2015), A Model for Doubly Clamped Piezoelectric Energy Harvesters with Segmented Electrodes, IEEE Electron Device Letters, Vol. 36(12), pp. 1369 – 1372.

12. K. Jena, R. Swain & T.R. Lenka, (2015), Impact of a Drain Field Plate on the Breakdown Characteristics of AlInN/GaN MOSHEMT, Journal of the Korean Physical Society, Vol. 67(9), pp. 1592-1596.

13. J. Panda, K. Jena, R. Swain & T.R. Lenka, (2015), Modeling on Oxide Dependant 2DEG Sheet Charge Density and Threshold Voltage in AlGaN/GaN MOSHEMT, Journal of Semiconductors.

14. K. Jena, R. Swain & T. R. Lenka, Physics-Based Mathematical Model of 2DEG Sheet Charge Density and DC Characteristics of AlInN/AlN/GaN MOSHEMT, International Journal of Numerical Modeling: Electronic Networks, Devices and Fields.

15. R. Swain, J. Panda, K. Jena & T.R. Lenka, (2015), Modeling of Oxide Dependent 2DEG Sheet Charge Density in AlGaN/GaN MOSHEMT, Journal of Computational Electronics, Vol.14(3), pp. 754-761.

16. R. Swain, K. Jena & T.R. Lenka, (2015), Interface DOS Dependent Analytical Model Development for DC Characteristics of Normally-off AlN/GaN MOSHEMT, Superlattices and Microstructures, Vol. 84, pp.54-65.

17. K. Jena, R. Swain & T.R. Lenka, (2015), Modeling and Comparative analysis of DC characteristics of AlGaN/GaN HEMT and MOSHEMT devices, International Journal of Numerical Modeling: Electronic Networks, Devices and Fields, Wiley.

18. K. Jena, R. Swain & T.R. Lenka, (2015), Impact of barrier thickness on gate capacitance—Modeling and Comparative analysis of GaN based MOSHEMTs, Journal of Semiconductors, Vol. 36, Issue 3:034003-5.

19. K. Jena, R. Swain & T.R. Lenka, (2015), Impact of oxide thickness on gate capacitance—Modeling and Comparative Analysis of GaN based MOSHEMTs, Pramana-Journal of Physics, Springer.

20. A.Baidya, V. Krishnan, S. Baishya & T.R. Lenka, (2015), Effect of Thin Gate Dielectrics and Gate Materials on Simulated Device Characteristics of 3D Double Gate JNT, Superlattices and Microstructures, Vol. 77,pp. 209–218.

21. D. Pandey & T.R. Lenka, (2015), A Model Predicting Sheet Charge Density and Threshold Voltage with dependence on Interface States Density in LM-InAlN/GaN MOSHEMT, Semiconductors, Vol. 49(4), pp. 513–518.

22. J. Singha & R.H. Laskar, (2015), ANN-based hand gesture recognition using self co-articulated set of features, IETE Journal of Research, Taylor & Francis, 1-12.

23. K. Dharavath, F.A. Talukdar & R.H. Laskar, (2015), Performance Analysis of PCA-based techniques for face authentication, Vol. 9(1), pp. 3299-3306.

24. R.K.Karsh, R.H. Lakshar & Aditi, (2015), Roubst Image Hash Based on Radon Transform and Markov Absorption Probability, Wulfenia Journal, (accepted).

25. T. Khan & A. De, (2015), Modeling of Microstrip Antennas Using Neural Networks Techniques; A Review, Wiley's International Journal of RF and Microwave Computer-Aided Engg., Vol. 25(9), pp. 447-457.

26. T. Khan & A. De,Prediction of Slot-Shape, Slot-Size and Inserted Air-Gap of a Microstrip Antenna using Knowledge-Based Neural Network, Progress In Electromagnetic Research (PIER) C (Accepted).

27. P.K.Paul, K.L.Baishnab, N.M. Laskar & F.A.Talukdar,(2015), Particle Swarm Optimization in Designing of High Slew Rate and Improved resolution CMOS Winner-Take-All (WTA) Circuit Suitable for Attention Shift,Simulation Modelling Practice and Theory, Elsevier Journal.

28. N.M. Laskar, P.K. Paul, S. Nath, K.L. Baishnab, (2015), Optimizing the transient performance of an Inverter design using Swarm Intelligence based techniques,International Journal of Swarm Intelligence, Inderscience.

29. B. Das, R. Goswami & B. Bhowmick, (2015), A Physics Based Potential and Electric Field Model of a Nanoscale Rectangular High-K Gate Dielectric HEMT, Pramana Journal of Physics, (in Press).

30. B. Bhowmick, R.Goswami & B.Das, (2015), A mathematical model and an algorithm for transmission in single rectangular potential barriers, International Journal of Pure and Applied Mathematics, Vol. 101(5),pp. 605-615.

31. R. Goswami, P.K. De & B. Das, Study of Some Properties of Whole Numbers, International Journal of Computer Applications, Vol. 112(16), pp. 4-9.

32. S. Chander, B. Bhowmick & S. Baishya, (2015), Heterojunction fully depleted SOI-TFET with oxide/source overlap, Superlattices Microstruct,Vol. 86, pp. 43–50.

33. R. Goswami, B. Bhowmick & S. Baishya, (2015), Electrical noise in circular gate TFET in presence of traps, Superlattices Microstruct, Vol. 86, pp. 342-354.

34. R. Gowami, B. Bhowmick & S. Baishya, Effect of Scaling on Noise in Circular Gate TFET and its Application as a Digital Inverter, Microelectronics Journal,Elsevier, (in press).

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

36. R. Gowami, B. Bhowmick & S. Baishya, (February 2016), Physics-based surface potential, electric field and drain current model of a Si(1-x)Gex Gate-Drain Underlap Nanoscale n-TFET, International Journal of Electronics, Taylor & Francis, (In press).

37. R. Kumar, Ch. Anandini & F.A. Talukdar, Design of 5.5GHz Linear Low Noise Amplifier using Post Distortion Technique with Body Biasing, Microsyst Technol, Springer.

38. D. Krishna, F.A. Talukdar & R.H. Laskar, Improving face recognition rate with image Preprocessing, Indian Journal of Science and Technology, Vol. 7(8), pp. 1170–1175.

39. D. Krishna, F.A. Talukdar & R.H. Laskar, Performance Analysis of PCA Based Techniques for Face Authentication, Canadian Journal of Pure and Applied Sciences.

40. N. P. Maity, R. Maity, R.K. Thapa & S. Baishya, (2015), Image Force Effect on Tunneling Current for Ultra-Thin High-K Dielectric Material Al2O3 Based Metal Oxide Semiconductor Devices,Journal of Nanoelectronics and Optoelectronics, Vol. 10(5), pp. 645-648.

41. R. Kumar, F.A. Talukdar & N. Dey, Quality Factor Optimization of Spiral Inductor using Firefly Algorithm and its Application in Amplifier, International Journal of Advanced Intelligence Paradigms.

42. R. Kumar & F.A. Talukdar, Optimization of 5.5 GHz CMOS LNA Parameters using Firefly Algorithm, Neural Computing and Applications.

43. Ch. Anandini, R. Kumar & F.A. Talukdar, A Review on the Low Noise Amplifier for Wireless Application, International Journal of Computer Application, Micro- 2015, pp. 11-17.

44. R. Kumar, Ch. Anandini & F.A. Talukdar, (2015), Optimization of 5.5 GHz Inductive Source Degeneration LNA using Multi-Objective PSO, Journal of Scientific Research and Development, Vol. 2 (12),pp. 19-23.

45. Ch. Anandini, R. Kumar & F.A. Talukdar, (2015), Noise Optimization of 6 GHz Inductive Source Degeneration LNA using PSO, Journal of Scientific Research and Development, Vol. 2 (12), pp. 33-38.

46. K. Guha, M. Kumar, S. Agarwal & S. Baishya, (2015), A modified capacitance model of RF MEMS shunt switch incorporating fringing field effects of perforated beam, Solid State Electronics, Vol. 114, pp. 35-42.

47. N. P. Maity, R. Maity, R.K. Thapa & S. Baishya, (2015), Image Force Effect on Tunneling Current for Ultra Thin High-K Dielectric Material Al2O3 Based Metal Oxide Semiconductor Devices, Journal of Nanoelectronics and Optoelectronics, Vol. 10(5), pp. 645-648.

48. S.K. Gupta & S. Baishya, (2015), Analog and RF Performance Analysis of a Junctionless Electrically Induced Source/ Drain Extension Cylindrical Surround Gate (JLET-CSG) MOSFET, Journal of The Institution of Engineers (India): Series B, Vol. 96(3), pp. 211-216.

49. R. Goswami, B. Bhowmick & S. Baishya, (2015), Electrical noise in Circular Gate Tunnel FET in presence of interface traps, Superlattices and Microstructures, Vol. 86, pp. 342-354.

50. K. Guha, M. Kumar, S. Agarwal & S. Baishya, (2015), A modified capacitance model of RF MEMS shunt switch incorporating fringing field effects of perforated beam, Solid State Electronics, Vol. 114, pp. 35-42.

51. S. Chander, B. Bhowmick & S. Baishya, (2015), Heterojunction fully depleted SOI-TFET with oxide/source overlap, Superlattices and Microstructures, Vol. 86, pp. 43-50.

52. W. Arif, S. Hoque, D. Sen & S. Baishya, A Comprehensive Analysis of Spectrum Handoff under Different Distribution Models for Cognitive Radio Networks, Wireless Personal Communications.

53. S. Chander & S. Baishya, (2015), A Two-Dimensional Gate Threshold Voltage Model for a Heterojunction SOI-Tunnel FET With Oxide/Source Overlap, IEEE Electron Device Letters, Vol. 36(7), pp. 714-716.

54. K. Guha, M. Kumar, A. Parmar & S. Baishya, Performance Analysis of RF MEMS Capacitive Switch with Non Uniform Meandering Technique, Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems,(available online).

55. N. P. Maity, R. R. Thakur, R. Maity, R. K. Thapa & S. Baishya, (2015), Analysis of Interface Charge Using Capacitance-Voltage Method for Ultra Thin HfO2 Gate Dielectric Based MOS Devices, Procedia Computer Science Journal, Elsevier.

56. N.P. Maity, R. R. Thakur, R. Maity, R.K. Thapa & S. Baishya, (2015), Interface Charge Density Measurement for Ultra Thin ZrO2 Material Based MOS Devices Using Conductance Method, Procedia Computer Science Journal, Elsevier.

57. R. Maity, R. K. Thapa & S. Baishya, (2015), Analytical Characterization and Simulation of a 2-D Capacitive Micromachined Ultrasonic Transducer Array Element, Journal of Computational and Theoretical Nanoscience, (SCI-E).

58. R. Maity, N. P. Maity, R. K. Thapa & S. Baishya, (2015), Analysis of Frequency Response Behaviour of Capacitive Micromachined Ultrasonic Transducers, Journal of Computational and Theoretical Nanoscience. (SCI-E).

59. N.P. Maity, R. Maity, R. K. Thapa & S. Baishya, (2015), Effect of Image Force on Tunneling Current for Ultra Thin Oxide Layer Based MOS Devices, Nanoscience and Nanotechnology Letters (NNL), Vol. 7(4), pp. 331-333, (SCI-E).

60. A. Baidya, V. Krishnan, S. Baishya & T. R. Lenka, (2015), Effect of thin gate dielectrics and gate materials on simulated device characteristics of 3D double gate JNT, Superlattices and Microstructures, Vol. 77, pp. 209-218.

61. W. Arif, S. Debnath & S. Baishya, (June 2015), Optimization of secondary user capacity in Dual Threshold Scheme in Cognitive Radio Using Evolutionary Algorithm,International Journal of Innovations in Engg. and Technology, Vol. 5(3), pp. 215-224, ISSN: 2319 – 1058.
62. W. Arif, S. Haque, D. Sen & S. Baishya, A Comprehensive Analysis of Spectrum Handoff Under Different Distribution Models for Cognitive Radio Networks, Wireless Personal Communications.
63. P.K. Paul, N.M. Laskar, S. Nath & K.L. Baishnab, (2015), Performance Analysis of new Swarm Intelligence based Algorithms in optimizing the design of CMOS Folded Cascode OPAMP and Comparator Circuits,International Journal of Applied Engg. Research.
64. P.K. Paul, N.M. Laskar, S. Nath & K.L. Baishnab, (2016), CMOS Inverter design Optimization using Swarm Intelligence based techniques, International Journal of Electronics (SCI).
65. P.K. Paul, N.M. Laskar, S. Nath, K.L. Baishnab & S. Debnath, (2016), Human Behaviour based PSO and PSO with Ageing Leaders and Challengers based Analog Circuit Sizing, IET Circuits, Devices & Systems (SCI).
66. C.L. Singh, K.L. Baishnab & Ch. Anandini, (2016), Flicker noise minimization of a CMOS common-source stage amplifier using HBPSO algorithm,Microsystem Technologies, Springer Hidelberg, Germany (SCI indexed).

b) International Conference(s)

1. T.K. Das, S. Misra, S.P. Choudhury, D.K. Sah, U. Baruah & R.H laskar, "Comparison of DTW Score and Warping path for Text Dependent Speaker Verification System", IEEE International Conference Circuit, Power And Computing Technologies (ICCPCT - 2015), 2015, Tamilnadu, India.
2. S. Misra, T.K. Das, P. Saha, U. Baruah & R.H. Laskar, "Comparison of MFCC and LPCC for a fixed phrase speaker verification system, time complexity and failure analysis", IEEE International Conference Circuit, Power And Computing Technologies (ICCPCT - 2015), 2015, Tamilnadu, India.
3. S.P. Choudhury, T.K. Das, R.H. Laskar, P. Saha & U. Baruah, "Comparative Analysis of Two Different System's Framework for Text Dependent Speaker Verification", IEEE International Conference Circuit, Power And Computing Technologies (ICCPCT - 2015), 2015, Tamilnadu, India.
4. S.P. Choudhury, S. Misra, T.K. Das & R.H. Laskar, "Text Dependent Speaker Verification using Algebraic Approach (AA) method and DTW under limited data condition", International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS - 2015), 2015, Coimbatore. Tamil Nadu, India.
5. S.P. Choudhury, N. Shome, S. Misra, T.K. Das & R.H. Laskar, "Effects of fuzzy parameter on text dependent speaker verification under uncontrolled noisy environment", Global Conference on Communication Technologies (ICCT-2015), Tamil Nadu, India.
6. S. Misra, T.K. Das, S.P. Choudhury & R.H. Laskar, "Choosing optimal value for fuzzy membership in FCM algorithm for LP-residual input features", Eleventh International Multi Conference on Information Processing (IMCIP – 2015), Science Direct, 2015, Bangalore, India.
7. A. Roy & R.H. Laskar, "Impulse Noise removal based on SVM Classification", TENCON Region 10th Conference, IEEE, Macau, 2015.
8. S.S Devi, R. Kumar & R.H. Laskar, "Recent Advances on Erythrocyte Image segmentation for Biomedical Applications", Proceedings of Fourth International Conference on Soft Computing for Problem Solving, Springer, 2015, pp. 353-359.
9. R. K. Karsh & R.H. Laskar, "Perpetual robust and secure image hashing using ring partition - GNMF", TENCON Region 10 Conference, IEEE, Macau, 2015.
10. S.K. Tripathy & G. Sahu, "Ground state properties of LiNbO3 from first principles calculations", 4th National Conference on Advanced Materials and Radiation Physics (AMRP 2015), SLIET, Longowal, March 13-14, 2015, American Institute of Phys. AIP Conf. Proc. 1675, (2015) 020005.

11. B. P. Singh, V. Kumar & S.K. Tripathy, "Optical properties and phonon calculation of wurtzite GaN from first-principle calculations", 4th National Conference on Advanced Materials and Radiation Physics (AMRP 2015), SLIET, Longowal, March 13-14, 2015, American Institute of Phys. AIP Conf. Proc. 1675, (2015) 030046.
12. R. Sen, N.M. Laskar, P.K Paul & K.L Baishnab, "Optimization of Interconnect Delay based on Convex Optimization Technique", ICIIECS-15 Karpagam College Of Engg.,Coimbatore.
13. N.M. Laskar, R. Sen, P.K Paul & K.L Baishnab, "A Survey On VLSI Floorplanning: Its Representation And Modern Approaches Of Optimization", ICIIECS-15 Karpagam College Of Engg.,Coimbatore.
14. B. Sinha, N.M. Laskar, R. Sen & K.L Baishnab, "Heuristics In Physical Design Partitioning", ICIIECS-15 Karpagam College Of Engg., Coimbatore.
15. N.M. Laskar, P.K.Paul, S. Nath & K.L.Baishnab, "Investigating the switching performance of an inverter design using the new HBPSO", CCEEDS-15 Sri Sunflower College Of Engg. and Technology, Lankapalli (Vijayawada)-521126, Krishna Dist., A.P., India.
16. N.M. Laskar, P.K. Paul, B. Sinha, K.L Baishnab & S. Nath,"Evolvable Hardware Design of Digital Circuits using the new Human Behavior Based Particle Swarm Optimization", CCEEDS-15 Sri Sunflower College Of Engg. and Technology, Lankapalli (Vijayawada)-521126, Krishna Dist., A.P., India.
17. P.K. Paul, K.L.Baishnab, S. Nath, N.M. Laskar, "Drosophila Food Search algorithms for High Resolution Loser-Take-All (LTA) VLSI circuit for compression", CCEEDS-15 Sri Sunflower College Of Engg. and Technology, Lankapalli (Vijayawada)-521126, Krishna Dist., A.P., India.
18. R. Haldar, K. Guha & S. Baishya, "Effect on Pull-in Voltage and Current in NEMFET by Scaling Channel Length" IEEE TENCON 2015 Conference in Macau.
19. P. Chakrabarty, K. Guha & S. Baishya, "Performance Analysis of 3D Flexure FET with Meandering Gate for Higher Sensitivity" IEEE TENCON 2015 Conference, Macau.
20. M. Kumar, K. Guha, S. Nath, A. Dutta, R. Rabha & S. Baishya, "Static and Electromagnetic Analysis of RF MEMS Shunt Capacitive Switch" IEEE TENCON 2015 Conference in Macau.
21. S. Agarwal, M. Kumar, K. Guha & S. Baishya, "RF Analysis of MEMS Shunt Capacitive Switch with Gold and Aluminum Beam", Proc. IEEE Sponsored International Conference on Advancesin Computer Engg.and Applications - 2015, Ghaziabad, Uttar Pradesh, India, 2015; Publisher: IEEE; Page(s):267 – 271.
22. P. Chakrabarty, K. Guha, G. Krishna & S. Baishya, "Comparative Analysis of 3D Flexure Gate FET with Different Metal and Gate Structure", Proc. IEEE Sponsored 2nd International Conference on Innovations in Information Embedded and Communication Systems, Karpagam College of Engg., Coimbatore, Tamil Nadu, India, 2015.
23. A. Ghosh, S. Chakraborty, S. Chattopadhyay, R. Guha, A. Nandi & B. Basu, "Rectangular Microstrip Antenna with Cross Headed Dumbbell Defected Patch Surface for Improved Polarization Purity," 2nd International Conference on Microwave and Photonics (ICMAP-2015), 2015, Dhanbad, India.
24. B. Shougaijam, R. Swain, C. Ngangbam & T.R. Lenka, "Enhanced Visible Light Detection by Vertically Aligned TiO2 Nanowires using Glancing Angle Deposition Technique," Abstract proceedings of IWPSD 2015, pp. 283, 2015.
25. R. Swain & T.R. Lenka, "Comparative study of critical barrier thickness for normally-off GaN-MOSHEMTs," Abstract proceedings of IWPSD 2015, pp.578, 2015.
26. K. Jena & T.R. Lenka, "Influence of AlN Spacer Layer on Electrical Characteristics of Lattice-Matched AlInN/AlN/GaN MOSHEMT," Abstract proceedings of IWPSD 2015, pp.579, 2015.
27. R. Swain, T.R. Lenka, "Investigation of Critical Barrier Thickness in LM-InAlN/GaN MOSHEMT towards Normally-off Operation," IEEE TENCON 2015, 2015, Holiday Inn, Sands Cotai Central Macau.

28. A.Baidya, T.R. Lenka, S. Baishya, "Performance analysis and improvement of nanoscale double gate Junctionless based inverter using high-k gate dielectrics," IEEE TENCON 2015, 2015, Holiday Inn, Sands Cotai Central Macau.
29. R. Swain, K. Jena, T.R. Lenka, G.N. Dash, A.K. Panda, "DC & RF Characteristics of normally-off AlN/GaN MOSHEMT by varying Oxide Thickness", IEEE International Conference on Electron Devices and Solid State Circuits 2015, Singapore, 2015.
30. R. Swain & T.R. Lenka, "Normally-off Al0.25Ga0.75N/GaN MOSHEMT with Stack Gate Dielectric Structure", IEEE International Conference on Electron Devices and Solid State Circuits 2015, Singapore, 2015.
31. S. Mitra, R. Goswami & B. Bhowmick "Optimization and Scaling of a SOI TFET with Back Gate Control", Proceedings of International Conference Recent Developments on Control, Automation and Power Engg. (IEEE), Noida, India, 2015.
32. S. Mitra, R. Goswami & B. Bhowmick, "A Dual Dielectric Step-Gate SOI n-Tunnel FET," Proceedingsof 2ndInternational Conference on Electrical, Electronics, Engg. Trends, Communication, Optimization and Sciences (E3COS),AP, India, 2015.
33. R. Pegu, R. Goswami, B. Bhowmick & M. Choudhury, "Optimization and Modelling of Electrical Characteristics of 3D Gate all around Silicon nano wire MOSFET with tri-material gate and comparison with conventional MOSFET", Proceedings of 1stInternational Conference on Computing, Communication, Electrical, Electronics, Devices and Signal Processing, AP, India, 2015.
34. R. Kumar, F.A. Talukdar & Ch. Anandini, "Modeling and Optimization of CMOS Spiral Inductor", accepted in IEEE 2nd International conference on Microelectronics, Circuit & Systems Micro-2015.
35. R. Kumar, Ch. Anandini & F.A. Talukdar, "Linearity analysis and optimization of 5.5 GHz Inductive Source Degeneration Low Noise Amplifier", accepted in IEEE 1stInternational Conference on Nano-electronics, Circuits & Communication Systems NCCS-2015.
36. D. Krishna, F.A. Talukdar & R.H. Laskar, "Facial image processing in conjunction with password for intelligent access control", IEEE TENCON, IEEE, 2015.
37. R. Kumar, Ch. Anandini & F.A. Talukdar, "Optimization of 5.5 GHz Inductive Source Degeneration LNA using Multi-Objective PSO", accepted in International Conference on Electrical, Mechanical and Industrial Engg. ICEMIE 2015.
38. R. Kumar, Ch. Anandini & F.A. Talukdar, "Linearity Optimization of 5.5 GHz Inductive Source Degeneration LNA using PSO", accepted in IEEE 1st International Conference on Nano-electronics, Circuits & Communication Systems NCCS-2015.
39. Ch. Anandini, R. Kumar & F.A. Talukdar, "Noise Optimization of 6 GHz Inductive Source Degeneration LNA using PSO", accepted in International Conference on Electrical, Mechanical and Industrial Engg. ICEMIE 2015.
40. Ch. Anandini, F.A. Talukdar & R. Kumar, "RF CMOS Low Noise Amplifier-A Review", accepted in IEEE 2nd International conference on Microelectronics, Circuit & Systems Micro-2015.
41. R. Kumar, F.A. Talukdar, N. Dey & V.E. Balas, "Histogram Thresholding in Image Segmentation: A Joint Level Set Method and Lattice Boltzmann Method based Approach", accepted in International Conference on Information Technology and Intelligent Transportation Systems, China 2015 Springer Proceeding.
42. R. Kumar, A. Sarkar & F.A. Talukdar, "Integrated Edge Region based active contour using texture information", accepted in CCEEDS 2015.
43. D. Mandal, Kurumendra, M. Paul, "Dependency of wavelength of CdSe, ZnS and GaAs Quantum Dots on Dot Radius: Quantum Confinement Effect," International Conference on Electrical, Electronics, Signal Communication and Optimization, India, 2015.

44. D. Mandal & M. Paul, "Eigen energy and wave function calculation of Quantum dot in tigh binding mode," 2nd International Conference on Nanotechnology, India, 2015.

45. W. Arif, S. Hoque, D. Sen, S. Baishya & A. Chaubey, "Sensing Time Minimization using Pipelining in Two Stage Spectrum Sensingfeasibility ," in proceeding of 2nd International Conference on Signal Processing and Integrated Networks (SPIN), 2015, pp. 359-365, 2015, Noida, India.

46. S. Agarwal, M. Kumar, K. Guha & S. Baishya, "RF Analysis of MEMS Shunt Capacitive Switch with Gold and Aluminium Beam," in Proceeding of the International Conference on Advances in Computer Engg. and Applications – 2015, pp. 267-271, March 2015, Ghaziabad, India.

c) Book/Chapter

1. Mousam Chatterjee, Arnab Nandi & Banani Basu, (2015), Performance of Incremental Redundancy-Based Data Transmission in Randomly Deployed Wireless Sensor Network, Springer Publication.

2. Prof. F.A. Talukdar, Jyotsna Rani, Ram Kumar & Nilanjan Dey, (2015), Recent Advances in Applied Thermal Imaging for Industrial Applications, IGI Global Publication.

3. Ram Kumar,Sweta Rani, Abahan Sarkar &F.A.Talukdar, (2015), Classification and Clustering in Biomedical Signal Processing, IGI Global Publication.

CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1.	NMEICT'T10K'	NMEICT	Rs.40,000.00

MAJOR EQUIPMENT ACQUIRED

Dell Precision T1700, P2213t (for VLSI Lab); Tanner (Software)

VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1.	Prof. F.A. Talukdar	Intel 2015 Embedded Research and Education Summit	Chandler, AZ, USA	March 2015
2.	Dr. T.R. Lenka	Attended IEEE International Conference on Electron Devices and Solid State Circuits2015	Singapore	June 1-4, 2015
3.	Prof. S. Baishya	TENCON 2015 IEEE Region 10 Conference	Macau	November 1-4, 2015
4.	Dr. R.H. Laskar	TENCON 2015 IEEE Region 10 Conference	Macau	November 1-4, 2015
5.	Mr. K. Guha	TENCON 2015 IEEE Region 10 Conference	Macau	November 1-4, 2015
6.	Mr. R.K. Karsh	TENCON 2015 IEEE Region 10 Conference	Macau	November 1-4, 2015

M.TECH. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
(Microelectronics & VLSI Design)			
1.	Godugu Kalyana Chakravarthy	Dr. K.L. Baishnab	Flipped Voltage Follower based High Performance Current Mirror
2.	Jiban Mohan Jamatia	Dr. K.L. Baishnab	VLSI Cell Placement Optimization Using Humpback Whale and Echolocation Based Algorithms
3.	Bokinala Kiranmayi	Dr. K.L. Baishnab	Convex Optimization: A Heuristic Approach To Routing Optimization in VLSI Physical Design
4.	Krishan Kumar	Dr. B. Bhowmick	Optimization of Field Plated High-K Gate Dielectric AlGAN/GaN HEMTs for high power applications.
5.	Aatish Kumar	Dr. B. Bhowmick	Modeling and simulation of AlGaN/GaN High electron mobility transistors with P-GaN cap layer and AlGaN Buffer layer.
6.	Prashant Singh	Dr. B. Bhowmick	Dual Metal Dual Dielectric based Source Gate overlap and Gate Drain Underlap TFET: Optimization and modeling of electrical parameters.
7.	Gunturi Praveen	Prof. S. Baishya	Comparative study between QFinFET and Trigate FinFET and Threshold Voltage Modeling of Heterojunction Tunnel FinFET with Source Overlap
8.	Himangshu Jyoti Gogoi	Mr. K. Guha	Static and Dynamic analysis of MEMS shunt switch.
9.	Ananta Kumar Borah	Mr. K. Guha	Modelling and Analysis of Noise in RF MEMS Switch Considering Beam Perforation Effect.
10.	Subhabrata Nath	Mr.K. Guha	Design and Analysis of Rayleigh Surface Acoustic Wave (RSAW) Sensor
(Communication & Signal Processing Engg.)			
1.	Saharul Alom Barlaskar	Dr. R.H.Laskar	A study on text-dependent speaker verification system with emphasis on spectral features and different Modeling techniques
2.	Deepak Agrawal	Dr. W. Arif	Study and Modelling of OSDMA_S with MIMO and Massive MIMO Architecture for 5G Communication Technology
3.	Abhishek Kumar Singh	Dr. A. Hossain	Study and Analysis of Efficient Deployment Strategies of Sensor Nodes in Wireless Sensor Network
4.	Sushmita Singh	Dr. B. Basu	Design & Analysis of Microstrip Patch Antenna Array using Pin Diode Switches
5.	Manish Sharma	Dr. R.H. Laskar	Automatic Malarial parasite Detection Based on the Segmentation of Microscopic Blood Smear Images
6.	Niraj Kumar	Dr. A. Hossain	Square Sector Based Clustering Hierarchy (SSBCH) Protocol for Clustered Homogenous WSNs
7.	Nirupam Shome	Dr. R. H. Laskar	A Study on Different Pre-Processing Techniques Applied to Text-Dependent Speaker Verification System
8.	Arcade Nshimiyimana	Dr. W. Arif	Investigation of clustering techniques and analysis of throughput for vehicular communication in 5G
9.	Mohd Azmal	Dr. W.Arif	Study and Modelling of User Mobility on Spectrum Handoff in Cognitive Radio Networks
10.	Chandan Roy	Dr. T. Khan	SVM Modeling for Performance Parameters Computation of Efficient Microstrip Antennas
11.	Kirtan Gopal Panda	Dr. A. Hossain	A Novel Clustering By Affinity Propagation in MIMO Based Wireless Sensor Network.
12.	Debajyoti Datta	Dr. W. Arif	Modelling and Analysis of Spectrum Handoff in Cognitive Radio Networks

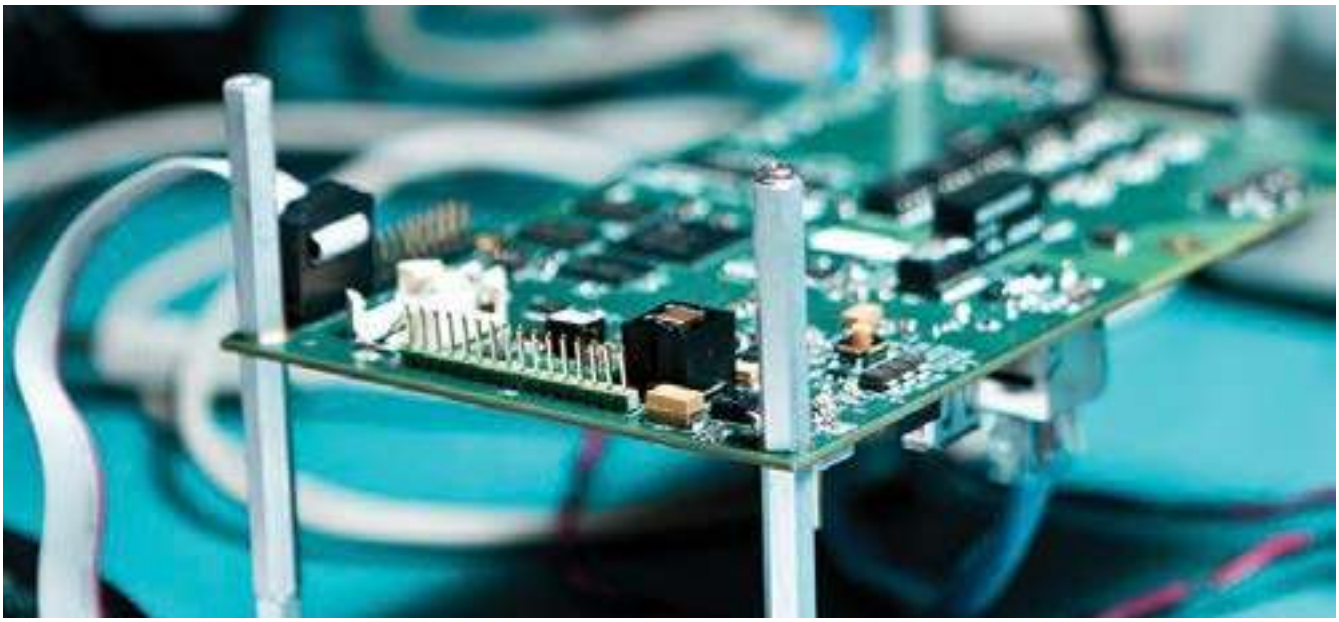
Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
Awarded			
1.	Wasim Arif	Prof. S. Baishya	Comprehensive study and modeling of Spectrum Sensing and mobility issues in Cognitive Radio
2.	Niladri Pratap Maity	Prof. S. Baishya	Analysis of Tunneling Current and interface charge density for ultra high-k MOS Transistors
3.	Reshmi Maity	Prof. S. Baishya	Modeling and FEM Simulation of capacitive Micro machined ultrasonic Transducers
Submitted			
4.	P.K. Paul	Dr. K.L. Baishnab	Optimization in VLSI Circuits
5.	Koushik Guha	Prof. S. Baishya	Design and Analysis of RF MEMS Switch for low actuation voltage and high capacitance ratio
6.	Sweta Chandar	Prof. S. Baishya	Modeling & Simulation of Tunnel FET
7.	J. Singha	Dr. R.H. Laskar	Dynamic Hand Gesture Recognition system under varying practical scenarios for Human-Computer Interaction
8.	K. Jena	Dr. T.R. Lenka	Modeling and Simulation of ALIN/ALN/GaN MOSHEMT for High Power & High Frequency Electronics
9.	R. Swain	Dr. T.R. Lenka	Modeling & Simulation of ALGaN/GaN MOSHEMT for Power Electronic application
Ongoing			
10.	C. Anandini Devi	Prof. F.A. Talukdar	Design of Low Noise Amplifier
11.	D. Krishna	Prof. F.A. Talukdar & Dr. R.H. Laskar	Study on some key issues in face recognition for intelligent access control systems under practical scenarios
12.	Amarnath Gaini	Dr. T.R. Lenka	Modeling & Simulation of InAIN/GaN MOSHENT for THz frequency applications
13.	S.S. Devi	Dr. R.H. Laskar	Automatic malaria detection in microscopic images of blood smear
14.	R.K. Karsh	Dr. R.H. Laskar	Signal Processing
15.	R. Kashyap	Prof. S. Baishya & Dr. T.R. Lenka	MEMS Energy Harvester
16.	S. Debnath	Dr. A. Hossain	Wireless Sensor Network
17.	S.M. Chowdhury	Dr. A. Hossain	Wireless Sensor Network
18.	Achintya Baidya	Prof. S. Baishya & Dr. T.R. Lenka	Modeling & Simulation of Junctionless Transistors
19.	G. Prasad	Dr. A. Hossain	Wireless Sensor Network
20.	Nivedita Biswas	Prof. F. A. Talukdar	Cognitive Radio

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
21	Ram Kumar	Prof. F. A. Talukdar	Optimization of Linearity of Low Noise Amplifier
22.	Barnali Dey	Dr. A. Hossain	Development of Soft Computing platform for the solutions of Spectrum Sensing problem for CR System & CR networks
23.	Chuya C. Bhanja	Dr. R.H. Laskar	Pre-classification based automatic language and dialect identification for world and North-east Indian languages
24.	Biraj Shougaijam	Dr. T. R. Lenka	Growth and characterization of TiO2 thin films and nanowires for Opto-Nanoelectronic Applications
25.	Rinku Rabidas	Dr. J. Chakraborty	Detection of abnormalities in mammograms
26.	Amarjit Roy	Dr. R. H. Laskar	Design and implementation of different de-noising algorithms for removal of noise from digital images
27.	Ashim Jyoti Gogoi	Dr. K. L. Baishnab	Optimization of sensing parameter in Cognitive Radio Network
28.	C. Lison Singh	Dr. K. L. Baishnab	Automated design of an analog circuit
29.	Rupam Goswami	Dr. B. Bhowmick	Studies of Gate-Engineered and Bandgap-Engineered TFETs for low power applications
30.	Ritwik Haldar	Dr. A. Hossain	WSN-HEAP
31.	Mohiul Islam	Dr. R. H. Laskar	Robust Digital Image watermarking scheme for ownership verification of digital images
32.	Rajashree Das	Prof. S. Baishya	Simulation and modelling of electrical characteristics of SOI FinFETs
33.	M. Krishnasamy	Dr. T. R. Lenka	MEMS based energy harvesters
34.	Sounik Kiran Kumar Dash	Dr. T. Khan	Dielectric Resonator Antenna
35.	Suman Kumar Mitra	Dr. B. Bhowmick	MEMS for Biomedical Application
36.	Ms. Pratistha Brahma	Dr. B. Basu	Antenna Array Optimization
37.	Ms. Songhita Misra (under Vis.Ph.D.scheme)	Dr. R. H. Laskar	Dynamic Hand Gesture Recognition
38.	Manir Ahmed (under Vis.Ph.D.scheme)	Dr. R. H. Laskar	Multiview automatic face recognition
39.	Md. Azharuddin Laskar	Dr. R. H. Laskar	Speaker verification with emphasis on application based featurization and modelling
40.	Abhishek Majumder (under Vis.Ph.D.scheme)	Dr. K. L. Baishnab	Security and optimization in Cloud Computing
41.	Naorem Yaipharenba Meitei	Dr. K. L. Baishnab	Thermal aware physical design for 3D ICs

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
42.	Shanidul Hoque	Prof. S. Baishya	Modelling and simulation of Spectrum Handoff in Cognitive Radio Networks (CRNs)
43.	Bhargab Sinha	Dr. K. L. Baishnab	Optimization of Routing in VLSI Physical Design
44.	Arifa Ahmed	Dr. K. L. Baishnab	Routing in Wireless Sensor Network
45.	Rajeev Kumar	Dr. A. Hossain	Multi-Hop relay based Wireless Communication
46.	Boddu Prashanth Kumar	Dr. B. Bhowmick	Modelling and simulation of Schottky barrier MOSFET
47.	Rajesh Saha	Prof. S. Baishya	Statistical study on Work Function Variation and Analytical Modelling of FinFETf
48.	Abhijyoti Ghosh	Dr. B. Basu	Antenna Design and Optimization
49.	Jayendra Kumar	Dr. B. Basu	Reconfigurable antenna for Cognitive Radio(CR)
50.	Deepak Kumar Panda	Dr. T. R. Lenka	Verilog-A based Modeling and simulations of AlGaN/GaN HEMT for RF IC Design
51.	Soumya Ranjan Routray	Dr. T. R. Lenka	Modelling and simulation of high efficiency GaN based Solar Photovoltaic Cell for terrestrial applications
52.	Paramita Sarkar	Dr. K. L. Baishnab	Analog Circuit Optimization
53.	Abhigyan Ganguly	Dr. M. Choudhury	Nano Technology
54.	Samineni Peddakrishna	Dr. T. Khan	Electromagnetic Bandgap Structures
55.	Ashish Pandey	Dr. A. Nandi	Optimization in Wireless Sensor Networks
56.	Amiya Dey	Dr. A. Nandi	Studies on Adaptive Beamforming Smart Antennas for Spread Spectrum Communications

Electronics & Instrumentation Engineering



Academic Staff

Head: Dr. S.H. Laskar, Ph.D. (from 01.04.2015 to 11.01.2016)

Dr. R. Dasgupta, Ph.D. (from 12.01.2016 to till date)

Faculty Members

Associate Prof.	Assistant Prof.
Dr. S.H. Laskar, Ph.D.	Dr. R. Dasgupta, Ph.D.
	Dr. A. Midya, Ph.D.
	Dr. A.K. Sunaniya, Ph.D.
	Dr. M. Khanra, Ph.D.
	Ms. J. Hazarika, M.Tech.
	Mr. L. Seban, M.Tech.
	Mr. S. Sahoo, M.Tech.
	Mr. K. Mondal, M.Tech. (Contractual)
	Mr. T. Bachhar, M.Tech. (Contractual)
	Mr. B. Singha, M.Tech. (Contractual)
	Mr. C. Dawo, M.Tech. (Contractual)

DISTINCTION ACHIEVED

a) By Student

Five B.Tech. students of E&I have qualified GATE 2016 and one B.Tech.student has scored CAT 2016. One B.Tech.student has published a research paper in IEEE Conference.

b) By Faculty Member

Mr. Lalu Seban has been awarded International Travel Support in Young Scientist category to attend and present the technical paper in 34th Chinese Control Conference (CCC 2015) at Hangzhou, China, by Science and Engg. Research Board (SERB), Department of Science & Technology (DST), Govt. of India. July 2015.

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. M. Khanra (joint organizer: Prof. Karabi Biswas, Associate Prof., EE, IIT Kharagpur)	Special Session on Fractors and FractionalOrder Systems under InternationalSymposium on Circuits & Systems (ISCAS2015)	ISCAS 2015	1.5 hours

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. R. Dasgupta	World Summit on Accreditation (WOSA-2016)during March 18-20, 2016, held at Hotel LeelaAmbience, Gurgaon	NBA, New Delhi
2.	Dr. A. Midya	Participated as an expert in, in-house trainingprogram on Biomedical instrumentation andsignal processing, under AICTE(NEQIP)	Silchar Polytechnic
3.	Dr. M. Khanra	International Symposium on Circuits & Systems(ISCAS 2015), Lisbon, Portugal, May 2015	ISCAS Committee, 2015
4.	Dr. A. K. Sunaniya	Workshop on MEMS	NIT Silchar
5.	Mr. L. Seban	One week workshop on Industrial OperatorTraining Simulator – PROSIM during August 24-28, 2015	SIM InfosystemPvt. Ltd. and Deptt. of E&IE, NIT Silchar
6.	Mr. S. Sahoo	Participated as an expert in, in-house trainingprogram on Biomedical instrumentation andsignal processing, under AICTE(NEQIP)	Silchar Polytechnic
7.	Mrs. J. Hazarika	Participated as an expert in, in-house trainingprogram on Biomedical instrumentation andsignal processing, under AICTE(NEQIP)	Silchar Polytechnic
8.	Dr. S. H. Laskar	Participated as an expert in, in-house trainingprogram on Biomedical instrumentation andsignal processing, under AICTE(NEQIP)	Silchar Polytechnic
9.	Mr. T. Bachhar	Applications of Statistical Methods andOptimization Techniques in Science andEngg.	NIT Silchar
		Advanced fuzzy logic & Application	NIT Silchar

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

Transdermal Drug Delivery System, Iontophoresis, Bioelectronics & Biosensors, Instrumentation, Sensors & Transducers, Signal Processing & Instrumentation in Power Quality Monitoring, Digital Image and Video Processing, Multimedia Signal Processing, Medical Image Processing, Electronic Devices & Equipments, VLSI Design, MEMS, Nano Technology, Biomedical Instrumentation, Modelling, control design, Control applications in energy storage systems, instrumentation design, optimization.

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

Completed	Submitted	Ongoing
00	00	13

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	PCB Lab as part of Design & Fabrication Laboratory	To be utilized by B.Tech., M.Tech. & Ph.D. students for their project hardware implementation
2.	On-going lab development, E&I Deptt. (NIT Silchar) for Acoustic & Biomedical Signal processing Lab, Virtual Instrumentation lab	New Lab for M.Tech. students
3.	Sensors Laboratory	New Lab

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Design & development of low cost prototype wearable drug delivery device for treatment of osteoporosis	Dr. R. Dasgupta	STIS scheme,	NIT Silchar	4.75 years
2.	Submitted in Oct 2015; have been called for presentation in May 2016	Dr. M. Khanra	DST	23.5	3 years
3.	Intelligent controlling of computer cursor (Submitted under Research Park Scheme, NIT Silchar	Dr. S.H. Laskar	Research Park Scheme, NIT Silchar	10.00	1 year

(e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. A. Midya	IEEE Transactions on Broadcasting	01	2016
		IET Image Processing	03	2015(2),2016(1)
		International Journal of Computer Assisted Radiology and Surgery	01	2016
		Artificial Intelligence in Medicine	01	2015
2.	Dr. M. Khanra	Circuits, Systems and Signal Processing, Springer	04	2015-16
		International Journal of Systems Science, Taylors & Francis	01	2015-16

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. M. Khanra	International Symposium on Circuits & Systems (ISCAS 2015), Lisbon, Portugal, May 2015
2.	Mr. L. Seban	Co–chair of Modelling and System Identification session in the 34th Chinese Control Conference 2015 at Hangzhou, China, July28-30, 2015

PUBLICATIONS

a) International Journal(s)

1. L. Seban, V. Kirubakaran, B.K. Roy & T. K. Radhakrishnan, (November 2015), GOBF-ARMA based model predictive control for an ideal reactive distillation column, Ecotoxicology and Environmental Safety, Vol.121, pp. 110-115, Elsevier, ISSN 0147-6513, http://dx.doi.org/10.1016/j.ecoenv.2015.04.049.
2. N. Boruah, L. Seban & B.K. Roy, (August 2015), Fuzzy based multiple model predictive control design and performance analysis of magnetic elevator system, International Journal of Applied Science and Engg. Research, Vol. 4(5), pp. 750-757, DOI:10.6088/ijaser.04076
3. B. Moharana & S. Sahoo, (April 2015), Active Noise Control In An Air Duct Flow Control Loop: A Technical Approach For Improving The Working Environment, International Journal of Electrical, Electronics and Data Communication, Issue-1, ISSN (P): 2320-2084, (O) 2321–2950, IRAJ.

b) International Conference(s)

1. R. Rabidas, A. Midya, A. Sadhu & J. Chakraborty, Benign-Malignant Mass Classification in Mammogram using Edge Weighted Local Texture Features, in Proceedings of SPIE Medical Imaging, San Diego, USA, February 2016.
2. A. Midya, J. Chakraborty & A. Sadhu, Classifications of Benign Malignant Masses in Mammograms Using Multi-Resolution Analysis of OrientedPatterns, in Proceedings of IEEE International Symposium on Biomedical Imaging-2015, New York, USA, April 2015.
3. M. Tripathy, M. Khanra, K. Biswas & S. Sen, Noise modelling of fractional capacitor and noise performance analysis of Fractional Order Filter, International Symposium on Nonlinear Theory and its Applications (NOLTA 2015), Hong Kong, China, December 1-4, 2015.
4. A. Adhikary, M. Khanra, S. Sen & K. Biswas, Realization of a carbon nanotube based electrochemical fractor, International Symposium on Circuits and Systems, ISCAS-2015, Lisbon, Portugal, May 24-27, 2015.
5. L. Seban & B.K. Roy, Combining deterministic generalized orthonormal basis filters with stochastic ARMA filters: A state space approach, 34th Chinese Control Conference (CCC 2015), Hangzhou, China, July 28-30, 2015, pp.1867-1872, IEEE Xplore, DOI: 10.1109/ChiCC.2015.7259918.
6. L. Seban, N. Boruah & B.K. Roy, Modified Single Layer Economic Model Predictive Control and Application to Shell and Tube Heat Exchanger, 4th International Conference on Advances in Control and Optimization of Dynamical Systems (ACODS 2016), Tiruchirappalli, India, February 1-5, 2016, IFAC-PapersOnLine, Elsevier.

MAJOR EQUIPMENT ACQUIRED

1. PCB layout design machine by LPKF, Germany.

VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1.	Dr. A. Midya	IEEE International Symposium on Biomedical Imaging-2015	New York, USA	April 16-19, 2015
2.	Dr. M. Khanra	International Symposium on Circuits & Systems (ISCAS 2015)	Lisbon, Portugal	May24-27, 2015
3.	Mr. L. Seban	34th Chinese Control Conference (CCC 2015)	Hangzhou, China	July28-30, 2015

M.TECH. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Namita Boruah	Mr. L. Seban	Design and Performance analysis of different controllers for magnetic levitation system
2.	Rudra Prasad Martha	Mr. L. Seban	Closed loop identification and adaptive control for shell and tube heat exchanger
3.	Bagdevi Moharana	Mr. S. Sahoo	Active Noise Control in an Air Duct Flow System
4.	E. Limhachankikon	Mr. S. Sahoo	Active Noise Cancellation In a Laboratory Duct

Mechanical Engineering

Academic Staff

Head: Dr. P.K. Patowari (from 01.04.2015 to 20.05.2015)
Dr. K.M. Pandey (from 20.05.2015 to till date)

Faculty Members

Prof.	Associate Prof.	Assistant Prof.
Dr. N.V. Deshpande, Ph.D. (Director, NIT Silchar)	Dr. K. Chakraborty, Ph.D.	Mr. L. Roy, M.Tech.
Dr. R. Gupta, Ph.D. (on lien, Director, NIT Srinagar)	Mr. D. H. Das, M.Tech.	Mr. S. K. Pattanayak, M.Tech.
Dr. K. M. Pandey, Ph.D.	Dr. K. K. Sharma, Ph.D.	Dr. S. Chatterjee, Ph.D.
Dr. R. D. Misra, Ph.D.	Mr. P. Choudhury, M.Tech.	Dr. A. Biswas, Ph.D.
	Dr. P. K. Patowari, Ph.D.	Mrs. S. Debbarma, M.Tech.
		Dr. S. Halder, Ph.D.
		Dr. S. Bhowmik, Ph.D.
		Dr. D. Dutta (Left on 03.11.15)
		Dr. D. Bhanja, Ph.D.
		Dr. S. Nath, Ph.D.
		Mr. Jagadish, M.Tech.
		Dr. P. Deb Roy, Ph.D.
		Dr. S. Pati, Ph.D.
		Dr. A. B. Deoghare, Ph.D.
		Dr. B. Das, Ph.D.
		Dr. S. Dey, Ph.D.
		Dr. P. R. Randive, Ph.D.
		Dr. S. R.Maity, Ph.D.

DISTINCTION ACHIEVED

a) By Student

One project with B.Tech.student Sharanga Boratitled "Application of the Coanda effect in CPU Heat Sink" was awarded the "Best Overall Simulation" in the Commercial Software category, ASME Innovative Design Simulation Challenge held on August 02, 2015 at Boston, MA, USA.

b) By Faculty Member

- Dr. K.M. Pandeyreceived certificate of appreciation as reviewer towards evaluating the article titled Comparative Evaluation & Optimization of Energy Systems in Supercritical Power Cycle in June 2015.
- Dr. P.K. Patowari received a certificate of appreciation for Outstanding Contribution in Reviewing, in recognition of the valuable contributions made to the quality of, International Journal, Materials and Manufacturing Processes by Taylor & Francis Group in December 2015.

c) Invited lecture delivered by Faculty Members

1. Dr. K.M. Pandey was invited as a Key note speaker in International Conference on Innovative Research in "Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg." (CIME-2016). Organized by "KrishiSanskriti publications", held on March 20, 2016, at Jawaharlal Nehru University, New Delhi.
2. Dr. K.M. Pandey was invited as a Key note speaker and Co-Editor in 2nd Annual International Conference on Advanced Material Engg. [AME2016], held on April 15-17, 2016, at Wuhan, Hubei, China.
3. Dr. K. M. Pandey delivered Expert Lecture in Self-financed training programme on computational methods in mechanical Engg., held on March 12-16, 2016 at Department of Mechanical Engg., NIT Silchar, Assam.
4. Dr. R.D. Misra delivered Expert Lecture in Self-financed training programme on computational methods in mechanical Engg., held on March 12-16, 2016 at Department of Mechanical Engg., NIT Silchar, Assam.
5. Dr. P.K. Patowari delivered a lecture on "Aim in Manufacturing" at "Industrial Motivation Campaign on theme "Start-up India" for young prospective entrepreneurs/ Engg. students. The program was organized by Micro, Small& Medium Enterprises (MSME) (Government of India) Ministry of Micro, Small & Medium Enterprises at School of Technology, Assam University, Silchar on March 09, 2016.
6. Dr. P.K. Patowari delivered three lectures on "Advanced Machining Process - a general overview", "Surface Modification using Electrical Discharge Machining (EDM)" & "Micro Machining" in Short Term Training Program on "Advances in Manufacturing Technique" during February 27 - March 02, 2016 in the Department of Mechanical Engg., NIT Silchar.
7. Dr. P. K. Patowari delivered two lectures on "Surface Modification using Electrical Discharge Machining (EDM)" & "Micro Machining" during June 30 – July 01, 2015 at SVNIT Surat.
8. Mr. Jagadish acted as a"Key Note Speaker" for short term training programme on advance in manufacturing Techniques held at Department of Mechanical Engg. NIT Silchar from February 27 - March 02, 2016.

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Coordinator: Dr. K. M. Pandey, Co- coordinators: Dr. S. Bhoumik, Dr. S. Pati	One week self financed Short Term Training Program on Computational Methods in Mechanical Engg.	Self-Financed	March 12-16, 2016
2.	Dr. P. K. Patowari (Coordinator) Dr. A. B. Deoghare (Co-Coordinator)	One week self-financed Short Term Training Program on Advances in Manufacturing Technique	Self-Sponsored	February 27 – March 02, 2016
3.	Dr. A. Biswas	One day workshop on awareness and technical discussion on solar thermal systems	Solar RTC project of NIT Silchar	November 29, 2015
4.	Dr. A. B. Deoghare	Basics of Computer Programming Languages	Self- Financed	September 15-30, 2015

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. K. M. Pandey	A comparative analysis of job satisfaction of male and female software professionals in HCL Pvt. Ltd, Noida, India, GJIMT's 9th International Conference on Sustainable Business Growth, June 06, 2015	GJIMT, Phase-2, Mohali, Chandigarh, India
2.	Dr. K. M. Pandey	Experimental and numerical analysis of forced convection heat transfer in turbulent flow, International conference on computational heat and mass transfer, Department of mathematics, November 30 – December 02, 2015	NIT Warangal
3.	Dr. K. M. Pandey	3D Numerical analysis for thermal-hydraulic characteristics of water flowinside a circular tube with twisted tape with helical protrusions, International conference on computational heat and mass transfer, Department of mathematics, November 30 – December 02, 2015	NIT Warangal
4.	Dr. K. M. Pandey	3D CFD Steady State Heat transfer in Nuclear Fuel Rod Assembly and Effect of Increasing Rod Diameter on Different Properties , International conference on heat and mass transfer held on February 12, 2016	Department of Chemical Engg., IIT Madras
5.	Dr. K. M. Pandey	Key note Speaker in CIME 2016 on Numerical Investigations into the Design and Development of Scramjet Combustors–A Review, March 20-21, 2016	Krishisanskriti, JNU, New Delhi
6.	Dr. K. Chakraborty	One week self financed short term training programme on Advances in Manufacturing Technique, February 27 – March 02, 2016. Presented the expert talk on Salient features on Material Behaviour during micromachining.	NIT Silchar
7.	Dr. A.B. Deoghare	QIP Short Term Course on Strategic Innovation & Flexibility from December 04-06, 2015	IIT Delhi, Department of Management Studies
8.	Mr. Jagadish	One week workshop on Advanced Fuzzy Logic	NIT Silchar
9.	Dr. S. Dey	Short term course on Advanced Vibration Engg. on December 13-15, 2015	IIT Guwahati

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
10.	Dr. S. Dey	Short term course on Rotor Dynamics on December 16-18, 2015	IIT Guwahati
11.	Dr. S.R. Maity	One week faculty development programme on Contemporary Engg. Practices (CEP-2015)	Haldia Institute of Technology, Haldia, W.B
12.	Dr. S.R. Maity	One week faculty development programme on Bridging Gap between Academia & Industry	Haldia Institute of Technology, Haldia, W.B

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

Thermal Engg., Heat Transfer, Computational Fluid Dynamics, Combustion, Refrigeration & Air Conditioning, Alternate Fuels, Solar Energy, Wind Turbines, Hydraulic Turbines, Spray Combustion, Fatigue & Fracture, Micro-machining, Advanced Manufacturing Processes, Engg. Material, Renewable Energy, Composite Materials, Fracture Mechanics, Bio-Mechanics, Industrial Management, Design, Fluid Dynamics, I.C. Engine, Applied Mechanics, Polymer nano-composite, Molecular Dynamics, Microfluidics.

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

Completed	Submitted	Ongoing
04	02	45

c) Research Lab/ Workshop:

Sl.No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Test Laboratory of Solar RTC	B.Tech. in Mechanical Engg., M.Tech. in Thermal Engg., and also for Ph.D. programme of the department

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Establishment of Regional Test cum Technology Back up Unit for Solar Thermal Devices at NIT Silchar	Dr. A. Biswas (PI) & Dr. R.D. Misra (Co-PI)	Ministry of New & Renewable Energy (MNRE), GoI	73.86	2012-17
2.	Synthesis and Fracture Property Evaluation of Polymer Nanocomposites	Dr. S. Halder	NIT Silchar	10.00	March 2014 – September 2015
3.	Proposal for Centre for Advanced Manufacturing and Material Testing has been identified for support in Level-I category by the DST under the FIST Program	Dr. S. Halder Dr. P. K. Patowari Dr. S. Bhowmik	Department of Science & Technology	220.00	2015-19
4.	Investigation and analysis of mechanical properties of different natural particle filler reinforced epoxy composite and its machinability	Dr. S. Bhowmik (PI) Dr. P.K. Patowari (Co-PI)	STIS – NIT Silchar	4.25	2016-18
5.	Synthesis and characterization of smart phase change mater-ials for efficient thermal management of electronic devices	Dr. S. Halder (PI) Dr. S. Pati (Co-PI)	NIT-Silchar	4.10	2016-18

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
6.	Design and Manufacturing of a Biomedical Models and Implant using 3D Printing Technology	Dr. A.B. Deoghare	NIT-Silchar (Science, Technology and Innovation Scheme (STIS))	4.75	2016-17

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. K.M. Pandey	International Journal of Heat & Mass Transfer, Elsevier (SCIE)	02	2015-16
2.	Dr. K.M. Pandey	International journal of communications in heat and mass transfer (SCIE)	02	-do-
3.	Dr. K.M. Pandey	Applied mathematical modelling (SCIE)	02	-do-
4.	Dr. K.M. Pandey	Institution of Engineers	04	-do-
5.	Dr. K.M. Pandey	ASME international conferences IMECE 2014	03	-do-
6.	Dr. P.K. Patowari	Materials and Manufacturing Processes by Taylor & Francis Group	15	-do-
7.	Dr. P.K. Patowari	Proceedings of the iMeche, Part B: Journal of Engg. Manufacture, Sage	06	-do-
8.	Dr. S. Chatterjee	Renewable & Sustainable Energy Reviews, Elsevier	02	-do-
9.	Dr. S. Chatterjee	Heat and Mass Transfer, Springer	01	-do-
10.	Dr. A. Biswas	Applied Energy, Elsevier	04	-do-
11.	Dr. A. Biswas	Energy Conversion and Management, Elsevier	04	-do-
12.	Dr. A. Biswas	Open Journal of Fluid Dynamics (OJFD), Scientific Research Publication	01	-do-
13.	Dr. S. Halder	Institute of Engineer, Series C	03	-do-
14.	Dr. S. Halder	Materiasls Chemistry and Physics	02	-do-
15.	Dr. S. Halder	Iranian Polymer	01	-do-
16.	Dr. S. Halder	Polymer Composite	01	-do-
17.	Dr. S. Halder	Polymer Bulletin	01	-do-
18.	Dr. S. Halder	Sadhana Indian academy of sciences	01	-do-
19.	Dr. S. Bhowmik	International Journal of Industrial Engg. and Design	01	-do-
20.	Dr. S. Pati	Journal of the Institution of Engineers (India):Series C	06	-do-
21.	Dr. S. Pati	Journal of Applied Fluid Mechanics	01	-do-
22.	Dr. S. Pati	Progress in Computational Fluid Dynamics, An International Journal (PCFD)	01	-do-
23.	Dr. S. Pati	Engg. Science and Technology, an International Journal	01	-do-
24.	Dr. S. Dey	Applied Mathematical Modelling,		-do-
25.	Dr. S. Dey	Composite Part B: Engg.,	05	-do-
26.	Dr. S. Dey	Journal of Mechanical Science and Technology, Sadhana		-do-
27.	Dr. S.R. Maity	Engg. Optimization, Taylor & Francis	02	-do-

(f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. K.M. Pandey	Chaired a session in CIME 2016 organised by KrishiSanskriti, at JNU New Delhi held from March 20-21, 2016
2.	Dr. S. Halder	One-week STTP on Application Of Analytical Techniques In Science And Engg.
3.	Dr. S. Halder	One-week STTP on Advances in Manufacturing Technique
4.	Dr. S. Chatterjee	Chaired two technical sessions at International Conference on Recent Trends in Engg. and Material Sciences held during March 17-19, 2016 at Jaipur National University (JNU), Jaipur, India

PUBLICATIONS

a) International Journal

1. A. Dey & K.M. Pandey, (April 2016), Characterisation of Fly Ash and Its Reinforcement Effect on Metal Matrix Composites: A Review, Rev. Adv. Matter, SCIE Journal (Accepted).
2. P. Debnath & K.M. Pandey, Exergetic Efficiency Analysis of Hydrogen-Air Detonation in Pulse Detonation Combustor Using CFD ,International Journal of Spray Combustion and Dynamics, SCIE Journal (Accepted).
3. D. Sharma & K.M. Pandey, Facile synthesis of TiO2 nano particle and numerical investigation of nano fluids heat transfer characteristics for application in nuclear reactor using CFD Code, Nano science and Nano Technology Letters (NNL) for publication in special issue, SCIE Journal, American Scientific Company, California, USA (Accepted).
4. K.M. Pandey, S. Roga & G. Choubey, (April 2016), Numerical Investigation on Hydrogen-fueled Scramjet Combustor with Parallel strut fuel injector at a Flight Mach number of 6, Journal of Applied Fluid Mechanics, SCIE Journal, ISSN: 1735-3572,eISSN: 1735-3645 (to be published).
5. A. Debbarma & K.M. Pandey, (2016), Influence on rewetting temperature and wetting delay during rewetting rod bundle by various radial jet models, Kerntechnik, SCIE International Journal Published from Hanser E-library, Germany.
6. K.M. Pandey & P. Debnath, (2016), Review on recent advances in Pulse detonation engines, accepted in Journal of combustion, Hindwai publication (Scopus indexed and indexed in Thomson Reuters) Hindawi Publishing Corporation, Article ID 4193034, http://dx.doi.org/10.1155/2016/4193034.
7. K.M. Pandey, S. Roga & G. Choubey, (September2015), Computational Analysis of Hypersonic Combustor Chamber Using Strut Injector at Flight Mach 7, Combustion Science and Technology, Taylor & Francis, Volume 187(9), pp. 1392-1407,DOI: 10.1080/00102202.2015.1035371
8. G. Choubey & K.M. Pandey, (September 2015), Numerical studies on the performance of Scramjet combustor with alternating wedge-shaped strut injector, International Journal of Turbo and Jet Engines, DOI:10.1515/TIJ20150048, De Gruyter Publications China, SCIE International Journal. Source Normalized Impact per Paper (SNIP): 0.749, (SCIE Journal).
9. A. Dey & K.M. Pandey, (2015), Magnesium Metal matrix Composites - a review, Rev. Adv. Matter, Vol. 42(1), pp.58-67,SCIE Journal.
10. D. Sharma & K.M.Pandey, (2015), 3D CFD Steady State Heat transfer in Nuclear Fuel Rod Assembly and Effect of Increasing Rod Diameter on Different Properties,Journal of Energy, Heat and Mass Transfer, 37 (2015), IIT Madras, Chennai, India.
11. O. Reddy & K.M. Pandey,(2015), Experimental and numerical analysis of forced convection heat transfer in turbulent flow, Procedia Engg.,Vol. 127, pp. 711–718, Elsevier Publications, DOI: 10.1016/j.proeng.2015.11.375
12. K.O. Reddy, V.R Reddy Bandi & K.M. Pandey, (2015), 3D Numerical analysis for thermal-hydraulic characteristics of water flow inside a circular tube with twisted tape with helical protrusions, Procedia Engg., Vol. 127,pp. 1134 –1141,Elsevier Publications, DOI: 10.1016/j.proeng.2015.11.478

13. D. Sharma, K.M. Pandey, C. Chandrashekhar & A. Pratap, (March 2016), Computational Study of Effect of Varying Properties of Carbon Dioxide on Convective Heat Transfer in Sub Channels Flow at a Pressure Just Above the Critical Value, 5th International Conference on Material Processing and Characterization, March12 – 13, 2016, GRIET, Hyderabad, India. (Full Paper Accepted) To be published in Materials Today Proceedings, Elsevier Publications.

14. G. Choubey, K.M. Pandey, A. Maji, T. Deshmukhya & A. Debbarma, Computational Investigation of Multi-Strut Injection of Hydrogen in a Scramjet Combustor, 5th International Conference on Material Processing and Characterization, March12 – 13, 2016, GRIET, Hyderabad, India. (Full Paper Accepted) To be published in Materials Today Proceedings, Elsevier Publications.

15. P. Choudhury, S. Das, S. Halder & K.M. Pandey, (December 2015), Free edge mixed mode delamination analysis of laminated composites with wrap-around configuration-A Finite Element Study, Journal of Institution of Engineers, Series D, pp. 1-11. DOI-10.107/s40033-015-0099-z

16. A. Debbarma & K.M. Pandey, (April 2016), CFD Study on Emergency Core Cooling of Hot Vertical Nuclear Fuel Rod Bundle by Jet Impingement, 5th International Conference of Materials Processing and Characterization (ICMPC 2016), March 12 -13, 2016 GRIET, Hyderabad, INDIA. (Full Paper Accepted) To be published in Materials Today Proceedings, Elsevier Publications.

17. G. Kumari, G. Joshi & K.M. Pandey, (2015), Job Satisfactionand Job Stress In Software Companies: A Review, Advances in Economics and Business Management (AEBM) Vol. 2 (7), pp. 756-760, KrishiSanskriti Publications, New Delhi.

18. G. Kumari, G. Joshi & K.M. Pandey, (2015), Factors Influencing Of Job Satisfaction Among Employess In Software Industries: A Case Study of Wipro Ltd., Greater Noida, India, Advances in Economics and Business Management(AEBM), Vol. 2(7), pp. 751-755, KrishiSanskriti Publications, New Delhi.

19. G. Kumari, G. Joshi & K.M. Pandey, (2015),A Comparative Analysis of Job satisfaction of male and female software professionals in HCL Pvt. Ltd, Noida, India, GJIMT's 9th International Conference on Sustainable Business Growth, June 06, 2015 at GJIMT, Phase-2, Mohali, Chandigarh, India.

20. G. Kumari, G. Joshi & K.M. Pandey, (2015), Job satisfaction among Software Professionals in IBM India Pvt. Ltd., Gurgaon, India: A Comparison between officers and staff, Advances in Economics and Business Management (AEBM), Vol.2(12), pp. 1128-1132, ISSN:2394-1545,e-ISSN:2394-1553.

21. G. Kumari, G. Joshi & K.M. Pandey, (2015), Factors Affecting Job Satisfaction of Software Professionals at IBM India Pvt. Ltd., Gurgaon, India, Advances in Economics and Business Management (AEBM), Vol.2(12), pp.1202-1204, ISSN:2394-1545, e-ISSN:2394-1553.

22. K. M. Pandey, (2016),Numerical Investigations into the Design and Development of Scramjet Combustors–A Review,Journal of Material Science and Mechanical Engg. (JMSME), ISSN: 2393-9095; e-ISSN: 2393-9109; Vol. 3(2), pp. 90-94, KrishiSanskriti Publications, http://www.krishisanskriti.org/Publication.html.

23. P. Majumder, K.M. Pandey & N.V. Deshpande, (2016), Design and Analysis of a Propeller Blade for Underwater Vehicle, Journal of Material Science and Mechanical Engg., Vol. 3(2), pp.105-110.

24. K.M. Pandey & J. Kumar, (2016), CFD Analysis of Pulse Detonation Engine- A Review, Journal of Material Science and Mechanical Engg., Vol. 3(2), pp.111-116.

25. K.M.Pandey & M. Debnath, (2016), An Analysis of Various Machining Process on Composite Materials-A Review, Journal of Material Science and Mechanical Engg., Vol. 3(2), pp. 117-120.

26. M. Rahman & K.M. Pandey, (2016), Current Research Trends in Aluminium Metal Matrix Composites–A Review, Journal of Material Science and Mechanical Engg., Vol. 3(2), pp. 121-125.

27. K.M. Pandey & R. Chaurasiya, (2016), Thermal Stratification in Hot Fluid Storage - A Review, Journal of Material Science and Mechanical Engg., Vol. 3(2), pp. 126-130.

28. A. Singh & K.M. Pandey, (2016), Experimental and Numerical Analysis of Combustion in Scramjet Engine: A Review, Journal of Material Science and Mechanical Engg., Vol. 3(2), pp. 131-135.

29. J. Acharya, K.M. Pandey & S. Chatterjee, (2016), A Review on Aerodynamics of Flight in Adverse Condition, Journal of Aeronautical and Automotive Engg. (JAAE), Vol. 3(1), pp. 38-42.

30. K.M. Pandey & A. Dey, Wear Behaviour of Mg Alloy and its Composites - A review, To be published in (Materials Science Forum, ISSN print 0255-5476, ISSN cd 1662-9760 ISSN web 1662-9752).

31. M.A. Singh, A. Biswas, & R.D. Misra, (2015), Investigation of Self-Starting and High Rotor Solidity on the Performance of a Three S1210 Blade H-Type DarrieusRotor, Renewable Energy, Vol. 76, pp. 381-387 (indexed in SCI).

32. A.R. Dey, & R.D. Misra, (2015), Evaluation of Palm Oil as a Bio Fuel Source for Agriculture-Based C.I. Engine, Journal of Sustainable Manufacturing and Renewable Energy, Vol. 3(1-2), pp. 51-62.

33. A.K. Singh, P.K. Patowari & N.V. Deshpande, (2016), Experimental Analysis of Reverse Micro-EDM for Machining Microtool, Materials and Manufacturing Processes, Taylor and Francis Group, Vol. 31, Issue 4, pp. 530-540. (SCIE)

34. M. Rahang & P.K. Patowari, (2016), Parametric, "Optimization for Selective Surface, Modification in EDM Using Taguchi Analysis, Materials and Manufacturing Processes, Taylor and Francis Group, Vol. 31(4), pp. 422–431. (SCIE)

35. E.K. Mussada & P.K. Patowari, (2015), Characterisation of layer deposited by electric discharge coating process, Surface Engg., Maney Publishing, Vol. 31(10), pp. 796-802. (SCIE)

36. M. Rahang & P.K. Patowari, (2015), Application of Masking Technique in EDM for Generation of Rectangular Shaped Pattern, International Journal of Precision Technology, Inderscience Publishers, Vol. 5(2), pp. 140-156.

37. E.K. Mussada & P.K. Patowari, (2015), Investigation of EDC parameters using W and Cu powder metallurgical compact electrodes, International Journal Machining and Machinability of Materials, Vol. 17(10, pp. 65-78, Scopus (Elsevier).

38. S.S. Deka, R. Gautam, A. Singh, G. Kumar, & P.K. Patowari, (2015), A Study on Synthetic Jet Actuator Diaphragm, Journal of Advanced Manufacturing Systems, Vol. 14(2), pp. 91–105, Scopus, DOI: 10.1142/S0219686715500079.

39. P. K. Patowari, P. Saha & P. K. Mishra, (2015), An experimental investigation of surface modification of C-40 steel using W–Cu powder metallurgy sintered compact tools in EDM, International Journal of Advanced Manufacturing Technology, Vol. 80, pp. 343–360, DOI 10.1007/s00170-015-7004-7. (SCIE)

40. N.M. Joy & L. Roy, (December 2015), Determination of Optimum configuration among different configurations of two-axial groove hydrodynamic bearings,Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engg. Tribology, (Accepted).

41. L. Roy & S.K. Kakoty, (January 2015), Optimum Groove Location of Three-lobe and four lobe bearing Using Genetic Algorithm,Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engg. Tribology,Vol. 229(1), pp. 47–63.

42. L. Roy & S.K. Kakoty, (2015), Application of Genetic Algorithm in Optimization of Hydrodynamic Bearings, Advances in Intelligent Systems and Computing, Vol. 335(1), pp. 207-217.

43. A. Ghosh, A. Biswas, K.K. Sharma & R. Gupta, (2015), Computational Analysis of Flow Physics of a Combined three bladed Darrius Savonious Wind Rotor, Journal of the Energy Institute, Vol. 88 (2015),pp. 425-437. Website:top25. sciencedirect.com/.../energy/11/journal/journal-of-the-energy-institute.

44. A. Biswas., S. Sarkar & R. Gupta, (2016), Application of ANN for performance evaluation of vertical axis wind turbine rotor, Journal of Ambient Energy, Vol. 37(2), pp. 209-218, Taylor & Francis. DOI: http://dx.doi.org/10.1080/0143075 0.2014.915889.

45. A. Ghosh, A. Biswas, K.K. Sharma & R. Gupta, (2015), Computational Analysis of flow physics of a combined three bladed Darrieus Savonius wind rotor, Journal of Energy Institute, Vol. 88(4), pp. 425-437, Elsevier.

46. M.A. Singh, A. Biswas & R.D. Misra, (2015), Investigation of self-starting and solidity on the performance of a three S1210 bladed H-type Darrieus rotor, Renewable Energy, Vol. 76, pp. 381-387, Elsevier.

47. P. Saini, A. Biswas & D. Bhanja (2015), Performance evaluation and simulation of solar panel, wind mill, fuel cell hybrid system for small scale energy harvesting, Journal of Clean Energy Technologies, Vol. 3(6), pp. 417-421.

48. A. Sinha, A. Biswas, K.K. Sharma, (2015), Comparison of efficiency of a solar driven Carnot engine under maximum power and power density conditions, Journal of Urban & Environmental Engg., Vol.8(2), pp.225-231, JUEE press.

49. P. Saini, D. Bhanja, S. Nath & A. Biswas,(2015), Energy and exergy analysis of flat plate collector solar water heater, ISESCO Journal of Science and Technology, Vol. 11(20), pp. 2-8, ICPSR.

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

51. A.R. Sengupta, A. Biswas & R. Gupta, (2016), 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, Vol. 93, pp. 536-547, Elsevier.

52. T. Prasad & S. Halder, (2015), Optimization of Parameters and its Effect on Size of ZnO Nanoparticles Synthesized by Sol-gel Method, Advances in Intelligent Systems and Computing, Vol. 336, pp. 399-407.

53. I. Choudhury, S. Halder, A. Mathur, W. Nath & A. Phukan, (2015), Synthesis of self-healing thermosetting resin based capsules and their related complexities, Advanced Materials Research, Vol. 1119, pp. 428-432.

54. S. Halder, M.S. Goyat & P.K. Ghosh, (2015), Morphological, structural, and thermophysical properties of zirconium dioxide–epoxy nanocomposites, High Performance Polymer, DOI: 10.1177/0954008315595275. Impact factor: 1.286

55. S. Halder, M.S. Goyat & P.K. Ghosh, (2015), Influence of ultrasonic dual mode mixing on the morphology, molecular structure and thermo-physical properties of a SiO2-epoxy nanocomposite adhesive, Journal of adhesion science and technology, Vol. 29, pp. 2590-5604, Impact factor: 0.961.

56. M.S. Goyat, Sumit A.S., S. Bahl, S. Halder & P. Ghosh, (2015), Thermomechanical response and toughening mechanisms of a carbon nano bead reinforced epoxy composite, Materials chemistry and physics, Vol. 166, pp. 144-152, Impact factor: 2.259.

57. P. Choudhury, S. Das, S. Halder & K.M. Pandey, (2015), Free edge mixed mode delamination analysis of laminated composites with wrap-around configuration-A Finite Element Study, Institute of Engineers Series-D, DOI 10.1007/s40033-015-0099-z.

58. S. Halder, S. Ahemad, S. Das & J. Wang, (2016), Epoxy/Glass Fiber Laminated Composites Integrated with Amino Functionalized ZrO2 for Advanced Structural Applications, ACS Applied Materials & Interfaces, Vol. 8 (3), pp. 1695–1706, Impact factor: 6.723.

59. T. Prasad, S. Halder & S.S. Dhar, (2016), Morphological dissimilarities of ZnO nanoparticles and its effect on thermo-physical behavior of epoxy composites, Polymer Composites, DOI: 10.1002/pc.23914, Impact factor: 1.632.

60. N.I. Khan, S. Halder& M.S. Goyat, (2016), Effect of epoxy resin and hardener containing microcapsules on healing efficiency of epoxy adhesive based metal joints, Materials chemistry and physics, Vol. 171, pp. 267-275, Impact factor: 2.259.

61. I. Choudhury, S. Halder, N.I. Khan, A. Mathur& W. Nath, (2016), Effect of TETA Microcapsules on Self-Healing Ability of Dual Component Epoxy System, Applied Materials letters, Impact factor: 1.9.

62. Jagadish, S. Bhowmik & A. Ray, (2015), Prediction of surface roughness quality of green abrasive water jet machining: a soft computing approach, Journal of Intelligent Manufacturing, pp. 1-15, Springer US. DOI: 10.1007/s10845-015-1169-7.

63. Jagadish, S. Bhowmik & A. Ray, (2015), Prediction and optimization of process parameters of green composites in AWJM process using response surface methodology, The International Journal of Advanced Manufacturing Technology, pp. 1-12, Springer London, DOI: 10.1007/s00170-015-8281-x.

64. S.A. Hazarika, D. Bhanja, S. Nath & B. Kundu, (2015),Analytical solution to predict performance and optimum design parameters of a constructal T-shaped fin with simultaneous heat and mass transfer,Energy, Elsevier, Vol.84, pp. 303-316. http://dx.doi.org/10.1016/j.energy.2015.02.102 (Citation: 2) SCI (Impact Factor: 4.844)

65. P. Saini, D. Bhanja, S. Nath & A. Biswas, (2015),Energy and Exergy Analysis of a Flat Plate Collector Solar Water Heater,ISESCO JOURNAL of Science and Technology,Vol. 11(20), pp. 2-8.

66. C.A. Akhadkar, A.B. Deoghare, A.M. Vaidya & P.V. Walke, (February-March 2016), A New Approach for Estimation of Penalty Parameter with Tolerance Stack-Up, International Journal of Engg. and Technology (IJET), Vol. 8(1),pp. 129-137, e-ISSN : 0975-4024.

67. G. Boob, A. Deoghare, P. Padole & P.V. Walke,(2015), Numerical modeling and simulation of orthogonal machining process using FE-code,International Journal of Machining and Machinability of Materials, Inderscience Publishers Ltd. Vol. 17(3/4), pp. 370-380, ISSN print: 1748-5711.

68. S. Gavhane, S. Pati & S.K. Som, (2016), Evaporation of Multicomponent Liquid Fuel Droplets: Influences of Component Composition in Droplet and Vapor Concentration in Free Stream Ambience, International Journal of Thermal Sciences, Vol. 105, pp. 83-95, DOI:10.1016/j.ijthermalsci.2016.03.003

69. B. Das & A. Giri, (2016), Combined energy and exergy analysis of a non-isothermal fin array with non-Boussinésq variable property fluid. ASME Journal Therm Sci. Engg.,Applications. (Accepted)

70. P. Lingfa & B. Das, (2015), Energy analysis of karanja oil as a supplementary fuel for compression ignition engine, Journal Urban Envi. Engg., Vol. 9(2), pp. 97-101. DOI: 10.4090/juee.2015.v9n2.097101

71. S. Dey, T. Mukhopadhyay, H.H. Khodaparast, P. Kerfriden, S. Adhikari, (2015), Rotational and ply-level uncertainty in response of composite shallow conical shells, Composite Structures, Vol.131, pp.594-605.

72. S. Dey, T. Mukhopadhyay, S.K. Sahu, G. Li, H. Rabitz & S. Adhikari, (2015), Thermal uncertainty quantification in frequency responses of laminated composite plates, Composites Part B: Engg., Vol. 80, pp.186-197.

73. S. Dey, T. Mukhopadhyay, H.H. Khodaparast & S. Adhikari, (2015), A response surface modelling approach for resonance driven reliability based optimization of composite shells, Periodica Polytechnica - Civil Engg. , DOI:10.3311/PPci.8073.

74. S. Dey, T. Mukhopadhyay, H.H. Khodaparast & S. Adhikari, Stochastic natural frequencies of composite conical shells, Acta Mechanica, Vol. 226(8), pp.2537-2553.

75. T. Mukhopadhyay, T.K. Dey, S. Dey & A. Chakrabarti, (2015), Optimization of fiber reinforced polymer web core bridge deck– A hybrid approach, Structural Engg. International, Vol. 24(2), DOInr.10.2749/101686614X14043795570778.

76. S. Dey, T. Mukhopadhyay & S. Adhikari, (2015), Stochastic free vibration analyses of composite doubly curved shells - A Kriging model approach, Composites Part B: Engg., Vol. 70, pp.99–112.

77. S. Dey, S. Adhikari & A. Karmakar, (2015), Impact response of functionally graded conical shells, Latin American Journal of Solids and Structures, Vol. 12(1), pp.133-152.

78. S. Dey, T. Mukhopadhyay & S. Adhikari, (2015), Stochastic free vibration analysis of angle-ply composite plates - A RS-HDMR approach, Composite Structures, Vol.122, pp.526–536.

79. S. Dey, S. Sarkar, A. Das, A. Karmakar & S. Adhikari, (2015), Effect of twist and rotation on vibration of functionally graded conical shells, International Journal of Mechanics and Materials in Design, Vol. 11(4), pp. 425-437.

80. S.R. Maity & S. Chakraborty, (2015), Tool steel material selection using PROMETHEE II method, International Journal of Advanced Manufacturing Technology,Vol. 78, pp. 1537-1547.

81. S. Dutta & S.R. Maity, (2015), Identification of optimum numbers of no isomorphic compound kinematic chains and their mechanisms based on Eigen spectrum matrix, International Journal of Mechanical, Robotics and Production Engg., Vol. 5(5), pp. 45-56.

b) National Journal(s)

1. S.N. Mulande, K.K. Sharma & R. Huidrom, (April-June, 2015), Development of an Algorithm for Analysis of Workspace of the Robix Robot Manipulator using MATLAB,Journal of Material Science and Mechanical Engg., Vol. 2(3), pp. 230-232, Krishi Sanskriti Publications India http://www.krishisanskriti.org/jmsme.html

c) International Conference(s)

1. K.O. Reddy & K.M. Pandey, Experimental and numerical analysis of forced convection heat transfer in turbulent flow, International conference on computational heat and mass transfer, Department of mathematics, NIT Warangal, Telangana, November 30- December 02, 2015.

2. K.O. Reddy & K.M. Pandey, 3D Numerical analysis for thermal-hydraulic characteristics of water flowinside a circular tube with twisted tape with helical protrusions, International conference on computational heat and mass transfer, Department of mathematics, NIT Warangal, Telangana, November 30- December 02, 2015.

3. D. Sharma, K.M. Pandey, C. Chandrashekhar & A. Pratap, Computational Study of Effect of Varying Properties of Carbon Dioxide on Convective Heat Transfer in Sub Channels Flow at a Pressure Just Above the Critical Value, 5th International Conference on Material Processing and Characterization, March12 – 13, 2016, GRIET, Hyderabad, India.

4. G. Choubey, K.M. Pandey, A. Maji, T. Deshmukhya& A. Debbarma, Computational Investigation of Multi-Strut Injection of Hydrogen in a Scramjet Combustor, 5th International Conference on Material Processing and Characterization,March12 – 13, 2016, GRIET, Hyderabad, India.

5. A. Debbarma & K.M. Pandey, CFD Study on Emergency Core Cooling of Hot Vertical Nuclear Fuel Rod Bundle by Jet Impingement, 5th International Conference on Material Processing and Characterization,March12 – 13, 2016, GRIET, Hyderabad, India.

6. S. Yadav, K. Das & K.M. Pandey, A comparative analysis of heat transfer in extended surfaces, Proceedings of the 23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference IHMTC2015, December17-20, 2015, Thiruvananthapuram, India.

7. D. Sharma & K.M. Pandey, Different codes used for reducing thermal hydraulics problems in nuclear reactors: a review, International journal of advance research in science and Engg. and 2nd international conference on recent innovation in science, Engg. and management, November 22, 2015 at JNU Convention Centre New Delhi.

8. G. Kumari, G. Joshi & K.M. Pandey, Studies on Job Stress in Employees of Software Companies: A Review, 6th International Conference on Recent Trends in Applied Physical, Chemical Sciences, Mathematical/Statistical and Environmental Dynamics, Organized by Krishi Sanskriti, August 09,2015, Jawaharlal Nehru University, pp. 77-82, ISBN: 978-81-930585-8-9.

9. G. Kumari, G. Joshi & K.M. Pandey, Relationship between Job Stress and Job Satisfaction in Software Industries: A Case Study of Wipro Ltd., Greater Noida India, 6th International Conference on Recent Trends in Applied Physical, Chemical Sciences, Mathematical/Statistical and Environmental Dynamics, Organized by KrishiSanskriti on August 09,2015, Jawaharlal Nehru University, pp. 83-88, ISBN: 978-81-930585-8-9.

10. K.M. Pandey, Numerical Investigations into the Design and Development of Scramjet Combustors–A Review, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

11. P. Majumder, K.M. Pandey & N.V. Deshpande, Design and Analysis of a Propeller Blade for Underwater Vehicle, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

12. K.M. Pandey & J. Kumar, CFD Analysis of Pulse Detonation Engine- A Review, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

13. K.M. Pandey & M. Debnath, An Analysis of Various Machining Process on Composite Materials-A Review, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

14. M. Rahman & K.M. Pandey, Current Research Trends in Aluminium Metal Matrix Composites–A Review, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

15. K.M. Pandey & R. Chaurasiya, Thermal Stratification in Hot Fluid Storage - A Review, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

16. A. Singh & K.M. Pandey, Experimental and Numerical Analysis of Combustion in Scramjet Engine: A Review, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

17. J. Acharya, K.M. Pandey & S. Chatterjee, A Review on Aerodynamics of Flight in Adverse Condition, International Conference on Innovative Research in Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engg. (CIME-2016), Krishi Sanskriti Publications, March 20, 2016, Jawaharlal Nehru University, New Delhi-110067.

18. L. Roy & S.K. Kakoty, Application of Genetic Algorithm in Optimization of Hydrodynamic bearings,Proceedings of Fourth International Conference on Soft Computing for Problem Solving (SOCPROS 2014),NIT Silchar,December 27-29, 2014.

19. I. Choudhury, A. Mathur, A. Phukan, W. Nath & S. Halder, Preparation and Characterization of self-healing polymer matrix, MACRO 2015, International Symposium on Polymer Science and Technology, Kolkata, India, January 23-26, 2015.

20. S. Baruah & S. Chatterjee, Structural analysis for exhaust gas flow through perforated and non-perforated elliptical chamber muffler under static and dynamic loading condition,Proceedings of International Conference on Recent Trends in Engg. and Material Sciences, March !7-19, 2016 at Jaipur National University(JNU), Jaipur, Rajasthan.

21. I. Choudhury, S. Halder, A. Mathur, W. Nath & A. Phukan, Synthesis of self-healing thermosetting resin based capsules and their related complexities, MIMT 2015: 6th International Conference on Mechanical, Industrial, and Manufacturing Technologies, March 6-7, 2015, Melaka, Malaysia.

22. S. Dey, T. Mukhopadhyay, A. Spickenheuer, U. Ghosh, S. Adhikari, Artificial neural network based stochastic natural frequency analysis of composite plates, 12th International Conference on Vibration Problems (ICOVP 2015), December 14-17, 2015, Indian Institute of Technology Guwahati, India.

d) National Conference(s)

1. N.I. Khan, S. Halder & M.S. Goyat, Tuning the size of self-healing epoxy-filled microcapsules by amending their synthesis process parameters, MRSI North East Symposium on Advanced Materials for Sustainable Applications, NEIST, CSIR Lab, Jorhat, (2016).

e) Book/Chapter

K.M. Pandey & Deb Sunita, (April 2015), 2D CFD Analysis of Combustion in Eight Legged Star Shaped Perforation, LAP LAMBERT ACADEMIC PUBLICATIONS, GERMANY, pages 92, ISBN- 978-3-659-69490-5.

CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1.	Testing of solar Flat Plate Collector for M/s Geetanjali Solar Enterprise, Kolkata	Solar RTC project of ME Deptt., NIT Silchar (approved by MNRE, GOI)	INR 16,000.00

MAJOR EQUIPMENT ACQUIRED

1. Workshop: Vernier Calliper 6" , Chop Saw Machine, Bench Grinder
2. Computational Lab:5 KVA OL UPS System, 5 KVA online UPS Synergy
3. Renewable Energy Lab:Hot air oven with Digital PID, Muffle Still (Water Mounting)
4. Solar RTC Project: S.W.M-FPC-100 LPD, FPC; SWM-ETC-100 LPD, ETC; ETC Tubes; Air Conditioner 1.5 Ton Capacity; Hitech Voltage Stabilizer
5. Fluid Mechanics and Fluid Machinery Lab: Apparatus for verification of the Bernoulis Theorem, Apparatus for Callibration of Venturi Orrifice meter, Metacentric height apparatus, Apparatus for measuring force due to Impact of Jet
6. Nanocomposite Materials Lab: Recirculating Chiller, Digital Oven, Vacuum Oven, Vacuum Pump, Digital Magnetic Stirrer
7. FRP Lab: High Temp Tube furnace, Micro Hardness Tester, Precision cutting machine, High speed grinder, Twin belt polishing machine, Ball Mill
8. Material Characterization Lab: Planetary Ball Milling Machine, Fritch, Computer Controlled Simultaneous DSC-DTA-TGA System , Netzsch-STA-449F3 Jupiter, Computerized Static UTM 50kN, Instron 5969, 10 KVA UPS, 3 KVA UPS
7. Advance Manufacturing Lab: Pressure Sensor, Data Logger with Accessories, Twin Syringe Pump, Vacuum Desiccator
8. Solar RTC Project: Data Acquisition System, Model No. DTKDT85, range 0-200 0C & 0-40 mV DC, with a least count/ accuracy of 0.10& 0.001 mV DC; Class one precision spectral pyranometer, range 0-2000 W/m2, least count ± 0.3%; Electromagnetic flowmeter, model no. MS-920, range 0-300 LPH with a least count/accuracy of ±0.3%

PATENT

Sl. No.	Details	Year
1.	Ashangbam Satyavrata Singh, Sudipta Halder, A System and Method for Synthesizing Bamboo Short Micron Fibers, 719/KOL/2015 dated 02-07-2015	2015

VISITS TO ABROAD

Sl.No.	Name of the faculty	Name of the Conference/Programme	Place	Date
1.	Dr. S. Halder	6th International Conference on Mechanical, Industrial, and Manufacturing Technologies	Melaka, Malaysia	March 6-7, 2015

M.TECH. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
Thermal Engg.			
1.	Sanju Bordoloi	Dr. K. K. Sharma	Power Augmentation of Savonius Wind Turbine
2.	Munesh Kumar Paswan	Dr. K. M. Pandey	CFD Analysis of Supersonic Combustion with Hydrogen and Methane
3.	Jitu Haloi	Dr. K. M. Pandey	CFD Analysis of Heat Transfer in Supercritical Nuclear Reactor Fuel Rod Assembly with R-12 Coolant
4.	Arvind Kumar	Mrs. S. Debbarma	Biodiesel Production from Palm Oil And Effects of its Blends with Diesel on the Performance, Emission and Second Law Efficiency of C.I. Engine
5.	Hukire Mayur Ramling	Dr. S. Nath	Modeling of Nonlinear Breakup of Planar Liquid Sheet and Droplet Distribution using Maximum Entropy Formulation
6.	Kamaldeep Kalita	Dr. R. D. Misra	Experimental Evaluation of CI Engine Performance and Emission using SVO as Lubricant
7.	Rai Jainaindra Subhashchandra	Dr. R. D. Misra	Feasibility of Integrating Vapour Absorption Refrigeration System with Gas Turbine Power Plant using Exergy Analysis
8.	Oulkar Parag Prakash	Dr. S. Nath	Partial Fulfillment of the Requiirement Degree of Master of Technology
9.	Alok Kumar	Dr. A. Biswas	Optimal Feasible and Economical Designs of Stand -alone Hybrid Renewable Energy System with Consideration of Proper Storage Unit for Abulding
10.	Yadav Premsagar Rajkishor	Dr. S. Nath	Reconstruction and Advection of Interface using Young's VOF Algorithm
11.	Sartthak Kaushik	Dr. R. D. Misra	Feasibility Study of Vortex Tube Refrigeration Application in Automobiles through Thermodynamic Analysis of Vortex Tube Refrigeration System
12.	Bishal Podder	Dr. A. Biswas	Analytical and Experimental Studies of a Flat Plate Collector for Solar Water Heating System
13.	Mithinga Basumatary	Dr. A. Biswas	Numerical Simulation of Two Bladed Savonius Water Turbine with Deflector
14.	Mohd. Zeeshan	Dr. D. Bhanja	CFD Analysis of Heat Transfer and Pressure Drop for Fin and Tube Heat Exchanger with Different Shapes of Tube Having in Line and Staggered Arrangements
15.	Noor Alam	Dr. K. M. Pandey	Experimental Studies on Production and Characterization of Hydroxy Gas
16.	Sanjay Kumar Sahoo	Dr. K. M. Pandey	Thermal Hydraulics of Subchannel in a Hexagonal Fuel Assembly in Upward Flow with Water as Coolant
17.	Saheera Azmi Hazarika	Dr. D. Bhanja	Thermal Analysis of a T-Shaped Fin with Simultaneous Heat and Mass Transfer
18.	Manoranjan Das	Dr. K. M. Pandey & Mr. D. Das	CFD Analysis of Pulse Detonation Engine with Different Types of Spiral Grooves
19.	Rajarshi Rajkhowa	Mr. D.H. Das & Dr. K. M. Pandey	CFD Analysis of an Unmanned Aerial Vehicle with Rim Mounted Blades
20.	Rupjyotyi Bharali	Dr. S. Chatterjee	Experimental Optimization of the Process Parameters During Solvent Extraction Process from Various Non Edible Biomasses
Design & Manufacturing			
21	Huruj Deori	Dr. D. Dutta	Comparative Study of Von-Mises stress for spur and bevel gears for various pressure angles and various orientations of axis
22.	Dibyajyoti Borah	Dr. P. K. Patowari	Machinability study of Austempered ductile iron using electrical discharge machining
23.	Hashim Mohamed	Mr. S. K. Pattanayak	Manufacturing cost optimization in aggregate production planning using stochastic search methods- a comparative

Sl. No.	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
24.	Yashpal Singh	Mr. S. K. Pattanayak	Optimum static balancing of a medical 3D- Ultrasonic Imaging parallel robot
25.	Partha Protim Das	Mr. S. K. Pattanayak	Optimization of production scheduling cost in a single raw material environment under uncertainity- a robust optimization approach
26.	Patwardhan Adheesh Abhay	Mr. S. K. Pattanayak	Meta-heuristic algorithm for product mix CONWIP production control system
27.	Phool Singh Dinkar	Dr. S. Chatterjee	Finite element based computational study for assessment of elastic follow-up in pressure vessel and pipe line
28.	Anil Varghese Mangalan	Mr. P. Choudhury	Graphene nano platelets : an attractive ingredient for laminated GFRP multi scale composition
29.	Gupta Ganesh Mallu	Dr.S. Bhowmik & Mr. D. Das	Analysis and comparative study for linear buckling of un-stiffened composite plate
30.	Sandeep Kuriakose	Dr. P. K. Patowari	Machinability study of metallic glass using micro-USM and micro EDM
31.	Pradeep Kumar Tarei	Mr. Jagadish	An exploratory analysis on performance measurment using multi- criteria decision making approach
32.	Abhishek Singh	Dr. L. Roy	Bio-micro machining of Copper and empirical modelling
33.	Polimeni Ravi Kumar	Mr. P. Choudhury & Dr. S. Halder	Effect of graphrenenanoplatelets infusion on dynamic thermal behavior of GFRP multi-scaale composition
34.	Vaibhav Srivastava	Dr. K. Chakraborty	Some studies on chip breakability
35.	Pranjal Sarma	Dr. P. K. Patowari	Design, Analysis and Fabrication of passive micromixtures for enhanced mixing performance
36.	Sumit Kr. Sinha	Dr. S. Bhowmik	Application of virtual manufacturing concept to develop the universal testing machine and testing procedure
37.	Ashutosh Rajput	Dr. L. Roy	Effect of surface texture on the steady state characteristics of journal bearing and its comparison
CAD –CAM &Automation			
38.	Hussain Mahamed Sahed Mostafa Mazarbhuiya	Dr. K. M. Pandey	Steady state structural and modal analysis of high pressure gas turbine blades with different materials using FEA
39.	Badgujar Alkesh Shaligram	Mr. Jagadish	Analysis and optimization of bamboo based tricycle using FEA and MCDM approach
40.	Kishore Jyoti Deka	Dr. P. K. Patowari	Design and analysis of cutout section and fabrication using photochemical machining
41.	Samuel Debbarma	Dr. D. Dutta	Numerical simulation for bending of flexible fingure joint driven by expandable human muscles
42.	Shashikanta Das Mohapatra	Mr. P. Choudhury & Dr. K. M.Pandey	Fluid-Structure interaction and stress analysis on horizontal wind turbine blade
43.	Mulande Sandip Narendra	Dr. K. K. Sharma	Upgrading degrees of freedom of the Robix Robot for improving its workspace using MATLAB
44.	Krishanu Gupta	Dr. S. Chatterjee	Geometrical modeling and Finite element based computational study on a suitable spur gear system for asingle axis indegenous solar tracking application
Materials & Manufacturing Technology			
45.	Soyeb Ahemad	Dr. S. Halder	Impact of silanized zro2 nanoparticles on mechanical performance of laminated GFRP Multi-scale composites
46.	Dhritiman Talukdar	Dr. S. Halder	Atomistic modelling and molecular dynamics simulation of DGEBA-DETA/C60 Nanocomposite
47.	Debakanta Mohanty	Dr. K. M. Pandey	Transient thermal analysis of modified Cr-Mo steel during gas metal arc welding process

Sl. No.	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
48.	Uttam Acharya	Dr. K. Chakraborty	Thermal behaviour of epoxy composites infused with CNP coated bamboo fibers
49.	Sriram Chauhan	Mr.D.H.Das & Dr. S. Halder	Tuning morphology of sol-gel synthesized zno on mechanical and thermal properties of epoxy nanocomposites
50.	Nazrul Islam Khan	Dr. S. Halder	Influence of self- healing microcapsules on healing performance of metal epoxy composite adhesive
51.	Animesh Sinha	Dr. S. Halder	Influence of reactive and non- reactive diluents on the mechanical properties of epoxy resin
52.	Barnasree Chanda	Dr. S. Bhowmik	Estimation and analysis of fatigue behaviour of wood dust reinforced epoxy composite

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Eswara Krishna Mussada	Dr. P. K. Patowari	Material Deposition Using EDM and its Post Processing for Better Surface Finish and Fabrication of Micro Structures
2.	Maneswar Rahang	Dr. P. K. Patowari	Selective Material Deposition Using Powder Metallurgical Compact Tool and Masking in EDM for Pattern Generation
3.	Sukanta Roga	Dr. K. M. Pandey	CFD Analysis of Scramjet Combustor with Cavity Based Flame Holders and Strut Injectors at Supersonic and Hypersonic Mach Numbers
4.	Bachu Deb	Dr. R. Gupta & Dr. R. D. Misra	Experimental and Computational Analysis of Helical Savonius Rotors

CENTRAL WORKSHOP

Head
Prof. K. M. Pandey, Ph.D

Faculty-in-charge Workshop
Dr. S. Halder, Ph.D.

Workshop-in-charge
Mr. B.K. Nath, Diploma

The workshop of the Mechanical Engg. Department acts as a Central Workshop of the Institute. It is one of the major service sections of the institute consisting of five sections namely, (i) Machine shop, (ii) Fitting shop, (iii) Carpentry shop, (iv) Welding shop, (v) Sheet Metal shop.

The Machine Shop comprises of Lathe (GD lathe, Capstan lathe, Turret lathe, Speed lathe, All Geared Sliding Surface Screw Cutting Lathe), Milling machine (horizontal and vertical), Surface Grinder, Shapper, Double Housing Planner, Slotter and Radial Drilling machine.

The Fitting Shop comprises of Bench Drilling machine, Power Hacksaw, Fitting Tables with vices, Wall mounted Grinding machine and Pedestal Grinder. The Carpentry Shop has Carpentry Tables with vices, Wood Turning lathe, Surface planner and Thickness planner. The Welding Shop includes Oxy-Acetylene Gas Welding, Arc Welding, TIG, MIG and Submerged Arc Welding.

All the shops are equipped with necessary tools. Common workshop classes are held in the workshop along with workshop classes for higher semesters of Mechanical Engg. branch. Different project works for the undergraduate and postgraduate students are also carried out in the workshop. However, continuous efforts are being taken to augment the facilities of the workshop commensurate with the change in technology. The workshop is also used for fabrication work for the Institute.

Chemistry

Academic Staff

Head: Dr. Pranjit Barman, Ph.D.

Faculty Members

Assistant Prof.
Dr. Pranjit Barman, Ph.D.
Dr. Ahmaruzzaman, Ph.D.
Dr. S. S. Dhar, Ph.D.
Dr. R. Rano, Ph.D.
Dr. B. H. Shambarkar, Ph.D.
Dr. L. Rokhum, Ph.D.
Dr. N. S. Moyon, Ph.D.

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. P. Barman	Lecture on understanding Retinal bound Photoreceptor through Bio-organic Chemistry	NITS	February 15, 2016
2.	Dr. P. Barman	Recent trends in chemical science and Technology (STTP)- self sponsored	Self-Sponsored	March 23-27, 2016
3.	Dr. M. Ahmaruzzaman	Recent Advances in Chemical Science and Technology	Self-Sponsored	March 23-27, 2016
4.	Dr. S.S. Dhar	Application of Analytical Techniques in Science and Technology	Self-financed	One-week

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

Synthesis of metal/metal oxides nanocatalysts and their application as efficient heterogenous catalysts in chosen organic transformations; preparation and application of ionic liquid based reagents; Synthesis of bivalent organo sulphur compounds and their applications; Synthesis of metal complexes with ONS donor ligands and their applications; Organic Synthesis; Petroleum residue upgradation, water pollution, nanomaterials, nanocomposities, adsorption, watertreatment, waste plastic recycling; Solvation dynamics, photochemistryof organic bio molecules; Nanomaterials synthesis,nanocomposities, conducting polymers, catalysis; Multi component utilisation of fly ashfrom different thermal power plants andpaper mills, studies on fly ash basedcatalyst in organic reactions,characterization of various industrialhazardous waste materials,investigations on coal and coalcombustion byproducts.

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

Completed	Submitted	Ongoing
03	03	22

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1	B.Tech. Laboratory	For B.Tech. Practical Class
2	PG Laboratory-I	For M.Sc. Organic Practical Class
3	PG Laboratory-I	For M.Sc. Inorganic Practical Class
4	PG Laboratory-I	For M.Sc. Physical/Environmental Practical Class
5	Ph.D. Laboratory	For Ph.D. Students
6	Instrument Laboratory	Sophisticated instruments are kept here

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Metal complexes of new chiral Schiff bases: Design, structure, elucidation, reactivity and synthetic applications	Dr. P. Barman	DST	36,00,448/-	3 years
2.	Synthesis of noble platinum-acridine antitumor compounds and their biological evaluation		STIS, NIT Silchar	4.83	2 years
3.	Investigation and remedial measures of greenhouse gas emission in HOT mix plan		STIS, NIT Silchar	4.95	2 years
4.	Development of tailored metal-oxide nanoparticles for the removal of As(IIII) and Fe(III) from aqueous phase	Dr. M. Ahmaruzzaman	STIS, NIT Silchar	4.71	2 years
5.	Oxo-tungsten Based Nano-catalysts in the Synthesis of Industrially Important Adipic Acid	Dr. S. S. Dhar	NIT Silchar	4.75	2 years
6.	Synthesis of Indenoisoquinoline (Fast Track Young Scientist Project)	Dr. L. Rokhum	SERB-DST	16.50	2014-17 (in progress)
7.	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways		SERB-DST	32.16	2014-18 (in progress)

(e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. P. Barman	Dalton Transactions	01	2016
		Journal of Coordination Chemistry	01	2015
		New Journal of Chemistry	02	2015
		The Journal of Organic Chemistry	01	2015
2.	Dr. M. Ahmaruzzaman	RSC Advances	09	2015-2016
		Scientific Reports (Nature Publishing Group)	01	2015-2016
		Crystal Engg. Communication	01	2015-2016
		Industrial Engg.& Chemistry Research	01	2015-2016
		Journal of Environmental Management	02	2015-2016
		Spectrocimica Acta Part A	01	2015-2016
3.	Dr. S.S. Dhar	Journal of Photochemistry and Photobiology B: Biology	03	2015-16
		Journal of Molecular Liquids	01	2015-16
		Phosphorus, Sulfur and Silicon and the Related Elements	01	2015-16
		RSC Advances	01	2015-16
		Environmental Chemistry Letters	01	2015-16
		Research on Chemical Intermediates	01	2015-16
		Solid State Sciences	01	2015-16

PUBLICATIONS

a) International Journal(s)

1. R. Rahaman, N. Devi, J.R. Bhagawati & P. Barman, (2016), Microwave-assisted regioselective sulfenylation of indoles under solvent- and metal-free conditions, RSC Advances, Vol. 6, The Royal Society of Chemistry.
2. R. Rahaman, N. Devi, K. Sarma & P. Barman, (2016), Microwave-assisted synthesis of 3-sulfenylindolesby sulfonyl hydrazides using organic ionic base bronsted acid, RSC Advances, Vol. 6, The Royal Society of Chemistry.
3. N. Devi, R. Rahaman, K. Sarma & P. Barman, (2016), Regioselective Mono- and Bis-Sulfenylation of Active Methylene Compounds, European Journal of Organic Chemistry, Vol. 2, Wiley Online Library.
4. A. Khaskel & P. Barman, (2016), Benzyltrimethylammoniumfluoride hydrate: An efficient catalyst for one-pot synthesis of Hantzsch 1,4-dihydropyridines and their aromatization, Heteroatom Chemistry, Vol. 27, Wiley Online Library.
5. R. Rahaman, N. Devi, & P. Barman, (2015), Metal free sulfenylation of active methylene compounds and indole: TBATB mediated synthesis, Tetrahedron Letters, Vol. 56, Elsevier.
6. P. Gogoi, S. Hazarika, & P. Barman, (2015), Role of TBATB in nano-indium catalyzed C-S bond formation, Scientific Reports, Vol. 5, Nature Publications Group.
7. K. Sarma, N. Devi, M. Kalita, B. Sarma, & P. Barman, (2015), Nickel(II), Copper(II), Cobalt(II) and Palladium(II) complexes with a Schiff base: Crystal Structure, DFT study and Copper complex catalyzed aerobic oxidation of alcohol to aldehyde, Journal of Coord. Chemistry, Vol. 68, Taylor & Francis.
8. P. Gogoi, B. Paul, S. Hazarika, & P. Barman, (2015), Gold nanoparticle catalyzedintramolecular C–S bond formation/ C–H bond functiona-lization/cyclization cascades, RSC Advances, Vol. 5, The Royal Society of Chemistry.
9. P. Gogoi, S. Hazarika, & P. Barman, (2015), Tetrabutylammoniumtribromide impregnated MCM-48 as a heterogeneous catalyst for selective oxidation of sulfides, RSC Advances, Vol. 5, The Royal Society of Chemistry.
10. P. Gogoi, S. Hazarika, & P. Barman, (2015), TBATB mediated debenzylative cross-coupling of aryl benzyl sulfides with electron rich compounds: synthesis of diaryl sulfides, RSC Advances, Vol. 5, The Royal Society of Chemistry.

11. A. Khaskel, P. Barman, & U. Jana, (2015), L-Tyrosine loaded nanoparticles: an efficient catalyst for the synthesis of dicoumarols and Hantzsch 1,4-dihydropyridines, RSC Advances, Vol. 5, The Royal Society of Chemistry.
12. M. Ahmaruzzaman, & S. Tanur, (2015), A new and facile strategy for the one-pot fabrication of luminescent gold nanoclusters and its prospective application, RSC Advances, Vol. 6, The Royal Society of Chemistry.
13. M. Ahmaruzzaman, & A. Bhattacharjee, (2016), A facile and green strategy for the synthesis of 1-dimensional luminescent ZnO nanorods and its reduction behavior for aromatic nitro-compounds, RSC Advances, Vol. 6, The Royal Society of Chemistry.
14. T.B. Devi, M. Ahmaruzzaman, & B. Shamima, (2016), A rapid, facile and green synthesis of Ag@AgCl nanoparticles for the effective reduction of 2,4-dinitrophenyl hydrazine, New Journal of Chemistry, Vol. 40, The Royal Society of Chemistry.
15. M. Ahmaruzzaman, & A. Bhattacharjee, (2016), A new facile strategy for the synthesis of 1-dimensional CuO nanostructures and their reduction performance, Materials Letters, Vol. 166, Elsevier.
16. R.A. Reza & M. Ahmaruzzaman, (2016), Removal of naproxen from aqueous environment using porous sugarcane bagasse: impact of ionic strength, hardness and surfactant, Res Chem Intermed, Vol. 42, Springer.
17. M.J.K. Ahmed, M. Ahmaruzzaman & M.H. Bordoloi, (2015), Novel Averrhoa carambola extract stabilized magnetite nanoparticles: a green synthesis route for the removal of chlorazol black E from wastewater, RSC Advances, Vol. 5(91), The Royal Society of Chemistry.
18. M. Ahmaruzzaman & A. Bhattacharjee, (2015), Photocatalytic-degradation and reduction of organic compounds using SnO2 quantum dots (via a green route) under direct sunlight, RSC Advances, Vol. 5(81), The Royal Society of Chemistry.
19. R.A. Reza & M. Ahmaruzzaman, (2015), A novel synthesis of Fe2O3@ activated carbon composite and its exploitation for the elimination of carcinogenic textile dye from an aqueous phase, RSC Advances, Vol. 5(14), The Royal Society of Chemistry.
20. M.J.K. Ahmed & M. Ahmaruzzaman, (2015), Fabrication and characterization of novel lignocellulosic biomass tailored Fe3O4 nanocomposites: influence of annealing temperature and chlorazol black E sequestration, RSC Advances, Vol. 5, The Royal Society of Chemistry.
21. M. Ahmaruzzaman, A. Bhattacharjee & T. Sinha, (2015), A novel approach for the synthesis of SnO2 nanoparticles and its application as a catalyst in the reduction and photodegradation of organic compounds, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Vol. 136, Elsevier.
22. T. Sinha & M. Ahmaruzzaman, (2015), A novel green and template free approach for the synthesis of gold nanorice and its utilization as a catalyst for the degradation of hazardous dye, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Vol. 139, Elsevier.
23. A. Bhattacharjee & M. Ahmaruzzaman, (2015), Facile synthesis of SnO2 quantum dots and its photocatalytic activity in the degradation of eosin Y dye: A green approach, Materials Letters, Vol. 139, Elsevier.
24. M. Ahmaruzzaman, M.J.K. Ahmed & S. Begum, (2015), Remediation of Eriochrome Black T-contaminated aqueous solutions utilizing H3PO4-modified berry leaves as a non-conventional adsorbent, Desalination and Water Treatment, Elsevier.
25. T. Sinha & M. Ahmaruzzaman, (2015), High-value utilization of egg shell to synthesize Silver and Gold–Silver core shell nanoparticles and their application for the degradation of hazardous dyes from aqueous phase-A green approach, Journal of Colloid and Interface Science, Vol. 453, Elsevier.
26. T. Sinha & M. Ahmaruzzaman, (2015), A novel and greener approach for shape controlled synthesis of gold and gold–silver core shell nanostructure and their application in optical coating, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Vol. 145, Elsevier.

27. A. Bhattacharjee & M. Ahmaruzzaman, (2015), A green approach for the synthesis of SnO2 nanoparticles and its application in the reduction of p-nitrophenol, Materials Letters, Vol. 157, Elsevier.

28. M. Ahmaruzzaman & M.J.K. Ahmed, (2015), Activated charcoal–magnetic nanocomposite for remediation of simulated dye polluted wastewater, Water Science & Technology, Vol. 71(9), IWA.

29. A. Bhattacharjee & M. Ahmaruzzaman, (2015), A novel and green process for the production of tin oxide quantum dots and its application as a photocatalyst for the degradation of dyes from aqueous phase, Journal of Colloid and Interface Science, Vol. 448, Elsevier.

30. T. Sinha & M. Ahmaruzzaman, (2015), Biogenic synthesis of Cu nanoparticles and its degradation behavior for methyl red, Materials Letters, Vol. 159, Elsevier.

31. M. Ahmaruzzaman & M.J.K. Ahmed, (2015), A facile synthesis of Fe3O4–charcoal composite for the sorption of a hazardous dye from aquatic environment, Journal of Environmental Management, Vol. 163, Elsevier.

32. T. Sinha & M. Ahmaruzzaman, (2015), Green synthesis of copper nanoparticles for the efficient removal (degradation) of dye from aqueous phase, Environmental Science and Pollution Research, Springer.

33. B. Bhuyan, B. Paul & S.S. Dhar, (2016), CTAB promoted size-tuning synthesis of rod-like V2O5 nanoparticles and their catalytic studies in oxidative esterification of aldehydes, Nanoscience and Nanotechnology Letters, American Scientific Publishers (in press).

34. B. Bhuyan, B. Paul, S.S. Dhar & D.D. Purkayastha, (2016), Size-controlled synthesis of NiFe2O4nanospheres via a surfactant-assistant hydrothermal route and their catalytic properties in oxidation of alcohols by periodic acid, Applied Surface Science, Vol. 370, Elsevier.

35. B. Bhuyan, B. Paul, S.S. Dhar & D.D. Purkayastha, (2016), Facile synthesis and characterization of zinc oxide nano particles and studies of their catalytic activity towards ultrasound-assisted degradation of metronidazole, Materials Letters, Vol. 168, Elsevier.

36. T. Prasad, S. Haldar, M.S. Goyat & S.S. Dhar, (2016), Morphological dissimilarities of ZnO nanoparticles and its effect on thermo-physical behavior of epoxy composites, Polymer Composites, Wiley (in press).

37. B. Paul, B. Bhuyan, S.S. Dhar & D.D. Purkayastha, (2016), Photo catalytic and antibacterial activity of gold and silver nanoparticles synthesized using biomass of Parkiaroxburghii leaf, Journal of Photochemistry and Photobiology B: Biology, Vol. 154, Elsevier.

38. B. Paul, B. Bhuyan, S.S. Dhar & D.D. Purkayastha, (2016), Green synthesis of silver nanoparticles using dried biomass of Diplaziumesculentum (retz.) sw. and studies of their photocatalytic activities and anticoagulative property on human blood, Journal of Molecular Liquids, Vol. 212, Elsevier.

39. B. Paul, B. Bhuyan, S.S. Dhar, D.D. Purkayastha & B.K. Patel, (2015), Hexamethoniumbis(tribromide) (HMBTB) a recyclable and high bromine containing reagent, Tetrahedron Letters, Vol. 56, Elsevier.

40. B. Paul, B. Bhuyan, S.S. Dhar, D.D. Purkayastha & S. Behra, (2015), Facile synthesis of spinel CuCr2O4 nanoparticles and studies of their photocatalytic activity in degradation of some selected organic dyes, Journal of Alloys and Compounds, Vol. 648, Elsevier.

41. B. Paul, B. Bhuyan, S.S. Dhar & D.D. Purkayastha, (2015), Facile synthesis of -Fe2O3 nanoparticles and their catalytic activity in oxidation of benzyl alcohols with periodic acid, Catalysis Communications, Vol. 69, Elsevier.

42. B. Paul, B. Bhuyan, S.S. Dhar, D.D. Purkayastha & M. Dey, (2015), Green synthesis of gold nanoparticles using Pogestemonbenghalensis (B) O. Ktz. leaf extract and studies of their photocatalytic activity in degradation of methylene blue, Materials Letters, Vol. 148, Elsevier.

43. R.R. Dey, B. Paul & S.S. Dhar, (2015), A Novel Metal- and Mineral-acid free Synthesis of Organic Ammonium Tribromides and Application of EthylenephenanthroliumBistribromide for Bromination of Active Methylene Group of 1, 3-Diketones and β-Ketoesters, Synthetic Communications, Vol. 45, Taylor & Francis.

44. B.H. Shambharkar & A.P. Chowdhury, (2016), Ethylene glycol mediated synthesis of Ag8SnS6 nanoparticles and their exploitation in the degradation of eosin yellow and brilliant green, RSC Advances, The Royal Society of Chemistry.

45. G. Pathak & L. Rokhum, (2015), Selective Monoesterification of Symmetrical Diols Using Resin-Bound Triphenylphosphine, ACS Comb. Sci, Vol. 17(9), ACS.

46. D. Das & L. Rokhum, (2015), Application of "Click" chemistry in solid phase synthesis of alkyl halides, Acta Chim Slov, Vol. 62.

47. F. Sultana & R. Rano, (2015), Study of Coal Combustion Residues from Pulp and Paper Mill for Potential Applications, Energy sources Part A, Taylor & Francis (in press).

48. N.A. Mazumder, R. Rano & G. Sarmah, (2015), A green and efficient solid acid catalyst over coal combustion fly ash for Fischer esterification reaction, Journal of Industrial and Engg. Chemistry, Vol. 32, Elsevier.

49. N.A. Mazumder & R. Rano, (2015), An Efficient Solid Base Catalyst from Coal Combustion Fly ash for Green Synthesis of dibenzylideneacetone, Journal of Industrial and Engg. Chemistry, Vol. 29, Elsevier.

b) International Conference(s)

1. K. Sarma & P. Barman, Synthesis of NS donor Pd complex crystallographic study and catalytic application towards oxidation of sulphide to sulfoxide, Department of analytical Chemistry, University of Madras, 2015.

2. M. Kalita & P. Barman, Synthesis characterization, crystal structure of a new copper Schiff base complex containing N, O donor set: Copper complex catalysed oxidation and its bioactivities, North Eastern Hill University, Shillong, 2015.

3. N. A. Mazumder & R. Rano, A highly efficient solid base catalyst derived from waste fly ash, International Conference on Waste Management (Recycle-2016), IIT Guwahati, April 1-2, 2016.

4. Firoza Sultana & R. Rano, Coal Combustion Residues and its Potential Applications, International Conference on Waste Management (Recycle-2016), IIT Guwahati, April 1-2, 2016.

c) National Conference(s)

1. R. Rahaman, N. Devi & P. Barman, Metal free sulfenylation of active methylene compounds and indole: TBATB mediated synthesis, CSIR-NEIST Jorhat, Assam, 2016.

2. N. Devi, R. Rahaman, K. Sarma & P. Barman, Regioselective Mono- and Bis-Sulfenylation of Active Methylene Compounds, CSIR-NEIST Jorhat, Assam, 2016.

3. K. Sarma, N. Devi, M. Kalita, B. Sarma & P. Barman, An efficient method for oxidation of alcohol to aldehyde by binuclear Cu (II) complex as catalyst, CSIR-NEIST Jorhat, Assam, 2016.

4. G. Pathak & L. Rokhum, Selective mono-esterification of symmetrical diols using resin-bound triphenylphosphine, National Symposium on Natural Products: Prospects & Perspectives, Chemical Research Society of India (CRSI)-NE Chapter and CSIR-NEIST.

5. N. A. Mazumder & R. Rano,Investigation on Fly Ash from Super Thermal Power Plant in India Using XRF, XRD, SEM-EDS and FT-IR Spectroscopy, National Conference on Current Perspectives on Research on Chemical Sciences (CPRCS-2015), Assam University, Silchar.

M.Sc. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Ihsanul Hussain	Dr. P. Barman	Role of nano-Silver particles: An efficient Pd/Ag-catalyzed Synthesis of Aryl sulfide from Diaryl Disulfide
2.	Pranjal Gogoi		Studies on synthesis, characterization of new transition metal complexes with SN & SNO donor ligands and palladium complex catalyzed aerobic oxidation of alcohol to aldehyde
3.	Jyoti Rekha Bhagawati		Iodine-Catalysed Regioselective Sulfenylation of Indoles with Thiols using H2O2 as Oxidant under ambient conditions in Polyethylene Glycol (PEG400)
4.	Mustaq Hussain Bordoloi	Dr. M. Ahmaruzzaman	Synthesis and Characterisation of magnetic nanomaterials and nanocomposites for the sequestration of chlorazole black E from aqueous solution
5.	Jayashree Nath		Synthesis, Characterisation and application of SnO2 nanoparticles
6.	Kashmiri Neog		Amino acid mediated synthesis of CuO nanoparticles and their role as catalyst in dye degradation
7.	Nadimur Rahman	Dr. S. S. Dhar	A New (1-propyl)triphenylphosphonium tribromide catalyst in the synthesis of functionalized piperidine derivatives through multi-component reaction
8.	Susmita Bhuyan		Green synthesis of gold and silver nanoparticles using leaf extract of parkiaroxburghii
9.	Tulika Dutta		Hydrothermal synthesis of ZnO nanoparticles: characterization and catalytic studies in oxidiation of benzyl alcohols by periodic acid
10.	Bittu Lama	Dr. L. Rokhum	One pot Wittig Reaction under Solvent-free Conditions
11.	Lupamudra Rajkhowa		A Facile Synthesis of Azides from Alcohols
12.	Juhina Hoque	Dr. N. S. Moyon	Steady-state fluroscence studies of Luminol(5-amino-2,3-dihydro-1,4 phalazinedione) in the presence of adenosine mono phosphate (AMP) and guanosine monophospahte(GMP)
13.	Gitarthi Sarmah	Dr. Ruma Rano	Application of coal-combustion fly ash as a catalyst for organic transformation
14.	Monisha Boruah		Characterisation of coal combustion residue from Nagaon Paper mill for potential Utilisation

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Prasanta Gogoi	Dr. P. Barman	Studies towards the development of synthetic methodologies for the formation of C-S bond and antibacterial and antifungal activities of a new sulfenylpyrrolidines
2.	Mukul Kalita	Dr. P. Barman	Studies on the synthesis, characterization of ONS donor Schiff base complexes and their applications
3.	Anamika Khaskel	Dr. P. Barman	Synthesis of various Heterocycles with special reference to multicomponent condensation reaction
4.	Ruhul Amin Reza	Dr. M. Ahmaruzzaman	Waste-derived adsorbents: Development, characterization and application in the removal of dyes and pharmaceuticals from aqueous phase

Mathematics

Academic Staff

Head: Mr. B. Nath, M.Sc. (from 01.04.2015 to 30.09.2015)

Dr. S. Roy, Ph.D. (from 01.10.2015 to till date)

Faculty Members

Associate Prof.	Assistant Prof.
Mr. B. Nath, M.Sc.	Dr. S. Roy, Ph.D.
Dr. P. K. De, Ph.D.	Dr. M. Sen, Ph.D.
	Dr. G. Ramesh, Ph.D.
	Dr. K. N. Das, Ph.D.
	Dr. P. K. Gupta, Ph.D.
	Dr. Md. Maqbul, Ph.D.
	Dr. P. Biswas, Ph.D.
	Dr. J. Mahanta, Ph.D.
	Dr. S. Bera, Ph.D.
	Dr. B. H. S. Raju, Ph.D.

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOP

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. P. K. De & Dr. D. Chakraborty	National Workshop on Mathematical MethodsIn Physical Sciences	ISI Kolkata	January 29-31, 2016
2.	Dr. M. Sen, Dr. K. N. Das & Dr. S. Roy	One week self-financed short term course on Applications of Statistical Methods Optimization in science and Engg.	Self-financed	March 18-23, 2016

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. P. K. De	IEEE International Conference MAMI 2015, Paper presented – Solution of Multi Objective Linear Fractional Programming Problem by Taylor Series Approache, December 17-19, 2015	C.V.Raman College of Engg.
2.	Dr. B. H. S. Raju	National workshop on Mathematical methods in physical sciences, January 29-31, 2016	ISI Kolakta& NIT Silchar
3.	Dr. K. N. Das	Fifth International Conference on Soft Computing for Problem Solving: SocProS 2015, December 18-20, 2015	IIT ROORKEE
4.	Dr. K. N. Das	International Conference on Robotics, Mechanics and Mechatronics (ICRMM 2015), April 21-23, 2015	Singapore
5.	Dr. P. K. Gupta	National workshop on Mathematical methods in Physical Sciences, Januray 29-31, 2016	ISI Kolkata & NIT Silchar

RESEARCH DEVELOPMENT

a) Ph.D. Programme (Specializations)

Fuzzy Multiple Sequence Spaces, Computational Fluid Dynamics: Heat Transfer, Evolutionary Optimization and Applications to Real world Problems, Computational Fluid Dynamics: Micro-nano fluidics Modelling, Mathematical Modelling of Biological Problems; Fractional Calculus; Numerical Methods for ODE and PDEs, Fuzzy Topology, Multiset theory, Rough Set Theory, Functional Differential Equations, Almost Periodic Functions, Operations Research and Applied Mathematics, Operations Research, Fuzzy Optimization, Mathematical Modelling, Uncertainty Modelling, Numerical Methods, Elasto-dynamics.

b) Ph.D. Produced /ongoing (In number)

Completed	Submitted	Ongoing
02	03	07

c) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal/ Co-PrincipalInvestigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	A study on measure theoretical approach to convergence of sequencesin probabilistic normed spaces	Dr. M. Sen	SERB-DST, Govt. of India	13.00 (Approx)	3 years
2.	Design of Optimized Model of Smokeless Chulha by using Geo-Polymer and Installation for Poor Villagers in North East India	Dr. K. N. Das (PI)	Science, Technology & Innovation Scheme (STIS), Govt. of India	3.61	2 years

Sl. No.	Project Title	Principal/ Co-PrincipalInvestigator	Funding Agency	Cost in lakhs (Rs)	Duration
3.	Implementation of Smart Card Access Control in Hostels of NIT Silchar	Dr. K.N. Das (Co-PI)	Science, Technology & Innovation Scheme (STIS), Govt. of India	4.75	2 years
4.	A numerical treatment of HIV infection through mathematical model'	Dr. P. K. Gupta (PI)& Dr. P. Biswas (Co-PI)	Science, Technology &Innovation Scheme (STIS), NIT Silchar	1.3	2 years
5.	Development of an integrated hydrological-mathematical model to determine flood discharge in and around Silchar city	Dr. J. Mahanta (Co-PI)	Science, Technology & Innovation Scheme (STIS), NIT Silchar	3.4	2years
6.	Spectral element methods for elliptic and parabolic interface problems in R^2 on parallel computers	Dr. P. Biswas (Co-PI)	NBHM	13.59	3 years

d) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. S. Roy	Springer Journals	01	2015
2.	Dr. S. Roy	IKP-PRM-REV-2-INFO	01	2015
3.	Dr. J. Mahanta	Mathematical & Computational Applications, Journal of New theory	02	2016
4.	Dr. K. N. Das	• National Academy Science Letters, Springer • International Journal of Swarm Intelligence (IJSI), Inder Science		
5.	Dr. P. K. De	IEEE Tranctions on Fuzzy System (TFS)	02	2015
6.	Dr. P. K. De	International Journal of FuzyCompution and Modelling (IJFCM)	01	2015
7.	Dr. P. K. De	Annals of Fuzzy Mathematics and Informatics (AFMI)	01	2015
8.	Dr. P. K. De	Applications and Applied Mathematics (AAM)	01	2015

e) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. K. N. Das	Hybrid Soft computing techniques for performance enhancement in practical applications, in International Conference on 'Soft Computing for Problems Solving' during December 18-20, 2015 (Saharanpur Campus, IIT Roorkee)
2.	Dr. P. K. De	Cybernetics in International Conference,on December 19, 2015, IEEE International Conference on Man and Machine Interfacing (MAMI 2015),December 17 – 19, 2015

PUBLICATIONS

a) International Journal(s)

1. T.V.S. Sekhar, B.H.S. Raju & P.V.S.N. Murthy, (2016), Higher order compact scheme for laminar natural convective heat transfer from a sphere, Applied Mathematical Modelling, Vol. 40, pp. 2039-2055, (Impact factor 2.251) Elsevier.
2. S. Bera & S. Bhattacharyya, (2015), Electroosmotic flow in the vicinity of a conducting obstacle mounted on the surface of a wide microchannel, International Journal of Engg. Science, Vol. 94, pp.128–138, Elsevier.
3. J. Mahanta & P.K. Das, Results on Fuzzy Soft Topological Spaces Mathematical & Computational Applications, MDPI (Accepted).
4. J. Mahanta & D. Das, Boundary and Exterior of a Multiset Topology, Journal of New Theory, BED U BilgisayarYazılımE itim Yayıncılık Ltd. ti, Turkey (Accepted).
5. M. Nath & S. Roy, (2015), On Fuzzy Real-valued Multiple Sequence Spaces , International Journal of Emerging Trends in Electrical and Electronics, Vol. 11 (4), (IJETEE – ISSN: 2320-9569).
6. S. Roy & M. Nath, (2015), On Fuzzy Real-valued Bounded Variation Multiple Sequence Space , International Journal of New Technologies in Science and Engg., Vol. 2 (1), (IJNTSE – ISSN: 2349-0780).
7. M. Nath & S. Roy, (2016), Some New Classes of Fuzzy Real-valued Ideal Convergent, Asian Journal of Mathematics and Computer Research (Accepted).
8. M. Nath & S. Roy, (2016), Some New Classes of Ideal Convergent Difference Multiple Sequences of Fuzzy Real numbers, Journal of Intelligent & Fuzzy systems (Accepted).
9. R. P. Parouha & K. N. Das, (2016), A novel hybrid optimizer for solving Economic Load Dispatch Problem, International Journal of Electrical Power & Energy System, Vol. 78, pp. 108-126, Elsevier (SCI, IF: 3.432).
10. R. P. Parouha & K. N. Das, (2016), A memory based differential evolution algorithm for unconstrained optimization, Applied Soft Computing, Vol. 38, pp. 501-517, Elsevier (SCI, IF: 3.22).
11. K. N. Das & R. P. Parouha, (2015), Constrained optimization with a novel hybrid algorithm and applications, OPSEARCH, Vol. 7(28), pp. 1-31, Springer.
12. K. N. Das & T. K. Singh, (2015), A Novel Approach for Solving Engg. Optimization Problems Involving Equality Constraints, International Journal of Materials, Mechanics and Manufacturing, Vol. 3(4), pp. 304-308.
13. R. P. Parouha & K. N. Das, (2015), Parallel hybridization of differential evolution and particle swarm optimization for constrained optimization with its application, International Journal of Systems Assurance Engg. and Management (IJSA), pp. 1-20, Springer, DOI: 10.1007/s13198-015-0354-6.
14. R. P. Parouha & K. N. Das, (2015),An Efficient Hybrid Technique for Numerical Optimization and Applications, International Journal of Computers & Industrial Engg., Vol. 83, pp. 193-216, Elsevier (SCI, IF:1.783).
15. P. K. Gupta, M. Singh & A. Yildirim, (2016), Approximate analytical solution of the time-fractional Camassa-Holm, modified Camassa-Holm and DegasPeris-Procesi Equations by HPM, Scientialranica, Transaction A: Civil Engg., Vol. 23(1), Research of Sharif University of Technology, (http://www.scientiairanica.com/en/ManuscriptDetail? mid=2245).
16. D. Tripathi, O. A. Beg, P. K. Gupta, G. Radhakrishnamacharya & J. Mazumdar, (2015), DTM Simulation of Peristaltic Viscoelastic Biofluid Flow in Asymmetric Porous Media: A Digestive Transport Model, Journal of Bionic Engg., Vol. 12(40, Elsevier, (http://jbe.jlu.edu.cn/EN/abstract/abstract8987.shtml).
17. O. A. Beg, D. Tripathi, T. Sochi & P.K. Gupta, (2015), Adomian decomposition method simulation of magneto-biotribological squeeze film with magnetic induction effects, Journal of Mechanics in Medicine and Biology, Vol. 15(5), World Scientific, (http://www.worldscientific.com/toc/jmmb/15/05).

18. M. Sen, B.C. Tripathy & S. Nath, (2015), Lacunary I-convergence in probabilistic n-normed space, Journal of the Egyptian Mathematical Society,Vol. 23, pp. 90-94, Elsevier.
19. D. Das & P.K. De, (2016), Ranking of intuitionistic fuzzy numbers by new distance measure, Journal of Intelligent & Fuzzy System, Vol. 30, pp.1099-1107.
20. D. Das & P.K. De, (2015), On Ranking of Trapezoidal Intuitionistic Fuzzy Numbers and its Application to Multi Attribute Group Decision Making, Journal of New Theory, Vol.6, pp.99-108.
21. M. Deb & P.K.De, (June 2015), Optimal Solution of a Fully Fuzzy Linear Fractional Programming Problem by Using Graded Mean Integration Representation Method, Applications and Applied Mathematics, Vol. 10(1), pp.571-587.

b) National Journal(s)

1. K. Kumari & P.K. Gupta, (2016), Application of LDTM-Pade for Solving Linear Initial Value Problems, International Journal of Pure and Applied Mathematics, Vol. 106(2), Academic Publication, (http://www.ijpam.eu)
2. K. Kumari, P.K. Gupta & G. Shanker, 2015, A Mathematical Model to Solve Nonlinear Initial and Boundary Value Problems by LDTM, International Journal of Engg. Research and Applications, Vol. 5(10), (http://www.ijera.com).
3. P.K. Gupta, K. Kumari & D. Tripathi, (2015), Exact Solution of Linear and Non-linear Klein-Gordon Equations using LDTM, International Journal of Applied Mathematics and Mechanics, Vol. 4(1), Research India Publication, (http://www.ripublication.com).
4. K. Kumari, P.K. Gupta & G. Shanker, (2015), Approximate Analytical Solution of Linear Boundary Value Problems by LDTM, Journal of Information & Mathematical Science, Vol. 7(2), RGN Publications (http://www.rgnpublications.com).
5. K. Kumari, P.K. Gupta & G. Shanker, (2015), An Exact solution of Diffusion Equation with boundary conditions by Pade-LDTM, International Journal of Mathematics and its Applications, Vol. 3(4), (http://ijmaa.in).
6. K. Kumari, P.K. Gupta & G. Shanker, (2015), A Study of a Non-linear Reaction Diffusion Equation Representing Initial and Boundary Value Problems by LDTM, International Journal of Advanced Research in Computer and Communication Engg., Vol. 4(9), (http://www.ijarcce.com).

c) International Conference(s)

1. R. Mishra, K.N. Das & K. Deep, Design of Chemo-GA for Engg. Design Optimization Problem, Proceedings of IEEE International Conference on Control, Measurement and Instrumentation (CMI), pp. 141-145, Jadavpur University, Kolkata, January 8-10, 2016.
2. R. Mishra & K.N. Das, Chemo-inspired Genetic Algorithm and applications to Model Order Reduction Problem, in the Proceedings of Fifth International Conference on Soft Computing for Problem Solving: SocProS 2015, Vol. 1 (Advances in Intelligent Systems and Computing), Saharanpur campus of IIT Roorkee, December 18-20, 2015.
3. K. N. Das & T. K. Singh, A novel approach for Solving Engg. Optimization Problems involving Equality Constraints, Proceeding of International Conference on Robotics, Mechanics and Mechatronics (ICRMM 2015), Singapore, March 21-23, 2015.
4. R. Mishra & K.N. Das, A Novel Chemo-inspired GA for Solving Constrained Optimization problem, Proceeding of International Conference on Computing, Communication and Automation (ICCCA2015), IEEE conference, pp. 156-160, Galgotias University, 2015.
5. K.N. Das & R. Paourha, Engg. Design Optimization using hybrid (DE-PSO-DE) algorithm, Proceedings of Fourth International Conference on Soft Computing for Problem Solving, Advances in Intelligent Systems and Computing, Springer, Vol. 335, pp. 461-475, 2015.

6. K.N. Das, T. Singh & K.L. Baishnab, Parameter Optimization of Winner-Take-All circuit for Attention Shift using Drosophila Food-search Algorithm, Proceedings of Fourth International Conference on Soft Computing for Problem Solving, Advances in Intelligent Systems and Computing, Springer, Vol. 336, pp. 79-90, 2015.
7. P. Mahapatra & S. Roy, A Mathematical Model for Optimization of Perishable Resources with Uniform, ICIDM 2015.

d) Book/ Chapter

1. Tapan Kumar Singh and Kedar Nath Das, 'Behavioural Study of Drosophila Fruit Fly and its Modelling for Soft Computing Application', 3rd Chapter in the book 'Problem Solving and Uncertainty Modeling through Optimization and Soft Computing Applications', IGI Global publisher, USA, March 2016, ISBN13: 9781466698857. (DOI: 10.4018/978-1-4666-9885-7)

M.Sc. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Sangeeta Saha	Dr. K.N. Das	A fitness-based Genetic Algorithm for solving Sudoku Puzzle
2.	Tamashri Chakraborty	Dr. J. Mahanta & Mr. B. Nath	A study on application of fuzzy topology
3.	Dipankar Saha	Dr. J. Mahanta	A study on fuzzy boundary
4.	Sonali Pati	Dr. Santanu Roy	A Study on Fuzzy Set Theory and Classes of Double Sequence Spaces of Fuzzy Real Numbers
5.	Samares Das	Dr. P.K. De	A Study on Vema Ridge Transform Intersection under Indian Ocean

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Tapan Kumar Singh	Dr. K.N. Das	Drosophila Food-Search Optimization: Design and Applications
2.	Raghav Prasad Parouha	Dr. K.N. Das	Robust tri-population and memory based hybrid variants of DE and PSO for optimization with their real-life applications

Physics

Academic Staff

Head: Dr. S.K. Barik (from 01.04.2015 to 02.08.2015)

Dr. R. Dutta (from 03.08.2015to till date)

Faculty Members

Associate Prof.	Assistant Prof.
Dr. Asim Roy, Ph.D.	Dr. R. Dutta, Ph.D.
	Dr. S. Panda, Ph.D.
	Dr. A. Chowdhury, Ph.D.
	Dr. S. R. Mohapatra, Ph.D.
	Dr. R. G. Nair, Ph.D.
	Dr. S. K. Barik, Ph.D.

DISTINCTION ACHIEVED

a) By Student

- Abinash Das qualified GATE.

b) By Faculty Member

- Dr. R. G. Nair, DST-ITSfor Young Scientists (2015).
- Dr. S. R. Mohapatra, Best Oral Presentation in NCSSI 2015.

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. A. Roy	Application of Analytical Techniques in Science and Engg.	Self-Financed	One week

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. A. Chowdhury	Application of Analytical Techniques in Science and Engg.	NIT Silchar
2.	Dr. S.R. Mohapatra	Application of Analytical Techniques in Science and Engg.	NIT Silchar
3.	Dr. R.G. Nair	Application of Analytical Techniques in Science and Engg.	NIT Silchar

RESEARCH DEVELOPMENT

a) Ph.D. Produced/Ongoing (in number)

Completed	Submitted	Ongoing
00	03	06

b) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Microscience & Nanophysics Lab	Research purpose
2.	Multiferroics	Research purpose
3.	Liquid Crystal	Research purpose

c) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Fabrication of organic-inorganic heterojunction based on natural dyes encapsulated in nanostructured titanium dioxide for biophotovoltaics	Dr. A. Chowdhury	STIS, NIT Silchar	4.37	2 years
2.	Energetic ion beam assisted synthesis of Ag/Au ion implanted titania/ZnO thin films and investigation of their utility as photo anode for dye sensitized solar cells	Dr. R.G. Nair	UGC/IUAC	6.49	3 years
3.	Synthesis & characterization of BST-BFO composites for devices	Dr. S.K. Barik	AICTE	16.0	2.10 years

d) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. Asim Roy	Journal of Materials Science: Materials in electronics	01	2015
		Materials Letters	01	
		Physics E: Low-dimensional Systems and Nanostructures	01	
2.	Dr. S.R. Mohapatra	Ionics	01	2015
		Procedings in National Conference of Solid State Ionics	01	
3.	Dr. R.G. Nair	DST SERB Extra Mural	02	2015-16
4.	Dr. S.K. Barik	Journal of Alloys and Compounds	01	2015
		Defence Science Journal	01	2015

PUBLICATIONS

a) International Journal(s)

1. N. Roy, A. Chowdhury, T. Paul & A. Roy, (2016), Morphological, Optical and Raman Characteristics of ZnONanoflowers on ZnO-seeded Si Substrates Synthesized by chemical Method, Journal of Nanoscience and Nanotechnology, Vol. 15, pp 1, American Scientific Publishers.
2. P.K. Sarkar, M. Prajapat, A. Barman, S. Bhattacharjee & A. Roy, (2016), Multilevel resistance state of Cu/La2O3/Pt forming-free switching devices, Journal of Materials Science, Vol. 51, pp. 4411, Springer.
3. M. Nath & A. Roy, (2016), Interface and electrical properties of ultra-thin HfO2 film grown by radio frequency sputtering, Physica B: Condensed Matter, Vol. 482, pp. 43, Elsevier.
4. P.K. Sarkar, S. Bhattacharjee, M. Prajapat & A. Roy, (2015), Incorporation of SnO2 nanoparticles in PMMA for performance enhancement of a transparent organic resistive memory device, RSC Advances, Vol.5, pp.105661.
5. M. Nath & A. Roy, (2015), Interfacial and electrical properties of radio frequency sputtered ultra-thin TiO2 film for gate oxide applications, Journal of Materials Science: Materials in Electronics, Vol. 26 (11), pp. 9107, Springer.
6. M. Nath & A. Roy, (2015), Complex impedance spectroscopy of high-k HfO2 thin films in Al/HfO2/Si capacitor for gate oxide applications, Journal of Materials Science: Materials in Electronics, Vol. 26(6), pp. 3506, Springer.
5. N. Roy & A. Roy, (2015), Growth and temperature dependent photoluminescence characteristics of ZnO tetrapods, Ceramics International, Vol. 41 (3), pp. 4154, Elsevier.
6. R. Dutta, (2016), $\Λ_b \to (\Λ_c,\,p)\,τ\,ν$ decays within standard model and beyond, Phys. Rev. D, Vol. 93, pp. 054003, American Physical Society.
7. S. Ahmed, S.K. Barik, (2015), Studies of structural, impedance and magnetic properties of (BiNa)1/2(Fe2/3Mo1/3) O3 nanoceramics, Materials Chemistry and Physics, Elsevier.
8. S. Nath, S.K. Barik & R.N.P. Choudhary, (2015), Dielectric relaxation and magnetic characteristics of (La1/2Li1/2) (Fe1/2V1/2)O3, Journal of Material Science: Material in Electronics, (DOI 10.1007/s10854-015-3481-6).
9. S. Ahmed, S.K. Barik, (2016), Enhanced electric and magnetic properties of (BiLi)1/2(Fe2/3W1/3)O3multiferroic as compared to BiFeO3, Ceramics International, DOI:10.1016/j.ceramint.2015.12.090.
10. B. Biswas, A. Chowdhury & B. Mallik, (2015), Spectacular Oscillations in dark and photocurrent in thiol-capped CdS quantum dots embedded in PMMA matrix, RSC Advances, Vol. 5, pp. 13613, Royal Society of Chemistry.
11. M. K. Sanyal, B. Biswas, A. Chowdhury& B. Mallik, (2015), Spectroscopic studies on the effect of some Ferrocene derivatives in the formation of Silver nanoparticles, Journal of Nanoscience and Nanotechnology (Accepted).
12. S.R. Mohapatra, T. Tsuruoka, K. Krishnan, T. Hasegawa & M. Aono, (2015), Effects of temperature and ambient pressure on the resistive switching behaviour of polymer-based atomic switches, Journal of Materials Chemistry, Vol. 3(22), pp. 5715-5720, Royal Society of Chemistry.
13. R.G. Nair, P.J. Bharadwaj & S.K. Samdarshi, (2015), Design improvement and performance evaluation of solar photocatalytic reactor for industrial effluent treatment, Ecotoxicology and environmental safety, (In Press).

b) International Conference(s)

1. R.G. Nair & S.K. Samdarshi, Synthesis and characterization of highly visible active multiwalled carbon nanotubes (MWCNT) decorated V doped titaniaphotocatalyst, First International Symposium on Recent Progress of Energy and Environmental Photocatalysis, Photocatalysis 1, Tokyo, Japan, September 3-4, 2015.
2. A. Das & R.G. Nair, Influence of vanadium doping on band transformation of mesoporoustitania synthesis through non-hydrolytic sol-gel technique, 11th National Conference on Solid State Ionics(NCSSI-11),Tezpur University, December 21-23, 2015.
3. S.R. Mohapatra, Nanoionic Resistive Switching Devices Based on Polymer Electrolyte Films – Effect of Temperature and Ambient Pressure, 11th National Conference on Solid State Ionics(NCSSI-11),Tezpur University, December 21-23, 2015.

VISITS TO ABROAD

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1.	Dr. R.G. Nair	First International Symposium on Recent Progress of Energy and Environmental Photocatalysis, Photocatalysis 1	Tokyo, Japan	September 3-4, 2015

M.TECH. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Pabir Garu	Dr. A. Roy	Synthesis and Characterization of n-ZnO/p-NiO for Transparent Heterojunction Diode Application
2.	Jyotirmoi Choudhury	Dr. R. Dutta	Theoretical and Experimental aspects of Neutrino Oscillations
3.	Biswalok Mitra	Dr. R. Dutta	Neutrino Flavor Oscillations
4.	Prfafulla Ch. Bhomick	Dr. S. Panda	Dynamics of Double Pendulum
5.	Pankaj Chaubey	Dr. S.R. Mohapatra	Resistivity Measurement using Four Probe
6.	Debasish Das	Dr. A. Chowdhury	Effect of Post Deposition Annealing Temperature on the Optical and Electrical Properties of ZnPc Thin Films
7.	Koustab K. Gosgoi	Dr. S.K. Barik	Structural, Dielectric and Electrical Studies of Lead Free Bi1/2(Na1/4Li1/4)TiO3 Peroskites
8.	Abinash Das	Dr. R.G. Nair	Physicochemical Characterization of V doped MesoporousTitania for Solar Energy Applications

Humanities & Social Sciences

Academic Staff

Head: Prof. G. Das, Ph.D.

Faculty Members

Prof.	Assistant Prof.
Prof. G. Das, Ph.D.	Dr. N.B. Singh, Ph.D.
	Dr. R. Sanasam, Ph.D.
	Dr. A. Ray, Ph.D.
	Dr. D. Ray, Ph.D.
	Dr. Mahalakshmi S., Ph.D.
	Miss P. Singha, M.A. (contractual)

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. D. Ray	International Seminar on RAW.CON 2015	Deptt. of Comparative Literature, University of Hyderabad, September9-11, 2015
		International Seminar on Coherence: Forming a Unified Whole	Symbiosis Law School, Hyderabad, October9-10, 2015
		International Seminar on Reconstructing the English Literary Map: Literatures of Partition and Diaspora from Asia and Asia Pacific	Deptt. of English and Cultural Studies, The University of Burdwan, March10-11, 2016
2.	Dr. Mahalakshmi S	Project Management and Strategic Financial Planning	National Productivity Council, New Delhi conducted at Port Blair, 2015
3.	Dr. A. Ray	Literary Historiography and the Question of Vernacular Modernity', National Seminar on Reinterpretations of the Past: The Discourse of Cultural Identity in South Asia	North Eastern Hill University (NEHU), Shillong, March17-18, 2016
		Testimonial Evidentialism and the Media, The Act of Media Workshop	SARAI-CSDS, New Delhi, January8-10, 2016
		Orientalist Historiography of Mahabharata Translation, Study Week on Historiography of Translation in India	The Indian Institute of Advanced Study (IIAS), Shimla, August 10-14, 2015
		Towards a 'New Science': Beyond the Enlightenment Discourse, National Seminar on Transforming Pedagogy in India	April 7-8, 2015
		Contextualizing the Famine Paintings, International Conference of the Goethe Society of India	Goethe Society of India, University of Delhi, Delhi, February18-20, 2015
4.	Dr. G. Das	Round Table on ASEAN-India: Integration and Development	ASEAN-India Centre, RIS, New Delhi, October 27, 2015
		National Seminar on Contemporary Issues in Business Research and education	Department of Commerce, Assam University, Silchar, October 6, 2015
		Research Methodology for Business management	Department of Management Studies, NIT Silchar, October 26, 2015
		Seminar on Regional imbalances and sustainable development in India with special reference to North Eastern Region	Siliguri College of Commerce, Siliguri, West Bengal, February 20-21, 2016
5.	Miss P. Singha	National conference on Weather and Crime: A case study of Indian Cities	Department of Economics, Rajiv Gandhi University, August 30-31, 2015
		National Seminar on Globalisation and Economic Growth: A Case Study Of India	Department of Social Work and Centre For Bangladesh Studies, Assam University, March 28-29, 2016
		National Seminar on Sources of Economic Growth in Assam in the post reform period	Department of Economics, Karimganj College, Karimganj, February 14-15, 2015
		Workshop on Time Series Econometrics	Department of HSS, IIT Guwahati , July 6-10, 2015
		Workshop on Basic to Advanced Data Analysis in SPSS	Department of Statistics, January 5-7, 2016
		Workshop on Researchers' Hands on Training in MS- Excel	Department of Statistics, December 22-24, 2015

RESEARCH DEVELOPMENT

a) Ph.D. Produced/Ongoing (in number)

Completed	Submitted	Left/ Terminated
04	00	13

b) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. G. Das	Chaired a session in the Seminar on Regional imbalances and sustainable development in India with special reference to North Eastern Region held during February 20-21, 2016, organised by Siliguri College of Commerce, Siliguri, West Bengal

PUBLICATIONS

a) International Journal(s)

1. G. Naresh, S. Thiyagarajan & Mahalakshmi S., (2015), Forecasting Volatility in Indian Agri-Commodities Market, Global Business & Finance Review, Vol. 20(1), pp. 95-104, ISSN 1088-6931.
2. D. Ray, (2015), The Vagabond's War Cry: The "Other" in Nabarun's Narrative, Sanglap: Journal of Literary and Cultural Inquiry, Vol. 2(1), Open Journal Systems, MLA cited. <http://sanglap-journal.in/index.php/sanglap/issue/view/11>.
3. A. Sinha & P. Singha, (2015), Crime Against Women: A case study of India, International Journal of Advanced Research, Vol. 3(1), pp. 1403-1406, ISSN 2320-5407.

b) National Journal(s)

1. Mahalakshmi S., G. Naresh & S. Thiyagarajan, (2015), Determinants of Foreign Direct Investment Inflows in to Indi,Journal of International Economics, Vol.6(1), pp. 24-43, ISSN 0976-0792.
2. G. Naresh, S. Thiyagarajan & Mahalakshmi. S,(2015), Price gouging of Futures on Commodity Indices in India, The IUP Journal of Financial Risk Management, Vol. 12(2).
3. A. Ray, (2016), Semantic History of 'Vagabond', Dibrugarh Journal of English Studies (in press)

c) International Conference(s)

1. D. Ray, A Translator's Dilemma: Radical Bengali Prose and Its Liminal Standing, RAW.CON 2015, Deptt. of Comparative Literature, University of Hyderabad, September 9-11, 2015.
2. D. Ray, Who Watches the Watchmen?: Retributive Justice and the Culpability of the Judge, Coherence: Forming a Unified Whole, Symbiosis Law School, Hyderabad, October 9-10, 2015.
3. D. Ray, Not My Land This Valley of Death: the Liminal in Nabarun Bhattacharya's Writings, Reconstructing the English Literary Map: Literatures of Partition and Diaspora from Asia and Asia Pacific, Deptt. of English and Cultural Studies, The University of Burdwan, March 10-11, 2016.

d) Book/Chapter

1. D. Ray, (2015), Homi K. Bhabha: from Dialectics to Hybrdity in The Location of Culture and Nation and Narration, Social Thinkers of Modern Times. Dr. Pradip Basu (ed.) Kolkata: Setu Prakasani, pp. 36-48. Print. ISBN 978-93-80677-83-5.
2. S. Basu & D. Ray, (2015), Who Watches the Watchmen?: Retributive Justice and the Culpability of the Judge, Coherence: Forming a Unified Whole, Symbiosis Law School, Hyderabad. Hyderabad: Asia Law House, Print. ISBN 978-93-85556-74-6.

3. A. Ray, (2016), Hinduism and Families, Shehan, C.L. (ed.), The Encyclopedia of Family Studies, Malden: Wiley-Blackwell, pp. 1049-53.

4. G. Das, (2015), Dynamics of India-China Relations in a Changing Global Geo-Political Environment, in Das, Gurudas, C Joshua Thomas and Nani Bath, (eds), Voices from the Border: Response to Chinese Claims over Arunachal Pradesh, Pentagon Press, pp. 33-47. ISBN: 978-81-8274-834-7

5. G. Das, (2015), Democracy in the Grass Root: A Case Study of Nagendra Nagar Gaon Panchayat in Karimganj District of Assam, (with Subodh Chandra Das), in Gassah, L.S. and C J Thomas, (eds), Democracy and Development in India's North-East: Challenges and Opportunities, Bookwell, Delhi, pp. 145-169. ISBN: 978-93-80574-74-5

6. G. Das, (2015), Sub-regional Cooperation for the Development of Landlocked Peripheral Areas: The Case of BCIM, (with Ujjwal K. Paul and Tanuj Mathur) in Bhatia, Rajiv K. and Rahul Mishra, (eds), BCIM Economic Corridor: The Road Ahead, Pentagon Press, New Delhi, pp. 62-81. ISBN: 978-81-8274-843-9

CONSULTANCY SERVICES

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1.	Honorarium for Review Editor – Avishek Ray	LPP Publishers	US $ 200

Ph.D. THESIS

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Suniho S.	Dr. A. Ray	The 'New Woman' in Kamala Markandaya's Novels
2.	Debbrata Sutradhar	Dr. G. Das	The Role of Foreign Direct Investment in Economic Development: The Indian experience since Economic Reforms
3.	Moumita Bhattacharjee	Dr. G. Das	Continuity, Change and Adjustment of the Kaibartta Community of Barak Valley
4.	Bhusan Chandra Das	Dr. G. Das	Industrial Sickness in Micro and Small Manufacturing Units : A Case Study of Tripura

Management Studies

Academic Staff

Head: Dr. A.K. Das, Ph.D.

Faculty Members

Assistant Prof.
Dr. A.K. Das, Ph.D.
Dr. S. Panja,Ph.D.
Dr. S. Chowdhury, Ph.D. (Contractual)
Mr. A. Ghosh, MBA (Contractual)
Mr. K. Mutum, MBA (Contractual)
Mr. D. Mahato, MBA (Contractual)
Mr. V.K. Pathak, MBA (Contractual)
Ms. P. Tamuli, M.A. (Contractual)
Ms. S. Kotoky, M.A. (Contractual)
Dr. A. Paul, Ph.D. (Contractual)

Visiting Prof.

CA Anil Jain

Mrs. Pradipta Dey, MBA

SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Mr. A. Ghosh	A discussion on Emerging Trends of e-commerce in India, by Saurabh Kirtania, Technical Evangelist at Microsoft India	NIT Silchar	1 Day
2.	Dr. A.K. Das	A lecture on Great workplace experience in a culture of Excellence, by Mr. Shubhankar Ghosh, Head (HR), ABP News Network Pvt. Ltd.	NIT Silchar	1 Day
3.	Dr. A.K. Das & Dr. A. Paul	Two days Workshop on Personality Development 'Attitude' by Rev. Francis Peter, XLRI Jamshedpur	NIT Silchar	2 Days
4.	Dr. S. Panja	Workshop on Advance Fuzzy Logic under Soft Computing Club	NIT Silchar	7 Days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. A.K. Das	National Seminar on Make in India and Rural North East India: The Challenges	National Institute of Rural Development & Panchayati Raj, North Eastern Regional Centre, Guwahati, Assam
2.	Dr. S. Chowdhury	National Seminar on Make in India and Rural North East India: The Challenges	National Institute of Rural Development & Panchayati Raj, North Eastern Regional Centre, Guwahati, Assam
3.	Ms. P. Tamuli	UGC Sponsored National Seminar on State of Business and Political Ethics in Present Socio-Economic System	Tinsukia College
4.	Dr. A. Paul	Workshop on Visual Display Design: A Scientific Representation	IIT Guwahati

RESEARCH DEVELOPMENT

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Establishment of an Innovation &Entrepreneurship Development Centre (IEDC) at NIT Silchar	Dr. A.K. Das	Ministry of Science & Technology (DST)	50 Lacs	5 years
2.	Post-Harvest Management (Storage/Packaging/Marketing) of Pineapple for an effective & sustainable marketing strategy: A case study on pineapple growing clusters in Barak Valley of Assam	Dr. A.K. Das	STIS, NIT Silchar	3.60 Lacs	1 year
3.	Developing Sustainable Financial System of NIT Silchar	Dr. S. Panja (PI) Dr. A.K. Das (Co-PI)	STIS, NIT Silchar	4.75 Lacs	2 years
4	Development of android child e-health care system for N-E Region using fuzzy logic	Dr. S. Panja	STIS, NIT Silchar	3.79 Lacs	1 year

PUBLICATIONS

a) International Journal(s)

1. S. Panja, (2015), Mathematical Exposition Coupled with Empirical Testing of Heuristically Designed Portfolio Optimization Model,International Journal of Applied Engg. Research, Research India Publication, Vol. 10(21), Scopus Indexed Journal.

b) National Conference(s)

1. A.K. Das, S. Chowdhury & S. Panja, Make in India- Dynamics in Rural NE India: Theoretical and Empirical Constructs, has been accepted for publication, which was presented in the National Seminar on Make in India and Rural North East India: The Challenges, February 25-26, 2016, National Institute of Rural Development & Panchayati Raj, North Eastern Regional Centre, Guwahati, Assam.
2. S. Chowdhury & S. Panja, Evaluating Micro Finance Institutional Framework for Agriculture Growth and Livelihood Diversification: Conceptual and Analytical Framework, has been accepted for publication in the proceedings bearing ISBN No. of the National Seminar titled "Sustainable Family Farming for Food, Nutritional & Livelihood Security", March 5-6, 2016, Department of EES, Palli Siksha Bhavana, Visva-Bharati.
3. S. Chowdhury, "Rating Micro Finance Institutions Operating in India: An Application of Fuzzy Analytical Hierarchical Process (FAHP)" (March 2016) in Economic Affairs-Quarterly Journal of Economics, Vol. 61(1), pp. 107-118,Print ISSN: 0424-2513 National Academy of Agricultural Science (NAAS) rating 2013- 4.69.

c) Book/Chapter

1. P. Tamuli, Business Ethics: A Facilitator of Corporate Social Responsibility in Business and Political Ethics in Present Socio-Economic System, Book Age Publications, Delhi, ISBN 978-93-83281-88-6.

Academic Centres & Cells

Central Computer Centre

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

Staff:

Officer
(i) B. Krishna Reddy (contr.), M.Tech.
(ii) Nazmul H. Laskar (contr.), M.Tech.
(iii)Atul Chauhan (contr.), B.Tech.

Technical Staff
(i) Abhishek Palit (outsourced), M.C.A.
(ii) Rupak Ranjan Deb (outsourced), Diploma

Attendant
(i) Ms. Champabati Balmiki.

A brief Introduction and Activities of CCC:

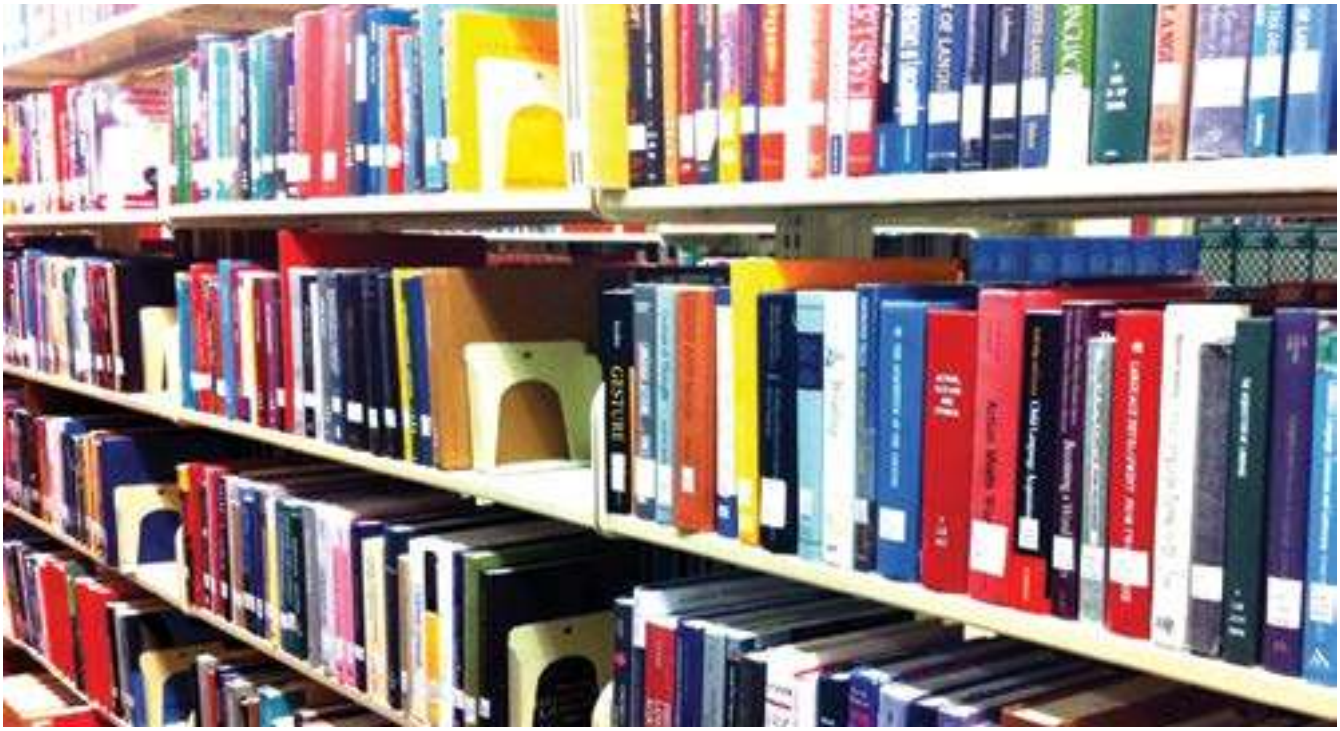
The Institute computing facility is maintained by the Central Computer Centre (CCC) which includes high-end servers and Intel Core-i5 & i7 based Personal Computers. The CCC is having three computer labs equipped with around 400 computers.

The State-of-Art IT Infrastructure has been recently deployed 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 from Bharat Sanchar Nigam Ltd. (BSNL) 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 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.

Facilities provided by Central Computer Centre:

- Campus wide Internet connectivity: Providing / maintaining internet facility around campus through LAN (5000 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 over all 5000 mail ids are being served to all, with address of mail.nits.ac.in
- 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 installation around the campus.
- HPC (High Performance Computing) facility is available at CCC for the students & faculty of the institute.



Central Library

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

The key officers of the Central Library are:

Chairman	**Librarian**	**Astt. Librarian**
Prof. A. K. Sinha	Dr. Kishor Chandra Satpathy	Ms. Krishnamati Singha
M. Tech, PhD,	M.A (Edu), MLISc, PGDLAN, PhD	BSc, MLISc, MBA (HRM)

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, Engg., technology, humanities, social sciences and management. The following table presents the collections of the library for the year 2015-16.

The total collection of library as on 31st March 2016 stands as follows:

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

Printed Journals / Magazines

During the year Library discontinued 7 printed journals that were not utilized by the users and are now available on open access. Library added 5 new printed journals; all total 99 printed journals were subscribed during the year.

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

In addition to the 13 databases provided by E-ShodhShindhu, NIT Silchar has renewed 17 databases including Elsevier, IEL/ IEEE, Springer, Taylor & Francis, AIP, ACS, EBSCO, Encyclopedia Britannica, Mathscinet, Proquest Dissertation and Theses Database etc. and also renewed few selected e-journals from the publishers like Sage, TERI etc. During the year 2015-16 Library subscribed new database like Wiley, RSC, Inderscience and E-brary. The library got access to the e-books from the major publishers like Elsevier, Springer, Pearson Cambridge & Proquest.

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 2014-2015

Sl. No.	Name of the Resources	Year wise download statistics	
		2014	2015
1.	ACS	4240	6725
2.	ACM	1225	1689
3.	ASCE	4155	6523
4.	ASME	1997	1433
5.	Elsevier Science Direct	103,067	127,004
6.	IEEE (450+ Jnls)	73476	74420
7.	Springer Link (1400+ Jnls)	12315	16370
8.	AMS	358	3218
9.	Taylor & Francis	4959	5781

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 2015-16. Out of the allocation of Plan funds Rs. 2, 72,21,262.00 have been utilized for purchase of books & database and printed journals and out of Non-Plan grant Rs. 1,54,052.00 has been utilized for subscription of newspapers/ binding purpose 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 & 2015-16 is given below:

Details expenditure:

Year	Books	e-Books and archive of e-Journals	Printed Journals/ Magazine	Online Database/ e-Journals	Contingency	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

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
1.	Btech	2226	2340
2.	Mtech	372	394
3.	MBA	71	101
4.	MSc	47	82
5.	PhD	170	263
6.	Academic Staff(Teaching)	199 (including Contractual)	165 (including Contractual)
7.	Non-Academic	55	130
Total		**3140**	**3475**

LIBRARY SERVICES

Circulation service

The books circulation service is kept open for 40 hours a week. The Library issued 25070 numbers of books during the year 2015-16.

Resource Sharing

The library maintains excellent relations with libraries of Assam University, and other local college libraries in Sothern Assam and also with DELNET for exchange of books, journals, photocopies etc. for the mutual benefit of the users. Library provides resource sharing service through inter-library loan and document delivery services. Library has core member of E-ShodhSindhu, NDL. In addition, library is 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. The book bank mainly consists of the prescribed text books for undergraduate courses and loans up to 5 to 7 books each to these students for full semester and sometimes more depending on availability. During the year, 500 students availed this facility and borrowed 3550 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

LIBRARY ORIENTATION & TRAINING

Library Orientation for fresher / user's education

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

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. AIU Workshop on Emerging Trends in Information Technology in University Management (http://aiuworkshop.blogspot.in/) from 25.07.15-27.07.15 sponsored by AIU, New Delhi

2. Workshop on "Development of Environmental Law Curriculum for Business and Validation Workshop" (http://worldbankworkshop.blogspot.in/) from 17.09.15-18.09.15 at IIE Guwahati sponsored by World Bank & IIM Kashipur

3. An Information Seminar on "Higher education Opportunities in USA" at NIT Silchar on 21.09.15 sponsored by USEFI, Kolkata

Library Staff Activities

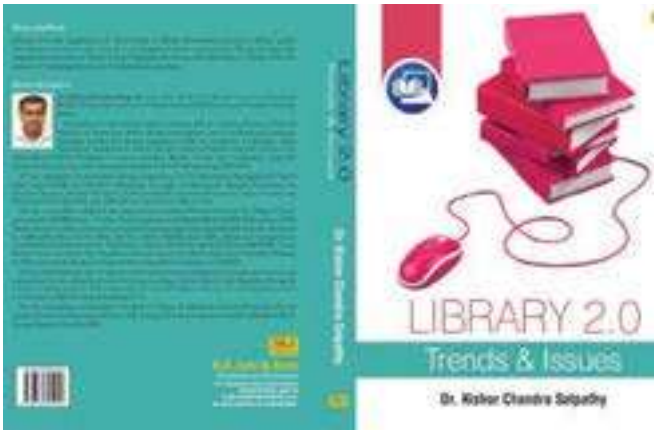
The library has a small team of talented and dedicated staff to perform their duties and responsibilities with dignity and honestly. In addition to their regular jobs, most of them are involved in various academic activities like attending workshop, presenting papers in seminars and conferences, delivering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

Honours, Awards, Prizes

- Dr. K. C. Satpathy received certificate of Appreciation for ILN in recognition for the work as the country Ambassador for India, for the International Librarians Network in 2015. (http://www.Interlibnet.org)
- Dr. K. C. Satpathy was honoured by Panjab University Library Chandigarh in 2015 for his achievement & contribution in the field of LIS.

Books Published

- Dr. K. C. Satpathy edited the book entitled "Lib 2.0: Trends & Issues" published by S.K. Jain and Sons, Jaipur, 2015, (ISBN: 978-93-82845-94-2)
- Dr. K. C. Satpathy edited the book entitled "Trends in Library Technology & Marketing of Information", published by Shankar's Book Agency Pvt. Ltd, New Delhi, 2015 (ISBN: 9789381893081)



Project Undertaken

- Dr. K. C. Satpathy has undertaken a project entitled "Development of Environmental Law Curriculum for Business" woth of 10 lakhs sponsored by World Bank & IIM Kashipur.

Conference / Meeting Attended

- Dr. K. C. Satpathy, participated in the round 2015A of the International Librarians Network peer mentoring program from March to June 2016.
- Dr. K. C. Satpathy, attended NIT Consortia Price Negotiation Committee Meeting on 05.10.15 at NIT Kurukhetra.
- Dr. K. C. Satpathy, participated in the workshop on "Management and Preservation of Indigenous Knowledge: a North-East Perspective" at Assam Administrative Staff College, Guwahati on 19-21 Nov, 2015.
- Dr. K. C. Satpathy, participated in the Taylor & Francis Interactive Digital Library Event entitled "The Evolving Librarian: Trends, Challenges, New Environment & Partnerships, at Kolkata on 19th Nov 2015
- Dr. K. C. Satpathy, attended 18th international Symposium on Electronic Theses and Dissertations (ETD 2015) organized by Central Library, Jawaharlal Nehru University at Convention Centre, Jawaharlal Nehru University on 4th-6th Nov 2015.

- Dr. K. C. Satpathy, attended as a Guest of Honour in the Librarians Day celebration organized to commemorate the Birth Anniversary of Dr. S. R. Ranganathan, Father of Library Science in India, at Radhamadhab College, Silchar on 12.08.1015.

Invited Lecture / Resource Person

- Dr. K. C. Satpathy, delivered lecture as a resource person in a three weeks training course for University/College Teachers and University personnel from 18th Jan 2016 to 11th February 2016 at Centre for Educational Planning and Management, Assam University, Silchar.
- Dr. K. C. Satpathy, delivered lecture as a resource person on 20th Nov 2015 in the workshop on "Management and Preservation of Indigenous Knowledge: a North-East Perspective" at Assam Administrative Staff College, Guwahati on 19-21 Nov, 2015
- Dr. K. C. Satpathy, hosted the innovative chat show for librarian at the Taylor & Francis Interactive Digital Library Event entitled "The Evolving Librarian: Trends, Challenges, New Environment & Partnerships, at Kolkata on 19th Nov 2015
- Dr. K. C. Satpathy, was invited as a Speaker of 60th ILA International Conference at A.C Joshi Library, Panjab University, Chandigarh on 8-10 April, 2015

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 Narsee Monjee Institute Of Management Studies And Khon Kaen University, Khon Kaen, Thailand.
- Dr. K. C. Satpathy, nominated as the member of the Advisory Committee for the Three-Days UGC Sponsored National Conference on Libraries in the Changing Information Marketplace 24th To 26th February 2016, at SNDT Women's University, Mumbai.
- Dr. K. C. Satpathy, nominated as a member of the Editorial Board in the LIS Communications (a Quarterly e-bulletin).
- Dr. K. C. Satpathy, appointed as a member of the Editorial Board/Reviewer's Team for the Journals entitled "International Journal of Transformations in Business Management (2231-6868/2454-468X)", "International Journal of Research in Social Sciences & Humanities (2249-4642/2454-4671)",and "Multidisciplinary International Journal (2454-8103)".
- Dr. K. C. Satpathy, nominated as a member of the Editorial Advisory Board (EAB) for the International Publication entitled "Handbook of Research on Scholarly Communication and the publish or perish pressures of Academia" published by IGI – Global.com
- Dr. K. C. Satpathy, the biography has been included in the Emerald Who's Who in Asia(vol-II); Asian American Who's Who (vol-VII) published by Rifacimento International, New Delhi on March 2015.
- Dr. K. C. Satpathy, the biography has been included in the Kohinoor Personalities of Asia (vol-III), Famous India : Nation's Who's Who (2015) published by Reguerdon Inc., Delhi on March 2015.

TRAINING OF LIBRARY STAFF

As a part of staff development policy of the institute, following staff were attended the training in respective domains as such:

- Swarnika Dey & Chanda Paul- Design and Development of Digital Libraries using DSpace - Advance on February 08 - 12, 2016 held at CSIR-National Institute of Science Communication And Information Resources, New Delhi.
- Anwar Hussain Laskar- Library Automation using KOHA - Advance on March 14 - 18, 2016 held at CSIR-National Institute of Science Communication And Information Resources, New Delhi.

NEW INTITIATIVES

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, organize, manage and provide access to scholarly publications.

C-DAC

The C-DAC Centre brings in new innovation avenues in the field of Computational Science and Engg. through collaborative research and development in multi-disciplinary Engg. fields. The Centre runs independently with dedicated C-DAC Engineers.

It facilitates through trainings of C-DAC technologies, promotes research and development of leading-edge high-performance computing techniques by enabling technologies in various thematic areas like High Performance Computing, Grid Computing, Cloud Computing, Professional Electronics, Multilingual Computing, Cyber Security, Health Informatics, Software Technologies, Education and Training for capacity and capability building and the socio-economic development of North East. In addition to this, the C-DAC Centre has been extremely beneficial to the faculty, Ph.D/M.Tech. Scholars and students both graduate and undergraduate involving in design and innovation.

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 Infy 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 Institue-Industry Collaboration.

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 Lab

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:

- Start up venture: Speaking Walls
- 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.
- Creating job opportunities through Skill Development
- MoU with Indian Soldering Association for a certificate course on soldering

PINEAPPLE FOOD PROCESSING UNIT

NIT Silchar has associated with the Association of Pineapple Growers of Barak Valley to develop a state of the art pineapple food processing Unit and a unit on Handicraft. It will definitely open new avenues for skill development and generate employment opportunities.

National Innovation Summit 2016

The Indovation Lab, NIT Silchar organized National Innovation Summit - 2016 (NIS-16) from March 10 – 12, 2016 in collaboration with NRDC, PMMM-NMTT, DHE, GoI, Start-Up Centre, DST, DHE, GoI & TEQIP-II. The aim of NIS-16 was to provide a platform for the young technopreneurs and grassroot innovators to showcase their creative dimensions in their respective fields and help achieve the innovative need of the country. The curtain raiser ceremony of NIS-2016 was held in the gracious presence of Shri Suresh Prabhu, Minister of Railways, GOI on 20-02-2016. Indovation Lab, NIT Silchar also organized two events with the aim to promote NIS 2016; first, an awareness programme in Haflong and second, Science & Innovation Fair in Central Public School, Badarpur.

The summit was to celebrate Innovation and Entrepreneurship spirit of the youth in the country and it encompassed three major events namely:

- Technopark: Budding entrepreneurs form different parts of India participated in the event Technopark and presented their Start-up ideas.
- Talkathon : Two panel discussions on Start ups in India and Women Entrepreneurship in India have been organized. More than ten speakers from different fields addressed the audience as a part of the Talkathon and shared their experiences and knowledge in the field of innovation and entrepreneurship.
- Innovation That Matters (ITM) Exhibition: Innovators from all over India participated in the ITM exhibition with their products and it received tremendous response from the visitors.

Apart from these, The Summit also tried to make the kids aware of innovation and quiz competition and 'best out of waste' challenge have been organized for them.

Vermicomposting

Activities / Infrastructure / R&C / Staff

Students' Activities

Dean (SW)

Name	Qualification	Period
1. Prof. A. K. Barbhuiya	Ph.D	From 1st Apr 2015 to 28th Feb 2015
2. Prof. M. A. Ahmed	Ph.D	29th April 2015 onwards

Associate Deans (SW)

Name	Qualification	Period
Dr. D. C. Das	Ph. D	8th October 2014 onwards
Dr. N. B. D. Choudhury	Ph. D	29th Aug2011 till August 2015
Dr. L. C. Saikia	Ph. D	8th Oct 2014
Dr. G. Ramesh	Ph. D	14th August 2015 Onwards
Dr. S. Choudhury	Ph. D	27th August 2015 Onwards

SCHOLARSHIP / ASSISTANTSHIP AWARDED TO THE STUDENTS DURING 2015-16

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 232 no. of students received scholarship/ stipend from various sources.

Sl. No.	Name of the Scholarship	Name of the State	Amount of Scholarship awarded in 2015- (RS)	No. of students received the Scholarship
1	ITDP	Assam	Rs.5183670.00	99
2	Govt. OF Andhra Pradesh	Andhra Pradesh	Rs.261904.00	08
3	Govt. Of Bihar	Bihar	Rs.1892790.00	44
4	NEC	Assam	Rs.589600.00	44
5.	FAEA	FAEA	Rs. 50000.00	01
6.	NEPCO	NEPCO	Rs.36000.00	01
7.	ONGC	ONGC	Rs.240000.00	06
8.	Central Sector Scholarship	All India	Rs.2541512.00	21
9.	NHFDC	All India	Rs.261890.00	05
10.	Govt. of Arunachal Pradesh	AP	Rs.32400.00	03
Total -	**1,1089766.00**			**232**

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.

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 2015-2016 was also full of activities and achievements and students have made the Institute proud by maintaining high standards of organizational and leadership qualities.

GYMKHANA OFFICE BEARERS 2015-16

Sl. No.	Name	Sch. No.	Portfolio	Tenure
1.	Mr. Bhaskar Jha	12-1-2-019	Vice President	1year
2.	Mr. Md. Faisal Karim	12-1-1-020	GS (Gymkhana)	1year
3.	Mr. Birjon Boro	12-1-5-087	GS (Cultural)	1year
4.	Mr. Indraneel Mukherjee	12-1-2-025	GS (Sports)	1year
5.	Mr. Yashash Gaurav	13-1-3-077	Photography Club Secretary	1year
6.	Mr. Mrinal Shrivastav	13-1-2-113	Literary Publication & Fine Arts Secretary	1year
7.	Mr. Mayank Garodia	13-1-1-084	Cricket Club Secretary	1year
8.	Mr. Samarpan Samajdar	13-1-3-067	Hockey Secretary	1year
9.	Mr. Murlidhar Nagalla	13-1-5-071	Tennis Secretary	1year
10.	Mr. Ashutosh Singh	13-1-2-079	Indoor Game Secretary	1year
11.	Mr. Angshuman V. Gogoi	13-1-1-071	Athletics & Gymnasium Secretary	1year
12.	Mr. Md. Imran	13-1-1-004	Trekking & Mountaineering Secretary	1year
13.	Mr. Mithu Nandan Medhi	13-1-5-053	Music Club Secretary	1year
14.	Mr. Abu Saleh Md. Arif	13-1-2-144	Dramatic and Dance Club Secretary	1year
15.	Mr. Bikram Barman	13-1-1-031	Football Secretary	1year
16.	Mr. Divyanshu Shekhar	13-1-3-081	Basketball Secretary	1year
17.	Ms Ketaki Vaidya	13-1-5-072	Girls Representative	1year
18.	Mr. Hifjur Hasan Ahmed	14-2-2-120	PG/PhD Representatives	1year
	Mr. Rohit Ranjan	14-2-1-307		

FACULTY ADVISORS OF GYMKHANA UNION BODY 2015-16

Sl. No.	Portfolio	Name	Designation	Department
1.	President	Prof. M. A. Ahmed	Prof.	CE
2.	Vice President	Mr. Kaushik Guha	Asst. Prof.	ECE
3.	GS (Gymkhana)	Mr. Wasim Arif	Asst. Prof.	ECE
4.	GS (Cultural)	Mr. R. Patgiri	Asst. Prof.	CSE
5.	GS (Sports)	Dr. D. C. Das	Asst. Prof.	EE
6.	Photography Club Secretary	Dr. N. B. Singh	Asst. Prof.	HSS
7.	Literary Publication & Fine Arts Secretary	Dr. N. B. D. Choudhury	Asso. Prof.	EE
8.	Cricket Club Secretary	Dr. S. S. Dhar	Asst. Prof.	Chemistry
9.	Hockey Secretary	Dr. Arup Kr. Goswami	Asst. Prof.	EE
10.	Tennis Secretary	Dr. M. L. V. Prasad	Asst. Prof.	CE
11.	Indoor Game Secretary	Dr. N. B. Singh	Asst. Prof.	HSS
12.	Athletics & Gymnasium Secretary	Mr. U.Majhi	Asst. Prof.	CSE
13.	Trekking & Mountaineering Secretary	Dr. B. S. Sil	Asst. Prof.	CE
14.	Music Club Secretary	Mr. P. S. Neog	Asst. Prof.	CSE
15.	Dramatic and Dance Club Secretary	Mr. P. S. Neog	Asst. Prof.	CSE
16.	Football Secretary	Mr. Pallab Das	Asso. Prof.	CE
17.	Basketball Secretary	Dr. S. Choudhury	Asso. Prof.	EE

Information regarding the students' activities (Gymkhana) under Office of the Dean (SW) During 2015-16 Session.

A. 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 2015-16 organized an orientation session for the freshmen batch of 2015-2019. This orientation program helped the freshmen to know the entire administration of the college, the regulations and other important information. The honorable Director, 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 2015-19 batch, this proved to be highly beneficial to them for the upcoming years of their college life.

III) Hindi Diwas:

MANTHAN'15, a show of respect for the Hindi language, was organized in NIT Silchar on the 14th of September, 2015 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'15 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 1989 and 1990.

V) Independence Day 2015:

NITs, being the abode of patriotic souls, celebrated the 69th Independence Day with great zeal and enthusiasm. The tricolor was hoisted by the director, 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 74th death anniversary of Rabindranath Tagore, India's most beloved and revered poet i.e. on the 7th of August 2015. It was an attempt to inculcate the noblev alues 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 15:

Tecnoesis 2K15 witnessed extravaganza of modules ranging from Robotics event to other events like Smart City to bring out the non technical intelligence of the students. 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 like Sir Abhayanand, Sir Chanchal Rana and Shri Sukhendu Sharma, Scientist 'F' DRDO; who gave the students lessons about various life skills as well as curricular skills. The children were also exposed to various military equipments 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 expertised stuntman to give a thrilling display of showmanship. The Spark Night on 2nd November saw the end of Tecnoesis 2k15. The Music soared high above all with bands like Divine Connection, Girish and the Chronicles and the Sunburn, which got the crowd head banging on their music and made the end of Tecnoesis worthy of remembrance. It was the selfless effort and pure devotion of the Tecnoesis 2k15 team which made it a success.

IX) Ekta Daud:

A marathon was organized in the college by Gymkhana Union body on August 14, 2015. 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) 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 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.

XI) 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, faculty members and a large number of students came forward to donate blood henceforth contributing to the noble cause.

XII) Incandescence '16:

NIT Silchar celebrated its annual cultural fest Incandescence'16 from 12th February-15th. The ambience of the institute had been full of fun and frolic. Several modules were chalked out catering to different fields. Dance Module (Natraaj), Music Module (Indie Lake), Film-making Module (Directors Cut) saw the dancing stars, the singing sensations and the prolific filmmakers among the youth; while the MUN module provided a platform for the budding MUNners. These events saw participation not only by the students of NIT Silchar but from various cities of India like Delhi, Mumbai, Kolkata etc. Pankaj Thapa of Dance India Dance fame who was invited entertained everyone with his dance moves. The literary module Deprador organised a debate competition and a book fair. The management department's module Paarbon organized events like Business Treasure Hunt, Poker Night, virtual IPL auction, Ad-making competition, photography competition etc. The Fun Module had been another exciting one, with Prom Night, Roadies, Food Carnival etc. Another big event, Razzmatazz exclusively for the school children of Barak Valley allowed them to display their creativity and enjoy a fun-filled ride. Events from sketching to singing and dancing competition were held for the school kids. However, the cultural nights during the fest were the most promising. On the 12th night, Glitterati, a fashion show was held which as expected drew a huge audience. Notable poets Suresh Albela, Saurabh Jain, Dr. Anamika Ambar, stand up comedian Angad Singh and famous fusion band Indian Jam Project graced the 13th night. The satirical poems, the hilarious jokes and the bewitching musical extravaganza created an enrapturing atmosphere. On the 14th night Thundermarch-the rock fest was held where rock bands from various parts of the country came here to compete with each other as well as popular death metal bands Third Sovereign from Aizawl, Undying Inc and Yester drive from Delhi and Junkyard Groove from Chennai created an electrifying atmosphere. On the 15th night, popular Bollywood playback singer Nikhil D'souza, famous rock band The Local Train and well known DJ Paroma lit up the night sky with their mesmerizing performances. The 4-day celebrations had been a huge success and surely enlightened one and all.

XIII) Bandwagon:

The Music Club organized Bandwagon – Cross genre Band Competition, which was headlined by AROGYA from Nepal, Victor, Guitarist of Magdelene, Mizoram and Scavenger Project. The evening was worth the efforts put in by the organizers and was enjoyed by everyone to the fullest.

XIV) Construction Of Park:

The Gymkhana Union Body 2015-16 took up the responsibility of constructing a park-cum-open air theatre in the NIT Silchar campus. This park was constructed keeping in mind that the activities should come out in the open for everyone to enjoy. This park has since seen numerous events organized in it.

XV) Rakshabandhan Celebrations:

Considering the great importance of this traditional festival, the Rakshabandhan Celebration was organised in the college on 30th August with a view to make everyone aware of the true significance of the occasion. The Honourable Director, Prof. N. V. Deshpande, correctly emphasized that Rakshabandhan is not only constrained to the relationship between brothers and sisters, but it also signifies that the strong must protect the weak from all evils.

XVI) Janmashtami:

The festival of the birthday of Lord Krishna, Janmashtami, was celebrated on 5th September with great enthusiasm. A puja for Lord Krishna was organized on that auspicious day in Hostel -7, which was followed by the most exciting "Dahi-Handi" competition, which involves the breaking of an earthen pot raised to a considerable height. The zeal and energy of the students was vividly demonstrated in the competition where all the hostels competed against each other. All the faculty members and students were invited to be a part of the grand celebration.

XVII) Durga Puja:

To seek the blessings of the Goddess of strength, Maa Durga, a 3-day celebration of Durga Puja was organised by the combined effort of the Durga Puja Committee and Gymkhana Students' Union Body from 21st to 23rd 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 Maa Durga on her way to heaven.

XVIII) Diwali:

The whole campus of NIT Silchar was glowing with the shine of the magnificent diyas and colourful lights, on the pristine occasion of Diwali which was celebrated on the 11th of November. On that day the students got actively involved in making beautiful Rangolies and decorating their hostels thereby creating an amazing festive mood throughout the campus. This year GH-2 took the initiative and organised the Kali Puja in which the whole of NIT Silchar was invited, to witness the ceremony and seek the blessings of Goddess Kali.

XIX) Rangmanch'16:

The Dramatics Club organised the annual inter-hostel drama competition Rangmanch on 20th March 2016. Every hostel put up a brilliant show and showcased their dramatic skills. Thunderous applause by the audience followed every drama. Boys Hostel 1 bagged the 1st position.

XIX) PROMETHEUS'16:

The literary club organised its annual fest Prometheus on 27 and 28th of March with pomp, gaiety and innovative events. Events like Declamation, Extempore, Poeta (Poem Recitation), Story Writing, Picture Perception, Alternate History, Spell Bee, Street Painting, Wall Painting, Origami etc were held to provide a platform to the authors, poets and fine artists of the institute . The fest was a grand success and evoked mass participation.

XX) Bihu & Lohri Celebrations:

On the 15th of January 2016, NIT Silchar celebrated Assam's traditional festival Bhogali Bihu and the festival of Lohri marking the auspicious occasion of Makar Sankranti. The event began with Director's speech. The traditional bonfire or "Mejji" was lit by the students and "Pithas" and laddoos were served. "Dahi-Chura" was also served marking the Makar Sankranti celebrations. It was a great initiative to celebrate Assam's favourite festival along with Lohri to have intermingling of cultures and everyone enjoyed it thoroughly.

XXI) Bus Facilities:

Gymkhana Student Body took a noble step in providing bus facilities to the students to ISBT, Railway Station and Airport right after the end-sem exams concluded in May 2015 and later in November 2015. It really helped the students a lot in curtailing their expenses of going to the station and airport from the institute.

XXII) South Indian Food Corner:

A south Indian food corner was set up near the SAC building which is sure to add to the delicacies of snacks for everyone in the college.

XXIII) Screening Of Ind-Pak Match:

The World Cup T20 match between India and Pakistan on 19.03.2016 was screened live in the Gymkhana Park to the delight of all the game lovers.

B. NCC, NITS REPORT OF THE YEAR 2015-16:

As it is well know that NCC is engaged in grooming the youth of the country into disciplined and patriotic citizens.NCC fraternity of NITS has an opulence of spirited and vigorous cadets. Following are a gist of activities of NCC NITS in the year 2015¬16.

Camps: This year a total of 05 camps were attended by various cadets. The details of the camps & achievements are as follows:

Sl. No.	Name of the Camp	Month in which camp happened and venue of the Camp	No. of cadets (SD/SW) attended the camp	Achievements and Remarks
1	NCC SSB SCREENING COURSE	MAY 2015 OTA KAMPTEE	03 SD Cadets	• 06 cadets were selected from North-East India in which 03 were from NITS. • 02 Cadets secured their position in top 5
2	CATC (Combined Annual Training Camp)	26 May to 4June 2015 NIT SILCHAR	33 SD Cadets 03 SW Cadets	• Best cadet prize came to our college. • Second prize in MAP reading and field craft • Best group in cultural event
3	NIC (National Integration camp)	09-20 December 2015 NIT SILCHAR	04 SD Cadets	• Best Supporting cadets was from our college
4	BLC (Basic Leadership camp	28August to 07 September AGARTALA	03 SD Cadets	• All the three cadets were selected for advanced leadership camp
5	CATC (combined annual training camp)	17-26March SILCHAR	22 SD Cadets	• First prize in weapon test • Best group in cultural

Activities Inside the Campus

Apart from camps, Cadets of NCC NITS remain spirited also in the institute throughout the year. The Activities of NCC NITS in the institute are listed below:

- NCC NITS provides training to students of the college and Lead the parade of Independence Day and Republic day parade.
- Every weekend NCC NITS Practices drill under the guidance of instructor coming from Assam BTLN.
- NCC NITS organised DAHI¬HANDI competition in the college to promote unity among students..
- To improve the condition of uniform the college purchased of new dress for cadets.
- Improvement in performance in exam but best is yet to come as some essentials are still lacking.

Details of the Cadets Appeared In "B" and "C" Certificate Exam.

Details	No. Of SW Cadets	No. Of SD Cadets	Remarks
"B" Certificate examination	03	31	Highest no. Of SD cadets appeared in entire 3 Assam BtIn.
"C" Certificate examination	11	17	For the first time SW cadets appeared in exam for "C" certificate
Total	14	48	62 total cadets appeared in both the examinations

NCC NITS Family will continue to be spirited whenever it comes to serve the nation as well as the society.

C. PERFORMANCE OF NIT SILCHAR IN ALL INDIA INTER NIT SPORTS MEET 2015-16

Team	Date	Venue	Category	Appearance	Position
Chess (GIRLS)	16th-18th Oct'15	NIT Silchar	Team	2nd time	Winner
Cricket	26th-29th Mar'16	NIT Calicut	Team	4th time	Runners Up
Table Tennis	16th-18th Oct'15	NIT Silchar	Team	4th time	Runners Up
Football	12th-14th Feb'16	NIT Rourkela	Team	2nd time	Third
Badminton	9th-11th Mar'16	SVNIT Surat	Team	4th time	Fourth
Chess (BOYS)	16th-18th Oct'15	NIT Silchar	Team	2nd time	Fourth
Table Tennis(GIRLS)	16th-18th Oct'15	NIT Silchar	Singles	1st time	Fourth
Basket Ball	26th-29th Mar'16	NIT Calicut	Team	1st time	Quarters
Kabaddi	12th-14th Feb'16	NIT Rourkela	Team	1st time	Quarters
Badminton(GIRLS)	16th-18th Oct'15	NIT Silchar	Team	2nd time	Quarters
Lawn Tennis	9th-11th Mar'16	SVNIT Surat	Team	1st time	Group Stage
Volleyball	9th-11th Mar'16	SVNIT Surat	Team	2nd time	Group Stage
Mountaneering	26th- 30th Jan'16	Arunachal	Team	-	-
Kho-Kho	12th-14th Feb'16	NIT Rourkela	DNP	DNP	DNP
Atheletics	26th-28th Feb'16	MNIT Jaipur	DNP	DNP	DNP

D. NIT SILCHAR KARATE DOJO: ACTIVITIES AND ACHIEVEMENT

Competitions	Date	Number of participants	Results
9th State Karate Championship (Senior) Nagaon, Assam	8th Nov' 2015	05	• Silver Medal (-75 kg category Kumite) • Bronze Medal (-65 kg category Kumite, women)
3rd State Games, Silchar (ASSAM OLYMPICS)	7th Jan' 2016	02	• Gold Medal (-67 kg category Kumite) • Bronze Medal -67 kg category Kumite)
T.G Baruah Memorial 7th under 21 Years State Karate Championships, Guwahati.	26th Mar' 2016	10	• Bronze Medal (-21 years kumite, -60kg) & (-21 years kumite, -75 kg) • Silver Medal (-21 years kumite, -75 kg) • Gold Medal (Girls -21 years kumite, -55 kg)

Karate Students in the DOJO with Grade/Belt Distribution:

GRADE/KYU	BELT	NUMBER OF STUDENTS
9	White I	18
8	White II	8
7	Yellow	10
6	Orange	9
5	Green	1
4	Blue	1
3	Brown I	1
2	Brown II	5
1	Brown III	1
Shodan	Black	2
TOTAL		**56**

Infrastructure and Amenities

ESTATE ENGINEERING SECTION

The Estate Engg. Section has the responsibility to maintain the NITS campus which is spread over an extent of 560 acres (approx). Estate Section is involved in the maintenance and construction of civil works in the Institute. The section looks after the functioning of the buildings, water supply and electrical wings. They supervise the repair and maintenance of instructional buildings, staff quarters and student hostels. Apart from the buildings and quarters the Estate Maintenance Department also maintains the Guest House in top shape. The list of officials under the estate section has been given below:

Dean (P&D)

Prof. P.Rajbongshi, Ph.D.

Associate Dean (P&D)

Mr. D. H. Das, M.Tech.

Other officers

Mr. Debasish Dey, Engineer

Mr. D. Chakraborty, Asst Engineer (Civil) (Contractual)

Mr. Debojyoti Deb, Jr Engineer (Civil)(Contractual)

Mr. S. Das Baishnab, Jr Engineer (Elect.)(Contractual)

Mr. S. Chauhan, Asst Engineer (Elect.)

Mr.AnjanDas,JuniorEngineer(Civil) (Contractual)

Mr. Rahul Suklabaidya, Jr Engineer (Civil)(Contractual)

Mr. Bipon Sinha, Jr Engineer (Elect.)(Contractual)

PHYSICAL FACILITIES

Institute development authority (Construction)

Work completed:

1. Construction of Type-IV (E) Asstt. Prof. qtrs. – 30 units
2. Providing poly-coated GS roofing over the existing roof of Electrical Engg. Deptt.Block-B.
3. Construction of Assam Type Civil Engg. shed.
4. Construction of Assam Type KIDS NITS School building.
5. Expansion of Hydraulics Laboratory.
6. Central school building "A" type and 17 nos. staff qtrs.
7. Supplying and installation of computer socket board, air conditioning machine etc. at CAD/CAM Lab at Production Engg. building.
8. Electrical works at CDAC at NIT Silchar.

On-going project/works:

1. Construction of 1000 capacity Boys Hostel No.9 & new Library building.
2. Construction of Academic building.
3. Construction of Type-VI(EL) Prof. Qtrs. – 12 units.
4. Construction of Type-V(E) Associate Prof. Qtrs. – 20 units construction.

5. Supplying and installation of tubular type street light pole, LED street light etc.
6. Construction of Earthquake Engg. Laboratory under Assam Type Civil Engg. shed.
7. Construction of NABL Accredited Laboratory building.
8. Expansion of Electrical Engg. Department.
9. Construction of Institute Health Care Centre.
10. Construction Eat-out Dhaba.
11. Balance work of Auditorium Building.

Project undertaken by CPWD:

1. Providing and laying of sewerage system for collection of sewage.
2. Construction of T-III Non-faculty staff qtrs. (100 units)
3. Construction of Administrative building.

Project undertaken by HPL:

1. Construction of Married Scholar Hostel (PG/Ph.D students) (a) 300 capacity PG Boys and (b) 100 capacity Married Scholar.

Priority-wise upcoming projects:

1. Internal road
2. Renovation of Workshop building
3. Renovation of old amenities building
4. Construction of 400 capacity Girls Hostel No.3
5. Construction of 1000 capacity Boys Hostel No.10
6. Construction of MMT building

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 & Trailor	Estate Branch
9.	New Vehicle Applied for Registration Donated by NIT Alumni	Travellor (Force) 9 seater Mini Bus	For T&P and other misc. purpose

THE HOSTELS

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 12 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.

THE BOARD OF HOSTEL MANAGEMENT

Name	Designation	Qualification
Prof. M.A. Ahmed	Chairman	Ph.D
Dr. D.C. Das	Vice Chairman	Ph.D
All Asso. Wardens of Hostels	Members	

List of Asso. Wardens of Hostel

Wardens				Period	
Hostel No.	Name	Designation	Department	from	To
1	Dr. T. R. Lenka	Ph. D	ECE	03/03/2015	Till date
2.	Dr. N. Bhupendro Singh	Ph. D	HSS	17/05/2013	17/01/2016
	Dr. B. S. Sil	Ph. D	Civil	18/01/2016	Till Date
3.	Dr. Debasish Dutta	Ph. D	ME	20/03/ 2014	02/11/2015
	Dr. N. Bhupendro Singh	Ph. D	HSS	3/11/2015	Till Date
4.	Mr. Koushik Guha	Ph. D	ECE	10/10/2011	27/04/2015
	Dr. Ashraf Hossain	Ph. D	ECE	28/04/2015	Till date
5.	Dr. S. S. Dhar	Ph. D	Chem.	08/08/2014	Till Date
6	Mr. Saroj Kr Biswas	M.Tech.	CSE	24/02/2015	Till Date
7	Dr. Arup Kr Goswami	Ph. D	EE	10/02/2015	Till Date
8.	Dr. Ganti Ramesh	Ph.D	EE	28/06/2013	03/02/2016
	Dr. R. G Nair	Ph.D	Phy.	04/02/2016	Till Date
GH 1	Dr. Jayasree Chakraborty	Ph. D	CSE	03/11/2014	05/04/5015
	Dr. Nirmala Soren	Ph.D	EE	06/04/2015	31/03/2015
GH 2	Mrs. Sumita Debbarma	Ph. D	ME	17/05/2013	09/04/2015
	Dr. Juthika Mohanta	Ph.D	Maths.	10/04/2015	Till Date
PG Hostel	Dr. Sushovan Chatterjee	Ph.D	ME	10/02/2015	Till Date

Following are the list of facilities available in the Hostels:

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

Following are the list of services available in the hostels:

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

HEALTH CENTRE

The Institute has a Health Centre with a full-time 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 4th academic session was started from 1st April 2015 and total enrollment of the Vidyalaya was 788 approx. In 2015, result of Class X was splendid and 04(four) students obtained 10(Ten) CGPA.

In major achievements , in sports many students participated in the Regional Sports Meet 2015 held in different Kendriya Vidyalayas and bagged Gold, Silver and Bronze medals.

The Vidyalaya hosted seven days Annual Training Camp for Silchar Region Scoutand Guide trainers in April 2015 and Regional Youth Parliament was held in this Vidyalaya on 11th Aug 2015. On 16th Nov 2015 Cluster level Bal Diwas was also celebrated in KV NIT Silchar.

Vidyalaya also contributed to Swacch Bharat Abhiyan and Swacch Vidyalaya drive was carried out accordingly to spread the awareness regarding cleanliness. At the infrastructural level, the new building is well-equipped with of academic facilities. It

has sufficient classrooms, 02(two) Computer Labs, E-classrooms, 03(Three) Science Lab, Language Lab, CMP resource room, Music room, Medical room, Work Education Room, Yoga Room etc. The Vidyalaya also has 06(Six) LCD projectors and 02 (two) Duplicator machines. It also has a library with approx. 2500 books.

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 2. 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 Dumbells etc. It has separate rooms for changing with bathroom and toilets attached. All the clubs of the institute such as literary club, photography club, Dramatic club, Gyansagar club, and Music club are there in the sports complex. It has the New Auditorium with 5000 seating capacity and a big stage.

GUEST HOUSE

The Institute Guest House, flanked by green lawns and colourful horticulture remains a pleasant haven for the Institute Guests, whether from academia or alumni or parents of the students. The state-of-the-art Guest House with all modern infrastructures is one of its kind in the North East. Some renowned personalities of the Nation in the likes of Former President of India and Bharat Ratna recipient Late Shri APJ Abdul Kalam and Hon'ble Minister of Railways, Shri Suresh Prabhakar Prabhu 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 syncs with the global technical advancements, with special emphasis on development of Northeastern 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 researchers and provides 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 Engg.,
(ii) Mechanical Engg.,
(iii) Electrical Engg.,
(iv) Electronics & Communication Engg.,
(v) Computer Science and Engg.,
(vi) Electronics and Instrumentation Engg.,
(vii) Humanities and Social Sciences,
(viii) Mathematics,
(ix) Chemistry,
(x) Physics.

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

Completed	Submitted	Ongoing
14 (i.e. degree was awarded in 13th Convocation held on 16.05.2015)	34	274

c) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Duration
ONGOING PROJECT:					
1.	Development of Speech Based Multi level Person Authentication System	Dr. R.H. Laskar (ECE)	MCIT	57.03	3 yrs
2.	Power Quality Assessment and Improvement in Barak Valley, Assam	Dr. A.K. Goswami (Electrical)	-do-	7.06	3 yrs
3.	L- Moments Based Regional Extreme Rainfall & Flood Frequency Analysis for Hydro-meteorological Sub Zones 2(b) and 2(c) of India	Prof. P.S. Choudhury (Civil)	MESc.	16.84	3 yrs
4.	Behaviour of Clay Dampers under Impact Loading	Prof. A.K. Dey (Civil)	-do-	29.90	3 yrs
5.	Development of Surface Modified Adsorbents for The Removal of CR(VI) and FE(III) From Wastewater	Dr. M. Ahmaruzzaman (Chemistry)	RPS	10.00	3 yrs
6.	Investigation of Some Binary Metal Oxide Material for Resistive Switching Memory Applications	Prof. Fazal A. Talukdar (ECE)	-do-	18.40	3 yrs

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Duration
7.	Development of An Enzymatic Process for Production of Microalgaeal Biodiesel	Dr. S. Chatterjee (Mechanical)	-do-	10.40	2 yrs
8.	Design and Implementation of Pure Sine Wave Inverter for Residential Solar Power	Dr. A.K. Goswami (Electrical)	-do-	15.00	2 yrs
9.	Design, Simulation and Implementation of Carbon Nanotube Based Fet Logics	Dr. S. Choudhury (Electrical)	-do-	8.00	2 yrs
10.	Synthesis & Characterization of BST-BFO Composites for Devices	Prof (Mrs). B. Choudhury and Dr. S.K. Barik (Physics)	-do-	16.00	2 yrs
11.	Automatic Generation Control of Autonomous Hybrid Generation System	Dr. Dulal Ch. Das (Electrical)	-do-	15.00	2 yrs
12.	Utility of Paratransit Modes in Regional Passenger Transportation	Prof. M.A Ahmed (Civil)	-do-	17.50	2 yrs
13.	Agricultural Development and Environment Issues in the North Eastern Region: A Case Study of Manipur	Dr. N. B. Singh (Humanities)	ICSSR	5.47	2 yrs
14.	Up Gradation of Highway Engg. Laboratory	Prof. D.N. Bhattacharjee Dr. P. Rajbongshi (Civil)	MODROB	13.50	1 yr
15.	Heat Transfer Lab	Prof. R.D. Misra	-do-	8.00	1 yr
16.	Extension of NLP	Mr. S. Borgohain	IBM	7.71	2 yrs
17.	Regional Test Centre cum Technology Back-up Unit.....	Dr. Agnimitra Biswas (Mechanical)	Ministry of Non-renewable	48.01	5 yrs
18.	Synthesis of indenoisoquinolineones	Dr. Lalthazuala Rokhum (Chemistry)	SERB	9.50	3 yrs
19.	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	-do-	-do-	17.50	4 yrs
20.	Evaluation of Non- linear fatigue damage in Asphalt Materials	Dr. P. Rajbongshi (Civil Engg.)	-do-	31.20	3 yrs
21.	Post invariant face recognition algorithm development for face based prototype video surveillance system(VSS)	Prof. Fazal A. Talukdar	BRNS	16.45	3 yrs
22.	Feasibility Studies on Use of Non Standard Local Materials in Rural Roads at Bishnupur District of Manipur.	Dr. P. Rajbongshi (Civil Engg.)	NRRDA	3.65	1 yr
23.	Visvesvaraya PhD Scheme for Electronics and IT at National Institute of Technology Silchar.	Dr. K.L. Baishnab	MLA	16.25	5 yrs
24.	Analysis of Brain Waves and Development of Intelligent model for Silent Speech Recognition.	Dr Nidul Sinha	DIETY	22.50	2 yrs
25.	A Study on Measure Theoretical approach to convergence of sequences in probalistic normed spaces"	Dr Mausumi Sen	SERB	3.00	3 yrs
26.	"Metal Complexes of New Chiral Schiff Bases: Design, Structure Elucidation, Reactivity and Synthetic Applications"	Dr Pranjit Barman	SERB	18.34	3 yrs
27.	Special Manpower Development Programme for Chips to System Design	Dr. K.L. Baishnab	MCIT	15.95	5 yrs

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Duration
28.	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application.	Dr. Arnab Nandi	SERB	23.40	3 yrs
COMPLETED PROJECT:					
1.	Seismic Performance of Beam-Column Joint made with PepPolymer Concrete	Prof. A.I. Laskar (Civil)	AICTE -RPS	9.00	3 yrs
2.	Studies on Co-operative Assistance to Nucleophilic Substitution Reactions at Disulfide Bridge	Dr. Pranjit Barman (Chemistry)	-do-	10.00	3 yrs
3.	Study of Bi-Layered Perovskite Oxides : Thin Films for Non-Volatile Ferroelectric Memory Applications'	Dr. Asim Roy (Physics)	-do-	17.50	3 yrs
4.	Refrigeration and Air Conditioning Laboratory	Prof. R.D. Misra (Mechanical)	AICTE - MODROB	15.00	1 yr
5.	Modernization of Thin Film Laboratory	Dr. Asim Roy (Physics)	-do-	10.00	1 yr
6.	Riverbank Erosion and its Counter Measures	Prof. Adbul Karim Barbhuiya	DST	24.06	3 yrs
7.	Scour of Bridge Pier in Cohesive Soil	Prof. Adbul Karim Barbhuiya	AICTE	17.00	3 yrs
8.	L-moments Based Regional Extreme Rainfall and Flood Frequency Analysis for Hydro-Meteoro-logical Sub-Zones 2(b) and 2(c) of India	Prof. Parathasarathi Choudhury	MOES	16.84	3 yrs
9.	Experimental Investigation of Surface Integrity in Electrodischarge Machining (EDM)	Dr P.K.Patowari	AICTE	20.00	3 yrs

d) Journal / Patent / Books / Chapter / Conference Publication Details:

Sl. No.	Department	Book /Chapter	Patent	International Journal	National Journal	International Conference	National Conference
1	CE	02	00	45	09	33	14
2	ME	01	01	81	01	22	01
3	CSE	00	00	18	00	07	00
4	ECE	03	00	66	00	46	00
5	EE	00	00	45	03	28	00
6	E&I	00	00	03	00	06	00
7	Physics	00	00	13	00	03	00
8	Chemistry	00	00	49	00	04	05
9	Mathematics	01	00	21	06	07	00
10	HSS	06	00	03	03	03	00
11	MS	01	00	01	00	00	03
Total		14	01	335	22	159	23

CE= Civil Engg., ME= Mechanical Engg., EE= Electrical Engg., ECE= Electronics & Communication Engg., E&I= Electronics & Instrumentation Engg., CSE= Computer Science & Engg., HSS= Humanities & Social Sciences, MS= Management Studies.

Staff Position

STAFF POSITION

i. Chief Academic & Executive Officer (Position as on 31.03.16)

Position	Name
Director	Prof. N. V. Deshpande

ii. Administrative Staff : (Position as on 31.03.16)

Name of the post	Sanctioned Strength	Staff in Position
Registrar	1	1
Deputy Registrar	2	1
Assistant Registrar	4	4
Librarian	1	1
Deputy Librarian	1	0
Assistant Librarian	1	1
Students Activity & Sports Officer	2	1
Senior Technical Officer	1	1
Technical Officer	1	0
Executive Engineer	1	0
Engineer (Civil/Elect.)	2	1
Sr. Medical Officer	1	1
Medical Officer	1	1
Security Officer	1	0
Total	**20**	**13**

iii. Academic Staff: (Position as on 31.03.16)

Name of the post	Sanctioned Strength	Staff in Position
Prof.	25	16
Associate Prof.	55	19
Assistant Prof.	122	110
Total	**202**	**145**

iv. Faculty Position as on 31.03.16 (Department –wise break up)

Name of Department	Prof.		Associate Prof.		Assistant Prof.		Total Sanctioned
	Sanctioned Strength	In position	Sanctioned Strength	In position	Sanctioned Strength	In position	
CE	4	7	10	4	19	16	33
ME	4	3	10	5	19	17	33
EE	4	2	8	2	17	17	29
ECE	4	2	8	3	17	15	29
CSE	3	1	6	1	16	13	25
EIE	1	0	3	1	8	7	12
Physics	1	0	2	1	5	7	8
Chemistry	1	0	2	0	5	7	8
Mathematics	1	0	3	2	8	10	12
HSS	1	1	2	0	4	5	7
MS	1	0	1	0	4	2	6
Total	**25**	**16**	**55**	**19**	**122**	**110**	**202**

v. Ministerial Higher Staff (as on 31.03.2016)

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	1
Total	**16**	**02**

vi. Technical Higher Staff (as on 31.03.2016)

Name of the post	Sanctioned Strength	Staff in Position
Technical Assistant / SAS Assistant / Junior Engineer	28	0
Sr. Technical Assistant / Sr. SAS Assistant / Assistant Engineer	21	1
Technical Assistant / SAS Assistant / Assistant Engineer (SG-II)	13	2
Total	**62**	**03**

vii. Ministerial Lower Staff (as on 31.03.2016)

Name of the post	Sanctioned Strength	Staff in Position
Junior Assistant	16	0
Senior Assistant / Stenographer	12	1
Assistant (SG-II) / Senior Stenographer	7	1
Assistant (SG-I) / Stenographer (SG - II & I)	0	12
Total	**35**	**14**

viii. Technical Lower Staff (as on 31.03.2016)

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	5
Technician/ Laboratory Asstt./ Pharmacist / Work Assistant (SG – I)	0	8
Total	**62**	**17**

ix. Supporting Staff (as on 31.03.2016)

Name of the post	Sanctioned Strength	Staff in Position
Supporting Staff (Attendant / Mali/Security Guard)	31	88
Total	**31**	**88**

x. Fresh Appointments Teaching (From 01.04.15 to 31.3.16)

SL. No	Name	Designation	Department	Date of Joining
1.	Dr. Avishek Ray	Assistant Prof.	Humanities and Social Sciences	14-Sep-15
2.	Dr. Biplab Das	Assistant Prof.	Mechanical Engg.	29-Sep-15
3.	Dr. Mahalakshmi S.	Assistant Prof.	Humanities and Social Sciences	30-Sep-15
4.	Dr. Susmita Ghosh	Assistant Prof.	Civil Engg.	13-Oct-15
5.	Dr. Shyamosree Pal	Assistant Prof.	Computer Science and Engg.	16-Oct-15
6.	Dr. Dibyakusum Ray	Assistant Prof.	Humanities and Social Sciences	02-Nov-15
7.	Dr. Susanta Kumar Tripathy	Assistant Prof.	Electronics and Communication Engg.	12-Nov-15
8.	Dr. Sudip Dey	Assistant Prof.	Mechanical Engg.	16-Nov-15
9.	Dr. Saikat Ranjan Maity	Assistant Prof.	Mechanical Engg.	18-Nov-15
10.	Dr. Pitambar Rambhau Randive	Assistant Prof.	Mechanical Engg.	20-Nov-15
11.	Dr. Bijan Kumar Roy	Assistant Prof.	Civil Engg.	23-Nov-15

SL. No	Name	Designation	Department	Date of Joining
12.	Dr. Ujjal Chakraborty	Assistant Prof.	Electronics and Communication Engg.	29-Nov-15
13.	Dr. Arnab Nandi	Assistant Prof.	Electronics and Communication Engg.	15-Dec-15
14.	Dr. Prashanth. J	Assistant Prof.	Civil Engg.	25-Feb-16

xi. Appointments of Non-Teaching (Contractual) (During 2015 - 2016)

SL. No	Name	Designation
1.	Mr. Jagdish S. Parab	Secretary
2.	Mr. Pritam Nath	Technical Assistant
3.	Mr. Riton Das	Technical Assistant
4.	Mr. Abdul Muktadir Barlaskar	Technical Assistant
5.	Mr. BiswajitNath	Technical Assistant
6.	Mr. Satya Saran Biswas	Technical Assistant
7.	Mr. Khaled Ahmed Barbhuiya	Technical Assistant
8.	Dr. Suman Debnath	Dental Surgeon
9.	Ms. Lipi Mahanta	Technical Assistant
10.	Mr. Sidique Haque	Technical Assistant
11.	Dr. Lakshmi Narayan Ray	Physician
12.	Mr. Hari Mohan Singha	Assistant (Health Centre)
13.	Mr. Dilip Chandra Das	Attendant (Health Centre)
14.	Ms. Ashalata Singha	Work Assistant (Nurse)
15.	Mr. Amitabh Kairi	Assistant
16.	Mr. Animesh Deshmukha	Assistant
17.	Mr. Binanda Barman	Assistant
18.	Mr. Ranjit Kr. Singha	Assistant
19.	Mr. Sajal Kanti Choudhury	Audit Officer
20.	Mr. Subrata Dey	Consultant Audit
21.	Mr. Birmangal Singha	Asstt. Security Officer
22.	Mr. Neilh M. Gautam	Training & Placement Officer
23.	Mr. Shantanu Chakraborty	Officer on Special Duty
24.	Mr. Enaobi Singha	Supervisor (PG Hostel)
25.	Mr. Janakinath Dasgupta	Asstt. Hostel Manager
26.	Mr. Jogesh Chandra Das	Hostel Supervisor
27.	Mr. Rahil Amin Laskar	Engineer
28.	Mr. Narattam Singha	Security Assistant
29.	Mr. Basudev Barman	Engineer
30.	Mr. S. Gournitai Singha	Assistant
31.	Mr. B. Krishna Reddy	Technical Officer
32.	Mr. Atul Chauhaan	Technical Officer
33.	Mr. Anjan Das	Junior Engineer (civil)
34.	Mr. Rahul Suklabaidya	Junior Engineer (civil)
35.	Mr. Debjyoti Deb	Junior Engineer (civil)
36.	Mr. Swapan Das Baishnab	Junior Engineer (civil)
37.	Mr. Baipan Kr. Singhna	Junior Engineer (civil)
38.	Mr. Dhrubajyoti Chakraborty	Engineer Estate
39.	Mr. Raijul Islam	Technical Assistant
40.	Mr. Saumya Kanti Das	Technical Assistant
41.	Mr. Himanish Das	Technical Assistant
42.	Mr. Ravi Kr. Roy	Technical Assistant

SL. No	Name	Designation
43.	Ms. Sulekha Bhattacharjee	Technical Assistant
44.	Ms. Priyanka Ray	Technical Assistant
45.	Mr. Deepraj Paul	Technical Assistant
46.	Mr. Jyotirmoy Kakati	Technical Assistant
47.	Mr. Saurav Bhattacharjee	Technical Assistant
48.	Mr. Mishal Deb	Technical Assistant
49.	Mr. Rajib de	Technical Assistant
50.	Mr. Ruhul Amin Reza	Technical Assistant
51.	Mr. Albert Mundu	Technical Assistant
52.	Mr. Rohit Pratap Singh	Technical Assistant
53.	Mr. Arif Khan	Technical Assistant
54.	Mr. Pradyut Paul	Technical Assistant
55.	Mr. Ruhul Amin Laskar	Technical Assistant
56.	Mr. Ranjan Baran Paul	Technical Assistant
57.	Mr. Mridulsubhra Dey	Technical Assistant
58.	Mr. H. Chinglen Singha	Officer on Special Duty
59.	Ms. Merry Nath	Physiotherapist
60.	Mr. Sameer Acharjee	Assistant
61.	Mr. Keshab Ranjan Bhattacharjee	Assistant
62.	Mr. Hari Sankar Dey	Asstt. Pension Cell
63.	Mr. Prosen Mohan Das	Lab Assistant (CE Deptt.)
64.	Mr. Nirmal Kumar Nath	Technician (C E Deptt.)
65.	Mr. Nilotpal Chakraborty	Accountant
66.	Mr. Pradip Kumar Choudhury	Assistant (Academics)
67.	Mr. Sanjit Banik	Pharmacist (Part – time) (Health Centre)
68.	Mr. Samanta Das	Pharmacist (Part – time) (Health Centre)
69.	Mr. Ram Avatar Kanu	Care Taker (KV – NIT)

xii. Appointments of Teaching (Contractual) (During 2015 - 2016)

Sl. No.	Name	Designation
1.	Mr. Arif Ahmed	Assistant Prof. CSE Deptt.
2.	Dr. Subroto Choudhury	Assistant Prof. MS Deptt.
3.	Mr. Chandan Dawo	Assistant Prof. E&I Deptt.
4.	Md. Ali Chaudhury	Assistant Prof. CE Deptt.
5.	Mr. Arnab Kumar Singh	Assistant Prof. CE Deptt.
6.	Ms. Sagarika Chaudhury	Assistant Prof. ECE Deptt.
7.	Mr. Surajit Suklabaidya	Assistant Prof. EE Deptt.
8.	Mr. Dipankar Mahatto	Assistant Prof. MS Deptt.
9.	Mr. Mayank Shekhar	Assistant Prof. CSE Deptt.
10.	Mrs. Priyanka Singh	Assistant Prof. CSE Deptt.
11.	Ms. Pratiti Singha	Assistant Prof. HSS Deptt.

xiii. Retirement / Resignation (From 01.04.15 to 31.3.16)

Sl. No.	Name	Designation	Date of Retirement / Resignation
1.	Mr. R. K. Sonar	Assistant SG - I	30.04.2015
2.	Mr. Sayub Ali Laskar	Attendant SG - II	30.04.2015
3.	Mr. Bijoy Sankar Das	Attendant SG - I	30.04.2015
4.	Dr. Jayasree Chakraborty	Assistant Prof. ECE Deptt.	07.05.2015
5.	Mr. Gauranga Sarkar	Technician SG - I	31.05.2015
6.	Mr. S. Bhattacharjee	Technician SG - I	31.05.2015
7.	Mr. Bivash Chakraborty	Attendant SG - I	31.05.2015
8.	Mr. N. G. Mazumdar	Technician SG - I	30.06.2015
9.	Mr. N. C. Singha	Draftsman	31.07.2015
10.	Mr. Amal Singha	Attendant SG - I	31.07.2015
11.	Dr. Binod Shaw	Assistant Prof. EE Deptt.	04.08.2015
12.	Mrs. Shefali Singha	Assistant SG - I	31.08.2015
13.	Mr. S. Acharjee	Assistant SG - I	31.08.2015
14.	Mrs. S. Dey	Assistant SG - I	30.09.2015
15.	Mr. Rajkumar Ahir	Attendant SG - I	30.09.2015
16.	Mr. N. Chakraborty	Sr. Accountant	30.10.2015
17.	Mr. Prosen Mohan Das	Attendant SG - I	31.10.2015
18.	Ms. U. Roy Choudhury	Attendant SG - II	31.10.2015
19.	Dr. Debashish Dutta	Assistant Prof. ME Deptt.	03.11.2015
20.	Mr. H. S. Dey	Stenographer SG - I	30.11.2015
21.	Mr. N. K. Nath	Technician SG - I	31.12.2015
22.	Ms. Lila Bala Das	Attendant SG - II	31.12.2015
23.	Mr. H. N. Verma	Assistant SG - I	31.01.2016
24.	Mr. S. Roy	Sr. Assistant	31.01.2016
25.	Mr. Abdul Razak Barbhuiya	Assistant SG – II	31.01.2016
26.	Mr. P. K. Chaudhury	Assistant SG – I	29.02.2016
27.	Mr. S. K. Paul Chaudhury	Assistant SG – I	31.03.2016
28.	Mr. Madanlal Sutradhar	Attendant SG - I	31.03.2016

xiv. Death In Harness (From 01.04.15 to 31.3.16)

SL. No	Name	Designation	Date of Death
1.	Mr. Subhash Chandra Das	Technician SG – II	17.04.2015
2.	Mr. Ranendro Dhar	Assistant SG – II	27.08.2015
3.	Mr. Abani Chandra Das	Attendant SG – II	18.01.2016
4.	Mr. Shusanto Deb Roy	Technician SG – II	19.01.2016

xv. Voluntary Retirement Scheme (From 01.04.15 to 31.3.16)

SL. No	Name	Designation	Date of VRS
1.	Abdul Rehman Barbhuiya	Sr. Work Assistant	29.02.2016

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 Engg. 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 of 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

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

Total Fund Received upto Nov 2015 = Rs 1250 in Lakhs

Additional Fund Received in Dec 2015 = Rs 250 in Lakhs

Total Fund Received as on 30/03/2016 = Rs 1500 in Lakhs

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	675
Provide Teaching and Research Assistantships for significantly increasing enrolment in existing and new Master's and Doctoral programmes in Engg. disciplines	20	300
Enhancement of R & D and institutional consultancy activities	5	75
Expenditure on faculty and Staff development for improved competence based on Training Needs Analysis.	10	150
Enhanced interaction with Industry	5	75
Institutional Management Capacity enhancement	2	30
Implementation of Institutional academic reforms	1	15
Academic support for weak students	2	30
Incremental operating cost	10	150
Total	100	1500

Details of in-house workshop/Expert Lecture/Seminar/Conference/Training organized at NIT Silchar during the year 2015-2016

Sl. No.	Date		Topic	Deptt.	Coordinator
	From	To			
1.	10/04/2015	12/04/2015	Recent trends in microelectronics and MEMs technology	ECE	Dr. Taimoor Khan.
2.	12/02/2016	14/02/2016	Expert Lecture series in electronics & communication Engg.	ECE	Dr. Taminoor Khan
3.	10/03/2016	12/03/216	National Innovation Summit 2016	ECE	Wasim Arif

Details of workshop/Expert Lecture/Seminar/Conference/Training attended outside by Faculties during the year 2015-2016

Procurement Report for the financial Year 2015-2016 under TEQIP-II

Sl No.	Name	Deptt.	Date		Title of Workshop/Expert Lecture/Seminar/Conference/ Training	Institute	Place
			From	To			
1.	Nirmala Soren	EE	24th Nov 15	25th Nov 15	Important Challenges in power sector	Indian Institute of Information Technology & Management	Gwalior
2.	Dr. Dulal Chandra	EE	24th Nov 15	25th Nov 15	Important Challenges in power sector	Indian Institute of Information Technology & Management	Gwalior
3.	Dr. R. D. Misra	ME	18th March 16	20th March 16	3rd World summit on Accreditation (WOSA-2016)	NBA New Delhi	Delhi
4.	Dr. T. Rehman	CE	18th March 16	20th March 16	3rd World summit on Accreditation (WOSA-2016)	NBA New Delhi	Delhi
5.	Dr. L. C. Saikia	EE	18th March 16	20th March 16	3rd World summit on Accreditation (WOSA-2016)	NBA New Delhi	Delhi
6.	Dr. K. L. Baishnab	ECE	18th March 16	20th March 16	3rd World summit on Accreditation (WOSA-2016)	NBA New Delhi	Delhi
7.	Dr. Swaroj Kr Biswas	CSE	18th March 16	20th March 16	3rd World summit on Accreditation (WOSA-2016)	NBA New Delhi	Delhi
8.	Dr. Rajdeep Dasgupta	E&I	18th March 16	20th March 16	3rd World summit on Accreditation (WOSA-2016)	NBA New Delhi	Delhi

Procurement Completed

Package Name	Department	Status	Amount Rs. in Lakhs
Desktop PC	E & I Deptt.	Order Placed	24.35
Desktop PC	CE Deptt, ECE Deptt, EE Deptt	Order Placed	24.35
Multimedia Projector	Institutional	Order Placed	16.94
		Total	65.64

Other Activities of TEQIP-II in the Year 2015-2016

Assistantship for students during the year 2015-2016

SL No .	Programme	Number of Students 2015-2016
1.	M.Tech.	30
2.	M. Sc.	25
3.	PhD Engg.	Nil
4.	PhD Non-Engg.	Nil
	Total No.	55

Financial Report of TEQIP-II Project during the financial year 2015-2016

Sl No.	Activity Name	Expenditure Involved(Amount) Upto 31/03/2016 (Rupess in lacs)
1	Procurement of Goods	575.21
2	Providing Assistantships for increased enrolment in existing and new PG Programmes in Engg. Discipline	444.20
3	Enhancement of Research and Development and Institutional Consultancy Activities	56.27
4	Faculty and staff development for improved competence based on Training Needs Analysis (TNA)	105.45
5	Enhanced Interaction with Industry	61.62
6	Institutional Management Capacity enhancement	44.39
7.	Implementation of Institutional reforms	44.14
8.	Academic support for weak students	13.45
9.	Incremental operating Cost	85.84
	Total Fund Utilized Rs.	1430.56

Awards and Achievement

NIT Silchar has undergone a transformation in the recent years in terms of Academics, Infrastructure and overall development and has become a preferred institute not only in the North-eastern region but also for the entire nation. Some of the awards and achievement of the institute are listed below:

1. Data Quest CMR ranking of Technical Schools: This survey is done by an independent agency and includes all CFTIs and other premier institutes including IITs. The ranking of NIT Silchar is as under:

2011	2012	2013-14	2015
AIR 31	AIR 33	AIR 25	AIR 12 Recently published in 31 May 2015 Issue of DataQuest magazine.

(AIR is All India Rank)

2. NIT Silchar has secured position within top 10 Institute in India due to high score in all the broad parameters of HR such as the overall reputation, industry relevant curriculum, and the quality of students. NIT Silchar is placed at #9 in HR feedback though it is not featured in the top 10 institutes as per the overall ranking. The HR scores of most of the institutes are in tune with their overall ranks. (This is published in the Data Quest Magazine, Vol XXXIII, No. 10, Page no. 66 May 31, 2015).

3. Received E-Assam challenge award 2015 in a ceremony held at Guwahati on 10-04-2015 for best ICT practitioners in Assam; it had three award categories namely Certificate of Appreciation, Certificate of Recognition & Certificate of Presentation. C-DAC Mohali in collaboration with NIT Silchar bagged two awards for its Silchar Telemedicine Project, that of Certificate of Appreciation & Certificate of Presentation.

4. ASSOCHAM award for Best Engg. College in East India consecutively for two years 2014 and 2015: In 2014 the award was handed over by Dr. Karan Singh and in 2015 the award was handed over by Prof. Ram Shankar Katheria, Honble MOS, HRD, GOI at New Delhi. This award is received for excellence in Engg. education.

5. The Institute has bagged the RAJBHASHA SHIELD from MHRD for the year 2014 for its excellent performance in the use and implementation of Rajbhasha- Hindi in official proceedings.

6. National Institute of Technology Silchar is awarded National Education Awards 2015 as Outstanding Engg. Institute East by ABP News on 23 July 2015 during World Education Congress 2015 held at Taj Hotel, Lands' End, Mumbai. The award was presented by Dr. David Richard Namwandi, Founder/Chair, The International University of Management & Former Education Minister, Namibia.

Glimpses of Annual Activities

13th Convocation, 2015

NATIONAL INSTITUTE OF TECHNOLOGY

Independence Day 2015

Republic Day 2016

Orientation Programme 2015-16

NIT Silchar welcomes Shri. Suresh Prabhu, Hon'ble Minister of Railways, GOI

Poshua '16

Incandescence 2016

Photo Courtesy: Photography Club, NIT Silchar

Corporate Social Responsibility

Inspite of numerous hurdles, the devotion towards serving the society at large has remained firm for the Institute and can be understood by the various developmental activities carried under the flagship of Corporate Social Responsibility. The Institute has undertaken various measures to improve the socio-economic conditions of the nearby villages and North-eastern region at large. Certain contributions of the Institute towards social development are listed below:

Contribution to Social Development

- **Adoption of border villages to develop these as Model villages:** The institute has adopted numerous villages from 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

Since the time of existence of civilization whatever man has created, he conceived the idea from its surrounding. The idea of social Engg. comes into mind from the simple fact that as a social animal one cannot expect to grow unless the surrounding is apt for the same. Gyansagar is a society service wing of NIT Silchar volunteered by the students of institute which is encouraged and approved by Prof. (Dr) N.V.Deshpande, Director, NIT Silchar. Since last four years, Gyansagar has put its effort towards the development of the society. The development is in terms of general education, IT education, agricultural awareness, health awareness, job-opportunity awareness, exploring the inherent qualities of kids in villages, etc.

Gyansagar was started in the year 2009 by a group of students led by Mr. Aditya Choudhary, an electrical Engg. 2012 pass-out student from NITS. Since then, it has taken huge leaps to become a social organization which benefits the nearby villages and communities near NIT Silchar. It had been headed by the dynamic leadership of Prof. (Dr) A. K. Sil, Prof., Department of Chemistry, NIT Silchar, since its establishment. Then, during the month of September, 2013, the headship was handed over to Dr. Kedar Nath Das, Assistant Prof., Department of Mathematics, NIT Silchar, Thereafter on 9th September, 2015 the headship was handed over to Dr. Ranjith G. Nair and Dr. Saumya Ranjan Mohapatra, Assistant Prof., Department of Physics, NIT Silchar.

ACTIVITIES ORGANIZED:

The various activities of Gyansagar are being carried out smoothly due to the consistent effort of the chief student coordinators as well as the student members. We have around 250 student volunteers with coverage of 7 villages, reaching out to more than 500 village kid students. Undoubtedly, the whole hearted support of the student community of NIT Silchar is highly appreciated. Gyansagar aims at creating a difference in the lives of children and people of nearby villages through quality education, awareness programs and courses that bring them at par with the national level of education. The major activities are listed below:

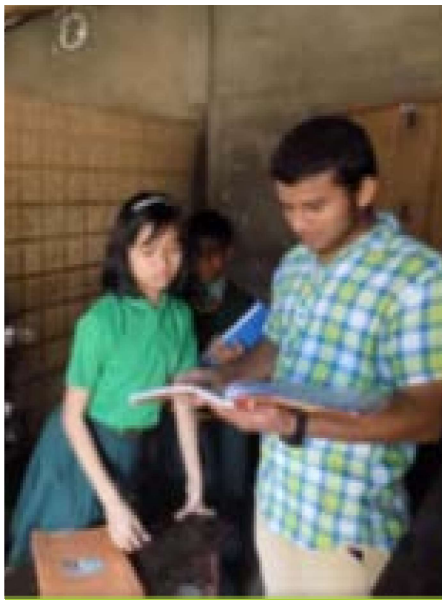
Clothes Donation Camp (15th November 2015)

Like every year on 15th November 2015, a successful cloth donation drive was organized at the nearby villages of NIT Silchar like Borakhai Tea Garden, Babu Tilla, Madhu Tilla, Tambu Tilla, Sadhu Tilla, and Bel Tilla. 1500 pieces of clothes, bags for school children, shoes for old villagers, blankets and bedding for household were donated by the volunteers of Gyansagar. The program was inaugurated by Prof. N. V. Deshpande, Director, NIT Silchar in presence of Prof. Mokaddes Ali Ahmed (Dean SW), Dr. Pabitra Rajbongshi (Dean P&D), Prof. F. A. Talukdar, Dr. R. G. Nair (Coordinator) and Dr. S. R. Mohapatra (Co-coordinator). The clothes have been collected from hostels and the faculty quarters and later on distributed among the villagers by the Gyansagar volunteers.

Teaching: Outreach Programme (October 2015 onwards)

The Education outreach program was re-launched on Oct'15 . Today it covers seven villages and reaches out to around 500 students. The education programme covers the following four schools nearby campus, namely R.N. Bania Memorial School, K.V. NIT Silchar, Borakhai School, Barak Valley School. Our team, of about 25-30 volunteers, goes to these villages every weekend to contribute to the quality of knowledge among less privileged students. Initial resistance of the villagers has worn out after looking the enthusiasm of our volunteers to teach and of the students to learn. Apart from the villages, the educational outreach program is also taking place in the KV NIT Silchar where girl student-volunteers teach on weekends.

Lead by a student Teaching Coordinator, the teaching team is divided in groups of five volunteers per school, with each team headed by one of the members. Each member has been allotted one subject in one class and the head is responsible for taking the attendance of the class and looking after extracurricular activities such as sports, games and various competitions. Each team is appointed to teach in one school. The subjects of Mathematics and Science are covered in classes of 8, 9 and 10. Teaching is done on weekends for a duration of two hours in each school and each of the two subjects is taught in every class for one hour.



Celebrating KITE FESTIVAL (26th January, 2016)

This event was conducted by Gyansagar to mark the flying of kites by the Constituent Assembly just after passing the INDIAN CONSTITUTION on 26th of January 1950. Marking the independence of taking our decisions on our own, independence of flying our kites of governance ourselves Gyansagar NIT Silchar tried to celebrate this very sense of republic.

Fruit Tree Plantation (26th January, 2016)

The best time to plant a tree is 20 years ago. The second best time is now. In an effort to make the college campus clean and green coupled with the objective for beautification of lakes in the campus, fruit tree plantation drive was initiated on 26th January 2016 by GYANSAGAR members. As many as 20 different saplings of different varieties of fruits were planted by the students along with Director Prof. N V Deshpande, Prof. A.K. Barbhuiya, Registrar, Prof. Mokaddes Ali Ahmed, Dean SW, Dr. Ranjith G Nair and Saumya R Mohapatra, Gyansagar Faculty Coordinators and other faculty members. With motivation from the "Swacch Bharat Abhiyan", the primary focus was to encourage the students to plant their own trees and further motivate them to take care of the trees, hence contributing to a healthy and safe environment.

Skill Development Program (NITS-CIT 2016): 12th March, 2016 onwards

20 selected students and 5 NIT Silchar staff are getting, professional computer application training course in the institution at free of cost with view to promote Skill India concept and empower the unemployed youth of nearby villagers. Candidates are provided with printed reading materials and individual computer system inside the lab with student:teacher ratio of 2:1. Course material is prepared in supervision of Faculty coordinators and with the help of Computer Science Department NIT Silchar. It focus on Internet use, Hardware, Data entry & MS Office in Booklet 1 and Tally & Adobe Photoshop in Booklet 2.

Accounts & Financial Statements

Financial Status

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

Sl No.	Particulars	Non Plan	Plan
1	Opening balance as on 01.04.2015	0.00	2853.01
2	Grants-in-aid received from GOI during the year 2015-16	3700.00	7400.00
3	IRG during the year 2015-16	1574.06	78.84
4	Total (1+2+3)	5274.06	10331.85
5	Expenditure during the year 2015-16	5274.06	9810.78
6	Balance as on 01.04.2016	0.00	521.07

2. Sources of Funds

Plan: Rs. 7400.00
Non-Plan: Rs. 3700.00
TEQIP-II: Rs. 250.00

3. Expenditure Position for Staff

SCHEDULE - 15. ESTABLISHMENT EXPENSES	Rupees in Lacs
Pay & Allowances	2232.68
Pay of Adhoc Staff / Visiting Teachers	383.13
Pay of Muster Roll	153.19
Medical Expenses including reimbursement	46.99
Leave Salary to Staff	133.35
Bonus	7.07
Expenditure on Death cum retirement Gratuity	211.62
Contribution to New Pension Scheme	74.34
Pension	572.74
L.T.C. Expenditure	34.67
H.T.C. Expenditure	9.22
Security Services	177.47
House Keeping	54.77
Professional Development Allowance	30.95
Staff Welfare Expenses	6.20
Children Education Allowance	18.00
TOTAL	**4146.39**

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

	(Rs. in lacs)
Opening Balance as on 01.04.2015	**11.89**
Grants-in-aid received during the year from MHRD, GOI	**250.00**
Interest Earned during the year	**0.90**
Expenditure Incurred during the year	**147.97**
Balance as on 01.04.2016	**114.82**

5. Statement of the on-going Project Accounts: (DST/MCIT/DSIR/AICTE PROJECT)

Month & Year	Name of the Project	Name of Project Coordinator	Grants sanctioned up to 31.03.16	Interest earned	Total	Expdr. Up to 31.03.16	Refund to Ministry	Balance as on 01.04.16

National Institute of Technology, Silchar
Statement of on-going project accounts (2015-16)

Sr. No.	Name of the project	Name of project co-ordinator	Grant Received Date	Opening balance as on 01.04.2015	Grant received (2015-16)	Total balance	Interest received duringthe year	Total expenditure (2015-16)	Refund to ministry	Balance as on 01.04.2016
MCIT				A	B	(A +B)				
1	Development of Speech Based Multi level Person Authentication System	Shri R.H. Laskar (ECE)	08.12.2015	11,44,065	2,30,265	13,74,330	35,517	13,25,843	0	84,004
2	Vishveshwarya Scheme	Sri K.L. Baishnab	15.09.2015	0	16,25,000	33,06,757	33,920	17,49,757	0	15,90,920
			30.03.2015		9,00,000					
			30.03.2015		7,81,757					
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	22.05.2015	0	1,50,000	15,95,000	2,874	1,97,083	0	14,00,791
			29.12.2015		14,45,000					
DST										
4	Power Quality Assessment and Improvement in Barak Valley, Assam	Shri A.K. Goswami (Electrical)		24,929	2,00,000	2,24,929	3,445	1,04,880	0	1,23,494
5	Advanced Manufacturing and Material Testing	Shri P.K. Patowari (Mechanical)	28.08.2015	0	1,45,00,000	1,45,00,000	1,90,685	0	0	1,46,90,685
6	Innovation and Entrepreneurship Development Centre(IEDC) at NIT Silchar during 2015-16	Dr Ashim Das	23.03.2016		5,30,000	5,30,000	0	0	0	5,30,000
MOESc.										
7	L- Moments Based Regional Extreme Rainfall & Flood Frequency Analysis for Hydro-meteorological Sub Zones 2(b) and 2(c) of India	Shri P.S. Choudhury (Civil)		11,45,663	0	11,45,663	22,925	0	11,45,663	22,925
8	Behaviour Of Clay Dampers under Impact Loading	Shri A.K. Dey (Civil)		9,30,799	0	9,30,799	36,386	6,11,478	0	3,55,707
AICTE (RPS)										
9	Development of Surface Modified Adsorbents for The Removal of CR(VI) and FE(III) From Wastewater	Md. Ahmaruzzaman (Chemistry)		3,45,888		3,45,888	13,427	0	0	3,59,315
10	Study of Bi-Layered Perovskite Oxides: Thin Film for Non-Volatile Ferroelectric Memory Applications	Shri Asim Roy (Physics)		1,04,041		1,04,041	4,038	0	0	1,08,079
11	Investigation Of Some Binary Metal Oxide Material for Resistive Switching Memory Applications	Shri Fazal A. Talukdar (ECE)		4,84,099		4,84,099	18,793	0	0	5,02,892

Sr. No.	Name of the project	Name of project co-ordinator	Grant Received Date	Opening balance as on 01.04.2015	Grant received (2015-16)	Total balance	Interest received duringthe year	Total expenditure (2015-16)	Refund to ministry	Balance as on 01.04.2016
12	Design and Implementation of Pure Sine Wave Inverter for Residential Solar Power	Shri A.K. Goswami (Electrical)		54,798		54,798	897	55,695	0	0
13	Design, Simulation and Implementation of Carbon Nanotube Based Fet Logics	Shri S. Choudhury (Electrical)		1,16,094		1,16,094	4,275	5,985	0	1,14,384
14	Synthesis & Characterization of BST-BFO Composites for Devices	Smt. B. Choudhury Shri S.K. Barik (Physics)		8,32,863		8,32,863	21,998	4,95,000	3,59,861	0
15	Automatic Generation Control of Autonomous Hybrid Generation System	Shri Dulal Ch. Das (Electrical)		1,47,900		1,47,900	5,741	0	0	1,53,641
16	Utility of Paratransit Modes in Regional Passenger Transportation	Shri M.A Ahmed (Civil)		63,571	0	63,571	2,467	59,317	0	6,721
ICSSR										
17	Agricultural Development and Environment Issues in the North Eastern Region: A Case Study of Manipur	Shri N. B. Singh (Humanities)		1,05,521		1,05,521	4,096	0	0	1,09,617
AICTE (MODROB)										
18	Up Gradation Of Highway Engg. Laboratory	Shri D.N. Bhattacharjee Shri P. Rajbongshi (Civil)		8,04,608		8,04,608	32,506	0	0	8,37,114
19	Heat Transfer Lab	Shri R.D. Misra		4,76,501		4,76,501	19,251	0	0	4,95,752
MNRE										
20	Reginal Test Centre cum Technology Back-up Unit.....	Shri Agnimitra Biswas (Mechanical)	22.06.2015	-41,973	23,17,250	22,75,277	65,288	14,24,614	0	9,15,951
SERB										
21	Synthesis of indenoisoquinolineones	Dr. Lalthazuala Rokhum (Chemistry)	28.01.2016	4,93,434	2,00,000	6,93,434	12,930	4,64,358	0	2,42,006
22	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	do		13,61,558	3,00,000	16,61,558	27,352	11,61,784	0	5,27,126
23	Evaluation of Non-linear fatigue damage in Asphait MAaerials	Dr. P. Rajbongshi (Civil engg.)		31,13,761	0	31,13,761	1,18,007	2,08,667	0	30,23,101
24	A Study on Measure Theoritical approach to Convergence of sequenxes in Probalistic normed Spaces	Dr. Mausumi Sen		0	3,00,000	3,00,000	0	51,716	0	2,48,284
25	"Metal Complexes of New Chiral Schiff Bases: Design, Structure Elucidation, Reactivity and Synthetic Applications"	Dr. Pranjit Barman	09.03.2016	0	18,34,800	18,34,800	0	0	0	18,34,800

Sr. No.	Name of the project	Name of project co-ordinator	Grant Received Date	Opening balance as on 01.04.2015	Grant received (2015-16)	Total balance	Interest received duringthe year	Total expenditure (2015-16)	Refund to ministry	Balance as on 01.04.2016
26	Design of Reconfigurable Defected Ground Structure Resonator for Wireless Application.	Dr Arnab Nandi	02.03.2016	0	20,95,407	20,95,407	0	0	0	20,95,407
27	Effects on Variation in input-excitation on the performance of limited-sensors based operational model analysis.	Dr Nirmalendu Debnath	28.12.2016	0	22,41,945	22,41,945	0	0	0	22,41,945
BRNS										
28	A Pose variant face	Shri F.A Talukdar (ECE)	10.09.2015	0	16,45,200	16,45,200	33,542	1,27,637	0	15,51,105
NRRDA										
29	Feasibility Studies on Use of Non Standard Local Materials in Rural Roads at Bishnupur District of Manipur.	Dr. P. Rajbongshi	31.10.2015	0	3,65,000	3,65,000	0	67,568		2,97,432
DIETY										
30	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with Prototype Development.	Prof S. Baishya	01.10.2015	0	26,80,000	26,80,000	0	22,906	0	26,57,094
31	Analysis of Brain Waves and Development of Intelligent model for Silent Speech Recognition.	Dr. Nidul Sinha	10.09.2015	0	22,50,000	22,50,000	0	13,899		22,36,101
UGC										
32	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	23.11.2015 05.02.2016	0 0	25,000 41,067	66,067	0	0	0	66,067

Annual Accounts

FOR THE FINANICAL YEAR 2015-16

National Institute of Technology, Silchar
(An Institute of National Importance)

सत्यमेव जयते

भारतीय लेखापरीक्षा और लेखा विभाग
प्रधान निदेशक, लेखापरीक्षा का कार्यालय,
केन्दीय, कोलकाता

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

No: OA II (AB)/AR/2015-16/NIT,SILCHAR / 286
Date: 19-09-2016

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 **National Institute of Technology, SilcharAssam**for the year ***2015-16***

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 **National Institute of Technology, SilcharAssam**for the year 2015-16. A copy of the annual accounts of the organisation for the year 2015-16 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 year 2015-16 on the Tables of both the Houses of Parliament may also please be communicated to this office.

Yours faithfully,

19.9.16

Encl.: As stated

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

जी. आई. प्रेस बिल्डिंग, 8, किरण शंकर राय रोड (प्रथम तल), कोलकाता - 700 001
Govt. of India Press Building, 8, Kiran Sankar Roy Road, Kolkata - 700 001
Phone : 2254-0221,(Gram : ACCOUNTCENT) Post Box : 2699,Fax No.: 033 22135377

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of National Institute of Technology, Silchar for the year ended 31 March 2016.

We have audited the attached Balance Sheet of **National Institute of Technology, Silchar** Assam as at 31 March 2016, 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.

4. Based on our audit, we report that:

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 Balance Sheet:

1.1 Liabilities:

1.1.1 Corpus/Capital Fund (Schedule-1): ₹ 534.85 crore

As per notes and instruction for the schedules (Schedule-1) circulated by the MHRD on new format of accounts where an Institute has a Separate Corpus Fund as an Earmarked Fund, the Corpus Fund is to be exhibited separately under Earmarked Fund. The Institute in its Significant Accounting Policies (Schedule 23 Sl. No: 7.1) had also disclosed that the Corpus Fund is in the nature of Endowment Fund.

In violation of the above instructions and accounting policies and despite mention in the earlier year's Audit Report, the Institute had continued to reflect the amount of ₹24.96 crore under Corpus/Capital Fund instead of being exhibited under Endowment Fund.

This had resulted in overstatement of Corpus/Capital Fund and understatement of Designated/Earmarked/Endowment Fund by ₹24.96 crore.

1.2 Assets:

1.2.1 Tangible Assets (Schedule-4): ₹352.79 crore

Despite mention in earlier year's Audit Report, the Institute had not rectified the error of capitalising Assets of Sponsored Project amounting to ₹72.15 lakh though the ownership of the assets had not been vested on the Institute.

In current year, the Institute had further Capitalised Assets of Sponsored Project amounting to ₹33.42 lakh without having any ownership on those assets.

This had resulted in overstatement of the value of Fixed Assets (Tangible) as well as Capital Fund by ₹105.57 lakh.

B Income and Expenditure Account:

2.1 Expenditure:

2.1.1 Deprecation (Schedule-4): ₹18.64 crore

The above amount had been understated by ₹150.83 lakh due to the following reasons:

(a) NABL Accredited Laboratory Valuing ₹1.12 crore and Electrical Installation therein valuing ₹0.18 crore though completed, taken over and put to use in December 2015, the value of those assets remained in Capital Works in Progress. This resulted in under provision of depreciation by ₹3.08 lakh (Building ₹1.79 lakh & Electrical Installation ₹1.29 lakh).

(b) Despite mention in earlier year's Audit Report for not providing depreciation on Electrical Sub-station (values ₹3.05 crore) commissioned in September 2014, the Institute had also not provided depreciation of ₹41.80 lakh in the current year and the amount was added with the fixed assets at the end of March 2016. This had resulted in understatement of Depreciation by ₹68.05 lakh (including previous year depreciation of ₹26.25 lakh).

(c) Although the Fixed Assets viz. Plant & Machinery (₹289.39 lakh), Water Supply (₹450.05 lakh), Roads and Bridges (₹9.52 lakh), Electrical Installations (₹59.45 lakh) and Buildings (₹61.94 lakh) were put to use and included with Fixed Assets, depreciation of ₹79.70 lakh (Plant & Machinery ₹44.12 lakh, Water Supply ₹22.87 lakh, Roads and Bridges ₹0.49 lakh, Electrical Installations ₹9.07 lakh and Buildings ₹3.15 lakh respectively) had not been provided for.

These had also resulted in overstatement of Excess of Income over Expenditure of the year by ₹150.83 lakh.

2.1.2 Administrative and General Expenses (Schedule-17): ₹6.82 crore

The above amount had been understated by ₹5.82 lakh as no liability had been provided for on the water charges payable to Public Health and Engineering Department (PHED) for the month of March 2016, claimed on 6th April 2016.

This had also resulted in overstatement of Excess of Income over Expenditure of the year by ₹5.82 lakh.

2.1.3 Repairs and Maintenance (Schedule-19): ₹1.44 crore

The above amount had been understated by ₹ 67.81 lakh as the revenue nature of expenses towards Operation & Maintenance of Network Services for ₹58.12 lakh had been wrongly capitalised under 'Other Assets' and no Provision had been made for liability of ₹9.69 lakh on Operation & Maintenance accrued for the period from December 2015 to March 2016.

This had also resulted in overstatement of Excess of Income over Expenditure of the year by ₹67.81 lakh.

C. General

I. (i) Depreciation on assets had been provided for at the rates and method (Written down Value) different from the rates and method (Straight Line) as prescribed in New Format of Accounts. Despite committed in last year, the Institute did not follow the rates and method of New Format of Accounts. The impact of departure from the prescribed rates and method had also not been disclosed.

(ii) Assets worth ₹15.03 crore pertaining to TEQIP Phase-I (₹10.32 crore), Earthquake Engineering NPEEE (₹0.14 crore) and Sponsored Project Funds (AICTE & R & D ₹4.57 crore) had been treated as own assets of the Institute without any authorities from the grants sanctioning authorities in support of transfer of the ownership on the assets to the Institute. Despite mention in previous year's Audit Reports, no action had been taken on this issue.

(iii) The value of Tangible Assets under the following heads either was overstated or was understated due to mis-classification as detailed below:

(a) The value of Water Treatment Plant amounting to ₹289.39 lakh had been Capitalised under Tubewells & Water Supply instead of under Plant & Machinery resulting in overstatement of value of Tubewells & Water Supply and understatement of Plant & Machinery by ₹289.39 lakh.

(b) The amount of Roads & Bridges had been understated by ₹9.52 lakh with the corresponding overstatement of value of Tubewells & Water Supply due to booking of expenses under Tubewells & Water Supply.

(c) The value of Electrical Installation and equipment remained understated by ₹59.45 lakh as the Expenditure on Electrical Works (₹47.13 lakh) and campus illumination (₹12.32 lakh) were booked under Tubewells and Water Supply resulting in overstatement of the amount of Tubewells and Water Supply.

(d) The value of Tubewells and Water Supply had been overstated by ₹61.94 lakh with the corresponding understatement of the value of Buildings as cost of sledge Pump House (₹1.45 lakh), Chemical House (₹30.36 lakh) C/WPower House (₹11.12 lakh) and Boundary Fencing (₹19.01 lakh) had not been added with the value of buildings.

(e) The value of NABL Accredited Laboratory Building amounting to ₹1.12 crore and Electrical installation therein amounting to ₹0.18 lakh remained in capital works in progress though the works were completed, taken over and put to use from December 2015. This had resulted in understatement of the value of fixed assets and overstatement of CWIP by ₹1.30 crore.

II. 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.

D Grants-in-Aid

The Institute is mainly financed by the grants-in-aid from the Government of India. During the year (2015-16) the Institute had received total grant of ₹17200.00 Lakh (Plan ₹7400.00 lakh and receivable of previous year ₹4900.00 lakh and Non Plan ₹3700.00lakh and receivable of previous year ₹1200.00 lakh. Out of total grants (₹17200.00 lakh), the Institute had spent ₹16232.15 lakh (Plan ₹10619.39 lakh and Non-plan ₹ 5612.76 lakh) leaving net unspent balance of ₹967.85 lakh (Plan ₹1680.61 lakh and Non-plan ₹ (-) 712.76 lakh).The Excess Expenditure under Non Plan was met out of internal receipt of the Institute.

Besides above, the Institute had received main Project Grants from various authorities of ₹366.57 lakh (Ministry of Communication and Information Technology: ₹51.32 lakh,

Department of Science and Technology: ₹152.30 lakh,Ministry of New and Renewable energy ₹23.17 lakh, Science and Energy Research Board ₹69.72 lakh, Board of Research in Nuclear Science, ₹16.45 lakh, National Rural Roads Development Agency ₹3.65 lakh, Department of Electronics & Information Technology ₹49.30 lakh and University of Grand Commission ₹0.66 lakh). The Institute had spent ₹69.22 lakh out of grants received under Project account resulting in an unspent Balance of ₹297.35 lakh.

E Net Effect

The net impact of the comments given in the preceding paragraphs is that the Assets and Liabilities of the Institute were overstated by ₹105.57 lakh as at 31 March 2016 and Excess of Income over Expenditure was overstated by ₹224.46 lakh for the year ended 31 March 2016.

F. 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 the National Institute of Technology, Silchar as at 31 March 2016 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

19.9.16

Place:-Kolkata
Date:- 19-9-16

(P.K. Singh)
Principal Director 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 in the NIT, Silchar, Assam. Only one internal Audit Officer was appointed on 23.11.2011 and no staffs were posted to assist the said officer for pre-auditing/post-audition. All purchase matters are routed through the said officer. Some of financial matters which require audit assistance are sent to the officer for scrutiny and comments.

(b) Audit Manual is under preparation. The Institute has not conducted any Internal Audit of its activities.

B. Adequacy of Internal Control System

Internal Control System is not adequate in the following areas:

(a) Cash in hand and cash in transit are not covered by any insurance.

(b) All Fixed Assets are not covered by insurance.

(c) There is no internal audit department and internal audit was not done.

(d) Physical Verification of Assets for the year 2015-16 was not done and Fixed Assets register was not maintained as per form 40 of General Financial Rules.

C. System of Physical Verification of Assets

Physical Verification of Library Books & Journals was conducted in 2014-15 worth ₹ 80.21 lakh. But Physical verification for the financial year 2015-16 was not conducted. Further the Institute had not maintained the Fixed Assets Register till 2015-16 since inception as per form 40 of General Financial Rules.

D. Statutory Liabilities:

The Institute was regular in payment of Statutory Dues. No Statutory Liability was outstanding to be paid as on 31 March 2016 as per accounts.

National Institute of Technology, Silchar
Balance Sheet as at 31st March 2016

Amount in Rupees

Sources of Fund	Schedule	Current Year	Previous Year
Corpus / Capital Fund	1	5,34,84,78,242	4,55,69,99,944
Designated / Earmarked / Endowment Funds	2	36,10,08,384	22,27,03,775
Current Liabilities & Provisions	3	25,93,78,835	72,40,68,176
Total		**5,96,88,65,461**	**5,50,37,71,895**
Application of Funds			
Fixed Assets	4		
Tangible Assets		3,52,78,52,182	2,03,62,18,089
Intangible Assets		2,64,87,987	2,60,80,215
Capital Works-In-Progress		1,47,23,87,777	2,26,36,78,789
Investments From Earmarked / Endowment Funds	5	35,41,44,046	23,95,79,118
Investments - Others	6	1,86,20,822	51,48,997
Current Assets	7	34,51,97,907	4,25,46,731
Loans, Advances & Deposits	8	22,41,74,740	89,05,19,957
Total		**5,96,88,65,461**	**5,50,37,71,895**
Significant Accounting Policies	23		
Contingent Liabilities and Notes to Accounts	24		

Dated, Silchar
The 10th May 2016

Registrar

Director

National Institute of Technology, Silchar
Income And Expenditure Account For The Year Ended 31st March 2016

Amount in Rupees

Particulars	Schedule	Current Year	Previous Year
INCOME			
Academic Receipts	9	17,14,98,740	14,91,05,613
Grants /Subsidies	10	46,73,32,776	41,11,62,869
Income from Investment	11	4,32,637	20,21,477
Interest Earned	12	45,66,547	9,49,448
Other Income	13	24,95,08,736	1,40,72,459
Prior Period Income	14	-	-
TOTAL (A)		89,33,39,436	57,73,11,867
EXPENDITURE			
Staff Payment & Benefits (Establishment Expenses)	15	41,46,39,385	37,28,08,531
Academic Expenses	16	10,36,01,711	5,79,63,483
Administrative and General Expenses	17	6,82,16,825	5,90,24,951
Transportation Expenses	18	16,79,930	16,37,867
Repairs & Maintenance	19	1,43,81,152	1,75,55,706
Finance Costs	20	26,996	69,854
Depreciation	4	18,63,78,648	18,09,15,402
Other Expenses	21	2,06,38,749	1,76,67,710
Prior Period Expenses	22	15,55,072	-
TOTAL (B)		81,11,18,468	70,76,43,504
Balance being excess of Income over Expenditure (A-B)		8,22,20,968	-13,03,31,637
Transfer to Institute Corpus Fund		8,22,20,969	-
Building Fund		-	-
Others (specify)		-	-
Balance Being Surplus / (deficit) Carried to Capital Fund		-	-13,03,31,637
SIGNIFICANT ACCOUNTING POLICIES	23		
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24		

Dated, Silchar

The 10th May 2016 Registrar Director

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule - 1 : Corpus / Capital Fund

Amount in Rupees

	Particulars	Current Year	Previous Year
A.	**CAPITAL FUND :** Balance at the beginning of the year	**4,24,78,46,595**	2,18,82,31,105
Add:	Reappropriation of Capital Fund of earlier year	**-**	1,15,94,17,373
Less:	Excess of Expenditure over Income transferred from Income & Exp A/C	**-**	-13,03,31,637
Less:	Depreciation on Capital Assets	**-186378648**	-
	Total	**4,06,14,67,947**	3,21,73,16,841
Add:	Grants from Govt. of India to the extent utilized for Capital expenditure	**883745134**	1030529754
	Total	**4,94,52,13,081**	4,24,78,46,595
Add:	TEQIP Phase- I Fund	**10,31,65,960**	10,31,65,960
Add:	Earth Quake Engg. NPEEE	**14,27,878**	14,27,878
Add:	Opeing balance of Sponsored Project (AICTE & R&D) Fund	**4,57,36,694**	3,85,21,274
	Addition during the year agsinst Sponsored Projects	**33,42,187**	72,15,420
	Total	**4,90,78,881**	4,57,36,694
	BALANCE AT THE YEAR END (A)	**5,09,88,85,800**	4,39,81,77,127
B.	**CORPUS FUND ACCOUNT**		
	Balance as at the beginning of the year	**15,88,22,817**	15,03,28,122
Add:	Contributions Towards Corpus Fund	**32,05,925**	23,10,770
Add:	Surplus of Income over Expenditure	**8,22,20,969**	-
Add:	Interest against investment & Savings a/c	**12,586**	3,02,762
Add:	Accrued Interest	**53,30,145**	58,81,163
	BALANCE AT THE YEAR END (B)	**24,95,92,442**	15,88,22,817
	BALANCE AT THE YEAR END (A+B)	**5,34,84,78,242**	4,55,69,99,944

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule - 2 : Designated / Earmarked / Endowment Funds

Amount in Rupees

Particulars	Fund wise Breakup					Total	
	Pension Fund	Depreciation Fund	Maintenance Fund	Staff Dev. Fund	Student Welfare Fund	Current Year	Previous Year
(1): A.							
a) Opening Balance	**47,29,105**	**7,80,70,910**	**7,81,00,414**	**1,15,22,480**	**2,63,795**	**17,26,86,704**	**27,34,99,914**
b) Additions during the year	3,44,26,659	7,19,914	49,757	6,36,986	1,11,699	3,59,45,015	2,93,77,904
c) Income from Investments made of the funds	-	22,82,722	-	-	-	22,82,722	39,69,837
d) Accrued Interest on Investments/ Advances	-	70,29,251	94,99,042	9,75,560	-	1,75,03,853	1,26,24,864
e) Interest on Savings Bank a/c.	-	9,95,689	9,91,472	29,421	-	20,16,582	4,16,854
f) Other additions : Tempo Loan recovered	-	5,50,00,000	5,50,00,000	-	-	11,00,00,000	-
g) Others additions: Receivable amount Recd	-	14,84,687	2,45,049	10,76,279	-	28,06,015	-
Less : Receivable from Institute Account						0	28,06,015
Total (A)	**3,91,55,764**	**14,55,83,173**	**14,38,85,734**	**1,42,40,726**	**3,75,494**	**34,32,40,891**	**31,70,83,358**
B : Utilization /Expenditure towards objective of funds							
i) Capital Expenditure						-	-
ii) Revenue Expenditure	3,79,84,413	-	-	-	-	3,79,84,413	3,43,96,654
iii)Temporary loan to Institute	-	-	-	-	-	-	11,00,00,000
Total (B)	**3,79,84,413**	**-**	**-**	**-**	**-**	**3,79,84,413**	**14,43,96,654**
Closing balance at the year end (1) (A-B)	**11,71,351**	**14,55,83,173**	**14,38,85,734**	**1,42,40,726**	**3,75,494**	**30,52,56,478**	**17,26,86,704**
Represented by							
Cash and Bank Balances	**-**	**49,77,267**	**36,02,098**	**18,70,259**	**-**	**1,04,49,624**	**-**
Investment	**-**	**12,49,58,489**	**11,35,00,000**	**97,75,374**	**-**	**24,82,33,863**	**-**
Interest accrued but not due	**-**	**1,53,27,017**	**2,67,83,636**	**22,74,693**	**-**	**4,43,85,346**	**-**
Balance lying with Institute A/c	**11,71,351**	**3,20,400**	**0**	**3,20,400**	**3,75,494**	**21,87,645**	**-**
Total	**11,71,351**	**14,55,83,173**	**14,38,85,734**	**1,42,40,726**	**3,75,494**	**30,52,56,478**	**-**

Schedule - 2 : Designated / Earmarked / Endowment Funds

Amount in Rupees

Particulars	Fund wise Breakup					Total	
	Instt. Dev. Fund	Employees Welfare Fund	Deptt. Promotion Fund	Virtual Class Room	NMEICT Fund	Current Year	Previous Year
(2) : A.							
a) Opening Balance	11,55,170	2,88,794	11,55,170	1,91,656	3,52,392	31,43,182	21,99,648
b) Additions during the year	4,46,799	1,11,699	4,46,799	0	4,39,450	14,44,747	13,22,469
c) Income from Investments made of the funds	-	-	-	-	-	-	-
d) Accrued Interest on Investments/ Advances	-	-	-	-	-	-	-
e) Interest on Savings Bank a/c.	-	-	-	-	-	-	-
f) Other additions (specify nature)	-	-	-	-	-	-	-
Total (A)	**16,01,969**	**4,00,493**	**16,01,969**	**1,91,656**	**7,91,842**	**45,87,929**	**35,22,117**
B : Utilization /Expenditure towards objective of funds							
i) Capital Expenditure	-	-	-	-	-	-	-
ii) Revenue Expenditure	-	-	-	-	2,91,118	2,91,118	3,78,935
Total (B)	**-**	**-**	**-**	**-**	**2,91,118**	**2,91,118**	**3,78,935**

Schedule Forming Part of Balance Sheet as at 31st March 2016

Amount in Rupees

Particulars	Fund wise Breakup					Total	
	Instt. Dev. Fund	Employees Welfare Fund	Deptt. Promotion Fund	Virtual Class Room	NMEICT Fund	Current Year	Previous Year
Closing balance at the year end (2): (A-B)	16,01,969	4,00,493	16,01,969	1,91,656	5,00,724	42,96,811	31,43,182
Represented by							
Cash and Bank Balances	-	-	-	-	-	-	-
Investment	-	-	-	-	-	-	-
Interest accrued but not due	-	-	-	-	-	-	-
Balance lying with Institute A/c	16,01,969	4,00,493	16,01,969	1,91,656	5,00,724	42,96,811	-
Total	**16,01,969**	**4,00,493**	**16,01,969**	**1,91,656**	**5,00,724**	**42,96,811**	**-**

Schedule - 2 : Designated / Earmarked / Endowment Funds

Amount in Rupees

Particulars	Fund wise Breakup					Total	
	Gratuity Fund	Student Aid Fund				Current Year	Previous Year
(3) : A.							
a) Opening Balance	4,47,74,107	20,99,782	-	-	-	4,68,73,889	4,31,95,869
b) Additions during the year	2,46,052	10,74,000	-	-	-	13,20,052.00	3,79,200
c) Income from Investments made of the funds	-	-	-	-	-	-	2,52,811
d) Accrued Interest on Investments/ Advances	31,84,189	-	-	-	-	31,84,189	31,58,082
e) Interest on Savings Bank a/c.	3,49,952	-	-	-	-	3,49,952	2,40,397
f) Other additions (specify nature)	-	-	-	-	-	-	-
Total (A)	**4,85,54,300**	**31,73,782**	**-**	**-**	**-**	**5,17,28,082**	**4,72,26,359**
B : Utilization /Expenditure towards objective of funds							
i) Capital Expenditure	-	-	-	-	-	-	-
ii) Revenue Expenditure	-	2,72,987	-	-	-	2,72,987	3,52,470
Total (B)	**-**	**2,72,987**	**-**	**-**	**-**	**2,72,987**	**3,52,470**
Closing balance at the year end (3): (A-B)	4,85,54,300	29,00,795	-	-	-	5,14,55,095	4,68,73,889
Represented by							
Cash and Bank Balances	90,12,151	-	-	-	-	90,12,151	-
Investment	3,15,67,987	-	-	-	-	3,15,67,987	-
Interest accrued but not due	79,74,162	-	-	-	-	79,74,162	-
Balance lying with Institute A/c	-	29,00,795				29,00,795	-
Total	**4,85,54,300**	**29,00,795**	**-**	**-**	**-**	**5,14,55,095**	**-**
Closing balance at the year end (1+2+3)	5,13,27,620	14,88,84,461	14,54,87,703	1,44,32,382	8,76,218	36,10,08,384	22,27,03,775

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule : 2A : Endowment Funds

Amount in Rupees

Sl. No.	Name of the Endowment	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	12,07,27,158	1,38,28,439	7,19,914	1,03,07,662	12,14,47,072	2,41,36,101	-	12,14,47,072	2,41,36,101	14,55,83,173
2	Maintenance Fund	11,95,38,623	1,38,06,840	49,757	1,04,90,514	11,95,88,380	2,42,97,354	-	11,95,88,380	2,42,97,354	14,38,85,734
3	Staff Dev. Fund	1,07,17,548	18,81,211	6,36,986	10,04,981	1,13,54,534	28,86,192	-	1,13,54,534	28,86,192	1,42,40,726
4	Gratuity Fund	3,78,10,095	69,64,012	2,46,052	35,34,141	3,80,56,147	1,04,98,153	-	3,80,56,147	1,04,98,153	4,85,54,300
5	Student Welfare Fund	2,63,795	-	1,11,699	-	3,75,494	-	-	3,75,494	-	3,75,494
6	Instt. Dev. Fund	11,55,170	-	4,46,799	-	16,01,969	-	-	16,01,969	-	16,01,969
7	Employees Welfare Fund	2,88,794	-	1,11,699	-	4,00,493	-	-	4,00,493	-	4,00,493
8	Deptt. Promotion Fund	11,55,170	-	4,46,799	-	16,01,969	-	-	16,01,969	-	16,01,969
9	Virtual Class Room	1,91,656	-	-	-	1,91,656	-	-	1,91,656	-	1,91,656
10	NMEICT Fund	3,52,392	-	4,39,450	-	7,91,842	-	2,91,118	5,00,724	-	5,00,724
11	Pension Fund	47,29,105	-	3,44,26,659	-	3,91,55,764	-	3,79,84,413	11,71,351	-	11,71,351
12	Student Aid Fund	20,99,782	-	10,74,000	-	31,73,782	-	2,72,987	29,00,795	-	29,00,795
	TOTAL	29,90,29,288	3,64,80,502	3,87,09,814	2,53,37,298	33,77,39,102	6,18,17,800	3,85,48,518	29,91,90,584	6,18,17,800	36,10,08,384

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule : 3 : Current Liabilities and Provisions

Amount in Rupees

Particulars	Current Year	Previous Year
A. CURRENT LIABILITIES		
1. Deposits from staff	21,23,499	6,15,970
2. Deposits from Students	2,82,04,126	1,88,07,846
3. Sundry Creditors		
a) For Goods & Services	78,79,556	96,47,779
b) Others	-	-
4. Deposits - Others (including EMD, Security Deposit & Project)	3,25,68,984	2,91,65,805
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS,NPS)	1,44,633	17,85,106
Liabilities against Sponsored Project(Performance Security)	-	-
6. Other Current Liabilities	-	-
a) Salaries (project)	-	-
b) Receipts against sponsored projects	4,02,63,401	1,28,93,400
c) Receips against sponsored fellowships & Scholarship	27,54,780	18,54,658
d) Unutilized Grants		
Under Plan Grants	5,21,07,888	28,53,01,371
Under Non-Plan Grants	-	-
e) Grants in Advance	-	-
f) Other funds	31,59,469	19,14,570
g) Other liabilities	9,01,72,499	36,20,81,671
Total (A)	**25,93,78,835**	**72,40,68,176**
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)	**-**	**-**
TOTAL (A+B)	**25,93,78,835**	**72,40,68,176**

Schedule Forming Part of Balance Sheet as at 31st March 2016

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	Interest				Credit	Debit
1	2	3	4	5	6	7	8	9	10	11
A	MCIT, GoI	11,44,065	-	51,32,022	72,311	63,48,398	32,72,683	-	30,75,715	-
B	DST, GoI	3,46,141	-	1,52,30,000	2,00,593	1,57,76,734	1,04,880	3,21,212	1,53,50,642	-
C	MNRE, GoI	-	41,973	23,17,250	65,288	23,40,565	14,24,614	-	9,15,951	-
D	MoESc., GoI	20,76,462	-	-	59,311	21,35,773	6,11,478	11,45,663	3,78,632	-
E	ICSSR, GoI	1,05,521	-	-	4,096	1,09,617	-	-	1,09,617	-
F	SERB, GoI	49,68,753	-	69,72,152	1,58,289	1,20,99,194	18,86,525	-	1,02,12,669	-
G	IBM	7,72,648	-	-	29,263	8,01,911	18,817	-	7,83,094	-
H	AICTE -RPS	21,88,345	-	-	73,154	22,61,499	6,15,997	3,59,861	12,85,641	-
I	AICTE -MODROBS	12,91,465	-	-	52,176	13,43,641	-	-	13,43,641	-
J	BRNS	-	-	16,45,200	33,542	16,78,742	1,27,637	-	15,51,105	-
K	NRRDA	-	-	3,65,000	-	3,65,000	67,568	-	2,97,432	-
L	DEITY	-	-	49,30,000	-	49,30,000	36,805	-	48,93,195	-
M	UGC	-	-	66,067	-	66,067	-	-	66,067	-
TOTAL		1,28,93,400	41,973	3,66,57,691	7,48,023	5,02,57,141	81,67,004	18,26,736	4,02,63,401	0

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule - 3 (1): Sponsored Projects Funds

Amount in Rupees

Particulars	Fund wise Breakup							Total	
	MCIT	DST	MOES	ICSSR	MNRE	DIETY	BRNS	Current Year	Previous Year
(1): A.									
a) Opening Balance	11,44,065	3,46,141	20,76,462	1,05,521	-41,973	-	-	36,30,216	50,84,414
b) Additions during the year	51,32,022	1,52,30,000	-	-	23,17,250	49,30,000	16,45,200	2,92,54,472	14,33,160
c) Interest on Savings Bank a/c.	72,311	2,00,593	59,311	4,096	65,288	-	33,542	4,35,141	1,46,451
d) Other additions - Loan / Adjustments	-	-	-	-	-	-	-	-	1,29,728
Total (A)	63,48,398	1,57,76,734	21,35,773	1,09,617	23,40,565	49,30,000	16,78,742	3,33,19,829	67,93,753
B : Utilization /Expenditure towards objective of funds									
i) Capital Expenditure									
Equipment	1,91,114	78,644	4,63,479	-	8,93,460	-	-	16,26,697	12,39,824
Computer	99,000	-	-	-	-	-	-	99,000	1,80,029
Software	-	-	99,999	-	-		-	99,999	5,85,000
Furniture	-	-	-	-	-	13,400	-	13,400	12,383
Other Cost	-	-	-	-	-	-	-	-	-
ii) Revenue Expenditure	29,82,569	26,236	48,000	-	5,31,154	23,405	1,27,637	37,39,001	10,85,987
iii) Refunded to Sanctioning authority	-	3,21,212	11,45,663	-	-	-	-	14,66,875	18,341
Total (B)	32,72,683	4,26,092	17,57,141	-	14,24,614	36,805	1,27,637	70,44,972	31,21,564
Closing balance at the year end (1) (A-B)	30,75,715	1,53,50,642	3,78,632	1,09,617	9,15,951	48,93,195	15,51,105	2,62,74,857	36,72,189

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule - 3 (1): Sponsored Projects Funds

Amount in Rupees

Particulars	Fund wise Breakup							Total	
	AICTE - RPS	AICTE - MODROB	I B M Project	S E R B	NRRDA	UGC		Current Year	Previous Year
(2) : A.									
a) Opening Balance	21,88,345	12,91,465	7,72,648	49,68,753	-	-	-	92,21,211	91,78,544
b) Additions during the year	-	-	-	69,72,152	3,65,000	66,067	-	74,03,219	53,20,000
c) Interest on Savings Bank a/c.	73,154	52,176	29,263	1,58,289	-	-	-	3,12,882	4,68,737
d) Other additions (specify nature)	-	-	-	-	-	-	-	-	-87,755
Total (A)	22,61,499	13,43,641	8,01,911	1,20,99,194	3,65,000	66,067	-	1,69,37,312	1,48,79,526
B : Utilization / Expenditure towards objective of funds									
i) Capital Expenditure									
Equipment	5,46,929	-	-	9,56,162	-	-	-	15,03,091	30,58,808
Computer	-	-	-	-	-	-	-	-	5,86,643
Software	-	-	-	-	-	-	-	-	15,40,350
Furniture	-	-	-	-	-	-	-	-	12,383
Books	-	-	-	-	-	-	-	-	-
ii) Revenue Expenditure	69,068		18,817	9,30,363	67,568	-		10,85,816	4,60,131
iii) Refunded to Sanctioning authority	3,59,861	-	-	-	-	-	-	3,59,861	-
Total (B)	9,75,858	-	18,817	18,86,525	67,568	-	-	29,48,768	56,58,315
Closing balance at the year end (2): (A-B)	12,85,641	13,43,641	7,83,094	1,02,12,669	2,97,432	66,067	-	1,39,88,544	92,21,211
Closing balance at the year end (1+2)	43,61,356	1,66,94,283	11,61,726	1,03,22,286	12,13,383	49,59,262	15,51,105	4,02,63,401	1,28,93,400

Schedule Forming Part of Balance Sheet as at 31st March 2016

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 31.03.16	
		Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8
1	Various Agencies	18,54,658	-	1,14,08,366	1,05,08,244	27,54,780	-
Total		**18,54,658**	**-**	**1,14,08,366**	**1,05,08,244**	**27,54,780**	**-**

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		28,53,01,371	1,52,06,45,530
Add: Receipts during the year		74,00,00,000	1,00,25,00,000
Add Other additions		78,84,427	-
	Total (a)	1,03,31,85,798	2,52,31,45,530
Less: Capital expenditure of last year (Net off depreciation)			1,15,94,17,373
Less: Utilized for Revenue Expenditure		9,73,32,776	4,78,97,032
Less: Utilized for Capital Expenditure		88,37,45,134	1,03,05,29,754
	Total (b)	98,10,77,910	2,23,78,44,159
Unutilized carried forward (a-b)		5,21,07,888	28,53,01,371
B. Grants : NON- PLAN			
Balance Brought forward		-	6,32,65,837
Add: Receipts during the year		37,00,00,000	30,00,00,000
	Total (c)	37,00,00,000	36,32,65,837
Less: Refunds			
Less: Utilized for Revenue Expenditure		37,00,00,000	36,32,65,837
Less: Utilized for Capital Expenditure			-
	Total (d)	37,00,00,000	36,32,65,837
Unutilized carried forward (c-d)		-	-
Grand Total (A+B)		5,21,07,888	28,53,01,371

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule 4 : Fixed Assets

Amount in Rupees

S. No.	Assets Heads	Gross Block				Depreciation for the Year 2015-16				Net Block	
	Tangible Assets	Opening Balance As On 01.04.2015	Additions	Deduction	Cl. Balance	Dep Opening Balance	Depreciation For The Year	Deductions/ Adjustment	Total Depreciations	31.03.2016	31.03.2015
1	Land	866458	-	-	866458	-	-	-	-	866458	866458
2	Site & Campus Development	56200786	1731656	-	57932442	12623217	2212822	-	14836039	43096403	43577569
3	Buildings	1621594316	1476719304	-	3098313620	337586809	68817622	-	406404431	2691909189	1284007507
4	Roads & Bridges	74062797	2128861	-	76191658	7414929	3383176	-	10798105	65393553	66647868
5	Tubewells & Water Supply	138499008	89956360	-	228455368	17158184	6089500	-	23247684	205207684	121340824
6	Electrical Installation & Equipment	26253151	4473391	-	30726542	12922034	2317322	-	15239356	15487186	13331117
7	Plant & Machinery	65600730	4847147	-	70447877	32684094	5188106	-	37872200	32575677	32916636
8	Scientific & Laboratory Equipment	238881359	43224572	-	282105931	95474458	22896432	-	118370890	163735041	143406901
9	Office Equipment	19019806	1632559	-	20652365	6601738	1902606	-	8504344	12148021	12418068
10	Audio Visual Equipment	6248670	1323464	-	7572134	2773511	586532	-	3360043	4212091	3475159
11	Computers & Peripherials	149292589	1499615	-	150792204	87246884	18816270	-	106063154	44729050	62045705
12	Furniture, Fixtures & Fittings	122111686	14700764	-	136812450	40752115	8693188	-	49445303	87367147	81359571
13	Vehicles	4438607	687500	-	5126107	3633546	161454	-	3795000	1331107	805061
14	Lib. Books & Scientific Journals	55404907	2071720	-	57476627	32306568	7148994	-	39455562	18021065	23098339
15	Other Assets	67550092	8835410	-	76385502	23794746	13984206	-	37778952	38606550	43755346
Total (A)		2646024962	1653832323	-	4299857285	712972833	162198230	-	875171063	3424686222	1933052129
16	Capital Works in Progress (B)	2263678789	737271184	1528562196	1472387777	-	-	-	-	1472387777	2263678789
	Intangible Assets										
17	Computer Software	38045944	4824754	-	42870698	11965729	4459162	-	16424891	26445807	26080215
18	E-Journals	35329364	19721256	-	55050620	35329364	19721256	-	55050620	-	-
19	Patents	-	42180	-	42180	-	-	-	-	42180	-
Total (C)		73375308	24588190	-	97963498	47295093	24180418	-	71475511	26487987	26080215
20	TEQIP I Assets (D)	103165960	-	-	103165960	-	-	-	-	103165960	103165960
Grand Total (A+B+C+D)		5086245019	2415691697	1528562196	5973374520	760267926	186378648	-	946646574	5026727946	4325977093

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule 4(C) (I) - Patents and Copyrights

Amount in Rupees

Particulars	Op Balance 01.04.2015	Additions	Gross	Amortization	Net Block 2015-16	Net Block 2014-15
A. Patents Granted						
1. Balance as on 31.03.2015 of Patents obtained in 2008-09 (Original Value - Rs.)	-	-	-	-	-	-
2. Balance as on 31.03.2015 of Patents obtained in 2010-11 (Original Value - Rs.)	-	-	-	-	-	-
3. Balance as on 31.03.2015 of Patents obtained in 2012-13 (Original Value - Rs.)	-	-	-	-	-	-
4. Patents granted during the Current Year	-	-	-	-	-	-
Total	-	-	-	-	-	-
B. Patents Pending in respect of Patents applied for:						
1. Expenditure incurred during 2009-10 to 2011-12	-	-	-	-	-	-
2. Expenditure incurred during 2012-13	-	-	-	-	-	-
3. Expenditure incurred during 2013-14	-	-	-	-	-	-
4. Expenditure incurred during 2014-15	-	-	-	-	-	-
5. Expenditure incurred during 2015-16	-	42,180	42,180	-	42,180	-
Total	-	-	-	-	-	-
C. Grand Total (A+B)	-	42,180	42,180	-	42,180	-

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	7,43,42,196	7,43,35,757
Investment of Depreciation Fund	12,49,58,489	6,54,00,000
Investment of Gratuity Fund	3,15,67,987	3,15,67,987
Investment of Maintenace Fund	11,35,00,000	5,85,00,000
Investment of Staff Development Fund	97,75,374	97,75,374
7. Others	-	-
Total	35,41,44,046	23,95,79,118

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

Schedule Showing Investments of Earmarked and Other Funds as on 31.03.2016

Amount in Rupees

Sl No.	Bank	F.D No	Date	Face Value as on 31.03.15	Addition during 2015-16	Matured during 2015-16	Face Value as on 31.03.16	Accrued Interest Upto 31.03.15	Accrued Interest during 2015-16
		Gratuity Fund							
1	SBI	32269515122	31.03.12	45,67,987	-	-	45,67,987	13,96,484	5,27,731
2	SBI	32323115747	23.04.12	25,00,000	-	-	25,00,000	7,61,167	2,87,125
3	Vijaya Bank	800603311003251	08.02.17	2,00,00,000	-	-	2,00,00,000	22,30,170	19,36,696
4	Bank of India	503945110000247	24.04.14	45,00,000	-	-	45,00,000	4,02,152	4,32,637
		Total		3,15,67,987	-	-	3,15,67,987	47,89,973	31,84,189
		Corpus Fund							
1	SBI	32115408694	31.12.11	26,50,000	-	-	26,50,000	9,30,735	3,12,052
2	SBI	32269399181	31.03.12	21,85,757	-	-	21,85,757	6,70,404	2,52,880
3	SBI	32323116853	23.04.12	15,00,000	-	-	15,00,000	4,89,241	1,72,038
4	SBI	33761329398	31.03.14	5,50,00,000	-	-	5,50,00,000	38,88,124	33,43,297
5	Canara Bank	3050401001159-1	19.04.14	1,30,00,000	-	-	1,30,00,000	11,77,347	12,49,332
6	Canara Bank	3050401001507		-	6,439	-	6,439	-	546.0
		Total		7,43,35,757	6,439	-	7,43,42,196	71,55,851	53,30,145
		Depreciation Fund							
1	SBI	32313779663	23.04.12	74,00,000	-	-	74,00,000	22,61,242	8,52,699
2	SBI	32313798610	23.04.12	90,00,000	-	-	90,00,000	27,50,161	10,37,067
3	SBI	32313799432	23.04.12	90,00,000	-	-	90,00,000	27,50,161	10,37,067
4	Bank of India	503945110000250	24.04.14	60,00,000	-	-	60,00,000	5,36,202	5,76,850
5	IDBI	6959	16.07.14	90,00,000	-	90,00,000	0	6,02,409	-
6	IDBI	6968	16.07.14	90,00,000	-	90,00,000	0	6,02,409	-
7	IDBI	6931	16.07.14	70,00,000	-	70,00,000	0	4,68,540	-
8	IDBI	6940	16.07.14	90,00,000	-	90,00,000	0	6,02,409	-
9	IDBI	293106000022376	30.11.15	-	79,38,512	-	79,38,512	-	2,07,757
10	IDBI	293106000022400	30.11.15	-	1,02,06,659	-	1,02,06,659	-	2,51,535
11	IDBI	293106000022419	30.11.15	-	1,02,06,659	-	1,02,06,659	-	2,51,535
12	IDBI	293106000022428	30.11.15	-	1,02,06,659	-	1,02,06,659	-	2,51,535
13	Vijaya Bank	80060331100287	05.09.15	-	70,00,000	-	70,00,000	-	3,26,653
14	Vijaya Bank	80060331100288	05.09.15	-	60,00,000	-	60,00,000	-	2,79,989
15	Vijaya Bank	80060331100285	05.09.15	-	90,00,000	-	90,00,000	-	4,19,983
16	Vijaya Bank	80060331100286	05.09.15	-	90,00,000	-	90,00,000	-	4,19,983
17	Vijaya Bank	80060331100284	05.09.15	-	90,00,000	-	90,00,000	-	4,19,983
18	PNB	311000DP00015494	05.09.15	-	90,00,000	-	90,00,000	-	4,17,969
19	PNB	311000DP00015500	05.09.15	-	60,00,000	-	60,00,000	-	2,78,646
		Total		6,54,00,000	9,35,58,489	3,40,00,000	12,49,58,489	1,05,73,533	70,29,251

Amount in Rupees

Sl No.	Bank	F.D No	Date	Face Value as on 31.03.15	Addition during 2015-16	Matured during 2015-16	Face Value as on 31.03.16	Accrued Interest Upto 31.03.15	Accrued Interest during 2015-16
		Maintenance Fund							
1	PNB	311000DA00003195	30.12.11	1,25,00,000		-	1,25,00,000	44,35,431	14,86,050
2	PNB	311000DA00003186	30.12.11	1,28,00,000		-	1,28,00,000	45,41,881	15,21,715
3	PNB	311000DP00015519	05.09.15	-	80,00,000	-	80,00,000	-	3,71,528
4	PNB	311000DP00015528	05.09.15	-	70,00,000	-	70,00,000	-	3,25,087
5	SBI	32313794525	23.04.12	67,00,000	-	-	67,00,000	20,47,341	7,72,039
6	SBI	32313795314	23.04.12	90,00,000	-	-	90,00,000	27,50,161	10,37,067
7	SBI	32313796146	23.04.12	90,00,000	-	-	90,00,000	27,50,161	10,37,067
8	Bank of India	503945110000249	24.04.14	85,00,000	-	-	85,00,000	7,59,619	8,17,204
9	Indian Bank	6370094889	04.09.15	-	60,00,000	-	60,00,000	-	3,19,693
10	Indian Bank	6370094584	04.09.15	-	70,00,000	-	70,00,000	-	3,72,975
11	Indian Bank	6370094302	04.09.15	-	85,00,000	-	85,00,000	-	4,52,898
12	Indian Bank	6370094546	04.09.15	-	90,00,000	-	90,00,000	-	4,79,539
13	Indian Bank	6370094296	04.09.15	-	95,00,000	-	95,00,000	-	5,06,180
		Total		5,85,00,000	5,50,00,000	-	11,35,00,000	1,72,84,594	94,99,042
		Staff Development Fund							
1	SBI	32115415012	31.12.11	7,00,000	-	-	7,00,000	2,46,326	82,418
2	SBI	32269400369	31.03.12	6,75,374	-	-	6,75,374	2,07,148	78,137
3	SBI	32323059473	23.04.12	4,00,000	-	-	4,00,000	1,30,723	45,872
4	Bank of India	503945110000248	18.04.14	80,00,000	-	-	80,00,000	7,14,936	7,69,133
		Total		97,75,374	-	-	97,75,374	12,99,133	9,75,560
		NONPLAN							
1	SBI	35593385121	24.02.16	-	50,00,000		50,00,000	-	38,542
2	SBI	35593383394	24.02.16	-	50,00,000		50,00,000	-	38,542
3	SBI	32921378693	04.03.13	14,000	-	14,000	0	1,265	
4	Bank of India	503945110000251	18.04.14	45,00,000	-	-	45,00,000	4,02,152	4,32,637
		PLAN							
1	Axis Bank	Stock TDR against LC	31.03.16	6,34,997	37,19,822	2,33,997	41,20,822	29,431	56,969
			Total	**51,48,997**	**1,37,19,822**	**2,47,997**	**1,86,20,822**	**4,32,848**	**5,66,690**
			Grand Total	**24,47,28,115**	**16,22,84,750**	**3,42,47,997**	**37,27,64,868**	**4,15,35,932**	**2,65,84,877**

Schedule Forming Part of Balance Sheet as at 31st March 2016

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)	-	14,000
Short Term Deposit	1,45,00,000	45,00,000
7. Others : Margin Money Account (L.C.)	41,20,822	6,34,997
Total	1,86,20,822	51,48,997

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	1,65,642	7,29,171
b) Others	-	-
3. CASH AND BANK BALANCES		
Cash in hand	8,108	38,169
Cash at Bank:		
A) With Scheduled Banks:		
In Current Accounts	19,88,57,444	87,94,418
In Savings Accounts	14,61,66,713	3,29,84,972
4. POST OFFICE - SAVINGS ACCOUNTS	-	-
Total	34,51,97,907	4,25,46,731

Schedule Forming Part of Balance Sheet as at 31st March 2016

Schedule : 7 (A) Annexure - Current Assets

Amount in Rupees

Particulars	Current Year	Previous Year
With Scheduled Banks:		
In Current Accounts		
SBI-10521277057 (NON PLAN}	16,19,48,433	56,27,835
SBI-10521277068 (PLAN GRANT)	3,69,09,011	31,66,583
Total	19,88,57,444	87,94,418
In Savings Accounts		
SBI-10521277818(CORPUS FUND)	7,87,43,795	3,11,532
SBI-10521278197(GRATUITY FUND)	90,12,151	86,62,199
SBI-30052416379(STAFF DEV FUN)	18,70,259	4,47,973
SBI-30052438520(DEPRECIATION FUND)	49,77,267	20,97,377
SBI-30052443879(MAINT.FUND)	36,02,098	23,15,820
AXIS-10049704315 (PLAN)	6,17,944	27,95,699
SBI-10521278244 (SCHOLARSHIP)	34,34,818	21,18,504
SBI-30432905766 (OBC)	10,85,211	10,43,071
SBI-30763009570(NONPLAN FEE)	25,27,689	3,13,967
SBI-30293190682(TUC)	6,463	3,21,212
SBI-35538434664 (IEDC)	5,30,000	-
SBI-30033506221 (SMDP)	14,05,738	-
SBI-31965903903 (DST)	2,02,477	-
SBI-34671803739 (AM&MT)	1,46,90,685	-
SBI-30780415571(RPS SCHEME)	2,17,30,515	91,89,691
SBI-30780416041(MODROBS)	13,43,641	12,91,465
SBI-31306562769(BEHAVIOUR OF CLAY/MoESc)	3,63,037	9,30,799
SBI-31306566082(REG EXTREME RAINFALL)	22,925	11,45,663
Total	14,61,66,713	3,29,84,972

Schedule : 7 (A) Annexure - Current Assets
8 : Loans, Advances and Deposits

Amount in Rupees

Particulars	Current Year	Previous Year
1. Advances to employees (Non-interest bearing) :		
Festival Advance	4,26,770	2,91,720
HTC Advance	-	1,66,000
LTC Advance	1,51,377	70,000
Other Advance To Employees	-	-
Recoverable Advance	76,096	15,29,610
TA Advance	44,000	1,31,469
2. Long Term Advances to employees: (Interest bearing) :		
a) Vehicle Loan	-	-
b) Home Loan	-	-
c) Soft Loan	11,93,052	9,62,496
3. Advances & other amounts recoverable in cash or in kind or for value to be received :		
a) On Capital Account	-	-
Deposit Work	10,01,65,462	16,12,36,625

Schedule Forming Part of Balance Sheet as at 31st March 2016

Amount in Rupees

Particulars	Current Year	Previous Year
Secured Advance	2,32,50,000	32,20,000
Advance - PHE Water Supply	80,061	25,83,025
Margin Money for LC	85,82,732	0
Mobilisation Adv- NCC Ltd	1,50,00,000	5,63,00,000
b) Suppliers/Firm	-	-
c) Others		
i) Electricity Consumption Receivable	3,93,976	-
ii) House Rent receivable	28,548	8,734
iii) Shop & Canteen Rent receivable	23,930	44,593
iv) Advance Tax	-	12,63,619
4. Prepaid Expenses :		
a) Insurance	4,79,038	40,443
b) Against E Journal	44,99,786	1,03,24,815
c) Digital Library	-	-
d) Printed Journal	-	1,46,880
e) AMC	3,52,177	-
5. Deposits :		
a) Telephone	-	-
b) Lease Rent	-	-
c) Electricity	4,00,854	4,00,854
d) AICTE	-	-
e) SBI ATM (TDR)	10,000	10,000
f) Security for POL	1,62,084	1,62,084
6. Income Accrued :	-	-
a) On investments from Earmarked / Endowment Fund	6,48,45,504	4,11,03,084
b) On Investment - Others	9,72,467	4,32,848
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	-	14,570
b) Debit balances in sponsored Fellowship & Scholarships	-	-
c) Grants receivable	-	61,00,00,000
d) Grants receivable from UGC	-	-
e) Recoverable from MR Staff (EPF Subscription)	27,08,310	-
8. Claims receivable :	3,28,517	76,488
Total (A)	22,41,74,741	89,05,19,957

Schedules Forming Part of Income & Expenditure Account

Schedule 9 : Academic Receipts

Amount in Rupees

Fees from Students	Current Year	Previous Year
Academic		
1. Tuition fee	15,02,18,283	13,58,53,750
2. Admission fee	30,59,400	23,24,780
3. Enrolment fee	-	-
4. Library Admission fee	30,43,200	14,63,060
5. Laboratory fee - I T System fee	61,39,750	42,92,250
6. Art & Craft fee	-	-
7. Registration fee / Institutional fee	-	1,77,660
8. Syllabus fee	-	-
	16,24,60,633	14,41,11,500
Examinations		
1. Admission test fee		
2. Annual Examination fee	32,46,900	24,20,110
3. Mark sheet, certificate fee	-	-
4. Entrance fee	-	-
Total (B)	32,46,900	24,20,110
Others Fees		
1. Identity card fee		
2. Fine/Miscelleneuos fee	10,37,421	3,11,185
3. Medical fee	18,38,160	8,58,600
4. Transportation fee	18,36,626	8,66,318
5. Hostel fee - Light & Water charges	-	-
6. Migration fee		
7. Summer term course fee	1,07,000	2,21,900
8. Verification fee	-	-
Total (C)	48,19,207	22,58,003
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	2,27,000	-
2. Registration fee (Academic Staff College)	-	-
3. Training & Placement	7,45,000	3,16,000
Total (E)	9,72,000	3,16,000
Grand Total (A+B+C+D+E)	17,14,98,740	14,91,05,613

Note: In case fees like entrance fee, subscription etc are material and are in nature of capital receipts, such amount should be recognised to the capital fund. Otherwise such fee will appropriately incorporated in this schedule

Schedules Forming Part of Income & Expenditure Account

Schedule 10 : Grants/Subsidies (Irrecoverable Grants Received)

Amount in Rupees

Particulars	Current Year				Previous Year		
	Plan Mhrd	Total Plan	Non Plan Mhrd	Current Year Total	Plan	Non Plan	Total Balance
Balance B/F	28,53,01,371	28,53,01,371	-	28,53,01,371	36,12,28,157	6,32,65,837	42,44,93,994
Add: Receipts during the year	74,00,00,000	74,00,00,000	37,00,00,000	1,11,00,00,000	1,00,25,00,000	30,00,00,000	1,30,25,00,000
Add: Interest earned	78,84,427	78,84,427	-	-	-	-	-
Total	1,03,31,85,798	1,03,31,85,798	37,00,00,000	1,40,31,85,798	1,36,37,28,157	36,32,65,837	1,72,69,93,994
Less: Refund to Ministry	-	-	-	-	-	-	-
Balance	1,03,31,85,798	1,03,31,85,798	37,00,00,000	1,40,31,85,798	1,36,37,28,157	36,32,65,837	1,72,69,93,994
Less: Utilized for Capital expenditure (A)	88,37,45,134	88,37,45,134	-	88,37,45,134	1,03,05,29,754	-	1,03,05,29,754
Balance	14,94,40,664	14,94,40,664	37,00,00,000	51,94,40,664	33,31,98,403	36,32,65,837	69,64,64,240
Less: Utilized for Revenue expenditure (B)	9,73,32,776	9,73,32,776	37,00,00,000	46,73,32,776	4,78,97,032	36,32,65,837	41,11,62,869
Balance C/F (C)	5,21,07,888	5,21,07,888	-	6,07,21,91,541	28,53,01,371	-	28,53,01,371

A- Appears as addition to Capital Fund as well as addition to Fixed assets during the year

B- Appears as income in the Income & expenditure Account.

C- (i) Appears under Current liabilities in the Balance sheet and will become the opening balance next year.
(II) Represented by Bank balances, Investment and Advances on the assets side.

Schedule 11 : Income From Investment

Amount in Rupees

Fees from Students		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**	-	-	-	13,27,332
	Interest on Stock Term Deposits from AXIS Bank	-	-	-	2,62,562
	Interest on Term Deposits against short term deposits.	22,82,722	42,22,648	-	-
3	**Income accrued but not due on Term Deposits**	2,06,88,042	1,57,82,946	4,32,637	4,31,583
4	**Interest on Savings Bank Accounts**	23,66,534	6,57,251	-	-
5	**Others (Specify)**	-	-	-	-
Total		2,53,37,298	2,06,62,845	4,32,637	20,21,477
Transferred to Earmarked/Endowment Funds		2,53,37,298	2,06,62,845		
Balance		-	-		

Schedules Forming Part of Income & Expenditure Account

Schedule 12 : Interest Earned

Amount in Rupees

Particulars	Current Year	Previous Year
1 On Savings Accounts with scheduled banks :		
Against fee fee account no. 30763009570	3,88,483	6,30,355
Against OBC account no. 30432905766	-	40,063
Against Scholarship account no. 10521278244	1,48,932	1,22,956
Against Auto Sweep A/c (Non Plan)	23,11,638	-
Against Auto Sweep A/c (Fees A/c)	15,52,626	-
Others	21,380	-
Total (A)	44,23,059	7,93,374
2 On Loans :		
a. Employees/Staff - Interest on Soft Loan	1,43,488	1,47,453
b. Others - Against Interest recovery of LTC/HTC	-	8,621
Total (B)	1,43,488	1,56,074
3 On Debtors and Other Receivables		
Total (C)	-	-
Grand Total (A+B+C)	45,66,547	9,49,448

Schedule 13 : Other Income

Amount in Rupees

	Current Year	Previous Year
A. Income from Land & Buildings		
1. Hostel room Rent	59,07,000	14,52,810
2. License fee	22,69,341	21,27,686
3. Hire Charges of Auditorium/Play ground/Convention Centre, Shop etc.	11,81,392	7,70,087
4. Guest House Rent	13,88,575	14,71,940
5. Electricity charges recovered	68,34,882	38,92,032
6. Light & Water charges recovered	59,07,000	26,08,200
Total	2,34,88,190	1,23,22,755
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	-	-
D. Others		
1. Income from consultancy		
2. RTI Fees	2,198	1,226
3. Income from Royalty	-	-
4. Sale of application form (Recruitment)	2,66,345	6,11,783
5. Misc. receipts (Sale of Tender Form, waste paper, etc.)	3,72,800	1,53,850

Schedules Forming Part of Income & Expenditure Account

Amount in Rupees

	Current Year	Previous Year
6. Profit on sale/disposal of Assets	-	-
a) Owned assets	28,896	-
b) Assets received free of cost		-
7. Others (specify)	-	-
Pension Fund Contribution	3,79,84,413	-
Capital Fund appropiration against Depreciation	18,63,78,648	-
a) Misc. Receipts	9,87,246	9,82,846
Total	22,60,20,546	17,49,704
Grand Total (A+B+C)	24,95,08,736	1,40,72,459

Schedule 14 : Prior Period Income

Amount in Rupees

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

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		15,69,00,725	156900725		13,36,25,928	13,36,25,928
ii) Group B & C		3,14,95,451	31495451		4,35,02,316	4,35,02,316
iii) Group D		3,31,68,736	33168736		3,32,85,331	3,32,85,331
B) Other Adhoc						
i) Salary of outsourced staff		1,39,29,345	13929345		1,02,91,779	1,02,91,779
ii) Salary of Contractual Teaching & Admin		2,43,83,968	24383968		2,36,19,172	2,36,19,172
iii) Salary of M R Staff		1,16,27,166	11627166		90,82,556	90,82,556
C) Allowances & Bonus						
i) Bonus		7,06,666	706666		6,66,622	6,66,622
ii) Cumulative Professional Dev. Allowance		30,94,591	3094591		1,31,38,904	1,31,38,904
D) Contribution to Other Fund		-	-		-	-
i) NPS Contribution		74,33,964	7433964		53,37,198	53,37,198
ii) Pension contribution (Deputation)		3,61,848	361848		2,09,508	2,09,508
iii) EPF Contribution (Employer)		36,91,657	3691657			
E) Staff Welfare Expenses		-	-			-
i) Mobile & Telephone expenditure		6,20,401	620401		7,36,106	7,36,106
F) Retirement and Terminal Benefits		-	-			-
i) Death cum Retirement Gratuity		2,11,61,937	21161937		2,05,34,613	2,05,34,613
ii) Pension		4,70,23,083	47023083		2,61,39,685	2,61,39,685
iii) Commuted Pension		98,89,120	9889120		1,27,49,048	1,27,49,048
iv) Leave Encashment		1,33,35,332	13335332		1,05,41,262	1,05,41,262
v) Leave Salary (Deputation)		-	-		1,26,198	1,26,198

Schedules Forming Part of Income & Expenditure Account

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
G) LTC facility		-	-			-
i) Home Travel Concession		9,21,791	921791		10,72,354	10,72,354
ii) Leave Travel Concession		34,66,553	3466553		14,34,276	14,34,276
H) Medical facility						
i) Medical Reimbursement		27,43,043	2743043		25,97,455	25,97,455
ii) Medicine & Dispensery expenses		19,56,574	1956574		23,16,585	23,16,585
I) Children Education Allowances		18,00,000	1800000			-
J) Honorarium		10,99,460	1099460		6,24,000	6,24,000
K) Others :						
i) Security Services		1,77,47,196	17747196		1,68,99,276	1,68,99,276
ii) House Keeping		54,76,779	5476779		38,18,790	38,18,790
ii) Joining Time TA		2,68,428	268428		2,28,476	2,28,476
iii) Relocation Charges		3,35,571	335571		2,31,093	2,31,093
Total	-	41,46,39,385	41,46,39,385	-	37,28,08,531	37,28,08,531

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 Avalable 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)	-	-	-	-

Note:

1. The total (A+B+C+D+E) in this sub schedule will be the figure against Retirement and Terminal Benefits in Schedule 15
2. Items B,C,D&E will be accounted on accrual basis and will include bills preferred but outstanding for payment on 31/3.

Schedule 16 : Academic Expenses

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Laboratories expenses	-	10,80,815	10,80,815	-	19,14,577	19,14,577
b) Field work/Participation in Conferences	-	-	-	-	-	-
c) Expenses on Seminars/workshops	-	8,85,500	8,85,500	-	9,08,821	9,08,821

Schedules Forming Part of Income & Expenditure Account

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
d) Payment to visiting faculty	-	1,73,381	1,73,381	-	5,40,357	5,40,357
e) Examination	-	22,84,765	22,84,765	-	15,57,599	15,57,599
f) Students Welfare expenses - Student Internship	-	-	-	-	-	-
g) Admission expenses	-	-	-	-	-	-
h) Convocation expenses	-	22,57,639	22,57,639	-	22,40,086	22,40,086
i) Publications	-	-	-	-	-	-
j) Stipend/Means-cum-Merit Scholarship	9,52,36,830	-	9,52,36,830	4,47,61,662	37,68,000	4,85,29,662
k) Subscription expenses	-	-	-	-	-	-
l) Contingency to Ph.D. Scholars	-	4,82,678	4,82,678	-	5,88,846	5,88,846
m) Students Project	-	4,32,079	4,32,079	-	6,69,326	6,69,326
n) Library Contingency	-	1,44,614	1,44,614	-	3,96,190	3,96,190
o) Industry Institute Partnership exp	-	-	-	-	-	-
p) Others	-	-	-	-	-	-
q) Internship Exp	-	78,840	78,840	-	1,56,524	1,56,524
r) Industry Visit (MBA)	-	-	-		1,13,455	1,13,455
s) Student Orientation Program	-	-	-	-	73,040	73,040
t) Summer Term Course Expenses	-	5,44,570	5,44,570	-	2,75,000	2,75,000
Total	9,52,36,830	83,64,881	10,36,01,711	4,47,61,662	1,32,01,821	5,79,63,483

Schedule 17 : Administrative and General Expenses

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
A. Insfrastructure						
a) Electricity	-	2,95,27,346	2,95,27,346	-	2,44,26,857	2,44,26,857
b) Water Charges	-	50,21,727	50,21,727	-	28,76,941	28,76,941
c) Insurance	-	-	-	-	-	-
d) Rent, Rates Taxes (including Property Tax)	-	-	-	-	-	-
B. Communication						
e) Postage and Stationery	-	1,44,060	1,44,060	-	75,059	75,059
f) Telephone, Fax and Internet Charges	-	28,43,090	28,43,090	-	18,99,210	18,99,210
C. Others						-
g) Printing and Stationery (consumption)	-	20,09,455	20,09,455	-	29,43,772	29,43,772
h) Travelling and Conveyance Expenses	-	57,09,063	57,09,063	-	49,02,943	49,02,943
i) Hospitality	-	2,79,961	2,79,961	-	3,09,183	3,09,183
j) Auditors Remuneration	-	3,98,105	3,98,105	-	6,89,220	6,89,220
k) Professional Charges - Legal fee	-	10,82,252	10,82,252	-	7,50,091	7,50,091
l) Advertisement and Publicity	-	21,60,287	21,60,287	-	27,64,021	27,64,021
m) Magazines & Journals - News paper	-	39,536	39,536	-	84,150	84,150
n) Training & Placement exemses	-	7,05,866	7,05,866	-	9,10,646	9,10,646
o) Board & Committee meeting	-	41,65,243	41,65,243	-	54,39,674	54,39,674
p) Computer Consumable	-	4,72,264	4,72,264	-	4,82,803	4,82,803
q) Initiative to foster Social Responsibility	-	-	-	-	-	-

Schedules Forming Part of Income & Expenditure Account

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
r) Misc. Expenses	-	1,19,855	1,19,855	-	5,51,158	5,51,158
s) Liverage	-	-	-	-	-	-
t) Gyan Sagar expenses	-	49,971	49,971	-	45,303	45,303
u) Celebration of National Day	-	7,18,461	7,18,461	-	2,98,526	2,98,526
v) NCC & NSS Activity	-	3,40,115	3,40,115	-	2,41,551	2,41,551
w) Promotion of Rashtra Bhasha	-	4,95,950	4,95,950	-	34,852	34,852
x) Consumable expenses	-	6,10,989	6,10,989	-	4,19,970	4,19,970
y) Academic Audit Exp	-	4,70,023	4,70,023	-	10,59,929	10,59,929
z) Contingency Exp	-	5,54,121	5,54,121	-	5,299	5,299
aa) Border Village Developemt Exp	-	-	-	-	35,765	35,765
bb) Tranist House Rent	-	61,770	61,770	-	1,35,893	1,35,893
cc) Adward & Prizes	-	1,91,600	1,91,600	-	67,500	67,500
dd) ETH Project Exp	-	16,800	16,800	-	5,925	5,925
ee) HPC Cell Expenses	-	-	-	-	1,00,220	1,00,220
ff) Incubation Centre CDAC	-	21,66,000	21,66,000	-	36,68,585	36,68,585
gg) Innovation Lab Exp	-	10,33,247	10,33,247	-	2,33,476	2,33,476
hh) Other Admin Exp	-	17,64,402	17,64,402	-	53,716	53,716
ii) Registration/Nomination fee	-	1,58,550	1,58,550	-	1,22,295	1,22,295
jj) RPC Project Exp	-	6,33,954	6,33,954	-	98,025	98,025
kk) Short Term Training Program	-	1,88,103	1,88,103	-	21,510	21,510
ll) Smart Card Facilty	-	-	-	-	90,005	90,005
mm) Telemedicine Project (CDAC)	-	-	-	-	8,008	8,008
nn) Upgradation of Supporting Staff	-	4,42,250	4,42,250	-	37,500	37,500
oo) Mobilization expenditure	24,45,712	-	24,45,712	31,35,370		31,35,370
pp) NSDL Service Charges	-	27,354	27,354	-	-	-
qq) Gymkhana Expenditure	-	10,70,233	10,70,233	-	-	-
rr) Swachh Bharat Mission Exp	-	99,110	99,110	-	-	-
TOTAL	24,45,712	6,57,71,113	6,82,16,825	31,35,370	5,58,89,581	5,90,24,951

Schedule 18 : Transportation Expenses

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Vehicles (owned by Institution)			-			
a) Running Expenses	-	15,56,959	15,56,959	-	15,24,715	15,24,715
b) Insurance Expenses	-	1,22,971	1,22,971	-	1,13,152	1,13,152
2. Vehicles taken by Rent/Lease	-	-	-	-	-	-
a) Rent/Lease Expenses	-	-	-	-	-	-
3. Vehicle (Taxi) hiring Expenses	-	-	-		-	-
TOTAL	-	16,79,930	16,79,930		16,37,867	16,37,867

Schedule 19 : Repairs & Maintenance

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Buildings	-	61,28,971	61,28,971	-	75,70,947	75,70,947
b) Furniture & Fixtures	-	4,39,918	4,39,918	-	7,16,911	7,16,911
c) Plant & Machinery	-	-	-	-	-	-

Schedules Forming Part of Income & Expenditure Account

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
d) Office Equipment	-	9,91,043	9,91,043	-	9,89,052	9,89,052
e) Scientific Equipment - (Digital Labrary)	-	-	-	-	10,625	10,625
f) Audio Visual Equipment	-	-	-	-	-	-
g) Cleaning Materials & Casual work	-	3,09,805	3,09,805	-	1,58,845	1,58,845
h) Book Binding Charges	-	91,950	91,950	-	-	-
i) Gardening	-	10,68,104	10,68,104	-	8,20,543	8,20,543
j) Estate Maintenance (Electrical)	-	17,14,874	17,14,874	-	25,45,620	25,45,620
k) Bio Gas Contingency expenses	-	14,340	14,340	-	30,500	30,500
l) D.G. Set	-	30,47,970	30,47,970	-	38,68,334	38,68,334
m) Networking	-	2,43,101	2,43,101	-	6,57,805	6,57,805
n) Guest House Maintenances	-	3,31,076	3,31,076	-	1,86,524	1,86,524
TOTAL	-	1,43,81,152	1,43,81,152	-	1,75,55,706	1,75,55,706

Schedule 20 : Finance Costs

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Bank Charges	18,885	8,111	26,996	-	69,854	69,854
b) Others	-	-	-	-	-	-
TOTAL	18,885	8,111	26,996	-	69,854	69,854

Note:

If the amount is not material, the head Bank Charges could be omited and these could be accounted as Admiistrative expenses in Schedule-17.

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	-	2,00,00,000	2,00,00,000	-	1,70,00,000	1,70,00,000
d) Support/Salaries to NITS-KIDS staff	-	6,38,749	6,38,749	-	6,67,710	6,67,710
TOTAL	-	2,06,38,749	2,06,38,749	-	1,76,67,710	1,76,67,710

Note:

Other expenses shall be classified as writes-off, provisions, miscellaneous expenses, loss on sale of investments, loss of fixed assets and loss on saleof fixed assets etc and disclose accordingly.

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)	-	15,55,072	15,55,072	-	-	-
2) Academic Expenses	-	-	-	-	-	-
3) Administrative Expenses	-	-	-	-	-	-
4) Transportation Expenses	-	-	-	-	-	-
5) Repair & Maintenance	-	-	-	-	-	-
6) Others	-	-	-	-	-	-
TOTAL	-	15,55,072	15,55,072	-		-

Receipts and Payments Account for the Year Ended 31st March 2016

Amount in Rupees

Receipts	Current Year	Previous Year	Payments	Current Year	Previous Year
I. Opening Balances:			**I. Expenses:**		
a) Cash Balances	38,169	7,921	a) Establishment expenses (Sch-15)	40,42,30,305	37,28,08,531
b) Bank Balance			b) Academic Expenses (Sch-16)	9,30,70,111	5,79,63,483
i. In Current Accounts	87,94,418	11,93,54,638	c) Administrative Expenses (Sch-17)	6,12,83,632	5,90,24,951
ii. Savings Account	3,29,84,972	3,16,19,111	d) Transportation Expenses (Sch-18)	13,81,954	16,37,867
			e) Repairs & Maintenance (Sch-19)	1,15,74,721	1,75,55,706
			f) Finance Cost	26,996	69,854
II. Grants Received:			g) Prior Period Expenses	15,55,072	0
a) Plan Grant: From Government of India	74,00,00,000	1,00,25,00,000	h) Other Expenses (Sch-21)	2,05,88,349	1,76,67,710
b) Non-Plan Grant: From Govt of India	37,00,00,000	30,00,00,000	**II. Payments against**		
			Earmarked/Endowment Funds	14,89,788	14,47,49,124
Grants-in-Aid Receivable :					
a) Plan Grant: From Government of India	49,00,00,000	19,24,37,500	**III. Payments against Sponsored Projects**	81,67,004	87,61,538
b) Non-Plan Grant: From Govt of India	12,00,00,000	0	Misc Payments against Grant/ Conference		31,67,329
			IV. Payments against Sponsored Scholarships	1,05,08,244	72,07,021
III. Academic Receipts	18,73,43,451	14,91,05,613			
			V. Investments and Deposits made		
IV. Receipts against Earmarked/ Endowmwnt	15,27,30,584	3,36,38,427	a) Out of Earmarked	11,00,00,000	7,40,00,000
Funds			b) Out of own funds(Investments-others)	3,08,49,752	13,03,64,511
V. Receipts against Sponsored Project:			**VI. Term Deposits with Schedule Banks**		
Grants Received from AICTE/GOI	3,66,57,691	67,53,160			
Other Misc Receipts against Conference	52,59,770	43,27,487			
VI. Receipts against sposored Fellowships & Scholarships	1,14,08,366	67,30,015	**VII. Expenditure on Fixed Assets and Capital Works- in -Progress**		
			a) Fixed Assets	10,15,44,480	17,48,50,540
VII. Income on Investments from			b) Capital works -in- Progress	42,57,28,449	85,56,79,214
a) Earmarked/Endowment funds	23,66,534	4,05,49,745			
b) Other investments	-	20,21,477	**Viii. Other Payments including statutory**	6,88,64,614	5,07,66,239
VIII. Interest received :			**IX. Refund of Grants (Sponsored Projects)**	18,26,736	-
a) Bank Deposit	-	-			
b) Loans and Advances	-	1,56,074	**X. Deposits and Advances**	50,03,79,466	43,62,01,750
c) Savings Bank Account	5,58,795	7,93,374			
d) Interest on Auto Sweep A/c	38,64,264				
e) Against Project Account	7,48,023	6,15,251			
IX. Investments encashed			**XI. Other Payments**	40,11,88,037	96,18,90,031
X. Term Deposits with Scheduled Banks encashed	1,73,77,927	32,78,66,101			
			XII. Closing balances		

Amount in Rupees

Receipts	Current Year	Previous Year	Payments	Current Year	Previous Year
XI. Other income (including prior Period Income) (Sch-13)	2,56,34,677	1,40,72,459	a) Cash in hands	8,108	38,169
			b) Bank balances		
XII. Deposits and Advances			i. In Current Accounts	19,88,57,444	87,94,418
Plant Machinery & Equipment	-	71,36,653	iii. Savings Account	14,61,66,713	3,29,84,972
Other Deposits (S Debtors)	31,72,073	3,30,29,780			
Loans & Advances	22,01,07,881	67,82,71,050			
XIII.Miscellenous Receipts including Statutory	9,27,78,321	6,98,08,720			
Receipts					
XIV. Any other Receipts	7,74,64,057.80	39,53,88,403			
TOTAL	2,59,92,89,975	3,41,61,82,960	TOTAL	2,59,92,89,975	3,41,61,82,960

Dated, Silchar
The 10th May 2016

Registrar

Director

Schedules Forming Part of Receipts & Payments Accounts for the Year Ended 31st March 2016

Receipts :

Amount in Rupees

Particulars	Current Year	Previous Year
PLAN GRANT : RECEIVED FROM GOVT OF INDIA:	74,00,00,000	1,00,25,00,000
NON PLAN GRANT: RECEIVED FROM GOVT OF INDIA	37,00,00,000	30,00,00,000
GRANTS-IN-AID RECEIVABLE FROM GOVT OF INDIA:		
Grant Receivable Plan	49,00,00,000	19,24,37,500
Grant Receivable Non Plan	12,00,00,000	0
Total	61,00,00,000	19,24,37,500
Academic Receipts		
Academic Fee		As per Income & Expenditure A/c
Tuition Fees	16,44,73,594	
Admission Fee	30,58,900	
Library Fee	30,42,700	
I.T System Fee	61,38,750	
Examination Fee		
Examination Fee	32,46,400	
Other Fees		
Late Fine/Penalty	5,12,371	
Misc Fees	5,25,050	
Medical Facility Fee	18,37,860	
Transportation Fees	18,36,326	
Summer Term Course Fee	1,07,000	
Other Academic Receipts		
Training & Placement Fee	7,45,000	
Short Term Training Programme Fee	2,17,500	
Development Fee	16,02,000	
Total	18,73,43,451	

Amount in Rupees

Particulars	Current Year	Previous Year
EARMARKED / ENDOWMENT FUND:		
Pension Fund Contribution	3,48,72,570	2,81,00,672
Depreciation Fund	5,68,84,201	5,91,718
Maintenance Fund	5,52,94,806	38,759
Staff Dev Fund	13,92,865	5,27,119
NMEICT Fund	4,17,270	
Student Welfare Fund		1,19,636
Institute Development Fund		4,78,540
Employee's Welfare Fund		1,19,636
Deptarmental Promotion Fund		4,78,540
Manish Roy Memorial Scholarship Fund		2,00,000
Student Aid Fund	10,74,000	3,79,200
Total (A)	14,99,35,712	3,10,33,820
CORPUS FUND :		
Corpus Fund		
Corpus fee received from Students	15,78,000	4,74,750
Migration fee (Charged under income of Corpus Fund)	40,631	13,100
Institute Share from Transcript fee	2,63,655	2,80,320
Corpus Fund interest on Savings Bank	12,586	2,93,837
Received from Development fee	9,00,000	15,42,600
Total (B)	27,94,872	26,04,607
Grand Total (A+B)	15,27,30,584	3,36,38,427
SPONSORED PROJECTS:		
Grants Received against Sponsored Projects		
MICT : GOI	51,32,022	13,29,735
ICSSR : GOI	0	1,03,425
SERB : GOI	69,72,152	53,20,000
DST: GOI	1,52,30,000	
MNRE: GOI	23,17,250	
BRNS:	16,45,200	
NRRDA	3,65,000	
DIETY	49,30,000	
UGC	66,067	
Total	3,66,57,691	67,53,160
OTHER MISC. GRANTS/SPONSHORSHIP:		
Received from SERB (DST)	8,56,274	8,50,000
Received from CBSE	2,23,496	90,000
Grants received fro NMEICT		2,45,753
NRDC Grants		3,00,000
Against SocPros 2014		8,94,831
INDEST 2014		16,85,803
WNL WORKSOP		2,61,100
PMMMNT SCHEME	22,00,000	
Faculty Development Programme	2,20,000	
Visveswariya PhD Scheme	1,10,000	
Business Emviroment Law Curriculam	7,50,000	
INSPIRE Internship	9,00,000	
Total	52,59,770	43,27,487

Amount in Rupees

Particulars		Current Year	Previous Year
VI. Receipts against sposored Fellowships and Scholarships:			
Outside Scholarship Payable		1,14,08,366	67,30,015
Total		1,14,08,366	67,30,015
INTEREST RECEIVED FROM EARMARKED FUND:			
Depreciation Fund Interest on Investment			22,28,739
Depreciation Fund Interest on Savings Account		9,95,689	1,84,282
Maintanance Fund Interest on Investment			17,33,267
Maintenance Fund Interest on Savings Account		9,91,472	1,52,404
Staff Dev. Fund Interest on Investment			7,831
Staff Dev Fund Interest on Savings Account		29,421	80,168
Gratuity Fund Interest on Investment			2,52,811
Gratuity Fund Interest on Savings Account		3,49,952	2,40,397
Interest on Investment against Corpus Fund			8,925
Interest on Mobilization Advance			1,39,96,812
Interest Accrued During the Year:			
Corpus Fund		0	58,81,163
Gratuity Fund		0	31,58,082
Depreciation Fund		0	57,09,005
Maintenanxces Fund		0	59,72,930
Staff Development Fund		0	9,42,929
Non-Plan Fund		0	
	Total	23,66,534	4,05,49,745
SH-12 Interest Earned			
Interest on Saving A/c			
Interest on Fees A/c		3,88,483	
Interest on Scholarship A/c		1,48,932	
Interest on Savings Bank A/c		21,380	
	Total	5,58,795	
Interest Others			
Interest on (Auto Sweep) Non Plan		23,11,638	
Interest on Auto Sweep A/c (Fee)		15,52,626	
	Total	38,64,264	
Interest Against Project A/c			
Interest on SavingA/c (Sponsored projects a/c.)		7,48,023	6,15,251
	Total	7,48,023	6,15,251
Investment with scheduled banks			
Investment of Gratuity Fund			86,59,943
Investment of Maintenace Fund			6,15,65,558
Investment of Corpus Fund			66,91,983
Investment of Depreciation Fund			8,61,97,045
Investment of Staff Dev Fund			58,71,288
Investment (Non-Plan)			12,07,32,511
Investment (Nonplan Fees)		14,000	3,00,08,000
Investment of Caution Money			36,42,770
Investment (Plan- Margin Money A/C)		1,73,63,927	44,97,003
	Total	1,73,77,927	32,78,66,101

Amount in Rupees

Particulars	Current Year	Previous Year
Other Income (Incuding Prior Period Income)		
Income From Land & Building		
License Fee	22,40,793	
Hire Charges for Shops Canten and Office	11,57,462	
Seat Rent/Hostel Room Rent	59,06,000	
Guest House Room Rent	12,54,875	
Electricity Consumption Receipts	64,28,879	
Light & Water (Hostel)	59,06,000	As per Income &
Other Income		Expenditure A/c
RTI Fees	2,198	
Application Fee	2,66,345	
Tender Form Fee	3,72,800	
Scrap Sale	28,896	
Misc Receipts	9,53,433	
Institute Overhead on Consultancy	11,16,996	
	2,56,34,677	
Margin Money for LC	0	71,36,653
Total	0	71,36,653
OTHER DEPOSITS:		
Solar Regional Test Centre	9,27,654	
Lab Equipment	8,48,929	
Prepaid E-Journals		1,26,10,567
Prepaid Insurance		41,747
Prepaid Exp - Maint. of Digital Library		10,625
Accrued Interest on Caution Money		11,49,884
Accrued Interest on Corpus Fund		21,12,404
Accrued Interest on Fee A/c Investment	1,265	16,03,387
Accrued Interest on LC Investment	25,806	
Accrued Interest on Gratuity Fund		21,01,230
Accrued Interest on Maintenance Fund		20,72,496
Accrued Interest on Staff Dev Fund		18,53,342
Accrued Interst on Depreciation Fund		74,72,119
Electricity Consumpation Receivable		4,33,269
House Rent Recivable	8,734	10,850
Shops & Canteen Rent Recivable	44,593	38,869
Loan to CCB/CCMT		3,28,241
From CDAC		10,66,804
Temporary loan from Institute account		41,973
Advance Tax	12,63,619	81,973
Receivable against SocPros	9,500	
Claims against RTC Project	41,973	
Grand Total	31,72,073	3,30,29,780
Loans,Advances & Deposits		
Advance to Employees		
HTC Advance	5,60,284	7,94,100
LTC Advance	11,68,113	11,85,400
Other Advance To Employees		
Recoverable Advance	1,28,91,074	1,70,63,708
Recoverable Advance (Project)	14,570	
TA Advance	5,57,825	24,87,820

Amount in Rupees

Particulars	Current Year	Previous Year
Soft Loan (Staff)	13,37,932	13,35,999
Festival Advance	7,13,450	10,10,050
Medical Advance	3,70,500	1,100
Advance to BRNS		
Loan to CSAB	4,35,476	8,93,271
Advance against Sponsored projects		54,000
Deposit Work		
Deposit Work-CPWD Central School		6,81,75,554
Deposit Work-CPWD Non/faculty Qtrs		7,17,65,739
Deposit Work-CPWD New Admin Building		6,60,45,836
Deposit Work-CPWD Swage Disopl. Sytm		1,03,26,390
Deposit Work-HPL Married Sch Hostel		29,16,37,650
Deposit Work-PHE-Agmn Water Supply		1,70,86,058
Deposit Work-PHE- Water Supply Scheme		12,23,576
Secured Advance Recovery	15,61,17,000	9,58,92,000
Mobilisation Advance	4,13,00,000	2,95,00,000
Advavce Recovery against Works	12,63,500	
Advance to PHE (Water Supply)	282	
Advance Recovery from Firm	29,46,225	17,92,799
Loan to CCB/CCMT	2,01,650	
AIU Workshop	1,80,000	
Loan to TEQIP	50,000	
Total	22,01,07,881	67,82,71,050
MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS:		
Provision - TAX:		
VAT	3,03,74,736	2,19,68,783
INCOME TAX (Against Salary & Contrats)	3,20,69,341	2,36,96,693
PROFESSIONAL TAX	10,08,695	8,63,985
SERVICE TAX	3,42,321	9,38,120
Labour Cess	51,18,105	32,99,366
GSLI	8,97,240	7,60,080
EPF Subscription MR Employee	4,55,649	
EPF Subscription FW Workers Society	22,596	
GPF Advance Recovery	25,62,118	28,42,851
GPF	1,05,000	2,24,000
GPF Subscription	1,18,17,900	1,04,48,300
NPS Subscription	80,04,620	47,66,542
Total	9,27,78,321	6,98,08,720
OTHER DEPOSITS:		
Hostel Caution Money	97,97,280	12,50,000
Institute Caution Money	53,64,000	17,65,200
Sundry Creditors		
Godrej Mfg Co. Ltd	29,52,349	14,60,069
ILFS Technology		12,04,575
Shree Ganesh Associates	7,500	
Nurul Hussain Barbhuiya	55,037	
AK Choudhury	68,223	

Amount in Rupees

Particulars	Current Year	Previous Year
NESS Pvt Ltd	2,36,804	
NCC Ltd		46,80,000
EMD	81,23,574	38,13,090
SD	1,16,42,991	1,23,36,023
SD Project	32,080	
Load Security	4,906	16,625
Agni Power & Electronics Pvt Ltd		27,22,000
Realsoft Corpn		30,000
Alumini Association Fee	10,79,000	9,58,000
Deposit Remittance	15,47,440	11,40,953
CCTV Payable	8,50,108	7,36,391
Group Insurance Claim	15,75,416	8,94,933
Gymkhana	61,32,760	41,88,000
Hostel Management	29,55,450	13,71,362
Hostel Welfare	30	79,320
Institute Share on Consultancy	1,65,857	
JEE (MAIN)-2013		20,000
Leave Encashment Payable (Other Org)	9,57,921	
Mess Dues		6,478
Liability Towards DCRG	3,00,000	3,41,610
L.I.C.I Payable	54,18,567	60,21,033
NPS Subscription & Contribution (Other Org)	1,86,836	
Pension Fund Contribution (Other Org)	3,17,449	
Mediclaim Insurance	16,90,095	24,50,149
Mess Advance	1,75,330	3,26,500
Mess Establishment	58,12,990	21,47,000
Processing Charges	8,26,700	5,16,250
Refundable Excess Deposit	3,83,741	21,11,653
Student Mediclaim	98,302	76,476
Fees Received In Advanced		2,91,87,439
Transcript Fee	7,64,735	7,47,425
Verification fee	54,700	39,300
Consultancy charges payable to Civil Engg. Department	15,917	1,50,000
Unclassified receipts	42,512	2,44,136
Plan interest on Auto Sweep	23,69,124	
Plan Interet on Mobilization Adv	50,75,671	
Plan Grant (Axis Bank)	3,82,663	
PROVISIONS :		
Outstanding Exp (Nonplan - Committed Liability))		4,77,00,359
Provision Others (Plan)		15,46,56,054
Loan from Depreciation Fund account		5,50,00,000
Loan from Maintenance Fund account		5,50,00,000
Total	7,74,64,058	39,53,88,403

Schedules Forming Part of Receipts & Payments Accounts for the Year 2015-16

Payments :

Amount in Rupees

Particulars	Current Year	Previous Year
Establishment Expenses		
Salary Teach & Admin	15,69,00,725	As per Income & Expenditure A/c
Salary Class-III	3,14,95,451	
Salary Class-IV	3,31,68,736	
Salary of Cont. Staff (Teach/admin/III/IV)	2,22,03,081	
Salary of MR Staff	1,06,48,414	
Salary of Outsourced Staff	1,28,15,315	
Bonus	7,06,666	
Professional Dev Allowance	28,15,791	
NPS Contribution	74,33,964	
Pension Contribution (Depu)	3,61,848	
EPF Contribution on MR Salary	35,60,805	
Mobile & Telephone Bill Reimbursement	51,027	
Death Cum Ret. Gratuity	2,11,61,937	
Pension	4,70,23,083	
Commuted Pension	98,89,120	
Leave Encashment	1,33,35,332	
Home Travel Concession	5,73,618	
Leave Travel Concession	32,51,748	
Medical Reimbursement	27,43,043	
Medicine & Dispensary Exp	19,27,163	
Honorarium/Sitting Fees	10,69,460	
Security Services	1,60,58,615	
House Keeping	44,31,364	
Joining Time T.A	2,68,428	
Relocation Charges (Transportation)	3,35,571	
Total	40,42,30,305	
Academic Expenses		
Lab Consumable	8,42,503	As per Income & Expenditure A/c
Seminer & Conferences	6,69,592	
Visiting Faculty Remuneration	1,38,700	
Examination Expenses	17,59,281	
Convocation Expenses	20,61,735	
Stipend to M.Tech./ Ph.D	8,60,47,363	
Contingency to Phd	4,28,142	
Student Project Expenses	3,64,771	
Library Contingency	1,34,614	
Internship Exp	78,840	
Summer Term Course Exp	5,44,570	
Total	9,30,70,111	

Amount in Rupees

Particulars	Current Year	Previous Year
Administrative Expenses		
Electricity & Power Charges	2,70,34,818	
Water and Electricity Charges to PHE	50,21,727	
Postage Exp	1,44,060	
Internet Expenses	24,33,418	
Telephone Charges	4,02,621	
Printing and Stationary Exp	18,95,780	
Local Conveyance	9,950	
TA/DA Expenses	54,78,773	
Hospitality Exp/Refreshment	2,32,215	
Audit Fees	3,98,105	
Professional Fee & Legal Exp	10,46,252	
Advertisement Expenses	21,60,287	
News Paper & Periodicals	39,536	
Training & Placement Expenses	5,19,547	
Board & Committee Meeting	27,40,042	
Computer Consumable Exp	3,50,739	
Miscellanous Exp	1,10,322	
Gyan Sagar Exp	49,971	
Celebration of National Day	2,81,089	As per Income & Expenditure A/c
NCC & NSS Activities	75,989	
Promotion of Rashtriya Bhasha	4,95,950	
Consumable	5,47,084	
Academic Audit Expenses	2,50,167	
Contingency Expenses	5,54,121	
Transit House Rent	61,770	
Award & Prizes	1,91,600	
ETH - Project Exp	16,800	
Incubation Centre (CDAC)	21,66,000	
Innovation Lab Exp	7,89,251	
Other Admin Exp	14,79,052	
Registration/Nomination Fee	1,58,550	
RPC Project Exp	4,97,136	
Short Term Training Programme	89,668	
Upgradation of Supporting Staff	4,42,250	
Junior Engg Staff Salary	16,87,695	
Mobilisation Exp	6,44,517	
NSDL Service Charges	27,354	
Gymkhana Expenditure	7,59,426	
Total	6,12,83,632	
Transportation Expenses		
Vehicle Running Expenses	12,99,426	As per Income & Expenditure A/c
Insurance Exp- Vehilces	82,528	
Total	13,81,954	

Amount in Rupees

Particulars		Current Year	Previous Year
Repairs and Maintenance Expenses			
Repairs & Maintenace- Building & Others		43,71,639	As per Income & Expenditure A/c
Maintenance of Furniture & Fixtures		4,13,333	
Repairs and Maintenace- Tools Equipments		8,75,882	
Casual Work & Carriage		2,26,996	
Gardening & Horticulture		5,65,018	
Repairs & Maintenance- Electricity		14,84,701	
Maintenance of D.G Set		30,47,970	
Manitenance of Networking		2,43,101	
Repairs & Maintenace of Guest House		2,54,131	
Book Binding Expenses		91,950	
	Total	1,15,74,721	
Finance Cost			
Bank Charges		26,996	As per Income & Expenditure A/c
	Total	26,996	
Prior Period Expenses			
Prior Period Exp (CEA)		15,55,072	
	Total	15,55,072	0
Other Expenses			
Support to NITS KIDS School		5,88,349	
Support to Kendriya Vidyalaya		2,00,00,000	
	Total	2,05,88,349	
EARMARKED FUND / ENDOWMENT FUND :			
Corpus Fee		5,44,000	
Pension fund Contribution		4,76,013	3,43,71,654
NMICT Awareness Program Fund		2,12,938	
Student Aid Fund		2,56,837	3,52,470
Student Welfare Fund			25,000
Loan to Institute from Depreciation Fund account			5,50,00,000
Loan to Institute from Maintenancce Fund account			5,50,00,000
	Total	14,89,788	14,47,49,124
SPONSORED PROJECTS:			
Expenditure against Sponsored Projects			
Capital Expenditure			
Equipment		31,29,788	42,98,632
Computer		99,000	7,66,672
Software		99,999	21,25,350
Furniture		13,400	24,766
Revenue Expenditure		48,24,817	15,46,118
	Total	81,67,004	87,61,538
OTHER MISC. GRANTS/CONFERENCE :			
Expenditure against SERB (DST)			8,06,123
NMEICT expenses			3,78,935
Against SocPros 2014			8,94,830
INDEST 2014			10,00,000
WNL WORKSOP			87,441
	Total	0	31,67,329

Amount in Rupees

Particulars	Current Year	Previous Year
FELLOWSHIP / SCHOLARSHIP :		
Outside Scholarship Payable	1,05,08,244	72,07,021
Total	1,05,08,244	72,07,021
INVESTMENTS & DEPOSITS:		
OUT OF EARMARKED/ENDOWMENT FUNDS;		
Investment of Corpus Fund		1,30,00,000
Investment of Depreciation Fund	5,50,00,000	4,00,00,000
Investment of Gratuity Fund		45,00,000
Investment of Maintenace Fund	5,50,00,000	85,00,000
Staff Development Fund		80,00,000
Total	11,00,00,000	7,40,00,000
OUT OF OWN FUNDS;		
Investment (Non-Plan)		12,52,32,511
Investment KIDs NITS	1,00,00,000	
Investment- LC Margin Money A/C	2,08,49,752	51,32,000
Total	3,08,49,752	13,03,64,511
EXPENDITURE ON FIXED ASSETS		
Software Developments	47,24,755	70,89,501
E-Journals	70,79,757	1,82,75,006
Patent and Copyright	42,180	
Buildings		
Boys Hostel No.7	1,53,500	
Girls Hostel-2	1,41,790	
Girls Hostel No.1		
Guest House (Old)	1,53,071	2,71,437
Hostels Including Spcl Repair	11,40,691	12,36,539
Institute Building Renovation	6,51,139	34,73,947
Renovation of Staff Quater		6,57,333
Electrical Renovation		1,83,800
KIDS NITS School Building		17,64,190
Production Engg Lab	5,64,830	4,83,906
Security Barack - II	3,18,896	1,37,298
Lecturers Quarter	11,27,229	
Staff Quarters (Type A,C,D)	3,51,297	
Staff Quarters Type IV 30 Units	9,57,781	
Campus Development		
Campus Development/Beautifcation	6,28,116	49,57,940
Childrens Park	30,375	2,08,047
Renovation of Internal Road & Gate	21,28,861	11,11,315
Boat Club	3,11,850	61,243
Security Wall	1,71,944	46,394
Sports Field Volley Ball/Tennies	9,01,221	9,10,218
Street Lighting		17,24,021
Plant, Machinery & Equipments		
100kwp Solar Photovoltaic Power Plant		70,51,891
Audio Visual Equipments	13,23,464	4,27,036
Electrical Equipments	44,73,391	11,69,986
Equipments of Health Centre		3,57,157

Amount in Rupees

Particulars		Current Year	Previous Year
Lab Equipments		4,09,43,713	4,10,07,209
Gym Equipment		6,55,450	
Solar Regional Test Centre			13,10,897
L T Line & UG Cabeling		41,91,697	6,88,880
Electrical Sub-Station 1 & 2			3,12,934
Vehicles- Bicycle			8,260
Furniture Including Hostels		1,46,87,364	1,38,03,767
Office Equipments		16,32,559	89,38,881
Computer Pheriphrals Including Projects		13,81,190	3,57,01,007
Books		18,63,909	36,65,488
Water Supply Distribution Network			
Water Supply Scheme		3,13,400	15,63,812
Childrens Park Equipments		81,000	
Networking		84,18,060	1,62,51,200
	Total	10,15,44,480	17,48,50,540
CAPITAL WORK IN PROGRESS:			
Boys Hostel-9 (WIP)		27,62,86,951	12,66,81,866
Central School Building (WIP)			6,81,75,554
Hydraulic Lab Building (WIP)			23,07,641
Library Building (WIP)			5,23,89,312
Married Scholar Hostels (WIP)		37,19,415	29,37,89,946
New Academic Building(WIP)		3,91,97,875	4,24,38,186
New Admin Building(WIP)			6,60,45,836
Non Faculty Staff Qtrs-100 Nos.(WIP)		15,07,282	7,17,65,739
Sewarage Disposal System (WIP)			1,03,26,390
Type (VI)Qtr 12 Units (WIP)		1,56,51,562	90,41,373
Type (IV) Qtr 30 Units(WIP)			1,30,73,497
Type (V)Qtr 20 Units (WIP)		2,46,59,155	1,86,59,259
Sports Complex (WIP)		21,59,629	1,37,25,226
Health Care Centre (WIP)		2,03,86,538	1,07,37,325
Expansion of E.E Building (WIP)		70,65,023	91,52,448
Mod of Mech-Workshop Bldg			31,03,048
Auditorium Building		1,11,40,364	
Eatout Dhaba		88,70,275	16,76,971
NABL Accrediated Lab Bldg (WIP)		47,19,872	83,02,474
Assam Type Civil Engg Shet			16,20,545
Water Supply Scheme			1,60,97,611
Earthquake Engg Lab Bldg		1,03,64,508	1,65,68,967
	Total	42,57,28,449	85,56,79,214
PROVISIONS : (TAX)			
VAT		3,03,26,152	2,19,68,491
INCOME TAX (Against Salary & Contrats)		89,05,326	2,36,96,693
Income Tax (Against Salary)		2,31,64,015	
PROFESSIONAL TAX		10,08,695	8,63,569
SERVICE TAX		3,42,321	9,38,120
Labour Cess Payable		51,18,105	32,99,366
	Total	6,88,64,614	5,07,66,239
Refund to Ministry			
Refund from Project Account		18,26,736	
	Total	18,26,736	

Amount in Rupees

Particulars	Current Year	Previous Year
Loans,Advances & Deposits		
Advance to Employees		
HTC Advance	5,59,400	9,41,100
LTC Advance	17,96,700	12,00,200
Other Advance To Employees		
Recoverable Advance	2,39,43,871	1,73,31,772
TA Advance	8,43,600	24,99,289
Soft Loan (Staff)	14,25,000	5,47,453
Festival Advance	8,48,500	7,66,250
Medical & Other Advance	3,70,500	1,100
Advance against Project account		52,570
Performance security against project		41,225
Advnce Tax on Salaries		13,45,592
Advances & Other Receivable on Capital A/c		
Deposit Work		
Deposit Work-33 KV Substation	4,92,034	
Deposit Work-CPWD Central School	23,60,000	3,00,00,000
Deposit Work-CPWD Non/faculty Qtrs	10,00,00,000	6,00,00,000
Deposit Work-CPWD New Admin Building	11,50,00,000	6,00,00,000
Deposit Work-CPWD Swage Disopl. Sytm	2,27,30,000	1,00,00,000
Deposit Work-HPL Married Sch Hostel	3,05,25,593	22,27,68,046
Deposit Work-PHE-Agmn Water Supply	67,25,740	80,34,000
Deposit Work-PHE- Water Supply Scheme		37,41,205
Deposit Work - APDCL		2,08,266
Secured Advance	17,74,10,500	1,31,00,000
Margin Money for LC against Equipment	85,82,732	18,00,001
Advance to Firms/Suppliers	66,60,296	18,23,681
Adv to Firm- PHE Water Supply	1,05,000	
Total	50,03,79,466	43,62,01,750
Current Liabilities & Provisions		
Hostel Caution Money	39,45,000	33,50,000
Institute Caution Money	18,20,000	13,08,000
Creditors for Goods& Services (Incl.EMD & SD)		
Godrej Mfg Co Ltd	29,52,349	19,00,131
IL&FS Technologies	12,04,575	
S.M Khetwat	3,23,495	
M/s Agni Power & Electronics Pvt. Ltd.	5,44,400	
M/s A.K.Choudhury	68,223	
EMD	69,14,595	35,59,242
SD	94,80,871	74,87,053
Realsoft Corpn		30,000
Sundry Creditors against DASA		79,105
GSLI Payable	8,37,710	8,15,610
EPF Subscription MR Employees	4,55,649	
GPF Advance Recovery	28,18,968	25,86,001
GPF Payable (Others)	6,32,000	2,24,000
GPF Subscription Payable (Others)	1,05,000	95,26,200
GPF Subscription Payable	1,21,08,000	

Amount in Rupees

Particulars	Current Year	Previous Year
NPS Subscription Payable	85,69,040	42,02,122
Vishveshwaraiya PhD Scheme	1,10,000	
PMMNT Fund	9,88,628	
SIS Library	2,09,075	
DST (SERB Project)	5,56,294	
CBSE Fund	1,58,496	
NRDC Fund	2,60,000	
Business Environment Law Cirriculum Fund	6,00,000	
WNL Library	1,73,659	
INDEST 2014, Library	6,85,803	
Alumini Association Fee	95,000	24,33,359
CCTV Payable	4,36,460	2,87,037
Deposit Remittance	5,35,538	5,56,339
Group Insurance Claim	16,15,241	8,16,707
Gymkhana	51,04,020	65,97,006
Hostel Management	26,14,000	0
Hostel Welfare	60	1,440
Institute Share on Consultancy	1,65,857	
JEE (MAIN)-2013		20,000
Liability Towards DCRG	50,000	11,000
L.I.C.I Payable	54,74,368	64,80,522
NPS Subscription & Contribution (Other Org)	3,25,752	
Mediclaim Insurance	16,89,148	15,62,621
Mess Advance	4,30,362	10,26,500
Mess Establishment	4,74,758	7,59,162
Processing Charges	6,84,400	5,67,250
Refundable Excess Deposit	3,51,949	20,99,149
Student Mediclaim	98,912	1,04,964
Fees Received In Advanced		2,35,61,870
Transcript Fee	8,03,935	7,01,800
Provision Non Plan Others	4,76,06,094	
Provision Plan Others	15,46,56,054	
Consultancy Cell CE Department	1,50,000	
Payable to Depreciation Fund	14,84,687	
Payable to Maintenance Fund Fund	2,45,049	
Depreciation Fund (Loan Refunded)	5,50,00,000	
Maintenance Fund (Loan Refunded)	5,50,00,000	
Staff Development Fund Payable	10,76,279	
Verification Fee	94,000	
Refunded to Ministry against Sponsorerd Projects		18,341
Refund from RPS Project A/c	41,973	
Outstanding Exp		8,86,095
Salary of outsource staff		6,97,665
Salary of MR Staff		10,91,014
Security Services		31,83,388
Stipen to PG Student		73,647
Vehicle Maintenance		55,400
Support to NITS KIDS		15,12,299

Amount in Rupees

Particulars	Current Year	Previous Year
Children Educational Payable		1,95,930
Water & Electricity		17,87,740
Electricity Charges		2,369
Newspaper & Periodicals		27,944
Electricity Maintenance		30,000
Teqip a/c against TADA		54,639
Horticulture payable		21,750
Maintanance of Furniture Fixture		68,080
Maintenance of Tools & Equipments		21,08,440
Building & others payable		93,000
Provision Others (Works & Others)		2,75,52,750
Provision for Equipment etc		19,50,92,468
Prepaid Expenses		1,03,24,815
Prepaid E-Journals	44,99,786	
Prepaid AMC	3,52,177	40,443
Prepaid Insurance	4,79,038	1,46,880
Accrued Income (receivable)		
Accrued Interest on Corpus Fund		58,81,163
Accrued Interest on Gratuity Fund		31,58,082
Accrued Interest on Maintenance Fund		59,72,930
Accrued Interest on Staff Dev Fund		9,42,929
Accrued Interst on Depreciation Fund		57,09,005
Accrued Interest on Non-Plan		4,02,152
Accrued interest on Axis Bank		29,431
House Rent Receivable		8,734
Shops & Canteen Rent Recivable		44,593
Other Receivable		
Grant Receivable Plan		49,00,00,000
Grant Receivable Non Plan		12,00,00,000
Loan to CCB/CCMT		3,28,241
Loan to CSAB		8,93,271
Frm SocPros 2014		9,500
From RTC Project		41,973
Loan to TEQIP (Refund)	50,000	
Receivable from Saswata Purkayastha Memorial Fund		3,500
Claims Receivable		
Receivable From CDAC	0	7,45,240
Receivable GH1	33,000	
Receivable against AIU Workshop Library	2,00,000	
Receivable Hostel 8	40,000	
EPF Subscription MR Employees (Recoverable)	27,08,310	
Total	40,11,88,037	96,18,90,031

Significant Accounting Policies

Schedule : 23

1. BASIS FOR PREPARATION OF ACCOUNTS

The financial statements are prepared under the Historical cost convention and on the basis of Generally Accepted Accounting Principles in India. Institute's accounts are maintained on accrual system of accounting in terms of the New System.

2. REVENUE RECOGNITION

2.1 Fees from students (except Tuition Fees), Sale of admission Forms, Interest on Savings Bank account are accounted on cash basis. Tuition Fees collected separately for each semester is accounted on accrual basis.

2.2 Income from Land, Buildings & other Property and Interest on Investments are accounted on accrual basis.

2.3 Interest on interest bearing advances staff for Soft Loan is accounted on actual basis every year.

3. FIXED ASSETS AND DEPRECIATION

3.1 Fixed assets are stated at cost of acquisition including inward freight, duties and taxes and incidental and direct expenses related to acquisition and commissioning..

3.2 Depreciation on Fixed assets is provided on written down value method as followed in earlier years, at the rates mentioned below. As regard toGovt. of India guidelines for providing depreciation on straight line method, the same could not be given effect during 2015-16 also, due to the fact that, change in method and rate of depreciation on the assets procured prior to 2014-15 will attracts complicacy.

Tangible Assets	Rate of Depreciation
1. Land	0%
2. Site Development	5%
3. Buildings	5%
4. Roads & Bridges	5%
5. Tube wells & Water Supply	5%
6. Electrical Installation and equipment	15%
7. Plant & Machinery	15%
8. Scientific & Laboratory Equipment	15%
9. Office Equipment	15%
10. Audio Visual Equipment	15%
11. Computers & peripherals	30%
12. Furniture, Fixtures & Fittings	10%
13. Vehicles	20%
14. Lib. Books & Scientific journals	30%
Intangible Assets (amortization):	
1. E-Journals	100%
2. Computer Software	15%

3.3 Depreciation is worked out 100% on the opening balance and proportionately on additions during the year. The amount of depreciation has been adjusted with the Capital Fund account and simultaneously shown under "Other Income" in the Income & Expenditure A/c.

3.4 Assets created out of Sponsored Projects funds, are setup by credit to Capital Fund with separate entity and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets.

3.5 Electronic Journals (E-journals) are separated from Library Books in view of the limited benefit that could be derived from the on-line access provided. E-journals are not in a tangible form, but temporarily capitalized in view of the magnitude of expenditure and the benefit derived in terms of perpetual knowledge of academic and Research Scholars, Depreciation is provided in respect of E-journals at a higher rate of 100% as against depreciation of 30% provided in respect of Library Books, since the access is permitted for a specific period only.

4. STOCKS: Expenditure on purchase of chemicals, glassware, publications other stores as revenue expenditure, they are valued at cost.

5. RETIREMENT BENEFITS

Retirement benefits of employees appointed prior to the year 2004 are entitled to pension and terminal benefits such as Gratuity, commuted value of pension, Leave encashment etc., are shown at actual as per provisions made by the Institute in annual Budget as Grants in Aid and provided for as per orders of the Govt. of India and paid as per schemes as applicable from time to time. Employees appointed after 2004 are governed by the New Pension Scheme to whom on a monthly basis matching employers contribution is paid from the salary grants provided under Non-plan Grant duly budgeted. Value of pension and gratuity received from previous employers of the Institution's employees, who have been absorbed in the Institution, is credited to the respective Provision Accounts.

6. INVESTMENT

Institute has invested temporary surplus in Multi Option Deposit Scheme and Term Deposits with banks. Investments are stated at cost. A schedule showing details of Investments of various funds annexed with the statement of accounts.

7. EARMARKED/ ENDOWMENT FUNDS.

The following long term funds are earmarked for specific purpose. Most of the funds have separate bank account. Those with large balances also have investments in term deposits with Banks. The income from Investment/advances, interest on savings Bank Accounts are credited to the respective Funds. The expenditure and advances are debited to the fund. The balance in the respective funds is carried forward and is represented on the assets side by the balance at Bank, Investments and accrued interest.

7.1 CORPUS FUND is created in compliance with Govt. of India, MHRD, Department of Higher Education, New Delhi vide letter no. F.21-7/2006-TS.III dated 31.03.2006. This fund is in the nature of Endowment Fund. Income from the investments of the fund is added to the fund. The balance in the Corpus Fund which is carried forward is represented by the balance in a separate bank Account, investment in Fixed deposits with the Bank and Accrued interest on investments. Surplus of Institute Revenue Generation is transferred to Corpus fund account and this fund is administered as per guidelines of the BOG.

9. GOVERNEMENT GRANTS

9.1 Government Grants are accounted on accrual basis (as per date of sanction letters).

9.2 To the extent utilized towards capital expenditure, (on accrual basis) government grants are transferred to the Capital fund.

9.3 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.

9.4 Unutilized grants including advances paid out of such grants are carried forward and exhibited as liability in the Balance Sheet.

10. INVESTMENTS OF EARMARKED FUNDS AND INTEREST INCOME ACCRUED ON SUCH INVETSMENTS:

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

11. 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.

12. The Institution itself also awards Scholarships to M.Tech./ M.Sc. & Ph.D. scholars, which are accounted as academic expenses.

Schedule : 23

Contingent Liabilities and Note to Accounts (Illustrative)

1. **CONTINGENT LIABILITIES :** LTC expenditure against 5 employees related to the F.Y 2015-16 may required to be paid during the 2016-17, subject to approval of the Board.
2. **CAPITAL COMMITMENTS :** The value of the ongoing contract works remaining to be executed on Capital account and not provided for amounted to Rs.12439.00 lacs as on 31.03.16.
3. **FIXED ASSETS:**
   - 3.1 Addition in the year to Fixed Assets in Schedule 4 include Assets purchased out of Plan Funds Rs. 88,37,45,134/- and Sponsored Projects Rs. 33,42,187/-. The assets have been set up by credit to Capital Fund.
   - 3.2 In the Balance Sheet as on 31.03.16 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 2015, 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 2015-16 have been attached with the Institute accounts.The balance held in New Pension Scheme in the Institution in respect of 20 members amounting to Rs.15,13,796/- out of which payment of NPS against 15 members are in process and remaining for 5 member PRA numbers are yet to be received.
9. **Penison Fund Contibution (Schedule-2):** During the year a total amount of Rs.379.84 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. Sponsored Project Account (Schedule 3A): Deficit balance of Rs. 41973.00 in the year 2014-15 against MNRE, GoI projects has been recouped during the year.
11. **Fixed Assets (Schedule-4) :** Addition of fixed assets during the year amounting to Rs. 24156.94 Lac includes Rs.15285.62 Lac being adjustment of WIP and Rs.33.42 Lacs from Sponsored Projects. Expenditure incurred against Patent from IRG amounting Rs. 0.42 Lac aslo taken into account. Thus total capital expenditure of Rs.8837.45 Lac booked as capital expditure from Plan Grant only.
12. A statement showing the details of investment and interest accrued is annexed, which is corresponding to Schedule 5 and 6.
13. **Grants and Subsidies (Schedule-10) :** Interest earned on Plan Grant fund investment amounting Rs. 78.84 lacs has been utilized fully, the balance under Plan Grant Rs.521.08 Lac is only against grant received.
14. **Prior Period Expenses (Schedule-22) :** Children Education Ellowance for the year 2014-15 paid during the year booked as Prior Period expense as no provision was made against the said expenditure during 2014-15.

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

GPF and NPS ACCOUNT

Balance Sheet as at March 31, 2016

Amount in Rupees

Liabilities	Current Year	Previous Year	Assets	Current Year	Previous Year
CAPITAL FUND (GPF):			**INVESTMENT:**		
Opening Balance	28,87,08,602	31,87,31,187	Investment with Bank	24,17,50,812	26,15,24,932
Less: Final Payment	4,72,13,813	4,03,31,282	Interest accrued on FD	30,71,546	3,43,67,788
Less: Fund towards Penion Fund transferred	69,27,606	2,62,90,744			
Balance	23,45,67,183	25,21,09,161	**CURRENT ASSETS:**		
Add: Excess prov. of Pension fund cont. reverted	97,60,708		Advance to Subscriber	48,87,731	47,87,034
Add: GPF Subscription	1,11,85,900	1,04,48,300	Receivable from Institute against NPS Sub & Contr	-	22,70,152
Add: GPF Subscription (Other Org)	2,72,000	2,39,400	Receivable from Institute against GPF Subs.	-	9,22,100
Add: Excess payment recovered	18,646				
Add: Excess of Income Over Exp	2,03,12,705	2,59,11,741			
Total Capital Fund	27,61,17,142	28,87,08,602			
CURRENT LIABILITIES & PROVISIONS:			**CASH AT BANK**	2,92,00,049	72,95,514
Penions Fund Contr. Payable	-	2,05,01,825			
NPS Account:					
Opening Balance	15,56,538	71,270			
Add: Subscription & Contribution (Received)	1,48,67,928	84,04,244			
Add: Subscription & Contribution (Provision))	-	22,70,152			
Add: Subscription & Contribution (Other Org)	4,08,668	1,80,032			
Less: Paid during the year (NSDL)	1,40,40,138	93,69,160			
Closing Balances	27,92,996	15,56,538			
Other Liabilites:					
Payable to CPF Subscriber	-	3,318			
Unclassified receipts	-	3,97,237			
Total	**27,89,10,138**	**31,11,67,520**	**Total**	**27,89,10,138**	**31,11,67,520**

Date: 10th May, 2016 **Registrar** **Director**

Place: Silchar NIT Silchar NIT Silchar

Income and Expenditure Account for the Year Ended March 31, 2016

Amount in Rupees

Expenditure	Current Year	Previous Year	Income	Current Year	Previous Year
Bank Commission	950	405	Interest Earned on Investment	1,68,20,167	43,87,344
Excess of Income over Expenditure	2,03,12,705	2,59,11,791	Interest Accrued on Investment	30,71,546	2,11,18,037
			Interest received on S/B A/c	4,14,323	4,06,815
			Interest Received against Autosweep	7,619	-
Total	**2,03,13,655**	**2,59,12,196**	**Total**	**2,03,13,655**	**2,59,12,196**

Date: 10th May, 2016 **Registrar** **Director**

Place: Silchar NIT Silchar NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

GPF & NPS ACCOUNT

Receipts and Payments Accounts for the Financial Year 2015-16

Amount in Rupees

Receipts	Current Year	Previous Year	Payments	Current Year	Previous Year
Opening Balance as on 01.04.2015					
Cash at Bank	72,95,514	1,20,58,567	**ACCUMULATED FUND:**		
ACCUMULATED FUND:			**GPF Adv./Withdrawal**		
GPF Subscription	1,11,85,900	95,26,200	GPF Withdrawal		4,03,31,282
GPF Subscription Received (Other Org)	2,72,000	2,39,400	Adavce to Subscriber	34,06,600	33,93,405
GPF Subscription payable	-	1,28,799	Pension Fund Contrb. Paid	1,07,96,185	2,62,90,744
Leave salary payable from other Organisation	3,30,750	-	GPF Subscription	-	1,28,799
Pension Fund Contrb. Other Org	51,750	-	Final payment	4,72,13,813	-
GPF Advance recovery	33,05,903	25,86,001	Leave salary other Organisation transferred	7,27,987	-
NPS Subscription (Institute)	74,33,964	42,02,122	Acculated Capital Fund	69,27,606	-
NPS Contribution (Institute)	74,33,964	42,02,122	NPS Subscription (Institute)	68,90,335	45,94,564
NPS Subscription (Other Org)	2,04,334	90,016	NPS Contribution (Institute)	68,90,335	45,94,564
NPS Contribution (Other Org)	2,04,334	90,016	NPS Subscription (Other Org)	1,29,734	90,016
Voluntary Deposit	-	-	NPS Contribution (Other Org)	1,29,734	90,016
Pension Fund Contrb. Payable		2,05,01,825			
GPF Subscription Receivable (2014-15)	9,22,100	-	**INVESTEMENT**		
NPS Contribution Receivable (2014-15)	11,35,076	-	Investment during the year	23,00,00,000	12,00,00,000
NPS Subscription Receivable (2014-15)	11,35,076	-			
Final payment	-	-	**EXPENSES**		
Accumulated Capital Fund	18,646	-	Bank Charges	950	455
INVESTMENT			**Unclassified Receipts (Transferred):**		
Investment Matured	25,15,24,932	12,46,27,664	Unclassified Receipts (Transferred):	25,094	-
Accrued Interest Received (Maturity)	3,36,85,356	2,33,65,231			
INTEREST			**Closing Balance:**		
Interest Received against FD	1,57,51,787	43,87,344	Cash at Bank	2,92,00,049	72,95,514
Interest Received against Autosweep	7,619				
Interest on SB A/c	4,14,323	4,06,815			
CURRENT LIABILITY					
Unclassified Receipts	25,094	3,97,237			
Total	**34,23,38,422**	**20,68,09,359**	**Total**	**34,23,38,422**	**20,68,09,359**

Date: 10th May, 2016
Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

Schedule of Investment & Interest accrued of C P Fund upto 31.03.2016

Amount in Rupees

SI	Name of Bank	Fixed Deposit/Bond Account No	Dated	Face Value Rs.	Date of Maturity	Matured Amount	Accrued Int. upto 2014-15	Accrued intt. 2015-16	Accrued Int. upto 31.03.16
2	IDBI	0293106000022385	24-11-2015	56,70,366	24-12-2016	61,61,758	-	155623	155623
3	-do-	0293106000022394	24-11-2015	56,70,366	24-12-2016	61,61,758	-	155623	155623
4	IDBI	0293106000023694	04-02-2016	40,00,000.00	04-02-2017	43,19,126.00	-	48333	48333
5	IDBI	0293106000023700	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	108750	108750
6	IDBI	0293106000023719	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	108750	108750
7	IDBI	0293106000023728	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	108750	108750
8	IDBI	0293106000023737	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	108750	108750
21	Vijaya Bank	800603311004617	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
22	Vijaya Bank	800603311004619	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
23	Vijaya Bank	800603311004616	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
24	Vijaya Bank	800603311004618	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
25	Vijaya Bank	800603311004614	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
26	Vijaya Bank	800603311004615	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
27	Vijaya Bank	800603311004612	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
28	Vijaya Bank	800603311004613	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
29	Vijaya Bank	800603311004610	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
30	Vijaya Bank	800603311004611	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
31	Vijaya Bank	800603311004622	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
32	Vijaya Bank	800603311004620	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
33	Vijaya Bank	800603311004621	04-02-2016	90,00,000.00	04-02-2017	97,18,034.00	-	110625	110625
34	Vijaya Bank	800603311004609	04-02-2016	30,00,000.00	04-02-2017	32,39,345.00	-	36875	36875
35	Canara Bank	3050401001158/9	18-02-2016	3,80,360.00	18-02-2017	4,10,705.00	-	3521	3521
	Canara Bank	3050401001509	-	29,720.00				2516	2516
36	Canara Bank	3050401001691/1	06-02-2016	90,00,000.00	06-02-2017	97,18,034.00	-	106562	106562
37	Canara Bank	3050401001691/2	08-02-2016	90,00,000.00	08-02-2017	97,18,034.00	-	102688	102688
38	Canara Bank	3050401001691/3	09-02-2016	90,00,000.00	09-02-2017	97,18,034.00	-	100750	100750
39	Canara Bank	3050401001691/4	10-02-2016	90,00,000.00	10-02-2017	97,18,034.00	-	98812	98812
40	Canara Bank	3050401001691/5	11-02-2016	90,00,000.00	11-02-2017	97,18,034.00	-	96875	96875
41	Canara Bank	3050401001691/6	12-02-2016	50,00,000.00	12-02-2017	53,98,908.00	-	52743	52743
42	UCO Bank	20130310035245	06-02-2016	90,00,000.00	06-02-2017	97,18,034.00	-	106875	106875
43	UCO Bank	20130310035252	06-02-2016	90,00,000.00	06-02-2017	97,18,034.00	-	106875	106875
44	UCO Bank	20130310035269	06-02-2016	20,00,000.00	06-02-2017	21,59,563.00	-	23750	23750
			Total Rs.	**24,17,50,812**	**13,25,838**	**26,10,83,979**	**-**	**30,71,546**	**30,71,546**

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

Fixed Deposits Matured

Amount in Rupees

Sl	Name of Bank	Fixed Deposit/Bond Account No	Dated	Face Value Rs.	Date of Maturity	Matured Amount	Accrued Int. upto 2014-15	Accrued intt. 2015-16	Accrued Int. Recd 2015-16	Intt Recd against FD. 2015-16
1	SBI	32194969292	15/02/2012	65,24,932	07.10.2015	88,46,741	19,49,150	-	19,49,150	**3,72,659**
2	IDBI	293106000016825.	12.07.2014	50,00,000	24.11.2015	56,70,366	3,41,216	-	3,41,216	**3,29,150**
3	-do-	293106000016816	12.07.2014	50,00,000	24.11.2015	56,70,366	3,41,216	-	3,41,216	**3,29,150**
9	PNB	3335	20/01/2012	1,50,00,000	04.02.2015	2,13,30,443	52,26,752	-	52,26,752	**11,03,691**
10	-do-	3326	20/01/2012	1,50,00,000	04.02.2015	2,13,30,443	52,26,752	-	52,26,752	**11,03,691**
11	-do-	3797	31/03/2012	1,00,00,000	16.04.2015	1,37,66,011	30,59,911	-	30,59,911	**7,06,100**
12	-do-	3803	31/03/2012	1,00,00,000	16.04.2015	1,37,66,010	30,59,910	-	30,59,910	**7,06,100**
13	Vijaya Bank	800603311003253	08-02-2014	1,50,00,000	08.02.2016	1,77,39,193	16,72,627	-	16,72,627	**10,66,566**
14	-do-	800603311003252	08-02-2014	1,50,00,000	08.02.2016	1,77,39,193	16,72,627	-	16,72,627	**10,66,566**
15	-do-	800603311003254	08-02-2014	1,50,00,000	08.02.2016	1,77,39,193	16,72,627	-	16,72,627	**10,66,566**
16	-do-	800603311003321	22-03-2014	1,00,00,000	22.03.2016	1,17,49,036	10,36,835	-	10,36,835	**7,12,201**
17	-do-	800603311003324	22-03-2014	1,00,00,000	22.03.2016	1,17,49,036	10,36,835	-	10,36,835	**7,12,201**
18	-do-	800603311003323	22-03-2014	1,00,00,000	22.03.2016	1,17,49,036	10,36,835	-	10,36,835	**7,12,201**
19	-do-	800603311003322	22-03-2014	1,00,00,000	22.03.2016	1,17,49,036	10,36,835	-	10,36,835	**7,12,201**
20	-do-	800602051000126	14.02.2015	5,00,00,000	17.02.2016	5,25,69,692	5,63,756	-	5,63,756	**20,05,936**
35	Canara Bank	30504011158/1	19.04.2014	1,50,00,000	12.01.2016	1,72,84,753	13,58,476	-	13,58,476	**9,26,277**
36	Canara Bank	30504011158/2	19.04.2014	1,50,00,000	12.01.2016	1,72,84,753	13,58,476	-	13,58,476	**9,26,277**
37	Canara Bank	30504011158/3	19.04.2014	1,50,00,000	12.01.2016	1,72,84,753	13,58,476	-	13,58,476	**9,26,277**
38	Canara Bank	30504011158/4	19.04.2014	1,50,00,000	12.01.2016	1,72,84,753	13,58,476	-	13,58,476	**9,26,277**
										29,720
										380360
			Total:	**26,15,24,932**	**0**	**31,23,02,807**	**3,43,67,788**	**0**	**3,43,67,788**	**1,68,20,167**

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

Technical Education Quality Improvement Programme [TEQIP PHASE- II]

Balance Sheet as at 31st March, 2016

Amount in Rupees

S. No.	Paricular	Schedule No.	Current Year Rs	Previous Year Rs
A	**SOURCE OF FUNDS:**			
	Opening Balance		12,50,00,000	12,50,00,000
	1) Amount received from: Govt of India		2,50,00,000	-
	2) Contribution from:			-
	3) Less: Excess of Expenditure over income:			
	As per last Account Rs. 6,63,89,355.56			
	Add during the year Rs. 1,46,06,962.00		8,09,96,318	6,63,89,356
TOTAL			**6,90,03,682**	**5,86,10,644**
B	**APPLICATION OF FUNDS**			
	1) Fixed Assets	I	5,75,21,326	5,74,21,326
	2) Investment	II	-	-
	2) Work in progress - Scheme work under implementation		-	-
	TOTAL		5,75,21,326	5,74,21,326
	3) A. Current Assets, Loans and Advances	III		
	a) Cash Balance			
	b) Bank Balance		1,15,10,687	12,17,649
	c) Advance for Capital Goods	IV	-	-
	d) Loans and Advances	V	-	-
TOTAL (A)			**1,15,10,687**	**12,17,649**
	B. Less: Curent Liabilities	VI		
	Earnest Money Deposit Etc		28,331	28,331
Net Current Assets (A - B)			**1,14,82,356**	**11,89,318**
TOTAL			**6,90,03,682**	**5,86,10,644**

Place, Silchar
Date: 10th May, 2016

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

Technical Education Quality Improvement Programme [TEQIP PHASE- II]

Income and Expenditure Account

For the Year Ended 31st March, 2016

(Amount in Rs.)

EXPENDITURE			INCOME		
Previous Year	Particulars	Amount Rs.	Previous Year	Particulars	Amount Rs.
	Incremental Operating Cost				
20,38,766	(a) Operation & Maintenance	6,88,180	6,70,020	Interest earned	90,083
10,000	(b) Consumables	10,000		Other income	-
45,161	(c) Salary	1,05,000			
8,51,622	Industry Institute Interaction	15,42,514			
1,38,38,212	Teaching & Research Assistantship	96,67,032	1,99,64,450	**Excess of Expenditure over Income**	1,46,06,962
17,12,612	Faculty & staff Development	9,09,395			
5,30,808	Research & Development	-			
25,500	Acedemic Support for weak students	1,42,104			
1,21,109	Institutional Mgt. Capacity Enhancement	20,720			
14,60,680	Institutional Reforms	16,12,100			
2,06,34,470	**Total Rs.**	**1,46,97,045**	**2,06,34,470**	**Total Rs.**	**1,46,97,045**

Place, Silchar
Date: 10th May, 2016

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

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

Schedule for Fixed Assets as on 31St March, 2016

Schedule - I

Amount in Rupees

Sl	Particulars	Gross Balance as on 01/04/2015	Addition during the year	Deletion during the year	Gross Balance as on 31/03/2016
1	Equipment	4,81,62,699	1,00,000	-	4,82,62,699
2	Furniture	-	-	-	-
3	Books & LRs & Software	92,58,627	-	-	92,58,627
4	Minor Works	-	-	-	-
Total		**5,74,21,326**	**1,00,000**	**-**	**5,75,21,326**

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

Technical Education Quality Improvement Programme [TEQIP PHASE- II]

Schedules forming part of Balance Sheet as at 31st March, 2016

Amount in Rupees

Current Assets: Investment	Schedule II	Current Year	Previous year
STDR		-	-
Total		0.00	0.00
Current Assets, Loans and Advances:	**Schedule III**	Current Year	**Previous year**
Cash in Hand			
Cash at Bank (SBI, NIT Branch)		1,15,10,687	12,17,649
Total		1,15,10,687	12,17,649
Advance for Capital Goods	**Schedule IV**	Current Year	**Previous year**
Total		0.00	0.00
Loans and Advances:	**Schedule V**	Current Year	**Previous year**
T A Advance		-	-
Advance to Firm		-	-
Advances		-	-
Total		0.00	0.00
Current Liabilities :	**Schedule VI**	Current Year	**Previous year**
EARNEST MONEY DEPOSIT:			
Zephyer 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, 2016

(Amount in Rs.)

Previous Year	Receipt	Current Year	Previous Year	Payment	Current Year
	Opening Balance :		73,24,393	Equipment	1,00,000
-	i) Cash in Hand	-	-	Furniture	-
2,91,02,578	ii) Cash at Bank	12,17,649	10,50,903	Books & LRs & Software	-
				Investment:	
			-	Investment	-
	Grants-in-Aid:		-	Loan from Institute	1,30,000
-	Received from Govt. of India	2,50,00,000		**Indirect Expenditure:**	
				Incremental Operating Cost:	
	Investment:		20,38,766	(a) Operation & Maintenance	6,88,180
-	Investment	-	10,000	(b) Consumables	10,000
			45,161	(c) Salary	1,05,000
	Other Receipts:		8,51,622	Industry Institute Interaction	15,42,514
6,70,020	Interest Earned	90,083	1,38,38,212	Teaching & Research Assistanceship	96,67,032
-	Accrued Interest on Investment	-	17,12,612	Faculty & staff Development	9,09,395
			5,30,808	Research & Development	-
	Other Receipt :		25,500	Acedemic Support for weak students	1,42,104
1,20,642	T A Advance	-	1,21,109	Institutional Management Capacity Enhancement	20,720
-	Advance to Firm	1,42,000	14,60,680	Institutional Reforms	16,12,100
38,60,441	Advances (for workshop etc)	15,11,000			
2,84,248	VAT	-		**Other Payments :**	
416	Professional Tax	624	20,800	T A Advance	-
3,038	Income Tax	21,100	-	Advance to Firm	1,42,000
-	Earnest Money Deposit	-	34,68,752	Advances (for workshop etc)	15,11,000
-	Loan from Institute	1,30,000	2,84,248	VAT	-
15,646	Deposit remittence	-	416	Professional Tax	624
			3,038	Income Tax	21,100
	IRG:		40,000	Earnest Money	-
			12,360	Deposit remittence	-
-	Cost of Tender paper	-		**IRG:**	
-	Postal Charge	-	-	Cost of Tender paper	-
			-	Postel Charge	-
				Closing balance :	
			-	Cash in hand	-
			12,17,649	Cash at Bank (SBI, NIT Br)	1,15,10,687
3,40,57,029	**TOTAL Rs.**	**2,81,12,456**	**3,40,57,029**	**TOTAL Rs.**	**2,81,12,456**

Place, Silchar
Date: 10th May, 2016

Registrar
NIT Silchar

Director
NIT Silchar

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