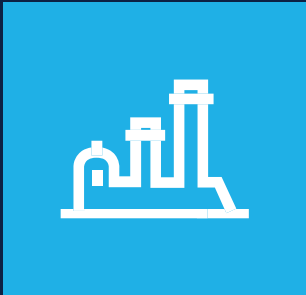




**ANNUAL
REPORT** 2014-15

**NATIONAL INSTITUTE OF
TECHNOLOGY SILCHAR**





ANNUAL REPORT

2014 - 2015



NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR



FROM THE DIRECTOR'S DESK

Over the last three decades NIT Silchar has emerged as one of the leading technical institutes in the entire eastern region of the country with the vision to be an international centre of excellence and the mission to develop innovative and ethical future leaders. Beginning as REC at a time when professional technical education was virtually unknown in this part of the country the Institute has made great strides over the years in providing technical and management education of the highest quality and in developing tomorrow's industry leaders and researchers.

Over the years, NIT system has evolved to reach and hold a unique position of pride in the technical education system in India. This system is known world over for providing quality technological and scientific education and an environment conducive to new and path breaking research and development in frontier areas of engineering, technology and science. The pursuit of technological excellence in a highly competitive environment is the benchmark of the NIT system. And I am proud to state that NIT Silchar has been able to design engineering and management programs that instill leadership and teamwork, and carries a global appeal. The undergraduate, postgraduate and PhD programs are regularly revised to comply with global technical developments and market demands.

The Institute has nationally and internationally acclaimed faculty members who bring forth right mix of industry-academic experience. They are actively involved in their pursuit of creating and disseminating knowledge through teaching, research and training. In their endeavor to develop innovative teaching and training techniques they offer consulting services in interdisciplinary areas to leading organizations.

The research conducive green campus encourages the young minds to develop attributes and knowledge beyond the constraints of traditional classroom teaching and learning. The flexibility in the design of management and engineering education in the Institute incubates global trends and helps to meet future demands, ensuring better Institute-Industry partnership both at local and global levels.

Thus at NIT Silchar, we are committed towards creating a vibrant community of value creators for our country.

Prof. N. V. Deshpande

Director

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From the Director's Desk

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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.

MISSION

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

OBJECTIVES

OBJECTIVES

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

INTRODUCTION

Historical Background

In the late fifties, the Government of India decided to establish Regional Engineering 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 Engineering Colleges were established as joint ventures of the Government of India and the respective State Governments. Assam is considered as the flag bearer of the Northeast India and so in the year 1967 the 15th REC was officially established in Silchar. However it took almost a decade for REC 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 engineering, namely, Civil Engineering, Mechanical Engineering, and Electrical Engineering. The total intake in the first batch was 60 students. The inadequate infrastructure facilities consisted 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 to Guwahati University. The first batch of BE students were awarded degrees in 1982-83. Subsequently, two more branches, namely, Electronics and Telecommunication Engineering, and Computer Science and Engineering started functioning from 1983 and 1987, respectively. The affiliation was later shifted to Assam University in 1994.

On the basis of the report of the High Powered Joint Expert Committee of AICTE and UGC under the chairmanship of Prof. S. K. Joshi, Director General of Council for Scientific and Industrial Research (CSIR), Regional Engineering College Silchar has been transformed and upgraded to National

Institute of Technology, Silchar with the status of Deemed University on 28th June 2002. The institute has been taken over by Government of India and subsequently made into 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 in 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 rooms, laboratories, resource-centres, sports grounds, open-air rooms, hospital, food-courts and many more being embraced by the greenery, expansive tea gardens 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 student
- 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. There is a full-fledged computerized branch of State Bank of India,

Post-Office, Health Centre and a Shopping Complex. A well-equipped Canteen is situated adjacent to the instructional buildings to facilitate the students and staff members during and beyond the working hours. There is a well-equipped Gymkhana and a Students Activity Center which are utilized by students for activities like fitness, indoor games and similar other pursuits. There is a 40 room Guest House in the campus for the visitors. There is a Kids School, Lower Primary School and a Kendriya Vidyalaya of up to class X in the campus for the schooling of the children.



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	Chairperson (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 woman, 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

Sl. No.	Members	Position
1.	Prof. Asis Datta, Professor of Eminence, NIPGR, Delhi (w.e.f. 6th Feb.'12 to 5th Feb.'15)	Chairperson
2.	Prof. N.V. Deshpande, Director, NIT Silchar	Ex-officio Member
3.	Sri. Amarjeet Sinha, Additional Secretary, Deptt. of Higher Education, MHRD, Govt. of India, Shastri Bhavan, C-Wing, New Delhi	Member
4.	Sri. Yogendra Tripathi, Financial Adviser & Jt. Secretary, Deptt. of Higher Education, MHRD, Govt. of India, New Delhi.	Member
5.	Sri. H.K. Sharma, Commissioner & Secretary, Govt. of Assam, Higher Education (Tech.) Deptt., Guwahati	Member
6.	Dr. Atul Bora, Director of Technical Education, Govt. of Assam, Guwahati	Member
7.	Prof. Sunanda Dhar, Head of Electronics Sciences, University of Calcutta, Kolkata (w.e.f. 06th Feb. '09 to 3rd March'15) Prof. S. L. Bapat , Professor of Mechanical Engg. , IIT Bombay (w.e.f. 4th March' 15)	Member
8.	Prof. Samarendra Dandapat, Deptt of Electronics & Electrical Engineering, IIT Guwahati (w.e.f. 22nd Aug.'12 to 3rd March'15) Prof. S.K. Kakoty, Dean of Infrastructure Planning and Management, IIT Guwahati (w.e.f. 27th March' 15)	Member
9.	Prof. Uma Bhattacharya, Deptt. of CSE, B.E.S.U., Sibpur, Howrah	Member
10.	One Professor (Nominee of the Senate)	Member
11.	One Assistant Professor (Nominee of the Senate)	Member
12.	Sri. J. Patro, Registrar	Member Secy.

Finance Committee

Name and Position of Members of Finance Committee

Sl. No.	Name and Address	Position
1.	Prof. Asis Datta, Professor of Eminence, NIPGR, Delhi (w.e.f. 6th Feb.'12 to 5th Feb.'15)	Chairperson
2.	Prof. N.V. Deshpande, Director, NIT Silchar (Ex-officio)	Member
3.	Sri. Amarjeet Sinha, Additional Secretary, Deptt. of Higher Education, MHRD, Govt. of India, Shastri Bhavan, C-Wing, New Delhi.	Member

Sl. No.	Name and Address	Position
4.	Sri. Yogendra Tripathi, Financial Adviser & Jt. Secretary, Deptt. of Higher Education, MHRD, Govt. of India, New Delhi.	Member
5.	Two nominees of Board of Governors	Member
6.	Sri. J. Patro, Registrar, (w.e.f 2nd September'14)	Member-Secy

Building and Works Committee

Name and Position of Members of Building and Works Committee

Sl. No.	Name and Address	Position
1.	Prof. N. V. Deshpande, Director, NIT Silchar	Chairperson
2.	The Director (NITS), MHRD, Dept. of Higher Education, C-Wing, Shastri Bhavan, New Delhi - 110001	Member
3.	The Director, IFD, Govt. of India, MHRD, Dept. of Higher Education, Shastri Bhavan, New Delhi - 110001	Member
4.	Prof. A. I. Laskar, HOD, Civil Engineering Dept., NIT Silchar	Member
5.	Prof. M. Ali Ahmed, Dean (P&D), NIT Silchar	Member
6.	Superintending Engineer, PWD, Silchar Building Circle, Silchar-1	Member
7.	Executive Engineer (Elect.), Office of the Chief Engineer, PWD (Bldg.), Assam, Chandmari, Guwahati-3	Member
8.	Sri. J. Patro, Registrar, NIT Silchar	Member-Secy

The Senate

Name and Position of Members of Senate

Sl. No.	Name and Address	Position
1.	Prof. N.V. Deshpande, Director, NIT Silchar	Chairperson
2.	Prof. A.K. Dey, Deptt. of CE, NIT Silchar	Member
3.	Prof. Fazal A. Talukdar, Deptt. of ECE, NIT Silchar	Member
4.	Prof. A.K. Sinha, Deptt. of EE, NIT Silchar	Member
5.	Prof. K.M. Pandey, Deptt. of ME, NIT Silchar	Member
6.	Prof. Nidul Sinha, Deptt. of EE, NIT Silchar	Member
7.	Prof. S. Baishya, Dean (R & C), NIT Silchar	Member

Sl. No.	Name and Address	Position
8.	Prof. S. Choudhury, Professor, Deptt. of CE, NIT Silchar	Member
9.	Prof. R.D. Misra, Deptt. of ME, NIT Silchar	Member
10.	Prof. Gurudas Das, Professor, Deptt. of HSS, NIT Silchar	Member
11.	Prof. D. Chakraborty, Professor, Deptt. of CE, NIT Silchar	Member
12.	Prof. A. I. Laskar, Professor, Deptt. of CE, NIT Silchar	Member
13.	Prof. M. A. Ahmed, Professor, Deptt. of CE, NIT Silchar	Member
14.	Prof. B. K. Roy, Professor, Deptt. of EE, NIT Silchar	Member
15.	Prof. C. R. Bhattacharjee, Professor, Deptt. of Chemistry, Assam University, Silchar	Member
16.	Prof. Sunanda Dhar, Professor, Deptt. of Electronic Sciences, Calcutta University	Member
17.	Prof. (Ms.) Rohini M Punekar, Professor of HSS Deptt., IIT Guwahati	Member
18.	Prof. P. S. Choudhury (on lien, NIT Meghalaya)	Member
19.	Prof. Rajat Gupta (on deputation, NIT Srinagar)	Member

DEANS AND HODs

Dean (Academic Affairs)	:	Prof. F. A. Talukdar
Dean (Alumni Relation)	:	Prof. A. K. Sinha
Dean (Faculty Welfare)	:	Prof. R.D. Misra
Dean (Planning & Development)	:	Prof. M. A. Ahmed
Dean (Research & Development)	:	Dr. S. Baishya
Dean (Student Welfare)	:	Dr. A. K. Barbhuiya
HOD, Civil Engineering	:	Prof. A. I. Laskar
HOD, Computer Science Engineering	:	Ms. Ujwala Barua (till 06.04.14) Dr. Nidul Sinha (from 07.04.14)
HOD, Chemistry	:	Dr. Pranjit Barman
HOD, Electrical	:	Dr. B. K. Roy
HOD, Electronics & Communication Engg.	:	Dr. R. H. Laskar
HOD, Electronics & Instrumentation Engg.	:	Dr. Shahedul Haque Laskar
HOD, Humanities and Social Sciences	:	Dr. Gurudas Das
HOD, Management Studies	:	Dr. Asim Kumar Das
HOD, Mathematics	:	Mr. Bijan Nath
HOD, Mechanical Engineering	:	Dr. P. K. Patowari
HOD, Physics	:	Dr. Subrat K. Barik
Co-ordinator (TEQIP)	:	Dr. M. A. Ahmed
Chairman (Board of Hostel Management)	:	Dr. A. K. Barbhuiya
Head, Workshop	:	Dr. P. K. Patowari
Head, Training & Placement	:	Dr. N. B. D. Choudhury, FIC
Head, Computer Centre	:	Sri Mithlesh Kumar
Head, Library	:	Dr. K. C. 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 provide for 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 (O-O-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 year (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 Post graduate programme and three years part-time programme in Engineering 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.

M.B.A.

The minimum eligibility criterion for admission to MBA is Bachelor degree in any branch of engineering/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 Course (Ph.D.)

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

1. Master Degree in Engineering/Technology or equivalent in an appropriate area with a minimum CPI of 6.5 or equivalent (60% of marks).

2. Bachelor Degree in Engineering/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	7 th and 8 th	6-8 weeks
B.Tech. (4 years) w.e.f. 2012 batch	8	32-48	320	15-20	7 th and 8 th	6-8 weeks (Audit)
M.Tech. (2 years)	4	24-32	Min 96	Min 32	3 rd and 4 th	-
M.Sc. (2 years)	4	26-30	Min 96	12-18	4 th	-
MBA (2 years)	4	Min 36	150	2	4 th	-
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 were held in the month of April-May 2014 (both UG & PG).
- Odd semester examinations were held in the month of Nov-December, 2014 (both UG & PG)

Statistics of the Results

a) Summary of results of End semester examination held in April-May 2014.

Programme	Branch & Course	Number Appeared	Number Passed	Percentage Passed
B.Tech.	Civil Engg. (Water Resources Engg.)	12	12	100%
	Civil Engg. (Earthquake Engg.)	15	15	100%
	Civil Engg.(Transportation Engg.)	09	09	100%

Programme	Branch & Course	Number Appeared	Number Passed	Percentage Passed
B.Tech.	Civil Engg.(Geo-technical Engg.)	08	08	100%
	Mech. Engg. (Thermal Engg.)	20	20	100%
	Mech. Engg.(Design & Manufacturing)	19	19	100%
	Electrical Engg. (Power & Energy system Engg.)	18	18	100%
	Electrical Engg. (Control & Industrial Automation Engg.)	09	09	100%
	Electronics & Comm. Engg. (Microelectronics & VLSI Design)	19	19	100%
	Computer Science & Engg.	10	10	100%
M.Sc.	Chemistry (Applied Chemistry)	09	09	100%
	Physics (Applied Physics)	06	06	100%
MS	Master of Business Administration(MBA)	22	22	100%
B.Tech.	Civil Engg.	107	95	88.79%
	Mechanical Engg.	102	93	91.18%
	Electrical Engg.	96	81	84.38%
	Electronics & Comm. Engg.	88	79	89.77%
	Computer Sc. & Engg.	80	61	76.25%
	Electronics & Instrumentation Engg.	21	21	100%

b) List of candidates qualified for the Degree of Bachelor of Technology after 11th Convocation held in May 2013 and before End semester examination held in April-May, 2014.

Branch	Appeared	Passed
Civil Engineering (B.Tech.)	01	01
Mechanical Engineering (B.Tech.)	07	07
Electrical Engineering (B.Tech.)	02	02
Electronics & Communication Engg. (B.Tech.)	06	06
Computer Science & Engg. (B.Tech.)	04	04

Enrolment

Undergraduate

Table: Semester-wise, course wise enrolment with sex and caste breakup for the period 2014-15.

(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	59	6	26	5	14	3	5	5	1 OPPH	-	124
	ME	58	2	32	-	18	-	8	1	2 OPPH 1 OBPH		122
	EE	56	5	29	1	15	1	6	2	1 OPPH 1 OBPH		117
	ECE	52	9	25	7	15	1	7	2	-		118
	EIE	24	3	13	2	8	1	4	1	1 OPPH		57
	CSE	45	6	22	2	14	-	4	2	1 OPPH 1 OBPH		97
		294	31	147	17	84	6	34	13	9	-	635
3RD & 4TH	CE	44	6	43	1	17	-	8	-	1 SCPH	-	120
	ME	62	3	38	1	18	1	9	-	1 OPPH	-	133
	EE	34	1	24	4	11	-	7	-	1 OPPH	-	82
	ECE	43	6	35	1	14	7	7	1	1 OPPH	-	115
	EIE	18	3	15	2	8	1	5	-	1 OPPH	-	53
	CSE	33	5	26	1	8	2	3	-	1 OPPH	-	79
		234	24	181	10	76	11	39	1	6	-	582
5TH & 6TH	CE	51	03	23	01	11	01	07	-	1 OPPH	-	98
	ME	58	02	26	-	12	-	06	01	2 OPPH 1 OBPH	-	108
	EE	48	04	20	02	12	-	04	01	1 OBPH 1 SCPH	-	93
	ECE	44	04	22	02	12	01	06	01	1 OPPH	-	93
	EIE	09	03	08	-	04	-	02	-	1 OPPH	-	27
	CSE	51	06	19	02	10	02	05	01	1 OPPH	-	97
		261	22	118	07	61	04	30	04	09		516

7TH & 8TH	CE	50	02	26	01	13	-	06	02	1OPPH 1OBPH		102
	ME	51	02	25	-	11	03	07	-	2OPPH		101
	EE	39	07	27	01	13	01	06	02	1SCPH 2OPPH		99
	ECE	43	06	25	01	11	03	09	01	1OPPH		100
	EIE	08	02	08	-	04	-	02	-	1OPPH		25
	CSE	42	06	23	02	10	04	06	-	1OPPH 2OBPH		96
		233	25	134	05	62	11	36	05	12	-	523
	Grand Total											2256

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

Table: Number of B.Tech. students on the roll of NIT Silchar during 2014-15.

Year	CE	ME	EE	ECE	CSE	EIE	TOTAL
2ND	124	122	117	118	97	57	635
4TH	120	133	82	115	79	53	582
6TH	98	108	93	93	97	27	516
8TH	102	101	99	100	96	25	523
TOTAL- 2256							

Postgraduate

Table: Course admission statistics of PG programmes (M.Tech., M.Sc. & MBA) for the year 2014-15.

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	25	M.Tech. in water Resource Engg.	11	11
	25	M.Tech. in Structural Dynamics & Earthquake Engg.	10	10
	25	M.Tech. in Transportation Engg.	18	18
	25	M.Tech. in Geotechnical Engg.	17	17
	25	M.Tech. in Structural Engg.	20	20
ME	25	M.Tech. in Thermal Engg.	21	21
	25	M.Tech. in Design & Manufacturing	18	18
	12	M.Tech. in CAD-CAM Automation	6	6
	12	M.Tech. in Material & Manufacturing Technology	9	9

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
EE	25	M.Tech. in Power & Energy system Engg.	14	14
	25	Control & Industrial Automation	6	6
ECE	12	M.Tech. in Micro-Electronics & VLSI Design	10	10
	12	M.Tech. in Communication & Signal Processing	10+02(FS)	12
CSE	25	M.Tech. in Computer Science & Engg.	10	10
PHY	25	M.Sc. in Applied Physics	15	15
CHEM	25	M.Sc. in Applied Chemistry	15	15
MATH	25	M.Sc. in Mathematics	06	06
MS	60	MBA	42	42
Grand Total (M.Tech. + M.Sc. + MBA) =			260	260

***(Regular & Sponsored)**

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

Table: Total number of PG students on the roll of NIT Silchar during 2014-15.

Courses	CE	ME	EE	ECE	CSE	PHY	CHY	MATHS	HSS	MBA	TOTAL
M.Tech.	163	107	47	44	30						391
M.Sc.						23	30	13			66
MBA										73	73
Total											530

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

Admission Statistics

Table: Indian students admitted (state-wise and course-wise admission statistics with category breakup for the year 2014-15).

Name of the State	Category	CE	ME	EE	ECE	CSE	EIE	Total
Assam	Open	26	28	29	29	23	14	149
	OBC	19	17	15	17	12	7	87
	SC	7	9	7	8	7	6	44
	ST	8	5	4	5	4	1	27
	OPPH	-	1	-	-	-	-	1
	OBPH	-	-	-	-	1	-	1
Rajasthan	OBC	2	3	3	2	5	2	17
	Open	3	4	5	-	2	4	18
	SC	1	2	3	-	-	1	7
	ST	3	3	4	1	1	1	13
Bihar	OP	13	2	10	2	3	4	34
	OBC	14	10	8	5	4	3	44
	OBPH	-	1	1	-	-	-	2
	OPPH	1	-	1	-	1	-	3
	SC	2	2	1	1	2	2	10
	OBC	3	2	2	1	2	2	12
Uttar Pradesh	Open	3	4	6	3	4	2	22
	SC	4	3	2	4	3	1	17
	OPPH	-	1	-	-	-	-	1
	OBC	-	3	1	7	4	1	16
Andhra Pradesh	Open	3	7	2	20	5	1	38
	SC	-	-	-	3	1	-	4
	ST	-	-	-	2	1	1	4
	OBC	-	-	-	-	-	1	1
Jharkhand	Open	-	1	1	-	-	-	2
	SC	1	-	-	-	-	-	1
	ST	-	-	-	-	-	1	1
	OPPH	-	-	-	-	-	1	1
Delhi	Open	1	1	1	1	-	-	4
	OBC	-	-	-	1	-	-	1
Haryana	Open	-	-	-	1	-	-	1
Nagaland	ST	1	-	-	-	-	-	1
Meghalaya	OP	-	-	1	-	-	-	1
Karnataka	OP	-	1	-	1	-	-	2
J & K	ST	1	-	-	-	-	-	1
Orissa	Open	-	2	3	1	2	-	8
	SC	-	1	-	-	-	-	1
West Bengal	Open	-	-	1	-	-	1	2
	SC	-	1	1	-	-	-	2
Madhya Pradesh	Open	-	1	-	-	1	-	2
	OBC	1	-	-	-	-	-	1

Name of the State	Category	CE	ME	EE	ECE	CSE	EIE	Total
Uttarakhand	Open	-	1	-	-	1	-	2
	ST	-	-	-	-	1	-	1
Maharashtra	Open	-	2	-	1	1	-	4
	SC	-	-	1	-	-	-	1
Sikkim	Open	1	-	-	-	-	-	1
	ST	-	1	-	1	-	-	2
Pondicherry	Open	-	1	-	-	-	-	1
Manipur	ST	-	-	-	-	1	-	1
18(Eighteen) nos. foreign students- Bhutan:5 Bangladesh: 13	Open	6	2	4	1	5	-	18
Total		124	122	117	118	97	57	635

Table: Foreign students admitted for the year 2014-15.

Sl. No.	Courses (B.Tech.)	Admitted
1.	Civil Engineering	6
2.	Mechanical Engineering	2
3.	Electrical Engineering	4
4.	Electronics & Communication Engineering	1
5.	Computer Sc. & Engineering	5
6.	Electronics & Instrumentation Engineering	-
Total		18

18 (Eighteen) nos. foreign students: 5 from Bhutan, 13 from Bangladesh

M.Tech. in Electronics & Communication Engg.(Comm.& Signal Processing)	02
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2 (Two) nos. foreign students: 1 from Rwanda, 1 from Bangladesh

Table: Course-wise admission statistics (B.Tech-1stYear)-2014-15

Sl.No.	Courses	Intake Capacity	Admitted	Remarks
1.	Civil Engineering	120	124	The excess intake (over & above the intake capacity) was carried out as distribution foreign students
2.	Mechanical Engineering	120	122	
3.	Electrical Engineering	120	117	
4.	Electronics & Communication Engg.	120	118	
5.	Computer Sc. & Engineering	92	97	
6.	Electronics & Instrumentation Engg.	60	57	
Total		632	635	

Table: Total student strength on the roll (course wise) of the year 2014-15 at NIT Silchar.

Courses		Branches	Total students strength (course-wise)
UG (B.Tech.)		Civil Engineering	444
		Mechanical Engineering	464
		Electrical Engineering	391
		Electronics & Communication Engg.	426
		Computer Sc. & Engineering	369
		Electronics & Instrumentation Engg.	162
PG	M.Tech.	Postgraduate Course (all engineering department)	391
	M.Sc.	Applied Chemistry/Applied Physics/Mathematics	66
	Management Studies	MBA	73
Total (B.Tech. + M. Tech. + M.Sc. + MBA)=			2786

Table: PhD student enrolled/registered department wise for the year 2014-15 at NIT Silchar.

Sl. No.	Name of Department	Regular	Part-time	Total
1.	Civil Engineering	8	2	10
2.	Mechanical Engineering	12	1	13
3.	Electrical Engineering	10	2	12
4.	Electronics & Communication Engineering	9	0	9
5.	Computer Sc. & Engineering	5	6	11
6.	Electronics & Instrumentation Engineering	3	1	4
7.	Humanities & Social sciences	0	0	0
8.	Mathematics	1	1	2
9.	Chemistry	5	1	6
10.	Physics	0	0	0
11.	Management Studies	0	0	0
Total		53	14	67

ACADEMIC PROGRAMMES / COURSES OFFERED

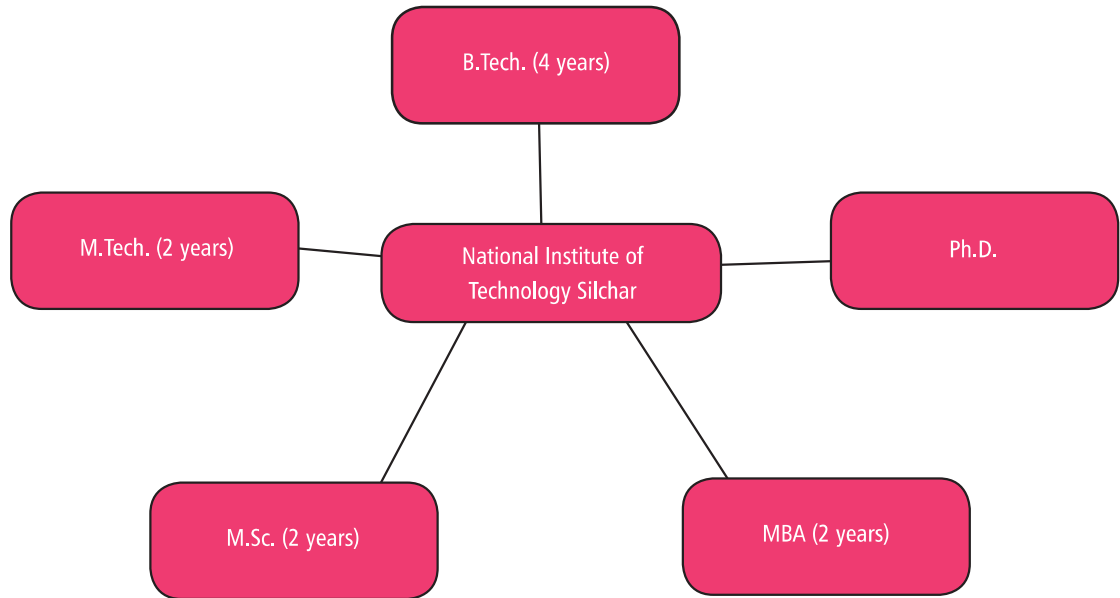


Figure 1: Courses Offered at NIT Silchar

B.Tech. Courses Offered at NIT Silchar

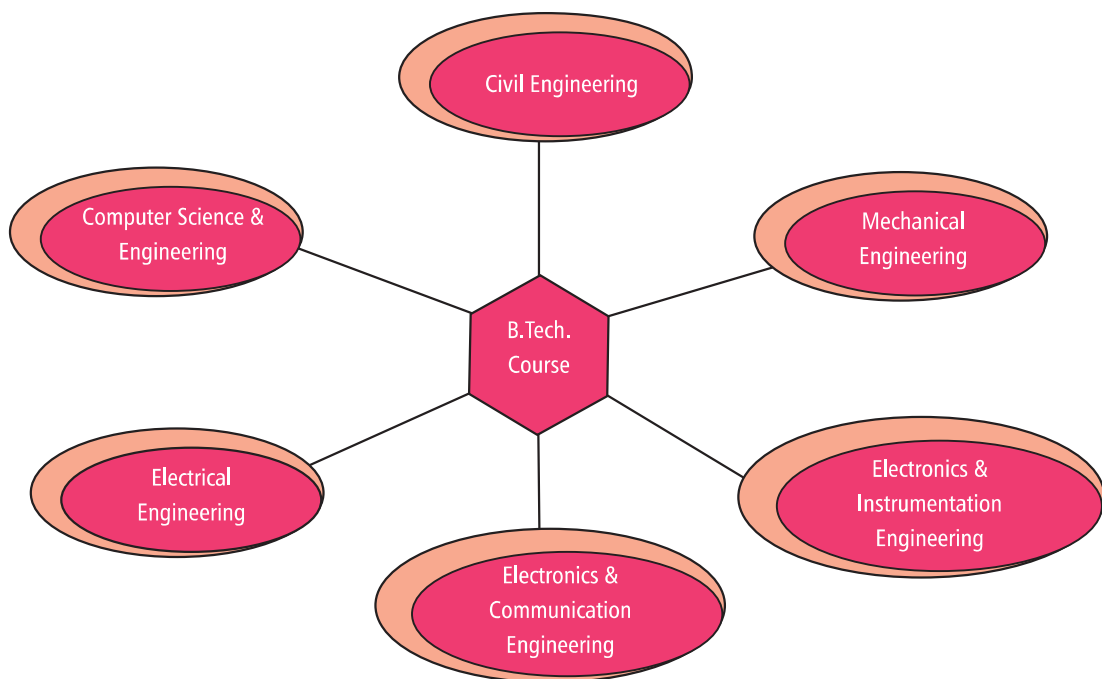


Figure 2: B.Tech. Courses Offered at NIT Silchar

M.Tech. Courses Offered at NIT Silchar

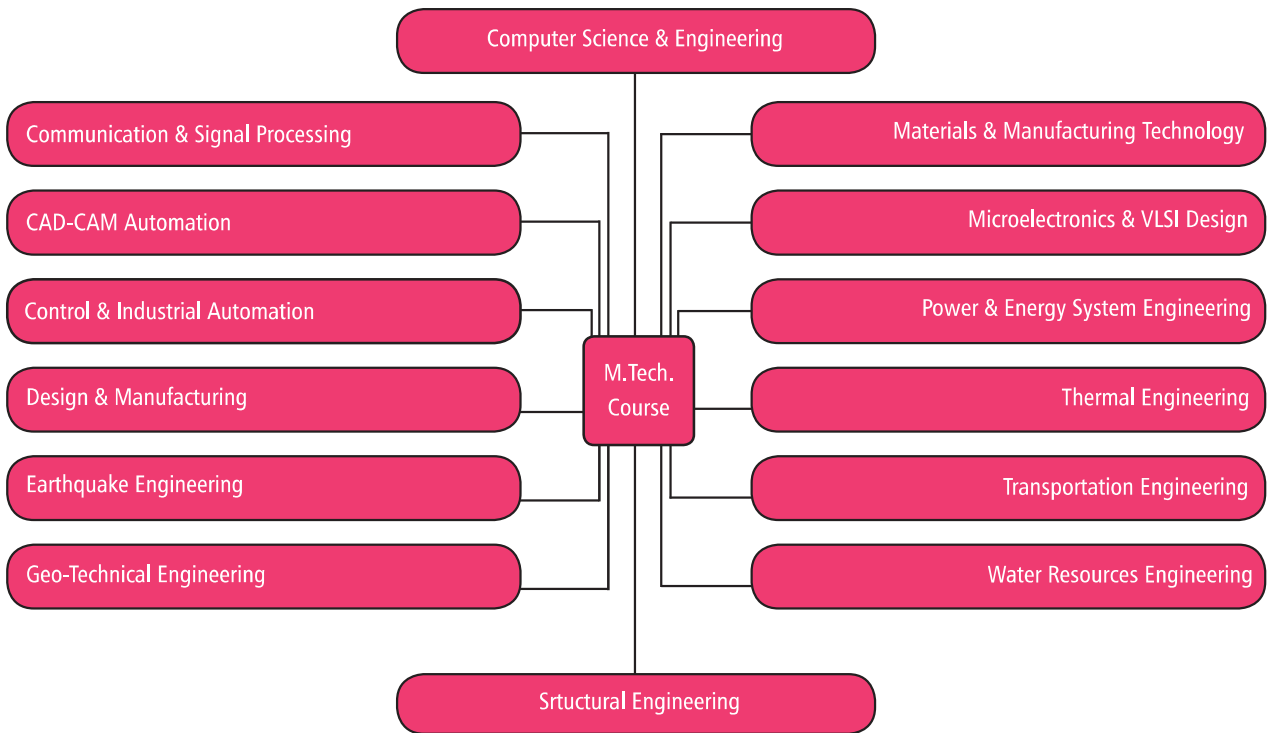


Figure 3: M.Tech. Courses Offered at NIT Silchar

Other Postgraduate Courses Offered at NIT Silchar

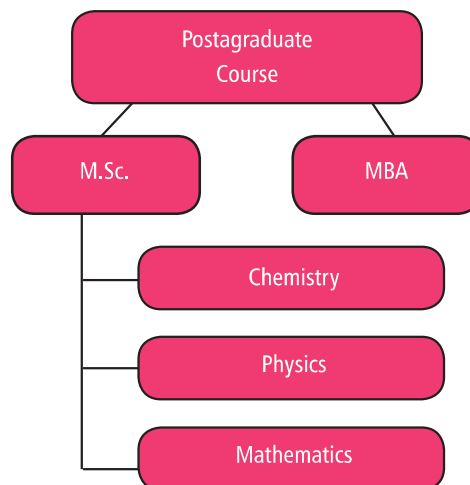


Figure 4: Postgraduate Courses Offered at NIT Silchar

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 2014-15.

Practical Training

Practical Training is an integral part of engineering 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 2013 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 2014-15, 53 companies from different sectors visited the institute for campus placement. In all, 564 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 2014-15 are detailed in Annexure 1.



DEPARTMENT AND ACADEMIC UNITS



Civil Engineering

1. Academic Staff

HEAD: Prof. Aminul Islam Laskar, Ph.D.

Faculty members

Professor

Prof. A. I. Laskar, Ph.D.
 Prof. S. Choudhury, Ph.D.
 Prof. A. K. Dey, Ph.D.
 Prof. P. S. Choudhury, Ph.D.
 Prof. D. Chakraborty, Ph.D.
 Prof. M. A. Ahmed, Ph.D.
 Prof. A. K. Barbhuiya, Ph.D.

Associate Professor

Dr. A. K. Das, Ph.D.
 Dr. P. Rajbangshi, Ph.D.
 Dr. U. Kumar, Ph.D.
 Dr. T. Rahman, Ph.D.

Assistant Professor

Dr. P. Roy, Ph.D.
 Ms. N. Borthakur, M.Tech.
 Mr. P. Das M.Tech.
 Mrs. P. Sultana, M.Tech.
 Dr. Arjun Sil, Ph.D.
 Mr. N. Ahir, M.Tech
 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.

2. Distinction Achieved

By Faculty Member

Prof. S. Choudhury; President of India Award for "A unified approach to performance based design of RC framed buildings"; 2014

3. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Prof. M.A. Ahmed	Recycling through Re-design	TEQIP-II	1 Day
2.	Dr. P. Rajbongshi	National FDP on Pedagogy: A Frame work for Effective Teaching and Learning Strategies, NIT Silchar	TEQIP-II	1week

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. M. Ali Ahmed	National FDP on Pedagogy: A Frame work for Effective Teaching and Learning Strategies, NIT Silchar	NIT Silchar under TEQIP-II
2.	Mrs. P. Sultana	National FDP on Pedagogy: A Frame work for Effective Teaching and Learning Strategies, NIT Silchar	NIT Silchar under TEQIP-II
3.	Dr. N. Debnath	Workshop on "Fuzzy Sets and Fuzzy Logic" (February 2-6, 2015)	NIT Silchar

4. Research and Development

a) Ph.D. Programme (Specializations)

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

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

Completed	Submitted	Ongoing
8	2	17

c) Research Lab/Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new Programme
1.	Structural Engineering Laboratory	Current UG, PG & Research Work
2.	Concrete Laboratory	Current UG, PG & Research Work
3.	Highway Laboratory	Current UG, PG & Research Work

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new Programme
4.	Hydraulics Laboratory	Current UG, PG & Research Work
5.	Environment Engineering Laboratory	Current UG, PG & Research Work
6.	Surveying Laboratory	Current UG Programme
7.	Soil Dynamics Laboratory	Current UG, PG & Research Work
8.	Advanced Computational Laboratory	Current PG & Research Work
9.	UG Computational Laboratory	Current UG Programme
10.	Geotechnical Engineering Laboratory	Current UG, PG & Research Work
11.	Geology Laboratory	Current UG Programme
12.	GIS & Remote Sensing Laboratory	Current PG & Research Work

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs	Duration
1.	Evaluation of Non-Linear fatigue damage in Asphalt materials	Dr. P. Rajbonghsi	SERB	41.79	3 years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Papers	Year
1.	Dr. N. Debnath	Journal of Vibration and Control	1	2014

5. Publication

a) International Journal(s)

- Kumar, U., Karthik, R. & Panday, K. M. (2014). CFD Analysis in the field of River Engineering. *International Review of Applied Engineering Research*-Vol. 4.
- Karthik, R., Kumar, U & Pandey, K. M. (2014). Numerical Simulation of 180° Meandering Bend of Barak River near Silchar City. *Proc. of the Intl. Conf. on Advances In Engineering And Technology*.
- Kumar, U, Kumar B. & Pandey, K. M. (2014). SEM and EDAX study of pretreated rice husk for the sorption of Cu (II) from wastewater *Applied Mechanics and Materials*- Vol. 656, Trans Tech Publications, Switzerland. www.scientific.net
- Kumar, U., & Laskar, N. (2014). Thermodynamic characterization of sorption of copper (II) ions on rice husk. *International Journal Engineering Sciences & Research Technology*. Vol. 3, No. 7.
- Kumar, B., Pandey, K. M. & Kumar, U. (2014). Isotherm, Kinetic, Thermodynamic of Adsorption of Crystal Violet onto Potassium Hydrogen Phosphate Treated Rice Husk. *International conference on Environment and Energy*.
- Kumar, B. & Kumar, U. (2014). Removal of Malachite Green and Crystal Violet Dyes from Aqueous Solution with Bio-Materials: A Review. *Global Journal of Researches in Engineering*. Vol. 14, No. 4.
- Kumar, B. & Kumar, U. (2014). Adsorption of malachite green in aqueous solution onto sodium carbonate treated rice husk. *The Korean Journal of Chemical Engineering*.
- Ahmed, M.A. & Binod, S. (2014). Evaluation of Roadway Capacity of For-lane Divided Carriageway under Heterogeneous Urban Traffic Conditions. *International Journal of Transport, Highway & Railway Engineering*. Vol.1, No.2.

9. Barbhuiya, A. K. & Mazumder, M. H. (2014). Live bed scour at vertical wall abutment. *ISH Journal of Hydraulic Engineering*. Vol. 20, No. 3. Taylor & Francis.
 10. Mazumder, M. H. & Barbhuiya, A. K. (2014). Live-bed scour experiments with 45° wing-wall abutments. *Sadhana*. Vol. 39, No. 5. Springer.
 11. Mayengbam, S. S. & Choudhury, S. (2014). Determination of column size for displacement-based design of reinforced concrete frame buildings. *Journal of Earthquake Engineering & Structural Dynamics*. Volume 43, No. 8.
 12. Rajbongshi, P. (2014). Reliability Based Cost Effective Design of Asphalt Pavements Considering Fatigue and Rutting. *International Journal of Pavement Research and Technology*.
 13. Prasad, M. L. V. (2014). Effect of Glass Fiber on Mechanical Properties of Vibrated Concrete and Self Compacting Concrete. *International Journal of Engineering & Science Research*. Vol.4, No.10.
 14. Sitharam, T.G. & Sil, A. (2014). Comprehensive seismic hazard assessment of Tripura & Mizoram states. *Journal of Earth System Science*. Vol. 123, No. 4. Springer.
 15. Sil, A. & Dey, A. K. (2014). Dynamic performance of cohesive slope under seismic loading. *International Journal of Civil and Structural Engineering*. Vol. 5, No.1.
 16. Roy, P., Saharia, M. & Choudhury, P. (2014). River Reaches Flood Flow Prediction using PRNN models. *International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development*.
 17. Sultana, P. (2014). Comparative study of soil slopes using static and pseudo-static approaches. *IJERT*. Vol.3, No. 05.
 18. Sil, B. S. & Choudhury, P. (2014). Muskingum equation based downstream sediment flow simulation models for a river system. *International Journal of Sediment Research*.
 19. Debnath N., Deb, S. K. & Dutta, A. (2015). Multi-modal vibration control of truss bridges with tuned mass dampers under general loading. *Journal of Vibration and Control*. Sage Publication. <http://dx.doi.org/10.1177/1077546315571172>
- b) National Journal(s)**
1. Porwal, S. S. & Dey, A. K. (2014). A cut and cover structure across an active landslide at Sonapur in North East India on NH 44 at Sonapur in the state of Meghalaya. *Journal of the Indian Roads Congress*. Vol. 74, No. 4.
 2. Hussain, M. & Dash, S. K. (2014). Influence of Lime on Compaction Behaviour of Soils. *Environmental Geotechnics*, ICE.
- c) International Conference(s)**
1. Subhra Das and S. Choudhury; Tuned Liquid Damper – A Critical Study of Past Works; *International Conference on Multidisciplinary Research & Practice*; Ahmedabad, Gujarat, India; Nov 30, 2014.
 2. Nibir Paban Borah and S. Choudhury; A Critical Study on the Period Formulae of Various Design Codes; *International Conference on Multidisciplinary Research & Practice*; Ahmedabad, Gujarat, India; Nov 30, 2014.
 3. Akbar Ali Ahmed and S. Choudhury; A parametric Study on Slope Stability of Earthen Dam; *International Conference on Multidisciplinary Research & Practice*; Ahmedabad, Gujarat, India; Nov 30, 2014.
 4. Nabapallab Deka and S. Choudhury; A Study on the Adequacy of Codal Column-to-Beam Capacity Ratio; *International Conference on Multidisciplinary Research & Practice*; Ahmedabad, Gujarat, India; Nov 30, 2014.
 5. Vijay Krishna Kotapati and S. Choudhury; A Study on Performance of Steel Buildings; *International Conference on Multidisciplinary Research & Practice*; Ahmedabad, Gujarat, India; Nov 30, 2014.
 6. Sanketa Sangma and S. Choudhury; Design of RC Frame-Shear Wall Buildings Using UPBD Method; *International Conference on Multidisciplinary Research & Practice*; Ahmedabad, Gujarat, India; Nov 30, 2014.

7. A.K. Dey; A critical study on failure of a reinforced earth wall; *10th International Conference on Geosynthetics*; Berlin; 21-26 Sept, 2014.
 8. Victory W & Ahmed M.A.; Modeling for the utility of Auto rickshaw; International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (11th TPMDC); IIT Bombay; 10-12th Dec'2014.
 9. D Das & Ahmed M.A.; Performance Analysis of Rotary Intersection; International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (11th TPMDC); IIT Bombay; 10-12th December'2014.
 10. Sallama R.D.K & Ahmed M.A; International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (11th TPMDC); IIT Bombay; 10-12th December'2014.
 11. Kumar, U. and Kumar B; Effect of chemical treatment on adsorption capacity of rice husk for the removal of crystal violet: SEM and FTIR analysis; *International conference on Environment and Energy*; JNTUH, Kukatpally, Telangana India; December 15th -17th 2014.
 12. Kumar, B., Pandey, K. M. and Kumar U; Isotherm, Kinetic, Thermodynamic of Adsorption of Crystal Violet onto Potassium Hydrogen Phosphate Treated Rice Husk; *International conference on Environment and Energy*; JNTUH, Kukatpally, Telangana India; December 15th -17th 2014.
 13. Kumar, U, Kumar B. and Pandey, K. M; SEM and EDAX study of pretreated rice husk for the sorption of Cu(II) from wastewater; *International Conference Smart Systems In All Fields of the Life*; Bucharest, Romania; October 24 -27, 2014.
 14. Kumar, U., Kumar B. and Acharya, J; SEM, EDAX and FTIR study of rice husk for the sorption of lead(II) ions from wastewater; *3rd Global Conference on Materials Science and Engineering (CMSE)*; Shanghai, China; October 20-23, 2014.
 15. Sarkar, P.P., Tripura J., Roy, P; Flood Forecasting In Barak River System Using Artificial Neural Networks" *IEEE; International Conference on Advances in Engineering & Technology (ICAET)*; EGS Pillay Engineering College, Nagapattinam; May 2 – 3, 2014..
 16. N. Borthakur; Stabilization of Peat Soil using locally available Admixture; *International conference on Advances in Civil and Structural Engineering* organized by IRED; Kuala Lumpur, Malaysia; 2nd & 3rd Aug 2014.
 17. M. L. V. Prasad; Quarry Rock Dust As A Partial Replacement of Natural Sand in Fiber Based SCC; *International Conference on Sustainable Civil Infrastructure (ICSCI)*; Hyderabad, A.P, India; 17-18 Oct'2014.
- d) National Conference(s)**
1. Partha Pratim Debnath and Satyabrata Choudhury; Challenges in Computational Analysis of Unified Performance-Based Seismic Design of Dual Systems; *Proceedings of National Conference on Furthering Aspirations on Civil Engineering Technique*; Govt. College of Engg., Kannur; June, 2014.
 2. Partha Pratim Debnath and Satyabrata Choudhury; Effect of Masonry Infill in Performance-Based Seismic Design of Frame-Wall Buildings; *Structural Engineering Convention 2014*; IIT Delhi; Dec 22-24, 2014.
 3. Nongthombam M. Singh and S. Choudhury; Seismic Performance of RC Frame Buildings on Slope; *Structural Engineering Convention 2014*; IIT Delhi; Dec 22-24, 2014.
 4. A.K. Dey and D. K. Jamatia; Use of Micropiles as a Replacement of Conventional Piles accepted for oral presentation; *Indian Geotechnical Conference*; Kakinada, A.P; 18-20 December, 2014.
 5. A.K. Dey and Abhijit Sutradhar; Determination of Active Earth Pressure due to Rise in Pore Pressure During Ground Shaking; *Indian Geotechnical Conference*; Kakinada, A.P; 18-20 December, 2014.
 6. A.K. Dey and Prasenjit Debnath; A Study on Dynamic Behaviour of Geocell Reinforced Clay; *Indian Geotechnical Conference*; Kakinada, A.P; 18-20 December, 2014.

7. Dey, L. and Barbhuiya A. K; Analytical Hierarchy Process to Optimize Lift Co-efficient On Sub-merged Vane; *First Annual Conference on Innovations and Developments in Civil Engineering (ACIDIC)*; NITK, Surathkal; 19-20 May 2014..
8. Bagang, D, Lhamu, S and Hussain, M; Strength and Compressibility Characteristics of Fly Ash Stabilized Expansive Soil; *Proceeding of the Indian Geotechnical Conference*; Hyderabad, India; 22-24, Dec, 2014.
9. Nyokir, R and Hussain, M; Hydraulic Conductivity of Red Soil-Bentonite Mixtures for Landfill Liner; *Proceeding of the Indian Geotechnical Conference*; Hyderabad, India; 22-24, Dec, 2014.
10. R. Nyokir, and Hussain, M; Fly Ash-Bentonite Mixtures Use As MSW Landfill Liner; *Proceeding of the North East Students Geo-Congress on Advances in Geotechnical Engineering*; IIT Guwahati; 18th October, 2014.
11. Bagang, D and Hussain, M; Unconfined Compressive Strength of Fiber reinforced Expansive Soil; *Proceeding of the North East Students Geo-Congress on Advances in Geotechnical Engineering*; IIT Guwahati; 18th October, 2014.

e) Book/Chapter

- 1) Dr. A.I.Laskar; Concrete Technology Practices; Narosa Publisher.

6. Consultancy Services

Sl. No.	Name of the Scheme	Sponsoring Agency	Amount Earned
1.	STA of PMGSY for part of Manipur and Assam States	NRRDA (CECON Cell of the Department)	Scrutinized Nearly Rs. 300.00 Crores of project value.
2.	Soil Investigation & Design of Canopy Structures	Indian Oil Corporation	Rs. 1,00,000.00

7. Major Equipments Acquired

100 KN actuator with loading frame; 700J Automatic impact testing machine

8. Visits to Abroad

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1.	A.K. Dey	10th International Conference on Geosynthetics	Berlin	21-26 Sept, 2014

9. M.Tech./M.Sc. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the thesis
1.	Satyajit Roy Choudhury	A. K. Dey & S. Choudhury	Evaluation of performance of structure considering soil-structure interaction
2.	Vijay Krishna	S. Choudhury	Seismic PBD of Buildings and IS Codes

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the thesis
3.	Gagan Singh	S. Choudhury	Base Isolation using Geosynthetic
4.	Jyotirmoy Haloi	A. Sil	Ground Response Analysis of a bridge site
5.	B.S. Chaitanye	T. Rahman	Comparative study of responses on vehicle bridge interaction system in India
6.	Sangketa Sangma	S. Choudhury	A study on shear-wall using UPBD
7.	N. Bennedy Singh	T. Rahman	Vibration Control of Building using TMD
8.	A. Madhavi	N. Ahir	ANN for generation of design charts SSI earthquake resistant RC buildings
9.	Kasturi Bhuyan	T. Rahman	Ground Response Analysis at Rukni Irrigation Project Site Location in Assam, India
10.	Subhra Das	S. Choudhury	TLD in three storeyed RCC Building
11.	Dhrubajyoti Thakuria	T. Rahman	Vibration control of bridge superstructure using TMD
12.	Ajay Kumar	N. Ahir	FRF Based Model updating of a scaled RC Model Column
13.	Minakshi Paul	A.K. Dey	Study on failure mechanism of granular soil by means of triaxial
14.	Barnali Roy	A.K. Dey	Study on dynamic soil bearing capacity
15.	Manita Das	A.K. Dey	Geosynthetic layered stone column
16.	Krushna Ch. Jena	P.Sultana	A comparative study on soil mitigation by using geotextiles as surface cover
17.	Achu. V	N. Borthakur	Effect of water table on soil amplification
18.	Thungchanbemo T Humtsae	A.K. Dey	Stability analysis on the effect of rainfall on landslides in Sikkim
19.	Koushik Deb	A.K. Dey	Study of piles with different shapes of caps founded in liquefiable soil under dynamic loads
20.	Arindam Saha	N. Borthakur	A study on lateral load test on micropile
21.	Tushar Kumar Vamal	A.K. Dey	A comparison study of bearing capacity of footing on embankment slope
22.	Intifa Parween	A.K. Dey	Experimental and Analytical Behaviour of TLCD on steel frame
23.	Priyank Srivasatava	N. Borthakur	A comparative study on micropiled raft foundation, raft foundation and micropile foundation
24.	Biswajit Bhagowati	N. Borthakur	A study on stabilization of expansive soil using fly ash and lime
25.	J. Sharalin Gidon	A.K. Dey	Reliability Analysis of Slope Stability
26.	Shankaregowda	P. Rajbongshi	Porous Asphalt & Pavement Design for Storm Water Management
27.	Prabhakar Kumar	P. Rajbongshi	Surface characteristics of bituminous mixes based on aggregate textures

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the thesis
28.	Madhumita Paul	P. Rajbongshi	Pedestrian gap analysis at uncontrolled road sections
29.	Jimli Das	P. Rajbongshi	Bituminous Mix Design using reclaimed asphalt materials
30.	Dipanajan Mukherjee	P. Rajbongshi	Studies of cost effectiveness of soil stabilization
31.	Mrinmoy Kr. Gautam	P. Rajbongshi	Development of fatigue models using ANN
32.	Laxman singh Bisht	M. A. Ahmed	Paratransit in Silchar
33.	Kankana Hazarika	P. Rajbongshi	Indentification of LOS in a road stretch in Silchar
34.	Ankur Goswami	M. A. Ahmed	Traffic Management Plan In Silchar City
35.	Sunandan Das	M. A. Ahmed	Design of ring road in NIT Silchar
36.	Ramen Borah	M. A. Ahmed	Tourism Potential & Transportation system at Sivsagar district of Assam
37.	Diganata Boro	M. A. Ahmed	Impact of on-street parking on traffic flow characteristics
38.	Ranadip Mandal	M. A. Ahmed	Evaluation of Pedestrian level-of-service in Silchar city
39.	Bhaskar Dhar	M. A. Ahmed	Design of Ring Road in NIT Silchar
40.	Mehzobin Eliza	A. I. Laskar	Sunstrate and Overlay of RC Beams Under Cyclic and Static Load
41.	Akbar Ali Ahmed	S. Choudhury	A parametric study on the slope stability of earthen dam
42.	Arnab Sinha	T. Rahman	Comparative Study of Arch Bridge with varying rise to span ratio
43.	Karabi Bharadwaj	N. Debnath	System on influence of eccentricity & SSI in the performance of supplemental viscous damper in steel framed buildings
44.	Sumit Ghangus	T. Rahman	Effect of surface structure due to underground tunneling
45.	Mitali Mandal	Pallab Das	Seismic Analysis of Beam Column joints in RC Moment resisting frames
46.	Probhakar Chakravorty	N. Debnath	Comparative study on structural performance between light-weight and normal-weight RC building
47.	Nabam Zomleen	Pallab Das	Effect of infill wall on RC Structure
48.	Tamal Ghosh	S.Choudhury	Effect of infill wall on Beam-Column joint
49.	Bapi Monadal	N. Debnath	Study on performance of supplemental viscous damper in RC framed building considering eccentricity and SSI
50.	Ramachandra Gollar	S.Choudhury	Seismic Vulnerability Study of School Buildings at Silchar Town

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the thesis
51.	Gitartha Kalita	T. Rahman	Translational and Rotational effect of Earthquake Ground Motion on a Bridge Structure
52.	Arindam Roy	T. Rahman	Comparative study of cable stayed bridge with varying cable configuration
53.	Manish Pratap Singh	Arjun Sil	Cyclic behaviour of jute fibre reinforce concrete
54.	Pritam Hait	Pallab Das	A study on fibre reinforced concrete beam column joint subjected to cyclic loading
55.	Subhrajit Pathak	T. Rahman	Seismic Hazard Response of a Tunnel due to the effect of faulting
56.	Snehansu Nath	Pallab Das	Effect of storey height on the design of multi-storey structure
57.	S. Kiran	U. Kumar	Numerical Simualtion of Barak River using RCM Model
58.	Umesh K. Das	P.J. Roy	Application of ANN in estimation of Aquifer loss coefficient
59.	Gilbert Hinge	D. Chakraborty	Optimal Reservoir operating policies
60.	Kamal Sukla Baidya	U. Kumar	Dye removal from waste water
61.	Md. Ali Choudhury	D. Chakraborty	Assessment of Irrigation water allocation based on optimization during drought
62.	Shehnaz Ara Rahaman	D. Chakraborty	Optimal management of sediment in alluvial river
63.	Vidya Niwar Bagri	A.K.Barbhuiya	Application of Remote Sensing and GIS in ground water

10. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the thesis
1.	Ruhul Amin Mazumder	Prof. A. I. Laskar	Geopolymer soil stabilization
2.	Yanglem Sonua Devi	Prof. A. K. Barbhuiya	Local scour around bridge pier in cohesive soil
3.	W. Victory	Prof. M. A. Ahmed	Utilization of regional paratransit in the North Eastern Regions of India
4.	N.Maheshkumar Singh	Prof. T. Rahman	Sit Specific Seismic Hazard Study Based on Engineering Approach.
5.	Sonika Thongram	Dr. P. Rajbongshi	Effect of ageing in asphalt stiffness and fatigue damage
6.	Joseph Tripura	Dr. P. J. Roy	Real time flow forecasting in river system
7.	Debashish Das	Prof. M. A. Ahmed	Parking Management
8.	Binod Singhi	Prof. A. I. Laskar & Prof. M. A. Ahmed	Geoploymer Soil Stabilization
9.	Gobin Engleng	Dr. P. Rajbongshi	Development of Strain transfer function & Asphalt stiffness reduction of Asphalt Pavement

Chemistry



1. Academic Staff

HEAD : Dr. Pranjit Barman, Ph.D.

Faculty members

Assistant Professor

Dr. S. S. Dhar, Ph.D.	Dr. P. Barman, Ph.D.
Dr. M. A. Zaman, Ph.D.	Dr. R. Rano, Ph.D.
Dr. B. H. Shambharkar, Ph.D.	Dr. L. Rokhum, Ph.D.
Dr. N. S. Moyan, Ph.D.	Dr. V. R. Mate, Ph.D. (Contractual)

2. Distinction Achieved

a) By Student

Number of NET qualified student :1, Number of GATE qualified student:1

b) By Faculty Member

A talk on "Green Chemistry" at S. S. College, Hailakandi under Star College Scheme of DBT, New Delhi, on 14th March 2015 was delivered by Dr. S. S. Dhar.

3. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. Pranjit Barman	Recent Trends in Synthesis of Chemical Compounds and Their Application in Science and Technology	Indian National Science Academy, New Delhi, Indian Academy of Sciences, Bangalore, National Academy of Sciences India, Allahabad.	May 05-07, 2014

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	S. S. Dhar	Pedagogy: A Framework for Effective Teaching and Learning Strategies; May 07-11, 2014	NIT Silchar
2.	S. S. Dhar	Recent Trends in Synthesis of Chemical Compounds and their Application in Science & Technology; May 05-07, 2014	NIT Silchar
3.	S. S. Dhar	Recent Advances in Chemistry of Tribromide based Compounds; March 25-26, 2015	Assam University, Silchar
4.	P. Barman	Pedagogy: A Framework for Effective Teaching and Learning Strategies; May 07-11, 2014	NIT Silchar
5.	N.S. Moyon	Current Perspective on Research on Chemical Sciences (CPRCS – 2015)	Department of Chemistry, Assam University.
6.	B. H. Shambharkar	STTP on Materials: Synthesis to Diverse Applications (MSDA)- 2014; December 18-22, 2014	Department of Applied Physics, VNIT Nagpur
7.	Ruma Rano	International Conference on Waste Management and Environmental Engineering ICWMEE 2014, Bangkok, Thailand, December 18-19, 2014	WASET-2014 Bangkok, Thailand
8.	Ruma Rano	Pedagogy: A Framework for Effective Teaching and Learning Strategies; May 07-11, 2014	NIT Silchar
9.	Lalthazuala Rokhum	REACH-2015: An International Symposium on Recent Advances in Chemistry	NEHU, Shillong

4. Research and Development

a) PhD Programme (Specializations)

Synthesis and application tribromide based compounds in organic transformations; Green synthesis of metal and/or metal oxides/ composites nanomaterials and their application in industrial organic reactions; 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, nanocomposites, adsorption, water treatment, waste plastic recycling; Solvation dynamics, photochemistry of organic bio molecules; Nanomaterials synthesis, nanocomposites, conducting polymers, catalysis; Multi component utilisation of fly ash from different thermal power plants and paper mills, studies on fly ash based catalyst in organic reactions, characterization of various industrial hazardous waste materials, investigations on coal and coal combustion byproducts.

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

Completed	Submitted	Ongoing
01	00	20

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	B.Tech. Laboratory	For B.Tech. Laboratory 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	Duration
1.	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	Dr. Lalthazuala Rokhum	SERB-DST	32.16	2014-18
2.	Synthesis of Indenoisoquinolinedione	Dr. Lalthazuala Rokhum	SERB-DST	16.5	2014-18

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	S. S. Dhar	Journal of Photochemistry and Photobiology B: Biology	01	2015
2.	M. Ahmaruzzaman	Materials Letters	2	2014
		Spectrochimica Acta	1	2015
		Environmental Progress and Sustainable Energy	1	2014
		ACS Sustainable Chemistry & Engineering	2	2014
		Industrial & Engineering Chemistry Research	1	2015
		Chemical Engineering Journal	4	2014
		Journal of Environmental Management	1	2014
		Science of the Total Environment	2	2014
		Journal of Water Process Engineering	1	2014

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. S. S. Dhar	One-day Regional Level Seminar on "Modern Research in Chemical Sciences" held in Karimganj College on 17 January, 2015
2.	Dr. Ruma Rano	Technical Section-IV of International Conference on Waste Management and Environmental Engineering ICWMEE 2014, Bangkok, Thailand, Dec 18-19, 2014

5. Publication

a) International Journal(s)

- Dey, M., Dey, R. R., & Dhar, S. S. (2014). Sodium Hypochlorite Promoted Novel Synthesis of Organic Ammonium Tribromides and Application of Phenanthroline Hydrotribromide in Chemoselective Oxidation of Organic Sulfides by Hydrogen Peroxide. *Chemistry Letters*, 43, 10, 631. (The Chemical Society of Japan).
- Dey, R. R., & Dhar, S. S. (2014). Synthesis and Characterization of 2-Carboxyethyltriphenyl Phosphonium Tribromide and its Application as Catalyst in Silylation of Alcohols and Thiols under Solvent Free Condition. *Synthetic Communications*, 44, 16, 2355. (Taylor & Francis).
- Dey, R. R., Paul, B., Dhar, S. S. & Bhattacharjee, S.(2014). Novel Protocol for Synthesis of Organic Ammonium Tribromides and investigation of 1, 2 Dipiperidinium Bistribromide-ethane in the Silylation of Alcohols and Thiols. *Chemistry Letters*, 43, 10, 1545. (The Chemical Society of Japan).
- Dey, R. R., Paul, B. & Dhar, S. S. (2015). A Novel Metal- and Mineral-acid free Synthesis of Organic Ammonium Tribromides and Application of Ethylenephenanthrolium Bistribromide for Bromination of Active Methylene Group of 1, 3-Diketones and β -Ketoesters. *Synthetic Communications*, 45, 6, 724. (Taylor & Francis).
- Paul, B., Bhuyan, B., Purkayastha, D. D., Dey, M. & Dhar, S. S.(2015). Green synthesis of gold nanoparticles using *Pogostemon benghalensis* (B) O. Ktz. leaf extract and studies of their photocatalytic activity in degradation of methylene blue. *Materials Letters*, 148, 37-40 (Elsevier).
- Gogoi, P., Gogoi, S. R., Devi, N. & Barman, P.(2014). Aluminium Chloride Catalyzed Synthesis of 4-benzyl Cinnolines from Aryl Hydrazones. *Synthetic Commun.* 44, 1-7(Taylor & Francis).
- Gogoi, P., Kalita, M., Bhattacharjee, T. & Barman, P. (2014).Copper-Schiff base complex catalyzed oxidation of sulfides with hydrogen peroxide. *Tetrahedron Letters*,55, 1028-1030 (Elsevier).
- Gogoi, P., Kalita, M. & Barman, P. (2014). An efficient protocol for the C-S cross-coupling of sulfonyl chloride with arylboronic acid using a palladium catalyst. *Synlett*, 25, 866-870 (Theime, Germany).
- Kalita, M., Gogoi, P., Barman, P., Sarma, B., Buragohain, A. K. & Kalita, R. D. (2014).A new series of Ni (II), Cu (II), Co (II) and Pd (II)complexes with ONS donor Schiff base: Synthesis, crystal structure, catalytic properties and bioactivities. *Polyhedron*, 74, 93-98 (Elsevier).
- Khaskel, Gogoi, P., Barman, P. & Bandyopadhyay, B.(2014).Grindstone chemistry: a highly efficient and green method for synthesis of 3, 4-dihydropyrimidin-2-(1 H)-ones by L-tyrosine as an organocatalyst: a combined experimental and DFT study. *RSC Adv.*, 4, 35559-35567 (Royal Society of Chemistry).
- Gogoi, P., Hazarika, S., Sarma, M. J., Sarma, K. & Barman, P. (2014). Nickel-Schiff base complex catalyzed C-S cross-coupling of thiols with organic chlorides. *Tetrahedron*, 70, 7484-7489 (Elsevier).
- Gogoi, P., Hazarika, S. & Barman, P. (2015).TBATB mediated debenzylative cross-coupling of aryl benzyl sulfides with electron rich compounds: synthesis of diaryl sulfides. *RSC Adv.*,5, 25765-25767 (Royal Society of Chemistry).
- Khaskel, Barman, P. & Jana, U. (2015).L-tyrosine loaded nanoparticles: An efficient catalyst for synthesis of dicoumarols and Hantzsch 1, 4-dihydropyridines. *RSC Adv.*, 5, 13366-13373 (Royal society of Chemistry).
- Reza, R. A., Ahmed, M. J. K. & Ahmaruzzaman, M.(2014). A Non-Conventional Adsorbent for the Removal of Clofibric Acid from Aqueous Phase. *Separation Science and Technology*, 49, Taylor and Francis.
- Sinha, T. & Ahmaruzzaman, M.(2014).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*, 142, Elsevier.
16. Bhattacharjee, A. & Ahmaruzzaman, A. (2015). A green and novel approach for the synthesis of SnO₂ nanoparticles and its exploitation as a catalyst in the degradation of methylene blue under solar radiation. *Materials Letters*, 145, Elsevier.
 17. Reza, R. A. & Ahmaruzzaman, M. (2015). Comparative study of waste derived adsorbents for sequestering methylene blue from aquatic environment. *Journal of Environmental Chemical Engineering*, 3, Elsevier.
 18. Sinha, T. & Ahmaruzzaman, M. (2015). Lithium dodecyl sulphate assisted synthesis of Ag nanoparticles and its exploitation as a catalyst for the removal of toxic dyes. *Journal of Molecular Liquids*, 201, Elsevier.
 19. Bhattacharjee, A., Sinha, T. & Ahmaruzzaman, M. (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*, 136, Elsevier.
 20. Bhattacharjee, A. & Ahmaruzzaman, M. (2015). Facile synthesis of SnO₂ quantum dots and its photocatalytic activity in the degradation of eosin Y dye: A green approach. *Materials Letters*, 139, Elsevier.
 21. Bhattacharjee, A. & Ahmaruzzaman, M. (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*, 448, Elsevier.
 22. Reza, R. A. & Ahmaruzzaman, M. (2014). Comparative Adsorption Behavior of Ibuprofen and Clofibric Acid onto Microwave Assisted Activated Bamboo Waste. *Industrial & Engineering Chemistry Research*, 53, ACS.
 23. Sinha, T. & Ahmaruzzaman, M. (2014). A novel and greener approach for shape controlled synthesis of gold and gold–silver core shell nanostructure and their application in optical coatings. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 145, Elsevier.
 24. Sinha, T. & Ahmaruzzaman, M. (2014). A simple approach for the synthesis of silver nanoparticles and their application as a catalyst for the photodegradation of methyl violet 6B dye under solar irradiation. *Journal of Environmental Chemical Engineering*, 2, Elsevier.
 25. Bhattacharjee, A., Sinha, T. & Ahmaruzzaman, M. (2014). Surfactant effects on the synthesis of durable tin-oxide nanoparticles and its exploitation as a recyclable catalyst for the elimination of toxic dye: a green and efficient approach for wastewater treatment. *RSC Advances*, 4, RSC.
 26. Ahmed, M. J. K. & Ahmaruzzaman, M. (2014). Lignocellulosic-derived modified agricultural waste: Development, characterisation and implementation in sequestering pyridine from aqueous solutions. *Journal of colloid and Interface Science*, Elsevier.
 27. Reza, R. A. & Ahmaruzzaman, M. (2014). A novel synthesis of Fe₂O₃@activated carbon composite and its exploitation for the elimination of carcinogenic textile dye from an aqueous phase. *RSC Advances*, 5, RSC.
 28. Sinha, T. & Ahmaruzzaman, M. (2014). Biomimetic synthesis of silver nanoparticles using the fish scales of *Labeo rohita* and their application as catalysts for the reduction of aromatic nitro compounds. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 131, Elsevier.
 29. Shambharkar, B. H. & Umare, S. S. (2014). Synthesis and Characterization of Polyaniline Mn₃O₄ Nanocomposite: Electrical Conductivity and Magnetic Studies. 67, 827-834, (Springer) <http://link.springer.com/article/10.1007%2Fs12666-014-0405-8>
 30. Mate, V. R., Jha, A., Joshi, U., Patil, K., Shirai, M. & Rode, C. V. (2014). Effect of preparation parameters on characterization and activity of Co₃O₄ catalyst in liquid phase oxidation of lignin model substrates. *Applied catalysis A*, 487, 130–138, (Impact factor 3.7).
 31. Kadam, S. R., Mate, V. R., Panmand, R. P., Nikam, L. K., Kulkarni, M. V., Sonawane, R. S. & Kale, B. B. (2014). Synthesis of C-N-S-doped zinc oxide nanostructured visible photocatalyst for water splitting and

degradation of biomass, *RSC Advances*, 4,60626–60635 (Impact factor 3.7).

32. Gawande, K. B., Gawande, S. B., Thakare, S. R., Mate, V. R., Kadam, S. R., Kale, B. & Kulkarni, M. V. (2015). Effect of composition zinc:cobalt in ZnCo₂O₄ spinel on highly selective liquefied petroleum gas sensor at low and high temperature conditions. *RSC Adv.*, (Accepted Manuscript DOI: 10.1039/C5RA03960F) (Impact factor 3.7).

b) National Conference(s)

1. Siddhartha S. Dhar and Bappi Paul; Recent Advances in Chemistry of Tribromide based Compounds, Current Perspectives on Research in Chemical Sciences' 2015

(CPRCS'15) held in Assam University, Silchar during March 25-26, 2015.

c) Book/Chapter

1. "Characterisation of High Carbon Ash from Captive Power Plant for Potential Utilisation", Ruma Rano, A.Sarkar, Mathematics and Computers in Science and Industry, ISBN: 978-1-61804-247-7 2, pp. 290-297.
2. Laxmi Gayatri Sorokhaibam, M. Ahmaruzzaman, Chapter 8 – Phenolic Wastewater Treatment: Development and Applications of New Adsorbent Materials, Industrial Wastewater Treatment, Recycling and Reuse, 2014, pp. 323-368.

6. Visits to Abroad

Sl.No.	Name of the faculty	Name of the Conference/Programme	Place	Date
1.	Dr. Ruma Rano	International Conference on Waste Management and Environmental Engineering ICWMEE -2014	Bangkok, Thailand	December 18-19, 2014

7. M.Sc. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Sushmita Bhattacharjee	Dr. S. S. Dhar	Periodic acid promoted synthesis of organic ammonium tribromides and exploration of catalytic activity of tetrabutylammonium bromide in the oxidation of organic sulfides to sulfoxides by CAN
2	Sukanya Hazarika	Dr. P. Barman	Metal free base-mediated synthesis of aryl sulfides and their applications in the synthesis of ONS donor Schiff base ligands and bioactivity measurements
3	Kashyap Jyoti Tamuli	Dr. P. Barman	Synthesis, Characterization Of A New Series Of Ni(II), Cu(II), Co(II) And Pd(II) Complexes With An Unsymmetrical Schiff Base Having Heterocyclic Ring And Catalytic Activity Studies Of Palladium Complex Towards Heck Coupling
4	Bandita Kalita	Dr. M. Ahmaruzzmana	Synthesis, characterisation and properties of low-viscous hyperbranched epoxy resin based nanocomposites
5	Madhumita Pattar	Dr. M. Ahmaruzzmana	Saturated fatty acids mediated synthesis of silver nanoparticles and their utility for photodegradation of methyl violet 6B dye under solar irradiation
6	Santanu Nondon Dihingia	Dr. N. S. Moyon	Fluorescence of (5-amino-2,3-dihydro-1,4-phthalazinedione) in different homogeneous solvent

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
7	Bishal Bhuyan	Dr. Ruma Rano	Characterisation of Fly ash from Cachar Paper Mill for potential utilisation
8	Gunindra Pathak	Dr. Lalthazuala Rokhum	An efficient synthesis of esters using solid phase organic syntheses
9.	Diparjun Das	Dr. B. H. Shambharkar	Synthesis and characterisation of poly(p-anisidine)

8. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Rupa Rani Dey	Dr. S. S. Dhar	Novel Approaches to Tribromide Based Reagent/ Catalysts and Investigation of their Application in Selective Organic Transformations

Computer Science & Engineering



1. Academic Staff

HEAD: Dr. Nidul Sinha, Ph.D.

Faculty members

Professor

Dr. Nidul Sinha, Ph.D.

Assistant Professor

Dr. A. Bhattacharjee, Ph.D.

Dr. Pinki Roy, Ph.D.

Mr. P. S. Neog, M.Tech.

Mr. P. K. Nath, M.Tech.

Mr. Badal Soni, M.Tech.

Mr. Ripon Patgiri, M.Tech.

Mr. A. K. Trivedi, M.Tech.

Mr. Shounak Chakraborty, M.Tech.

Ms. Shrijee Bhattacharjee, M.Tech.

Associate Professor

Dr. B. Purkayastha, Ph.D.

Mrs. Ujwala Baruah, M.Tech.

Mr. S. K. Borgohain, M.Tech.

Mr. B. Dey, M.Tech.

Mr. S. K. Biswas, M.Tech.

Mr. D. M. Thounaojam, M.Tech.

Mr. Umakanta Majhi, M.Tech.

Mr. S. Chakraborty, M.Tech.

Mr. Prasenjit Kr. Das, M.Tech.

Ms. Esha Barlaskar, M.Tech.

Visiting Professor: Prof. Ashok Deshpande, UC, Berkeley

2. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Mr. Umakanta Majhi	ISTE workshop on "Computer Programming"	National Mission on Education through ICT (MHRD, Govt. of India)	June 16 - 21, 2014
2.	Prof. S. Bandyopadhyay (ISI-Kolkata) & Prof. Nidul Sinha (Head, CSE)	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques"	Machine Intelligence Unit ISI-Kolkata & NIT-Silchar	March 20 -24, 2015

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the program	Organizing Institute
1.	Badal Soni	One Week National Workshop on High Performance Computing, April 4-9, 2014	NIT Silchar & C-DAC
2.	Pantha Kanti Nath	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
3.	Badal Soni	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
4.	Saptarshi Chakraborty	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
5.	Saptarshi Chakraborty	One Week Workshop On Computer Programming, June 2014	IIT Bombay (Remote Center NIT Silchar)
6.	Prasenjit Kumar Das	IEEE Authorship Workshop, February 15, 2015	IEEE Student branch and Department of Electrical Engineering, NIT Silchar, Assam
7.	Shrijee Bhattacharjee	IEEE Authorship Workshop, February 15, 2015	IEEE Student branch and Department of Electrical Engineering, NIT Silchar, Assam
8.	Esha Barlaskar	IEEE Authorship Workshop, February 15, 2015	IEEE Student branch and Department of Electrical Engineering, NIT Silchar, Assam
9.	Dr. P. Roy	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar

Sl. No.	Name of Faculty	Details of the program	Organizing Institute
10.	P. K. Nath	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
11.	B. Dey	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
12.	S. K. Borgohain	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
13.	Badal Soni	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
14.	D. M. Thounaojam	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
15.	U. Baruah	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
16.	S. K. Biswas	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
17.	Saptarshi Chakraborty	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
18.	Shounak Chakraborty	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
19.	Prasenjit Kr. Das	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
20.	Shrijee Bhattacharjee	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar

Sl. No.	Name of Faculty	Details of the program	Organizing Institute
21.	Esha Barlaskar	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
22.	Shounak Chakraborty	Workshop on "Scholarly Publication What it takes to publish", Wiley Publishing House	Central Library, NIT Silchar
23.	Prasenjit Kr. Das	Workshop on "Scholarly Publication What it takes to publish", Wiley Publishing House	Central Library, NIT Silchar
24.	S.K. Borgohain	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
25.	D.M. Thounaojam	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
26.	U.Baruah	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
27.	Saroj Biswas	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
28.	Amit Trivedi	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
29.	Ripon Patgiri	One week National FDP on "Pedagogy: A Framework for effective Teaching and Learning Strategies" May 7-11, 2014	NIT Silchar
30.	Saroj Biswas	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
31.	Ripon Patgiri	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	Machine Intelligence Unit, Indian Statistical Institute, Kolkata, & Department of Computer Science & Engineering, NIT Silchar
32.	Umakanta Majhi	ISTE coordinator workshop on "Computer Programming", April 21-26, 2014	National Mission on Education through ICT (MHRD, Govt. of India)
33.	Ripon Patgiri	ISTE coordinator workshop on "Computer Programming", April 21-26, 2014	National Mission on Education through ICT (MHRD, Govt. of India)

3. Research and Development

a) Ph.D. Programme (Specializations)

Machine Learning, Speech Processing, Computer Networks, Cloud Computing

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

Completed	Submitted	Ongoing
01	0	16

c) Research Lab / Workshop

Sl. No.	Name of Workshop	Purpose/Linkage to an existing/new programme
1.	ISI-NIT Silchar Spring School on "Computation Biology: Tools and Techniques" March 20-24, 2015	To motivate and inspire Ph.D. scholars and faculty members to new area of computation paradigm. Some research trends of pattern recognition were also discussed with how biologically inspired algorithm can help in solving computational problems

d) Ongoing / Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs	Duration
1.	Natural Language Processing	S. K. Borgohain	IBM Shared University	USD 10000	24 Months
2.	Development of Speech based Multi-level Authentication System	U. Baruah	DieTy	INR 57.93 Lakhs	36 Months
3.	Size Based Secured Access Control Model for Cloud Computing Environment	Dr. P. Roy	DieTy	INR 49.5 Lakhs	24 Months

e) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. Pinki Roy	IEEE International Conference on Computing, Communication and Automation, School of Computer Science and Engineering, Galgotias University, Uttar Pradesh, India

4. Publication

a) International Journal(s)

1. Saptarshi Chakraborty & Dhrubajyoti Das (April 2014) "An Overview Of Face Liveness Detection" Vol.3, No.2, *International Journal on Information Theory (IJIT)*.
2. Esha Baraskar & Y. Jayanta Singh (2014). Dynamic Consolidation of Virtual Machines with Multi-Agent System. *International Journal of Computer Applications*, Volume 94, Issue 9, pp. 30-38, May 2014.
3. Ranjan, Rohit & Arup Bhattacharjee (2014) "Reducing Cross-ISP Traffic in P2P Systems Using Adaptive Search Radius", In *IOSR Journal of Computer Engineering*, Vol. 16, Issue 1, Ver. III, pp. 74-79.
4. Pinki Roy & Amrit Roy, "A New Approach Towards Text Filtering", Second International Conference on Pinki Roy, Pradip K. Das, Sandeep Kumar Gupta, "Comparison of SVMs and NNs approach for automatic identification of Indian languages", Published in Elsevier, 1st International Science & Technology Congress, IEMCONGRESS-2014, August 28-31, 2014, Science City, Kolkata, India, pp. 39-44, ISBN:978-93-5107-248-5.
5. Saroj Kr Biswas, Nidul Sinha, Biswajit Purakayastha & Leniency Marbaniang (2014), Hybrid expert system using case based reasoning and neural network for classification, *Biologically Inspired Cognitive Architectures*, Vol. 9, Elsevier, pp. 57– 70.
6. Saroj K. Biswas, Nidul Sinha & Biswajit Purkayastha (2014), A review on fundamentals of case-based reasoning and its recent application in different domains, *International Journal of Advanced Intelligence Paradigms*, Vol. 6, No.3, Inderscience, pp. 235-254.
7. Saroj Kr Biswas, Nidul Sinha, Biswajit Purakayastha & Leniency Marbaniang (2014), Weather Prediction by Recurrent Neural Network Dynamics, *International Journal of Intelligent Engineering Informatics*, Vol. 2, Nos. 2/3, Inderscience pp.166-180.
8. Saroj K. Biswas, Nidul Sinha, Barnana Baruah & Biswajit Purkayastha (2014), Intelligent Decision Support System of Swine Flu Prediction using Novel Case Classification Algorithm, *International Journal Knowledge Engineering and Data Mining*, Vol. 3, No. 1, Inderscience, pp. 1-19.
9. Hidangmayum Saxena Devi, Dalton Meitei Thounaojam & Romesh Laishram (April 2014) "An approach to Illumination and Expression Invariant Multiple Classifier Face Recognition," *International Journal of Computer Applications*, Vol. 91, No.15, pp.34-37, Foundation of Computer Science, New York, USA.
10. Deori, Barga, & Dalton Meitei Thounaojam (2014) "A Survey On Moving Object Tracking In Video." In *International Journal of Information Theory*, Vol.3, No. 3, pp.31-46.
11. Happy Nath & Ujwala Baruah (May 2014) "Evaluation of Lower Bounding Methods of Dynamic Time Warping (DTW), *IJCA*.
12. Sarbojit Banerjee & Prasenjit Kumar Das (March 2015) "Security Issues survey In Cloud Computing", *International Journal of Engineering Trends and Technology*, Vol. 21, No. 3.
13. Dipayan Dev & Ripon Patgiri, "Hadoop-DR: Giving Wings to The Baby Elephant!!"- *Frontiers of Information Technology & Electronic Engineering, Springer*. (In press)
14. S. K Singh, A. K Goswami & N Sinha (December 2014) "Power System Harmonic Parameter Estimation Using Bilinear Recursive Least Square (BRLS) Algorithm", *International Journal of Electrical Power and Energy System*, Elsevier, Vol.67, pp. 1-10.
15. Saroj Kr. Biswas, Leniency Marbaniang, Biswasjit Purkayastha, Manomita Chakraborty, Rohen Heisnam Sing & Monali Bordoloi, " Rainfall Forecasting by Relevant Attributes Using Artificial Neural Networks - A Comparative Study", *International Journal of Big Data Intelligence*, Inderscience. (Accepted for publication)
16. Puja Dash, Lalit Chandra Saikia & Nidul Sinha (2014) "Comparison of performances of several Cuckoo search algorithm based 2DOF controllers in AGC of multi-area thermal system", *International Journal of Electrical Power & Energy Systems*, Vol. 55, pp. 429-436, Elsevier.

17. Puja Dash, Lalit Chandra Saikia & Nidul Sinha (2015) "Comparison of Performances of Several FACTS Devices Using Cuckoo Search Algorithm Optimized 2DOF Controllers in Multi-area AGC", *International Journal of Electrical Power & Energy Systems*, Vol. 65, pp. 316-324, Elsevier.
 18. Puja Dash, Lalit Chandra Saikia & Nidul Sinha (2015) "Automatic Generation Control of Multi Area Thermal System Using Bat Algorithm Optimized PD-PID Cascade controller", *International Journal of Electrical Power and Energy Systems*, Vol. 68, pp. 364-372, Elsevier.
 19. D. C. Das, N. Sinha & A. K. Roy (2014) "Small Signal Stability Analysis of Dish-Stirling Solar Thermal Based Autonomous Hybrid Energy System", *International Journal Electrical Power Energy System*, Vol. 63, pp. 485-49.
- b) National Journal(s)**
1. Pantha K. Nath, "Model-based Evaluation of Simulated Touch Screen Cell Phone Interface" *Journal of Applied Information Science*, Vol II, no 2, pp. 37-50 (Dec 2014) (ISSN:2321-6115)
- c) International Conference(s)**
1. Saswati Debnath, Badal Soni & Ujwala Baruah, "Text-Dependent Speaker Verification System: A Review" *IEEE Sponsored 9th International Conference on Intelligent Systems and Control (ISCO), 9th and 10th Jan.2015*.
 2. Saswati Debnath, Badal Soni & Pradip Kr. Das, "Text-constrained Speaker Verification using Fuzzy C Means Vector Quantization". *4th IEEE International Conference on Communication and Signal Processing-ICCSP'15*.
 3. Rituparna Sarma & Pantha K. Nath, "Routing and Wavelength Assignment in Translucent Optical Networks with No Bifurcation of Flow", *Eighth International Conference on Computer Communication Networks (ICCN)*, Elsevier Science and Technology, pp. 282-289 (2014).
 4. Rituparna Sarma & Pantha K. Nath, "Minimizing Lost Traffic in Translucent Optical Networks with No Bifurcation of Flow using Branch and Price", *International Conference on Electrical Electronics and Computer Science (ICEECS)*, Vol. 3, No.7, pp. 24-28 (April 2014).
 5. Bishwa Ranjan Roy & Amit Kumar Trivedi, "Construction of Fingerprint Orientation Field from Minutia Points", *IEEE International Conference on Advanced Communication, Control and Computing Technologies (ICACCCT) 2014*.
 6. Nivedita Deb & Saptarshi Chakraborty, "A Noble Technique for Detecting Anaemia through Classification of Red Blood Cells in Blood Smear", *IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014)*.
 7. Dhruvajyoti Das & Saptarshi Chakraborty, "Face Liveness Detection Based on Frequency and Micro-Texture Analysis", *IEEE International Conference on Advances in Engineering & Technology Research (ICAETR - 2014)*.
 8. Arun Kr. Yadav & Samir Kr Borgohain, "Sentence Generation from a Bag of Words Using N-gram Mode", *IEEE International Conference on Advanced Communication Control & Computing (ICACCCT)*, Tamilnadu, 08th May 2014.
 9. Deori Barga & Dalton Meitei Thounaojam. "Extended Kalman Filtering Based Multiple Object tracking in Image Sequences", *International Conference on Image and Signal Processing*, ISBN: 9789351072522 2014, pp. 315-323, Elsevier, 2014.
 10. D. M. Thounaojam, Amit Trivedi, Kh Manglem Singh & Sudipta Roy, "A Survey on Video Segmentation", *In Intelligent Computing, Networking, and Informatics*, pp. 903-912. Springer India, 2014.
 11. Dipayan Dev & Ripon Patgiri, "Performance Evaluation of HDFS in Big Data Management", will be published by IEEE in the proceedings of The International Conference on High Performance Computing and Applications (ICHPCA-2014), India. (In press)
 12. Dipayan Dev & Ripon Patgiri, "HAR+: Archive and Metadata Distribution! Why Not both?" In the proceedings of 2014 International Conference on Computer Communications and Informatics. (In press)

13. Dipayan Dev & Ripon Patgiri, "A Survey of Different Technologies and Recent Challenges of Big Data", *In the proceedings of 3rd ICACNI 2015. Book section 'Smart Innovation, Systems and Technologies'*, Springer Verlag. (In Press)
 14. Shounak Chakraborty & Ajoy Kumar Khan, "LoCoDuo: Low Cost Dual hop Clustering Based Protocol for Wireless Sensor Networks", In Proceeding of IEEE International Conference on Communication System and Network Technologies, Bhopal, April 2014.
 15. Shounak Chakraborty & Ajoy Kumar Khan, "A Noble Approach for Self Learning and Cluster based Routing Protocol with Power Efficiency in WSN", In Proceeding Of IEEE International Conference on Communication and Signal Processing, Chennai, April 2014.
 16. Esha Barlaskar & Y. Jayanta Singh, "Energy Efficient Management of Virtual Machines with Intelligent Agent in Cloud Data Center", Proceedings of 1st National Conference on Research Trends in Computer Science and Applications (NCRITCSA-2014), 8th February 2014, Siliguri Institute of Technology, Siliguri, Darjeeling, West Bengal.
 17. Manoj Pant, Bishwanath Dey & Sukumar Nandi, "A Multihop Routing Protocol for WSN based on Grid Clustering", AIMoC-2014, Kolkata, India.
 18. Bhasker J. Saikiya & Ujwala Barauh "A GA-NN based Wavelet Method of Speech Signal Denoising", ICCCI, PP. 91-99, 10th January, 2015.
 19. S. K. Singh, A. K Goswami & N. Sinha, "Power System Harmonic Estimation using FT-RLS Algorithm", Proceedings of IZCT-2014, IEEE-Mumbai, April-2014.
 20. S. K. Singh, A. K Goswami & N Sinha, "Variable Constrained based LMS Algorithm for Power System Harmonic Estimation", Proceedings of ICCPS-2014, IEEE-Chennai, April-2014, pp.1131-1134.
 21. S. K. Singh, A. K Goswami & N. Sinha, "Complex-NLMS Algorithm Based Power System Harmonic Estimation", Proceedings of ICRTIT-2014, IEEE-Chennai, April-2014.
 22. S. K. Singh, A. K Goswami & N. Sinha, "Harmonic Parameter Estimation of a Power Signal using FT-RLS Algorithm", ICHQP-2014, IEEE Bucharest, Romania, May 2014, pp.157-161.
 23. N. Sinha, S. Karan and S. K. Singh", "Modified DE Based ATC Enhancement Using FACTS Devices", Proceedings of CINE-2015, IEEE-Kolkata, January 2015, pp.3-8.
 24. S. K. Singh, A. K. Goswami & N. Sinha, "Power System Harmonic Parameter Estimation Using Complex-NLMS Algorithm", Proceedings of CALCON-2014, IEEE-Kolkata, November 2014.
 25. D. C. Das, N. Sinha & A. K. Roy, "Automatic generation control of an organic Rankine cycle solar thermal-wind-diesel hybrid energy system" Energy Technology, DOI:10.1002/ente.201402024.
- d) National Conference(s)**
1. Pinki Roy, Pradip K. Das & Sandeep Kumar Gupta, "Comparison of SVMs and NNs approach for automatic identification of Indian languages", 1st International Science & Technology Congress, IEMCONGRESS-2014, August 28-31, 2014, Science city, Kolkata, India, pp. 39-44, ISBN:978-93-5107-248-5.
 2. Hidangmayum Saxena Devi & Dalton Meitei Thounaojam, "Facial Feature Extraction and Classification Techniques: A Survey," *in National Conference on Emerging Global trends in Engineering and Technology*, Don Bosco University, Assam, India, 2014.
- e) Book/Chapter**
1. Shounak Chakraborty & Ajoy Kumar Khan, "Wireless Sensor Network Routing Protocol and Disaster Mitigation Usage", ISBN-13: 978-3-659-59506-6 ISBN-10: 3659595063 EAN: 9783659595066 Published on 28-08-2014, Publisher: LAMBERT Academic Publishing. (Available online at: <https://www.morebooks.de/store/gb/book/wireless-sensor-network-routing-protocol-and-disaster-mitigation-usage/isbn/978-3-659-59506-6>)

5. M.Tech. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Vikram Singh	Pantha Kanti Nath	Regenerator Placement in Translucent DWDM Networks
2.	Rituparna Sarma	Pantha Kanti Nath	Routing and Wavelength Assignment in Translucent Optical Network with No Bifurcation of Flow
3.	Nivedita Deb	Saptarshi Chakraborty	Automatic Blood Smear Analysis for Anaemia Detection.
4.	Dhrubajyoti Das	Saptarshi Chakraborty	Face Liveness Detection Based on Frequency & Micro-Texture Analysis.
5.	Purbankan Das	Amit Kr. Trivedi	A Single Seeded Based Region Growing Algorithm Based on Triple Homogeneity Criteria
6.	Bishwa Ranjan Roy	Amit Kr. Trivedi	Fingerprint Reconstruction From Minutia Template
7.	Barnana Baruah	Saroj Kr. Biswas	Performance Improvement of Case Based Reasoning in Medical Domain
8.	Leniency Marbaniang	Saroj Kr. Biswas	Weather Forecasting by Case based Reasoning and ANN
9.	Arun Kr. Yadav	Samir Kr. Bargohain	Sentence Generation from a Bag of Words using N-gram Model
10.	Rohit Ranjan	Dr. Arup Bhattacharjee	Distributed Downloading in Peer to Peer File sharing System
11.	Manish Kr. Jaiswal	Biswanath Dey	Study on Efficient Routing in Sensor Network
12.	Surya Kant Soni	Biswanath Dey	Dynamic Selection of Cluster Head in Cluster of Cluster heads within cluster in heterogeneous WSN
13.	Happy Nath	Ujwala Barua	Intelligent Detection of Stuttering with an Improved DTW
14.	Ananya Choudhury	Bishwajit Purkayastha	Automatic Number Plate Recognition System
15.	Barga Deori	D.M. Thounaojam	Detection and Tracking of Multiple Moving Objects using adaptive GMM with Noisr Reduction and Extended Kalman Filtering
16.	Hidangmayum Saxena Devi	D.M. Thounaojam	Linear and Non-Linear Appearance based Classification Techniques for Face Recognition
17.	Nivedita Deb	Saptarshi Chakraborty	Automatic Blood Smear Image Analysis for Anaemia Detection
18.	Arif Ahmed	A.S. Sabyasachi	Network-based QOS-aware Mobile Cloud service prediction and Selection

6. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Dr. Pinki Roy	Dr. P.K. Das (IIT Guwahati)	Automatic Identification of Indian Languages based on various classification techniques

Electrical Engineering



1. Academic Staff

HEAD: Dr. Binoy Krishna Roy, Ph.D.

Faculty members

Professor

Dr. Binoy Krishna Roy, Ph.D.
Dr. Ashoke Kumar Sinha, Ph.D.
Dr. Nidul Sinha, Ph.D.

Assistant Professor

Dr. Dulal Chandra Das, Ph.D.
Dr. Lalit Chandra Saikia, Ph.D.
Dr. Jyoti Prakash Mishra, Ph.D.
Dr. Tanmoy Malakar, Ph.D.
Dr. Arup Kumar Goswami, Ph.D.
Dr. Prashant Kumar Tiwari, Ph.D.
Dr. Rajeeb Dey, Ph.D.
Dr. Raj Kumar Biswas, Ph.D.
Dr. Nirmala Soren, Ph.D.

Associate Professor

Dr. Saurabh Chaudhury, Ph.D.
Dr. Nalin Behari Dev Choudhury, Ph.D.

Dr. Binod Shaw, Ph.D.
Mr. Chayan Bhattacharjee, M.Tech.
Mr. Prasanta Roy, M.Tech.
Ms. Washima Tasnin, M.Tech. (Contractual)
Ms. Barasha Mali, M.Tech. (Contractual)
Ms. Rumi Rajbongshi, M.Tech. (Contractual)
Mr. Shubhashish Bhakta, M.Tech.(Contractual)
Mr. H. J. Khuman, M.Tech. (Contractual)

2. Distinction Achieved

a) By Faculty Member

1. POSCO Award by Dr. Binod Shaw.

3. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. B. K. Roy	Workshop on implementation of image processing using Lab-VIEW	Department of EE, NIT Silchar	Two days
		Workshop on development of assessment tools for effective implementation of Outcome Based Curriculum	Department of EE, NIT Silchar	Two days
		Main Workshop on Control Systems, 2nd Dec – 12th Dec 2014	NMEICT, IITK	Two weeks
2.	Mr. P. Roy	Implementation of Image Processing Using Lab VIEW	TEQIP-II	Two days
3.	Dr. P. K. Tiwari	National Seminar on “Recent Challenges and Future Issues of Power System Operation in Indian Context”	TEQIP-II, Department of EE, NIT Silchar	One day
4.	Dr. T. Malakar	Recent Challenges and Future Issues of Power System Operation in Indian Context (National Seminar)	NIT Silchar	Two days
5.	Dr. J. P. Mishra	Workshop on “Creativity & Innovation Techniques and Patenting in India & Abroad” (As Co-Coordinator)	TEQIP – II	Two days

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. A. K. Sinha	Management Capacity Enhancement Program	IIM Indore
2.	Dr. B. K. Roy	One week Coordinators’ Workshop on Control Systems	IIT Kharagpur
3.	Dr. A. K. Goswami	National Faculty Development Program (FDP) on “Pedagogy: A Framework for Effective Teaching and Learning Strategies”	NIT Silchar
		Workshop on Outcome Based Teaching & Learning	NIT Silchar
4.	Dr. B. Shaw	Development of assessment tools for effective implementation of outcome based curriculum	NIT Silchar
		T10KT Main Workshop on Control Systems	NIT Silchar

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
5.	Mr. H. J. Khuman	Development of assessment tools for effective implementation of outcome based curriculum.	NIT Silchar
		Control system	IIT Kharagpur
6.	Dr. L. C. Saikia	FDP	NIT Silchar
		IEEE workshop	IIT Delhi
7.	Dr. N. B. Dev Choudhury	FDP under TEQIP-II	NIT Silchar
		Recent trends in Synthesis of Chemical Compounds and their Application in Science & Technology	NIT Silchar and Indian Academy of Science
8.	Mr. P. Roy	Two Week Main Workshop on Control Systems	IIT KGP, NIT Silchar
		Development of Assessment tools for effective implementation of outcome based curriculum	NIT Silchar
		One Week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies	NIT Silchar
9.	Dr. P. K. Tiwari	Innovating India	Jointly organized by NIT Silchar, CSIR-NISTADS-New Delhi & IIM Kashipur
		National Faculty Development Program (FDP) on "Pedagogy: A Framework for Effective Teaching and Learning Strategies"	NIT Silchar
		Workshop on Outcome Based Teaching & Learning	EE Department, NIT Silchar
10.	Mr. S. Bhakta	Development of assessment tools for effective implementation of outcome based curriculum	NIT Silchar
11.	Dr. T. Malakar	One week national FDP on Pedagogy : A framework for effective teaching and learning strategies	NIT Silchar
12.	Dr. J. P. Mishra	Main workshop on "Control Systems"	NMEICT, IIT Kharagpur
		Workshop on "Development of assessment tools for effective implementation of outcome based curriculum"	NIT Silchar
		National FDP on "Pedagogy: A Framework for Effective Teaching and Learning strategies"	TEQIP-II, NIT Silchar
13.	Barasha Mali	National level workshop on LABVIEW and Selected Applications	Department of ECE and IEEE, Student Branch, GU
14.	Washima Tasnin	IEEE Authorship Workshop	IEEE Student Branch, EED, NIT Silchar
		Skill Development Program on Solar Systems	NIT Silchar
		Development of Assesment Tools for Effective Implementation of outcome based curriculum	NIT Silchar
		International Conference on Green Energy and Smart Materials through Science, Technology and Management (GESM'14)	Gauhati University, Assam

4. Research and Development

a) PhD 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 Sources; Electric Drives; Control System; Fractional Order Controller; Chaos and its Control; Stability & Control of time-delay system; Dynamics & Stability of Neural Network; Application of delay feedback control in robotics & 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 Sources; 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 & H-Infinity Control; Decentralized control for interconnected power system under deregulated power market scenario; Nonlinear control design and applications; Integrated Rural Energy Planning; Micro-Grid Inverter Control; Electric and Hybrid Vehicles.

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

Completed	Submitted	Ongoing
01	02	26

c) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs	Duration
1.	Automatic Generation Control for Automone Hybrid Generation System	Dr. Dulal Ch. Das	AICTE	15	2 years
2.	Design & Simulation of Carbon Nanotube FET devices for VLSI Applications	Dr. S. Chaudhury	AICTE	8	2012-14
3.	Power Quality Assesment & Improvement in Barak Valley, Assam	Dr. A. K. Goswami	DST	9.37	2013-15
4.	Design & Implementation of Pure Sine Wave Inverter for Residential Solar Power	Dr. A. K. Goswami	AICTE	25	202-14

5. Publication

a) International Journal(s)

1. Goswami, A. K.(2014). Power System Harmonic Parameter Estimation Using Bilinear Recursive Least Square (BRLS) Algorithm. *International Journal of Electrical Power and Energy Systems*.
2. Goswami, A. K.(2014). Voltage sag mitigation strategies for an Indian Power Systems: A Case Study. *Journal of the Institution of Engineers (India): Series B*.
3. Saikia, L. C.(2014). Automatic generation control using two degree of freedom fractional order PID controller. *International Journal of Electrical Power & Energy Systems*, Volume 58, pp. 120-129.
4. Saikia, L. C. (2014). Robust Two-Degree-of-Freedom Controller for Automatic Generation Control of Multi-Area System. *International Journal of Electrical Power & Energy Systems*, Volume 63, pp. 878-886.
5. Saikia, L. C. (2015). Comparison of Performances of Several FACTS Devices Using Cuckoo Search Algorithm Optimized 2DOF Controllers in Multi-area AGC. *International Journal of Electrical Power & Energy Systems*, Vol. 65, pp. 316-324.
6. Saikia, L. C.(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.
7. Sinha, A. K.(2014). Impact of load management on the energy management strategy of a wind-short hydro hybrid system in frequency based pricing. *Energy Conversion and Management*, Vol. 79, pp. 200-212.
8. Malakar, T. (2015). Optimal reactive power dispatch using hybrid Nelder-Mead Simplex based firefly algorithm. *International Journal of Electrical Power and Energy Systems*, Elsevier, Vol.66, pp. 09-24.
9. Chaudhury, S.(2015). Analysis of different parameters of channel material and temperature on threshold voltage of CNTFET. *Material Science in Semiconductor Processing*, Elsevier, Vol. 31, pp 431-438.
10. Chaudhury, S.(2014). Analytical approach to reduce leakage power in CNTFET over MOSFET device. *Journal of Semiconductors*, Vol.35, No. 11, (Article in Press).
11. Chaudhury, S.(2014). Comparative Analysis of Leakage Power with 10 Nm Channel Length In MOSFET/ CNTFET Devices. *Journal of Electron Devices*, Vol. 20, pp. 1718-1723.
12. Biswas, R. K.(2014). Free Final Time Fractional Optimal Control Problems. *Journal of the Franklin Institute*, 351, pp. 941–951.
13. Shaw, B. (2014). Solution of reactive power dispatch of power systems by an opposition-based gravitational search algorithm. *International Journal Electrical Power & Energy System*, 55, pp. 29-40.
14. Shaw, B.(2014). A seeker optimization algorithm for economic load dispatch with non-smooth cost functions. *International Journal Latest Technology in Engineering, Management & Applied Science*, 3(11), pp. 41-48.
15. Roy, B. K.(2014). Online Validation of Soft Calibration Circuit for Capacitance Pressure Sensor. *International Journal of Information Processing*, Vol. 8, No. 2, pp. 64-70.
16. Roy, B. K.(2014). Synchronization and Anti-synchronization of Lu and Bhalekar-Gejji Chaotic Systems using Nonlinear Active Control, Chaos, Solitons and Fractals. *Interdisciplinary journal of Nonlinear Science, and Non equilibrium and Complex Phenomena*, Vol. 69, No. 2, pp. 31-39.
17. Roy, B. K., A Practically Validated Intelligent Calibration Circuit Using Optimized ANN for Flow Measurement by Venturi. *IE(I) Journal Electrical Series (B)*, Accepted.
18. Roy, B. K., Synchronization and anti-synchronization between hyperchaotic and chaotic systems and its simulation using analog circuit design. *Nonlinear Dynamics*, Springer (First review is over)

19. Das D. C., Sinha, N. & Roy, A. K.(2014). Small Signal Stability Analysis of Dish-Stirling Solar Thermal Based Autonomous Hybrid Energy System. *International Journal Electrical Power & Energy System*, Vol. 63, pp. 485–49.
 20. Das D. C., Sinha, N. & Roy, A. K.(2014). Automatic generation control of an organic Rankine cycle solar thermal- wind-diesel hybrid energy system. *Energy Technology*, Vol. 2, pp. 721 – 731.
 21. Sinha, N.(2014). Automatic generation control using two degree of freedom fractional order PID controller. *International Journal of Electrical Power & Energy Systems*, Vol. 58, pp. 120-129.
 22. Sinha, N. (2014). Solution to automatic generation control problem using firefly algorithm optimized IAD μ controller. *ISA Transactions*, Vol. 53, No. 2, pp. 358-366.
 23. Sinha, N.(2014). AGC of a Multi-Area Thermal System under Deregulated Environment Using a Non Integer Controller. *Electric Power Systems Research (EPSR)*, Elsevier, Vol. 95, pp. 175-183.
- b) National Journal(s)**
1. Roy. B. K., (2014). Dynamic Modelling, Simulation of Single-Link Flexible Robot Manipulator and Its Control. *Journal of Control & instrumentation*, Vol. 5, No. 3.
 2. Roy. B. K.(2014). Dynamic Modeling and State-Feedback Control of a Rotational Base Flexible Link Manipulator. *Journal of Electronic Design Technology*, Vol. 5, No. 3, pp. 01-07.
 3. Roy. B. K.(2014). Adaptive Control Scheme For Anti-Synchronization of Identical Bhalekar-Gejji Chaotic Systems. *Research & Reviews : Journal of Physics*, Vol. 3, No. 3.
 4. Roy. B. K.(2014). Anti-Synchronization of Vallis System Using Sliding Mode Control. *STM Journal of Control & Instrumentation*, Vol. 5, No. 3, pp. 22-27.
- c) International Conference(s)**
1. Jayesh Deorao Ruikar, Dr. A. K. Sinha, Dr. S. Chaudhury, Image Quality Assessment Algorithms: Study and Performance Comparison, IEEE International Conference on Electronics and Communication Systems-2014, Coimbatore, Tamil Nadu, 13-14 Feb 2014.
 2. Adla Vinod, Dr. A. K. Sinha, Performance Comparison of Controllers For Non-Isolated Boost Converter, IEEE International Conference on Electronics and Communication Systems-2014, Coimbatore, Tamil Nadu, 13-14 Feb 2014.
 3. Adla Vinod, Dr. A. K. Sinha, A Study on Intelligent Algorithms For Maximum Power Point Tracking in Field of Wind Energy Conversion System (Review), IEEE International Conference on Electronics and Communication Systems-2014, Coimbatore, Tamil Nadu, 13-14 Feb 2014.
 4. Dr. A. K. Sinha, Wavelet Based Speech Coding Technique Using Median Function Thresholding, IEEE International Conference on Electronics and Communication Systems-2014, Coimbatore, Tamil Nadu, 13-14 Feb 2014.
 5. Dr. A. K. Sinha, Priyank Ray, Design of a Controller for Grid Bus Power Management with PV System, IEEE The International Conference on Green Computing, Communication and Electrical Energy, Coimbatore, 6-8 March 2014.
 6. Dr. A. K. Sinha, Design of Controller for Power Quality Management in Presence of Unbalanced Load Integrated with Solar PV, IEEE The International Conference on Green Computing, Communication and Electrical Energy, Coimbatore, 6-8 March 2014.
 7. Arup Kumar Goswami, Chandra Prakash Gupta and Girish Kumar Singh, Cost-Benefit Analysis of Voltage Sag Mitigation Methods in Cement Plants, 6th IEEE International Conference on Harmonics and Quality of Power (ICHQP), University POLITEHNICA of Bucharest, Romania, May 25 to May 28, 2014.
 8. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Harmonic Parameter Estimation of a Power Signal using FT-RLS Algorithm, 6th IEEE International Conference on Harmonics and Quality of Power (ICHQP), University POLITEHNICA of Bucharest, Romania, May 25 to May 28, 2014.

9. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Variable Constrained based LMS Algorithm for Power System Harmonic Estimation, IEEE, ICCPS-2014, Adiprasakti Engineering College, Chennai, April 2014.
10. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Power System Harmonic Estimation using FT-RLS Algorithm, IEEE I2CT-2014, I2CT-2014, Pune, April-2014.
11. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Fast Transverse-RLS Algorithm Based Power System Harmonic Estimation, IEEE, ICICES-2014, S A Engineering College, Chennai, Feb-2014.
12. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Application of Volterra-Series Algorithm for Power System Harmonic Estimation, Automation, Control, Energy and Systems (ACES), 2014 First International Conference on IEEE, ACES 2014, AOT, Hooghly, WB, Feb-2014.
13. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Power System Harmonic Estimation by using Complex normalized least means square algorithm, ICRTIT 2014, Anna University, 10-12 April 2014.
14. S. K. Singh, B. R. Deka, A. Nath, R. Chakravorthy, J. Kalita, A. K. Goswami and N. Sinha, Complex NLMS Algorithm based power system harmonic estimation, ICRTIT-2014 (IEEE Chennai), 10-12 April 2014.
15. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, Robust Power System Harmonic Parameter Estimation Using Fast Transverse Based RLS Algorithm, RTCSP 2014, 26-27 February 2014.
16. Nilotpal Sinha, Ajit Gupta, Santosh Kumar Singh, N. Sinha, Arup Kumar Goswami, Power System Harmonic Parameter Estimation Using Complex-NLMS Algorithm IEEE CALCON 2014.
17. Subhasish Deb and Arup Kumar Goswami, Rescheduling of Real Power for Congestion Management using Cuckoo Search Algorithm, INDICON 2014, Pune, Dec 2014.
18. Binod Shaw, Solution of Optimal Power Flow with FACTS Devices using Opposition-based Gravitational Search Algorithm, Int. Conf. Swarm Evolutionary and Memetic Computing (SEMCCO 2014), Bhubaneswar, 18-20 December 2014.
19. Binod Shaw, Solution of Optimal Power Flow by an Opposition-based Gravitational Search Algorithm, 1st Int. Conf. on Intelligent Computing & Applications (ICICA 2014), NIT Durgapur, 20-22 December 2014.
20. Puja Dash, Lalit Chandra Saikia, Nidul Sinha, AGC of a Multi - area Interconnected System with FACTS and Firefly Optimized 2DOF PID Controller, IEEE International Conference on Control, Instrumentation, Energy and Communication (CIEC), 31 January to 2 Feb 2014.
21. Lalit Chandra Saikia, Asmita Paul, Puja Dash, N.B. Dev Choudhury, AGC of An Interconnected Multi-area Hydrothermal System Using A Neuro-Fuzzy Controller, IEEE International Conference on Control, Instrumentation, Energy and Communication (CIEC), 31 January to 2 Feb 2014.
22. Puja Dash, Lalit Chandra Saikia, Nidul Sinha, AGC of a Multi - area System Using Firefly Optimized Two Degree of Freedom PID Controller, IEEE International Conference on Power & Energy Systems: Towards Sustainable Energy - PESTSE, March 2014.
23. Lalit Chandra Saikia, R. Kedia, Nidul Sinha, Puja Dash, Damping of Oscillations Using TCPS with BF Technique in a Three-Area Thermal System, IEEE International Conference on Power & Energy Systems: Towards Sustainable Energy - PESTSE, March 2014.
24. P. Roy, Fractional Order System Identification of Maglev Model from Real-Time Data, IEEE International Conference on Advanced Communication Control and Computing Technologies, Ramanathapuram, 2014.
25. P. Roy, Design of a Fractional Order PD Controller Tuned by Firefly Algorithm for Stability Control of the Nonlinear Ball and Plate System, IEEE International Conference on Advanced Communication Control and Computing Technologies, Ramanathapuram, 2014.
26. P. Roy, Trajectory Control of a Ball in a Ball and Plate System using Cascaded PD Controllers Tuned by PSO, 4th International Conference on Soft Computing for Problem Solving. NIT Silchar, 2014.

27. P. K. Tiwari, An Approach for Optimal Placement Rating and Investment Cost Recovery of a TCSC in Double Auction Power Market, Proceedings of the 2014 International Conference on Power Systems, Energy, Environment, Switzerland, 2014.
 28. P. K. Tiwari, Maximization of Social Welfare by Optimal Allocation of UPFC with Wind Power Generation in Deregulated Electricity Market, 2014 IEEE International Conference on Advanced Communication Control & Computing Technologies (ICACCCT), Ramanathapuram, Tamil Nadu, 2014.
 29. P. K. Tiwari, Improvement of Social Welfare and Profit by Optimal Allocation of TCSC with Wind Power Generator in Double Auction Competitive Power Market, 2014 Fourth IEEE International Conference on Advances in Computing and Communications, 2014.
 30. Saurabh Chaudhury, Advantage of CNTFET Characteristics Over MOSFET to Reduce Leakage Power, 2nd IEEE International Conference on Devices, Circuits, and Systems (ICDCS 2014), Karunya University, Coimbatore, 6-8 March 2014.
 31. Saurabh Chaudhury, Effect of Temperature and Chiral Vector on Emerging CNTFET Device, 8th IEEE International Conference on Computing for Sustainable Global Development, Bharti Vidyapeeth, New Delhi, 5-7 March 2014.
 32. Saurabh Chaudhury, A Novel PMOS Data Retention Leakage Power Reduction Design, International Conference on Communication Systems and Network Technologies, NITTTR Bhopal, 7-9 April 2014.
 33. Saurabh Chaudhury, Analysis of leakage feedback techniques, Proceedings of IEEE International conference on Electronics communication and Instrumentation, Heritage Institute of Technology, Kolkata (WB).
 34. T. Malakar, Optimal active power dispatch using hybrid firefly algorithm, IEEE International Conference, INDICON 2014, IEEE, Pune.
 35. Washima Tasnin and Pradyumna Kumar Choudhury, Designing of a temperature control mechanism for Solar water heating system, Green Energy and Smart Materials through Science, Technology and Management (GESM-14), Gauhati University, Assam, 21-23 January 2014.
- d) National Conference(s)**
1. P. Roy, Design of PID and FOPID Controllers based on Bacterial Foraging and Particle Swarm Optimization for Magnetic Levitation System, First Indian Control Conference (ICC 2015). IIT Madras. Chennai.
 2. Santosh Kumar Singh, Arup Kumar Goswami and Nidul Sinha, "Robust Power System Harmonic Parameter Estimation Using Fast Transverse Based RLS Algorithm", RTCSP-2014, Amrita Vidyapitham, Coimbatore, Feb-2014.

6. Visits to Abroad

Sl. No.	Name of the faculty	Name of the Conference/Programme	Place	Date
1.	Dr. Saurabh Chaudhury	12th International Conference on Advanced Materials and Nanotechnology	Bangkok	December 18-19, 2014

7. M.Tech. / M.Sc. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Alok Kumar Behera	Mr. S. K. Pattnayak	Robot manipulator modelling in matlab sim-mechanics using variable structure generalized impedance control for Robust compliance motion.
2.	Ameresh Kumar Singh	Dr. Lalit Chandra Saikia	Modelling and Control of a Grid Connected Hybrid/pv Distributed Generation System.

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
3.	Arunav Ray	Prof. N. Sinha	Cuckoo search optimized controllers for reduction of harmonic distortion in grid connected Pv inverter.
4.	Ashish Mishra	Prof. A. K. Sinha	Optimal placement of phasor measurement units in power system network with fixed channel capacity for full observability.
5.	Balram Patel	Prof. A. K. Sinha	A novel approach for placement of phasor measurement unit for full observability.
6.	Chetan Sharma	Mr. Dulal Ch. Das	Frequency Control of Isolated Hybrid Energy System.
7.	Debasis Kr. Patel	Prof. A. K. Goswami	Voltage sag mitigation using dynamics voltage restorer.
8.	Divye Rishi Srivastava	Prof. A. K. Roy	Some studies on enhancement of power system oscillation damping.
9.	Jay Prakash Singh	Prof. B.K. Roy	Synchronization techniques involving chaotic and hyper chaotic system using different control schemes and their circuit simulation.
10.	Jayadev Muduli	Dr. N.B.D Choudhury	An integration of adaptive and artificial neural network (ANN) method for shunt active power filter (SAPF) to compensate harmonics and reactive power.
11.	Lalbahadur Majhi	Mr. P.Roy	Fractional order PID controller design for Maglev ball system.
12.	Manashita Borah	Mr. P.Roy	Design of fractional order proportional derivative (FOPD) controllers for controlling the trajectory of the non-linear ball and plate system.
13.	Nalini Prasad Mohanty	Prof. B.K.Roy	Design & Implementation of PID & QFT Based Controller for Liquid Level of the Tank.
14.	Narayan Sahoo	Mr. Lalu Seban	Single axis control of a ball position in magnetic levitation system using fuzzy logic control and model predictive control.
15.	Pinaki Dhar	Mr.T. Malakar	A day Ahead Reactive Power Dispatch Using Cuckoo Search Algorithm.
16.	Prakash Kumar	Dr.P.K.Tiwari	Optimal ALlocation, Sizing of TCSC & UPFC for Congestion Management in Competitive Power Market.
17.	Rajiyung Madhurya Barman	Mr D. C. Das	Voltage Control for IG/PMIG based isolated wind-diesel hybrid power system using firefly Algorithm.
18.	Ranjit Jena	Dr. N.B.D Choudhury	Optimal placement of facts device for enhancing total transfer capability (TTC) during contingency.
19.	Ritu Parna Mitra	Prof. A.K. Goswami	An approach for congestion management based on transmission line reconfiguration using heuristic algo in electrical power system.
20.	Sabyasachi Das	Mr. T. Malakar	Optimal reactive power dispatch using bat algo.
21.	Sankha Pallab Das	Prof. N. Sinha	Maximum power extraction of PV plant by using Fuzzy logic controller and Dc link voltage control of grid connected Pv system.

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
22.	Saurabh Dey Purkayastha	Mr. P.Roy	PID controller design for a liquid level system.
23.	Silabati Saren	Prof. A.K. Roy	Power quality improvement of grid connected DFIG based wind energy conversion system using PI and Fuzzy logic controller - Based HAPF and UPQC.
24.	Smruri Ranjan Jagadeb	Mr. Sudarsan Sahoo	Hybrid Active & Passive Control of a Server Room Noise -A Comparative Study of Result Obtained by Using Different Algorithms.
25.	Subhojit Dawn	Dr. P.K.Tiwari	Optimal Allocation of TCSC & UPFC With Wind Power Generator in Double Auction Competitive Power Market.
26.	Sumit Kumar	Dr. Lalit Chandra Saikia	Some Studies on AGC of three Area System.
27.	Suresh Kumar Sahoo	Prof. B. K. Roy	Design of Robust Controller Using Quantitative Feedback Theory(QFT) for Dynamical System.

8. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Tanmay Malakar	Prof. S. K. Goswami & Prof. A. K. Sinha	Some Studies on the application of Metaheuristic Optimization Algorithms for Solving Power System Operational Problems

Electronics & Communication Engineering



1. Academic Staff

Head : Dr. R.H. Laskar, Ph.D.

Faculty members

Professor

Prof. F. A. Talukdar, Ph.D.

Prof. S. Baishya, Ph.D.

Mrs. Madhumita Paul, M.Tech.

Associate Professor

Mr. P. K. Paul, M.Tech.

Mrs. M. Choudhury, M.Tech.

Assistant Professor

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

Dr. B. Bhowmick, Ph.D.

Mr. Koushik Guha, M.Tech.

Mr. Avinash Sahoo, M.Tech.

Dr. J. Chakraborty, Ph.D.

Mr. G. P. Keshri, M.Tech.

Dr. Taimoor Khan, Ph.D.

Mr. V. S. Bhadauria, M.Tech. (contractual)

Dr. R. H. Laskar, Ph.D.

Mr. Wasim Arif, ME

Dr. T. R. Lenka, Ph.D.

Dr. Ashraf Hossain, Ph.D.

Mr. R. K. Karsh, M.Tech.

Dr. Banani Basu, Ph.D.

Ms. Bhaswati Das, M.Tech. (contractual)

Mr. N. K. Singh, M.Tech. (contractual)

2. Distinction Achieved

a) By Faculty Member

1. Dr. T. R. Lenka, Letter of Appreciation from Director, NIT Silchar, 2014.
2. Dr. T. R. Lenka, Letter of Appreciation from Prof. Rajat Moona, Director General, Centre for Development of Advanced Computing (C-DAC), 2014.
3. Dr. T. R. Lenka, Letter of Appreciation from Dr. P.K Sinha, Sr. Director, Centre for Development of Advanced Computing (C-DAC), 2014.
4. Dr. T. R. Lenka, Letter of Appreciation from Intel Technology India Ltd., 2014.

3. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Mr. Koushik Guha & Dr. T. R. Lenka	MEMS	IEEE EDS Student Branch Chapter, NIT Silchar RSF-IIT, Guwahati	February 07, 2015
2.	Prof. F. A. Talukdar & Dr. R. H. Laskar	Embedded Systems in the IoT era	NIT Silchar & IIT Delhi	March 30-31, 2015
3.	Mr. Wasim Arif	One Week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies	TEQIP-II	May 7-11, 2014
4.	Mr. Wasim Arif (Remote Centre Coordinator)	Control Systems	NMEICT	December 02-12, 2014
5.	Mr. Wasim Arif (Remote Centre Coordinator)	ISTE workshop on Fluid Mechanics	NMEICT	May 20-30, 2014
6.	Mr. Wasim Arif (Remote Centre Coordinator)	Introduction to Design of Algorithms	NMEICT	March 16-20, 2015 (Coordinator workshop) May 25-30, 2015 (Main workshop) under Blended MOOCs
7.	Dr. T. R. Lenka	1st One Week National Symposium on High Performance Computing	TEQIP-II	April 04-09, 2014
8.	Dr. T. R. Lenka	Summer Training on High Performance Computing	Self-Sponsored	June 25, 2014 – July 25, 2014
9.	Dr. T. R. Lenka	Winter Training on High Performance Computing	Self-Sponsored	December 08-26, 2014
10.	Dr. T. R. Lenka	One Week Hands on Training on High Performance Computing	Self-Sponsored	March 25-31, 2015

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. J. Chakraborty	Short-term course on "Computational Systems Biology", 31st March-4th April'14	IIT Kharagpur
2.	Dr. T.R. Lenka	3rd NKN Annual Workshop from 15-17 Dec.'14	IIT Guwahati
3.	Mr. A. Sahoo	Short-term course on Design, Education, Research & Innovation (DERI) from 2-6 Feb.'15	IIT Guwahati
4.	Dr. B. Basu	Short-term course on Design & Analysis of Efficient Systems for Microwave Transmission & Radiation from 23-28 Feb.'15	IIT Kharagpur
5.	Mr. R.K. Karsh	Short-term course on "Mathematical Modeling & Numerical Computation using Matlab" from 9-13 Feb.'15	IIT Roorkee
6.	Dr. K.L. Baishnab	Conference attended from 19-20 March'15	Karpagam College of Engineering Myleripalayam, Coimbatore
7.	Mr. Wasim Arif	One day discussion on the draft policy for promoting innovation based entrepreneurship by students, youth and other individuals,	IIM Ahmedabad
8.	Mr. Wasim Arif	Meeting of Innovation Clubs at Rashtrapati Bhavan	President's Secretariat
9.	Dr. Ashraf Hossain	One week Faculty development program on Pedagogy	NIT Silchar & TEQIP-II
10.	Dr. T. R. Lenka	Two days workshop on "Development of Assessment Tools for Effective Implementation of Outcome Based Curriculum" from 22-23 Nov 2014 at NIT Silchar.	NIT Silchar
11.	Mr. Koushik Guha	1st International Conference on Microelectronics, Circuits & Systems; July 11-13, 2014, Hayat Regency, Salt Lake City, Kolkata, West Bengal, India	International Association of Science, Technology and Management
12.	Mr. Koushik Guha	IEEE Nanotechnology Materials and Devices Conference 2014 October 12-15, 2014 – Aci Castello, Sicily, Italy	CNR-IMM, ITALY and University of Catania, Italy
13.	Prof. S. Baishya	IEEE Authorship Workshop	IIT Delhi

4. Research and Development**a) PhD Programme (Specializations)**

MEMS; Semiconductor Device, Modelling and Simulations; Nano Technology; Electronic Circuits; Communication Engineering; Wireless Technologies; Power Electronics; RF & Microwave Engineering; 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 Communication Engineering; Radar Engineering & Radar Signal Processing.

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

Completed	Submitted	Ongoing
04	00	35

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	For PG and PhD Scholar Research work
5.	Speech Processing Lab	For PG and PhD Scholar Research work
6.	Computational Lab	For PG and PhD Scholar Research work
7.	TCAD Lab	For PG and PhD Scholar Research work
8.	MEMS Lab	For PG and PhD Scholar Research work
9.	DSP Lab	For PG and PhD Scholar Research work

d) Ongoing / Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lacs	Duration
1.	NRDC-NITS-IFC	Wasim Arif	NRDC, New Delhi	8 Lacs	1 year
2.	Development of National Disaster Spectrum (NDS) and Disaster Communication Backbone Architecture (DiCoBA) with prototype development	Prof. S. Baishya Co-Investigator: Wasim Arif	DeitY	1.1 Crore	3 years
3.	Nationally coordinated NMDC	Prof. S. Baishya	DRDO	Software provided	Ongoing since 2009
4.	Investigation of Some Binary Metal Oxide material for Resistive Switching Memory	Prof. F. A. Talukdar	AICTE	18.40 Lacs	3 years
5.	Development of speech based multilevel person Authentication System	Dr. R. H. Laskar	DIT, MHRD	57.93 Lacs	3 years
6.	Development of Prototype Video Surveillance System using Face Recognition	Prof. F. A. Talukdar & Dr. R. H. Laskar	BRNS, BARC	24.9 Lacs	3 years

*There are five projects under RPC, NIT Silchar

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Mr. Wasim Arif	Springer WPC	1	2015
2.	Mr. Wasim Arif	SPIN-2015	3	2015
3.	Dr. B. Bhowmick	International Journal of Electronics	2	2014
4.	Dr. Ashraf Hossain	Elsevier Journal of Computers & Electrical Engineering	1	2015
5.	Dr. Jayasree Chakraborty	Neurocomputing	1	2014
6.	Dr. Jayasree Chakraborty	Applied Soft Computing	2	2015
7.	Dr. Jayasree Chakraborty	Defence Science Journal	1	2015
8.	Dr. Jayasree Chakraborty	IET Image Processing	1	2014
9.	Dr. T. R. Lenka	Superlattices and Microstructures (Elsevier)	1	2014
10.	Dr. T. R. Lenka	Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (Springer Journal's Editorial Office)	1	2014
11.	Dr. T. R. Lenka	International Journal of Electronics (Taylor and Francis)	1	2014
12.	Dr. T. R. Lenka	World Journal of Nano Science and Engineering (WJNSE)	1	2014

5. Publication

a) International Journal(s)

1. A. Sahoo, et al. (March, 2010). A Computationally Efficient Generalized Poisson Solution for Independent Double Gate Transistors. *IEEE Transactions on Electron Devices*, Vol.57, Issue 3, pp. 632-636.
2. Arif, W., Saikia, D. N. & Baishya, S. (March, 2014). An Adaptive Spectrum Sensing Model for Cognitive Radio Application. *IJSCE*, ISSN: 2231-2307, Volume-4, Issue-1, pp. 171 – 176.
3. Prashanth Kumar, B., Arif, W. & Baishya, S. (March, 2014). Gate Capacitance Extraction Two Dimensional T- Shaped Junction less Transistor Using Sentaurus TCAD. *IJRSET*, Vol. 3, Special Issue 3, ISSN (Print): 2347 – 6710, pp. 1486-1489.
4. Nandi, R. A. & Basu, B. (2014). 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, Early View*. Wiley, DOI: 10.1002/jnm.2031.
5. Bhowmick, B., Goswami, R. & Das, B., 'A mathematical model and an algorithm for transmission in single rectangular potential barriers', *International Journal of Pure and Applied Mathematics*. (Accepted).
6. Suman, M. K., Kumar, S. & Bhowmick, B. (March, 2014). A comparative study of ballistic DG nMOS for 9.8nm gate length with Mixed gate oxide over single gate oxide by DC and RF analysis. *International Journal of Innovative Research in Science, Engineering and Technology*, Vol.3, pp.1403-1408.

7. Chakraborty, J., Midya, A., Mukhopadhyay, S., Rangayyan, R. M., Sadhu, A., Singhla, V., Khandelwal, N., Bhattacharyya, P. & Azevedo-Marques, P. M. (2015). Detection of the Nipple in Mammograms with Gabor Filters and the Radon Transform. *Biomedical Signal Processing and Control*, Vol. 15, pp. 80-89. <http://www.sciencedirect.com/science/article/pii/S1746809414001335>
8. Choudhury, M., Nath, S. S. & Bhattacharjee, R. (2014). Ethanol sensing property of SnO₂ quantum dots embedded on PVP. *Journal of Nanotech. Prog INT.*, Vol. 5, Issue1.
9. Choudhury, M., Nath, S. S. & Bhattacharjee, R. (2014). Methanol sensing property of Fe₂O₃ quantum dots embedded on PVP. *International Journal of Nanoscience and Nanotechnology*, Vol. 5, Number 1, pp. 101-108.
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22. Maity, R., Thapa, R. K. & Baishya, S. 'Analytical Characterization and Simulation of a 2-D Capacitive Micromachined Ultrasonic Transducer Array Element,' *Journal of Computational and Theoretical Nanoscience* (to be published) (SCI-E).
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 24. Baidya, A., Krishnan, V., Baishya, S. & Lenka, T. R. (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 (SCI-E).
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- b) International Conference(s)**
1. B. Prashanth Kumar, W. Arif, S. Baishya, "An Inclusive Study on Characteristics of Junctionless Transistor" IEEE-ICECS, 2014 DOI: 10.1109 /ECS. 2014. 6892746 2014.
 2. B. P. Kumar, G. Amarnath, W. Arif, S. Baishya, "Gate Capacitance Extraction of JLT using TCAD", Green Computing Communication and Electrical Engineering (IEEE-ICGCCEE), 2014 DOI: 10.1109/ICGCCEE.2014.6922275 , 2014, IEEE Xplore.
 3. W. Arif, A. Gogoi, B. Deka, D. J. Das, G. P. Medhi, "Auto Route Selection based Dynamic Spectrum Management under Centralized Cooperative Communication in Cognitive Radio" IEEE ICGCEE, 2014 DOI: 10.1109/ICGCCEE.2014.6921385 2014 , pp.: 1 – 5, IEEE Xplore.
 4. B. Prashanth Kumar, W. Arif, S. Baishya, " Gate Capacitance of a two dimensional JLT ,IEEE-ICIET-2014, IEEE Xplore.
 5. W. Arif, S. Haque, Manpreet Singh, S. Baishya, "Analysis of Spectrum Handoff under Diverse Mobile Traffic Distribution Model in Cognitive Radio", IEEE ICDCCom-2014, IEEE Xplore.
 6. S Majumder, W. Arif, P Sonowal, S Kashyap, M Sonowal, " Design and Analysis of a Novel Half Jagged Toothed Capacitive Comb Drive with Increased Efficiency", IEEE C3IT-2015, IEEE Xplore.
 7. Wasim Arif, Aakriti Chaubey, Shanidul Hoque, Debarati Sen & Srimanta Baishya, "Sensing Time Minimization using Pipelining in Two Stage Spectrum Sensing", IEEE SPIN-2015, IEEE Xplore.
 8. Wasim Arif, Shanidul Hoque, Sanjan Das, Sachin Reddy & Debarati Sen, "Study and Analysis of Adaptive

- Multitaper Method in Diverse Fading Channels for Cognitive Radio", IEEE SPIN-2015, IEEE Xplore.
9. B. Chowdhury, A. Choudhury, A. S. Pramanik, W. Arif, J. Mehedi, "An SMS based home security system" IEEE ICECCT-2015.
 10. Biplav Choudhury, Tameem Choudhury, Aniket Pramanik, Wasim Arif & Jishan Mehedi, "An SMS based home security system" IEEE ICECCT 2015, Indexing waited.
 11. Sanjoy Debnath, Shanidul Hoque, G. Sachin Reddy, Wasim Arif, S. Baishya, "Optimization of Spectrum Handoff Probability in Cognitive Radio Networks", Elsevier EECOS-2015, Indexing awaited.
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 13. Biplav Choudhury, Aniket Pramanik, Tameem Choudhury, Wasim Arif & Jishan Mehedi, "Simulative Study of Random Waypoint Mobility Model for Mobile Ad hoc Networks" Accepted for IEEE Global Conference on Communication Technologies (GCCT-2015), Indexing awaited.
 14. M. Chatterjee, B. Basu, A. Nandi, 'Performance of Incremental Redundancy Based Data Transmission in Randomly Deployed Wireless Sensor Network', 1st International Doctoral Symposium on Applied Computation and Security Systems, Kolkata, India, 18-20 April, 2014, pp.167-186.
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 17. S. Mitra, R. Goswami, B. Bhowmick, "A Dual Dielectric Step-Gate SOI n-Tunnel FET," accepted in 2nd International Conference on Electrical, Electronics, Engineering Trends, Communication, Optimization and Sciences (E³COS), AP, India, 28th - 30th March-2015.
 18. R. Pegu, R. Goswami, B. Bhowmick & M. Choudhury, "Optimization and Modeling of Electrical Characteristics of 3D Gate all around Silicon nano wire MOSFET with tri-material gate and comparison with conventional MOSFET" accepted in 1st International Conference on Computing, Communication, Electrical, Electronics, Devices and Signal Processing, AP, India, 28th - 30th Mar-2015.
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 20. A. Midya & J. Chakraborty, "Classification of Benign and Malignant Masses Using Multi-resolution Analysis of Oriented Patterns," IEEE International Symposium on Biomedical Imaging (ISBI-2015), 2015 (accepted).
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 22. T. R. Lenka, N. V. Deshpande, "High Performance Computing Facility for North East India through Information and Communication Technology", Proceedings of ICSIT 2015, Mar 10-13, 2015, Orlando, Florida, USA.
 23. T. R. Lenka, G. N. Dash, A. K. Panda, "2DEG Transport Characteristics by Self-consistent Subband Calculations of Schrödinger and Poisson Equations in In AlN/GaN HEMT," IEEE Nanotechnology Materials and Devices Conference 2014, 12-15 Oct 2014, AciCastello, Italy, pp. 124 – 127, 10.1109/NMDC.2014.6997438.

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25. A. Bhattacharjee & T. R. Lenka, "RF and Microwave characteristics of a 20nm Gate Length InAlN/GaN based HEMT having a High Figure of Merit", IEEE International Conference on Devices, Circuits and Systems – ICDCS 2014, 6-8 Mar, 2014, Coimbatore, TN, India. IEEE Xplore.
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27. A. Bhattacharjee & T. R. Lenka, "Insight to the 2DEG Transport and Mobility Effects of a 20nm Recessed Gate InAlN/AlN/GaN HEMT", IEEE International Conference on Electronics and Communication Systems, 13-14 Feb 2014, Coimbatore, TN, India. IEEE Xplore.
28. Koushik Guha, Mithlesh Kumar, Ajay Parmar, S. Baishya, 'Non Uniform Meander Based Low Actuation Voltage High Capacitance Ratio RF MEMS Shunt Capacitive Switch'. Proc. IEEE Explore, 9th IEEE Nano Materials and Devices Conference (IEEE NMDC), ACI CASTELLO, Italy, October 12-15, 2014, pp. 120-123.
29. Koushik Guha, Ajay Parmar, Srimanta Baishya, 'Investigation of High C_{on}/C_{off} Ratio Capacitive Shunt RF MEMS Switch for High Frequency Applications'. Proc. 1st INTERNATIONAL CONFERENCE on Microelectronics, Circuits and Systems, Salt Lake, Kolkata, West Bengal, India, July 2014, pp. 45-48.
30. Saurabh Agarwal, Mithlesh Kumar, Koushik Guha, Srimanta Baishya, 'RF Analysis of MEMS Shunt Capacitive Switch with Gold and Aluminum Beam'. Proc. IEEE Sponsored International Conference on Advances in Computer Engineering and Applications - 2015, Ghaziabad, Uttar Pradesh, India, 19th – 20th March, 2015 (Accepted for IEEE Explore).
31. Pralay Chakrabarty, Koushik Guha, Gautam Krishna, Srimanta 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 Engineering, Coimbatore, Tamil Nadu, India, 19th – 20th March, 2015 (Accepted for IEEE Explore).
32. Sweta Chander & S. Baishya, "Feasibility study of a novel asymmetric SGOI-TFET using non-local BTBT model," in Proc. 2014 Annual IEEE India Conference (INDICON), ©2014 IEEE. DOI: 10.1109/INDICON.2014.7030530.
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34. Reshmi Maity, N. P. Maity, R. K. Thapa & S. Baishya, "Impedance Response Behavior of Capacitive Micromachined Ultrasonic Transducers (CMUTs)", in Proc. of the International Conference on Advances in Engineering & Technology, ISBN: 978-81-908980-6-5, pp. 1-3, Jameshedpur, 2014.
35. Koushik Guha, Purbashis Ganguly & S. Baishya, "Performance analysis of low power and high frequency novel RF Power Amplifier for 4G systems," in Proc. of the International Conference Electron Devices and Solid-State Circuits (EDSSC), 2013, pp. 1-2, Hong Kong, 2013. doi: 10.1109/EDSSC.2013.6628180.
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37. B. Bhowmick, K. Jena & S. Baishya, "A Self-Consistent Model for Hetero-Gate All Around Tunnel FET," in Proc. of 2014 2nd International Conference on Devices, Circuits and Systems (ICDCS), Coimbatore, pp. 1-5, 2014, doi:10.1109/ICDCSyst.2014.6926147.

38. K. Jena, B. Bhowmick, S. Baishya, "Length Scaling Effect on 3D Hetero Junction SOI Tunnel FET," in Proc. of the International conference on Recent Trends in Engineering and Technology, 28-30th March, Nasik, 2014.
39. S. Baishya & Soumen Deb, "Modeling and Simulation study of AC Characteristics of an NMOS based High Pressure Sensor," in Proc. of the second International Conference on Devices, Circuits and Systems (ICDCS), 2014, pp. 1-5, Coimbatore, 2014. doi: 10.1109/ICDCSyst.2014.6926147.
40. Sweta Chander & S. Baishya, "A Comprehensive Analysis of SOI-TFET with Novel AlxGa1-xAs Channel Material," in Proc. of the second International Conference on Devices, Circuits and Systems, Coimbatore, pp. 1-4, 2014. doi: 10.1109/ICDCSyst.2014.6926155.
41. S. Deb & S. Baishya, "TCAD based study of a noble 24 nm DMIDG MOSFET for LOW power applications," in Proc. of Int. Conference on Green Computing Communication and Electrical Engineering (ICGCCEE), pp. 1-6, Coimbatore, 2014. doi: 10.1109/ICGCCEE.2014.6921414.
42. Sweta Chander, Om Prakash Mahto, Vivek Chander & S. Baishya, "Analysis of Novel SGOI-TFET with Record Low Subthreshold Swing (SS) and High I_{on}/I_{off} Ratio," in Proc. of the eighth IEEE International Conference on Computing for Sustainable Global Development, BhartiVidyapeeth, New Delhi, pp. 500-504. March 2014. doi: 10.1109/IndiaCom.2014.6828188.
43. B. Prashanth Kumar, Wasim Arif & S. Baishya, "An inclusive study on characteristics of junctionless transistor," in Proc. of the Int. Conf. on Electronics and Communication Systems (ICECS), pp. 1-5, Coimbatore, 2014. doi: 10.1109/ECS.2014.6892746.
44. N. P. Maity, Reshmi Maity, R. K. Thapa & S. Baishya, "Modeling of Tunneling Current Using High-k Material Al₂O₃ Based MOS Devices", in Proc. of the International Conference on Advances in Engineering & Technology, ISBN: 978-81-908980-6-5, pp. 4-7, 2014.
45. S. N. Mishra, W. Arif, J. Mehedi and S. Baishya, "A power efficient 6-bit TIQ ADC design for portable applications," in Proc. of the IEEE Third International Conf. on Consumer Electronics (ICCE-Berlin)," pp. 235 – 239, Berlin, 2013. DOI: 10.1109/ICCE-Berlin.2013.6698042.
46. Rahul Sen, Naushad Manzoor Laskar, P. K. Paul & K. L. Baishnab, "Optimization of Interconnect Delay based on Convex Optimization Technique", ICIECS-15 Karpagam College Of Engineering, Coimbatore.
47. Naushad Manzoor Laskar, Rahul Sen, P. K. Paul & K. L. Baishnab, "A Survey On VLSI Floor planning:Its Representation And Modern Approaches of Optimization "ICIECS-15 Karpagam College of Engineering, Coimbatore.
48. Bhargab Sinha, Naushad Manzoor Laskar, Rahul Sen, K. L. Baishnab, "Heuristics In Physical Design Partitioning", ICIECS-15 Karpagam College of Engineering Coimbatore.
49. Naushad Manzoor Laskar, P. K. Paul, Sourav Nath, K. L. Baishnab, "Investigating the switching performance of an inverter design using the new HBPSO ", CCEEDS-15 Sri Sunflower College Of Engineering and Technology, Lankapalli (Vijayawada)-521126, Krishna Dist., A.P. (accepted).
50. Naushad Manzoor Laskar, P. K. Paul, Bhargab Sinha, K. L. Baishnab & Sourav Nath, "Evolvable Hardware Design of Digital Circuits using the new Human Behavior Based Particle Swarm Optimization", CCEEDS-15 Sri Sunflower College Of Engineering and Technology, Lankapalli (Vijayawada)-521126, Krishna Dist., A.P. (accepted).
51. P. K. Paul, K. L. Baishnab, Sourav Nath & Naushad Manzoor Laskar, "Drosophila Food Search algorithms for High Resolution Loser-Take-All (LTA) VLSI circuit for compression", CCEEDS-15 Sri Sunflower College Of Engineering and Technology, Lankapalli (Vijayawada)-521126, Krishna Dist., A.P. (accepted).

52. S. Mandia, Krishna Dharavath & Rabul Hussain Laskar, "Improving Image Compression Ratio: A Novel Approach", Accepted for publication in IEEE-ICRTIT 2014.
53. Krishna Dharavath, Amarnath Gaini, Fazal Ahmed Talukdar & Rabul Hussain Laskar, "Impact of Image Preprocessing on Face Recognition: A Comparative Analysis", Accepted for ICCSP 2014.
- c) Book/Chapter**
1. Mousam Chatterjee, Arnab Nandi & Banani Basu; Performance of Incremental Redundancy-Based Data Transmission in Randomly Deployed Wireless Sensor Network; Springer, 2015.
 2. Banani Basu & Arnab Nandi; Evolutionary Algorithms in Optimization of Linear Antenna Array; LAP Lambert Academic Publishing, Germany, 2014.
 3. K. Jena & B. Bhowmick; Optimization of 3 Dimensional Tunnel FET and its digital applications; LAP Lambert Academic Publishing, 2014.
 4. T. R. Lenka, G. N. Dash & A. K. Panda; Small-Signal RF and Microwave Characteristics of Sub-Micron AlGaIn/GaN HEMT; Springer, 2014.
 5. D. Pandey, A. Bhattacharjee & T. R. Lenka; Study on Temperature Dependence Scattering Mechanisms and Mobility Effects in GaN and GaAs HEMTs; Springer, 2014.

6. Consultancy Services

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

7. Major Equipment Acquired

25 numbers DSP Starter Kit TMS320C6713 (DSK) with Code Composer Studio for DSP Lab.

8. Visits to Abroad

Sl. No.	Name of the Faculty	Name of the Conference/Programme	Place	Date
1.	Dr. T. R. Lenka	IEEE Nanotechnology Materials and Devices Conference 2014	AciCastello, Italy	October 12-15, 2014
2.	Koushik Guha	9th IEEE Nano Materials and Devices Conference (IEEE NMDC)	AciCastello, Italy	October 12-15, 2014

9. M.Tech / M. Sc. Thesis

(M.Tech – Microelectronics & VLSI Design)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Manash Kumar Sonowal	Mr. Wasim Arif	Design & Analysis of Half jagged capacitive comb drive and Design of micro needle for medical application
2.	G. Srinivasarao	Dr. T. R. Lenka	Study of DC & effect of fringing capacitance on high frequency characteristics of InAlN/AlN/GaN MOS-Hemt

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
3.	Rahin Pegu	Mrs. M. Choudhury & Dr. B. Bhowmick	Optimization and Modelling of Electrical Characteristics of 3D Gate all around Silicon nanowire MOSFET with tri-material gate
4.	Kurmendra	Mrs. Madhumita Paul	Study of quantum theory of nonlinear susceptibility on low dimensional semiconductor quantum dots and its quantum confinement effects
5.	Rahul Sen	Dr. K. L. Baishnab	Convex Approach to Interconnect Delay and Floorplanning Optimization in VLSI Design
6.	Juktijiban Panda	Dr. T. R. Lenka	Modelling and Simulation of 2DEG Density and Threshold Voltage of GaN-based MOSHEMT
7.	Pralay Chakrabarty	Mr. Koushik Guha	Design & Analysis of Flexure Gate FET
8.	Mithlesh Kumar	Mr. Koushik Guha	Modelling and Simulation Meander based RF MEMS Switch
9.	Dhruba Kumar Mandal	Mrs. Madhumita Paul	Theoretical Analysis Towards Modelling of Semiconductor Quantum Dots for Future nano-technology
10.	Bhargab Singh	Dr. K. L. Baishnab	A Hybrid RFD-ACO Approach for Routing Optimization in VLSI Physical Design
11.	Naushad Manzoor Laskar	Dr. K. L. Baishnab	Swarm Intelligence Based Switching Characterization and Floorplan Design Optimization of VLSI Circuits
12.	Saurabh Agarwal	Prof. S. Baishya	Capacitance Analysis of Fixed-Fixed RF MEMS Shunt Capacitive Switch
13.	Suman Kumar Mitra	Dr. B. Bhowmick	Optimization and Sealing of an SOI TFET with Back Gate Control and modeling of dram current
14.	Usham Siddharth	Dr. T. R. Lenka	Study and simulation of various characteristics of SiGe HBT with different base contact configurations

(M. Tech- Communication & Signal Processing Engineering)

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
15.	Shanidul Haque	Mr. Wasim Arif	Study and Analysis of Spectrum Mobility in Cognitive Radio Networks
16.	Sanjoy Debnath	Mr. Wasim Arif	Study and Analysis of Optimization Techniques for Cognitive Radio Application
17.	Rajeev Kumar	Dr. Ashraf Hossain	Low Power Strain Gauge Based on Wireless Sensor Network and its Application in Dam Health Monitoring
18.	G. Sachin Reddy	Mr. Wasim Arif	Analysis of Compressed sensing and Study of Channel State Information in Cognitive Radio Network
19.	Songhita Misra	Dr. R. H. Laskar	Modelling and Analysis of LP-residual features for its application in Text-dependent Speaker Verification System

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
20.	Tushar Das	Dr. R. H. Laskar	Significance of Acoustic Features in Development of Text-Dependent Speaker Verification System
21.	Partha Saha	Dr. R. H. Laskar	Development of robust system for continuous VOP detection and its significance in various applications of Speech processing
22.	Suman Paul Choudhury	Dr. R. H. Laskar	Significance and Effects of modeling techniques for Text Dependent Speaker Verification under practical noisy environment

10. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Mr. Wasim Arif	Prof. S. Baishya	Comprehensive study and modeling of Spectrum Sensing and mobility issues in Cognitive Radio
2.	Mr. Koushik Guha	Prof. S. Baishya	Design and Analysis of RF MEMS Switch for low actuation voltage and high capacitance ratio
3.	Sweta Chandar	Prof. S. Baishya	Modeling & Simulation of Tunnel FET
4.	C. Anandini Devi	Prof. F. A. Talukdar	Design of Low Noise Amplifier
5.	D. Krishna	Prof. F. A. Talukdar & Dr. R. H. Laskar	Robust Authentication using two factor authentications
6.	Neme Fraol	Dr. J. Mehedi	
7.	Amarnath Gaini	Dr. T. R. Lenka	Modeling & Simulation of InAlN/GaN MOSHEMT for THz frequency applications
8.	S. S. Devi	Dr. R. H. Laskar	Biomedical Image Segmentation
9.	J. Singha	Dr. R. H. Laskar	Hand Gesture Recognition
10.	P. Bora	Dr. R. H. Laskar	
11.	R. K. Karsh	Dr. R. H. Laskar	Signal Processing
12.	K. Jena	Dr. T. R. Lenka	Modeling and Simulation of ALIN/ALN/GaN MOSHEMT for High Power & High Frequency Electronics
13.	R. Swain	Dr. T. R. Lenka	Modeling & Simulation of ALGaIn/GaN MOSHEMT for Power Electronic application
14.	R. Kashyap	Prof. S. Baishya & Dr. T. R. Lenka	MEMS Energy Harvester
15.	S. Debnath	Dr. A. Hossain	Wireless Sensor Network
16.	S. M. Chowdhury	Dr. A. Hossain	Wireless Sensor Network
17.	Achintya Baidya	Prof. S. Baishya & Dr. T. R. Lenka	Modeling & Simulation of Junctionless Transistors

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
18.	G. Prasad	Dr. A. Hossain	Wireless Sensor Network
19.	Nivedita Biswas	Prof. F. A. Talukdar	Cognitive Radio
20.	Ram Kumar	Prof. F. A. Talukdar	Optimization of Linearity of Low Noise Amplifier
21.	Niladri Pratap Maity	Prof. S. Baishya	Analysis of Tunneling Current and interface charge density for ultra high-k MOS Transistors
22.	Reshmi Maity	Prof. S. Baishya	Modeling and FEM Simulation of capacitive Micro machined ultrasonic Transducers
23.	Barnali Dey	Dr. J. Mehedi	Development of Soft Computing platform for the solutions of Spectrum Sensing problem for CR System & CR networks
24.	Mr. P. K. Paul	Dr. K. L. Baishnab	Optimization in VLSI Circuits
25.	Chuya C. Bhanja	Dr. R. H. Laskar	Speech Processing
26.	Bhaswati Das	Dr. J. Chakraborty	Image Processing
27.	Biraj Shougaijam	Dr. T. R. Lenka	Semiconductor Devices and Circuits
28.	Rinku Rabidas	Dr. J. Chakraborty	Medical Image Processing
29.	Amarjit Roy	Dr. R. H. Laskar	Image Processing
30.	AshimJyoti Gogoi	Dr. K. L. Baishnab	Analog VLSI Circuits
31.	C. Lison Singh	Dr. K. L. Baishnab	VLSI Design
32.	Rupam Goswami	Dr. B. Bhowmick	Semiconductor Devices and Circuits
33.	Ritwik Haldar	Dr. A. Hossain	Wireless Sensor Network
34.	Mohiul Islam	Dr. R. H. Laskar	Image Processing
35.	Rajashree Das	Prof. S. Baishya	Semiconductor Devices and Circuits

Electronics & Instrumentation Engineering



1. Academic Staff

HEAD: Dr. S. H. Laskar, Ph.D.

Faculty members

Associate Professor

Dr. S. H. Laskar, Ph.D.

Assistant Professor

Dr. Rajdeep Dasgupta, Ph.D.

Dr. Abhishek Midya, Ph.D.

Dr. Arun Sunaniya, Ph.D.

Dr. Munmun Khanra, Ph.D.

Ms. Jupitara Hazarika, M.Tech.

Mr. Lalu Seban, M.Tech.

Mr. Sudarsan Sahoo, M.Tech.

Mr. Kalimuddin Mondal, M.Tech. (contractual)

Mr. Tushar Bachhar, M.Tech. (contractual)

Mr. Birjit Singha, M.Tech. (contractual)

Mr. Dhruva Jyoti Bora, M.Tech. (contractual)

2. SEMINAR, SYMPOSIA, SHORT TERM COURSES, WORKSHOPS

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. S. H. Laskar	Workshop and training on Industrial Simulator, organized by E&I Engg Dept, NIT Silchar and Prosim, Chennai	NIT Silchar	April 01-03, 2014
		Workshop on LabVIEW and Data Acquisition Systems	NIT Silchar	August 05-08, 2014
		Real time Operating system and FPGA	NIT Silchar	Sept. 29–Oct. 01, 2014
2.	Mr. Lalu Seban	Co-coordinator, One week workshop on 'Fuzzy Sets & Fuzzy Logic'	TEQIP - II	February 2-6, 2015
		Coordinator, One day foundation workshop on 'Fuzzy Logic' at USTM, Meghalaya	USTM, Meghalaya & NIT Silchar	February 7, 2015
3.	Mr. Sudarshan Sahoo, Co-coordinator	International Conference on SOCPROS-4	NIT Silchar	December 27-29, 2014
		Workshop on High Performance Computing	NIT Silchar	April 04-09, 2014
		Workshop on Lab VIEW and Data Acquisition Systems	NIT Silchar	August 05-08, 2014

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. S. H. Laskar	Soft Computing for Problem Solving(SocProS 2014) during 27-29 December'2014	NIT Silchar
		Two-week ISTE Workshop on Control Systems (2nd to 12th Dec'2014)	NMIECT, IIT Kharagpur
		One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies (2014)	NIT Silchar
		Three day workshop on "Reliability Theory and its Applications to Real Life problems", during 16-18 January'2015 at NIT Silchar	ISI Kolkatta
2.	Dr. Rajdeep Dasgupta	Pedagogy:A Framework for Effective Teaching and Learning Strategies	NIT Silchar
3.	Dr. Abhishek Midya	One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies	NIT Silchar
		Two week ISTE main workshop on Control System(2015)	NIT Silchar and NMEICT

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
4.	Dr. Arun Sunaniya	One Day workshop on IEEE Authorship workshop-2015	NIT Silchar
		One day Workshop on MEMS(2015)	NIT Silchar
5.	Dr. Munmun Khanra	One week workshop on 'Fuzzy Sets & Fuzzy Logic'	NIT Silchar
6.	Ms. Jupitara Hazarika	Application of Soft computing techniques in engineering	CE, NIT Silchar
		Implementation of Image Processing using LABVIEW(2015)	EE, NIT Silchar
		One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies(2014)	NIT Silchar
7.	Mr. Lalu Seban	Implementation of Image Processing using LabVIEW(2015)	NIT Silchar + National Instruments
		Two weeks NMEICT workshop on "Control Systems"(2015)	IIT Kharagpur (Remote mode)
		One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies(2014)	NIT Silchar
		IEEE Authorship workshop(2015)	IEEE student branch
		Wiley Authorship workshop(2015)	Wiley, India + NIT Silchar
		One week workshop on 'Fuzzy Sets & Fuzzy Logic'(2015)	NIT Silchar
8.	Mr. Sudarsan Sahoo	Workshop on High Performance Computing	CDAC & NIT Silchar
		Workshop on Lab View(2014)	National Instruments and NIT Silchar
		Workshop on PXI, cRIO, Real time Embedded system(2015)	National Instruments and NIT Silchar
		Pedagogy: A Framework for Effective Teaching and Learning Strategies(2014)	NIT Silchar
		One week workshop on 'Fuzzy Sets & Fuzzy Logic'(2015)	NIT Silchar
9.	Mr. Kalimuddin Mondal	Application of Statistics in Engineering, Management & Applied Sciences(2014)	NIT Silchar
		Lab-View basics a preparatory course for CLAD(2012)	NIT Silchar
		Reliability Theory and its Applications to Real life Problems(2014)	NIT Silchar
		Pedagogy:A Framework for Effective Teaching and Learning Strategies(2014)	NIT Silchar
10.	Mr. Tushar Bachhar	Two week ISTE Main Workshop on Signals and System(2014)	NIT Silchar
		Two week ISTE Main Workshop on Control System(2015)	NIT Silchar
		Pedagogy:A Framework for Effective Teaching and Learning Strategies(2014)	NIT Silchar

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
11.	Mr. Dhruva Jyoti Bora	Two week ISTE Main Workshop on Control System(2015)	IIT Kharagpur
		School on Computational Biology: Tools and Techniques(2015)	ISI Kolkata and CSE Dept, NIT Silchar
		IEEE Authorship Workshop(2015)	IEEE Kolkata and NIT Silchar

3. Research and Development

a) PhD Programme (Specializations)

Instrumentation, Sensors & Transducers, Transdermal Drug Delivery System, Iontophoresis, Bioelectronics & Biosensors, Signal Processing & Instrumentation in Power

Quality Monitoring, Digital Image and Video Processing, Multimedia Signal Processing, Medical Image Processing, Electronic Devices & Equipment, VLSI Design, MEMS, Nano Technology, Biomedical Instrumentation, Modelling, control design, instrumentation design, optimization.

b) PhD Produced / Ongoing (in number)

Completed	Submitted	Ongoing
00	00	06

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Industrial Process Engineering	For UG lab and PG/PhD research
2.	Instrumentation Lab	For UG lab and PG/PhD research
3.	Instrumentation and Automation Lab	For UG lab and PG/PhD research
4.	Sensor Lab	For UG lab and PG/PhD research
5.	DSP lab	For UG lab and PG/PhD research
6.	Electronics & Circuit Lab	For UG lab
7.	Microprocessor & Microcontroller Lab	For UG lab
8.	VLSI lab	For UG lab and PG/PhD research
9.	Control System Lab	For UG lab

d) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Dr. Munmun Khanra	IET Control Theory and Applications	1	2014
		IEEE Conference on Decision and Control	1	2015
2.	Dr. Abhishek Midya	IET Image Processing	1	2014
		Artificial Intelligence in Medicine	1	2015

4. Publication

a) International Journal(s)

1. Chakraborty, J., Midya, A., Mukhopadhyay, S., Rangayyan, R. M., Sadhu, A., Singha, V., Khandelwal, N., Bhattacharyya, P. & Azevedo-Marques, P. M. (2015). Detection of the Nipple in Mammograms with Gabor Filters and the Radon Transform. *Biomedical Signal Processing and Control* (Elsevier), pp. 80-89, Vol-215.
2. Moharana, B. & Sahoo, S. (2015). Active noise control in an air duct flow control loop: a technical approach for improving the working environment. *IJEEDC*, ISSN (p): 2320-2084, Special Issue-1.
3. Moharana, B. & Sahoo, S. (2015). A review on soft computing application in active noise control. *International Journal of Advanced Research Trends in Engineering and Technology*, ISSN 2394-3777 (Print), Vol. 2, Special Issue I.

b) International Conference(s)

1. A. Ranjan, A. Midya, J. Chakraborty, and S. Sengupta, "Video Error Concealment Using Speeded Up Robust Features and Affine Transformation", IEEE Students' Technology Symposium, pp. 72-75, Kharagpur, India, Feb.-Mar., 2014.
2. A. Verma, S. A. Raj, A. Midya, and J. Chakraborty, "Face detection using skin color modeling and geometric feature", 3rd International Conference on Informatics, Electronics, and Vision (ICIEV), pp. 1-6, Dhaka, Bangladesh, May, 2014.
3. Singha, T.B.; Konwar, S.; Roy, S., "Low power design and analysis of fundamental logics using adiabatic array logic," Signal Propagation and Computer Technology (ICSPCT), 2014 International Conference on , vol., no., pp.775,781, 12-13 July 2014.
4. Shruti Konwar; Thockchom Birjit Singha; Soumik Roy, "Power Efficient Code Converters Using Adiabatic Array Logic", Emerging Applications of Information Technology (EAIT 2014) IEEE International Conference on. [accepted]
5. Dhruva Jyoti Bora, Ritushree Dutta, Neelesh Kumar "Novel Approach to Gait Angle Measurement using

tri-axial MEMS Accelerometer" presented in IAET, 2014.

6. Lalu Seban, Narayan Sahoo, B. K. Roy; Multiple model predictive control of magnetic levitation system; IEEE INDICON 2014, Pune, India, 11-13 December, 2014.
7. Lalu Seban, Namita Baruah, B. K. Roy; Fuzzy based multiple model predictive controllers for magnetic elevators; ICGTEPC 2014, NIT Tiruchirappalli, 27-29 September 2014.
8. Lalu Seban, V. Kirubakaran, T. K. Radhakrishnan; GOBF-ARMA based model predictive control for ideal reactive distillation column; ICGTEPC 2014, NIT Tiruchirappalli, 27-29 September 2014.
9. M. Khanra, K. Biswas, and J. Pal, "Circuit proposition for realization of approximated fractional order systems," IEEE International Conference on Fractional Differentiation and Its Applications (ICFDA' 14), Catania, Italy, 23-25 June 2014.
10. Sudarsan Sahoo, Smruti Ranjan Jagadeb, "Hybrid Active and Passive Control of a Server Room Noise: A Comparative Study of Results Obtained by using Different Algorithms", Proceedings of the fourth International Conference on Soft Computing for Problem Solving SocProS 2014.
11. Sudarsan Sahoo, Smruti Ranjan Jagadeb, Performance Analysis of RLS and LMS, Used in Adaptive Filters for Active Noise Cancellation of an Elevator Noise, proceedings of the 3rd International Conference on 'Computing, Communication and Sensor Network, CCSN 2014.
12. Singha, Thockchom Birjit; Jain, Lakshay; Kant, Bikash, "Negligible time-consuming RC5 remote decoding technique," Computer Communication and Informatics (ICCCI), 2014 International Conference on , vol., no., pp.1,4, 3-5 Jan. 2014.
13. Singha, Thockchom Birjit; Konwar, Shruti; Roy, Soumik; Vanlalchaka, Reginald H., "Power efficient priority encoder and decoder," Computer Communication and Informatics (ICCCI), 2014 International Conference on, vol., no., pp.1,5, 3-5 Jan. 2014 .

14. Konwar, Shruti; Singha, Thockchom Birjit; Roy, Soumik; Vanlalchaka, Reginald H., "Adiabatic logic based low power multiplexer and demultiplexer," Computer Communication and Informatics (ICCCI), 2014 International Conference on , vol., no., pp.1,5, 3-5 Jan. 2014.
15. Singha, T.B.; Konwar, S.; Roy, S., "Low power design and analysis of fundamental logics using adiabatic array logic," Signal Propagation and Computer Technology (ICSPCT), 2014 International Conference on , vol., no., pp.775,781, 12-13 July 2014.
16. Konwar, Shruti; Singha, Thockchom Birjit; Roy, Soumik, "Power Efficient Code Converters Using Adiabatic Array Logic," Emerging Applications of Information Technology (EAIT), 2014 Fourth International Conference of , vol., no., pp.167,172, 19-21 Dec. 2014

c) National Conference(s)

1. Dhruva Jyoti Bora, Neelesh Kumar, Dinesh Pankaj, "Wireless Sensor Network for Inertial Measurement Based Gait Analysis" National Conference on Advances in Electrical and Electronics Communication Engineering, AEECE-2015.

d) Book/Chapter

- 1) Lalu Seban; contributed new changed end chapter questions & solutions : M. Khalil; Nonlinear Control; Pearson 1st Global Edition, October 2014.

5. Major Equipment Acquired

Heat Exchanger System (Vi-Microsystems, Chennai); Multi Process Station (Vi-Microsystems, Chennai); Pressure Sensor Module (Vi-Microsystems, Chennai); Industrial PLC unit (Allen Bradley, Zephyr Kolkata); Industrial PID Controller (Honeywell, Zephyr Kolkata); Process Controller Trainer Kit – Level Control (Armfield, UK); Process Controller Trainer Kit – Flow Control (Armfield, UK); Process Controller Trainer Kit – Pressure Control (Armfield, UK); Process Controller Trainer Kit – Temperature Control (Armfield, UK); Programmable logic controller (Armfield, UK); Modular Automation System-MTAP; Sensor Modules; Pro-Simulator Modules; Microprocessors(8086); NIELBES, NI DAQ systems; Smart Camera; NIPXI Processor; cRIO, mRIO; Mechatronics module; DSO, CRO, DMM, etc.; FPGA board(Spartan); MATLAB + SIMULINK and necessary Toolboxes (Mathworks); TANNER Software(VLSI), etc.

6. Visits to Abroad

Sl.No.	Name of the faculty	Name of the Conference/Programme	Place	Date
1.	Dr. Munmun Khanra	Fractional Differentiation and Its Applications	Catania, Italy	June 2014

7. M.Tech. / M.Sc. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis	Department
1.	Narayan Sahoo	Lalu Seban	Study of effectiveness and analysis of Fuzzy, PID and MPC controller of Magnetic Levitation System	Control & Industrial Automation, EE
2.	Smruti Ranjan Jagadeb	Sudarsan Sahoo	Active noise cancellation	Control & Industrial Automation, EE

Humanities and Social Sciences



1. Academic Staff

HEAD: Prof. Gurudas Das, Ph.D.

Faculty members

Professor

Prof. Gurudas Das, Ph.D.

Assistant Professor

Dr. Reena Sanasam, Ph.D.

Dr. N. B. Singh, Ph.D.

Dr. Ashim Kumar Das, Ph.D.

Dr. Arpan Paul, Ph.D. (contractual)

Ms. Sagarika Kotoky, M.A. (contractual)

2. Seminar, Symposia, Short Term Courses, Workshops

a) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. Gurudas Das	Presentation on "India-ASEAN Economic Engagement: Trade and Investment Dimensions" in a two-day International Seminar on India-ASEAN Connectivity: Challenges and opportunities for the North Eastern Region held during 29-30 September, 2014	RIS, NEC, Indian Chamber of Commerce, ASEAN-India Centre at Hotel Pinewood, Shillong

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
		Presentation on "BCIM: What should be the Basis for Cross-Country Sub-regional Cooperation?"(with Ujjwal Kanti Paul and Tanuj Mathur) in a two-day International Seminar on BCIM: Sub-Regional Cooperation for the Development of the Peripheral Areas held during 27-28 November, 2014	ICSSR, NERC, Shillong
		Presentation on "Look East to Act East: What to act in "Act East Policy?" in a one-day International Seminar on "Kolkata Dialogue on "Look East" to "Act East": New Frontiers in Trade, Investment and Business Cooperation held on January 9, 2015	Indian Chamber of Commerce (ICC) , sponsored by MEA, New Delhi at Oberoi Grand, Kolkata
		Presentation on "Making "Act East Policy" to work for the Development of North Eastern Region of India" (with Ujjwal Kanti Paul and Tanuj Mathur) in a one-day International Seminar on Integrating Northeast India in India's Act East Policy held on Feb 23, 2015	Indian Council of World Affairs, Sapru House, New Delhi
2.	Dr. N. B. Singh	Presentation on "Juming as Resistance: a Politically Oriented Hill Agriculture" (with Samson Kipgen) in a Two-Day National Seminar on Knowing Manipur from Endogenous Perspective held on 20-21 oct 2014 sponsored by ICSSR New Delhi	Centre for Manipur Studies, Manipur University, Manipur

3. Research and Development

a) PhD Programme (Specializations)

Agricultural Economics, Development Economics, International Trade, Regional Development, Political Economy, English Literature, Marketing.

b) PhD Produced / Ongoing (in number)

Completed	Submitted	Ongoing
03	05	21

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Computer Lab	For the use of the scholars

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs	Duration
1.	Agricultural Development and Environmental Issues in the North Eastern Region: A Case Study of Manipur	Dr. N. B. Singh	ICSSR, New Delhi	Rs. 6.35	2 Years

e) **Research Paper Reviewed**

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Dr. Gurudas Das	Institute for Defence Studies and Analyses, Occasional Paper	1	2014
2.	Dr. Gurudas Das	Reviewed a book proposal on Oxford Handbook on Indian Security Studies for Oxford University Press, New Review submitted on Delhi, October 14, 2014	1	2014

f) **Chairing of Technical Section**

Sl. No.	Faculty Name	Details
1.	Dr. Gurudas Das	Chaired a session on November 28, 2014 in an international seminar on BCIM: Sub-Regional Cooperation for the Development of the Peripheral Areas held during 27-28 November, 2014, organised by ICSSR-NERC, Shillong
2.	Dr. Gurudas Das	Chaired a session on February 15, 2015, in a national seminar on Development Strategies Issues and Challenges of NE Region With Special Reference to Southern Part of Assam organized by Karimganj College, Karimganj, Assam

4. **Publication**a) **Book/Chapter**

- Gurudas Das (with Subodh Chandra Das), 2015, "Democracy in the Grass Root: A Case Study of Nagendra Nagar Gaon Panchayat in Karimganj District of Assam", in Gassah, L S and C J Thomas, (eds.), *Democracy and Development in India's North East: Challenges and Opportunities*, Bookwell, Delhi.
- N.B. Singh (with Diana Rajkumari), 2014, "Towards Women Empowerment through MGNREGS: A Study on Rural Women Workers of Manipur" in Shyamkishor, Ayangbam(ed), *Engaging Failed state: Political, Social and Economic Issues of Contemporary Manipur*, Mittal Publications, New Delhi.

5. **Ph.D. Thesis**

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Arpita Bhattacharjee	Dr. Gurudas Das	Education and Economic Well-being: A Study of Interlinkages with Special Reference to Barak Valley of Assam
2.	Sahidul Ahmed	Dr. Gurudas Das	The Quality of Primary Education in Assam
3.	Debabrata Sutradhar	Dr. Gurudas Das	The Role of Foreign Direct Investment in Economic Development: The Indian Experiences since Economic Reforms
4.	Rinku Das	Dr. Ashim Kumar Das	Cluster Development approach towards Poverty Alleviation and Income Generation- A case study on Barpeta District of Assam

Management Studies



1. Academic Staff

HEAD: Dr. Ashim Kumar Das, Ph.D.

Faculty members

Assistant Professor

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

Dr. Soma Panja, Ph.D.

Mr. Abhijit Ghosh, MBA (contractual)

Ms. Arpita Dutta, M.Tech. (contractual)

Mr. Kelvin Mutum, MBA (contractual)

Mrs. Manisha Goswami, MBA (contractual)

Mr. Neilh M Gautam, MBA (contractual)

Mr. Shubrangshu Baruah, MBA (contractual)

Mr. Vivek Kr Pathak, MBA (contractual)

Ms. Padmaja Tamuli, M.A. (contractual)

Ms. Pradipta (Deb) Dey, M.A. (contractual)

Visiting Professor: CA Anil Jain, Private Practitioner, Chartered Accountant.

2. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Head of Department	Interaction with ADGP (Admin.) Assam Police Head Quarter with the students	Department	1 Day
2.	Head of Department	A Talk on "Corporate Leadership" by Mr. Ravi (Director Operations of Unisys)	Department	1 Day
3.	Head of Department	A Talk on "Motivation, Personality & Career Development" by Mr. Gajanan Baidya, Personality Development Trainer	Department	1 Day

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
4.	Head of Department	A Talk on "Character Building and Personality Development" by Swami Nikhileswarananda (Director Ramakrishna Mission Baroda)	Department	1 Day
5.	Head of Department	A Two Days Workshop on SPSS Software jointly organizes by Department of Management Studies, National Institute of Technology Silchar & SPSS South Asian Pvt. Ltd, Kolkata	Department	2 Days
6.	Head of Department	Industrial Visit at Numaligarh Refinery Limited (NRL), Golaghat, Assam for the students of MBA 2nd semester	Department	6 Days
7.	Head of Department	A Panel Discussion on "Recent Initiatives of infrastructural development & its role in transformation of Barak Valley- An Industry Perspective"	Department	1 Day

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. Ashim Kumar Das, Mr. Abhijit Ghosh, Mr. Kelvin Mutum & Mr. Vivek Kr Pathak	A lecture session on "Values & Business: The Indian Approach" by Professor Tanmay Dutta (Formerly Professor, Indian Institute of Management, Calcutta)	Silchar Management Association in association with Lions Club of Silchar
2.	Dr. Soma Panja	Workshop on "Fuzzy Sets and Fuzzy Logic, organised" by Soft Computing Club In house training Programme on "Administration, Accounts & Establishment"	NIT Silchar NIT Silchar
3.	Mr. Abhijit Ghosh	A Workshop on "Six Sigma"	ISI Kolkata at Assam University Silchar
4.	Mr. Vivek Kr Pathak	Presented a Paper Entitled "Impact of Ethics in Knowledge Management" at a National Workshop on "Knowledge, Theorizations & Rights"	Assam University Silchar
5.	Ms. Padmaja Tamuli	Presented a Paper Entitled "Business Ethics: A Facilitator of CSR" in UGC sponsored National Seminar on "State of Business and Political Ethics in present Socio- Economic System"	Department of Commerce, Tinsukia College, Assam

3. Publication

a) Book/Chapter

1. Dr. Soma Panja, May 2014, "Risk based Selection of Portfolio: Heuristic Approach, "Strategic Business

Infrastructure Development and Contemporary Issues in Finance", ISBN 9781466651548, Publisher IGI Global.

Mathematics



1. Academic Staff

HEAD: Mr. Bijan Nath, M.Sc.

Faculty members

Associate Professor

Mr. Bijan Nath, M.Sc.

Dr. P. K. De, Ph.D.

Assistant Professor

Dr. S. Roy, 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.

2. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. P. K. De	Workshop on Basic Statistics using Computer	ISI Kolkata	August 14-18, 2014

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
2.	Dr. P. K. De	Workshop on Reliability Theory and Its applications to real Life Problems	ISI Kolkata	January 16-18, 2014
3.	Dr. K. N. Das	4th International Conference on "Soft Computing for Problem Solving (SocProS 2014)" at NIT Silchar	DRDO, MHRD, CSIR, SCRS	December 27-29, 2014

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. S. Roy	4th International Conference on Soft computing for problem solving, Advances in Intelligent system and computing, 336, pp. 565-575, 2015	NIT Silchar
2.	B. Nath	-Do-	-Do-
3.	Dr. M. Sen	-Do-	-Do-
4.	Dr. G. Ramesh	-Do-	-Do-
5.	Dr. K. N. Das	One week workshop on "Fuzzy sets and Fuzzy logics", February 2-6, 2015	NIT Silchar
6.	Dr. P. K. Gupta	Instructional School for Lecturers in Numerical Analysis, June 09 – 28, 2014	Panjab University, Chandigarh
7.	Dr. P. K. Gupta	Workshop on reliability theory and its applications to real life problems, January 16-18, 2015	NIT Silchar
8.	Dr. P. Biswas	Mimetic Spectral Methods, March 23-30, 2015	IIT Kanpur
9.	Dr. J. Mahanta	One week National Faculty Development Program on "Pedagogy: A Framework for Effective Teaching and Learning Strategies, 07th -11th May 2014	NIT Silchar
10.	Dr. J. Mahanta	National Conference on "Recent Trends in Mathematical Science Research", 5th-6th September, 2014	Assam University, Silchar
11.	Dr. J. Mahanta	SocPros 14, 27th -29th December 2014	NIT Silchar
12.	Dr. S. Bera	2nd International conference on Mathematics and computing (ICMC 2015)	Haldia Institute of Technology

3. Research and Development

a) PhD Programme (Specializations)

Fuzzy Optimization and Decision Making; Evolutionary Optimization; Fuzzy set theory; Linear Algebra; Sequence Space & summability; Numerical Optimizations; Complex Analysis; Mathematical Modelling; Seismic Wave

Propagation; Operations Research in Crisp and Fuzzy Environments; Evolutionary Optimization; Mathematical Modelling of Heat transfer problem, Numerical Methods, Fractional Calculus; Almost Periodic and almost automorphic solutions of Functional Diff. Equations; Fuzzy Topology; Computational Fluid dynamics: Micro-nano fluidics Modeling; Computational fluid dynamics: Convective Heat.

b) PhD Produced / Ongoing (in number)

Completed	Submitted	Ongoing
02	02	08

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Computational Fluid Dynamics Lab	Required for M. Sc. (Maths) Program

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs	Duration
1.	Spectral element methods for elliptic and parabolic interface problems in R^2 on parallel computers	Dr. Narapara Ju. Kishore Kumar, Dr. Pankaj Biswas (Co- Investigator)	NBHM	09	3 Years

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Dr. P.K.De	IEEE Fuzzy Transaction	01	2015
2.	Dr. P. K. De	Int'l Jr of fuzzy Computation and Modelling	01	2015
3.	Dr. P. K. De	Applications and Applied Mathematics	01	2014
4.	Dr. K. N. Das	National Academy Science Letters, Springer	01	2015
5.	Dr. J. Mahanta	Annals of fuzzy mathematics and Informatics	4	2014-15
6.	Dr. J. Mahanta	Abstract and Applied Analysis	1	2014
7.	Dr. J. Mahanta	Neural Computing and Applications	2	2014-15

4. Publication**a) International Journal(s)**

- Das, D. & De, P. K.(2014). Shortest path problem under intuitionistic fuzzy setting. *IJCA*, Vol.105 (1).
- Deb, M. & De, P. K.(2014). A note on fuzzy multi objective linear fractional programming problem. *IJCSN*, Vol. 3(6).
- Debnath, P. & Sen, M. (2014). Some results of calculus for functions having values in an intuitionistic fuzzy n-normed linear space. *Journal of Intelligent and Fuzzy Systems*, Vol. No. 26, IOS Press DOI:10.3233/IFS-130964.
- Parouha, R. P. & Das, K. N.(2015). Parallel hybridization of differential evolution and particle swarm optimization for constrained optimization with its application. *International Journal of Systems Assurance Engineering and Management (IJSAM)*, Springer, DOI: 10.1007/s13198-015-0354-6.
- Parouha, R. P. & Das, K. N.(2015). An Efficient Hybrid Technique for Numerical Optimization and Applications. *International Journal of Computers & Industrial Engineering*, Elsevier. Accepted. (SCI, IF:1.69)
- Das, K. N. & Parouha, R. P.(2015). An ideal tri-population Approach for Unconstrained Optimization and Applications. *Applied Mathematics and Computations*, Vol. 256, pp. 666-701. Elsevier. (SCI, IF:1.6)

7. Das, K. N. & Parouha, R. P.(2015).A novel DE-PSO-DE (DPD) algorithm for economic load dispatch problem.*International Journal of Applied Evolutionary Computation*, Vol. 5 (4).
 8. Mishra, R. & Das, K. N. (2014). Model Order Reduction of Single Input and Single Output for Chemo-inspired Genetic Algorithm.*International Journal of Research in Mathematics & Computation*, Vol. 2 (2), pp. 1-11. EASTER.
 9. Gupta, P. K., Bég, O. A., Tripathi. D.& Sochi, T.(2014). Adomian decomposition method simulation of magneto-biotribological squeeze film with magnetic induction effects.*Journal of Mechanics in Medicine and Biology*, Accepted, DOI: 10.1142/S0219519415500724 (World Scientific, ISSN 0219-5194, SCI-Expanded-2014).
 10. Gupta, P. K. & Verma, S.(2014).A numerical study of Cauchy Reaction-Diffusion Equation.*International Journal of Nonlinear Science*, Vol. 17(3), pp. 221-233. (World Academic Press, ISSN 1749-3889).
 11. Mahanta, J. & Das, P. K. (2014). On Fuzzy Boundary. *The Journal of Fuzzy Mathematics*, 22(1), pp.197-201.
 12. Mahanta, J. & Das, P. K. (2014). On soft topological spaces via semi open and semi closed soft sets. *KYUNGPOOK Math. J.*, 54, pp. 221-236.
 13. Mahanta, J. & Das, P. K., Results on Fuzzy Soft Topological Spaces.*Mathematical & Computational Applications* (Accepted).
 14. Mahanta, J.(2015). Semiopen and semiclosed sets in fuzzy soft topological spaces.*Annals of fuzzy mathematics and informatics*, 9(1), pp. 161–167.
 15. Mahanta, J. & Das, D.(2014).Semi Compactness in Multiset Topology.arXiv:1403.5642v1 [math.GM].
 16. Bhattacharyya, S. & Bera, S.(2015). Combined electroosmosis-pressure driven flow and mixing in a microchannel with surface heterogeneity. *Applied Mathematical Modelling*, doi:10.1016/j.apm.2014.12.050 (SCI, IF: 2.158)
- b) International Conference(s)**
1. P. Mahapatra and S. Roy, "AP-NSGA-II: An Evolutionary Multi-objective Optimization Algorithm using Average-Point-Based NSGA-II", *Fourth International Conference on Soft computing for problem solving, NIT Silchar, December, 2015*.
 2. K. N. Das and T. K. Singh, "A novel approach for Solving Engineering Optimization Problems involving Equality Constraints", *Proceeding of International Conference on Robotics, Mechanics and Mechatronics (ICRMM 2015)*, Singapore, April 21-23, 2015. (To be published in *Int. Jr. of Materials, Mechanics and Manufacturing (IJMMM)*, ISSN: 1793-8198)
 3. K. N. Das and R. Paourha, "Engineering 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, NIT Silchar, 27-29 Dec, 2015.
 4. K. N. Das, T. Singh and 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, NIT Silchar, 27-29 Dec, 2015.
 5. K. N. Das and R. Mishra, "A novel chemo-inspired Genetic Algorithm for ELD with valve point loading effect", *Proceedings of Fourth International Conference on Soft Computing for Problem Solving, Advances in Intelligent Systems and Computing*, Springer, Vol. 335, pp. 443-460, NIT Silchar, 27-29 Dec, 2015.
 6. K. N. Das and R. Parouha, "Hybridizing DE with PSO for Constrained Engineering Design Problems", *International conference on Industrial Engg. Sc. and Applications*, Online Proceeding, pp. 116-12, NIT Durgapur, India, 2-4 April, 2014.
 7. J. Mahanta and P.K. Das, "Further results on fuzzy g*s-closed sets", *International Conference on Recent*

Advances in Mathematics (ICRAM 2014), Department of Mathematics, Rastrasant Tukadoji Maharaj Nagpur University, 20th -23rd January, 2014.

8. J. Mahanta and P.K. Das, "On some generalized fuzzy continuous functions", 4th International Conference on Soft Computing for Problem Solving, 2014, NIT Silchar, Assam, 27th -29th December, 2014.
9. Subrata Bera and Somnath Bhattacharyya, "Electrokinetic effects on solute mixing near a conducting obstacle within a microchannel", 2nd International conference on Mathematics and computing (ICMC 2015), Haldia Institute of Technology, India, 5-10th January, 2015 (To be published on Mathematics and Statics Series, Springer).

c) National Conference(s)

1. J. Mahanta, "A note on Chang's and Lowen's Fuzzy Topology", National Conference on Recent Trends in Mathematical Modeling & Soft Computing Techniques,

Organised by Department of Mathematics, Manav Rachna International University, Faridabad, 29th March 2014.

2. J. Mahanta, "On fuzzy weakly continuous functions", National Conference on Recent Trends in Mathematical Science Research", Assam University, Silchar, 5th-6th September, 2014.

d) Book/Chapter

1. Juthika Mahanta, "Topological Structures of Certain Generalized Sets", Scholars' Press, ISBN 978-3-639-71560-6.
2. J. Mahanta, P.K.Das, Chapter Title: Some Generalized Fuzzy Continuous Functions, Book Title: Proceedings of Fourth International Conference on Soft Computing for Problem Solving Series Title: Advances in Intelligent Systems and Computing Series Volume: 336, Series ISSN: 2194-5357, Publisher: Springer India.

5. Visits to Abroad

Sl.No.	Name of the faculty	Name of the Conference/Programme	Place	Date
1.	Dr. K. N. Das	Collaborative research between the Deptt. of Mathematics, Liverpool Hope University, UK and the Deptt. of Mathematics, NIT Silchar. (Tour sponsor: Liverpool Hope University)	Liverpool Hope University, Liverpool, UK	June 10 -30, 2014

6. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1	Mr. Tapan Kumar Singh	Dr. K. N. Das	Drosophila Food-Search Optimization: Design and Applications
2	Mr. 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

Mechanical Engineering



1. Academic Staff

HEAD: Dr. P. K. Patowari, Ph.D.

Faculty members

Professor

Dr. N.V. Deshpande, Ph.D. (Director, NIT Silchar)
 Dr. R. Gupta, Ph.D. (on lien, Director, NIT Srinagar)
 Dr. K. M. Pandey, Ph.D.
 Dr. R. D. Misra, Ph.D.

Assistant Professor

Dr. L. Roy, Ph.D.
 Dr. S. Chatterjee, Ph.D.
 Mrs. S. Debbarma, M.Tech.
 Dr. S. Bhowmik, Ph.D.
 Dr. D. Bhanja, Ph.D.
 Mr. Jagadish, M.Tech.
 Dr. S. Pati, Ph.D.

Associate Professor

Dr. K. Chakraborty, Ph.D.
 Mr. D. H. Das, M.Tech.
 Dr. K. K. Sharma, Ph.D.
 Mr. P. Choudhury, M.Tech.
 Dr. P.K. Patowari, Ph.D.
 Mr. S.K. Pattanayak, M.Tech.
 Dr. A. Biswas, Ph.D.
 Dr. S. Halder, Ph.D.
 Dr. D. Dutta, Ph.D.
 Dr. S. Nath, Ph.D.
 Dr. P. Deb Roy, Ph.D.
 Dr. A. B. Deoghare, Ph.D.

2. Distinction Achieved

a) By Student

- I M. Tech. scholar, under the supervision of Dr. S. Chatterjee, Mr. Sanjoy Paul had honoured with the best paper award in International Conference on "Contemporary Challenges in Management, Technology & Social Sciences", held on April 05-06, 2014 at MGIMT, Lucknow, and by presenting the paper entitled "CFD analysis of hydrodynamic condition of designed spiral column photobioreactors for cultivation of microalgae". The full paper of his conference had been published in "Handbook of Management, Technology and Social Sciences"(ISBN) - 978-81-928926-3-4, pp.166-174. <http://semsindia.org/publication/conference-book>.
- II Best Project Award in Mechanical Division at The jed-i project challenge 2014, at IISC Bangalore under the supervision of Dr. S. Halder.

b) By Faculty Member

1. Dr. S. Halder guided the team that secured the Best Project Award in Mechanical Division at The jed-i project challenge 2014, at IISC Bangalore.

2. Mr. Jagadish secured the "Best Innovative paper award" for the research paper by Springer in SocProS 2014 held at NIT Silchar.

c) Invited lecture delivered by faculty members

1. Dr. K. M. Pandey, was invited as a Key note speaker in 7th International Congress of environmental organized by Journal of Environmental Research and Development (JERAD), R. V. College of Engineering, Bangalore, India in December 26-28, 2014.
2. Dr. P. K. Patowari delivered a talk on "Surface Modification by Material Deposition in Electrical Discharge Machining (EDM) using Powder Metallurgy (P/M) Tools" in QIP STC on Micro Manufacturing Technologies on 27.03.2015 at IIT Guwahati.

3. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. P. K. Patowari, Dr. N. Sinha (CSE), Coordinators & Dr. S. Bhowmik, Mr. S. Biswas (CSE) Co-Coordinators	Talks on Fuzzy Logic by Prof. Ashok Deshpande, Founding Chair: Berkeley Initiative in Soft Computing (BISC) – UC Berkeley CA	NIT Silchar	November 5-6, 2014
2.	Dr. Sushovan Chatterjee, Dr. P.K. De (Maths) - Local Coordinators and Dr. Arnab Chakraborty (ISI Kolkata)	Five days "Workshop on Basic Statistics Using Software"	Applied Statistics Unit, ISI Kolkata	August 14-18, 2014
3.	Dr. Sushovan Chatterjee, Dr. P.K. De(Maths)- Organizing Co-coordinators, Dr.A. K. Chakraborty (ISI Kolkata)-Organizing Coordinator	Three days "Workshop on Reliability Theory and its Applications to Real Life Problems"	Central SQC Unit, ISI Kolkata	January 16-18, 2015
4.	Dr.S. Bhowmik	Three day workshop on AUTOSPARK 2014 – 2015	Self-sponsor	January 16-18, 2015

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
5.	Dr. D. Bhanja	Industry Ready Program	TEQIP-II	April 6-9 , 2014
6.	Dr. D. Bhanja	Fluid Mechanics	NMEICT, IIT Kharagpur	May 20-30, 2014
7.	Mr. Jagadish	Workshop on Robotics (MobiRoboTics-ROBOTRYST: 2014-15)	self-sponsored	September 20-21, 2014

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. K. M. Pandey	International Conference on Advance Trends in Engg. & Technology (ICATET 2014), 18th-19th April, 2014, India, Topic- Review on Pulse detonation Engine	Arya College of Engineering & I.T. Jaipur
2.	Dr. K. M. Pandey	Numerical investigation of hypersonic combustion of a scramjet combustor with a wedge shaped strut injector with the variation in angle of attack, 13-15 June, 2014	NIT Trichy
3.	Dr. K. M. Pandey	Non-Newtonian Computational Fluid Dynamics (CFD) Modeling on Left Coronary Artery with Multiple Blockages, Proceedings of the International Mechanical Engineering Congress (IMEC) on Advances in mechanical Engineering, 13-15 June, 2014	NIT Trichy
4.	Dr. K. M. Pandey	Numerical heat transfer analysis of nuclear fuel sub-channels, Proceedings of the International Mechanical Engineering Congress (IMEC) on Advances in mechanical Engineering, June 13-15, 2014, PP.137-140.	NIT Trichy
5.	Dr. K.M. Pandey	A Computational analysis of hypersonic combustion, published in 5th International and 41st National Conference on Fluid Mechanics and Fluid Power (FMFP-2014) December 12-14, 2014.	IIT Kanpur
6.	Dr. K.M. Pandey	A Comparative Analysis of Heat Transfer in Extended Surfaces with and without Holes, published in 5th International and 41st National Conference on Fluid Mechanics and Fluid Power (FMFP-2014) December 12-14, 2014,	IIT Kanpur
7.	Dr. R. D. Misra	"Experimental and CFD analyses of two bladed savonius water turbine under low velocity conditions", ASME 2014 Power Conference, July 28-31, 2014	Baltimore, Maryland, USA
8.	Dr.K.K.Sharma	One Week National FDP on "Pedagogy : A Frame for Effective Teaching and Learning' Strategies", 7-11 May , 2014	NIT Silchar
9.	Dr. P. K. Patowari	5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) December 12th-14th, 2014	IIT Guwahati

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
10.	Dr. P. K. Patowari	28th International Conference on Surface Modification Technologies (SMT28). June 16th – 18th, 2014	Tampere University of Technology, Tampere, Finland
11.	Dr. L. Roy	Fourth international conference on Soft Computing for Problem Solving	NIT Silchar
12.	Dr. Sushovan Chatterjee	Two and half day workshop on “Promise and Challenges of Biodiesel as Sustainable fuel for Future Use” during February 19-21, 2015	IIT Madras
13.	Dr.Sushovan Chatterjee	One week National FDP on “Pedagogy: A Framework for Effective Teaching and Learning Strategies” organized by TEQIP-II during May 7-11, 2014	NIT Silchar
14.	Dr.Sushovan Chatterjee	International Conference on Recent Trends in Engineering, Science & Management (ICRTESM-2015) on 15 March 2015 at Jawaharlal Nehru University (JNU, Convention Center), New Delhi	A R Research Publication
15.	Dr.Sushovan Chatterjee	International Conference on Green Technology for Environmental Pollution Prevention and Control held at National Institute of Technology Tiruchirappalli, Tamilnadu during 27-29 September, 2014	NIT Trichy
16.	Dr.Sushovan Chatterjee	International Mechanical Engineering Congress 2014, held at NIT Trichy, during June 13-15, 2014	NIT Trichy
17.	Dr. A. Biswas	Two Week ISTE Workshop on Fluid Mechanics under NMEICT (National Mission on Education Through ICT) held at NIT Silchar during 20-30 May 2014	IIT Kharagpur
18.	Mrs. Sumita Debbarma	One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies, 7th - 11th May 2014	NIT Silchar
19.	Mrs. Sumita Debbarma	Two week ISTE workshop on Fluid Mechanics, 20th - 30th May 2014, NIT Silchar	IIT Kharagpur
20.	Dr. S. Halder	One week National FDP on Pedagogy for effective teaching and Learning Strategies	NIT Silchar
21.	Dr. Sumit Bhowmik	One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies, 7th – 11th May 2014, NIT Silchar	NIT Silchar
22.	Dr. Sumit Bhowmik	Two week ISTE workshop on Fluid Mechanics, 20th – 30th May 2014, NIT Silchar	IIT Kharagpur
23.	Dr. D. Dutta	Faculty Development Programme through enhancement of Pedagogy	IIT Kharagpur
24.	Dr. D. Bhanja	One week National FDP on “Pedagogy: A Frame Work for Effective Teaching and Learning Strategies” held on 7-11 May 2014	NIT Silchar
25.	Dr. Sujit Nath	One week National FDP on “Pedagogy: A Frame Work for Effective Teaching and Learning Strategies” held on 7-11 May 2014	NIT Silchar

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
26.	Dr. Sujit Nath	Fluid Mechanics under NMEICT, IIT Kharagpur, 20-30 May, 2014	NIT Silchar
27.	Mr. Jagadish	One week National FDP on Pedagogy: A Framework for Effective Teaching and Learning Strategies, 7th – 11th May 2014, NIT Silchar	NIT Silchar
28.	Mr. Jagadish	Two week ISTE workshop on Fluid Mechanics, 20th – 30th May 2014	IIT Kharagpur
29.	Mr. Jagadish	IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2014), Kuala Lumpur, Malaysia, during Dec 9-12, 2014	Monash University, Malaysia
30.	Dr. Ashish B. Deoghare	Short term course "Design: Education, Research & Innovation" organized by Department of Design from Feb. 02-06 2015.	Department of Design IIT Guwahati
31.	Dr. Ashish B. Deoghare	IEEE Authorship workshop organized by Electrical Engineering Department on 15.02.2015	NIT Silchar
32.	Dr. D. Dutta	IEMCON international Conference in Kolkata, dated 27-30th August, 2015	IEEE Kolkata Chapter

4. Research and Development

a) PhD Programme (Specializations)

Thermodynamics; Heat Transfer; Computational Heat Transfer; Computational Fluid Dynamics; Combustion; Refrigeration & Air Conditioning; Alternate Fuels;

Solar Energy; Wind Turbines; Hydraulic Turbines; Spray Combustion; Non-conventional Energy; Tribology; Fracture Mechanics; Stress Analysis; Vibration; Micro-machining; Advanced Manufacturing Processes; Engineering Materials; Virtual Manufacturing; Composite Materials.

b) PhD Produced / Ongoing (in number)

Completed	Submitted	Ongoing
02	01	32

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Instrumentation laboratory, Robotics laboratory, Renewable energy	For performing M.Tech, B.Tech, Ph.D project
2.	Nanocomposite Materials Lab	Synthesis of nanostructured materials and polymer composites and FRP composites for performing M.Tech lab, M.Tech and Ph.D projects
3.	FRP Lab	Synthesis of laminated composites and material processing for performing M.Tech lab, M.Tech and Ph.D. projects
4.	Advanced Mechanical Characterization Lab	Under progress (tendered), Mechanical and physical characterization of materials
5	CAD/CAM and Computational Laboratory	PG and PhD students.

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs (Rs)	Duration
1.	Development of an enzymatic process for production of microalgaean biodiesel	Dr. S. Chatterjee	All India Council For Technical Education (AICTE)	10.40	April 2012 to Sept. 2014
2.	Establishment of Regional Test cum Technology Back up Unit for Solar Thermal Devices at NIT Silchar	Dr. A. Biswas (P.I.) & Prof. R. D. Misra (Co-P.I.)	Ministry of New & Renewable Energy, G.O.I.	73.86	2012 to 2017
3.	Synthesis and Fracture Property Evaluation of Polymer Nanocomposites	Dr. S. Halder	NIT Silchar	10.00	March 2014 – Sept. 2015
4.	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. S. Bhowmik Dr. P. K. Patowari	Department of Science & Technology	220.00	2015-2019

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Dr. K.M. Pandey	International Journal of Heat & Mass Transfer, Elsevier	01	2014-15
2.	Dr. K.M. Pandey	Renewable energy, Elsevier SCI International Journal	02	-do-
3.	Dr. K.M. Pandey	Combustion science and technology, Taylor & Francis, an International SCI journal	01	-do-
4.	Dr. K.M. Pandey	Flow Turbulence and Combustion, an SCI Journal of Springer Publication	01	-do-
5.	Dr. K.M. Pandey	Reviewer of Sadhna, an International Journal published from IISc, Bangalore, Springer Publications	02	-do-
6.	Dr. K.M. Pandey	Reviewer of The Journal of Mechanical Science and Technology, SCI International Journal.	01	-do-
7.	Dr. K.M. Pandey	Journal of thermal science published from Institute of Nuclear Science, Vinca, Belgrade, Serbia, SCI International Journal	01	-do-
8.	Dr. K.M. Pandey	Reviewer of the journal Engineering Applications of Computational Fluid Mechanics	01	-do-
9.	Dr. K.M. Pandey	journal of Institution of engineers (India) : Series C	02	-do-
10.	Dr. K.M. Pandey	Reviewer of the journal Proceedings of the National Academy of Sciences, India Section A: Physical Sciences., NASA	01	-do-
11.	Dr. K.M. Pandey	ASME international conferences IMECE 2014	03	-do-

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
12.	Dr. K.M. Pandey	OPTIROB 2015	01	-do-
13.	Dr. K.M. Pandey	CMSE 2014	16	-do-
14.	Dr. K.M. Pandey	CMSE 2015	05	-do-
15.	Dr. P. K. Patowari	Materials and Manufacturing Processes, Taylor and Francis	14	2014-15
16.	Dr. P. K. Patowari	Journal of Engineering Manufacture, Sage	4	2014-15
17.	Dr. P. K. Patowari	International Journal of Precision Technology, Inderscience	2	2014
18.	Dr. P. K. Patowari	International Journal of Advanced Manufacturing Technology, Springer	1	2014
19.	Dr. A. Biswas	Applied Energy (Elsevier)	07	2014-15
20.	Dr. A. Biswas	Energy Conversion & Management (Elsevier)	05	-do-
21.	Dr. A. Biswas	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	01	-do-
22.	Dr. S. Halder	Journal of the Institution of Engineers (India): Series C	1	2014
23.	Dr.S. Bhowmik	Indian Journal of Engineering & Materials Sciences	01	2014
24.	Dr. D. Bhanja	Energy Conversion & Management, Elsevier	01	August,2014
25.	Dr. D. Bhanja	International Journal of Heat & Mass Transfer, Elsevier	01	Feb,2015
26.	Mr.Jagadish	International Journal of Sustainable Engineering	01	2014
27.	Mr.Jagadish	Advances in Intelligent System and Computing(SocProS)	01	2014
28.	Dr.S. Pati	European Journal of Mechanics - B/Fluids	1	2015
29.	Dr.S. Pati	Progress in Computational Fluid Dynamics, An International Journal (PCFD)	1	2014
30.	Dr.S. Pati	Journal of Thermal Science and Engineering Applications(ASME)	2	2014
31.	Dr.S. Pati	Journal of Applied Fluid Mechanics	2	2014
32.	Dr.S. Pati	Journal of the Institution of Engineers (India):Series C	8	2014-15

f) Chairing of Technical Section

Sl. No.	Faculty Name	Details
1.	Dr. K.M. Pandey	International Conference on Advance Trends in Engg. & Technology (ICATET 2014), 18th-19th April, 2014, Arya College of Engineering & I.T. Jaipur, India (Published)
2.	Dr. P. K. Patowari	One technical session in International Conference on Surface Modification Technologies (SMT28). June 16th – 18th, 2014, Tampere University of Technology, Tampere, Finland

5. Publication

a) International Journal(s)

1. Gupta, R., Sinha, A. & Pandey, K. M. (2014). Computational Fluid Dynamics (CFD) study of tea withering trough considering leaf layer as porous medium. *Progress in Computational Fluid Dynamics, an Inderscience journal*, Vol. 14 no 5. DOI: 10.1504/PCFD.2014.064561; pp:304-315.
2. Sinha, A., Gupta, R. & Pandey, K. M. (2014). Exergy analysis of coal fired tea drying furnace. accepted in *International Journal of Exergy, an Inderscience Journal* (SCI Journal-Article in press).
3. Pandey, K. M. & Roga, S. (2015). Computational Analysis of Hypersonic Combustor Using Strut Injector at Flight Mach 7, accepted in March 2015 in *Combustion Science and Technology*, Taylor and Francis International Journal, SCI Journal., available online DOI: 10.1080/00102202.2015.1035371
4. Choubey, G. & Pandey, K. M. (2015). Numerical analysis of Hypersonic Combustion of Hydrogen fueled Scramjet Combustor with the variation in the angle of attack at Mach number of 7, accepted in *International Journal of Turbo and Jet Engines* on 26 March, 2015, De Gruyter Publications China, SCIE International Journal. Source Normalized Impact per Paper (SNIP): 0.749, Impact Factor 0.218
5. Debnath, P. & Pandey, K. M. (2015). CFD Analysis of Shchelkin Spiral Effect on Detonation Flame Acceleration in Pulse Detonation Engine, accepted in *International Journal of Turbo and Jet Engines* on 29 March, 2015, De Gruyter Publications China, SCIE International Journal. Source Normalized Impact per Paper (SNIP): 0.749
6. Pandey, K. M. & Roga, S. "CFD Analysis of Scramjet Combustor with Non-Premixed Turbulence Model Using Ramp Injector," Scientific.Net, Applied Mechanics and Materials, Vol. 555, pp. 18-25, Transtech publications Switzerland, (Indexed in Thomson Reuters and Scopus).
7. Pandey, K. M., Thakur, R., Hazarika, A., Ashutosh, T. & Gogoi, D. "Non-Newtonian Computational Fluid Dynamics (CFD) Modeling on Left Coronary Artery with Multiple Blockages, Applied Mechanics and Materials, 592-594, pp. 1924-1929, Trans Tech publications Switzerland. (Indexed in Thomson Reuters and Scopus) (DOI-10.4028/www.scientific.net/AMM.592-594.1924)
8. Pandey, K. M. & Roga, S. (2014). CFD Analysis of Hypersonic Combustion of H₂-Fueled Scramjet Combustor with Cavity Based Fuel Injector at Flight Mach 6. Communicated to ICMERA 2014, Romania. October 24-27, 2014, also published in Applied Mechanics and Materials, Trans Tech publications Switzerland. (Indexed in Thomson Reuters and Scopus), (DOI-10.4028/www.scientific.net/AMM.656.53).
9. Debnath, P. & Pandey, K. M. (2014). Effect of Blockage Ratio on Detonation Flame Acceleration In Pulse Detonation Combustor Using CFD" Communicated to ICMERA 2014, Romania. October 24-27, 2014, also published in Applied Mechanics and Materials, Trans Tech publications Switzerland. Vol. 656 (2014) pp. 64-71, (2014) (Indexed in Thomson Reuters and Scopus), (DOI-10.4028/www.scientific.net/AMM.656.64).
10. Pandey, K. M., Dey, A. & Choudhury, P. L. (2014). Buckling Behaviour of Circular Ring Stiffened Filament Wound Composite Pressure Hull through Finite Element Analysis. ICMERA 2014, Romania. October 24-27, 2014, also published in Applied Mechanics and Materials, Trans Tech publications Switzerland. (Indexed in Thomson Reuters and Scopus), (DOI-10.4028/www.scientific.net/AMM.656.288).
11. Kumar, U., Kumar, B. & Pandey, K. M. (2014). SEM and EDAX Study of Pretreated Rice Husk for the Sorption of Cu(II) from Wastewater. *Applied Mechanics and Materials* Vol. 656 (2014) pp. 17-22, Trans Tech Publications, Switzerland, 10.4028/www.scientific.net/AMM.656.17
12. Choubey, G. & Pandey, K. M. (2014). Numerical analysis of Hypersonic Combustion of a Scramjet Combustor with a Central lobed Strut Injector by varying the angle of attack. *International Journal of Advanced Mechanical Engineering*, Research India

- Publications, New Delhi, ISSN: 2250-3234 Volume 4, Number 3 (2014), pp. 269-276(2014)
13. Karthik, R., Kumar, U. & Pandey, K. M.(2014). CFD Analysis in the Field of River Engineering, A Review, International Review of Applied Engineering Research, Research India Publications, New Delhi, ISSN: 2248-9967, Volume 4, Number 4, pp. 337-342(2014)
 14. Srivastawa, P. & Pandey, K. M (2014). Computational Analysis of Hypersonic Combustion Using Flame Stabilizing Fuel Injection with Species Transport Model. *International Journal of Advanced Mechanical Engineering*, Research India Publications, New Delhi, ISSN: 2250-3234 Volume 4, Number 3, pp. 405-412.
 15. Debnath, P., Gupta, R. & Pandey, K. M. (2014). Performance Analysis of Helical Savonius Rotor Using Computational Fluid Dynamics. *ISESCO Journal of Science and Technology*, Vol. 10 No. 18, (Published).
 16. Debnath, P. & Pandey, K. M. (2014). Performance Studies on Pulse Detonation Engines: A Review. *International Conference on Advance Trends in Engg. & Technology (ICATET 2014)*, Arya College of Engineering & I.T. Jaipur, India (Published).
 17. Jena, J. & Misra, R. D. (2014). Effect of fuel oxygen on the energetic and exergetic efficiency of a compression ignition engine fuelled separately with palm and karanja biodiesels. *Energy – The Int. Journal*, Vol. 68, pp. 411-419.
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 50. Debasish Dutta, Computational Aero-Elasticity Analysis: Future Generation Technique For Measuring Wind Energy, held at Mangalore, during 12-14 March, 2015
 51. Jagadish, Ray, A. "Optimization of green electrical discharge machining using an integrated approach", IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2014), Kuala Lumpur, Malaysia, during Dec 9-12, 2014.
 52. Jagadish, Ray, A. "A fuzzy multi-criteria decision making model for green electrical discharge machining". Proceedings of Fourth International Conference on Soft Computing for Problem Solving, NIT Silchar, during Dec 27-29, 2014.
- c) National Conference(s)**
53. L. Roy and S. K. Kakoty, "Application of Genetic Algorithm in Optimization of Hydrodynamic bearings," Proceedings of Fourth International Conference on Soft Computing for Problem Solving Advances in Intelligent

Systems and Computing Volume 335, 2015, pp 207-217.

54. Bhuyan S., Biswas A. Performance evaluation of combined Savonius-H-rotor. In: Proceedings of the 5th International and 41st National Conference on Fluid Mechanics and Fluid Power (FMFP), December 12-14, 2014, IIT Kanpur. Paper ID: FMFP14-A-702.

d) Book/Chapter

1. K. M. Pandey and K.O. Reddy, CFD analysis of solid rocket motors, Lap Lambert Academic Publications, Germany, pages 96, ISBN-13- 978-3-659-48990-7, Published on 17th March 2015.

6. Major Equipment Acquired

Workshop: Welding Fume Extraction Table - 01 No; Portable Generator set - 01 No

Composite Material Lab: Ultra Sonicator Temperature Probe, Micro Tip – 01 No., L.G. Refrigerator – 01 No.; Metallography Abrasive Cutter – 1 No. ; High Speed Saw – 01 No.; Variable Speed Grinder – 1 No. ; Twin Belt Grinder – 01 No. ; Precision Weighing Scale – 01 No. ; Ball Mill – 01 No.

Instrumentation Lab: Strain Measurement Trainer; Capacitance Measurement Trainer; Inductance Trainer; Pressure Measurement Trainer

Computer Lab: Lenovo Desk Top – 15 Nos.

Renewable Energy Lab: Vertical Autoclave – 01 No.; Bench Top Centrifuges Electronics Digital Precision Balance – 01 No.; Biodiesel Production plant 5-10 lbs per batch – 01 set; Fermenter – 01 No.; Orbital Incubator – 01 No.; P.H. Meter – 01 pack; Magnetic Stirrer cum hot plate – 2 packs

Fluid Mech. Labs: Bernoulli's Theorem App.; App for Calibration of Venturies, Orifice Meter and rotometer; Metacentric Height App.; App. For Measuring force due to Impact jet

Material Testing Lab: Digital Vernier Calliper – 01; Digital Shore D- hardness Tester – 01; Marble Cutter – 01

Composite Materials Lab: Bench Top Centrifuges – 01; Table Top Cleaner – P-230-D –01; S.S. Mesh Basket – 01; Grinding Balls; Muffle furnace - 01

RTC Project (Solar Thermal): Precision Spectral Pyranometer for different Solar radiation with shading ring; PID Temperature Controller with all accessories-01; Data Acquisition System -01; Mesh + enclosure + junction box + Cross with Mounting accessories- 01; Laboratory Oven – 01; Digital Multimeter– 01; Ambient Temp. Sensor-01; Wind Speed, Relative Humidity Sensor-02; Temperature Sensors-12 Nos.

Refrigeration & Air Conditioning Lab: Mechanical Heat Pump – 01 set

7. Patent

Sl. No.	Details	Year
1.	Sudipta Halder, Ikbal Choudhury, AbhinavMathur, WrituparnaNath, A system and method of synthesizing PMMA-Shell Based Self-Healing Microcapsules, Application No. 1127/KOL/2014	2014

8. Visits to Abroad

Sl.No.	Name of the faculty	Name of the Conference/ Programme	Place	Date
1.	Dr. N. V. Deshpande	High Performance Computing Facility for North East India through Information and Communication Technology	Orlando, Florida, USA	March 10-13, 2015

Sl.No.	Name of the faculty	Name of the Conference/ Programme	Place	Date
2.	Dr. R. D. Misra	ASME-POWER 2014	Baltimore, Maryland, USA	July 28-31, 2014
3.	Dr. P. K. Patowari	28th International Conference on Surface Modification Technologies (SMT28)	Tampere University of Technology, Tampere, Finland	June 16 – 18, 2014
4.	Dr. S. Halder	MIMT 2015: 6th International Conference on Mechanical, Industrial, and Manufacturing Technologies	Melaka, Malaysia	March 6-7, 2015
5.	Dr. Sumit Bhowmik	6th International Conference on Mechanical, Industrial, and Manufacturing Technologies (MIMT 2015)	Melaka, Malaysia	March 6-7, 2015
6.	Mr. Jagadish	IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2014)	Kuala Lumpur, Malaysia	Dec 9-12, 2014

9. M.Tech. Thesis (2014 passed out students)

a) Thermal Engineering.

Sl. No	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
1.	Chandradeep Barman	Dr. K.M. Pandey	CFD Analysis of Heat Transfer In Subchannels of Nuclear Reactors Using Freon 12
2.	Amit Ranjan	Mr. D.H. Das	CFD Analysis of An Air Cooled Engine Cylinder Using Different Fin Geometry
3.	Vishwa Mohan Behera	Mr. D.H. Das	Computational Analysis of a Triple Tube Heat Exchanger Using Heat Transfer Enhancement Techniques
4.	Akash Raj	Dr. K.M. Pandey	Burnback Analysis and Design Optimization of Two Different Grain Geometries in Solid Propellant Rocket Motor
5.	Rupesh P L	Dr. R.D. Misra	Experimental and Computational Evaluation of the Temperature Difference of The Cascade Condenser of a Cascade Refrigeration System
6.	Shikha Bhuyan	Dr. A. Biswas	Experimental Investigations of H-Type and Hybrid H-Savonius Vertical Axis Wind Rotors
7.	Aaditya Chandel	Dr. D. Bhanja	Thermal Analysis of Porous Fin Subjected to Variable Thermophysical Parameters
8.	Chandrasekhara Pratap G.C.	Dr. K.M. Pandey	Numerical Heat Transfer Study in Sub Channels of Nuclear Fuel Rod Assembly

Sl. No	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
9.	Ayusman Nayak	Dr. R.D. Misra	Reduction of Cooling Load for an Existing Building Using Passive Concepts
10.	Manas Pratim Borthakur	Dr. A. Biswas	Development of a Meshfree Solver for Two Dimensional Incompressible Flows
11.	Joly Goswami	Dr. R.D. Misra	Design And Development of a Heating-Cooling Belt Using Thermoelectric Refrigeration for Medical Purposes
12.	Subhasis Chakravarty	Dr. D. Bhanja	Analytical Experimental and Computational Predictions in Performance and Optimum Design Analysis of Porous Fins of Various Profiles
13.	Nuruzzaman Choudhury	Dr. K.K. Sharma	Experimental Investigation of Six bladed Savonius Rotor with variation in chord ratio and optimum deflector plate position
14.	Abhinandan Baruah	Dr. R.D. Misra	Energy Distribution Model of a Hybrid Energy System for a Given Energy Demand
15.	Alok Patra	Dr. S. Chatterjee	Isolation and Characterization of Biodiesel from Indigenous Biomass
16.	Prateek Srivastava	Dr. K.M. Pandey	Studies on 2d CFD Analysis of Hydrogen Fueled Hypersonic Combustion Using Cavity Based Fuel Injection with Variation in Mach Number
17.	Sanjoy Paul	Dr. S. Chatterjee	CFD Analysis on Hydrodynamic Conditions of Designed Spiral Column Photo-bioreactors for Cultivation of Microalgae
18.	Gautam Chaubey	Dr. K.M. Pandey	Numerical Investigation of Hypersonic Combustion of a Hydrogen-Fueled Scramjet Combustor with Variation in Angle of Attack
19.	Sachine Ganwer	Dr. A. Biswas & Dr. D. Bhanja	Optimal Sizing and Techno Economic Evaluation of Stand-Alone Hybrid Renewable Energy System for Production Building of Department of Mechanical Engineering, NIT Silchar
20.	Kanak Ch. Sharma (Part-Time)	Dr. R.D. Misra	Experimental Evaluation of Engine Performance and Emission Characteristics of a CI Engine Fuelled with Biofuelmix

b) Design & Manufacturing

Sl. No	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
1.	Pothala Sreenu	Dr. R.K. Gupta	Extraction of Process Parameters from a Sheet Metal Part Model
2.	Gaurav Chaudhary	Mr. P. Choudhury	Stress Analysis and Delamination Prediction on Tapered Composite Laminate with Different Ply-Drop Configuration Using Finite Element Method

Sl. No	Name of the Scholar	Name of the Supervisor(s)	Title of the Thesis
3.	Tilekar Shivkantdilip	Dr. P.K. Patowari	Generation of Squate Shape Using Rotating Reuleaux Triangle Tool in Die Sinking EDM
4.	Abhisek Acharya	Mr. S.K. Pattanayak	DMADV Approach Towards Implementation of Six Sigma in a Manufacturing Environment
5.	Usmani Md. Shahid Afzal Ahmad	Dr. K. Chakraborty	Some Studies on Machining of Few Alloys
6.	Rahul Kumar	Dr. S. Bhowmik	Experimental Study and Optimization of Mechanical Properties of Epoxy Based Wood Dust Reinforced Green Composite
7.	Politraj Sonowal	Mr. S.K. Pattanayak	Optimization of Production Cost in Aggregate Production Planning under Complex Planning Variables – A Bio-Inspired Approach
8.	Ramteke Ashwini Milind	Dr. R.K. Gupta	Design and Development of Bamboo Based Tricycle with Safety Features
9.	Arunab Choudhury	Mr. L. Roy	Determination of Steady State Characteristics and Optimization of Dam Length Two Lobe Pressure Dam Bearing
10.	Sunil Kr. Panigrahy	Mr. S.K. Pattanayak	Guiding Preparation of Master Production Scheduling (Mps) in an Assembled Production Environment – A Case Study
11.	SankhaShuvra Das	Dr. P.K. Patowari	Computational and Experimental Study for Passive Mixing of Fluids in Serpentine Micro - Channel
12.	Anurag Khare	Dr. S. Halder	Multiscale Modelling of Ilmenite Reduction Process
13.	Faruque Aziz	Dr. S. Bhowmik	Fracture Roughness Estimation Using Beremin Model on CT Specimen of 20 MnMoNi55 Steel
14.	Tankeshwar Prasad	Dr. S. Halder	Preparation and characterization of ZnO based polymer composites
15.	Rabin Kumar Das	Mr. S.K. Pattanayak	Plastic from Potato Starch – A Techno Commercial Feasibility Perspective
16.	Chiranjib Bhowmik	Dr. A. Ray	Study of Quality Improvement Projects Using Theory of Constraints
17.	Rajnish Kumar	Dr. A. Ray	Study of Material Selection Using Multi-Criteria Decision Making Approach
18.	Abhijit Dey	Mr. P. Coudhury & Dr. K.M. Pandey	Buckling Analysis of Stiffened Composite Pressure Vessels under Hydrostatic Pressure using Finite Element Method
19.	Ajit Biswas	Dr. S. Bhowmik	Estimation of Critical Fracture Toughness for Ductile Failure of RPV Steel Using Tensile Test Data

10. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Jibanananda Jena	Dr. R.D. Misra	Effect of Oxygen Content In Biofuel Blends on CI Engine Performance and Exhaust Emissions through Experimental and Exergoeconomic Evaluations
2.	Abhijit Sinha	Dr. R. Gupta, (Director, NIT Srinagar) & Dr. K.M. Pandey	Productivity Analysis of CTC Tea Industries of Barak Valley with Special Emphasis on Socio-Technological Aspects Productivity Analysis of CTC Tea Industries of Barak Valley with Special Emphasis on Socio-Technological Aspects

Physics



1. Academic Staff

HEAD: Dr. Subrat Kumar Barik, Ph.D.

Faculty members

Associate Professor

Dr. Asim Roy, Ph.D.

Assistant Professor

Dr. A. Bhattacharjee, Ph.D. (on Lien)

Dr. S. K. Barik, Ph.D.

Dr. A. Chowdhury, Ph.D.

Dr. R. Dutta, Ph.D.

Dr. S. R. Mohapatra, Ph.D.

Dr. R. G. Nair, Ph.D.

Dr. S. Panda, Ph.D.

2. Seminar, Symposia, Short Term Courses, Workshops

a) Conducted by Faculty Member

Sl. No.	Name of the Coordinator	Title	Funding Agency	Duration
1.	Dr. R. G. Nair	Field development programme on solar energy systems	TEQIP II	January 29-30, 2015

b) Participated by Faculty Member

Sl. No.	Name of Faculty	Details of the Program	Organizing Institute
1.	Dr. A.Roy	The 28th International Conference on Surface Modification Technologies SMT28	Tampere University of Technology, Tampere, Finland
2.	Dr. A. Chowdhury	Development of assessment tools for effective implementation of outcome based curriculum	NIT Silchar
3.	Dr. A. Chowdhury	IUCr workshop on XRD Systems and Applications	IIT Guwahati
4.	Dr. R. G. Nair	International Congress on Renewable Energy (ICORE-2014)	Solar Energy Society of India, Delhi
5.	Dr. R. G. Nair	IUCr workshop on XRD Systems and Applications	IIT Guwahati
6.	Dr. R. Dutta	Development of assessment tools for effective implementation of outcome based curriculum	NIT Silchar
7.	Dr. S. R. Mohapatra	Development of assessment tools for effective implementation of outcome based curriculum	NIT Silchar
8.	Dr. S. Panda	Development of assessment tools for effective implementation of outcome based curriculum	NIT Silchar

3. Research and Development**a) PhD Programme (Specializations)**

Binary oxide for RRAM, Thin Films, Semiconductor nanostructures; X-ray Diffraction, Structural phase transitions in oxides perovskites, Multiferroics; Liquid

Crystals, Metal Oxide Semiconductors, Raman Spectroscopy; Semiconductor Nanostructure and Devices, Polymer nano-composites; Solar Photocatalysis, Solar Photovoltaics, Nano Energy Materials and Devices; Solid State Ionics, Energy Storage materials and devices; Mathematical Physics and Boundary value problems; Theoretical High Energy Physics.

b) PhD Produced/Ongoing (in number)

Completed	Submitted	Ongoing
02	00	06

c) Research Lab/ Workshop

Sl. No.	Name of Lab/Workshop	Purpose/Linkage to an existing/new programme
1.	Microscience & Nanophysics	Research
2.	Multifunctional Materials	Research
3.	Liquid crystals	Research

d) Ongoing/Completed Sponsored Research Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in lakhs	Duration
1.	Synthesis & characterization of BST-BFO composites for devices	Dr. Subrat Kumar Barik	AICTE	16	2012-15

e) Research Paper Reviewed

Sl. No.	Faculty Name	Journal Name	No. of Paper	Year
1.	Dr. S. R. Mohapatra	Ionics	02	2014
2.	Dr. S. R. Mohapatra	Nanotechnology	01	2014

4. Publication

a) International Journal(s)

- Roy, A., Roy, N. & Chowdhury, A.(2014). Observation of negative differential resistance and electrical bi-stability in chemically synthesized ZnO nanorods. *Journal App. Phys*, 115, 223502, AIP Publishing.
- Roy, A. & Roy, N.(2015).Growth and temperature dependent photoluminescence characteristics of ZnO tetrapods.*Ceramic International*, Vol. 41, No. 3 Part A, pp. 4154-4160, Elsevier Science.
- Sarkar, P. S. & Roy, A.(2015). Improvement of retentivity in Tiox/Hfox bilayer structure for low power resistive switching memory applications. *Surface Review and Letters, World Scieintific*.
- Nath, M. & Roy, A. (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*, Springer US.
- Ahmed, S. & Barik, S. K. (2015) Electrical and Magnetic Properties of (SbLi)_{1/2}(Fe₂/3Mo₁/3)O₃ Multiferroic Material. *Journal of Alloys and Compounds*, 626, Elsevier B.V.
- Biswas, B., Chowdhury, A. & Mallik, B.(2015). Spectacular oscillations in the dark and photocurrent in thiol-capped CdS quantum dots embedded in PMMA matrix, *RSC Advances* 5, 13613. RSC Publishing.
- Sanyal, M. K., Biswas, B., Chowdhury, A. & Mallik, B.(2015). Spectroscopic Studies on the Effect of Some Ferrocene Derivatives in the Formation of Silver Nanoparticles.*Journal of Nanoscience and Nanotechnology*, 15, 1-10, ASP.
- Roy, N.,Chowdhury, A. & Roy, A.(2014). Observation of negative differential resistance and electrical

bi-stability in chemically synthesized ZnO nanorods. *Journal App. Phys*, 115, 223502, AIP Publishing.

- Dutta, R., Bhol, A. & Giri, A. K. (2014). Baryonic $b \rightarrow s \bar{l} l$ transition decays, *J. Phys. G: Nucl. Part. Phys.*, 41, 065002, IOP Publishing.

b) National Journal(s)

- Kumari, N. & Bhattacharjee, A.(2014). Synthesis, Structural and Optical properties of Al doped SnO₂ nanoparticles, 88, 65-70,*Indian Journal of Physics*.
- Kumari, N., Ghosh, A. & Bhattacharjee, A.(2014). Investigation of structural and electrical transport mechanism of SnO₂ with Al dopants, 88 (10), 1059-1066, *Indian Journal of Physics*.

c) International Conference(s)

- M. Nath & A. Roy, Electrical Properties of Radio Frequency Sputtered Hafnium Oxide Thin Film, The 28th International Conference on Surface Modification Technologies SMT28, June 16th – 18th, 2014 Tampere University of Technology, Tampere, Finland.
- P. K. Kushwaha, Abhijit Gope and Ranjith G. Nair, Solar e-Rickshaw: A Green Local Transport Solution, 2014, Page No. 46-51 International Congress on Renewable Energy (ICORE) held at Manekshaw Center, New Delhi.

d) National Conference(s)

- S. Bhattacharjee, M. Basu & A. Roy, Optical and electrical properties of undoped and Boron-doped ZnO synthesized by chemical route, AMRP-2015 (Accepted for publication).
- P. K. Sarkar & A. Roy, Electrical properties of radio frequency sputtered HfO₂ thin film for gate dielectric application, ETPTA-2014 (Accepted for publication).

5. Visits to Abroad

Sl. No.	Name of the faculty	Name of the Conference/Programme	Place	Date
1.	Dr. Asim Roy	International Conference on Surface Modification Technologies SMT28	Tampere University of Technology, Tampere, Finland	June 16 -18, 2014

6. M.Sc. Thesis

Sl. No	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Moumita Basu	Dr. Asim Roy	Chemical Synthesis and Characterization of Boron-doped ZnO nanostructures
2.	Anik Misra	Dr. S. K. Barik & Dr. S. R. Mohapatra	Sodium Ion Conductive Composite Polymer Thin Films
3.	Abhrajit Roy	Dr. Asim Roy	Thermally Evaporated ZnO Thin Films
4.	Sarmistha Bhattacharjee	Dr. Avijit Chowdhury & Dr. C.V.S. Rao, Institute for Plasma Research, Gandhinagar	Neutron irradiation studies on thorium sample
5.	Harsh Mohan Das	Dr. Rupak Dutta	Neutrino oscillation and its phenomenology
6.	Piyush Kalita	Dr. Subhasis Panda	Chaos in magnetic pendulum

7. Ph.D. Thesis

Sl. No.	Name of the Scholar	Name of the Supervisor	Title of the Thesis
1.	Ms. Nandini Roy	Dr. A. Roy	Synthesis and characterization of II-VI semiconductor nanostructures for optoelectronic applications
2.	Ms. Navnita Kumari	Dr. N. V. Deshpande Dr. A. Bhattacharjee	Study of structural, electrical and optical properties of pure and doped SnO ₂ nanoparticles

ACADEMIC CENTRE

Central Computer Centre

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

Technical Staff

Abhishek Palit (contractual), M.C.A.

Rupak Ranjan Deb (contractual), Diploma

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. With this link, the Institute is getting around 400 to 600 Mbps bandwidth. The institute also has a 16 Mbps leased line from BSNL, dedicated to Web Server and Mail Server.

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 as well as at the departments. Network expansion still continues and work is going on for making the campus Wi-Fi by deploying greater 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 Computer Centre

- Internet facility is provided by the Central Computer Centre (CCC) to NITS campus and LAN and network updation and Maintenance is done by the centre. Web services along with domain based mail services facility is provided to faculty, staff and students in the NITS campus by this centre.
- CCC provides Computational Lab. facilities for B. Tech. 1st year students.
- CCC also provides the facilities for online examinations.
- HPC (High Performance Computing) facility is available at CCC for the students & faculty of the institute.

Central Workshop

Head	Faculty-in-charge Workshop	Workshop-in-charge
Dr. P.K. Patowari, Ph.D.	Dr. S. Halder, Ph.D.	Mr. B.K. Nath, Diploma

The workshop of the Mechanical Engineering 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 Engineering 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.

Central Library

Central Library @NIT Silchar was set up in 1977 and is one of the best technical libraries in North East India. It plays a pivotal role in the academic and research activities of NIT Silchar by providing facilities for creation and dissemination of knowledge. With a mission to provide quality service it acts to be the hub of all research and academic activities by identifying, acquiring, organizing and retrieving information in all formats to serve the information needs of the academic fraternity of NIT Silchar to meet their

teaching, research, and consulting, training and learning requirements. The library has made a significant progress during the year 2014-15 in the aspect of procuring e-journals, databases and e-books. The present Director has taken special interest for the development of library and for extension of the new library building. The Central Library is one of the biggest technical libraries in North-East India. (<http://www.nits.ac.in/library/library.html#page=default>)

The key officers of the Central Library are:

Chairman

Prof. F.A Talukdar
Ph.D.

Librarian

Dr. Kishor Chandra Satpathy
Ph.D.

Astt. Librarian

Ms. Krishnamati Singha
MLISc, MBA

Budgetary Details

Central Library received a projected allocation of 2.77 crore under Plan-Head and 11 lacs under Non-Plan during the financial year 2014-15. Out of the allocation of Plan funds Rs.2,35,05,991.00 have been utilized for purchase of books & dataset/e-journals and printed journals and

out of Non-Plan grant Rs. 3,69,124.00 has been utilized for subscription of printed journals/ newspapers/ binding purpose and rest for day-to-day operation of the library. Below table gives the detailed expenditure incurred on books, journals, newspaper, binding etc. for 2014-15:

Year	Books	Printed Journals/ Magazine	Online Database/e- Journals	Contingency	Newspapers &Magazines
2014-15	36,04,675.00	1,51,210.00	1,97,50,106.00	3,51,562.00	17,562.00

Membership Details

Sl. No.	Members	2014-15
1.	BTech	2226
2.	MTech	372
3.	MBA	71
4.	MSc	47
5.	PhD	170
6.	Academic Staff (Teaching)	199(including Contractual)
7.	Non-Academic	55
	Total	3140

Collection Development and Management

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 in areas of science, engineering, technology, humanities, social sciences and management. The total collection of library as on 31st March 2015 stands as follows:

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

New arrivals of books, journals, theses and reports etc. can be accessed on the library home page. An email alert is also sent to the requesting faculty member(s) about the arrival of publications requested by them. Library has taken special

care to keep the library stacks neat and clean and also helps the user to locate the desired document quickly.

MOU

In order to create a world-class, innovative, inviting and flexible library system to enhance campus learning, support research, and provide community outreach and service at NIT Silchar, through consultation and collaboration with the University Library, University of Illinois, Urbana Champaign, USA; NIT Silchar has entered into a collaborative MOU with University Library & Mortenson Centre for International Library Program of University of Illinois at Urbana Champaign, USA on 6th June 2014.

Human Resources

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

Lecture Delivered

1. Dr. Kishor Chandra Satpathy, delivered a invited talk on "Vision of Library" in the workshop on "Development of a Modern library at ABV-IIIITM Gwalior" on 13.03.2015.

2. Dr. Kishor Chandra Satpathy, acted as a resource person in the refresher Course & delivered lectures on "Role of Libraries & Librarians in 21st Century", "Best Practices in LIS", "Disaster Management in Libraries" & "E-Learning & IL in LIS" in the workshop "Librarianship in 21st Century" during 18th November to 8th December 2014 in the Department of Library and Information Science, Mizoram University, Aizwal.
3. Dr. Kishor Chandra Satpathy conducted a Workshop on "Use of e-resources for academic purpose" at Radhamadhab College, Silchar on 10th October, 2014.
4. Dr. Kishor Chandra Satpathy delivered the Keynote address on the theme "Managing libraries and information centres in changing environment with emphasis on Dr. S R Ranganathan philosophy of Librarianship" organised by Department of Library and Information Science & Rabindra Library, Assam University, Silchar in collaboration with IASLIC, Kolkata on 12th August, 2014 at Department of Library and Information Science, Assam University, Silchar.
5. Dr. Kishor Chandra Satpathy delivered 4 lectures in the two week Faculty Development Programme on "Effective Teaching" during 14th -25th July, 2014 at TrigunaSen School of Technology (TSSOT), Assam University, Silchar.

Other Activities

1. Dr. Kishor Chandra Satpathy appointed as an Indian Ambassador for ILN- International Library Network, Australia.
2. Dr. Kishor Chandra Satpathy appointed as an Indian Ambassador for Global Access to Post-Secondary Education (GAPS), UK.
3. Dr. Kishor Chandra Satpathy the biography has been included in the Kohinoor Personalities of Asia, Vol-III and Famous India: Nation's Who's Who published by Reguerdon Inc., Delhi on March 2015.
4. Dr. Kishor Chandra Satpathy the biography has been included in the Asia/Pacific Who's Who, Vol-XIII; Asia Admirable Achievers, Vol-VI; Reference Asia: Asia's Who's Who of Men & Women of Achievement", Vol-III; and Emerald Who's Who in Asia; Biography India published by Rifacimento International, New Delhi on March 2015.
5. The biography of Dr. Kishor Chandra Satpathy was included in the Biographical Dictionary of Indian LIS Professionals edited by Prof. L.S.Ramaiah, Prof. A.A.N. Raju & Prof. M. Shankara Reddy, Hyderabad on March 2015.
6. Dr. Kishor Chandra Satpathy, acted as an external examiner for Assam University, Silchar during March 2015.
7. Dr. Kishor Chandra Satpathy, acted as an expert in the Selection Committee of Assam University, Silchar on 2nd November, 2014.
8. Dr. Kishor Chandra Satpathy, joined a member of Technical Advisory Board of the journal of "College Libraries" with ISSN: 0972-1975 published by West Bengal College Librarians' Association, West Bengal from March 2015.
9. Dr. Kishor Chandra Satpathy, joined as an honorary member of Technical Review Board of Bi-monthly e-magazine "Dimorian Review" with ISSN: 2394-9163 published by Dimorian Review, Kamrup, Assam from March 2015.
10. Dr. Kishor Chandra Satpathy, joined as a member of editorial board in LIS Communications a quarterly e-bulletin of from March 2015.
11. Dr. Kishor Chandra Satpathy, acted as a member of the technical Committee of the National Conference on Scholarly Communication and Intellectual Property Rights (SCIPR-2014) organized by School of Planning and Architecture, Vijayawada during August 04 – 05, 2014.
12. Dr. Kishor Chandra Satpathy, acted as a Conference Committee Member of the National Conference on "Emerging Trends and Techniques for Electronics Resources Management in Libraries: Issues & Challenges" during 13-14 February, 2015 at NIT Rourkela, Odisha.

13. Dr. Kishor Chandra Satpathy attended the meeting of Purchase Finalization Committee of the INDEST-AICTE Consortium as a member of the committee on 1st & 2nd December 2014 at Central Library, IIT Delhi.
14. Dr. Kishor Chandra Satpathy attended the meeting has attended the 22nd Meeting of National Steering Committee of INDEST-AICTE Consortium as a member of INDEST-AICTE on 25th August 2014 at IIT Delhi.
15. Dr. Kishor Chandra Satpathy has participated in the 1st India Public Libraries Conference (IPLC 2015) organised by Digital Empowerment Foundation (DEF) and DELNET-Developing Library Network from March 17-18, 2015 at India International Centre, New Delhi.
16. Dr. Kishor Chandra Satpathy selected & attended the prestigious international course at the University of Illinois, USA as part of Mortenson Center International Library Associates Program "Imagine, Question, Connect: A Professional Development Program for Library Leaders and Innovators" from May 29 -June 24, 2014.

Publications

1. Proceedings of 10th Annual Meet & Workshop of INDEST-AICTE Consortium Edited by: Dr. Kishor Chandra Satpathy. Publisher: National Institute of Technology Silchar & N E Books, Assam.(May 2014). ISBN: 9789384275068.
2. E-Learning & Information Literacy -The Changing Role of Librarian Edited by: Dr. Kishor Chandra Satpathy. Publisher: Shankar's Book Agency Pvt. Ltd, New Delhi. (Oct. 2014).ISBN: 9789381893074
3. Souvenir and Proceedings of International Conference on "What's Next in Libraries? Trends, Space, and Partnerships" jointly organized by Mortenson Center for International Library Programs, University of Illinois at Urbana-Champaign and NIT Silchar (January 21-23, 2015) Edited by: Dr. Kishor Chandra Satpathy. Publisher: National Institute of Technology Silchar & N. E. books, Assam.(Jan 2015).ISBN: 9789384275211

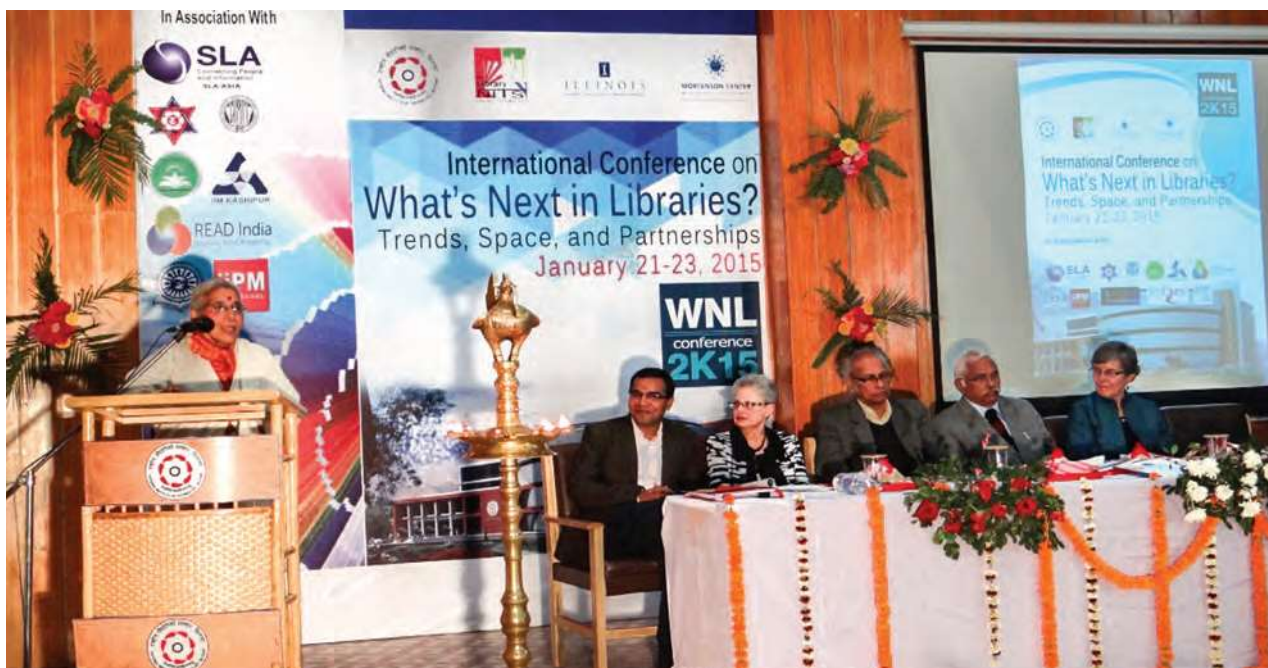
Seminar / Conference / Workshop Organized

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 library successfully organized the following programs:

1. Dr. Kishor Chandra Satpathy and Mrs. K. M. Singha, orientation on "Science Direct Product and Platform" and "Meet the Publisher" on 26th August, 2014 at NIT Silchar
2. Dr. Kishor Chandra Satpathy, 10th Annual Meet & Workshop of INDEST-AICTE Consortium of MHRD in collaboration with IIT Delhi on 5-6 May 2014 at NIT Silchar.



3. Dr. Kishor Chandra Satpathy, International Conference on “What’s Next in Libraries? Trends, Space, and Partnerships” jointly organized by Mortenson Center for International Library Programs, University of Illinois at Urbana-Champaign and NIT Silchar on January 21-23, 2015 at NIT Silchar.



4. Dr. Kishor Chandra Satpathy and Mrs. K. M. Singha, Workshop on “Anti-Plagiarism Software” in collaboration with Proquest & Balani Infotechon 27th November, 2014 & 9th March, 2015 at NIT Silchar.
5. Dr. Kishor Chandra Satpathy, Workshop on “Scholarly Publishing” in collaboration with Wiley & NIT Silchar on 26th March, 2015 at NIT Silchar.



STUDENTS ACTIVITY CENTRE

DEAN (Student Welfare)

Name	Qualification	Period
Dr. A. K. Barbhuiya	Ph.D.	11th February 2013 onwards

ASSOCIATE Deans (Student Welfare)

Name	Qualification	Period
Dr. N. B. D Choudhury	Ph.D.	29th August 2011 onwards
Dr. L. C. Saikia	Ph.D.	8th October 2014 onwards
Dr. D. C. Das	Ph.D.	8th October 2014 onwards

Scholarship / Assistantship Awarded to the Students during 2014-15

The students of this Institute are awarded various types of scholarships from various schemes of Central Govt., State Governments, PSUs, Charitable Trusts/ Organizations. During period under review, 263 students received scholarships/stipends from various sources.

Sl. No.	Name of the Scholarship	Name of the State	Amount of Scholarship Awarded in 2012-13 (RS)	No. of Students Received the Scholarship
1	ITDP	Assam	5173161/-	131
2	Govt. of Andhra Pradesh	Andhra Pradesh	270704/-	7
3	Govt. of Bihar	Bihar	1225534	26
4	NEC	Assam	7,10200/-	52
5.	FAEA	FAEA	200000/-	4
6.	NEPCO	NEPCO	36000/-	1
7.	ONGC	ONGC	540,000/-	9
8.	Central Sector Scholarship	All India	2556174/-	24
9.	Minority Affaire	Bihar	54446/-	1
10.	NHFDC	All India	192312/-	4
11.	Indian Oil	IOCL	108000/-	4

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 the MHRD and the Institute. To be eligible for this Assistantship, a student must have cleared GATE/NET/UGC exams and 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' 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 2014-2015 was also full of activities and achievements. Students have made the Institute proud by maintaining high standards of organizational and leadership qualities.

GYMKHANA OFFICE BEARS -2014-15

Name	Port-Folios	Semester	Tenure
Mr. Agni Kumar Jha	Vice President	8th	1 Year
Mr. Sugata S. Goswami	General Secretary (GS, Gymkhana)	-do-	-do-
Mr. Kushan Kiran	GS, Cultural	-do-	-do-
Mr. Himanshu Sharma	GS, Sports	-do-	-do-
Mr. Udit Ojha	Secretary, Music Club	6th	-do-
Mr. Indraneel Mukherjee	Secretary, Foot ball	-do-	-do-
Mr. Sandeepen Goswami	Secretary, Dramatic Club	-do-	-do-
Mr. Debabrata Saha	Secretary, Basket ball	-do-	-do-
Mr. Ravi Prakash Sunda	Secretary, Cricket	6th	-do-
Mr. Rajan Kumar	Secretary, Photography	-do-	-do-
Mr. Bhaskar Jha	Secretary, Lit. & Publication	-do-	-do-
Mr. Mohit Ojha	Secretary, Hockey	-do-	-do-
Mr. Angshuman Madhab Dutta	Secretary, Tennis	-do-	-do-
Mr. Faisal Karim	Secretary, Indoor Games	-do-	-do-
Mr. Sharad Singh	Secretary, Athletics & Gym.	-do-	-do-
Mr. Trinabh Dowerah	Secretary, Trekking & Mount.	-do-	-do-
Mr. Rupjyoti Bharali	PG/PhD Representative to Gymkhana	3rd Sem	-do-
Miss Rukmi Sarmah	Girls Representative to Gymkhana	6th Sem	-do-
Miss Sonam Rai		-do-	-do-

FACULTY ADVISORS OF GYMKHANA

Port-Folios	Name	Designation	Department
Vice President (VP)	Mr. S.K. Pattanayak	Asst. Professor	ME
General Secretary (Gymkhana)	Dr. L. C. Saikia	Asst. Professor	EE
General Secretary (Cultural Activities)	Dr. Saptarshi Chakraborty	Asso. Professor	CSE
Music Club Secretary	Dr. Prashanta Roy	Asst. Professor	EE
Dramatic Club Secretary	Mr. Ripon Patgiri	Asst. Professor	CSE
Photographic Club Secretary	Mr. Koushik Guha	Asst. Professor	ECE
Literary & Publication Secretary	Dr. K.C. Satpathy	Librarian	Library
General Secretary (Sports)	Mr. Dulal Ch. Das	Asst. Professor	EE
Football Secretary	Dr. Sudipta Halder	Asst. Professor	ME
Cricket Secretary	Dr. S. S. Dhar	Asst. Professor	Chemistry
Hockey Secretary	Mrs. P. Sultana	Asso. Professor	CE
Tennis Secretary	Dr. R.H. Laskar	Asst. Professor	ECE
Indoor Game Secretary	Dr. N.B. Singh	Asst. Professor	HSS
Athletics & Gymnastic Secretary	Dr. Debasish Dutta	Asst. Professor	ME
Basket Ball Secretary	Mr. Pallab Das	Asst. Professor	CE
Tracking & Mountaineering Secretary	Dr. P.J. Roy	Asst. Professor	CE

A list of Tournaments and Competitions in which students participated under the Sports Section NIT, Silchar is given below:

1. IIT BHU Sports Fest 2014
2. MMTA Manipur Adventure Camp 2015
3. IIT Kharagpur Spring Fest 2015
4. IIT Guwahati Alcheringa 2015
5. Inter NIT Football Tournament NIT Warangal 2015
6. Youth Karate Championship 2015 Guwahati
7. KAI National Karate Championship 2015 New Delhi.
8. Inter NIT Cricket Tournament MNNIT Allahabad 2015
9. Inter NIT Sports Tournament MANIT Bhopal 2015
10. Inter NIT Sports Volleyball Tournament NIT Kurukshetra 2015
11. Inter NIT Badminton and Chess Championship SVNIT, Surat 2015

Achievement of the students of NIT Silchar for various Sports/ Tournaments/ Events/ competition, etc and their success.

In 2014-15 session, students of NIT Silchar have won many prizes and certificates in different categories at various

Inter/Intra NIT Sports/ Tournaments/ Events/competitions, by their active participation.

1. The Table Tennis Team (Men) NIT, Silchar won 1st prize in Inter NIT Sports Tournament organized by MANIT Bhopal.
2. The Badminton and Table Tennis Team secured 2nd and 3rd position in IIT BHU Sports Fest.
3. The Karate Team (Men) won one Silver and one Bronze in Youth Karate Championship Guwahati.
4. The Badminton Team (Men & Women) secured 3rd position in Inter NIT Badminton Championship in SVNIT Surat.
5. The Chess Team (Men & Women) secured 3rd and 4th position in Inter NIT Chess Championship organized by SVNIT Surat.
6. The Cricket Team (Men) reached to the Quarter Finals at Inter NIT Cricket Tournament organized by MNNIT Allahabad.
7. The Football Team (Men) reached to the Quarter Finals at Inter NIT Football Tournament (Men) organized by NIT Warangal.

National Service Scheme (NSS)

This is compulsory for every student. As it is known that the primary aim of NSS is Personality Development through social or community services. This year NIT, Silchar, under NSS has organized campaigns like, Green Day, Campus Cleaning, Green March, Clothes donation programme etc. Apart from these Debate and Quiz Competitions were also organized for the students.

National Cadet Corp (NCC)

NCC is engaged in grooming the youth of the country into disciplined and patriotic citizens. Every year NIT, Silchar conducts NCC Annual Training Camp (ATC) for its Cadets. Students attend regular parade sessions for participating on Independence Day and Republic Day march-past. Fifteen NCC cadets of NIT Silchar, out of 40, have successfully completed "A" certificates exam in the ATC held in June 2014.

Gyansagar



Gyansagar is a social service wing of NIT Silchar, volunteered by the students of the institute which is encouraged and approved by Prof. N. V. Deshpande, Director, NIT Silchar. Since last five years, Gyansagar has put its effort towards the development of the society. The development is in terms of general education, IT education, health awareness, job-opportunity awareness, exploring the inherent qualities of kids in villages, etc.

Gyansagar was started in 2009 by a group of students led by Mr. Aditya Choudhary, an electrical engineering 2012 pass-out student from NITS. Since then, it has taken huge leaps to become a social organization which benefits to the neighbouring villages and communities near NIT Silchar. It had been headed by the dynamic leadership of Prof. (Dr) A. K. Sil, Professor, Department of Chemistry, NIT Silchar, since its establishment. During September, 2013, the Leadership was handed over to Dr Kedar Nath Das, Assistant Professor, Department of Mathematics, NIT Silchar.

The various activities of Gyansagar are being carried out smoothly due to the consistent effort of the chief student coordinators Mr. Nitish Rajpurohit and Mr Mukesh Swarup. We have now around 116 registered student volunteers. Undoubtedly, the whole hearted support of the student community of NIT Silchar is highly appreciated.

Activities organized

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.

DISHA, THE FUTURE PATH (8th November 2014, in collaboration with Technoosis): Keeping in view that most of the students getting frustrated by choosing wrong career after their schooling, Gyansagar attempted to organize an event namely "DISHA: THE FUTURE PATH" to provide the knowledge of right path for future life. The event was organized on 08th November 2014, in collaboration with Technoosis, NIT Silchar. Around 420 number of students participated in this event. Director, NIT Silchar also contributed his valuable advice to inspire the youth in choosing the future path of one's career. There was an excellent student interactions during the event. NIT Silchar student coordinators presented different ways of career options for the school/college children who participated in the event.



Disha Programme

Cloth Donation Camp (16th November 2014): Like every year, this year also on 16th November 2014, Gyansagar conducted a Cloth donation camp. In this event student volunteers of Gyansagar, NIT Silchar visited nearby poor villages like Babutilla, Bellatilla, Madhutilla, Gwala Basti, Fakeertilla, Sadhutilla, Borakhai etc. About 3000 numbers of clothes were donated by students, faculty and staff members of NIT Silchar. It is just a service to the poorest of the poor people. The happiness reflected among the village was greatly realized.

Celebration of Communal Harmony Week (19-25 November 2014): As instructed by the National Foundation for Communal Harmony, an autonomous organization under the Ministry of Home Affairs, Govt. of India, New Delhi, Gyansagar observed the Communal Harmony Campaign Week from 19th to 25th November 2014. A rally of the students/faculty/staff members went door to door to collect donation to provide the financial assistance to children rendered orphan or destitute needing rehabilitation.

About Rs. 10000 was collected by the rally and sent to the Ministry.

Apart from that student volunteers of Gyansagar have organized various competitions like art, debate and essay writing in various schools during the event. The winners in the competition were awarded the on last day, namely 'Flag Day' of the Harmony week. It was a grand success.

Celebration of Rangotsav (5-6 March 2015): This year Gyansagar members enjoyed the Holi celebration named

"Rangotsav" during 5-6 March 2015. Student volunteers enjoyed with colors and made a rally for the awareness of non use reacted/poisonous colors during Holi celebration in general. At the end, there was a 'Holi Dahan' at 6th night in the presence of Director, Dean (S/W) and Head (Gyansagar). It was a memorable celebration for Gyansagar.



Cloth donation



Communal harmony week



Rangotsav

ESTATE ENGINEERING SECTION

The Estate Engineering 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. M. A. Ahmed, Ph.D.

Associate Dean (P&D)

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

Other officers

Mr. Debasish Dey, Engineer

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

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

Mr. Anjan Das, Junior Engineer (Civil) (Contractual)

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

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

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

Mr. Bipon Sinha, Junior 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 Engineering 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 Engineering 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 Engineering Laboratory under Assam Type Civil Engg. shed.
7. Construction of NABL Accredited Laboratory building.
8. Expansion of Electrical Engineering 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 RegistrationNo.	Type of Vehicle	Purpose
1.	AS 11E-5501	Maruti SX4	Director
2.	AS 11B-0930	Tata Bus	For staff and students
3.	AS 11B-2703	Tata Bus	For staff and students
4.	AS 11C-0043	Ambassador Car	Official
5.	AS 11AC-5027	Maruti Ambulance	Medical
6.	AS 11e-2416	Maruti Van	Free service for Staffs and students inside the campus
7.	AS 11D-7736 (Donated by NITS Alumni Association)	Tata Indigo Car	T & P Academic & Office purpose
8.	AS 11D-2701/ 2702	Tractor &Trailer	Estate Branch

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 homeopathy and dental treatment. 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.

STAFF POSITION

Staff Position

i Chief Academic & Executive Officer (Position as on 31.03.15)

Position	Name
Director	Prof. N. V. Deshpande

ii Administrative Staff : (Position as on 31.03.15)

Name of the post	Sanctioned Strength	Staff in Position
Registrar	1	1
Deputy Registrar	2	1
Assistant Registrar	4	3
Librarian	1	1
Deputy Librarian	1	0
Assistant Librarian	1	1
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	0
Security Officer	1	0
Total	20	11

iii Academic Staff: (Position as on 31.03.15)

Name of the post	Sanctioned Strength	Staff in Position
Professor	25	16
Associate Professor	55	19
Assistant Professor	122	100
Total	202	135

iv Faculty Position as on 31.03.15 (Department –wise break up)

Name of Department	Professor		Associate Professor		Assistant Professor		Total Sanctioned
	Sanctioned Strength	In Position	Sanctioned Strength	In Position	Sanctioned Strength	In Position	
CE	4	7	10	4	19	13	33
ME	4	3	10	5	19	14	33

Name of Department	Professor		Associate Professor		Assistant Professor		Total Sanctioned
	Sanctioned Strength	In Position	Sanctioned Strength	In Position	Sanctioned Strength	In Position	
EE	4	3	8	3	17	12	29
ECE	4	2	8	3	17	14	29
CSE	3	0	6	1	16	12	25
EIE	1	0	3	0	8	7	12
Physics	1	0	2	2	5	10	8
Chemistry	1	0	2	1	5	7	8
Mathematics	1	0	3	0	8	7	12
HSS	1	1	2	0	4	3	7
MS	1	0	1	0	4	1	6
Total	25	16	55	19	122	100	202

v. Ministerial Higher Staff (as on 31.03.2015)

Name of the post	Sanctioned Strength	Staff in Position
Superintendent/Accountant/ Secretary	7	0
Sr. Superintendent/Accountant/ Secretary	5	2
Superintendent/Accountant/ Secretary (SG-II)	4	1
Total	16	03

vi Technical Higher Staff (as on 31.03.2015)

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 31.03.2015)

Name of the post	Sanctioned Strength	Staff in Position
Junior Assistant	16	0
Senior Assistant / Stenographer	12	2
Assistant (SG-II) / Senior Stenographer	7	2
Assistant (SG-I) / Stenographer (SG - II & I)	0	21
Total	35	25

viii Technical Lower Staff (as on 31.03.2015)

Name of the post	Sanctioned Strength	Staff in Position
Technician/Laboratory Asstt./Work Asstt.	28	3
Sr. Technician/ Laboratory Asstt./Work Asstt.	21	3
Technician/ Laboratory Asstt./ Work Asstt. (SG – II)	13	6
Technician/ Laboratory Asstt./ Pharmacist / Work Assistant (SG – I)	0	12

Name of the post	Sanctioned Strength	Staff in Position
Technician (SG - I)	0	1
Total	62	25

ix Supporting Staff (as on 31.03.15)

Name of the post	Sanctioned Strength	Staff in Position
Supporting Staff (Attendant / Mali/Security Guard)	31	100
Total	31	100

x Fresh Appointments Teaching (From 01.04.14 to 31.3.15)

SL. No	Name	Designation	Department	Date of Joining
1.	Dr. Abhishek Midya	Assistant Professor	Electronics and Instrumentation Engineering	13-Oct-14
2.	Dr. Nirmalendu Debnath	Assistant Professor	Civil Engineering	21-Oct-14
3.	Dr. Nirmala Soren	Assistant Professor	Electrical Engineering	31-Oct-14
4.	Dr. Soma Panja	Assistant Professor	Management Studies	03-Nov-14
5.	Dr. Banani Basu	Assistant Professor	Electronics and Communication Engineering	03-Nov-14
6.	Dr. Ranjit G Nair	Assistant Professor	Physics	03-Nov-14
7.	Dr. Rupak Dutta	Assistant Professor	Physics	03-Nov-14
8.	Dr. Subhasis Panda	Assistant Professor	Physics	03-Nov-14
9.	Dr. Saumya Ranjan Mohapatra	Assistant Professor	Physics	03-Nov-14
10.	Dr. Binod Shaw	Assistant Professor	Electrical Engineering	13-Nov-14
11.	Dr. Taimoor Khan	Assistant Professor	Electronics and Communication Engineering	10-Nov-14
12.	Dr. Arun Kumar Sunaniya	Assistant Professor	Electronics and Instrumentation Engineering	19-Nov-14
13.	Dr. Praveen Kumar Gupta	Assistant Professor	Mathematics	01-Dec-14
14.	Dr. Dilip Kumar Ghosh	Assistant Professor	Civil Engineering	26-Nov-14
15.	Dr. Rajeeb Dey	Assistant Professor	Electrical Engineering	28-Nov-14
16.	Dr. Raj Kumar Biswas	Assistant Professor	Electrical Engineering	08-Dec-14
17.	Dr. Pradip Deb Roy	Assistant Professor	Mechanical Engineering	09-Dec-14
18.	Dr. Munmun Khanra	Assistant Professor	Electronics and Instrumentation Engineering	10-Dec-14
19.	Dr. Debjit Bhowmik	Assistant Professor	Civil Engineering	15-Dec-14
20.	Dr. Monowar Hussain	Assistant Professor	Civil Engineering	18-Dec-14
21.	Dr. Deepak Swami	Assistant Professor	Civil Engineering	19-Dec-14
22.	Dr. M. Lakshmi Vara Prasad	Assistant Professor	Civil Engineering	22-Dec-14
23.	Dr. Sukumar Pati	Assistant Professor	Mechanical Engineering	22-Dec-14
24.	Dr. Md. Maqbul	Assistant Professor	Mathematics	22-Dec-14
25.	Dr. Pankaj Biswas	Assistant Professor	Mathematics	21-Dec-14
26.	Dr. Briti Sundar Sil	Assistant Professor	Civil Engineering	29-Dec-14

SL. No	Name	Designation	Department	Date of Joining
27.	Dr. Ashish B. Deoghare	Assistant Professor	Mechanical Engineering	30-Dec-14
28.	Dr. Juthika Mahanta	Assistant Professor	Mathematics	13-Jan-15
29.	Dr. Kh. Lakshman Singh	Assistant Professor	Civil Engineering	19-Jan-15
30.	Dr. Subrata Bera	Assistant Professor	Mathematics	21-Jan-15
31.	Dr. Balla Hema Sundar Raju	Assistant Professor	Mathematics	30-Jan-15

xi Fresh Appointments Teaching (Contractual) (From 01.04.14 to 31.3.15)

SL. No	Name	Designation	Department	Date of Joining
1.	Mr. Amit Kumar Trivedi	Assistant Professor	Computer Science & Engineering	02-Jan-15
2.	Mr. Saptarshi Chakraborty	Assistant Professor	Computer Science and Engineering	02-Jan-15
3.	Mrs. Madhudeepa Dey	Assistant Professor	Chemistry	23-Jan-15
4.	Mr. Kalimuddin Mondal	Assistant Professor	Electronics and Instrumentation Engineering	02-Jan-15
5.	Mr. Tushar Bachhar	Assistant Professor	Electronics and Instrumentation Engineering	02-Jan-15
6.	Mrs. Arpita Dutta	Assistant Professor	Management Studies	06-Jan-15
7.	Mr. Vivek Kr. Pathak	Assistant Professor	Management Studies	06-Jan-15
8.	Miss Mahasweta Laskar	Assistant Professor	Civil Engineering	08-Jan-15
9.	Mr. Kelvin Mutim	Assistant Professor	Management Studies	06-Jan-15
10.	Mr. Abhijit Ghosh	Assistant Professor	Management Studies	06-Jan-15
11.	Ms. Bhaswati Das	Assistant Professor	Electronics and Communication Engineering	02-Jan-15
12.	Mr. Shubrangshu Baruah	Assistant Professor	Management Studies	06-Jan-15
13.	Mr. Neilh M Gautam	Assistant Professor	Management Studies	06-Jan-15
14.	Dr. Arpan Paul	Assistant Professor	Humanities and Social Sciences	08-Jan-15
15.	Ms. Sagarika Kotoky	Assistant Professor	Humanities and Social Sciences	06-Jan-15
16.	Mr. Biplab Singha	Assistant Professor	Mathematics	02-Jan-15
17.	Mr. Soumya Samanta	Assistant Professor	Electrical Engineering	02-Jan-15
18.	Miss Padmaja Tamuli	Assistant Professor	Management Studies	06-Jan-15
19.	Mr. Haobam Jaillendra Khuman	Assistant Professor	Electrical Engineering	02-Jan-15
20.	Mr. Subhashish Bhakta	Assistant Professor	Electrical Engineering	02-Jan-15
21.	Ms. Barsha Mali	Assistant Professor	Electrical Engineering	02-Jan-15
22.	Ms. Wasima Tasnin	Assistant Professor	Electrical Engineering	02-Jan-15
23.	Mr. Dhrubojyoti Bora	Assistant Professor	Electronics and Instrumentation Engineering	02-Jan-15

SL. No	Name	Designation	Department	Date of Joining
24.	Mr. Thockchom Birjit Singha	Assistant Professor	Electronics and Instrumentation Engineering	02-Jan-15
25.	Ms. Jhuma Debnath	Assistant Professor	Civil Engineering	02-Jan-15
26.	Mr. Bidyut Bikash Gogoi	Assistant Professor	Mathematics	05-Jan-15
27.	Mr. Shounak Chakraborty	Assistant Professor	Computer Science and Engineering	02-Jan-15
28.	Mr. Prsenjit Kumar Das	Assistant Professor	Computer Science and Engineering	02-Jan-15
29.	Ms. Rumi Rajbongshi	Assistant Professor	Computer Science and Engineering	05-Jan-15
30.	Ms. Esha Barlaskar	Assistant Professor	Computer Science and Engineering	05-Jan-15
31.	Ms. Shrijee Bhattacharjee	Assistant Professor	Computer Science and Engineering	06-Jan-15
32.	Ms. Manisha Goswami	Assistant Professor	Management Studies	07-Jan-15
33.	Dr. Vivek R. Mate	Assistant Professor	Mechanical Engineering	07-Jan-15
34.	Mr. Vivek Singh Bhadouria	Assistant Professor	Electronics and Communication Engineering	09-Jan-15
35.	Mr. Prasenjit Saha	Assistant Professor	Civil Engineering	09-Jan-15
36.	Mr. Neeraj Kumar Singh	Assistant Professor	Electronics and Communication Engineering	19-Jan-15
37.	Mr. Biswajit Parida	Assistant Professor	Mechanical Engineering	23-Jan-15
38.	Dr. Manaswani Pati	Assistant Professor	Mathematics	01-Jan-15

xii Fresh Appointments Non-Teaching (Contractual) (From 01.04.14 to 31.3.15)

SL. No	Name	Designation	Date of Joining
1.	Mr. Jagdish S. Parab (Ex – Serviceman)	Secretary	01.08.14
2.	Mr. Priyam Nath Bhowmik	Technical Assistant	21.07.14
3.	Mr. Riton Das	Technical Assistant	21.07.14
4.	Mr. Abdul Muktedir Barlaskar	Technical Assistant	21.07.14
5.	Mr. Biswajit Nath	Technical Assistant	21.07.14
6.	Mr. Satya Saran Biswas	Technical Assistant	21.07.14
7.	Mr. Khaled Ahmed Barbhuiya	Technical Assistant	21.07.14
8.	Mr. Pankaj Saha	Technical Assistant	21.07.14
9.	Mr. Debraj Dhar Purkayastha	Technical Assistant	21.07.14
10.	Ms. Lipi Mahanta	Technical Assistant	21.07.14
11.	Mr. Sidique Haque	Technical Assistant	23.07.14
12.	Mr. Prasenjit Kumar Das	Technical Assistant	11.08.14
13.	Ms. Achun Rongmei	Work Assistant (Nurse)	09.01.15
14.	Dr. (Ms) Misti Sen	Medical Officer	12.01.15
15.	Ms. Pramila Gahatraj	Work Assistant (Nurse)	16.01.15

SL. No	Name	Designation	Date of Joining
16.	Ms. Ashalata Singha	Work Assistant (Nurse)	14.01.15
17.	Mr. Amitabh Kairi	Assistant	05.12.14
18.	Mr. Gautam Paul	Assistant	09.12.14
19.	Mr. Binanda Barman	Assistant	08.12.14

xiii Retirement / Resignation (From 01.04.14 to 31.3.15)

SL. No	Name	Designation	Date of Retirement / Resignation
1.	Dr. A. K. Roy	Professor	30.06.2014
2.	Mr. Sandip Bhattacharjee	Superintendent (SG - I)	31.07.2014
3.	Mrs. Biva Goswami	Assistant (SG - I)	31.05.2014
4.	Mrs. Smriti Choudhury	Assistant (SG - I)	31.07.2014
5.	Mrs. Sibani Bhattacharjee	Assistant (SG - I)	31.07.2014
6.	Mr. Dilip Dey	Stenographer (SG - I)	31.03.2015
7.	Mr. Parimal Chakraborty	Stenographer (SG - I)	31.12.2014
8.	Mr. S. C. Lala	Technician (SG - I)	30.06.2014
9.	Mr. Sankar Rajbongshi	Senior Technician	08.12.2014
10.	Mr. N. H. Laskar	Senior Technician	31.01.2015
11.	Mr. I. A. Barbhuiya	Technician (SG - I)	30.09.2014
12.	Mr. Abdul Kuddus Laskar	Technician (SG - I)	30.11.2014
13.	Mr. Sukesh Roy Choudhury	Technician (SG - I)	31.07.2014
14.	Mr. Nazim Uddin Laskar	Senior Technician	30.09.2014
15.	Mr. Alim Uddin Laskar	Attendant (SG - I)	31.10.2014
16.	Mr. Gopal Ram Kurmi	Attendant (SG - I)	30.09.2014
17.	Mr. Kalyan Kumar Dey	Attendant (SG - I)	31.01.2015
18.	Mr. Hillal Uddin Laskar	Attendant (SG - I)	31.10.2014
19.	Mr. Roy Bahadur Nunia	Attendant (SG - II)	31.07.2014
20.	Mr. Ram Babu Singh	Attendant (SG - I)	31.10.2014
21.	Mr. Parasuram Goala	Mali (SG - I)	30.04.2014
22.	Mr. Fariz Uddin Laskar	Attendant (SG - II)	31.12.2014
23.	Mr. Samsul Haque Laskar	Attendant (SG - II)	31.01.2015
24.	Mr. Nagina Sonar	Attendant (SG - I)	31.12.2014
25.	Dr. Ravi Kumar Gupta	Assistant Professor	06.05.2014
26.	Mr. Abadhan S. Sabyasachi	Assistant Professor	30.06.2014
27.	Dr. Amitava Ray	Assistant Professor	03.07.2014
28.	Dr. Abdul Munim Choudhury	Associate Professor	
29.	Dr. Deepak Swami	Assistant Professor	27.01.2014

xiv Death In Harness (From 01.04.13 to 31.3.14)

SL. No	Name	Designation	Date of Retirement / Resignation
	Mr. Chirag Ali	Attendant (SG - I)	16.01.2015

INTERNAL COMPLAINTS COMMITTEE (ICC)

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 redressal of complaints Sexual Harassment and for matters connected 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:

1.	Smt. Madhuchhanda Choudhury, Associate Professor, ECE	Presiding officer
2.	Smt. Madhumita Paul, Associate Professor, ECE	Member
3.	Ms. Ranjana Jha, Assistant Registrar (Accounts)	Member
4.	Dr. Shahin Ara Begum , NGO	Member
5.	Dr. Mousami Sen, Assistant Professor, Mathematics	Member Secretary

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 provide a unique platform to promote their innovative ideas. The academic curricula of all the disciplines is designed according to the current Industry needs and an initiative has been taken to establish a research park comprising of different pioneers of the Industry through MoUs.

a) Ph.D. Programme (specializations) in

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

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

Completed	Submitted	Ongoing
20 (degree was awarded in 12th convocation held on 18.05.2014)	15 (from April 1, 2014 to March 31, 2015)	200

c) Ongoing/Completed Sponsored Research Project

Ongoing project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Dura-tion
1.	Development of Speech Based Multi level Person Authentication System	Dr. R.H. Laskar (ECE)	MCIT	54.73	3 yrs
2.	Management of TUC	Prof. F.A. Talukdar (ECE)	DST	4.70	3 yrs

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Dura-tion
3.	Power Quality Assessment and Improvement in Barak Valley, Assam	Dr. A.K. Goswami (Electrical)	-do-	7.06	3 yrs
4.	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
5.	Behaviour of Clay Dampers under Impact Loading	Prof. A.K.Dey (Civil)	-do-	29.90	3 yrs
6.	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
7.	Investigation of Some Binary Metal Oxide Material for Resistive Switching Memory Applications	Prof. Fazal A. Talukdar (ECE)	-do-	18.40	3 yrs
8.	Development of An Enzymatic Process for Production of Microalgaeeal Biodiesel	Dr. S. Chatterjee (Mechanical)	-do-	10.40	2 yrs
9.	Design and Implementation of Pure Sine Wave Inverter for Residential Solar Power	Dr. A.K. Goswami (Electrical)	-do-	15.00	2 yrs
10.	Design, Simulation and Implementation of Carbon Nanotube Based Fet Logics	Dr. S. Choudhury (Electrical)	-do-	8.00	2 yrs
11.	Synthesis & Characterization of BST-BFO Composites for Devices	Prof (Mrs). B. Choudhury and Dr. S.K. Barik (Physics)	-do-	16.00	2 yrs
12.	Automatic Generation Control of Autonomous Hybrid Generation System	Dr. Dulal Ch. Das (Electrical)	-do-	15.00	2 yrs
13.	Utility of Paratransit Modes in Regional Passenger Transportation	Prof. M.A. Ahmed (Civil)	-do-	17.50	2 yrs
14.	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
15.	Up Gradation of Highway Engineering Laboratory	Prof. D.N. Bhattacharjee Dr. P. Rajbongshi (Civil)	MODROB	13.50	1 yr
16.	Heat Transfer Lab	Prof. R.D. Misra (ME)	-do-	8.00	1 yr
17.	Extension of NLP	Mr. S. Borgohain (CSE)	IBM	2.50	
18.	Regional Test Centre cum Technology Back-up Unit.....	Dr. Agnimitra Biswas (Mechanical)	Ministry of Non-renewable	25.00	5 yrs
19.	Synthesis of indenoisoquinolineones	Dr. Lalthazuala Rokhum (Chemistry)	SERB	7.50	3 yrs

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Dura-tion
20.	Towards the synthesis of bio-active molecules using solid phase organic synthesis (SPOS) pathways	-do-	-do-	14.50	4 yrs
21.	Evaluation of Non- linear fatigue damage in Asphalt Materials	Dr. P. Rajbongshi (Civil Engg.)	-do-	31.20	3 yrs

c) Completed Project

Sl. No.	Project Title	Principal Investigator	Funding Agency	Cost in Lakhs	Dura-tion
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

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

Sl. No.	Department	Book / Chapter	Patent	International Journal	National Journal	International Conference	National Conference
1.	CE	01	01	19	02	17	11
2.	ME	01	01	57	01	52	02
3.	CSE	01	00	19	01	25	02
4.	ECE	05	00	33	00	54	00
5.	EE	00	00	24	04	35	02
6.	E&I	01	00	03	00	16	01
7.	Physics	00	00	09	02	02	02
8.	Chemistry	02	00	32	00	00	01
9.	Mathematics	02	00	16	00	09	02
10.	HSS	02	00	00	00	00	00
11.	MS	01	00	00	00	00	00
Total		16	02	212	10	210	23

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

THE HOSTELS

NIT Silchar is essentially a residential one and provides hostel accommodation for students. Separate hostel accommodation is available for girl students. 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 11 nos. of hostels for the students inside the campus. Of them 9 hostels are for the boys (UG/PG separate), and 2 for the girl students (UG/PG). Hostels' capacity varies from hostel to hostel. Available capacity of boys' hostels all together (UG/PG) is 2491 and the available capacity of girls' hostel (UG/PG) is 396.

BOARD OF HOSTEL MANAGEMENT		
Name	Designation	Qualification (e.g., B. Tech., M. Tech., Ph.D.)
Dr. A. K. Barbhuiya	Chairman	Ph.D.
Dr. N. B. D. Choudhury	Vice Chairman	Ph.D.
All Asso. Wardens of Hostels	Members	

WARDENS				Period	
Hostel No.	Name	Designation	Department	from	to
1.	Dr. Kedar Nath Das	Ph.D.	Math	08/06/2012	02/03/2015
	Dr. T.R. Lenka	Ph.D.	ECE	03/03/2015	Till date
2.	Dr. N. B. Singh	Ph.D.	HSS	17/05/2013	Till Date
3.	Dr. Debasish Dutta	Ph.D.	Mechanical	20/03/ 2014	Till Date
4.	Mr. Koushik Guha	Ph.D.	ECE	10/10/2011	Till Date
	Mr. Biswanath Dey	Ph.D.	CSE	02/04/2012	7/08/2014
5.	Dr. S.S. Dhar	Ph.D.	Chemistry	08/08/2014	Till Date
	L.C. Saikia	Ph.D.	EE	March 2012	23/02/2015
6.	Mr. Saroj Kr Biswas	M.Tech	CSE	24/02/2015	Till Date
	Mr. Dulal Chandra Das	Ph.D.	EE	13/07/2012	09/02/2015
7.	Dr. Arup Kr Goswami	Ph.D.	EE	10/02/2015	Till Date
	Dr. Ganti Ramesh	Ph.D.	EE	28/06/2013	Till Date
8.	Dr. Ganti Ramesh	Ph.D.	EE	28/06/2013	Till Date
	Miss Jupitara Hazarika	Ph.D.	CSE	23/05/2013	29/10/2014
GH 1	Dr. Jayasree Chakraborty	Ph.D.	EE	30/10/2014	31/03/2015
	Mrs. Sumita Debbarma	Ph.D.	CE	17/05/2013	Till Date

WARDENS				Period	
Hostel No.	Name	Designation	Department	from	to
PG Hostel	Mr. Wasim Arif	M. Tech	ECE	21/08/2012	09/02/2015
	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. Ambulance service round the clock
11. Coffee house provided
12. Indoor game like, Table Tennis, carom, chess provided
13. LPG connection and fire wood cook house available
14. Dining hall with dining Table/chair provided
15. Fire Extinguisher provided
16. Bio Gas plant provided. (Only Hostel - 8)
17. Bi-cycle stand provided
18. Badminton court with lighting arrangement available (Only BH-1 & GH- 2)

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

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

TEQIP-II

Introduction

Technical Education Quality improvement Programme (TEQIP) is a World Bank and MHRD funded project for the technical Institutions. Around 206 Technical Institutions (CFIs/ Govt. Institutions/ Private Institutions) in India are supported by TEQIP program among which NIT Silchar is one of them. The TEQIP project is broadly divided into two Sub-components.

A) Sub-component 1.1: TEQIP-I

B) Sub-component 1.2: TEQIP-II

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

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

Goal of TEQIP

To scale up and support ongoing efforts of the GOI to improve quality of technical education and enhance

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

Objectives of TEQIP

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

Activities under TEQIP – II NIT Silchar & Fund allocation

Activities	Percentage	Cost in Crore
Procurement of good	45	5.625
Provide Teaching and Research Assistantships for significantly increasing enrolment in existing and new Master's and Doctoral programmes in Engineering disciplines	20	2.50
Enhancement of R & D and institutional consultancy activities	5	0.625
Expenditure on faculty and staff development for improved competence based on training needs analysis.	10	1.250
Enhanced interaction with industry	5	0.625
Institutional management capacity enhancement	2	0.250
Implementation of institutional academic reforms	1	0.125

Activities	Percentage	Cost in Crore
Academic support for weak students	2	0.250
Incremental operating cost	10	1.250
Total	100	12.50

The total amount granted for a TEQIP-II is Rs 12.5 crore out of which Rs 1282.59 in Lacs including Bank Interest has been utilized till 31st March 2015 in different activities of the project heads. According to the NPIU, the performance

of Fund utilization of TEQIP-II project at NIT Silchar is the best in the country among all others project participation institutes. Thus NIT Silchar is proudly recognized as the top most TEQIP performance institute in the country.

Details of in-house workshop/Expert Lecture/Seminar/Conference/Training organized at NIT Silchar during the year 2014-2015

Sl. No.	Period	Topic	Deptt.	Coordinator
1.	April 03, 2014	Recycling Through Re-Design	CE	Dr. M. A. Ahmed
2.	April 04-09, 2014	High Performance Computing	ECE	Dr. T. R. Lenka
3.	April 05-06, 2014	Recent Challenges and Future Issues of Power System operation in Indian context	EE	Mr. T. Malakar, Dr. P. K. Tiwari, Mr. D. C. Das
4.	April 06-09, 2014	Industry Ready programme	ME	Dr. A. Roy, Dr. S. Bhowmik, Dr. D. Bhanja
5.	April 10, 2014	Marg-Darshan	CE	P. Kumar, M. Phukan, S. Vibusshana, Vanathy, A. Asati
6.	May 07-11, 2014	Pedagogy: A Framework for Effective Teaching and Learning Strategies	TEQIP-II	R. Rajbongshi, Wasim Arif
7.	February 02-06, 2015	Fuzzy Sets & Fuzzy Logic	CSE	Dr. Nidul Sinha & Dr. L C Saikia
8.	March 07-13, 2015	Administration, Accounts & Establishment	Admin	Ranjana Jha & Rajib Kahar

Details of workshop/Expert Lecture/Seminar/Conference/Training attended outside by Faculties during the year 2014-2015

Sl. No.	Name	Period	Topics	Organization	Place
1.	Dr. R. H. Laskar	April 10-11, 2014	Setting up a Innovation Study at IIT Bombay	IIT Bombay	Bombay
2.	Sudarsan Sahoo	April 14-15, 2014	Summer School on Advance in computational Intelligence	SOA University, Bhubaneswar	Bhubaneswar
3.	Dr. K. M. Pandey	April 18-19, 2014	Performance studies on Pulse Detonation Engines	Arya College	Jaipur
4.	Dr. M. A. Ahmed Dr. P Rajbongshi Mr. Wasim Arif	April 30, 2014	3rd Review Mission by World Bank & NPIU	Habitat Centre, New Delhi	New Delhi
5.	Dr. A. K. Sinha	June 16-22, 2014	Training on Management Capacity Enhancement for Administrator	IIM Indore	Indore
6.	Dr. Debasish Dutta	July 10-12, 2014	STP on Faulty Development Program	IIT Karagpur	Kharagpur
7.	Dr. J. Mehedi Mr. Wasim Arif	September 25, 2014	TEQIP SFSS Training	Jadavpur University	Kolkata

Procurement Report for the financial Year 2014-2015 under TEQIP-II

Procurement Completed			
Package Code	Package Name	Department	Amount Rs.
TEQIP-II/NITS/97	Thermal Imaging	CSE	1417500
TEQIP-II/NITS/108	Matlab for Digital and Image Processing in CSE	CSE	858900
TEQIP-II/NITS/109	Survey Laboratory for CE Deptt.	CE	863363
TEQIP-II/NITS/86	CE-Hydraulics Laboratory	CE	573541
TEQIP-II/NITS/65	EE-Digital Multimeter	EE	67200
TEQIP-II/NITS/112	EE-Advance Control Lab	EE	1597043
TEQIP-II/NITS/111	Campus Security Surveillance	Institutional Package	1039433
TEQIP-II/NITS/13	Multimedia Projector	Institutional Package	907412
TEQIP-II/NITS/110	Pearson E-Text Books for Engineering	Library	1050903
Total			8375295

Other Activities of TEQIP-II in the Year 2014-2015**(A) Assistantship for students during the year 2014-2015**

SL. No.	Programme	Number of Students 2014-2015
1.	M.Tech.	33
2.	M.Sc.	33
3.	Ph.D. Engineering	Nil
4.	Ph.D. Non-Engineering	6
Total No.		72

(B) Details of workshop/Expert Lecture/Seminar/Conference/Symposium/Training attended outside by Students during the year 2014-2015

Sl. No.	Name	Deptt.	Period	Title	Organization/Venue	Place
1.	Aditya Chandel	ME	April 02-04, 2014	Thermal Analysis of porous fin with internal heat generation	NIT Durgapur	Durgapur
2.	Joly Goswami	ME	April 02-04, 2014	Design & Development of heating cooling belt using thermoelectric refrigeration for medical purpose	NIT Durgapur	Durgapur
3.	Shika Bhuyan	ME	April 02, 2014	CFD Analysis of cambered airfoil for H-Rotor VAWT	NIT Durgapur	Durgapur
4.	Subhasis Chakraborty	ME	April 02, 2014	Heat transfer analysis in porous fin of different profile using variation iteration method	NIT Durgapur	Durgapur

Sl. No.	Name	Deptt.	Period	Title	Organization/Venue	Place
5.	Jay Prakash Singh	EE	April 03-05, 2014	Hybrid Synchronization of LU and BAO Hyperchaotic System using 5 SMC	Adhiparasakt-i Engineering College	Melmaruvathur
6.	Anubhav Nath	EE	April 03-05, 2014	Variable canstrained based IMS algorithm for power system harmonic.	Adhiparasakti-Engineering College	Melmaruvathur
7.	Sanjay Paul	ME	April 05-06, 2014	CFD Analysis of Hydro dynamic condition of designed spiral column PBR for Cultivation of microalgae	Society of Engineering and Management Science	UP
8.	Chandradeep Barman	ME	April 10-11, 2014	CFD Analysis of Heat Transfer in subchannel of nuclear reactor.	N I University	Tamil Nadu
9.	Akash Raj	ME	April 10-11, 2014	Burnback Analysis of Axi-systemic grain with truncated cone bare & ciftend has cylinder cut off	N I University	Kaumarkal, TN
10.	Dibyadrasta Sahoo	ECE	May 02-03, 2014	Reduction of BTBT effect in JNT with T-Gate & Si3N4 Gate dielectric	EGS Pillay Engineering College	Nagapattinam, Tamil Nadu

Financial Report of TEQIP-II Project during the financial year 2014-2015

Sl. No.	Activity Name	Expenditure Involved(Amount) Upto 31/03/2015(Rupess in lacs)
1.	Procurement of goods	574.21
2.	Providing assistantships for increased enrolment in existing and new pg programmes in engineering discipline	347.53
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)	96.35
5.	Enhanced interaction with industry	46.19
6.	Institutional management capacity enhancement:	44.18
7.	Implementation of institutional reforms	28.02
8.	Academic support for weak students	12.03
9.	Incremental operating cost	77.81
Total Fund Utilized Rs.		1282.59

CORPORATE SOCIAL RESPONSIBILITY

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

- **Adoption of border villages to develop these as Model villages:** The institute has adopted numerous villages from its surroundings in order to turn them into a model for 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 NIT has been a long cherished desire of the people of Silchar; but it would have remained a distant dream until it materialized on 21.04. 2012 having signed 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 build a healthy society.
- **Skill development program on Solar Syatem :** On January 29th 2015, NIT Silchar in association with SESI student chapter organized a two-day workshop on Skill development program on Solar system. The workshop was conducted to create awareness among the nearby villagers about solar system and its application. Around thirty four participants undertook various skill development training to become technician for installation and maintainance of Solar street light, Solar water heating system, Solar PV system.
- **Gyansagar:** It started as a small club, which used to do social activities, mostly educational outreach in and around NIT Silchar, has now turned into a tremendous force conduct transforming the lives of hundreds of students and adults alike. Right now, Gyansagar is on way to become a formal NGO under NIT Silchar. It works in three areas – Educational outreach, NIS-CIT (NIT Silchar Certification in Information Technology) and Awareness and Projects. Few activities carried under it are given below:
 - **Disha, The future path:** Gyansagar organized an event named "DISHA: THE FUTURE PATH" to provide the knowledge of right path for future life. Around 420 students participated in this event. NIT Silchar student coordinators presented different kinds of career options for the school/college who children participated in the event.
 - **Clothes Donation Camp:** Like every year, this year also Gyansagar conducted a Clothes donation camp. at this event student volunteers of Gyansagar, NIT Silchar visited nearby poor villages. Babutilla, Bellatilla, Madhutilla, Gwala Basti, Fakeertilla, Sadhutilla, Borakhai etc. About 3000 clothes were donated by students, faculty and staff members of NIT Silchar. It was a service to the poorest of the poor people. The happiness reflected among the villages was greatly felt.

- **Celebration of Communal Harmony Week:** Gyansagar observed the Communal Harmony Campaign Week with a team visiting from door to door of the students/faculty/staff members to collect donation for providing financial assistance to children rendered orphan or destitute for complete rehabilitation. About Rs. 10000 was collected and sent to the ministry.
- Apart from that student volunteers of Gyansagar have organized various competitions like art, debate and essay writing in various schools during this event. The winners in the competition have been awarded on the last day namely 'Flag Day' of the Harmony week. It was a grand success.



Street painting

RESEARCH PROMOTION CELL (RPC)

The genesis of the Research Promotion Cell of the National Institute of Technology, Silchar in 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, Engineering and Technology development process.
- Design and development of efficient Tea-plucking machine
- Gesture recognized robot
- Focus and positioning system using Automated Robot.
- Development of new triaxial cell for determination of shear parameters of soil.
- Study on improvement of bearing capacity of soft clay using goecell reinforcement.

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 provide 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 for 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 as well.

Projects

some research projects undertaken by the students include:

- Refrigerated Automatic Pet-feeder
- Solar Powered Bamboo Rickshaw

The projects that have been completed by 31.3.2015 include:

- SPARSH (Solar Powered Automated Route Sensing Hexapod).
- Effect of different substances present in water bodies on corresponding geotechnical properties of soil.
- Characterization of bituminous mix by recycling and cost analysis.
- GSM based Automation and Control.

Achievements

Three students of NIT Silchar have been awarded the EUREC Master's Award 2013 by the European Renewable Energy Research Centre at Brussels, Belgium for their invention on "Solar Powered Wheelchair" as "Best Undergraduate Renewable Energy Project" across globe. It is the first patented project acquired by RPC, NIT Silchar. The students, Rajarshi Choudhury (Student Co-ordinator (Project)), Rohit Thakwani (former Student Co-ordinator (Project)) and Shubham Jain received their awards on 14 October 2013 at the EUREC Headquarters at Brussels, Belgium.

REPORT OF KENDRIYA VIDYALAYA NIT SILCHAR

Before placing the Vidyalaya Report, we feel a sense of gratitude to Prof. Shri N. V. Deshpande for his kind attention and guidance for the growth and development of the Vidyalaya in every sphere and aspect. His vision and missionary zeal has been a constant source of motivation and inspiration for all of us. He has always been among us on various functions and celebrations. Despite his busy schedule he has desired to be amongst the children, trying to understand their problems, and coming up with a solution to it. He desired to see that the students get the best possible resources and a congenial academic environment to reach the highest levels in life. K.V.NIT Silchar will remain ever grateful to you for nurturing and strengthening the academic climate of the Vidyalaya. It was because of his constant efforts KV NIT Silchar got its new building. The building has all the academic facilities and full of resources.

KV NIT Silchar stepped into the 3rd academic session on 1st April 2014 along with this there has been increase in the enrolment of students. There has also been an addition of one more class, Class XI Science. The total enrolment of the students in the Vidyalaya is up to 750. The Vidyalaya is growing and developing very fast and it is a matter of great pride and fortune that it is earning a great lot of reputation in the locality and society as one of the best Educational Institutions.

There was registration of approx 300 students for new and fresh admission in the last academic session but, only 98 students could be accommodated and admitted; keeping in view the permissible class strength in each class as per KVS guideline for admission. KV NIT Silchar provides ample opportunities and guidance to the students for all round development of their personalities and master and excel in every field they venture into, in their future career keeping in line with the curriculum of NCERT and CBSE.

From Class X, 41 Students appeared for their first Class X board exam, Out of them 26 opted for the Board Exam conducted by CBSE and 15 opted for scheme II Exam for the session 2014-15.

In a major achievement two students Master Nitish Kumar Jha and Miss Hritika Nath of the Vidyalaya were selected for 42nd Jawahar Lal Nehru National Science, Mathematics and Environment Exhibition for children 2015, and represented Silchar region at national level held at KV Jalandhar Cantt in April 2015. Nitish Kumar Jha also participated in Regional Social Science cum Integration Camp held at KV Masimpur and secured 3rd position in Debate. Also each students from class IX and class X got significant positions in a national level competition organized by Vivekananda Seva Samitee, Hyderabad. Master Amanat Ahmed of class IX won gold medal in athletics at regional level sports meet under Silchar region held at KV Dholchera and also represented the region at KVS National Sports meet 2014 held at Delhi. Miss Salma Choudhury of Class X and Miss Babli Verma of Class IX participated at the Regional Sports 2014 held at KV Masimpur and secured 2nd position in Athletic and Badminton. Miss Pompey Roy of Class IX also represented the School, at the same event and secured 3rd position in Athletics. Master Satyam Sonar of Class VIII participated in the 3rd South Zone Inter District Karate-Do Championship and secured 2nd position. He also begged bronze medal in United Karate Do organized by UKAA. From Primary Section Miss Somya Srivastava of Class III and Miss Padmaja Bhattacharjee of Class IV also participated in Cluster Level Bal Diwas celebration at KV Silchar.

Apart from students the teachers also brought laurels for the Vidyalaya. Former Incharge and Principal of the Vidyalaya

Miss Marream Zuberi and Mr. Prithwish Chakraborty, PRT were awarded with the Regional Level Incentive Award by KVS RO Silchar. Mr. Prithwish Chakraborty was promoted to the post of TGT English at the same Vidyalaya, through Departmental Exam. Mr. Lalit Soni TGT English, got certificate from Vivekananda Seva Samitee, Hyderabad, as a quiz coordinator.

The Vidyalaya had been the host for seven days 'Annual Training Camp Scout and Guide Trainers' in the month of April 2015. Vidyalaya also supported and contributed to the Swatch Bharat Abhiyan and celebrated the Swatch Vidyalaya Diwas to spread the awareness on cleanliness among the student. The students of Vidyalaya also listened the message of Honorable Prime Minister of India Shri Narendra Modi on Teacher`s Day.

At present we have more than 100 students enrolled for Scouts and Guides. The Vidyalaya started functioning in the new permanent school building from January 2015. The new school building is well equipped with all academic facilities. the new campus also accommodates well appointed staff

quarters. The new school building has sufficient classrooms, computer rooms, playground etc. Also in the new school building we have a big library of around 2000 books, resource room with LCD TV, duplicating machine, projector, two separate computer rooms for Primary and Secondary sections, music room with musical instruments, sports room with sports material, Science Labs, Math Lab, Language Laboratory, Medical room with necessary medical facilities.

A group of devoted teachers is working tirelessly for overall development of the students. Parallel to academics various co-curricular activities and non-scholastic activities under CMP and CCA are carried out for the students. With proper planning and optimum utilization of existing resources, keeping in mind the strength and weaknesses we shall definitely excel in the days to come. We live in present, dream of future, with experience and wisdom of the past we are confident in imparting quality education to the children.

MOMENTS...



Inauguration of NIT Silchar Supercomputing Centre



Twelfth Convocation



Republic Day Celebration, 2015



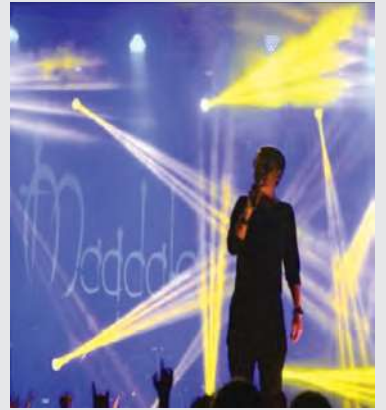
Hindi Diwas Celebration



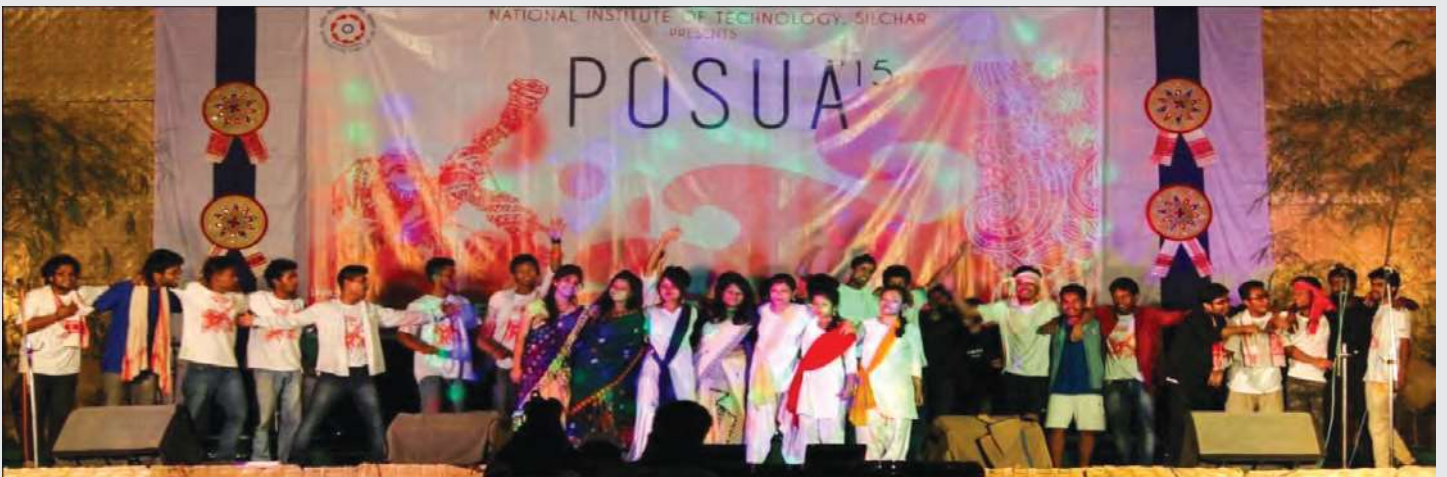
Release of 'NITSCOOP'



Ambedkar Jayanti



Incandescence' 15



Posua



Alumni Meet 14



Auto Quiz Mahindra



Ekta Daud



Freshers Day



Orientation Program



Adventure Camp in Manipur



NIT Silchar...scaling heights

ANNEXURE 1: PLACEMENT STATISTICS (2014-2015)

Sl.No.	Name of organisation	Date of visit	CTC (LPA)	CE	ME	EE	ECE	CSE	EI	MBA	M.TECH
1.	UNISYS,Bangalore	17-20 Aug 14	5.5 LPA	-	-	-	-	12	-	-	-
2.	MU Sigma, Bangalore	23-24 Aug 14	18 Lacs (3 Yrs)	1	1	3	7	1	-	-	EE(PSE)-1& CE(TPT)-1
3.	ITC, Kolkata	22-23 Aug 14	8.84 LPA	-	1	-	-	-	-	-	-
4.	Polaris Financial Technologies	24-27 Aug 14	4.5 LPA	-	-	-	1	4	-	-	-
5.	Work Application, Bangalore H.O.- Japan	21-23 Aug 14	35 LPA	--	-	-	0	0	-	-	-
6.	NRI Financial Technologies, Kolkata	4-8 Sep 14	4.25 LPA	-	-	-	1	4	-	-	-
7.	L & T Construction , Mumbai	9-11 Sep 14	5 LPA	21	-	8	-	-	-	-	Structural-2 Thermal-1 PESE-1
8.	TCS	10-13 Sep 14	3.18 LPA	-	30	31	40	23	8	-	ECE- 2+3=5 ME(Thermal)-1
9.	Philips India Ltd., Bangalore	16-17 Sep 14	6 LPA	-	-	-	4	4	-	-	-
10.	Infosys	20-22 Sep 14	3.15 LPA	23	13	15	7	8	5	-	CE (Earth Q)-1, ECE-1 & 1 EE
11.	IBM	22-25 Sep 14	3.25 LPA	12	8	11	13	9	4	-	CE (WR-1, Stuc-1)=2 ECE-2+2=4 CSE-2 & EE (PESE)-1
12.	Shapoorji Paloynji	29-30 Sep 14	3.6 LPA	5	-	-	-	-	-	-	-
13.	Mjunction Service Ltd.	23-25 Sep 14	4 LPA	1	1	2	-	-	-	-	-
14.	Yodlee Infotech, Bangalore	26-27 Sep 14	7 LPA	-	-	-	-	6	-	-	-
15.	Orade Fin Services	8-10 Oct 14	5.5 LPA	-	2	3	2	1	1	-	-

16.	Maruti Suzuki (Pool Campus at Agartala)	21 Oct 14	6.5 LPA	-	4	-	-	-	-	-	-	-	-	-
17	Tata Advance System, Hyderabad	26-28 Oct 14	3.93 LPA	-	2	-	-	-	-	-	-	-	-	-
18.	SONY India Software Centre, Bangalore	28-29 Oct 14	4.75 LPA	-	-	-	3	2	-	-	-	-	-	-
19.	SKF Bearing, Pune	28-29 Oct 14	4.25 LPA	-	2	-	-	-	-	-	-	-	-	-
20.	Nucleus Software Pvt Ltd , Noida	29-31 Oct 14	4.5 LPA	-	2	-	5	3	1	-	-	-	-	-
21.	Ericsson India Global Service, Kolkata	30 Oct-01 Nov 14	3.62 LPA	-	-	-	8	6	-	-	-	-	-	-
22.	Retailon, Bangalore	2-5 Nov 14	3.6 LPA	-	-	-	-	4	1	-	-	-	-	-
23.	Reliance Jio Infocomm Ltd., Mumbai	9-11 Nov 14	5 LPA	-	-	-	9	1	-	-	-	-	-	-
24.	ITC Ltd, Guwahati	21-22 Nov 14	3.59 LPA	-	-	-	-	-	-	-	-	Mktg-2	-	-
25.	Potential Coaching Institute, Guwahati	24-26 Nov 14	3.6 LPA -MBA 8.4 LPA- B.Tech	-	2	-	-	-	-	-	-	Mktg-1 & HR-1	-	-
26.	HONDA 2 Wheelers	30-02 Dec 14	6.75 LPA	-	3	-	-	-	-	-	-	-	-	-
27.	Zaloni Technologies Guwahati	17-18 Nov 14	2.71 LPA B.tech. 3.53 LPA M.tech	-	-	-	1	-	-	-	-	-	-	-
28.	Reverie Language Technologies Pvt Ltd., Bangalore	10 -11 Dec 14	3 LPA	-	-	-	1	-	-	-	-	-	CSE-1	-
29.	Vodafone India	11 Dec 14	4.1 LPA	-	-	-	-	-	-	-	-	Mktg-1	-	-
		(Pool Campus at Assam University)												
30.	DRDO	3-5 Jan 15 19-20 Jan 15	6.5 LPA	-	1	-	-	1	-	-	-	-	-	-
31.	Tata Motors	7-9 Jan 2015	6.16 LPA	-	6	-	-	-	-	-	-	-	-	-
32.	Brahmos Aerospace	8-10 Jan 2015	9 LPA	-	1	-	1	-	-	-	-	-	-	-
33.	Idea Cellular	12-13 Jan 14	5 LPA	-	-	-	3	-	-	-	-	-	-	-

Sl.No.	Name of organisation	Date of visit	CTC (LPA)	CE	ME	EE	ECE	CSE	EI	MBA	M.TECH
34.	Godrej & Boyce, Kolkata	19 Jan 15	5.2 LPA	-	2	-	-	-	-	-	-
		Interview in Kolkata									
35.	Tata Hitachi	21-22 Jan 15	6.9 LPA	-	1	-	-	-	-	-	-
36.	KEC International, Mumbai	28-30 Jan 15	4.75 LPA	4	-	4	-	-	-	-	-
37.	Development Environey Service Ltd (DESL), New Delhi	29 Jan 15	3.55LPA	-	-	1	-	-	-	-	-
		Interview in New Delhi									
38.	Capital Via	03 Feb 15	4.07 LPA	-	-	-	-	-	-	5 (Mktg -4 & Fin -1)	-
		On line Interview									
39.	Fluor Daniel India Pvt Ltd , Gurgaon	12-14 Feb 15	5.2 LPA	3	12	-	-	-	1	-	-
40.	ITD , Cementation, Kolkata	16-17 Feb 15	2.91 LPA	2	-	-	-	-	-	-	-
41.	Jaro Education, Mumbai	18-19 Feb 15	3 LPA	-	-	-	-	-	-	HR-1	-
42.	Snapdeal	18-19 Feb 15	15 LPA	-	-	-	-	2	-	-	-
		Interview in Delhi									
43.	Ashok Leyland	20 Feb 15	7.07 LPA	-	3	-	-	-	-	-	-
		Interview in Kolkata									
44.	Hewlett Packard (HP India), Bangalore	3-6 Mar 15	3.5 LPA	-	-	9	2	2	1	-	-
45.	IP Infusion, Noida	13-14 Mar 15	3.5 LPA	-	-	-	1	3	1	-	-
46.	Resonance Eduventures, Kota	15-17 Mar 15	4.80 LPA	-	-	1	1	-	1	-	-
47.	Rose IT Solutation, Delhi	16 Mar 15	2.2 LPA	-	-	-	-	-	-	HR-3	-
48.	Ways 2 Capital, Indore	19 Mar 15	2.9 LPA	2	-	1	3	1	1	Mktg -4 Fin-2	-
		On line Interview									

49.	Axis Bank	23 Mar 15	4.07 LPA	-	-	-	-	-	-	-	-	Mktg-2 Fin-1	
		Interview at Guahati											
50.	PL Engineering Ltd. Gurgaon	31 Mar 15	3.75 LPA	2	-	-	-	-	-	-	-	-	-
		Interview at Gurgaon											
51.	Jhon Deere Technology Centre, Pune	8-10 Apr 15	5.4 LPA	-	-	-	-	-	-	-	-	-	-
52.	Epic Research, Indore, MP	10-12 Apr 15	3.47 LPA	1	3	3	-	-	-	-	-	HR-3 Mktg-2 Fin-4	
53.	Sikkim Manipal University	19-25 Apr 15	4.8 LPA	-	-	-	-	-	-	-	-	-	-
54.													
	Total No of eligible students			70	87	76	78	64	22	26	188		
	Total No. of Job offers (till date)			77	100	92	113	97	25	32	28		
	Total No. of Job Placed			54	61	60	68	64	15	29	23		
	% of job placed (B.Tech. average - %)			77.14	70.1	78.94	87.17	98.43	68.18	111.53	12.23		
	Highest Package			B.Tech- 15 LPA				M.Tech. - 6 LPA					MBA- 4.07 LPA
	Average Package			B.Tech- 3.98 LPA				M.Tech. - 3.92 LPA					MBA-3.35LPA



**SEPARATE AUDIT REPORT ON THE ACCOUNTS
OF
NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR**

FOR THE YEAR 2014 - 2015



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

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

No: OA II (AB)/AR/2014-15/NITSILCHAR/ 276

Date: 09-09-15

09 SEP 2015


A copy of the Separate Audit Report alongwith Annexure on the accounts of **National Institute of Technology, Silchar**, for the year 2014-15 is forwarded to the **Director, National Institute of Technology, Silchar, , Assam 788010**, for information and necessary action.

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

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

Two copies of the printed Annual Report for the year 2014-15 (both English and Hindi Version) containing the Audited Accounts and the Separate Audit Report along with Annexure, as laid before Parliament, may please be forwarded to this office for necessary action at this end.

Encl.: As stated


Dy. Director (I)

जि. आई. प्रेस बिल्डिंग, 8 किरण शंकर राय रोड (1म मंजिल), कोलकाता - 700001

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 2015.

We have audited the attached Balance Sheet of **National Institute of Technology, Silchar** Assam as at 31 March 2015, 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

A. Balance Sheet

1.1 Liabilities

1.1.1 Corpus/Capital Fund (Schedule – 1) : ₹ 455.70 crore

As per Notes and Instructions for the Schedules (Schedule -1) circulated by the MHRD in 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 above instructions and accounting policies, the Corpus Fund amounting to ₹15.88 crore had been shown 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 Funds by ₹15.88 crore at the end of 2014-15.

1.1.2 Designated/Earmarked/Endowment Funds (Schedule – 2): ₹ 22.27 crore

The above funds were credited by ₹28.06 lakh (Depreciation Fund ₹14.85 lakh, Maintenance Fund ₹2.45 lakh and staff development Fund ₹10.76 lakh) on transfer of

overhead income earned on Consultancy Services. However, transfer of the amount from Institute's main bank account to Designated bank accounts was not done. To give effect of the same the Designated/Earmarked/Endowment Funds were debited (Receivable from Institute account) and Current Liabilities & Provisions was credited by an equal amount. Since, the entire bank balance of the Institute was reflected as one balance in the balance Sheet, the second entry was not required to be passed.

This had resulted in understatement of Designated/Earmarked/Endowment Funds by ₹28.06 lakh with the corresponding overstatement of Current Liabilities and Provisions by similar amount.

1.1.3 Current Liabilities & Provisions (Schedule -3): ₹ 72.41 crore

(a) The above amount had been understated with the corresponding overstatement of Corpus/ Capital Fund by ₹1.40 core due to the following:

The amount of ₹28.53 crore had been provided as liabilities for unspent Plan grant at the end of the year. While computing Capital expenditure incurred during the year out of total available Plan grant to workout the amount of unspent grant, the amount of Capital Works in Progress (CWIP) shown under deduction column is to be excluded from the amount of additions to CWIP as per instructions of MHRD in new format of accounts (Schedule – 1 and 10 of Format of Financial Statement for Central Higher Education Institutions). The Institute provided liabilities (Schedule – 3C) without excluding the CWIP amounting to ₹1.40 crore deducted during the year (Schedule – 4) from the additions to CWIP while arriving at the amount of Capital expenditure incurred out of available Plan grant amount.

(b) The above amount had also been overstated by ₹0.11 crore as liability was provided (by debiting CWIP) towards amount payable to a contractor against ongoing works of constructions of hostel/library without deducting the liability amount by ₹0.11 crore being the amount of interest recoverable on the mobilization advance paid to the

contractor. This had also resulted in overstatement of Fixed Assets (CWIP) by an equal amount.

1.2 Assets

1.2.1 Tangible Assets (Schedule – 4): ₹ 203.62 core

The above amount had been overstated by ₹72.15 lakh as the assets of ongoing sponsored projects were shown as own assets though the ownership of those assets was not vested with the Institute.

This also resulted in overstatement of Corpus/Capital Fund by equal amount.

1.2.2 Loans, Advances & Deposits (Schedule – 8): ₹ 89.05 core

Despite Commissioning and putting to use (September, 2014) of 33 KV sub-station, the amount of ₹3.00 core lying under advance to contractor as deposit works had not been transferred to Fixed Assets. This had resulted in overstatement of Loans, Advances & Deposits by ₹3.00 crore and understatement of Fixed Assets (tangible) by the same amount.

B. Income and Expenditure Account:

2.1 Expenditure:

2.1.1 Depreciation (Schedule – 4): ₹ 18.09 crore

The above had been understated by ₹ 31.39 lakh due to the following:

- (i) Non-provision of depreciation of ₹26.25 lakh on 33KV sub-station commissioned and put to use in September 2014 as the advance paid for the work was not capitalized.
- (ii) Short provision of ₹4.53 lakh as depreciation was calculated at prorata rate from the date of release/providing liabilities of balance amount towards Purchase of Solar Photo-Voltaic Devices though the said asset was installed and commissioned in April 2014.

(iii) Providing depreciation @5% instead of @15% on equipment pertained to Scientific laboratories as it was wrongly classified under Buildings resulting in short provision of ₹0.40 lakh.

(iv) Non-provision of depreciation amounting to ₹0.21 lakh as the Capital nature of works on sub-station had been treated as revenue expenditure.

This had also resulted in understatement of Excess of Expenditure over Income of the year by ₹31.39 lakh.

C. Receipts and Payments Accounts:

The Institute had prepared Receipts and Payments Account on accrual basis instead of cash basis by showing adjustment entries of ₹8793.21 lakh on both Receipts and Payments sides. Due to exhibition of adjustment entries, the amount of ₹8793.21 lakh remained overstated on both Receipts and Payments sides and inclusion of adjustment entries in Receipts and Payments Account resulted in non-adherence to the accounting principles.

D. GPF and NPS Account

4.1 Liabilities

4.1.1 Current Liabilities and Provisions

Pension Fund Contribution payable: ₹ 2.05 crore

The above head remained overstated by ₹0.98 crore as the same amount had also been included under the head 'Fund towards Pension Fund' (₹2.63 crore) and had already been deducted from the Capital Fund. This resulted in understatement of Capital Fund (GPF/CPF) by ₹ 0.98 crore at the end of 2014-15.

E. General

5.1 Fixed Assets

(i) Depreciation on assets had been provided on written down value method instead of straight line method as prescribed in new format of accounts. The impact of not providing depreciation on straight line method had not been disclosed.

(ii) Assets worth ₹14.31 crore pertaining to TEQIP Phase – I (₹10.32 crore), Earthquake Engineering NPEEE (₹0.14 crore) and Sponsored Project Funds (AICTE & R&D ₹3.85 crore) had been treated as fixed assets of the Institute without any authorities from the grant sanctioning authorities in support of transfer the ownership on the assets to the Institute. Further, no depreciation had been provided on TEQIP Phase – I assets though the same is used by the Institute.

5.2 The impact on the accounts in the following cases due to changes in accounting policies/treatments had not been disclosed as required under the provision of AS – 5 despite mention in earlier year's report.

(i) Increase in the amount of Corpus/Capital Fund by ₹103.05 crore (Schedule – 1) with the corresponding decrease in Restricted Fund as Plan grant utilized for creation of assets had been shown under Corpus/Capital Fund instead of reflecting it under Restricted Fund in earlier year.

(ii) Increase in the amount of Current Liabilities and Provision by ₹28.53 crore with the corresponding decrease in Restricted Fund as Liabilities towards unspent Plan grant amount had been shown under Current Liabilities and Provision instead of earlier year's policy of exhibiting it under Restricted Fund.

(iii) Depreciation amounting to ₹18.09 crore had been charged to Expenditure Account (I/E) instead of adjusting it against Plan Grant Liabilities (Restricted Fund) like earlier year resulting in overstatement of Depreciation, total revenue expenses as well as excess of Expenditure over Income of the year by ₹18.09 crore.

5.3 Despite mention in earlier Audit Reports, the Institute had not followed the pattern of investment prescribed by the MHRD in respect of investments.

5.4 Despite mention in earlier year's Audit Report and in violation to the instructions of MHRD no liabilities towards the retirement benefits payable to the officials /staff on actuarial basis had been provided for.

F. Grants-in-aid

The Institute is mainly financed by the Grants-in-aid from the Govt. of India. During the year (2014-15) the Institute had received total grants of ₹8849.38 lakh (Plan ₹5125.00 lakh and receivable of previous year ₹1924.38 lakh and Non-Plan ₹1800.00 lakh). Out of the total grants (₹8849.38 lakh), the Institute had spent ₹14,043.87 lakh (Plan ₹9720.01 lakh + Non-Plan ₹4323.86 lakh) resulting in an excess expenditure of ₹ 5194.49 lakh (Plan (-)₹2670.63 lakh & Non-plan (-)₹2523.86 lakh). This excess expenditure both under Plan and Non-plan head was met from loans from Maintenance Fund, previous years' unspent balance & internal revenue of the Institute.

Besides above, the Institute had received main Project grants under SERB, ICSSR & MCIT of ₹67.53 lakh (SERB¹: ₹53.20 lakh, ICSSR²: ₹1.03 lakh and MCIT³: ₹13.30 lakh). The Institute had spent ₹16.20 lakh (SERB: ₹4.28 lakh, ICSSR: ₹0.04 lakh and MCIT: ₹11.88 lakh) out of grants received under Project account resulting in an unspent Balance of ₹51.33 lakh.

G. Net Effect

The net impact of the comments given in the preceding paragraphs is that the Assets and Liabilities of the Institute's Balance Sheet as on 31-03-2015 were overstated by ₹0.83 crore and Excess of Expenditure over Income was understated by ₹ 0.31 crore for the year 2014-15.

¹ Science & Engineering Research Board

² Indian Council of Social Science Research

³ Ministry of Communication and Information Technology

H. Management Letter:

Deficiencies which have not been included in the Audit Report have been

brought to the notice of the Director, National Institute of Technology, Silchar through a management letter issued separately for remedial/corrective action.


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

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

- a. in so far as it relates to the Balance Sheet, of the state of affairs of according the National Institute of Technology, Silchar as at 31 March 2015 and
- b. in so far as it relates to Income and Expenditure Account of the deficit for the year ended on that date.

For and on behalf of the C&AG of India

Place:-Kolkata
Date:- 09.09.2015


(A. Roychoudhury)
Director General of Audit
Central :: Kolkata

Annexure

1. Adequacy of Internal Audit System

- a) There is no Internal Audit Department in the NIT, Silchar. Only one internal Audit Officer was appointed on 23.11.2011 and no staff was posted to assist the said officer for pre-auditing/post-auditing. 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) As Audit Manual is under preparation, the Institute has not conducted any Internal Audit of its activities.
- c) No periodic internal audit report is generated.

2. Adequacy of Internal Control system

- i) Cash in hand and cash in transit are not covered by any insurance.
- ii) All Fixed Assets are not covered by insurance.

3. System of Physical verification of Assets

No Assets Register had been maintained since very beginning. In absence of the Assets Register, the value of the fixed assets as exhibited in Schedule – 4 could not be verified in audit.

Despite mention in the previous audit report, progressive value of books was not recorded in the Accession Registers nor physical verification of the Library Books and Scientific Journals had ever been conducted. In the absence of which existence and conditions of Library Books and Scientific Journals valuing ₹ 2.31 core (net) could not be ascertained in audit.

4. Statutory Liabilities:-

Despite mention in the previous year's audit report, the Institute had not disposed off the statutory dues for more than two years as stated below,

- (a) Income Tax Payable (Salary): ₹0.23 lakh
- (b) VAT Payable: ₹0.04 lakh

**STATEMENT OF ACCOUNTS
OF
NATIONAL INSTITUTE OF TECHNOLOGY
SILCHAR**

FOR THE YEAR 2014 - 2015

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

BALANCE SHEET AS AT 31ST MARCH, 2014

(Amount in Rupees)

SOURCES OF FUND	Schedule	Current Year	Previous Year
		₹	₹
CORPUS / CAPITAL FUND	1	4,556,999,944	2,481,674,339
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	2	222,703,775	318,895,431
CURRENT LIABILITIES & PROVISIONS	3	724,068,176	1,923,024,531
TOTAL		5,503,771,895	4,723,594,301

APPLICATION OF FUNDS			
Fixed Assets			
Tangible Assets		2,036,218,089	2,040,713,564
Intangible Assets	4	26,080,215	20,434,182
Capital Work - In- Progress		2,263,678,789	1,421,996,387
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5	239,579,118	334,564,935
INVESTMENTS - OTHERS	6	5,148,997	33,664,770
CURRENT ASSETS	7	42,546,731	151,680,022
LOANS, ADVANCES & DEPOSITS	8	890,519,957	720,540,442
TOTAL		5,503,771,895	4,723,594,301

SIGNIFICANT ACCOUNTING POLICIES	23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24

Dated, Silchar

The 13th May 2015

Registrar

Director

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2015

(Amount in Rupees)

PARTICULARS	Schedule	Current Year	Previous Year
INCOME		₹	₹
Academic Receipts	9	149,105,613	93,710,136
Grants /Subsidies	10	411,162,869	430,365,654
Income from Investment	11	2,021,477	10,193,718
Interest Earned	12	949,448	851,384
Other Income	13	14,072,459	10,639,248
Prior Period Income	14	-	-
TOTAL		577,311,867	545,760,140

APPLICATION OF FUNDS			
EXPENDITURE			
Staff Payment & Benefits (Establishment expenses)	15	372,808,531	315,419,604
Academic Expenses	16	57,963,483	39,318,947
Administrative and General Expenses	17	59,024,951	42,412,321
Transportation Expenses	18	1,637,867	1,619,829
Repairs & Maintenance	19	17,555,706	20,694,809
Finance costs	20	69,854	34,835
Depreciation	4	180,915,402	
Other Expenses	21	17,667,710	10,865,309
Prior Period Expenses	22		
TOTAL		707,643,504	430,365,654
Balance being excess of Income over Expenditure (A-B)		-130,331,637	115,394,486
Transfer to /from Designated Fund			70,000,000
Building fund			
Others (specify)			
Balance Being Surplus / (deficit) Carried to Capital Fund		-130,331,637	45,394,486

SIGNIFICANT ACCOUNTING POLICIES 23

CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS 24

Dated, Silchar

The 13th May 2015

Registrar

Director

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE - 1 : CORPUS / CAPITAL FUND

(Amount in Rupees)

PARTICULARS		Current Year	Previous Year
		₹	₹
A.	CAPITAL FUND : Balance at the beginning of the year	2,188,231,105	302,390,690
Add:	Contribution towards Corpus / Capital Fund		
Add:	Reappropriation of Capital Fund of earlier year	1,159,417,373	1,982,410,533
Add:	Excess of Income over expenditure transferred from I/E Account		45,394,486
Less:	Excess of Expenditure over Income transferred from Income & Expdr A/C	-130,331,637	
Less:	Transferred to Reserve & Surplus		103,868,977
Less:	Refund to Ministry (Unsecured Loan)		13,784,185
Less:	Asset deletion against Vehicle		11,442
Less:	Asset deletion against against 100 KVA Solar Photo voltaic Plan (Kind)		24,300,000
TOTAL		3,217,316,841	2,188,231,105
Add:	Grants from Govt. Of India to the extent utilized for Capital expenditure	1030529754	
Add:	TEQIP Phase I Fund	103,165,960	103,165,960
Add:	Earth Quake Engineering NPEEE	1,427,878	1,427,878
Add:	Sponsored Project (AICTE & R&D) Fund	38,521,274	38,521,274
Add:	Addition during the year against Sponsored Projects	7215420	
BALANCE AT THE YEAR END (A)		4,398,177,127	2,331,346,217
B.	CORPUS FUND ACCOUNT		
	Balance as at the beginning of the year	150,328,122	74,199,580
Add:	Contributions Towards Corpus Fund	2,310,770	6,128,542
Add:	Surplus of Income over Expenditure		70,000,000
Add:	Interest against investment & Savings a/c	302,762	
Add:	Accrued Interest	5,881,163	
BALANCE AT THE YEAR END (B)		158,822,817	150,328,122
BALANCE AT THE YEAR END (A+B)		4,556,999,944	2,481,674,339

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	11,000,087	125,841,853	125,448,103	11,040,712	169,159	273,499,914	248,346,473
b) Additions during the year	28,100,672	591,718	38,759	527,119	119,636	29,377,904	
c) Income from Investments made of the funds		2,228,739	1,733,267	7,831		3,969,837	56,157
d) Accrued Interest on Investments/Advances		5,709,005	5,972,930	942,929		12,624,864	12,448,778
e) Interest on Savings Bank a/c.		184,282	152,404	80,168		416,854	
f) Other additions (specify nature)		1,484,687	245,049	1,076,279		-	12,648,506
Less : Receivable from Institute Account						2,806,015	
TOTAL (A)	39,100,759	133,070,910	133,100,414	11,522,480	288,795	317,083,358	273,499,914
B.							
Utilization /Expenditure towards objective of funds							
i) Capital Expenditure							
ii) Revenue Expenditure	34,371,654	-	-	-	25,000	34,396,654	
iii) Temporary loan to Institute		55,000,000	55,000,000			110,000,000	
Total (B)	34,371,654	55,000,000	55,000,000	-	25,000	144,396,654	
Closing balance at the year end (1) (A-B)	4,729,105	78,070,910	78,100,414	11,522,480	263,795	172,686,704	273,499,914
Represented by							
Cash and Bank Balances	Balance lying with Institute	2,097,377	2,315,820	447,973	Balance lying with Institute		
Investment	A/C	65,400,000	58,500,000	9,775,374	A/C		
Interest accrued but not due		10,573,533	17,284,594	1,299,133			
Total	-	78,070,910	78,100,414	11,522,480	-	-	-

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	676,630	169,158	676,630	191,656	485,574	2,199,648	1,364,056	
b) Additions during the year	478,540	119,636	478,540	-	245,753	1,322,469	-	
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)	1,155,170	288,794	1,155,170	191,656	731,327	3,522,117	2,886,474	
B.								
Utilization /Expenditure towards objective of funds								
i) Capital Expenditure								
ii) Revenue Expenditure					378,935	378,935	686,826	
Total (B)	-	-	-	-	378,935	378,935	686,826	
Closing balance at the year end (1) (A-B)	1,155,170	288,794	1,155,170	191,656	352,392	3,143,182	2,199,648	
Represented by								
Cash and Bank Balances								
Investment								
Interest accrued but not due								
Total	-	-	-	-	-	-	-	

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE - 2 : DESIGNATED / EARMARKED / ENDOWMENT FUNDS

(Amount in Rupees)

Particulars	Fund wise Breakup				Total	
	Gratuity Fund	Student Aid Fund			Current Year	Previous Year
(B): A.						
a) Opening Balance	41,122,817	2,073,052			43,195,869	39,480,316
b) Additions during the year		379,200			379,200	
c) Income from Investments made of the funds	252,811				252,811	1,482,267
d) Accrued Interest on Investments/Advances	3,158,082				3,158,082	1,830,455
e) Interest on Savings Bank a/c.	240,397				240,397	997,255
f) Other additions (specify nature)						
TOTAL (A)	44,774,107	2,452,252	-	-	47,226,359	43,790,293
B.						
Utilization /Expenditure towards objective of funds						
i) Capital Expenditure						
ii) Revenue Expenditure		352,470			352,470	594,424
Total (B)		352,470	-	-	352,470	594,424
Closing balance at the year end (3): (A-B)	44,774,107	2,099,782	-	-	46,873,889	43,195,869
Represented by						
Cash and Bank Balances	8,416,147	Balance lying with Institute				
Investment	31,567,987	A/C				
Interest accrued but not due	4,789,973					
Total	44,774,107	-	-	-	-	-
Closing balance at the year end (1+2+3)	50,658,382	80,459,486	79,255,584	11,714,136	22,703,775	318,895,431

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	120,135,440	5,706,413	591,718	8,122,026	120,727,158	13,828,439	-	120,727,158	13,828,439	134,555,597
2	Maintenance Fund	119,499,864	5,948,239	38,759	7,858,601	119,538,623	13,806,840	-	119,538,623	13,806,840	133,345,463
3	Staff Dev. Fund	10,190,429	850,283	527,119	1,030,928	10,717,548	1,881,211	-	10,717,548	1,881,211	12,598,759
4	Gratuity Fund	37,810,095	3,312,722	-	3,651,290	37,810,095	6,964,012	-	37,810,095	6,964,012	44,774,107
5	Student Welfare Fund	169,159	-	119,636	-	288,795	-	25,000	263,795	-	263,795
6	Instt. Dev. Fund	676,630	-	478,540	-	1,155,170	-	-	1,155,170	-	1,155,170
7	Employees Welfare Fund	169,158	-	119,636	-	288,794	-	-	288,794	-	288,794
8	Deptt. Promotion Fund	676,630	-	478,540	-	1,155,170	-	-	1,155,170	-	1,155,170
9	Virtual Class Room	191,656	-	-	-	191,656	-	-	191,656	-	191,656
10	NMEICT Fund	485,574	-	245,753	-	731,327	-	378,935	352,392	-	352,392
11	Pension Fund	11,000,087	-	28,100,672	-	39,100,759	-	34,371,654	4,729,105	-	4,729,105
12	Student Aid Fund	2,073,052	-	379,200	-	2,452,252	-	352,470	2,099,782	-	2,099,782
TOTAL		303,077,774	15,817,657	31,079,573	20,662,845	334,157,347	36,480,502	35,128,059	299,029,288	36,480,502	335,509,790

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE : 3 : CURRENT LIABILITIES AND PROVISIONS

(Amount in Rupees)

PARTICULARS	Current Year	Previous Year
A. CURRENT LIABILITIES	₹	₹
1. Deposits from staff	615,970	744,849
2. Deposits from Students	18,807,846	20,450,646
3. Sundry Creditors		
a) For Goods & Services	9,647,779	1,464,641
b) Others		
4. Deposits - Others (including EMD, Security Deposit)	29,165,805	24,062,987
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS,NPS)	1,785,106	96,558
Liabilities against Sponsored Project(Performance Security)		41,225
6. Other Current Liabilities		
a) Salaries (project)	-	93,000
b) Receipts against sponsored projects	12,893,400	14,262,958
c) Receipts against sponsored fellowships & Scholarship	1,854,658	2,331,664
d) Unutilized Grants		
Under Plan Grants	285,301,371	1,520,645,530
Under Non-Plan Grants	-	63,265,837
e) Grants in Advance		
f) Other funds	1,914,570	421,231
g) Other liabilities	362,081,671	275,143,405
Total (A)	724,068,176	1,923,024,531
B. PROVISIONS		
1. For Taxation	-	-
2. Gratuity	-	-
3. Superannuation Pension	-	-
4. Accumulated Leave encashment	-	-
5. Trade Warranties/Claims	-	-
6. Provision for Works and Plan others	-	-
Total (B)	-	-
TOTAL (A+B)	724,068,176	1,923,024,531

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	Closing Balance	
		Credit	Debit	Grants	Interest			Credit	Debit
1	2	3	4	5		6	7	8	9
A	MCT, GoI	983,430		1,329,735	19,031	2,332,196	1,188,131	1,144,065	
B	DST, GoI	309,001	87,755		13,901	410,657	64,516	346,141	
C	MNRE, GoI	1,086,559	-		5,632	1,092,191	1,134,164		41,973
D	MoEsc., GoI	2,701,078			106,337	2,807,415	730,953	2,076,462	
E	ICCR, GoI	4,346		103,425	1,550	109,321	3,800	105,521	
F	SERB, GoI	-		5,320,000	76,856	5,396,856	428,103	4,968,753	
G	IBM	801,043			32,741	833,784	61,136	772,648	
H	AICTE RPS	7,194,212	87,755		250,964	7,357,421	5,169,076	2,188,345	
I	AICTE MODROBS	1,183,289			108,176	1,291,465	-	1,291,465	
	TOTAL	14,262,958	-	6,753,160	615,188	21,631,306	8,779,879	12,893,400	41,973

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE : 3B : SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

(Amount in Rupees)

Sl. No.	Name of the Project	Opening Balance		Transaction during the year				Closing Balance as on 31.03.15	
		Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8		
1	Various Agencies	2,331,664		6,730,015	7,207,021	1,854,658			
	TOTAL	2,331,664	-	6,730,015	7,207,021	1,854,658	-		

SCHEDULE - 3 (1): SPONSORED PROJECTS FUNDS

(Amount in Rupees)

Particulars	Fund wise Breakup							Total	
	M C I T	D S T	M O E S	I C S S R	M N R E	Current Year	Previous Year		
(1): A.									
a) Opening Balance	983,430	309,001	2,701,078	4,346	1,086,559	5,084,414	10,865,401		
b) Additions during the year	1,329,735	-	-	103,425	-	1,433,160	1,454,425		
e) Interest on Savings Bank a/c.	19,031	13,901	106,337	1,550	5,632	146,451	407,024		
f) Other additions - Loan / Adjustments		87,755			41,973	129,728	49,649		
Total (A)	2,332,196	410,657	2,807,415	109,321	1,134,164	6,793,753	12,776,499		
B. Utilization /Expenditure towards objective of funds									
i) Capital Expenditure									
Equipment	299,138		103,084		837,602	1,239,824	2,376,864		
Computer	130,380	49,649				180,029	370,527		
Software	-		585,000			585,000	89,081		
Furniture	-	12,383				12,383	-		
Other Cost						-	429,881		
ii) Revenue Expenditure	740,272	2,484	42,869	3,800	296,562	1,085,987	2,558,012		
iii) Refunded to Sanctioning authority	18,341					18,341	1,867,720		
Total (B)	1,188,131	64,516	730,953	3,800	1,134,164	3,121,564	7,692,085		
Closing balance at the year end (1) (A-B)	1,144,065	346,141	2,076,462	105,521	-	3,672,189	5,084,414		

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	1,520,645,530	739,505,938
Add: Receipts during the year	1,002,500,000	1,050,000,000
Add Other additions		1,306,159,290
Total (a)	2,523,145,530	3,095,665,228
Less: Capital expdr. of last year (Net off depreciation)	1,159,417,373	-
Less: Utilized for Revenue Expenditure	47,897,032	122,118,491
Less: Utilized for Capital Expenditure	1030529754	1,452,901,207
Total (b)	2,237,844,159	1,575,019,698
Unutilized carried forward (a-b)	285,301,371	1,520,645,530
B. Grants : NON- PLAN		
Balance Brought forward	63,265,837	104,013,000
Add: Receipts during the year	300,000,000	267,500,000
Total (c)	363,265,837	371,513,000
Less: Refunds		
Less: Utilized for Revenue Expenditure	363,265,837	308247163
Less: Utilized for Capital Expenditure		
Total (d)	363,265,837	308,247,163
Unutilized carried forward (c-d)	-	63,265,837
GRAND TOTAL (A+B)	285,301,371	1,583,911,367

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

Sl. No	Assets Heads	Gross Block				Depreciation for the Year 2014-15				Net Block	
		Op Balance 01.04.2014	Additions	Deduction	Cl. Balance	Dep Opening Balance	Depreciation for the Year	Deductions/ Adjustment	Total Depreciations	31.03.2015	31.03.2014
1	Land	866458			866458	0	0		0	866458	866458
2	Site & Campus Development	48354166	7846620		56200786	10608539	2014678		12623217	43577569	37745627
3	Buildings	1611762035	9832281		1621594316	270284229	67302580		337586809	1284007507	1341477806
4	Roads & Bridges	72951482	1111315		74062797	3936663	3478266		7414929	66647868	69014819
5	Tubewells & Water Supply	136935196	1563812		138499008	10845760	6312424		17158184	121340824	126089436
6	Electrical Installation & Equipment	25083165	1169986		26253151	10681624	2240410		12922034	13331117	14401541
7	Plant & Machinery	57502802	8097928		65600730	27565246	5118848		32684094	32916636	29937556
8	Scientific & Laboratory Equipment	193575518	45305841.04		238881359	75089532	20384926		95474458	143406901	118485986
9	Office Equipment	10080925	8938881		19019806	5119834	1481904		6601738	12418068	4961091
10	Audio Visual Equipment	5821634	427036		6248670	2228103	545408		2773511	3475159	3593531
11	Computers & Peripherals	112824910	36467679		149292589	69739394	17507490		87246884	62045705	43085516
12	Furniture, Fixtures & Fittings	108283153	13828533		122111686	32674381	8077734		40752115	81359571	75608772
13	Vehicles	4430347	8260		4438607	3434346	199200		3633546	805061	996001
14	Lib. Books & Scientific Journals	51739419	3665488		55404907	23555508	8753060		32306568	23098339	28185911
15	Other Assets	51237649	16312443		67550092	8140096	15654650		23794746	43755346	43097553
	Total (A)	2491448859	154576103	0	2646024962	553901255	159071578	0	712972833	1933052129	1937547604
16	Capital Works in Progress (B)	1421996387	855679214.2	13996812	2263678789	0	0	0	0	2263678789	1421996387
	Intangible Assets										
17	Computer Software	28831093	9214851		38045944	8396911	3568818		11965729	26080215	20434182
18	E-Journals	17054358	18275006		35329364	17054358	18275006		35329364	0	0
19	Planets	0	0	0	0	0	0	0	0	0	0
	Total (C)	45885451	27489857	0	73375308	25451269	21843824	0	47295093	26080215	20434182
20	TEQIP I Assets (D)	103165960			103165960				0	103165960	103165960
	Grand Total (A+B+C+D)	4062496657	1037745174.25	13996812	5086245019	579352524	180915402	0	760267926	4325977093	3483144133

Note: The addition during the year include addition from:

Capital Fund 1030529754

Sponsored Projects 7215420

Total 1037745174

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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

Particulars	Op Balance 01.04.2014	Additions	Gross	Amortization	(Amount in Rupees)	
					Net Block 2014-15	Net Block 2013-14
A. Patents Granted						
1. Balance as on 31.03.2014 of Patents obtained in 2008-09 (Original Value - Rs.)						
2. Balance as on 31.03.2014 of Patents obtained in 2010-11 (Original Value - Rs.)						
3. Balance as on 31.03.2014 of Patents obtained in 2012-13 (Original Value - Rs.)						
4. Patents granted during the Current Year						
Total	0	0	0	0	0	0
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						
Total	0	0	0	0	0	0
C. Grand Total (A+B)	0	0	0	0	0	0

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	74,335,757	68,027,740
Investment of Depreciation Fund	65,400,000	111,597,045
Investment of Gratuity Fund	31,567,987	35,727,930
Investment of Maintenace Fund	58,500,000	111,565,558
Investment of Staff Development Fund	9,775,374	7,646,662
7. Others)		
Total	239,579,118	334,564,935

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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)	14000.00	30022000.00
Short Term Deposit	4500000.00	3642770.00
7. Others : Margin Money Account (L.C.)	634997	
Total	5148997.00	33664770.00

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

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	729,171.00	698,289
b) Others		
3. CASH AND BANK BALANCES		
Cash in hand	38,169	7,921
Cash at Bank:		
A) With Scheduled Banks:		
In Current Accounts	8,794,418	119,354,638
In Savings Accounts	32,984,972	31,619,174
4. POST OFFICE - SAVINGS ACCOUNTS		
Total	42,546,730.69	151,680,022

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE : 7 (A) ANNEXURE - CURRENT ASSETS

(Amount in Rupees)

PARTICULARS	Current Year	Previous Year
With Scheduled Banks:		
In Current Accounts		
SBI-10521277057 NON PLAN	5,627,835	114,997,809
SBI-10521277068 (PLAN GRANT)	3,166,583	4,356,829
Total	8,794,418	119,354,638
In Savings Accounts		
SBI-10521277818(CORPUS FUND)	311,532	4,204,383
SBI-10521278197(GRATUITY FUND)	8,662,199	1,907,818
SBI-30052416379(STAFF DEV FUN)	447,973	635,344
SBI-30052438520(DEPRECIATION FUND)	2,097,377	1,015,192
SBI-30052443879(MAINT.FUND)	2,315,820	292,095
AXIS-10049704315 (PLAN)	2,795,699	1,141,003
SBI-10521278244 (SCHOLARSHIP)	2,118,504	2,472,814
SBI-30432905766 (OBC)	1,043,071	1,003,166
SBI-30763009570(NONPLAN FEE)	313,967	4,566,176
SBI-30293190682(TUC)	321,212	308,938
SBI-30422523520(ANNA-GA-ANFIS)		25
SBI-30468295090(SOLVENT FREE OXI)		38
SBI-30780415571(RPS SCHEME)	9,189,691	10,187,815
SBI-30780416041(MODROBS)	1,291,465	1,183,289
SBI-31306562769(BEHAVIOUR OF CLAY)	930,799	1,599,193
SBI-31306566082(REG EXTRM RAINFALL)	1,145,663	1,101,885
Total	32,984,972	31,619,174

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE : 8 : LOANS, ADVANCE AND DEPOSITS

(Amount in Rupees)

PARTICULARS	Current Year	Previous Year
1. Advances to employees (Non-interest bearing) :		
10.01.01.Festival Advance	291,720	535,520
10.01.02.HTC Advance	166,000	19,000
10.01.03.LTC Advance	70,000	55,200
10.01.04 Other Advance To Employees		
10.01.04.01 Recoverable Advance	1,529,610	1,261,546
10.01.04.02 TA Advance	131,469	120,000
2. Long Term Advances to employees: (Interest bearing) :		
a) Vehicle Loan		
b) Home Loan		
c) Soft Loan	962,496	1,751,042
3. Advances and other amounts recoverable in cash or in kind or for value to be received :		
a) On Capital Account		
10.03.01.01.Deposit Work	161,236,625	295,263,540
10.03.01.02.Secured Advance	3,220,000	86,012,000
10.03.01.03.Advance - PHE Water Supply	2,583,025	65,396
10.03.01.04.Margin Money for LC	-	5,336,652
10.03.01.05.Mobilisation Adv- NCC Ltd	56,300,000	85,800,000
b) to Suppliers/Firm		
c) Others		
i) Electricity Consumption Receivable	-	433,269
ii) House Rent receivable	8,734	10,850
iii) Shop & Canteen Rent receivable	44,593	38,869
iv) Advance Tax	1,263,619	
4. Prepaid Expenses :		
a) Insurance	40,443	41,747
b) Against E Journal	10,324,815	12,610,567
c) Digital Library	-	10,625
d) Printed Jpournal	146,880	
5. Deposits :		
a) Telephone		
b) Lease Rent		
c) Electricity	400,854	400,854
d) AICTE		
e) SBI ATM (TDR)	10,000	10,000
f) Security for POL	162,084	162,084

Continued....

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2015

SCHEDULE : 8 : LOANS, ADVANCE AND DEPOSITS (Continuation)

PARTICULARS	Current Year	Previous Year
6. Income Accrued :		
a) On investments from Earmarked / Endowment Fund	41,103,084	35,050,566
b) On Investment - Others	432,848	2,754,536
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	16,000
b) Debit balances in sponsored Fellowship & Scholarships		
c) Grants receivable	610,000,000	192,437,500
d) Grants receivable from UGC		
8. Claims receivable :	76,488	343,079
Total	890,519,957	720,540,442

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR ASSAM

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	135,853,750	62,873,503
2. Admission fee	2,324,780	16,910,290
3. Enrolment fee		-
4. Library Admission fee	1,463,060	1,323,500
5. Laboratory fee - I T System fee	4,292,250	3,963,000
6. Art & Craft fee		-
7. Registration fee / Institutional fee	177,660	172,500
8. Syllabus fee	-	
Total (A)	144,111,500	85,242,793
Examinations		
1. Admission test fee		-
2. Annual Examination fee	2,420,110	2,206,000
3. Mark sheet, certificate fee		-
4. Entrance fee		-
Total (B)	2,420,110	2,206,000
Others Fees		
1. Identity card fee		-
2. Fine/Miscellaneous fee	311,185	313,037
3. Medical fee	858,600	797,706
4. Transportation fee	866,318	801,000
5. Hostel fee - Light & Water charges		3,158,000
6. Migration fee		8,000
7. Summer term course fee	221,900	856,700
8. Verification fee		22,400
Total (C)	2,258,003	5,956,843
Sale of Publications		
1. Sale of Admission forms		
2. Sale of syllabus and question paper, etc.		
3. Sale of prospectus including admission forms		
Total (D)		
Other Academic Receipts		
1. Registration fee for workshops, programmes		
2. Registration fee (Academic Staff College)		
3. Training & Placement	316,000	304,500
Total (E)	316,000	304,500
Grand Total (A+B+C+D+E)	149,105,613	93,710,136

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR ASSAM
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	361,228,157	361,228,157	63,265,837	424,493,994	739,505,938	104,013,000	843,518,938
Add: Receipts during the year	10025,00,000	1,002,500,000	300,000,000	13025,00,000	1,050,000,000	267,500,000	1,317,500,000
Total	13637,28,157	1,363,728,157	363,265,837	17269,93,994	1,789,505,938	371,513,000	2,161,018,938
Less: Refund to Ministry	-	-	-	-	-	-	-
Balance	13637,28,157	1,363,728,157	363,265,837	17269,93,994	1,789,505,938	371,513,000	2,161,018,938
Less: Utilized for Capital expenditure (A)	10305,29,754	1,030,529,754	-	1,030,529,754	1,306,159,290	-	1,306,159,290
Balance	333,198,403	333,198,403	363,265,837	696,464,240	483,346,648	371,513,000	854,859,648
Less: Utilized for Revenue expenditure (B)	47,897,032	47,897,032	363,265,837	411,162,869	122,118,491	308,247,163	430,365,654
Balance C/F (C)	285,301,371	285,301,371	-	285,301,371	361,228,157	63,265,837	424,493,994

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

Schedule 11 - INCOME FROM INVESTMENT

(Amount in Rupees)

PARTICULARS	Earmarked/Endowment Funds		Other Investments	
	Current Year	Previous Year	Current Year	Previous Year
1. Interest				
a. On Government Securities				
b. Other Bonds/Debentures				
2. Interest on Term Deposits			1,327,332	1,604,652
Interest on Stock Term Deposits from AXIS Bank			262,562	1,139,208
Interest on Term Deposits against short term deposits.				7,449,858
3. Income accrued but not due on Term Deposits			431,583	
4. Interest on Savings Bank Accounts				
5. Others (Specify)			2,021,477	10,193,718
Transferred to Earmarked/Endowment Funds				
Balance	Nil	Nil		

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR: ASSAM
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	630,355	531,717
Against OBC account no. 30432905766	40,063	38,954
Against Scholarship account no. 10521278244	122,956	125,058
Others	-	60,258
Total (A)	793,374	755,987
2. On Loans		
a. Employees/Staff - Interest on Soft Loan	147,453	74,942
b. Others - Against Interest recovery of LTC/HTC	8,621	20,455
Total (B)	156,074	95,397
3. On Debtors and Other Receivables		
Total (C)		
Grand Total (A+B+C)	949,448	851,384

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR: ASSAM

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 13- OTHER INCOME

<i>(Amount in Rupees)</i>		
A. Income from Land & Buildings	Current Year	Previous Year
1. Hostel room Rent	1,452,810	1,178,086
2. License fee	2,127,686	1,007,488
3. Hire Charges of Auditorium/Play ground/Convention Centre, Shop etc.	770,087	652,477
4. Guest House Rent	1,471,940	1,584,809
5. Electricity charges recovered	3,892,032	3,847,468
6. Light & Water charges recovered	2,608,200	-
Total	12,322,755	8,270,328
B. Sale of Institute's Publications		
C. Income from holding events		
1. Gross Receipts from annual function/sports carnival Less: Direct expenditure incurred on the annual function/sports carnival		
2. Gross Receipts from fetes Less: Direct expenditure incurred on the fetes		
3. Gross Receipts for educational tours Less: Direct expenditure incurred on the tours		
4. Others (to be specified and sepoerately disclosed)		
Total		
D. Others		
1. Income from consultancy		
2. RTI Fees	1,226	1,040
3. Income from Royalty		-
4. Sale of application form (recruitment)	611,783	239,845
5. Misc. receipts (sale of tender form, waste paper, etc.)	153,850	388,350
6. Profit on sale/disposal of Assets		
a) Owned assets		1,043,771
b) assets received free of cost		-
7. Grants/Dobnations from Institutions, Welfare Bodies and International Organisations		
8. Others (specify)		
a) Misc. Receipts	982,845.74	695,914
Total	1,749,704	2,368,920
Grand Total (A+B+C)	14,072,459	10,639,248

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

SCHEDULE 14- PRIOR PERIOD INCOME

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

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

SCHEDULE 15 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

Particulars	Current Year			previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
	(Amount in Rupees)					
A) Salaries and Wages						
i) Teaching & Admin		133,625,928	133,625,928		119,522,163	119,522,163
ii) Group B & C		43,502,316	43,502,316		44,141,956	44,141,956
iii) Group D		33,285,331	33,285,331		36,610,087	36,610,087
B) Other Adhoc						
i) Salary of outsourced staff		10,291,779	10,291,779		12,810,573	12,810,573
ii) Salary of Contractual Teaching & Admin		23,619,172	23,619,172		17,597,867	17,597,867
iii) Salary of M R Staff		9,082,556	9,082,556		8,364,740	8,364,740
b) Allowances & Bonus						
i) Bonus		666,622	666,622		831,108	831,108
ii) Cumulative Professional Dev. Allowance		13,138,904	13,138,904		4,031,297	4,031,297
c) Contribution to Contributory Provident Fund					641,541	641,541
d) Contribution to Other Fund						
i) NPS Contribution		5,337,198	5,337,198		4,492,589	4,492,589
ii) Pension contribution (Deputation)		209,508	209,508		181,603	181,603
e) Staff Welfare Expenses						
i) Mobile & Telephone expenditure		736,106	736,106		688,876	688,876
f) Retirement and Terminal Benefits						
i) Death cum Retirement Gratuity						
ii) Pension		20,534,613	20,534,613		9,582,008	9,582,008
iii) Commuted Pension		26,139,685	26,139,685		11,769,407	11,769,407
iv) Leave Encashment		12,749,048	12,749,048		7,355,870	7,355,870
v) Leave Salary (Deputation)		10,541,262	10,541,262		9,515,308	9,515,308
g) LTC facility		126,198	126,198		104,737	104,737
i) Home Travel Concession		1,072,354	1,072,354		702,187	702,187
ii) Leave Travel Concession		1,434,276	1,434,276		3,820,253	3,820,253
h) Medical facility						
i) Medical Reimbursement		2,597,455	2,597,455		2,045,863	2,045,863
ii) Medicine & Dispensary expenses		2,316,585	2,316,585		1,676,488	1,676,488
i) Children Education Allowances					1,535,571	1,535,571
j) Honorarium		624,000	624,000		431,950	431,950
k) Others :						
i) Security Services		16,899,276	16,899,276		13,830,031	13,830,031
ii) House Keeping		3,818,790	3,818,790		2,426,028	2,426,028
ii) Joining Time TA		228,476	228,476		351,170	351,170
iii) Relocation Charges		231,093	231,093		358,333	358,333
Total	0	372,808,531	372,808,531	-	315,419,604	315,419,604

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

SCHEDULE 15 A - EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

(Amount in Rupees)

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

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 16- ACADEMIC EXPENSES

(Amount in Rupees)

Particulars	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Laboratories expenses		1,914,577	1,914,577		1,942,607	1,942,607
b) Field work/Participation in Conferences			-			-
c) Expenses on Seminars/workshops		908,821	908,821		210,382	210,382
d) Payment to visiting faculty		540,357	540,357		285,000	285,000
e) Examination		1,557,599	1,557,599		1,658,965	1,658,965
f) Students Welfare expenses - Student Internship			-		53,641	53,641
g) Admission expenses			-			-
h) Convocation expenses		2,240,086	2,240,086		2,791,097	2,791,097
i) Publications			-			-
j) Stipend/Means-cum-Merit Scholarship	44,761,662	3,768,000	48,529,662	30,044,663		30,044,663
k) Subscription expenses			-			-
l) Contingency to Ph.D. Scholars		588,846	588,846		325,646	325,646
m) Students Project		669,326	669,326		1,398,831	1,398,831
n) Library Contingency		396,190	396,190		194,918	194,918
o) Industry Institute Partnership exp			-		413,197	413,197
p) Others			-			-
Internship Exp		156,524	156,524		-	-
Industry Visit (MBA)		113,455	113,455		-	-
Student Orientation Program		73,040	73,040		-	-
l) Summer Term Course Expenses		275,000	275,000			-
Total	44,761,662	13,201,821	57,963,483			39,318,947

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT

SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES

(Amount in Rupees)

	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
A. Infrastructure						
a) Electricity		24,426,857	24,426,857		18,786,190	18,786,190
b) Water Charges		2,876,941	2,876,941		3,539,430	3,539,430
c) Insurance			-		-	-
d) Rent, Rates Taxes (including Property Tax)			-		-	-
B. Communication						
e) Postage and Stationery		75,059	75,059		114,014	114,014
f) Telephone, Fax and Internet Charges		1,899,210	1,899,210		2,166,704	2,166,704
C. Others						
g) Printing and Stationery (consumption)		2,943,772	2,943,772		2,020,091	2,020,091
h) Travelling and Conveyance Expenses		4,902,943	4,902,943		4,261,599	4,261,599
i) Hospitality		309,183	309,183		458,367	458,367
j) Auditors Remuneration		689,220	689,220		412,000	412,000
k) Professional Charges - Legal fee		750,091	750,091		384,938	384,938
l) Advertisement and Publicity		2,764,021	2,764,021		2,608,363	2,608,363
m) Magazines & Journals - News paper		84,150	84,150		24,735	24,735
n) Training & Placement exemes		910,646	910,646		1,045,120	1,045,120
o) Board & Committee meeting		5,439,674	5,439,674		2,941,465	2,941,465
p) Computer Consumable		482,803	482,803		690,355	690,355
q) Initiative to foster Social Responsibility			-		100,000	100,000
r) Misc. Expenses		551,158	551,158		963,373	963,373
s) Leverage			-		9,884	9,884
t) Gyan Sagar expenses		45,303	45,303		516,056	516,056
u) Celebration of National Day		298,526	298,526		186,105	186,105
v) NCC & NSS Activity		241,551	241,551		190,193	190,193
w) Promotion of Rashtra Bhasha		34,852	34,852		75,605	75,605
x) Consumable expenses		419,970	419,970		917,734	917,734
y) Academic Audit Exp		1,059,929	1,059,929			
z) Contingency Exp		5,299	5,299			
aa) Border Village Developemt Exp		35,765	35,765			
bb) Tranist House Rent		135,893	135,893			
cc) Adward & Prizes		67,500	67,500			
dd) ETH Project Exp		5,925	5,925			
ee) HPC Cell Expenses		100,220	100,220			

Continued....

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

SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES (Continuation)

(Amount in Rupees)

	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
ff) Incubation Centre CDAC		3,668,585	3,668,585			
gg) Innovation Lab Exp		233,476	233,476			
hh) Other Admin Exp		53,716	53,716			
ii) Registration/Nomination fee		122,295	122,295			
jj) RPC Project Exp		98,025	98,025			
kk) Short Term Training Program		21,510	21,510			
ll) Smart Card Facility		90,005	90,005			
mm) Telemedicine Project (CDAC)		8,008	8,008			
nn) Upgradation of Supporting Staff		37,500	37,500			
oo) Mobilization expenditure	3135370		3,135,370			
TOTAL	3,135,370	55,889,581	59,024,951	-	42,412,321	42,412,321

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

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		1,524,715	1,524,715		1,484,943	1,484,943
b) Running Expenses			0			0
c) Insurance Expenses		113,152	113,152		134,886	134,886
2. Vehicles taken by Rent/Lease			0			0
a) Rent/Lease Expenses			0			0
3. Vehicle (Taxi) hiring Expenses			0			0
TOTAL		1,637,867	1,637,867	0	1,619,829	1,619,829

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

SCHEDULE 19 - REPAIRS & MAINTENANCE

(Amount in Rupees)

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Buildings		7,570,947	7,570,947		8,824,444	8,824,444
b) Furniture & Fixtures		716,911	716,911		1,149,779	1,149,779
c) Plant & Machinery			0		1,788,393	1,788,393
e) Office Equipment		989,052	989,052			0
f) Scientific Equipment - (Digital Labrary)		10,625	10,625		91,500	91,500
g) Audio Visual Equipment			0			0
h) Cleaning Materials & Casual work		158,845	158,845		541,764	541,764
i) Book Binding Charges			0		20,955	20,955
j) Gardening		820,543	820,543		908,351	908,351
k) Estate Maintenance (Electrical)		2,545,620	2,545,620		2,553,182	2,553,182
l) Bio Gas Contingency expenses		30,500	30,500		35,144	35,144
m) D G Set		3,868,334	3,868,334		3,789,005	3,789,005
n) Networking		657,805	657,805		992,292	992,292
o) Guest House Maintenances		186,524	186,524		0	0
TOTAL		17,555,706	17,555,706	0	20,694,809	20,694,809

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

SCHEDULE 20 - FINANCE COSTS

(Amount in Rupees)

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Bank Charges		69,854	69,854		34,835	34,835
b) Others			-			
TOTAL	-	69,854	69,854	-	34,835	34,835

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

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		17,000,000	17,000,000		10,000,000	10,000,000
d) Salaries to NITS-KIDS staff		667,710	667,710		865,309	865,309
TOTAL		17,667,710	17,667,710		10,865,309	10,865,309

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

SCHEDULE 22 - PRIOR PERIOD EXPENSES

(Amount in Rupees)

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1) Establishment Expenses						
2) Academic Expenses						
3) Administrative Expenses						
4) Transportation Expenses						
5) Repair & Maintenance						
6) Others						
TOTAL						0

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

SIGNIFICANT ACCOUNTING POLICIES

SCHEDULE: 23

1. BASIS FOR PREPARATION OF ACCOUNTS

The financial statements are prepared under the Historical cost convention and on the basis of generally accepted accounting principles in India. Institute's accounts are maintained on accrual system of accounting in terms of the New System.

2. REVENUE RECOGNITION

- 2.1 Fees from students (except Tuition Fees), Sale of admission Forms, Interest on Savings Bank account are accounted on cash basis. Tuition Fees collected separately for each semester is accounted on accrual basis.
- 2.2 Income from Land, Buildings Other Property and Interest on Investments are accounted on accrual basis.
- 2.3 Interest on interest bearing advances staff for Soft Loan is accounted on actual basis every year.

3. FIXED ASSETS AND DEPRECIATION

- 3.1 Fixed assets are stated at cost of acquisition including inward freight, duties and taxes and incidental and direct expenses related to acquisition and commissioning..
- 3.2 Fixed assets are valued at cost less accumulated depreciation on Fixed assets is provided on written down value method, as followed in earlier years, at the following rates. However, new rates as per Govt. of India guide lines will be given effect on depreciation including calculation on straight line method from 2015-16.

The rate of depreciation for the year 2014-15 are as follows :-

Tangible Assets

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):

15. E-Journals	100%
16. Computer Software	15%

3.3 Depreciation is worked out 100% on the opening balance and at the number of days from date of receipt proportionately. During the year 2013-14, Depreciation charged has been directly transferred to Plan grant liability account now charged under Income & Expenditure account.

3.4 Where an asset is fully depreciated, it will be carried at a residual value of Re.1 in the Balance sheet and will not be further depreciated. Thereafter, depreciation is calculated on the additions of each year separately at the rate of depreciation applicable for that asset head.

3.5 Assets created out Earmarked Funds and of Sponsored projects, are setup by credit to Capital Fund and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets.

3.6 Assets the individual value of each of which is Rs. 5000 or less are treated as Small Value Assets, 30% depreciation is provided in respect of such assets at the time of their acquisition. However physical accounting and control are continued by the holders of such assets.

3.7 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 academic and Research Staff, 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.

3.8 Expenditure on acquisition of software has been separated from computers and peripherals, as apart from being intangible assets, the rate of obsolescence in respect of these is very high. Depreciation is provided in respect of Software at a rate of 15%.

4. **STOCKS:** Expenditure on purchase of chemicals, glassware, publications other stores as revenue expenditure, they are valued cost.

5. RETIREMENT BENEFITS

Retirement benefits of employees appointed prior to the year 2004 and 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 Bank Fixed Deposit receipts. 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. Each of the funds has a 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. This fund will be administered as per guide lines of the BOG.

9. GOVERNEMENT GRANTS

- 9.1 Government Grants are accounted on realization basis. However, where a sanction for release of grant pertaining to the financial year is received before 31st March and the grant is actually received in the next financial year, the grant is accounted on accrual basis and an equal amount is shown as receivable from the Grantor.
- 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, as income of the year in which they are realized.
- 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 INVESTMENTS:

To the extent not immediately required for the expenditure, the amounts available against such funds are invested in fixed term with Banks, leaving the balance in savings Bank Accounts.

Interest received, interest accrued due and interest accrued but not due on such investments are added to the respective funds and not treated 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.

13. INCOME TAX.

The income of the Institution is exempt from Income Tax under section 10(23c) of the Income Tax Act. No provision for tax is therefore made in the accounts.

Registrar

Director

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

CONTINGENT LIABILITIES AND NOTE TO ACCOUNTS (ILLUSTRATIVE)

SCHEDULE: 24

1. CONTINGENT LIABILITIES:

- 1.1 As on 31.03.15, Court Case filed against the Institution, by Muster Roll employees, were pending for decisions. The suits filed by M R employees were establishment related and the quantum of the claims in respect of EPF liability yet to be ascertained.
- 1.2 Another Court case against Sri P L Choudhury, Ex Registrar is lying with Supreme Court is pending for decisions. Total financial liability against said case is also yet to be ascertained.

2. CAPITAL COMMITMENTS

The value of the ongoing contract works remaining to be executed on Capital account and not provided for amounted to Rs.17876.47 lacs as on 31.03.15

3. FIXED ASSETS:

- 3.1 Addition in the year to Fixed Assets in Schedule 4 include Assets purchased out of Plan Funds Rs. 10305,29,754/- and Sponsored Projects Rs. 72,15,420/-. The assets have been set up by credit to Capital Fund.
- 3.2 In the Balance Sheet as on 31.03.15 and the Balance Sheets earlier years, fixed assets created out of Plan funds were exhibited distinctly. The additions during the years, from plan and non-plan Funds, and other funds, and the depreciation on those additions respectively have been exhibited distinctly in Sub Schedules A,B C and D to the main schedules of Fixed Assets (Schedules 4).
- 3.3 Fixed assets as set out in schedule 4 includes assets purchased out of funds of sponsored projects, held and used by the Institution.

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 at least to the aggregate amount shown in the Balance Sheet.

5. The details of the Balances in the Savings Bank accounts, Current accounts and Fixed Deposit Accounts with Banks are enclosed as schedule of Investment and schedule 7A of Schedule of Current assets.
6. Previous year's figures have been regrouped wherever necessary.
7. Figures in the Final accounts have been rounded off to the nearest rupee.
8. Schedules 1 to 24 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.

- 9 As the provident fund accounts and the New Pension Scheme account are owned by the members of those funds and not by the Institution, these accounts were separated from the Institution's Accounts. A Receipt & Payments Account, an Income & expenditure Account (on accrual basis) and a balance sheet of the Provident fund Accounts as well as the New Pension Schemes for the year 2014-15 have been attached, to the Institution's accounts. A large portion of the New Pension Scheme funds (Rs. 93,69,160/-) in respect of 86 employee who have been allotted PRA numbers has been transferred up to February 2015 to National Securities depository Limited (NSDL) – Central Record keeping Agency (CRA). The balance held in New Pension Scheme in the Institution in respect of about 11 members amounting to Rs.15,56,538/- will be transferred to NSDL, once the PRA numbers are allotted by the agency.

Dated, Silchar

The 13th May 2015

Registrar

Director

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
RECEIPT AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2015

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
I. Opening Balances:					
a) Cash Balances	7,921	240,117	a) Establishment expenses (Sch-15)	372,808,531	315,419,604
b) Bank Balance			b) Academic Expenses (Sch-16)	57,963,483	39,318,947
i. In Current Accounts	119,354,638	407,404,114	c) Administrative Expenses (Sch-17)	59,024,951	42,412,321
ii. Savings Account	31,619,111	7,960,760	d) Transportation Expenses (Sch-18)	1,637,867	1,619,829
II. Grants Received:			e) Repairs & Maintenance (Sch-19)	17,555,706	20,694,809
a) Plan Grant: From Government of India	1,002,500,000	1,050,000,000	f) Prior Period Expenses (Sch-22)		0
b) Non-Plan Grant: From Govt of India	300,000,000	267,500,000	g) Finance Cost (Sch-20)	69,854	34,835
Grants-in-Aid Receivable :			h) Other Expenses (Sch-21)	17,667,710	10,865,309
a) Plan Grant: From Government of India	192,437,500	1,090,362,500	II. Payments against	144,749,124	143,245,854
b) Non-Plan Grant: From Govt of India	0	366,400,000	Earmarked/Endowment Funds		
III. Academic Receipts – (Sch-9)	149,105,613	93,710,136	III. Payments against Sponsored	8,761,538	
IV. Receipts against Earmarked/ Endowment Funds	33,344,590	138,485,580	Projects/Schemes		
V. Receipts against Sponsored Project:			Misc Payments against Grant/ Conference	3,167,329	0
Grants Received from AICTE/GOI	6,753,160		IV. Payments against Sponsored	7,207,021	6,132,742
Other Misc Receipts against Conference	4,327,487	0	Fellowships/Scholarships		
VI. Receipts against sponsored Fellowships & Scholarships	6,730,015	5,132,990	V. Investments and Deposits made	74,000,000	185,000,000
			a) Out of Earmarked		
			b) Out of own funds (Investments-others)	130,364,511	580,022,000
			VI. Term Deposits with Schedule Banks		
			VII. Expenditure on Fixed Assets and Capital Works- in -Progress		
			a) Fixed Assets	174,850,540	353,283,517

RECEIPT AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2015

RECEIPTS		PAYMENTS		(Amount in Rupees)	
	Current Year	Previous Year		Current Year	Previous Year
VII. Income on Investments from					
a) Earmarked/Endowment funds	40,843,582	2,810,957	b) Capital works -in- Progress	855,679,214	1,039,757,207
b) Other investments -(Sch--11)	2,021,477	10,193,718	Viii. Other Payments including statutory	50,766,239	75,030,998
VIII. Interest received (Sch-12)			IX. Refund of Grants		
a) Bank Deposit			X. Deposits and Advances	436,201,750	616,841,019
b) Loans and Advances	156,074	95,397	XI. Other Payments	961,890,031	1,476,117,103
c) Savings Bank Account	793,374	755,987			
d) Against Project Account	615,251				
IX. Investments encashed					
X. Term Deposits with Scheduled Banks encashed	327,866,101	564,620,630	XII. Closing balances		
XI. Other income (including prior Period Income) (Sch-13)	14,072,459	10,639,248	a) Cash in hands	38,169.00	7,921
XII. Deposits and Advances			b) Bank balances		
Plant Machinery & Equipment	7,136,653	21,818,238	i. In Current Accounts	8,794,418	119,354,638
			iii. Savings Account	32,984,972	17,237,991
Other Deposits	33,029,780	108,619,379			
Loans & Advances	678,271,050	445,666,801			
XIII. Miscellaneous Receipts including Statutory Receipts	69,808,720	96,632,953			
XIV. Any other Receipts	395,388,403	353,347,139			
TOTAL	3,416,182,960	5,042,396,644	TOTAL	3,416,182,960	5,042,396,644

Dated, Silchar

The 13th May 2015

Registrar

Director

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
PLAN GRANT : RECEIVED FROM GOVT OF INDIA:		
PLAN GRANT GENERAL 112-31	55,431,000	284,603,000
PLAN GRANT GENERAL 112-35	748,694,000	523,988,250
PLAN GRANT SC 789-31	10,500,000	81,920,000
PLAN GRANT SC 789-35	118,875,000	76,812,500
PLAN GRANT ST 796-31	4,520,000	52,920,000
PLAN GRANT ST 796-35	64,480,000	29,756,250
Total	1,002,500,000	1,050,000,000
NON PLAN GRANT: RECEIVED FROM GOVT OF INDIA		
NON PLAN GRANT GENERAL 31	133,632,000	78,750,000
NON PLAN GRANT SALARIES 36	166,368,000	188,750,000
Total	300,000,000	267,500,000
GRANTS-IN-AID RECEIVABLE FROM GOVT OF INDIA:		
.Grant Receivable Plan	192,437,500	1,090,362,500
.Grant Receivable Non Plan	0	366,400,000
Total	192,437,500	1,456,762,500
OTHER MISC. GRANTS/Sponsorship		
Received from SERB (DST)	850,000	
Received from CBSE	90,000	
Grants received fro NMEICT	245,753	
NRDC Grants	300,000	
Against SocPros 2014	894,831	
INDEST 2014	1,685,803	
WNL WORKSOP	261,100	
Total	4,327,487	0

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

<i>(Amount in Rupees)</i>		
Particulars	Current Year	Previous Year
EARMARKED / ENDOWMENT FUND:		
Pension Fund Contribution	28,100,672	9,828,736
Interest on Contribution (CPF)		1,171,351
Depreciation Fund	591,718	6,599,382
Maintenance Fund	38,759	6,154,529
Staff Dev Fund	527,119	1,399,443
Student Welfare Fund	119,636	169,159
Institute Development Fund	478,540	676,630
Employee's Welfare Fund	119,636	169,158
Departmental Promotion Fund	478,540	676,630
Saswata Purkayastha Award Fund		3,500
Manish Roy Memorial Scholarship Fund	200,000	
Gratuity Fund		3,312,722
Student Aid Fund	379,200	993,755
Total (A)	31,033,820	31,154,995
CORPUS FUND		
Corpus Fund		3,317,585
Corpus fee received from Students	474,750	
Migration fee (Charged under income of Corpus Fund)	13,100	
Institute Share from Transcript fee	280,320	
Received from Development fee	1,542,600	
Total (B)	2,310,770	3,317,585
GENERAL FUND		
Capital Fund		
Reserves & Surpluses		104,013,000
Total (C)	-	104,013,000
Grand Total (A + B + C)	33,344,590	138,485,580

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
INTEREST RECEIVED FROM EARMARKED FUND:		
Depreciation Fund Interest on Investment	2,228,739	
Depreciation Fund Interest on Savings Account	184,282	
Maintenance Fund Interest on Investment	1,733,267	
Maintenance Fund Interest on Savings Account	152,404	
Staff Dev. Fund Interest on Investment	7,831	
Staff Dev Fund Interest on Savings Account	80,168	
Gratuity Fund Interest on Investment	252,811	
Gratuity Fund Interest on Savings Account	240,397	
Corpus Fund interest on Savings Bank	293,837	
Interest on Investment against Corpus Fund	8,925	
Interest on Mobilization Advance	13,996,812	1,742,464
Plan Grant Interest	0	1,068,493
Interest Accrued During the Year:		
Corpus Fund	5,881,163	
Gratuity Fund	3,158,082	
Depreciation Fund	5,709,005	
Maintenance Fund	5,972,930	
Staff Development Fund	942,929	
Non-Plan Fund		
Total	40,843,582	2,810,957
SPONSORED PROJECTS:		
Grants Received against Sponsored Projects		
MICT : GOI	1,329,735	
ICSSR : GOI	103,425	
SERB : GOI	5,320,000	
Total	6,753,160	-

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

<i>(Amount in Rupees)</i>		
Particulars	Current Year	Previous Year
Interest received from Sponsored projects a/c.	615,251	
Total	615,251	-
MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS:		
Provision -TAX:		
VAT	21,968,783	39,130,721
INCOME TAX (Against Salary & Contrats)	23,696,693	28,629,833
PROFESSIONAL TAX	863,985	950,106
SERVICE TAX	938,120	576,120
Labour Cess	3,299,366	5,743,802
GSLI	760,080	806,410
CPF Subscription		545,536
CPF Voluntary Deposit		283,500
GPF Advance Recovery	2,842,851	4,055,741
GPF	224,000	180,000
GPF Subscription	10,448,300	11,238,595
NPS Subscription	4,766,542	4,492,589
Total	69,808,720	96,632,953
VI. Receipts against sposed Fellowships and Scholarships		
Outside Scholarship Payable	6,730,015	5,132,990
Total	6,730,015	5,132,990
Other Deposits		
Hostel Caution Money	1,250,000	4,733,800
Institute Caution Money	1,765,200	1,908,000
Sundry Creditors		
Godrej Mfg Co. Ltd	1460069	61,422,192
ILFS Technology	1,204,575	
NCC Ltd	4,680,000	

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

Particulars	<i>(Amount in Rupees)</i>	
	Current Year	Previous Year
EMD	3,813,090	
SD	12,336,023	
Load Security	16,625	
Agni Power & Electronics Pvt Ltd	2,722,000	
Realsoft Corpn	30,000	
NRFCC BRNS Projects		530,000
Gratuity Fund- From Other Organisation		246,052
Alumini Association Fee	958,000	951,000
K.K Mrinalini Kroni Gold Medal Fund		110,000
CSIR - NISTADS		50,000
29th Convention Seminer(Library)		200,000
CCTV Payable	736,391	700,856
Court Recovery Payable		12,000
Deposit Remittance	1,140,953	1,812,009
Group Insurance Claim	894,933	633,992
Gymkhana	4,188,000	3,920,200
Hostel Management	1,371,362	1,268,000
Hostel Welfare	79,320	77,120
Institute Share on Consultancy		687,619
Intel Big Idea		
JEE (MAIN)-2013	20,000	82,000
Leave Encashment Payable		
Leave Encashment Payable (Other Org)		96,024
Mess Dues	6,478	
Liability Towards DCRG	341,610	120,000
L.I.C.I Payable	6,021,033	5,722,370
LTC Exp Payable		

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
Mediclaime Insurance	2,450,149	925,757
Mess Advance	326,500	4,720,000
Mess Establishment	2,147,000	2,065,000
Payable to TEQIP-II (TA Adv)		30,000
Processing Charges	516,250	473,800
Red Ribbon Club		
Refundable Excess Deposit	2,111,653	473,278
Seminar Grant		
Salary Teach/Admin Payable		
Student Mediclaime	76,476	317,839
Fees Received In Advanced	29,187,439	23,561,870
Transcript Fee	747,425	596,700
Soil Test Charges (Payable)		416,182
Verification fee	39,300	
Consultancy charges payable to Civil Engg. Department	150,000	
Unclassified receipts	244,136	
Provisions		
Superannuation/Pension		
Outstanding Exp (Nonplan - Committed Liability))	47,700,359	11,838,261
Provision Others (Plan)	154,656,054	222,645,218
Loan from Depreciation Fund account	55,000,000	
Loan from Maintenance Fund account	55,000,000	
Grand Total	395,388,403	353,347,139

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
Other Deposits		
Plant, Machinery & Equipments		
100kwp Solar Photovoltaic Power Plant		24,300,000
Vehicles		11,442
Library Books & Learning Recources		
Book Bank SC/ST Books		312,977
Books		12,605
Cost of Books		12,605
Junior Engg Staff Salary		1,055,653
Mobilisation Exp		1,640,862
Internal Road Phase-III (WIP)		17,073,548
Equipments of Mechanical Engg (U/E)		17,056,825
Internal Road (WIP)		16,078,319
Security Barrack -II (WIP)		8,930,616
Security Posts 3 Nos (WIP)		395,982
Prepaid Expenses		
Prepaid E-Journals	12,610,567	5,179,269
Prepaid Insurance	41,747	66,723
Prepaid Exp - Maint. of Digital Library	10,625	
Prepaid Printed Journals		2,503,321
Accrued Income (Received)		
Accrued Interest on Caution Money	1,149,884	
Accrued Interest on Corpus Fund	2,112,404	
Accrued Interest on Fee A/c Investment	1,603,387	
Accrued Interest on Gratuity Fund	2,101,230	2,877,157
Accrued Interest on Maintenance Fund	2,072,496	
Accrued Interest on Staff Dev Fund	1,853,342	

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
Accrued Interst on Depreciation Fund	7,472,119	
Other Receivable		
Electricity Consumption Receivable	433,269	74,168
House Rent Recivable	10,850	
Shops & Canteen Rent Recivable	38,869	135,249
Loan to CCB/CCMT	328,241	300,000
From CDAC	1,066,804	
Loan to CSAB		248,598
Temporary loan from Project account	41973	
Loan to TEQIP		10,000,000
Advance Tax	81,973	
Claims Receivable		
Group Insuracne Claim Receivable		353,460
Grand Total	33,029,780	108,619,379
Investments (Matured)		
Long Term Investment		
Investment of Gratuity Fund	8,659,943	14,620,630
Investment of Maintenace Fund	61,565,558	
Investment of Corpus Fund	6,691,983	
Investment of Depreciation Fund	86,197,045	
Investment of Staff Dev Fund	5,871,288	
Short Term Investment		
Investment (Non-Plan)	120,732,511	150,000,000
Investment (Nonplan Fees)	30,008,000	
Investment of Caution Money	3,642,770	
Investment (Plan- Margin Money A/C)	4,497,003	400,000,000
Grand Total	327,866,101	564,620,630

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
Margin Money for LC	7,136,653	21,818,238
Total	7,136,653	21,818,238
Loans,Advances & Deposits		
Advance to Employees		
HTC Advance	794,100	759,000
LTC Advance	1,185,400	2,911,780
Other Advance To Employees		
Recoverable Advance	17,063,708	12,514,170
TA Advance	2,487,820	1,179,000
Soft Loan (Staff)	1,335,999	673,900
Festival Advance	1,010,050	706,000
Medical Advance	1,100	1,000
Advance to BRNS		34,406
Loan to CSAB	893,271	
Advance against Sponsored projects	54,000	
Deposit Work		
Deposit Work-CPWD Central School	68,175,554	50,146,446
Deposit Work-CPWD Non/faculty Qtrs	71,765,739	30,192,261
Deposit Work-CPWD New Admin Building	66,045,836	10,254,164
Deposit Work-CPWD Swage Disopl. Sytm	10,326,390	17,306,610
Deposit Work-HPL Married Sch Hostel	291,637,650	222,782,987
Deposit Work-PHE-Agmn Water Supply	17,086,058	
Deposit Work-PHE- Water Supply Scheme	1,223,576	
Deposit Work - CPWD for Internal Road		10,804,148
Secured Advance		
Secured Adv- B.K Construction	2,355,000	
Secured Adv-Gangwal Engineering	27,790,000	8,500,000

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR ENDED 31ST MARCH 2015

DEPOSITS & ADVANCE RECOVERY

(Amount in Rupees)

Particulars	Current Year	Previous Year
Secured Adv- NCC Ltd	59,997,000	45,300,000
Secured Adv-T.K Das & Co.(NABL Lab)	1,100,000	
Secured Adv- Dipak Nath	1,600,000	
Secured Adv- N Bhattacharjee	3,050,000	
Mobilisation Adv- NCC Ltd	29,500,000	22,500,000
Callidai Motor Works Chennai		12,305
Mobilisation Adv - Networking		6,022,093
Advance to Firm		
Adv to Firm - Maverick Technologies		
Adv to Firm - AVL India Pvt Ltd	170,353	
Adv to Firm- Bhabani Offset Pvt Ltd		60,000
Adv to Firm-Central Medical Stores		109,667
Adv to Firm-Drugs & Surgical Mart		77,738
Adv to Firm-Ghosh Enterprise		58,727
Adv to Firm- Gitanjali Drugs		560,226
Adv to Firm- Gupta Tyre & Agencies		97,600
Adv to Firm- Joy Kumar Bardia		200,000
Adv to Firm-Maloti Drug Distributors		86,884
Adv to Firm-Panorama International	1,622,446	1,088,591
Adv to Firm- Perkin Elmer India Pvt Ltd		406,017
Adv to Firm- Radharaman Enterprise		51,059
Adv to Firm-R.L Das & Associates		100,000
Adv to Firm -Taranga Automobiles		120,554
Adv to Firm- Ghosh Marketing Agency		49,468
Total	678,271,050	445,666,801

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNTS FOR
THE YEAR 2013-14

OTHER PAYMENTS, LOANS & ADVANCES:

(Amount in Rupees)

Particulars	Current Year	Previous Year
EARMARKED FUND / ENDOWMENT FUND		
Library Dev. Fund		600
Book Bank SC/ST Fund		457,000
Saswata Purkayastha Award Fund		3,500
Pension fund (Arrear Pension)	34,371,654	
Virtual Classroom		672,400
NMICT Awareness Program Fund		14,426
Student Aid Fund	352,470	133,324
Student Welfare Fund	25,000	
Capital Fund		141,964,604
Loan to Institute from Depreciation Fund account	55,000,000	
Loan to Institute from Maintenance Fund account	55,000,000	
Total	144,749,124	143,245,854
FELLOWSHIP / SCHOLARSHIP		
Outside Scholarship Payable	7,207,021	6,132,742
Total	7,207,021	6,132,742
OTHER MISC. GRANTS/CONFERENCE		
Expenditure against SERB (DST)	806,123	
NMEICT expenses	378,935	
Against SocPros 2014	894,830	
INDEST 2014	1,000,000	
WNL WORKSOP	87,441	
Total	3,167,329	0
INVESTMENTS & DEPOSITS:		
OUT OF EARMARKED/ENDOWMENT FUNDS;		
Investment of Corpus Fund	13,000,000	55,000,000
Investment of Depreciation Fund	40,000,000	55,000,000

(Amount in Rupees)

Particulars	Current Year	Previous Year
Investment of Gratuity Fund	4,500,000	20,000,000
Investment of Maintenance Fund	8,500,000	55,000,000
Staff Development Fund	8,000,000	
Total	74,000,000	185,000,000
OUT OF OWN FUNDS;		
Investment (Non-Plan)	125,232,511	150,000,000
Investment (Nonplan Fees)	0	30,022,000
Investment of Caution Money		
Investment- Margin Money A/C	5,132,000	400,000,000
Total	130,364,511	580,022,000
EXPENDITURE ON FIXED ASSETS		
Intangible Assets		
Software Developments	7,089,501	13,704,153
E-Journals	18,275,006	12,800,211
Tangible Assets		
Buildings		
Asstt.Professors Quarters		51,810
Boys Hostel No.6		2,011,104
Boys Hostel No.7		277,180
Boys Hostel No.8		695,470
Continuing Education Cell Building		2,399,710
Garage for Vehicle		167,311
Girls Hostel-2		1,800,935
Girls Hostel No.1		142,836
Guest House (Old)	271,437	941,918
Hostels Including Spcl Repair	1,236,539	26,280,722
Institute Building Renovation	3,473,947	37,997,362
Renovation of Staff Quater	657,333	
Electrical Renovation	183,800	
KIDS NITS School Building	1,764,190	384,924
LTD Building/Seminer Hall		1,766,192
Production Engg Lab	483,906	608,615
Security Barack - II	137,298	10,553,090
Staff Canteen		402,515
Staff Quarters (Type A,C,D)		26,245,579

(Amount in Rupees)

Particulars	Current Year	Previous Year
Campus Development		
Campus Development/Beautifcation	4,957,940	7,616,698
Childrens Park	208,047	200,238
Renovation of Internal Road & Gate	1,111,315	43,376,816
Road & Power Supply		1,213,603
Boat Club	61,243	
Security Wall	46,394	1,330,146
Sports Field Volley Ball/Tennies	910,218	571,986
Street Lighting	1,724,021	
Plant, Machinery & Equipments		
100kwp Solar Photovoltaic Power Plant	7,051,891	8,875,144
Audio Visual Equipments	427,036	2,440,606
Bio Gas Plant		253,977
Electrical Equipments	1,169,986	2,730,826
Equipments of Health Centre	357,157	293,422
Lab Equipments	41,007,209	54,440,533
Management Information System		94,500
Solar Street Lighting		2,945,700
Solar Regional Test Centre	1,310,897	
L T Line & UG Cabeling	688,880	398,043
Electrical Sub-Station 1 & 2	312,934	
Vehicles		
Vehicles- Bicycle	8,260	120,554
Furniture & Fixtures		
Furniture & Fixture (Kendriya Vidyalaya)		1,646,607
Furniture Including Hostels	13,803,767	19,948,398
Office Equipments		
Office Equipments	8,938,881	2,754,576
Computers & Pheripherals		
Computer Pheriphrls	35,701,007	13,632,143
Library Books & Learning Recources		
Books	3,665,488	3,653,720
Books (Kendriya Vidyalaya)		50,620
Cost of Books		12,605

(Amount in Rupees)

Particulars	Current Year	Previous Year
Tubewells & Water Supply		
Water Supply Distribution Network		344,022
Water Supply Scheme	1,563,812	1,028,276
Other Fixed Assets		
Childrens Park Equipments		2,372,575
Networking	16,251,200	41,705,546
Total	174,850,540	353,283,517
CAPITAL WORK IN PROGRESS:		
Boys Hostel-9 (WIP)	126,681,866	239,327,211
CAD-CAM Centre (WIP)		258,894
Central School Building (WIP)	68,175,554	50,146,446
Director's Bungalow (WIP)		94,232
Hydraulic Lab Building (WIP)	2,307,641	2,823,667
Library Building (WIP)	52,389,312	68,617,470
Market Complex (WIP)		1,536,898
Married Scholar Hostels (WIP)	293,789,946	230,574,690
Material & Mfg Technology Building (WIP)		835,519
New Academic Building(WIP)	42,438,186	24,460,534
New Admin Building(WIP)	66,045,836	12,898,980
Non Faculty Staff Qtrs-100 Nos.(WIP)	71,765,739	34,337,281
Sewarage Disposal System (WIP)	10,326,390	17,306,610
Type (VI)Qtr 12 Units (WIP)	9,041,373	20,759,693
Type (IV) Qtr 30 Units(WIP)	13,073,497	40,746,692
Type (V)Qtr 20 Units (WIP)	18,659,259	20,632,680
Sports Complex (WIP)	13,725,226	254,754,844
Health Care Centre (WIP)	10,737,325	303,481
Expansion of E.E Building (WIP)	9,152,448	269,229
Junior Engg Staff Salary		1,055,653
Mobilisation Exp		1,640,862
Internal Road Phase-III (WIP)		11,317,733
Internal Road (WIP)		1,579,319
Security Barrack -II (WIP)		3,478,589
Mod of Mech-Workshop Bldg	3,103,048	
Eatout Dhaba	1,676,971	
NABL Accrediated Lab Bldg	8302474	

(Amount in Rupees)

Particulars	Current Year	Previous Year
Assam Type Civil Engg Shet	1620545	
Water Supply Scheme	16097611	
Earthquake Engg Lab Bldg	16568967	
Total	855,679,214	1,039,757,207
SPONSORED PROJECTS:		
Expenditure against Sponsored Projects		
Capital Expenditure		
Equipment	4,298,632	
Computer	766,672	
Software	2,125,350	
Furniture	24,766	
Revenue Expenditure	1,546,118	
Total	8,761,538	0
PROVISIONS : (TAX)		
VAT	21,968,491	39,130,721
INCOME TAX	23,696,693	28,629,833
PROFESSIONAL TAX	863,569	950,522
SERVICE TAX	938,120	576,120
Labour Cess	3,299,366	5,743,802
Total	50,766,239	75,030,998
Current Liabilities & Provisions		
Deposits from Students		
Hostel Caution Money	3,350,000	2,525,000
Institute Caution Money	1,308,000	1,084,000
Sundry Creditors		
Creditors for Goods & Services (Incl.EMD & SD)		54,392,595
Godrej Mfg Co Ltd	1,900,131	
EMD	3,559,242	
SD	7,487,053	
Realsoft Corpn	30,000	
Sundry Creditors against DASA	79,105	
Statutory Liabilities		
GSLI Payable	815,610	805,860
CPF Subscription Payable		545,536
CPF Voluntary Deposit		283,500

(Amount in Rupees)

Particulars	Current Year	Previous Year
GPF Advance Recovery	2,586,001	4,055,741
GPF Payable	224,000	180,000
GPF Subscription Payable	9,526,200	11,238,595
NPS Subscription Payable	4,202,122	4,492,589
NRFCC BRNS Projects		417,844
Gratuity Fund- From Other Organisation		
Alumini Association Fee	2,433,359	96,000
K.K Mrinalini Kroni Gold Medal Fund		10,000
CSIR - NISTADS		50,000
29th Convention Seminer(Library)		
Accd Intt From Inv.of Caution Money		731,054
CCTV Payable	287,037	293,975
Children Education Allowance Payable		886
Court Recovery Payable		12,000
Deposit Remittance	556,339	1,937,689
Group Insurance Claim	816,707	1,082,912
Gymkhana	6,597,006	3,411,307
Hostel Management	0	1,500
Hostel Welfare	1,440	
HTC Exp Payable		9,709
Institute Share on Consultancy		687,619
Intel Big Idea		
JEE (MAIN)-2013	20,000	82,000
Leave Encashment Payable		874,697
Leave Encashment Payable (Other Org)		
Liability to CCB		180,000
Liability Towards DCRG	11,000	
L.I.C.I Payable	6,480,522	6,167,388
LTC Exp Payable		16,748
Mediclaim Insurance	1,562,621	1,217,273
Mess Advance	1,026,500	5,635,000
Mess Establishment	759,162	882,922
Payable to TEQIP-II (TA Adv)		
Processing Charges	567,250	454,300
Red Ribbon Club		9,000

(Amount in Rupees)

Particulars	Current Year	Previous Year
Refundable Excess Deposit	2,099,149	646,222
Seminar Grant		50,000
Salary Teach/Admin Payable		94,363
Student Mediclaim	104,964	200,000
Fees Received In Advanced	23,561,870	
Transcript Fee	701,800	506,980
Soil Test Charges (Payable)		416,182
Refunded to Ministry against Sponsored Projects	18,341	
Provisions		
Superannuation/Pension		4,009,898
Outstanding Exp		7,111,783
Salary of outsource staff	886,095	
Salary of MR Staff	697,665	
Security Services	1,091,014	
Stipen to PG Student	3,183,388	
Vehicle Maintenance	73,647	
Support to NITS KIDS	55,400	
Children Educational Payable	1,512,299	
Water & Electricity	195,930	
Electricity Charges	1,787,740	
Newspaper & Periodicals	2,369	
Electricity Maintenance	27,944	
Teqip a/c against TADA	30,000	
Horticulture payable	54,639	
Maintanance of Furniture Fixture	21,750	
Maintenance of Tools & Equipments	68,080	
Building & others payable	2,108,440	
Salary against project	93,000	
Provision Others (Works & Others)		
Equipment etc	27,552,750	
Works	195,092,468	
Prepaid Expenses		
.Prepaid E-Journals	10,324,815	12,610,567
Prepaid Exp - Maint. of Digital Library	0	10,625
Prepaid Insurance	40,443	41,747
Prepaid Printed Journals	146,880	

(Amount in Rupees)

Particulars	Current Year	Previous Year
Accrued Income (receivable)		
Accrued Interest on Caution Money		418,830
Accrued Interest on Corpus Fund	5,881,163	1,376,117
Accrued Interest on Fee A/c Investment		1,604,652
Accrued Interest on Gratuity Fund	3,158,082	1,830,455
Accrued Interest on Maintenance Fund	5,972,930	5,922,161
Accrued Interest on Staff Dev Fund	942,929	845,062
Accrued Interest on Depreciation Fund	5,709,005	5,681,555
Accrued Interest on Non-Plan	402,152	
Accrued interest on Axis Bank	29,431	
Electricity Consumption Receivable		433,269
House Rent Receivable	8,734	10,850
Shops & Canteen Rent Receivable	44,593	38,869
Other Receivable		
Grant Receivable Plan	490,000,000	1,050,000,000
Grant Receivable Non Plan	120,000,000	267,500,000
Loan to CCB/CCMT	328,241	300,000
Loan to CSAB	893,271	248,598
Frm SocPros 2014	9,500	
From RTC Project	41,973	
Loan to TEQIP		10,000,000
Receivable from Saswata Purkayastha Memorial Fund	3,500	
Claims Receivable		
Receivable From CDAC	745,240	343,079
Group Insuracne Claim Receivable		
Total	961,890,031	1,476,117,103
Loans, Advances & Deposits		
Advance to Employees		
HTC Advance	941,100	778,000
LTC Advance	1,200,200	2,966,980
Other Advance To Employees		
Recoverable Advance	17,331,772	13,644,620
TA Advance	2,499,289	1,299,000
Soft Loan (Staff)	547,453	2,424,942
Festival Advance	766,250	957,500

(Amount in Rupees)

Particulars	Current Year	Previous Year
Medical Advance	1,100	1,000
Advance to BRNS		34,406
Advance against Project account	52,570	
Performance security against project	41,225	
Advance Tax on Salaries	1,345,592	
Advances & Other Receivable on Capital A/c		
Deposit Work		
Deposit Work-CPWD Central School	30,000,000	
Deposit Work-CPWD Non/faculty Qtrs	60,000,000	
Deposit Work-CPWD New Admin Building	60,000,000	40,000,000
Deposit Work-CPWD Swage Disopl. Sytm	10,000,000	
Deposit Work-HPL Married Sch Hostel	222,768,046	336,174,000
Deposit Work-PHE-Agmn Water Supply	8,034,000	988,447
Deposit Work-PHE- Water Supply Scheme	3,741,205	
Deposit Work - CPWD for Internal Road		4,300,000
Deposit Work - APDCL	208,266	
Secured Advance		
Secured Adv- B.K Construction		4,825,000
Secured Adv-Gangwal Engineering	3,000,000	
Secured Adv- NCC Ltd	4,700,000	72,197,000
Secured Adv-T,K Das & Co.(NABL Lab)	0	1,100,000
Secured Adv Dipak Nath	1,600,000	
Secured Adv- N Bhattacharjee	3,800,000	
Margin Money for LC	1,800,001	17,370,000
Mobilisation Adv- NCC Ltd		108,300,000
Callidai Motor Works Chennai		
Mobilisation Adv - Networking		6,022,093
Advance to Firm		
Adv to Firm - Maverick Technologies		661,500
Adv to Firm - AVL India Pvt Ltd	170,352	
Adv to Firm- Bhabani Offset Pvt Ltd		60,000
Adv to Firm-Central Medical Stores		109,667
Adv to IBM India Pvt Ltd	30,883	
Adv to Panorama International	1,622,446	
Adv to Firm-Drugs & Surgical Mart		77,738

(Amount in Rupees)

Particulars	Current Year	Previous Year
Adv to Firm-Ghosh Enterprise		58,727
Adv to Firm- Gitanjali Drugs		560,226
Adv to Firm- Gupta Tyre & Agencies		97,600
Adv to Firm- Joy Kumar Bardia		200,000
Adv to Firm-Maloti Drug Distributors		86,884
Adv to Firm-Panorama International		918,591
Adv to Firm- Perkin Elmer India Pvt Ltd		406,017
Adv to Firm- Radharaman Enterprise		51,059
Adv to Firm-R.L Das & Associates		
14.Adv to Firm -Taranga Automobiles		120,554
Adv to Firm- Ghosh Marketing Agency		49,468
Total	436,201,750	616,841,019
	2,838,875,760	4,475,430,440

SCHEDULE - : SPONSORED PROJECTS FUNDS

Particulars	Fund wise Breakup					Total	
	AICTE - RPS	AICTE - MODROB	I B M Project	S E R B	Current Year	Previous Year	
(2) : A.							
a) Opening Balance	7,194,212	1,183,289	801,043	-	9,178,544	18,039,601	
b) Additions during the year				5,320,000	5,320,000	-	
e) Interest on Savings Bank a/c.	250,964	108,176	32,741	76,856	468,737	649,554	
f) Other additions (specify nature)	-87,755				-87,755		
Total (A)	7,357,421	1,291,465	833,784	5,396,856	14,879,526	18,689,155	
B. Utilization /Expenditure towards objective of funds							
i) Capital Expenditure							
Equipment	2,860,368			198,440	3,058,808	6,479,039	
Computer	538,356		48,287		586,643	153,590	
Software	1,540,350				1,540,350	1,303,125	
Furniture	12,383				12,383		
Books					-	25,635	
ii) Revenue Expenditure	217,619		12,849	229,663	460,131	317,838	
iii) Refunded to Sanctioning authority						1,231,384	
Total (B)	5,169,076	-	61,136	428,103	5,658,315	1,231,384	
Closing balance at the year end (2): (A-B)	2,188,345	1,291,465	772,648	4,968,753	9,221,211	9,178,544	
Closing balance at the year end (1+2)	3,332,410	1,637,606	2,849,110	5,074,274	12,893,400	14,262,958	

**NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
BALANCE SHEET AS AT MARCH 31, 2015**

GPF and NPS ACCOUNT

		<i>(Amount in Rupees)</i>				
	LIABILITIES	Current Year	Previous Year	ASSETS	Current Year	Previous Year
	CAPITAL FUND (GPF/CPF):			INVESTMENT:		
	Opening Balance	318,731,187.00	294,201,021.00	Investment with Bank	261,524,932.00	266,152,596.00
	Less: Final Payment	40,331,282.00	33,948,799.00	Interest accrued on FD	34,367,788.00	36,614,982.00
	Less: Fund towards Penion Fund	26,290,744.00	0.00			
	Balance	252,109,161.00	260,252,222.00	CURRENT ASSETS:		
	Add: CPF Subscription & Contrb		1,084,436.00	Advance to Subscriber	4,787,034.00	3,979,630.00
	Add: GPF Subscription	10,448,300.00	11,295,362.00	Receivable from Institute against NPS Sub & Contr	2,270,152.00	
	Add: GPF Subscription (Other Org)	239400.00		Receivable from Institute against GPF Subs.	922,100.00	
	Add: Voluntary Deposit	0.00	565,100.00			
	Add: Excess Provision of Last yr. towards NPS payable	0.00	720,086.00			
	Add: Pension Fund Created out of Final Payment		16,533,354.00			
	Add: Interest Provision		24,000,000.00			
	Add: Excess of Income Over Exp	25,911,741.00	4,280,627.00			
	Total Capital Fund	288,708,602.00	318,731,187.00	CASH AT BANK	7,295,514.00	12,058,567.00
	CURRENT LIABILITIES & PROVISIONS:					
	Pensions Fund Contr. Payable	20,501,825.00				
	NPS Account:					
	Opening Balance	71,270.00	6,292,792.00			
	Add: Received from CPF A/c		0.00			
	Add: Subscription & Contribution (Received)	8,404,244.00	8985178			
	Add: Subscription & Contribution (Provision))	2,270,152.00				
	Add: Subscription & Contribution (Other Org)	180,032.00				
	Less: Paid during the year (NSDL)	9,369,160.00	14,486,614.00			
	Less: Transferred to Capital Fund A/c	0.00	720,086.00			
	Closing Balances	1,556,538.00	71,270.00			
	Other Liabilities:					
	Payable to CPF Subscriber	3,318.00	3,318.00			
	Unclassified receipts	397,237.00	0.00			
	Total	311,167,520.00	318,805,775.00	Total	311,167,520.00	318,805,775.00

Date: 13th May, 2015
Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2015

GPF and NPS ACCOUNT

		<i>(Amount in Rupees)</i>			
EXPENDITURE	Current Year	Previous Year	INCOME	Current Year	Previous Year
Interest Expenditure			Interest Income		
Provision for Interest Credited (Subscriber)		24,000,000.00	Interest Earned on Investment	4,387,344.00	10,670,822.00
			Interest Accrued on Investment	21,118,037.00	17,227,837.00
			Interest received on S/B A/c	406,815.00	382,368.00
Bank Commission	405.00	400.00	Excess of Expenditure over Income		
Excess of Income over Expenditure	25,911,791.00	4,280,627.00			
Total	25,912,196.00	28,281,027.00	Total	25,912,196.00	28,281,027.00

Date: 13th May, 2015

Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
RECEIPTS AND PAYMENTS ACCOUNT FOR THE FINANCIAL YEAR 2014-15

GPF and NPS ACCOUNT

		<i>(Amount in Rupees)</i>			
RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
Opening Balance as on 01.04.2014					
Cash at Bank	12,058,567.00	19,170,642.00	ACCUMULATED FUND		
ACCUMULATED FUND			GPF Advt./Withdrawal	40,331,282.00	33,948,799.00
GPF Subscription	9,526,200.00	11,295,362.00	GPF Withdrawal	3,393,405.00	2,271,800.00
GPF Subscription Received (Other Org)	239,400.00		Advance to Subscriber	26,290,744.00	
GPF Subscription payable	128,799.00		Pension Fund Contrb. Paid	128799	
CPF Subscription	0.00	542,218.00	GPF Subscription payable	4594564	7243307
CPF Contribution	0.00	542,218.00	NPS Subscription (Institute)	4,594,564.00	7243307
CPF Subscription payable	2,586,001.00	3,318.00	NPS Contribution (Institute)	90,016.00	
GPF Advance recovery	4,202,122.00	4,559,791.00	NPS Subscription (Other Org)	90,016.00	
NPS Subscription (Institute)	4,202,122.00	4,492,589.00	NPS Contribution (Other Org)		
NPS Contribution (Institute)	4,202,122.00	4,492,589.00	INVESTMENT		
NPS Subscription (Other Org)	90,016.00		Investment during the year	120,000,000.00	129,824,361.00
NPS Contribution (Other Org)	90,016.00		EXPENSES		
Voluntary Deposit		565,100.00	Bank Charges	455.00	400.00
Pension Fund Contrb. Payable	20,501,825.00	16,533,354.00			
INVESTMENT					
Investment Matured	124,627,664.00	102,669,383.00			
Accrued Interest Received (Maturity)	23,365,231.00	16,670,787.00			
INTEREST					
Interest Received against FD	4,387,344.00	10,670,822.00			
Interest on SB A/c	406,815.00	382,368.00			
CURRENT LIABILITY					
Unclassified Receipts	397,237.00	0.00	Closing Balance:	7,295,514.00	12,058,567.00
			Cash at Bank		
Total	206,809,359.00	192,590,541.00	Total	206,809,359.00	192,590,541.00

Date: 13th May, 2015
Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
BALANCE SHEET AS AT 31ST MARCH, 2015

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]

S. No.	PARTICULARS	SCHEDULE No.	((Amount in Rupees))	
			CURRENT YEAR (Rs)	PREVIOUS YEAR (Rs)
A	SOURCE OF FUNDS: Opening Balance 1) Amount received from: Govt of India 2) Contribution from: 3) Less: Excess of Expenditure over income: As per last Account Rs. 4,64,24,906/- Add during the year Rs. 1,99,64,449.56/- TOTAL		125,000,000.00 0.00 0.00 66,389,355.56 58,610,644.44	70,000,000.00 55,000,000.00 0.00 46,424,906.00 78,575,094.00
B	APPLICATION OF FUNDS 1) Fixed Assets 2) Investment 2) Work in progress - Scheme work under implementation TOTAL 3) A. Current Assets, Loans and Advances a) Cash Balance b) Bank Balance c) Advance for Capital Goods d) Loans and Advances TOTAL (A) B. Less: Current Liabilities Earnest Money Deposit Etc Net Current Assets (A - B) TOTAL	I II III IV V VI	57,421,326.00 0.00 57,421,326.00 1,217,649.44 0.00 0.00 1,217,649.44 28,331.00 1,189,318.44 58,610,644.44	49,046,030.00 0.00 49,046,030.00 29,102,578.00 0.00 491,531.00 29,594,109.00 65,045.00 29,529,064.00 78,575,094.00

Dated, Silchar
The 13th of May, 2015

Registrar
NIT Silchar

Director
NIT Silchar

**NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
FOR THE YEAR ENDED 31ST MARCH, 2015**

**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]
INCOME AND EXPENDITURE ACCOUNT**

EXPENDITURE		INCOME	
Previous Year	Particulars	Previous Year	Particulars
	Amount Rs.	Amount Rs.	Amount Rs.
	Incremental Operating Cost		
	(a) Operation & Maintenance	2,038,765.56	Interest earned
	(b) Consumables	10,000.00	Other income
	(c) Salary	45,161.00	
	Industry Institute Interaction	851,622.00	
	Teaching & Research Assistantship	13,838,212.00	Excess of Expenditure over Income
	Faculty & staff Development	1,712,612.00	19,964,449.56
	Research & Development	530,808.00	
	Academic Support for weak students	25,500.00	
	Institutional Mgt. Capacity Enhancement	121,109.00	
	Institutional Reforms	1,460,680.00	
	Total Rs.	20,634,469.56	Total Rs.
33,544,109.00		33,544,109.00	20,634,469.56

Date: 13th May, 2015
Place: Silchar

Registrar
NIT Silchar

Director
NIT Silchar

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

SCHEDULE FOR FIXED ASSETS as on 31st March, 2015

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - PHASE-II [TEQIP-II]

SCHEDULE - I

(Amount in Rupees)

Sl	Particulars	Gross Balance as on 01/04/2014	Addition during the year	Deletion during the year	Gross Balance as on 31/03/2015
1	Equipment	40,838,306	7,324,393	0	48,162,699
2	Furniture	0	0	0	0
3	Books & LRs & Software	8,207,724	1,050,903	0	9,258,627
4	Minor Works	0	0	0	0
Total		49,046,030	8,375,296	0	57,421,326

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM

Schedules forming part of Balance Sheet as at 31st March, 2015

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE- II]

(Amount in Rupees)

Current Assets: Investment	Schedule II	Current Year	Previous year
STDR		0.00	0.00
Total		0.00	0.00
Current Assets, Loans and Advances:	Schedule III	Current Year	Previous year
Cash in Hand			0.00
Cash at Bank (SBI, NIT Branch)		1,217,649.44	29,102,578.00
Total		1,217,649.44	29,102,578.00
Advance for Capital Goods	Schedule IV	Current Year	Previous year
		0.00	0.00
Total		0.00	0.00
Loans and Advances:	Schedule V	Current Year	Previous year
T A Advance		0.00	99,842.00
Advance to Firm		0.00	0.00
Advances		0.00	391,689.00
Total		0.00	491,531.00
Current Liabilities :	Schedule VI	Current Year	Previous year
EARNEST MONEY DEPOSIT:			
Zephyr Enterprise (India)		25,045.00	25,045
National Instrument Systems India Pvt. Ltd		0.00	40,000
Deposit Remittance (Uncashed/Stale Cheque)		3,286.00	
TOTAL		28,331.00	65,045.00

NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR : ASSAM
RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2015

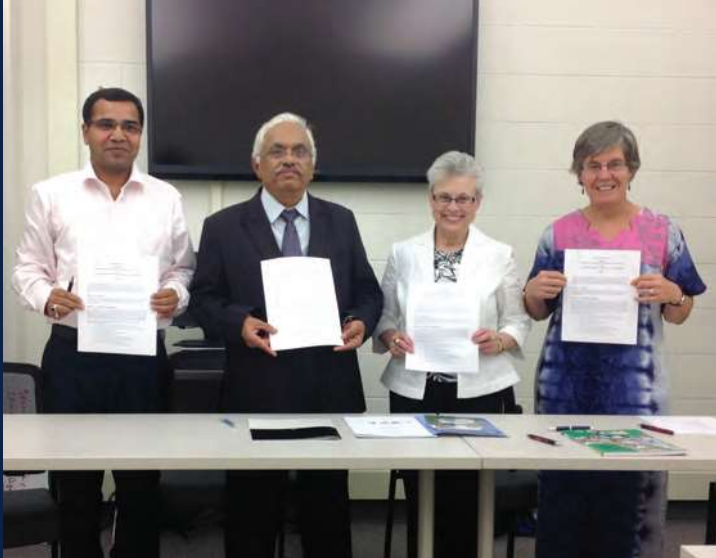
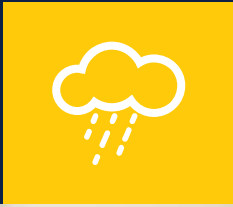
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME [TEQIP PHASE - II]

		<i>(Amount in Rupees)</i>			
Previous Year	RECEIPT	Current Year	Previous Year	PAYMENT	Current Year
86,897	Opening Balance :	-	37,317,776	Equipment	7,324,393
10,483,191	i) Cash in Hand	29,102,578	-	Furniture	-
	ii) Cash at Bank		8,207,724	Books & LR's & Software	1,050,903
55,000,000	Grants-in-Aid:		-	Investment:	-
	Received from Govt. of India		10,000,000	Investment	-
40,000,000	Investment:			Loan from Institute	-
	Investment		2,474,083	Indirect Expenditure:	
2,334,585	Other Receipts:		10,808	Incremental Operating Cost:	
	Interest Earned		239,853	(a) Operation & Maintenance	2,038,766
	Accrued Interest on Investment	670,020	3,030,197	(b) Consumables	10,000
			14,729,578	(c) Salary	45,161
2,032,857	Other Receipt :	120,642	5,544,704	Industry Institute Interaction	851,622
	T A Advance		4,201,861	Teaching & Research Assistanceship	13,838,212
2,076,983	Advance to Firm		596,500	Faculty & staff Development	1,712,612
7,169,575	Advances (for workshop etc)		1,499,470	Research & Development	530,808
863,505	VAT			Academic Support for weak students	25,500
2,140	Professional Tax		1,217,055	Institutional Management Capacity	121,109
44,450	Income Tax			Enhancement	
791,045	Earnest Money Deposit			Institutional Reforms	1,460,680
10,000,000	Loan from Institute				
	Deposit remittance	15,646		Other Payments :	
				T A Advance	20,800
8,250	IRG:			Advance to Firm	-
	Cost of Tender paper			Advances (for workshop etc)	3,468,752
500	Postal Charge			VAT	284,248
				Professional Tax	416
				Income Tax	3,038
				Earnest Money	40,000
				Deposit remittance	12,360
				IRG:	
				Cost of Tender paper	-
				Postal Charge	-
				Closing balance :	
				Cash in hand	-
				Cash at Bank (SBI, NIT Br)	1,217,649
130,893,978	TOTAL Rs.	34,057,029	130,893,978	TOTAL Rs.	34,057,029

Dated: Silchar
The 13th of May, 2015

Registrar
NIT Silchar

Director
NIT Silchar



MOU with UIUC, USA



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