

**NATIONAL INSTITUTE OF TECHNOLOGY-  
ARUNACHAL PRADESH  
(YUPIA, ARUNACHAL PRADESH)**



**ANNUAL REPORT (2013-14)**

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*(Established by the Ministry of Human Resource Development,  
Government of India)*



## **Preface:**

### **From the Desk of the Director:**



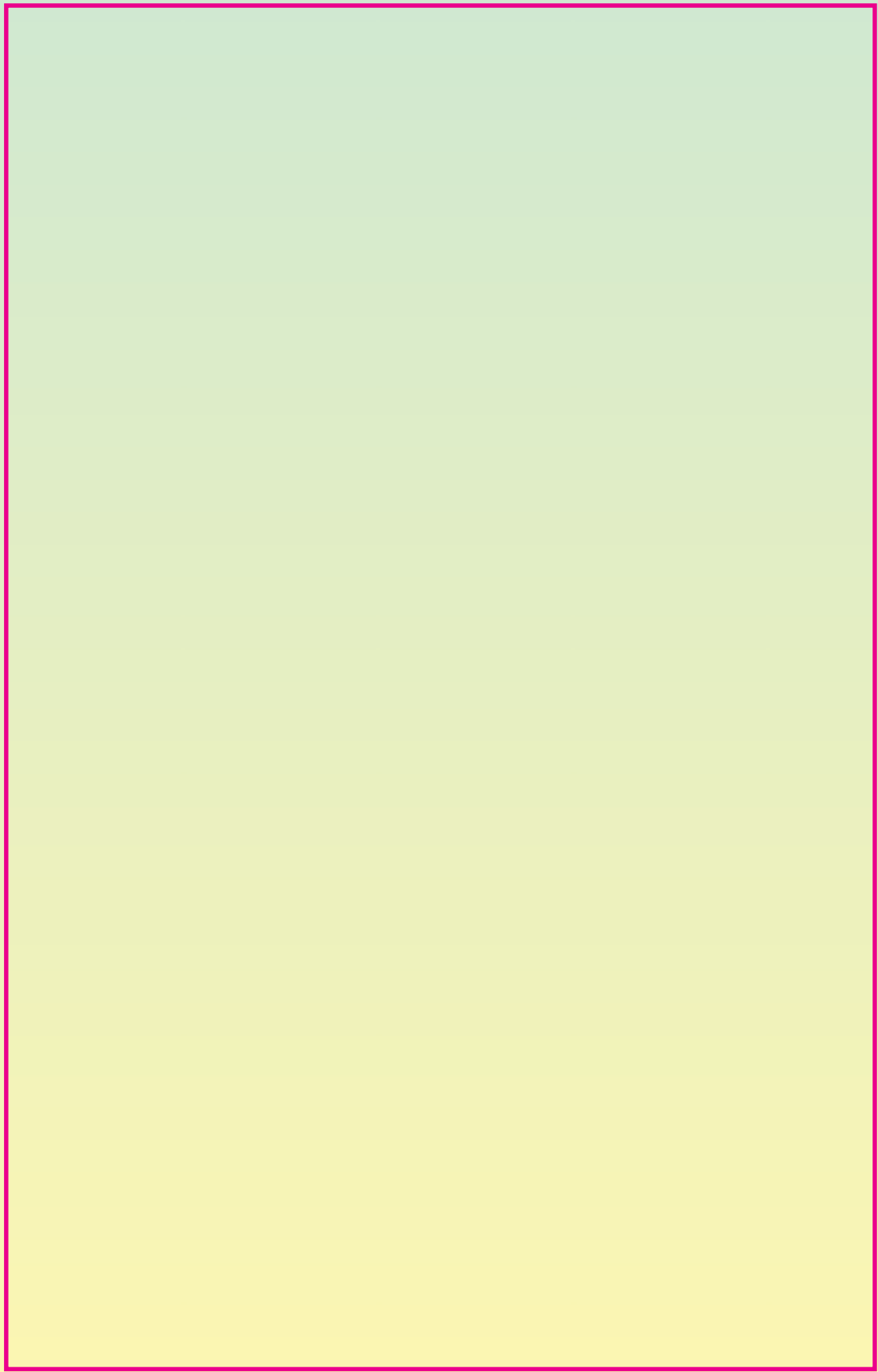
**Prof. C.T. Bhunia**

Let me begin with highly promising and surely encouraging achievement that this brand new National Institute of Technology has achieved. The performance of the first outgoing batch in terms of GATE score and campus placement is pretty emphatic as detailed in the relevant chapter of this report. The young & energetic pool of scholastic members of faculty have initiated exceptionally brilliant in-house research works that have got attention of other researchers as seen in different citation index, publications in SCI & referred journals, and submission of patents. To realize the best & most clear agenda of this institute i.e. to achieve inclusive & quality growth; a pool of distinguished visiting Professors are appointed:

- i. Prof S C Dutta Roy, Bhatnagar Awardee & Former Professor of Electrical Engineering, Indian Institute of Technology-Delhi, New Delhi, India
- ii. Prof. B P Sinha, Professor, Advanced Computing and Microelectronics Unit Indian Statistical Institute, Kolkata, India
- iii. Prof. S L Maskara, Former Professor, Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology-Kharagpur, India
- iv. Prof. D. P. Kothari, Former Dy Director, Indian Institute of Technology-Delhi, New Delhi, India
- v. Prof. Bibek Bandyopadhyay, Former Director, Solar Energy Centre Ministry of New and Renewable Energy, Govt. of India, Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology-Kharagpur, India

These delightful achievements do surely, fairly and squarely reflect the performance of any academic institute like ours.

In the year 2013-14, the members of faculty, officers and the members of staff have done concerted and determined efforts of meeting the gaps of previous years as well to design a road map for prospective growth and innovative achievements. These are recorded in the report. I congratulate all the team members in this journey.



**VISITOR**

**Dr. Pranab Mukherjee  
Hon'ble President of India**



**Chairperson**

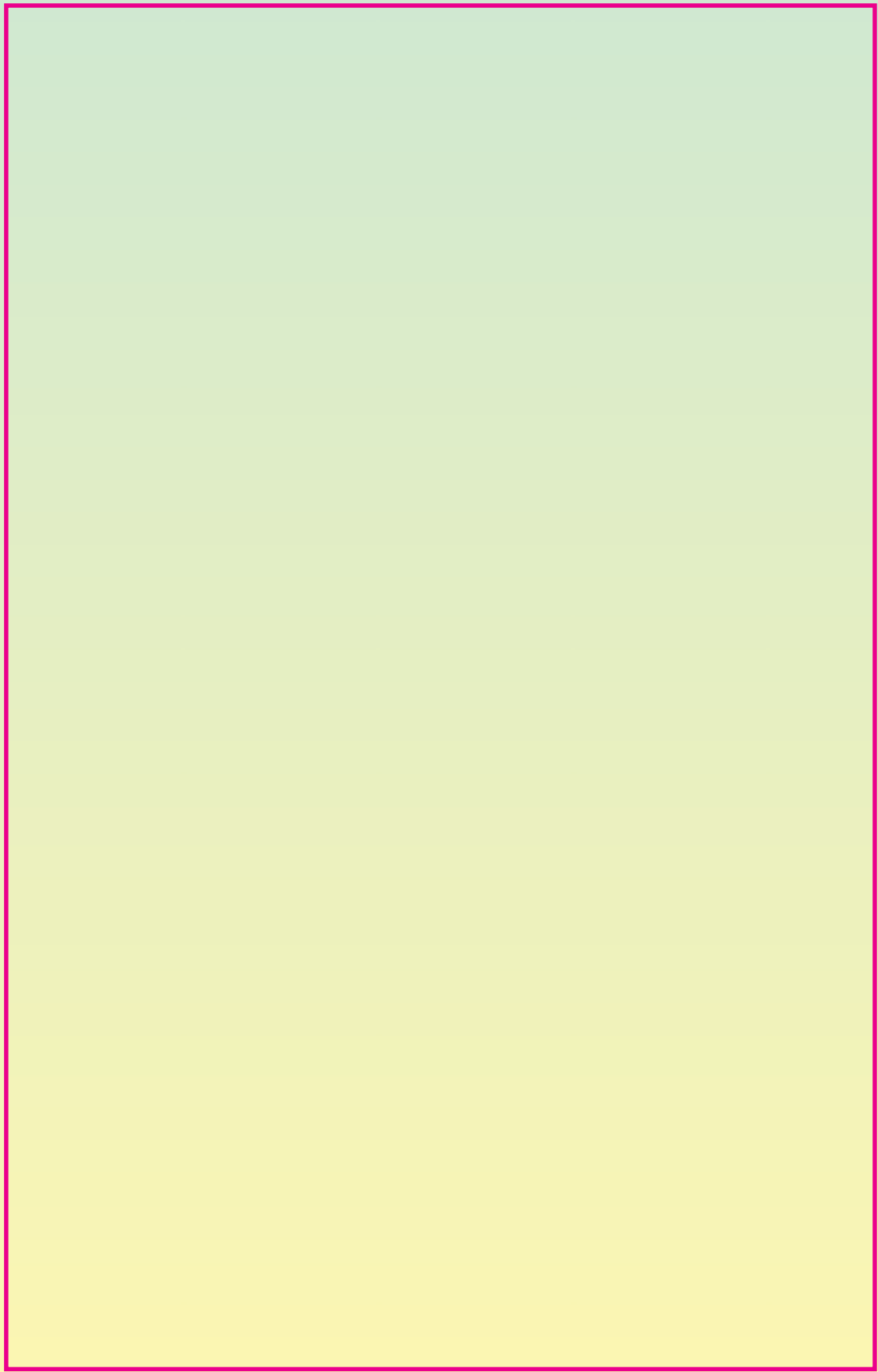
**Board of Governors  
Dr. Gangan Prathap**



**Director**

**Prof. (Dr.) Chandan Tilak Bhunia**





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**ANNUAL REPPORT  
PART - I**

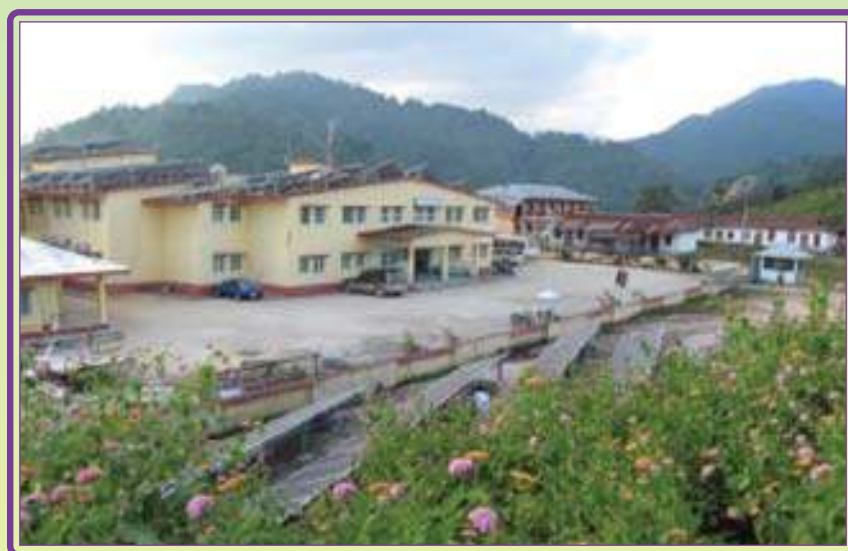


## 1. OVERVIEW

### 1. Introduction

National Institute of Technology - Arunachal Pradesh was inaugurated on 18th August 2010 as a member of a group of ten new NITs. These new NITs were established as centres of excellence in technical education to combat the growing need of technical professionals in India as well as in the world. The Institute has been through many trials since its establishment in 2010, but ultimately has triumphed over all challenges and is thriving today with more than 350 students on roll and many distinguished members of faculty as well as a good many numbers of competent administrative personnel.

The land, buildings and structures were made available to the NIT by the Government of Arunachal Pradesh.



A view of the present campus at Yupia, Arunachal Pradesh

### 1.1. Location (Temporary Campus)

The campus of the Institute is temporarily housed in Yupia, the district headquarters of the Papum Pare district of Arunachal Pradesh. Yupia is around 18 km from Itanagar, the capital of Arunachal Pradesh, and is around 11 km from Naharlagun, which is the twin capital town. The place has healthy climate with moderate temperature ranging from 13°C to 27°C with an average annual rainfall of 365mm.

## 1.2. Travel Guide to the Present Campus

**Rail Link:** The nearest railway station is Naharlagun, which is around 3 km from Yupia. The other feasible railway station is at Guwahati. The journey from Guwahati to Yupia takes about 10 hours. Car/bus services are availed from Guwahati to Naharlagun. Taxi for Yupia can be available at Naharlagun.

**Air Link:** The nearest Airport is Lilabari (North Lakhimpur) in Assam, which is around 50 km and the nearest helipad is at Naharlagun. Daily helicopter services are available between Guwahati and Naharlagun except on Sundays.

**Road Link:** Guwahati is at a distance of 370 km from Naharlagun.

Day and Night bus services are available from Guwahati to Naharlagun from where taxi can be availed to reach Yupia.

## 1.3. Permanent Campus

The Government of Arunachal Pradesh has also provided free of cost a land of 302 acres in Jote (District: Papumpare) in Arunachal Pradesh. The hilly areas and the undulating terrain therein have been levelled so as to bring out a vast plot of land fit for a series of robust structural constructions meant for the Institution. During the year under report, the construction works for boundary wall, approach roads, water supply system, Power Supply System, shopping complex are in good progress and are likely to be completed shortly. The construction works for Administrative Building, Academic Block, Director's residence have also been started simultaneously. The construction works are underway through Government agencies at the permanent site and it is anticipated that the Institute would be shifted in part to the Permanent Campus by 2015.

## 1.4. Human Resources

The Institute has since received sanction for faculty and non-faculty posts as per its students' strength. However, the entire process of recruitment could not be completed due to non-availability of qualified candidates willing to serve in this remote area of the country. In fact, this particular problem is now being faced by most of the Centrally-funded Technical Institutes in the North-Eastern Region. This aspect needs immediate attention at an appropriate level. The Institute has however started its colourful journey with the available human resources, infrastructural facilities etc.

### 1.5 Journey Ahead

In the aforesaid process, the Institute is trying its level best to take care of the necessary Academic activities, Research work etc. with the existing faculty members, laboratories, libraries, IT facilities etc. It has also provided full-fledged hostel facilities to all of its students. All the students are residing in the hostels located either in the temporary campus or outside it. Due compassion and care is being paid to ensure that the students do not feel that they are staying away from home. This is essential to provide a congenial ambience to enable the students to continue their studies in a proper manner.

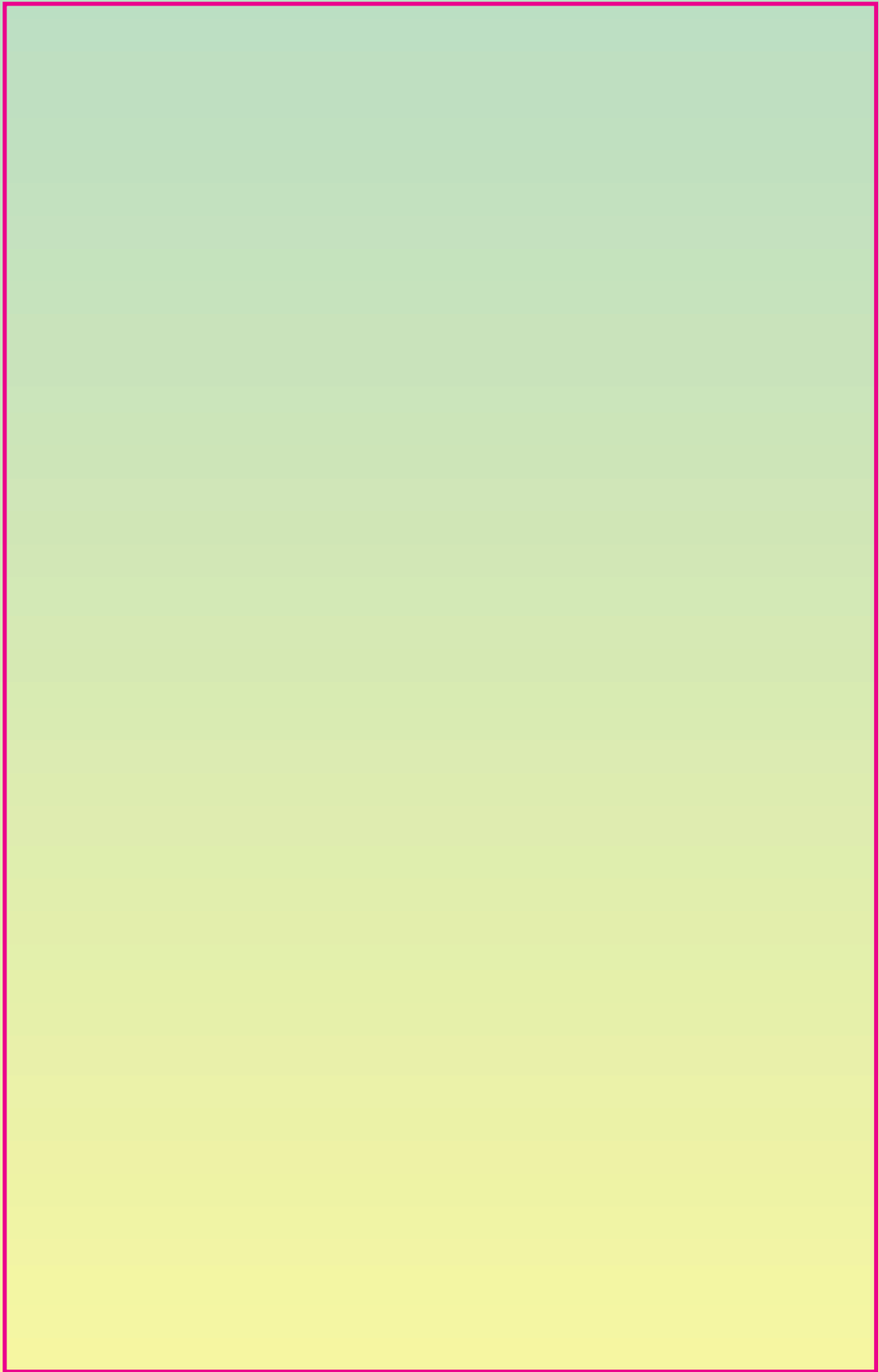
### 1.6 Responsibilities

NIT-Arunachal Pradesh is also responsible for accomplishing a noble task of catering to the needs of the local people and fulfilling the aspirations of the talented youths belonging to the poorest among poor backward people residing in the remotest areas of the State. In order to ensure that the students can avail the facilities of Technical Education, the Institute has to play a bigger role while providing suitable training programme to the students at 10+2 stage in the schools of the State. The Institute is also striving hard to provide necessary technological knowhow to the local industries so that the overall industrial development of the State can move forward in a faster pace.

### 1.7 Conclusion

The Institute is also quite confident to accomplish the tasks bestowed upon it and fulfil its cherished dreams in near future.

*"Everything that is done in the world is done by hope." ~ Martin Luther*



## 2. EXECUTIVE SUMMARY

### 2. Introduction

National Institute of Technology-Arunachal Pradesh was inaugurated on 18th August, 2010 as an '*Institute of National Importance*' in technical education to combat the growing needs of technical professionals in India as well as in the world.

### 2.1. Vision and Mission statement

The Institute has passed through many trials since its establishment in 2010; but ultimately has triumphed over all the challenges and is now marching ahead with about 373 students on roll and many distinguished members of faculty as well as a good many numbers of competent administrative personnel.

#### Vision statement

Our vision is to impart quality technical education with strong underpinning of sound knowledge in the domain. Our approach is interactive, innovative and quintessentially holistic. Our goal is to produce imaginative entrepreneurs, technology leaders of the new millennium and researchers with a profound sense of humanistic and ethical values.

#### Mission statement

Our mission is that of producing such Technical Engineers who will not run after jobs ;but for whom jobs will run after them, and such that they will create employment and develop new technologies for a faster, sustainable and inclusive growth.

In order to realize the goals of its Vision and Mission, NIT-Arunachal Pradesh has framed a strategic and progressive academic plan for the next ten (10) years which may be seen at the Institute's website. This speaks of the determination and sound temperament of the members of the faculty and staff of the Institute. It is planned to make this Institute a global leader so as to earn global accolades.

Culturally and environmentally, this place is so rich that it would facilitate the Institute to become a fusion of scholastic students, academically bright and credible members of the faculty, innovative researchers and visionary leaders in India's "Land of the Rising-Sun". By no stretch of imagination, it may, therefore, be said that NIT-Arunachal Pradesh is second to no other institute in its fields of development and momentum built by this time.

## 2.2 Academic information

National Institute of Technology-Arunachal Pradesh started 4-years B. Tech degree programmes in Computer Science and Engineering, Electronics and Communication Engineering and Electrical and Electronics Engineering since its inception in 2010. The First batch of students will pass out in June, 2014. The Institute has added two more B. Tech degree programmes in Civil Engineering and Mechanical Engineering and two M. Tech Programmes in Mobile Communication and Computing and Appropriate Technology and Entrepreneurship Practices from 2013-14. Besides B. Tech and M. Tech Programmes, the Institute has also started Research programme leading to Ph.D in Computer Science & Engineering.

### Enrolment

The Institute admitted 94 students under U.G. programmes for five disciplines against the sanctioned strength of 150 (30 in each discipline) and 24 students under two P.G. programmes against the sanctioned strength of 36 (18 in each discipline). 15 (fifteen) faculty members of the Institute are also registered to pursue their research work leading to Ph. D. The total enrolment of the students during the year under report was 373 as against 247 in the previous year 2012-13. The strength of the students in the Hostels is 362 (boys and girls).

### Faculty Position

During the year under report, three Associate Professors and twenty-eight Assistant Professors were on the roll in various departments as against one Associate Professor and seventeen Assistant Professors in the previous year. Further details are given in the Chapter - V of this report.

## 2.3. Academic programmes

National conferences (NC)/International conferences (IC)/Seminars (S)/Workshop (W)/Continuing Education Program (CEP) were organized (during the last five years) and the details are as under:

### Year-wise Details

Events	No. of Events				TOTAL
	2010	2011	2012	2013	
NC	—	—	—	01	01
IC	—	—	02	01	03
W	—	—	—	04	04
CEP	—	—	02	06	08
<b>TOTAL</b>	—	—	02	06	08

## Department-Wise Data

Sl. No.	Department	Total no. organized/conducted								TOTAL
		2010		2011		2012		2013		
		NC+IC	W+CE P+S	NC+IC	W+CE P+S	NC+IC	W+CE P+S	NC+IC	W+CE P+S	
i	ECE, CSE & EEE	—	—	—	—	—	02	04	02	08
<b>Total</b>		—	—	—	—	—	<b>02</b>	<b>04</b>	<b>02</b>	<b>08</b>

**Seminars / Symposia / Workshops / Short Term Courses conducted**

During year 2013-14 and earlier, NIT-Arunachal Pradesh organized:

- Addovedi '13 an innovative programme from 28th - North-Eastern Regional Science Congress 2013, 11th -13th March, 2013
- National Student's Essay Competition, 11th May, 2013.
- Self-Workshop from Spoken Tutorial, 30th October, 2012
- Entrepreneurship Awareness Camp, 9th - 12th January, 2013.
- Hack Mania' 2012, 06th - 07th April, 2012
- Cyborg-The Robotics Workshop, 16th - 22nd February, 2013.
- 5 Days' Crash Course for Engineers from The HR Club, 16th - 20th April, 2013

**Seminars, Symposia and Workshops participated by the faculty members:**

During year 2012-13, following faculty members of the Institute attended the following seminars and workshops in India and abroad.

- Prof. Dr. C.T. Bhunia, Rajat Subra Goswami, S.K. Chakraborty: "100th Science Congress", 3rd-7th January, 2013, Kolkata.
- Prof. C.T. Bhunia: "09th International Conference ITNG 2013", 16th-18th April, 2012 Las Vegas, USA.
- Prof. C.T. Bhunia: "IEEE CITS'2012", 14th-16th May 2012, Amman, Jordan.
- Anish Kumar Saha: "North Eastern Regional Science-Congress For The Shaping The Future of India", 11th-13th March 2013, DST, NIT-Arunachal Pradesh.
- Anish Kumar Saha: ISTE Workshop on "Introduction to Research Methodologies", 25th June to 04th July, 2012 held at NIT-Agartala, National Mission on Education through ICT (MHRD).

- Anish Kumar Saha: National Workshop on "Recent Trends In Object Oriented Software Testing (R-TOOST-2012)" June 9th-11th, TEQIP, Department of Computer Science and Engineering, NIT-Rourkela.
- Anish Kumar Saha: SERC School Workship on "Advantage Software Engineering Techniques & Their Applications" 4th-8th June, 2012, DST, Department of Computer Science and Engineering, NIT-Rourkela.
- Anish Kumar Saha: 2 days Workship on "Developing Location Specific R&D and Demonstration Projects in Tripura", April 4th-5th 2012, Tripura State Council for Science & Technology.
- Santanu Maity: National Workshop "Communication and information technology & devices for electronics", 18th-22nd March 2013, SMIT.
- Santanu Maity: "20th West Bengal State Science & Technology Congress, 2013", 28th February 2013-2nd March 2013, BESU.
- Santanu Maity: "North Eastern Regional Science Congress-Science For The Shaping The Future of India", 11th-13th March 2013, DST, NIT-Arunachal Pradesh.
- Karam Ratan Singh: Brain Storming Workshop on Developing R&D proposals, 18th-19th October, 2012, DST, Tripura State Council for Science & Technology.
- Karam Ratan Singh: International Workshop on Industry-Academia Collaboration for Greater National Productivity & Competitiveness, New Delhi, 14th-15th April, 2013, AICTE, MHRD, CII.
- U.K. Saha: National Workshop on "Emerging Trends in Ramanujan's Mathematics & its applications in the fields of q-hypergenometric series", 22nd -24th Dec 2013, NASI, Allahabad.

**Invited Lectures delivered by Eminent Professors of other Universities:**

- Prof. Ajit Pal, Department of Computer Science & Engineering, IIT- Kharagpur.
- Prof. B P Sinha, Dept. of Computer Science & Engg, ISI Kolkata
- Prof. Ashok Nath, Dept. of Computer Science & Engg, St. Xaviers College, Kolkata.

- Prof. Paramartha Dutta, Department of Computer & System Sciences, Visva Bharati University, Santiniketan
- Prof. Atal Choudhury, Department of Computer Science & Engineering, Jadavpur University
- Sh. Sufal Das, Department of Information Technology, North Eastern Hill University, Shillong
- Prof. S C Dutta Roy, Emeritus Professor, Department of Electrical Engineering, IIT- Delhi
- Prof. Jibon Chakraborty, Department of Basic Science and Humanities, University of Calcutta
- Prof P K Basu, Department of Radio Physics & Electronics, University of Calcutta.
- Prof. S L Maskara, Department of Electronics and Communication Engineering, IIT- Khargpur.
- Dr. S Subedar, Associate Professor, Department of Electronics and Communication Engineering, NERIST, Nirjuli
- Prof, P Sarkar, Department of Electrical Engineering, National Institute of Technical Teachers Training & Research-Kolkata
- Prof. Gulab Jha, Department of Foreign Languages, Guwahati University, Guwahati
- Dr. S K Dutta, Associate Professor, National Institute of Rural Development, Guwahati, etc.

## 2.4 Library

The library has a good number of books and journals which are supplemented on regular basis. The Central Library of the Institute is a knowledge centre of NIT- Arunachal Pradesh. It has a rich collection of information resources mainly in Engineering, Science and also Management. Reading room facilities are available for (a) thirty students and (b) twelve faculty members and employees. Online Public Access Catalogue (OPAC) service through Libsys is available in the Central Library. Present status of the publications available is as follows:

Description	Status on 31st March 2013	Status on 31st March 2012
Total Title	1127	850 (apprx.)
Total volume	16433	15,000 (apprx.)

The Central Library of National Institute of Technology-Arunachal Pradesh has been functioning since 2010. At present, the library holds about 15,854 volumes and 860 numbers of titles. Apart from the online journals and standards provided by INDEST-AICTE consortium, the library has purchased license to access online science and technology research journals to support local research activity.



Total Print Journal	26	20 (apprx.)
Total Print Magazine	19	12 (apprx.)
E-resource	IEL Online (One user), Springer Link, ACM Digital Library	IEL Online (One user), Springer Link, ACM Digital Library

The subscribed journals at present in the library are mentioned below:

ETE Journal of research, IETE Technical review, IETE Journal of Education, Journal of Scientific & Industrial research, Indian Journal of Engineering Material Science, Journal of Intellectual Property Rights, Indian Journal of Radio & Space Physics, Entrepreneurship Development, Information Technology, Computer Sciences, Electrical & Electronics Engineering, Telecommunications, IEEE Communications Magazine, IEEE Communication Letters, Journal of the Institution of Engineers (India): Civil Engineering, Journal of the Institution of Engineers (India): Electrical Engineering, CSI Communications, Everyman's Science.

### 2.5 Language Laboratory

The language lab has revolutionized the way we teach and the students are enabled to learn a language within just the term of using it. The language laboratory is envisaged to cater to the growing demand of a large pool of fluent English speaking youths in areas like multinational IT companies in particular and in all



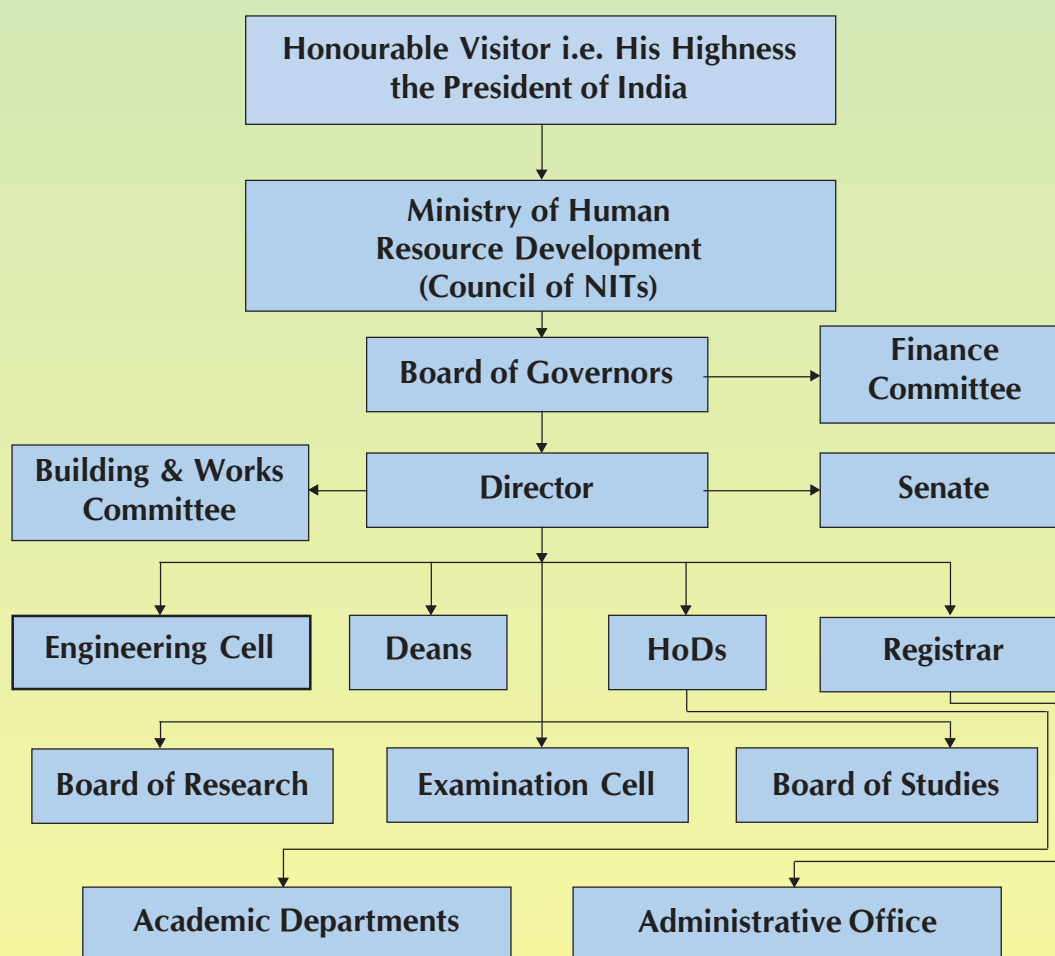
walks of life in general. It has conceptualized a customized training program based on the latest technological tools and the most advanced training methodology to impart simplified and effortless learning of English.

National Institute of technology-Arunachal Pradesh has this Station e-language laboratory with seat capacities of 32 numbers which will make language learning a whole new experience meanwhile helping students to improve their English speaking with ease and in the simplest way.

## 2.6 Internal Quality Assurance Cell

The Institute has its own internal quality assurance programme on the basis of regular evaluation process and students' feedback. After each semester before ending, students give their feedback on different parameters in respect of the faculty members. All the parameters are summarized and then, the best teacher is awarded on the basis of the feedback and other performances.

## 2.7 Organizational Structure



**Details of the structure (as on 31.3.2014)**

**DEANS OF THE INSTITUTE**

<b>Academic Coordinator</b>	:	Prof. P. D. Kashyap Academic Coordinator
<b>Research and Development</b>	:	Dr. Pinaki Chakraborty Assistant Dean (R &D )
<b>Examination</b>	:	Dr. U. K.Saha Assistant Dean (Examination)
<b>Finance</b>	:	Dr. Nabakumar Pramanik Assistant Dean (Finance)

**HEAD OF DEPARTMENTS**

- ⚙ **Department of Computer Science and Engineering**  
Swarnendu Kr. Chakraborty
- ⚙ **Department of Electronics and Communication Engineering**  
Sahadev Roy
- ⚙ **Department of Electrical and Electronics Engineering**  
Rajen Pudur
- ⚙ **Department of Civil Engineering**  
Jumrik Taipodia
- ⚙ **Department of Mechanical Engineering**  
Bapi Sarkar
- ⚙ **Department of Mathematics, Management and Humanities**  
Dr. Mihir Kumar Shome
- ⚙ **Department of Physics, Chemistry and Biotechnology**  
Dr. A.K.Atta

**ADMINISTRATIVE OFFICERS**

**DIRECTOR'S OFFICE**

P.A. to Director	:	Pralay Kumar Samanta
Confidential Assistant	:	Ms. Abi Tayeng

**OFFICE OF THE REGISTRAR**

OSD	:	Dr. S .K. Dutta
Junior Assistant	:	Shibo Chetry
Multitasking Staff	:	Dipak Jana

**OFFICE OF THE FINANCE OFFICER**

Accountant : S P Kar

Junior Assistant : Ms Momi Das

**OFFICE OF THE DEAN EXAMINATION**

Junior Assistant : Taw Talo

**OFFICE OF THE PUBLIC RELATION & RTI**

CPIO : Rajat Subhra Goswami

Assistant Public Relation Officer  
(Addl. charge) : Nabam Talar

**CENTRAL LIBRARY**

Assistant Librarian : Mohit Kumar De

**ENGINEERING WING**

Assistant Engineer : Tana Chiyi

Electrician : Sriman Ghosh

**HEALTH CENTRE**

Medical Officer (Part-time) : Dr. P.K. Deb

**INSTITUTE'S HOSTELS**

Hostel Provost : Mohit Kumar De

**TRAINING AND PLACEMENT CELL**

Training and Placement Officer : Dr. S. K. Dutta

**ENTREPRENEURSHIP CELL**

Professor In-Charge : Dr. S. K. Dutta

**NSS/NCC**

NSS Programme Officer : Dr. Karam Ratan Singh

NCC CTO (Care Taker Officer) : Rajen Pudur

SAS Assistant : Jorjo Jomoh

**2.8 New Appointments**

Group - A : As given in Table-1

Group - B : Nil

Group - C : As in the Table-2 below:

Table-1

Sl. No.	Name	Designation	Date of joining
i	Dr. Sujit Kumar Dutta	Associate Professor	13/05/2013
ii	Ms Yang Saring	Assistant Professor	11/04/2013
iii	Dr. Ananta Kr. Atta	Assistant Professor	03/09/2013
iv	Mr. Alak Majumder	Assistant Professor	06/09/2013
v	Mr. Ralli Sangno	Assistant Professor	06/09/2013
vi	Mr. Abir Jyoti Mondal	Assistant Professor	10/09/2013
vii	Mr. Shantanu Chatterjee	Assistant Professor	14/09/2013
viii	Dr. Susanta Maity	Assistant Professor	16/09/2013
ix	Mr. Sandip Kumar Mandal	Assistant Professor	19/09/2013
x	Mr. Manash Pratim Dutta	Assistant Professor	23/09/2013
xi	Dr. Pratap Kumar Swain	Assistant Professor	18/10/2013
xii	Ms. Jumrik Taipodia	Assistant Professor	09/12/2013
xiii	Mr. Brajagopal Datta	Assistant Professor	10/12/2013
xiv	Dr. Mihir Kumar Shome	Associate Professor	27/12/2013

Table-2

Sl. No.	Name	Designation	Date of joining
i	Shri Amit Das	Technician	27/08/2013
ii	Ms Takam Junali	Technician	03/08/2013
iii	Ms Baken Nyodu	Technician	04/09/2013
iv	Ms Teli Yani	Technician	31/08/2013
v	Sri Tana Autung Tara	Technician	19/09/2013
vi	Ms Priyanka Kumari	Technician	04/09/2013
vii	Sri Suraj Chetry	Technician	23/09/2013
viii	Sri Dilip Rana	Technician	03/09/2013
ix	Sri Nabam Jhon	Technician	06/09/2013
x	Sri Nabum Tado	Technician	14/12/2013
xi	Sri Nich Heri	Library Assistant	02/01/2014

## 2.9 Authorities of the Institute

The meeting of the Board of Governors, Finance Committee, Building and Works Committee, Senate and Board of Studies were held regularly during the period under report, in line with the stipulation provided in the MoA, the Statutes and the NIT Act, 2007. The details of the meetings held during the period under report are as follows:

Board of Governors	:	04.08.2013; 05.12.2013;
Finance Committee	:	04.08.2013; 05.12.2013;
Building and Works Committee	:	08.05.2013; 23.07.2013; 21.09.2013; 30.10.2013;
Senate	:	05.07.2013; 07.10.2013;
Board of Studies	:	
Board of Research	:	08.04.2013; 01.12.2013;

## 2.10 Memorandum of Understanding

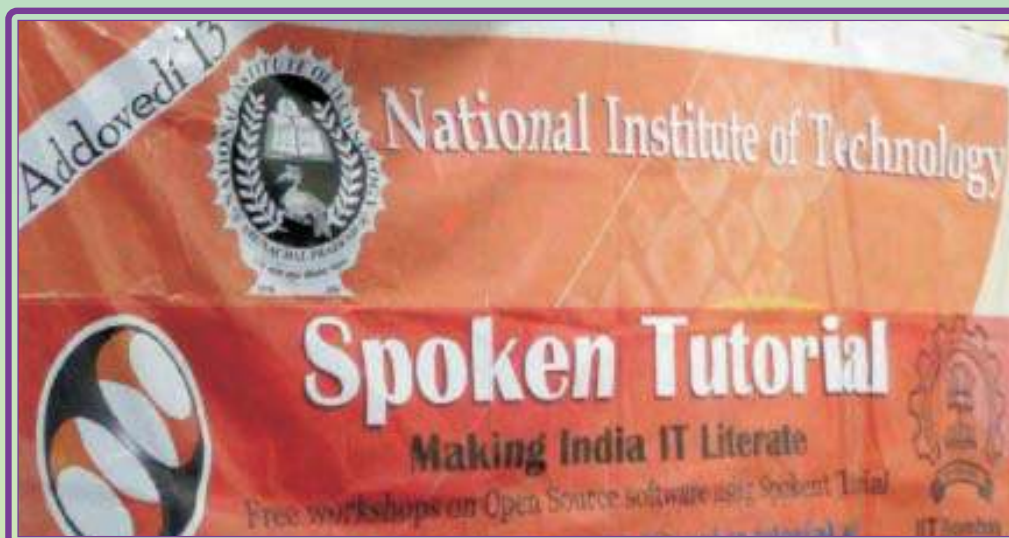
### Memorandum of Understanding with prestigious Organizations

- (i) In order to encourage Entrepreneurship Practices at national level, the Institute has started a new M. Tech Programme, first of its kind in the country, on '**Appropriate Technology and Entrepreneurial Practices**' in collaboration with the National Institute of Rural Development, Government of India, Hyderabad. A MoU in this respect has been signed between the Director, NIT-Arunachal Pradesh and the Director General, NIRD, Hyderabad on 11th May, 2013.



Dr. M.V.Rao, Director General, NIRD and Prof. (Dr) C.T.Bhunja,  
Director, NIT-Arunachal Pradesh Exchanging the signed MoU

- (ii) The Institute has also signed a MoU with IIT-Bombay on 11th May 2013, for RESOURCE (Robust Extensions for Spoken Tutorial Project on Open Source Software Usage for Recruitment Community and Education) Centre for promoting the Spoken Tutorial Project, one of the Talks to a Teacher Project supported by NMEICT, Ministry of Human Resource Development, Government of India.



Free workshop on Open Source Software

### 2.11 Power back-up

Besides having electric supply from the State Power Department, the Institute has installed its own 100 kW Solar Power System, which is operational since 28.10.2012 and in this way, the Institute has been able to minimize expenditure on grid power utilization. Throughout the year under report, the solar power system has functioned very satisfactorily. The specifications of the Solar Power System are as follows:

#### Specification of Solar Panels

Voc = 37.08 V  
 Isc = 8.45 A  
 Diode Rating = 15 A  
 Total Number of Solar Panels: 410 nos.

#### Battery Specification

Each Battery Backup: 600 Ah  
 Voltage: 2V  
 Total No of Battery: 240 numbers



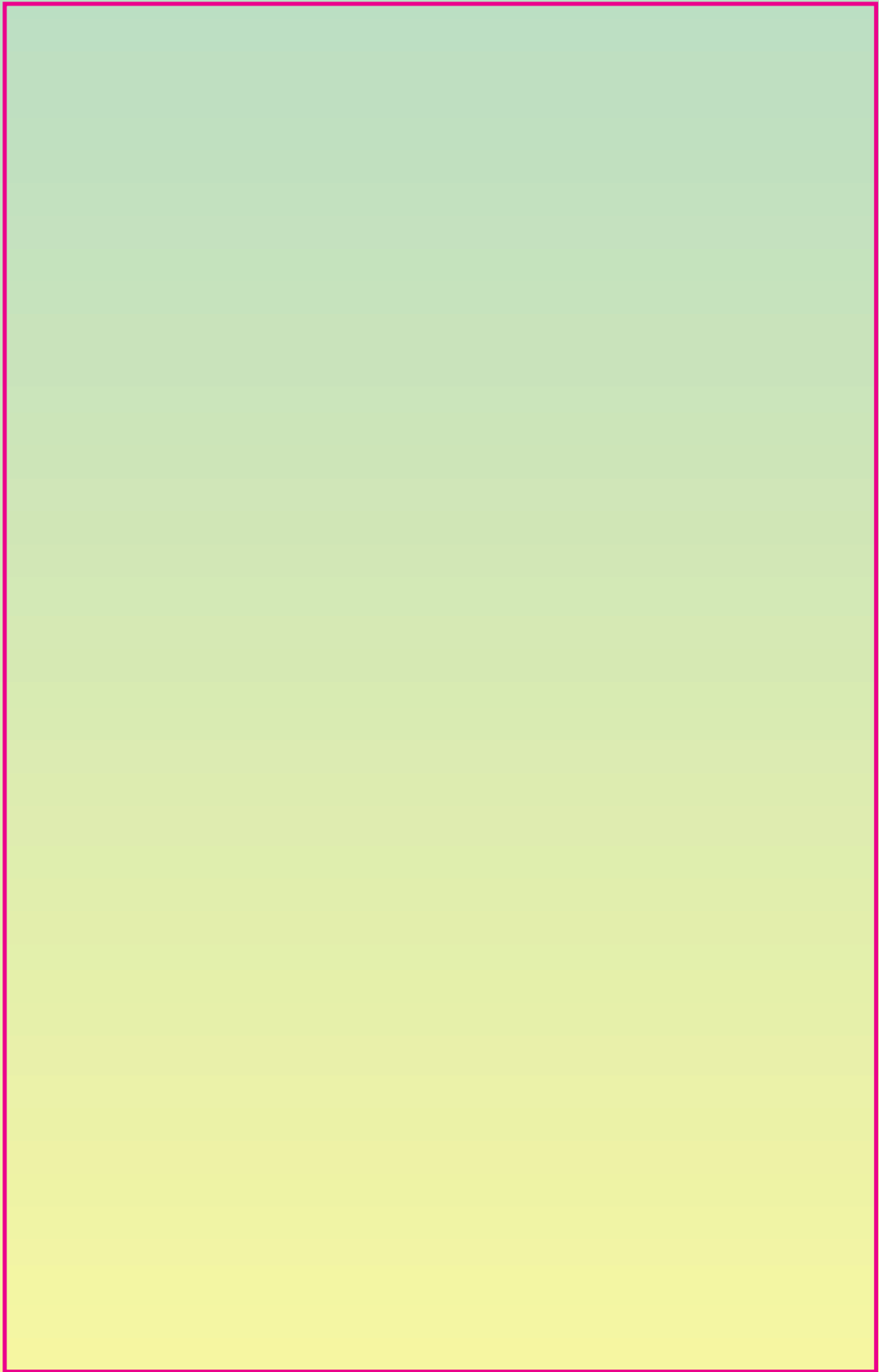
Solar panels of NIT- Arunachal Pradesh [This is reportedly the first of its kind among the thirty (30) NITs]



Solar Inverter and Battery back-up



Solar panels on top of the building of NIT-Arunachal Pradesh



### 3. ACADEMIC ACTIVITIES

#### 3.0. Introduction

During this year, the Institute offered Undergraduate and Postgraduate programmes in the following five disciplines apart from the Ph.D. programmes:

#### U. G. Programme:

- Computer Science & Engineering
- Electronics & Communication Engineering
- Electrical & Electronics Engineering
- Civil Engineering
- Mechanical Engineering
- Biotechnology

#### P. G. Programme:

- M.Tech courses in Mobile Communication & Computing
- M.Tech courses in Appropriate Technology & Entrepreneurship Practices

#### Ph. D. Programme:

- Ph.D. Programme in Computer Science & Engineering

The Institute offered Ph. D. programme in Computer Science & Engineering and also facilitated the faculty members to pursue their higher studies leading to Ph.D. on part-time basis without affecting the academic schedule of the Institute.

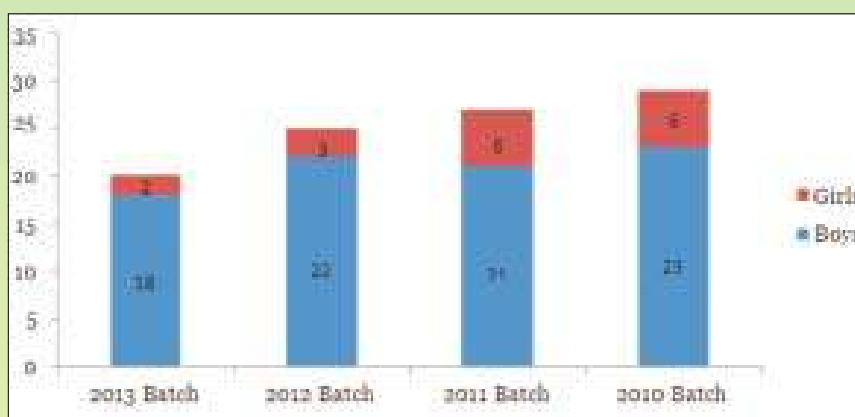
#### 3.1. Admission of students

Students, after qualifying the Joint Entrance Engineering Examination (JEE) Main, report to the counselling centres and opt for the Institute and branch of study of their liking/choice and as per availability of the seats, admission is allowed to them. In case, there is no seat available in the Institute of their choice, they are allowed to opt other Institute or branch. Admissions to all NITs are conducted by the CSAB and NIT-Rourkela was in-charge of this for the academic year 2013-14.

Students admitted during the academic year 2013-14— at a glance

**Table 3.1**  
**(B.Tech. -Computer Science and Engineering)**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	20	2	3	0	2	0	6	1	9	1	0	0	0	0
2 <sup>nd</sup> year	25	3	4	0	0	0	10	0	11	3	0	0	0	0
3 <sup>rd</sup> year	27	6	7	0	5	3	4	2	11	1	0	0	0	0
4 <sup>th</sup> year	29	6	3	0	1	0	11	2	14	4	0	0	0	0
<b>Total</b>	<b>101</b>	<b>17</b>	<b>17</b>	<b>0</b>	<b>8</b>	<b>3</b>	<b>31</b>	<b>5</b>	<b>45</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



[No. of students registered (gender-wise) in Computer Science and Engg.]



[No. of students registered (category-wise) in Computer Science and Engg.]

Table 3.2

(B.Tech. -Electronics and Communication Engineering)

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	17	3	1	1	2	0	6	0	8	2	0	0	0	0
2 <sup>nd</sup> year	28	4	4	1	1	0	13	2	10	1	0	0	0	0
3 <sup>rd</sup> year	28	7	7	1	4	2	4	2	13	2	0	0	0	0
4 <sup>th</sup> year	24	8	3	1	3	2	8	2	10	3	0	0	0	0
<b>Total</b>	<b>97</b>	<b>22</b>	<b>15</b>	<b>4</b>	<b>10</b>	<b>4</b>	<b>31</b>	<b>6</b>	<b>41</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

(B.Tech - Electronics and Communication Engineering)



[No. of students registered (gender-wise) in Electronics and Communication Engineering]



[No. of students registered (category-wise) in Electronics and Communication Engineering]

**Table 3.3  
(B.Tech -Electrical and Electronics Engineering)**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	19	4	4	1	2	1	7	1	6	1	0	0	0	0
2 <sup>nd</sup> year	28	4	3	0	2	0	10	3	13	1	0	0	0	0
3 <sup>rd</sup> year	29	6	6	1	7	2	6	1	9	2	1	0	0	0
4 <sup>th</sup> year	27	3	2	0	2	0	17	2	6	1	0	0	0	0
<b>Total</b>	<b>103</b>	<b>17</b>	<b>15</b>	<b>2</b>	<b>13</b>	<b>3</b>	<b>40</b>	<b>7</b>	<b>34</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>



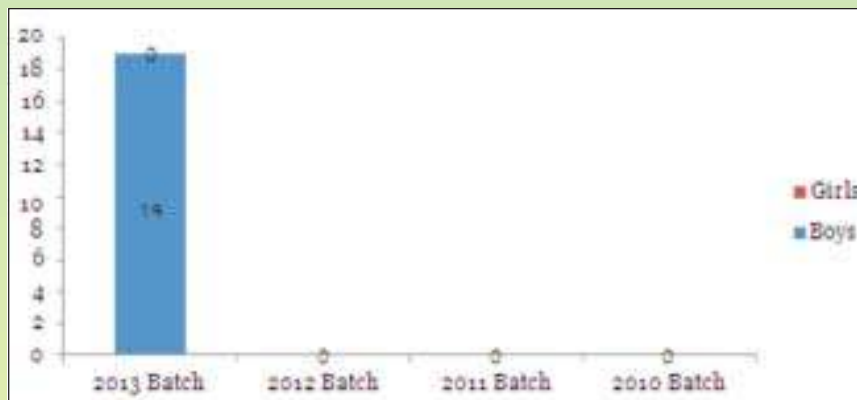
[No. of students registered (gender-wise) in Electrical and Electronics Engg.]



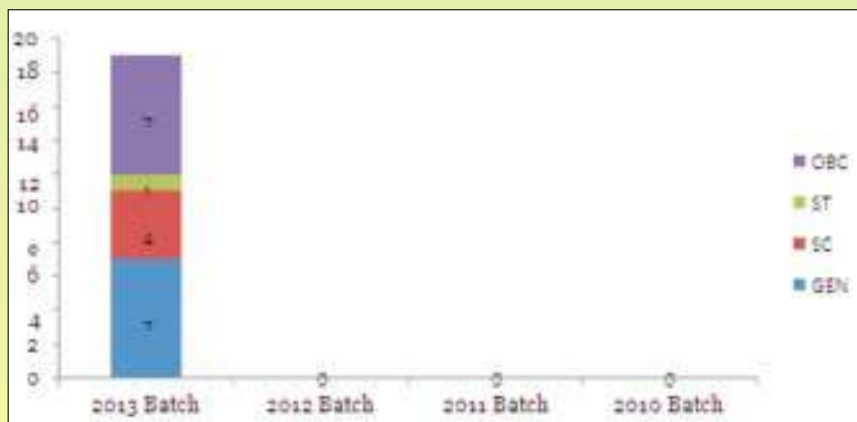
[No. of students registered (category-wise) in Electrical and Electronics Engg.]

**Table 3.4  
(B.Tech -Mechanical Engineering)**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	19	0	4	0	1	0	7	0	7	0	0	0	0	0
2 <sup>nd</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 <sup>rd</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 <sup>th</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>19</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



[No. of students registered (gender-wise) in Mechanical Engineering]



[No. of students registered (category-wise) in Mechanical Engineering]

**Table 3.5  
(B.Tech -Civil Engineering)**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	19	1	4	0	4	1	7	0	4	0	0	0	0	0
2 <sup>nd</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 <sup>rd</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 <sup>th</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>19</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



[No. of students registered (gender-wise) in Civil Engineering]



[No. of students registered (category-wise) in Civil Engineering]

**Table 3.6**  
**(M.Tech—Mobile Communication and Computing)**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	14	3	1	0	1	0	2	1	10	2	0	0	0	0
2 <sup>nd</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>14</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



[No. of students registered (gender-wise) in M.Tech—Mobile Communication and Computing]



[No. of students registered (category-wise) in M.Tech—Mobile Communication and Computing]

**Table 3.7**  
**(M.Tech—Appropriate Technology and Entrepreneurship Practices)**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1 <sup>st</sup> year	10	1	1	0	2	0	1	0	6	1	0	0	0	0
2 <sup>nd</sup> year	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



[No. of students registered (gender-wise) in M.Tech—Appropriate Technology and Entrepreneurship Practices]



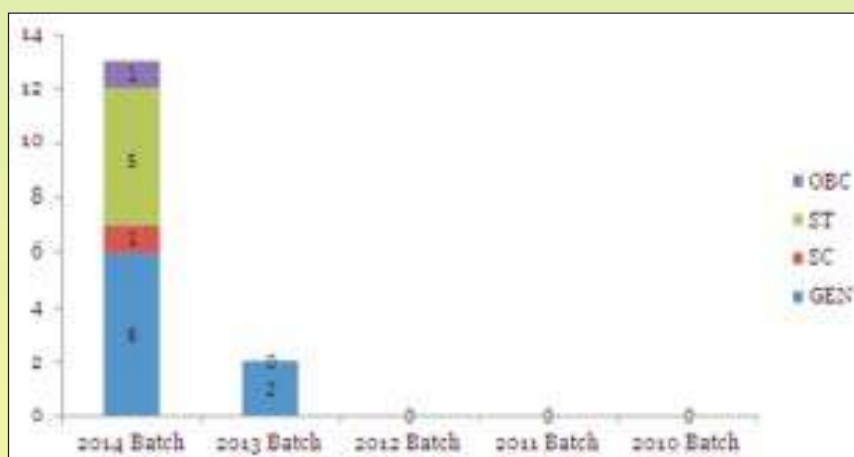
[No. of students registered (category-wise) in M.Tech—Appropriate Technology and Entrepreneurship Practices]

**Table 3.8**  
**Faculty Members pursuing Higher Studies leading to Ph. D.**

Year	No. of students enrolled											
	Total no. of students admitted		SC		ST		OBC		GEN		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
2014	13	3	1	0	5	3	1	0	6	0	0	0
2013	2	0	0	0	0	0	0	0	2	0	0	0
<b>Total</b>	<b>15</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>



[No. of faculty members registered (gender-wise) in Research Programme leading to Ph. D.]



[No. of faculty members registered (category-wise) in Research Programme leading to Ph. D.]

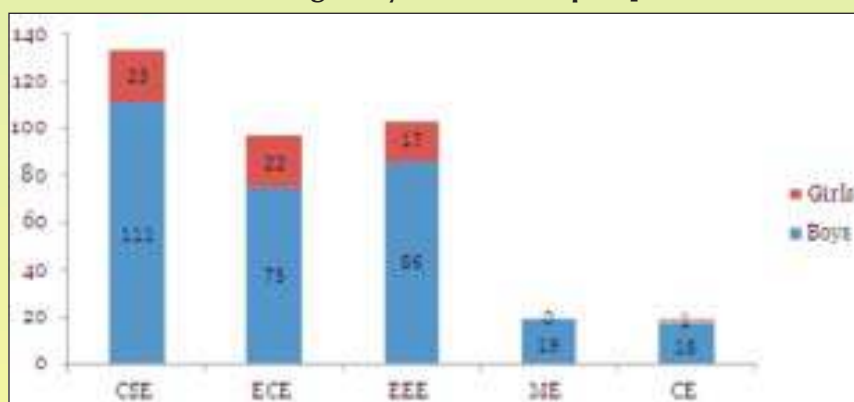
**List of Faculty Members pursuing Higher Studies leading to Ph. D.**

Sl. No.	Name	Designation	Category	Dept.	Date of Joining the		Pursuing Ph.D at
					Institute	Ph.D.	
i	Shri Swarnendu Kr. Chakraborty	Asstt. Prof.	GEN	CSE	01/12/2011	July 2012	NIT-Arunachal Pradesh
ii	Shri Rajat Subhra Goswami	Asstt. Prof.	GEN	CSE	01/12/2011	July 2012	-do-
iii	Shri Rajen Pudur	Asstt. Prof.	ST	EEE	01/02/2012	July 2012	NERIST
iv	Shri Abhishek Kumar	Asstt. Prof.	GEN	EEE	01/08/2012	July 2013	NERIST
v	Shri Bapi Sarkar	Asstt. Prof.	SC	ME	03/08/2012	July 2013	NERIST
vi	Shri Koj Sambyo	Asstt. Prof.	ST	CSE	07/08/2012	July 2013	NIT-Arunachal Pradesh
vii	Miss Yaka Bulu	Asstt. Prof.	ST	ECE	07/08/2012	July 2013	NIT-Arunachal Pradesh
viii	Shri Sahadev Roy	Asstt. Prof.	GEN	ECE	13/08/2012	July 2013	NIT-Arunachal Pradesh
ix	Shri Anish Kumar Saha	Asstt. Prof.	GEN	CSE	03/10/2012	July 2013	NIT-Arunachal Pradesh
x	Shri Subhasish Banerjee	Asstt. Prof.	GEN	CSE	27/02/2013	Jan. 2014	NIT-Arunachal Pradesh
xi	Ms Yang Saring	Asstt. Prof.	ST	ECE	11/04/2013	Jan. 2014	NIT-Arunachal Pradesh
xii	Shri Ralli Sangno	Asstt. Prof.	ST	EEE	06/09/2013	Jan. 2014	NERIST
xiii	Shri Manash Pratim Dutta	Asstt. Prof.	OBC	CSE	23/09/2013	Jan. 2014	NIT-Arunachal Pradesh
xiv	Ms. Jumrik Taipodia	Asstt. Prof.	ST	CE	09/12/2013	July 2011	IIT-Guwahati
xv	Shri Brajagopal Datta	Asstt. Prof.	GEN	EEE	10/12/2013	Jan. 2014	NERIST

**Table 3.9**  
**Total number of students on roll (gender-wise) from 2010 to 2013**

Course		CSE		ECE		EEE		ME		CE		Grand Total
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
B. Tech	1 <sup>st</sup> year	18	2	14	3	15	4	19	0	18	1	<b>94</b>
	2 <sup>nd</sup> year	22	3	24	4	24	4	0	0	0	0	<b>81</b>
	3 <sup>rd</sup> year	21	6	21	7	23	6	0	0	0	0	<b>84</b>
	4 <sup>th</sup> year	23	6	16	8	24	3	0	0	0	0	<b>80</b>
M. Tech in Mobile Communication & Computing and Appropriate Technology & Ent. practices	1 <sup>st</sup> year	20	4	0	0	0	0	0	0	0	0	<b>24</b>
	2 <sup>nd</sup> year	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Ph.D.	2013	4	-	1	2	0	0	0	0	0	0	<b>7</b>
	2012	2	0	0	0	0	0	0	0	0	0	<b>2</b>
<b>Grand Total</b>		<b>110</b>	<b>21</b>	<b>76</b>	<b>24</b>	<b>86</b>	<b>17</b>	<b>19</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>372</b>

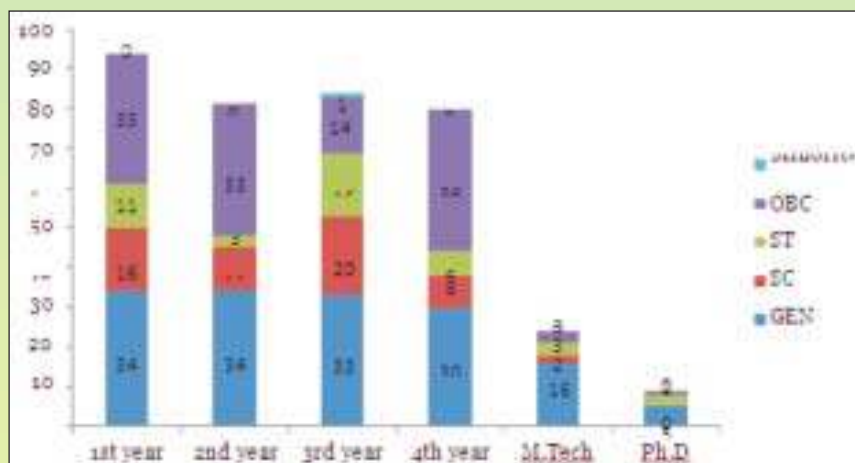
[Total number of students (branch-wise) enrolled during the year under report]



[Total No. of students registered (gender-wise) from 2010 to 2013]

**Table 3.10**  
**Total number of students on roll (category-wise) from 2010 to 2013**

Year	No. of students enrolled													
	Total no. of students admitted		SC		ST		OBC		GEN		MINORITY		PH	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
1st year	94	10	16	2	11	2	33	2	34	4	0	0	0	0
2 <sup>nd</sup> year	81	11	11	1	3	0	33	5	34	5	0	0	0	0
3 <sup>rd</sup> year	84	19	20	2	16	7	14	5	33	5	1	0	0	0
4 <sup>th</sup> year	80	17	8	1	6	2	36	6	30	8	0	0	0	0
M.Tech	24	4	2	0	3	0	3	1	16	3	0	0	0	0
Ph.D	9	2	0	0	3	2	1	0	5	0	0	0	0	0
<b>Total</b>	<b>372</b>	<b>63</b>	<b>57</b>	<b>6</b>	<b>42</b>	<b>13</b>	<b>120</b>	<b>19</b>	<b>152</b>	<b>25</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>



[Total number of students on roll (category-wise) from 2010 to 2013]

## 4. DEVELOPMENTAL ACTIVITIES

### 4.0. Introduction

The space available in the Institute (which is, at present, functioning in its temporary campus at Yupia) is quite limited and it needs more space to accommodate the students, faculty members and other employees which are increasing year by year. Need for more space has arisen as the Institution has started new UG and PG courses from 2013-14.

### 4.1. New construction

To meet out the space requirements for laboratories, class rooms, library and offices, it became absolutely necessary to construct additional rooms in the existing space and, therefore, construction works of thirteen (13) new rooms were done during the last year i.e. 2012-13. During the period under report, the construction works undertaken are:

- i) Construction of 3 Nos. of Laboratory at NIT-Arunachal Pradesh Yupia.
- ii) Construction of EEE laboratory building at NIT-Arunachal Pradesh Yupia. (Block 1, 2, 3 and 4).
- iii) Construction of Civil Engineering laboratory building at NIT-Arunachal Pradesh Yupia. (Block 1, 2, 3 and 4).
- iv) Construction of Chemistry laboratory building at NIT-Arunachal Pradesh Yupia. (Block 1, 2, 3 and 4).
- v) Construction of Mechanical Engineering laboratory building at NIT-Arunachal Pradesh Yupia. (Block 1, 2, 3 and 4).
- vi) Construction of Chemistry laboratory building at NIT-Arunachal Pradesh Yupia. (Block 1, 2, 3 and 4).
- vii) Construction of Computer Science & Engineering laboratory building (Block 2 and 4).
- viii) Construction of Gym building at NIT-Arunachal Pradesh Yupia.
- ix) Common Toilet 3 Nos. for boys and girls at NIT-Arunachal Pradesh Yupia.
- x) RCC drain cover 0.45 mtr. width at NIT-Arunachal Pradesh Yupia.
- xi) RCC drain cover for 0.60 mtr. With at NIT-Arunachal Pradesh Yupia.
- xii) Construction of separate tank & soak pit for administrative and academic block at NIT-Arunachal Pradesh Yupia.
- xiii) Construction of CC flooring for bus parking at NIT-Arunachal Pradesh Yupia.
- xiv) Construction of CC flooring for vehicle parking place at NIT-Arunachal Pradesh Yupia.

- xv) Dining hall for students at Academic block at NIT-Arunachal Pradesh (Foundation).
- xvi) Construction of Security Cell at NIT-Arunachal Pradesh Yupia.
- xvii) Construction of Old Dining room partition and rack for NIT-Arunachal Pradesh Yupia.
- xviii) Construction of Drivers' resting room at NIT-Arunachal Pradesh Yupia.
- xix) Fixing of precast cement concrete chequered tile on parking place at NIT-Arunachal Pradesh Yupia.
- xx) Construction of classroom no. 1,2,3, 4, 5 and 6 on first floor of workshop building at NIT-Arunachal Pradesh Yupia.
- xxi) Construction of RCC stair for 1st floor workshop and classroom building at NIT-Arunachal Pradesh Yupia.
- xxii) Construction of additional work of modern class, chain link fencing, steps, plaster etc. at NIT-Arunachal Pradesh Yupia.
- xxiii) Partition wall for new classroom at Dormitory block, NIT-Arunachal Pradesh Yupia.

#### **4.2. Laboratory development**

Institute has equipped the following laboratories to conduct practice classes as per academic schedule:

- Computer Centre or Computing Laboratory
- Electrical Machine Laboratory
- Electrical Measurement/Power System Laboratory
- Digital Electronics/Computer
- Organization and Architecture Laboratory
- Basic Electronics Laboratory
- Analog Communication Engineering Laboratory
- Basic Engineering Physics Laboratory
- English Communication Laboratory or Language Laboratory
- Software Engineering Laboratory
- Programming Laboratory
- Computer Networks Laboratory
- Simulation Laboratory
- Embedded System Laboratory

The following laboratories/ workshops have been installed and those are functioning in a proper manner:



Computer Network Centre and Computing Laboratory



Networking Laboratory



Basic Electronics Laboratory



Electrical measurement laboratory



Electrical machine laboratory



Simulation Laboratory



Language Laboratory



Engineering Physics Laboratory



Computer Laboratory for M. Tech and Ph.D. students



Mechanical Workshop



Software Engineering Laboratory

**4.3 The website of the Institute has been developed and is maintained in a proper manner. The details of the Web Development Team are as under:**

	<p><b>Rajat Subhra Goswami</b>                      Assistant Prof. &amp; Web Master                      NIT-Arunachal Pradesh (M) : 09436271052                      Email: rajat.nitap@gmail.com</p>
	<p><b>Subhasish Banerjee</b>                      Assistant Prof. &amp; Web Master NIT-                      Arunachal Pradesh (M) : 09434985900                      Email: subhasish.cse@nitap.in</p>
	<p><b>Dhananjay Kumar Thakur</b>                      CSE 4th year , Batch 2014                      (M) :09863932418                      Email: dhananjay10cse@gmail.com</p>
	<p><b>Narendrajangir</b>                      CSE 4th Year , Batch 2014                      (M) : 09402609650                      Email: narendra2010cse17@gmail.com</p>
	<p><b>Aditya Singh</b>                      CSE 4th Year , Batch 2014                      (M) : 09863498745                      Email: adityasingh10cse10@gmail.com</p>

	<p><b>Ashanidepta Bhattacharya</b>                  CSE 4th Year , Batch 2014                  (M) : 09863015838                  Email: ashanidepta@gmail.com</p>
	<p><b>Neelmani Rai</b>                  CSE 4th Year , Batch 2014                  (M) : 09863094886                  Email: neelmani10cse@gmail.com</p>
	<p><b>Ashok</b>                  CSE 4th Year , Batch 2014                  (M) : 09863463435                  Email: ashok10cse@gmail.com</p>
	<p><b>Piyush Pandey</b>                  ECE 3rd Year , Batch 2015                  (M) : 09402273115                  Email:piyushpandey2011ece@gmail.com</p>
	<p><b>Ekansh Sharma</b>                  CSE 3rd Year , Batch 2015                  (M) : 0986306342                  Email: ekanshsharmacse11@gmail.com</p>
	<p><b>Sumit Kapoor</b>                  CSE 3rd Year , Batch 2015                  (M) : 08415074638                  Email: sumitkapoor11cse@gmail.com</p>

**4.4. Details of the Support Team are as under :**

	<p><b>Sanchita Dutta</b>                  CSE 4th Year, Batch 2014                  (M) : 08575574926                  Email: sanchita10cse@gmail.com</p>
	<p><b>Mrinal Kanti Rajak</b>                  EEE 3rd Year, Batch 2015                  (M) : 09402447070                  Email: mrinal2042@gmail.com</p>

**4.5 Various facilities**

The facilities and services that the Institute renders to the students, faculty and staff members that the Institute makes it stand among the top level institutes. The splendid amenities provided to the students make the stay

in the Institute a wonderful experience. The presence of modern facilities furthers the overall development of all the residents of the Institute and also assists students and faculty members to work in tandem while enhancing the academic growth of the students.

The students are provided with a nice set of hostel room with all the basic facilities a students will need. A few of them constitute the 24x7 availability of water and electricity. The whole Institute and hostels are supplied with a permanent Internet and LAN facility so as to increase the limits of every individual.

#### 4.6 Computer Course

The Computer Centre in the Institute provides the students a unique way to enhance themselves, be it on the Internet or different professional software. Computer Centre provides E-mail, Web, DNS, FTP, Internet access and other services to the campus community round the clock. Computer Centre also provides various advanced and special purpose software for all the campus users against the background of the present tech-savvy global scenario. Following are the features of the Computer Centre present in the department:

- i. Total no. of Computers: 168
- ii. Printing facilities are provided for the students.
- iii. High Speed internet connectivity.
- iv. Technical software available in the computer lab:
  - MARLAB 7.0
  - DEV C + +
  - 8085 SIMULATOR
  - ORACLE
  - SYLVACO



Programming Laboratory

#### **4.7 Development of permanent site of the Institute at Jote, Dist- Papumpare**

##### **Work in Progress**

The necessary work of site development at the permanent campus of the Institute (at Jote, District: Papumpare, Arunachal Pradesh) is almost completed. The boundary pillars are constructed and the contracts for construction works have been awarded. The construction has started in full-fledged and the progress of the same is satisfactory.



**Initial stage at the time of Jungle Clearance**

##### **Land Development**

Since the permanent site of the Institute is located in the heart of a mountainous hilly terrain of Arunachal Pradesh, there was a need of developing the land before taking up construction and creation/erecting of any type of structure. Thus, the portion of land has since been developed for construction of Hostel buildings, Academic buildings, Administrative buildings and Director's Bungalow. Apart from the land development, the work relating to road-connectivity within the campus has also been done.



Site after levelling of land

### Helipad

A temporary helipad has been constructed for emergency purposes, visits of Central & State VIPs and any other exigency works. The landing ground was prepared prior to the 'Foundation Stone' laying ceremony of the Institute at its permanent site at Jote.



Temporary helipad at Jote, District: Papumpare

### Temporary Office shed

A temporary Office shed has been constructed on the permanent site at Jote for supervising and monitoring of construction works being undertaken therein. It is very much needed as the scale of on-going construction works has since become manifold.



Temporary Office shed for supervising construction works at Jote



Boundary Wall



Steel Bridge at the entry of the permanent campus



Shopping Complex



Academic Block



Administrative Block

### Drinking Water Supply

The survey of drinking water was done in conjunction with the PHE & WS Department, Government of Arunachal Pradesh. The level of head for pipe-line connection meets the requirements and the water available/ found in the source is fresh and clean in nature. The surrounding area of the water source is free from pollution and it lies on the virgin lap of the 'Mother Nature'. The construction of WTP & work for connectivity of water supply being carried out by the PHE & WS Department, Government of Arunachal Pradesh is about to be completed.



Water Supply System

### Power Supply System

Arrangement for required power supply to the Institute is being carried out by the Power Department of the State government and the outdoor sub-station has been installed.



Power Supply System

## 5. ACADEMIC DEPARTMENTS

### 5.0 Introduction

National Institute of Technology - Arunachal Pradesh started with 4-years B. Tech degree programmes in "Computer Science and Engineering", "Electronics and Communication Engineering" and "Electrical and Electronics Engineering". The Institute has added two more 4-years B. Tech degree programmes in "Civil Engineering" and "Mechanical Engineering" and two M. Tech Programmes in "Mobile Communication and Computing" and "Appropriate Technology and Entrepreneurship Practices" from the year 2013-14. Besides B. Tech and M. Tech Programmes, the Institute has also started Research programme leading to Ph.D. in Computer Science & Engineering. Two more programmes [Online MBA and MS Programme in Mathematics and Computing (Holiday Course)] have been approved and are scheduled to start from July 2014.

### 5.1 Number of Faculty positions filled up in 2013-14

Professor		Associate Professor		Assistant Professor		Total		Grand Total
Male	Female	Male	Female	Male	Female	Male	Female	
0	0	2	0	10	2	12	2	14

### 5.2 Current strength of the Faculty as on 31.03.2014 (category-wise)

Professor		Associate Professor		Assistant Professor		Total		Grand Total
Male	Female	Male	Female	Male	Female	Male	Female	
0	0	3	0	24	4	27	4	31

### 5.3 Faculty Profiles on 31.03.2014

Sl. No.	No. of faculty as on 31.3.2013	No. of faculty recruited during 2013-14	No. of faculty resigned during 2013-14	No. of faculty as on 31.3.2014
(a)	(b)	(c)	(d)	(e)
i	19	14	2	31

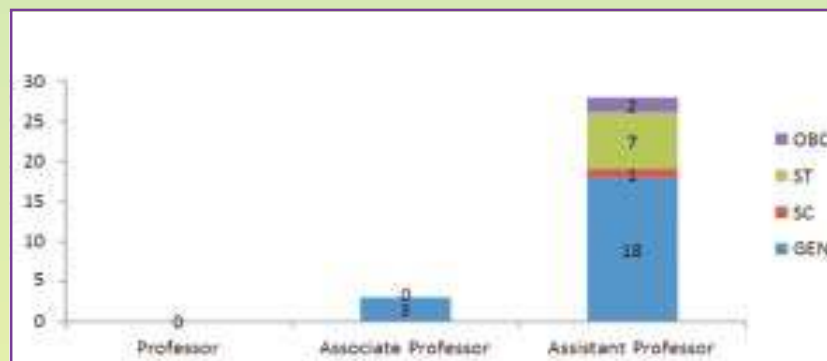
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(Category- wise Faculty position)

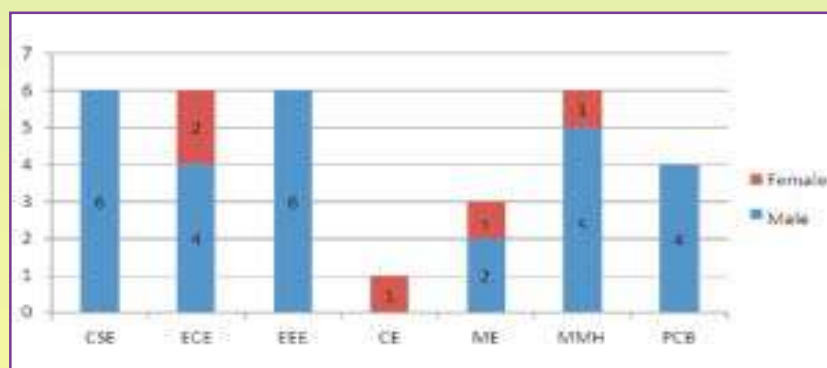
	SC		ST		OBC		GEN		Minority		PH		Total
	M	F	M	F	M	F	M	F	M	F	M	F	Total
<b>Professor</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Associate Professor</b>	0	0	0	0	0	0	3	0	0	0	0	0	3
<b>Assistant Professor</b>	1	0	3	4	2	0	18	0	0	0	0	0	28
<b>Total</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>



(Faculty status during the period under report)



(Category- wise Faculty strength)



(Department-wise faculty position)

#### 5.4 Appointment of Faculty members during the year 2013-14

Sl No	Name	Designation	Department	Date of Joining	Category
i	Dr. Sujit Kumar Dutta	Assoc. Prof.	MMH	13.05.2013	GEN
ii	Ms Yang Saring	Asstt. Prof.	ECE	11.04.2013	ST
iii	Dr. Ananta Kr. Atta	Asstt. Prof.	PCB	03.09.2013	GEN
iv	Mr. Alak Majumder	Asstt. Prof.	ECE	06.09.2013	GEN
v	Mr. Ralli Sangno	Asstt. Prof.	EEE	06.09.2013	ST
vi	Mr. Abirjyoti Mondal	Asstt. Prof.	ECE	10.09.2013	GEN
vii	Mr. Shantanu Chatterjee	Asstt. Prof.	EEE	14.09.2013	GEN
viii	Dr. Susanta Maity	Asstt. Prof.	MMH	16.09.2013	GEN
ix	Mr. Sandip Kumar Mandal	Asstt. Prof.	ME	19.09.2013	GEN
x	Mr. Manash Pratim Dutta	Asstt. Prof.	CSE	23.09.2013	OBC
xi	Dr. Pratap Kumar Swain	Asstt. Prof.	PCB	18.10.2013	GEN
xii	Ms. Jumrik Taipodia	Asstt. Prof.	CE	09.12.2013	ST
xiii	Mr. Brajagopal Datta	Asstt. Prof.	EEE	10.12.2013	GEN
xiv	Dr. Mihir Kumar Shome	Assoc. Prof.	MMH	27.12.2013	GEN

#### 5.5 Faculty retirement and resignation during the year 2013-14

Sl. No.	Name and Department	Department	Date	Event
I	Ms Kaveri Bhuyan	Assistant Professor	01.08.2013	Resigned
ii	Mr. Anand Shankar Hati	Assistant Professor	05.05.2013	Resigned

#### 5.6 Visits of Faculty members during the year 2013-14 abroad

Sl. No.	Name	Designation	Department	Place and purpose of visit
1	Rajat Subhra Goswami	Assistant Professor	CSE	CSE 2013 International conference, Los Angeles, USA
2	Koj Sambyo	Assistant Professor	CSE	ITNG 2014 International conference, Las Vegas, USA
3	Rajen Pudur	Assistant Professor	EEE	APPEEEEC 2013, IEEE International Conference, Hong Kong
4	Abhishek Kumar	Assistant Professor	EEE	ICPEE 2013, SCIEI Conference, Phuket

### 5.7 Foreign visit (Year-wise and Department-wise) Year-wise Details

Academic Session	No. of faculty members	Other reason	Total
2013	05	—	<b>05</b>
2012	02	—	<b>02</b>
2011	—	—	—
2010	—	—	—
2009	—	—	—

### Department-wise Details

Department	2009	2010	2011	2012	2013	Total
Computer Science & Engineering	—	—	—	01	03	04
Electrical & Electronics Engineering	—	—	—	<b>01</b>	<b>02</b>	<b>03</b>

### 5.8 Percentage of time-sharing by faculty in the Institute

Average Percentage		
Teaching	Research and consultancy	Administrative assignment
<b>50%</b>	<b>35%</b>	<b>15%</b>

### 5.9 Department of Computer Science and Engineering

Computer Science & Engineering is a multi-disciplinary branch of engineering which integrates several fields. The Department of Computer Science & Engineering was established right from the inception of the Institute in 2010. The Department offers a four-year degree program in Computer Science and Engineering with an annual intake of 30 students. The Department has also started M.Tech and Ph.D. programme from July- December, 2013 session. The Department of Computer Science & Engineering (CSE) embodies the Institute's tradition of excellence in engineering and technical education.

#### Faculty Members

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Swarnendu Kumar Chakraborty	01.11.2011	Assistant Professor	Error Control & Network Security
ii	Rajat S Goswami	01.11.2011	Assistant Professor	Multimedia & Network Security
iii	Koj Sambyo	07.08.2012	Assistant Professor	Cloud Computing
iv	Anish Kumar Saha	03.10.2012	Assistant Professor	Computer Networking
v	Subhasish Banerjee	27.02.2013	Assistant Professor	Network Security
vi	Manash Pratim Dutta	23.09.2013	Assistant Professor	Computer Networking

**Students' Strength**

	Male	Female	Total
B. Tech 1st year	18	2	20
B. Tech 2nd year	22	3	25
B. Tech 3rd year	21	6	27
B. Tech 4th year	23	6	29
P.G.	11	3	14
Ph. D.	6	—	6
<b>Total</b>	<b>101</b>	<b>20</b>	<b>121</b>

**Expert Faculty from reputed Institutions**

Sl. No.	Name of the Experts
i	Prof. B P Sinha, Dept. of Computer Science & Engg, ISI, Kolkata
ii	Prof. Ajit Pal, Dept. of Computer Science & Engg, IIT-Kharagpur
iii	Prof. M S Gaur, Dept. of Computer Science & Engg, MNIT-Jaipur
iv	Prof. Ashok Nath, Dept. of Computer Science & Engg, St. Xaviers College, Kolkata.
v	Prof. Paramartha Dutta, Department of Computer & System Sciences, Visva Bharati University, Santiniketan
vi	Prof. Atal Chowdhury, Department of Computer Science & Engg, Jadavpur University, Kolkata
vii	Sh. Sufal Das, Department of Information Technology, North Eastern Hill University, Shillong

**5.10 Department of Electronics and Communication Engineering**

The Department of Electronics and Communication Engineering was established right from the inception of the Institute in 2010. The Department offers a four year degree program in Electronics & Communication Engineering with an annual intake capacity of 30 students. The mission of the Department of Electronics and Communication Engineering is to produce and disseminate theory, principles, practice and know-how of computing in the information age, for the critical analysis, design, evaluation and improvement of computing systems in tune with the needs and demands of the changing times. The curriculum strives to keep the students posted at par with the latest trends of the world.

### Faculty Members

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Sh. Sahadev Roy	13.08.2012	Assistant Professor	Mechatronics & Robotics
ii	Ms Yaka Bulo	07.08.2013	Assistant Professor	VLSI
iii	Sh. Santanu Maity	27.02.2013	Assistant Professor	RF & Microwave
iv	Ms Yang Saring	11.04.2013	Assistant Professor	Mobile Computing
v	Sh. Alak Majumder	06.09.2013	Assistant Professor	VLSI
vi	Sh. Abirjyoti Mondal	10.09.2013	Assistant Professor	VLSI

### Students' Strength

	Male	Female	Total
B. Tech 1st year	14	3	17
B. Tech 2nd year	24	4	28
B. Tech 3rd year	21	7	28
B. Tech 4th year	16	8	24
Ph.D.	1	2	3
<b>Total</b>	<b>76</b>	<b>24</b>	<b>100</b>

### Special Lectures

Sl. No.	Expert Faculty from reputed Institutions
i	Prof. S. C. Dutta Roy, Department of Electrical Engineering, IIT-Delhi
ii	Prof. P. K. Basu, Department of Radiophysics & Electronics, Calcutta University, Kolkata
iii	Prof. S. L. Maskara, Department of Electronics & Communication Engg. IIT-Khargpur
iv	Prof. S. Subedar, Department of Electronics & Communication Engineering, North Eastern Regional Institute of Science and Technology, Nirjuli, Arunachal Pradesh
v	Prof. Dr. Jagadesh Kumar, Department of Electrical Engineering, IIT-Delhi.
vi	Prof. Dr. Susanta Sen, Institute of Radio Physics & Electronics, University of Kolkata.
vii	Prof. Dr. Siddhartha Sen, HoD, Department of Electrical Engineering, IIT-Kharagpur.
viii	Prof. Dr. Anirban Bhattacharya, Institute of Radio Physics & Electronics, University of Kolkata.
ix	Prof. Dr. Bidyut Bhattacharyya, Department of Electrical Engineering, NIT -Agartala.
x	Prof. Dr. Sambhu Nath Pradhan, Department of Electrical Engineering, NIT - Agartala.
xi	Prof. Dr. Sanatan Chattopadhyay, Institute of Radio Physics & Electronics, University of Kolkata.
xii	Prof. Dr. P.P. Goswami, Institute of Radio Physics & Electronics, University of Kolkata.

### 5.11 Department of Electrical and Electronics Engineering

Electrical and Electronics Engineering is a field of engineering that generally deals with the study and application of electricity, electronics and electromagnetism. The field first became an identifiable occupation in the late nineteenth century after commercialization of the electric telegraph and electrical power supply. It now covers a range of sub-topics including power, electronics, control systems, signal processing and telecommunications. The Department of Electrical & Electronics Engineering was established right from the inception of the Institute in 2010. The department offers a four year degree program in Electrical & Electronics Engineering with an annual intake capacity of 30 students.

The course objective is to prepare the students to be successful in integrating all the fields of engineering and science and to be able to pursue advanced studies in Electrical & Electronics Engineering on a competitive global basis. The mission is a culmination of the efforts of the Department to meet the mission of NIT-Arunachal Pradesh, North-Eastern region and the nation at large.

#### Faculty Members

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Prof. P. D. Kashyap	01.11.2011	Associate Prof.	Measurement and Instrumentation
ii	Rajen Pudur	01.02.2012	Assistant Prof.	Power Systems
iii	Abhishek Kumar	01.08.2012	Assistant Prof.	Electrical Machines,
iv	Ralli Sangno	06.09.2013	Assistant Prof.	Power System Engineering and Power System Control
v	Shantanu Chatterjee	14.09.2013	Assistant Prof.	Applied Electronics & Instrumentation, Power Electronics and Drivers Tuning of PID Controller, Renewable Energy Resources
vi	Brajagopal Dutta	10.12.2013	Assistant Prof.	High Voltage Engineering, HUDC System

**Students' Strength**

	Male	Female	Total
B. Tech 1st year	15	4	19
B. Tech 2nd year	24	4	28
B. Tech 3rd year	23	6	29
B. Tech 4th year	24	3	27
<b>Total</b>	<b>86</b>	<b>17</b>	<b>103</b>

**Special Lectures**

Sl. No.	Expert Faculty from reputed Institution
i	Prof P. Sarkar, Department of Electrical Engineering, NITTTR-Kolkata

**5.12 Department of Civil Engineering**

Civil Engineering is a professional engineering discipline that deals with the design, construction and maintenance of the physical and naturally built environment, including works like roads, bridges, canals, dams, and buildings. Civil Engineering is one of the oldest engineering disciplines. It is traditionally broken into several sub-disciplines including environmental engineering, geotechnical engineering, geophysics, structural engineering, transportation engineering, earth science, municipal or urban engineering, water resources engineering, materials engineering, offshore engineering, quantity surveying, coastal engineering, surveying and construction engineering. Civil Engineering pervades through all the levels in the public sector – from municipal administration through to national government, and in the private sector from individual home-owners through to international companies. The Department of Civil Engineering at the National Institute of Technology- Arunachal Pradesh, was started in 2013 with an annual intake capacity of 30 students.

The objective is to prepare the students to be capable of taking up any Civil Engineering challenges and to be able to pursue advanced studies and research in Civil Engineering on a competitive global basis. The mission of the Department is culmination of its effort to meet the efforts of NIT- Arunachal Pradesh, North Eastern region and the nation at large.

**Faculty Members**

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Ms Jumrik Taipodia	09.12.2013	Assistant Professor	Construction Technology

### Students' Strength

	Male	Female	Total
B. Tech 1st year	18	1	19
B. Tech 2nd year	0	0	0
B. Tech 3rd year	0	0	0
B. Tech 4th year	0	0	0
<b>Total</b>	<b>18</b>	<b>1</b>	<b>19</b>

### 5.13 Department of Mechanical Engineering

Mechanical Engineering is one of the major divisions within the profession and its principles are involved in the design, development and construction of nearly all of the physical devices and systems which technology has produced. Mechanical engineers are also concerned with the operations of all kinds of machinery, and the production of power. They must conceive research, design, develop, test, manufacture and sell equipments for these purposes. It is one of the oldest and broadest engineering disciplines.

The Department of Mechanical Engineering at National Institute of Technology-Arunachal Pradesh was established in August, 2013. The Department offers a four year degree program in Mechanical Engineering with an annual intake capacity of thirty(30) students. Within a very short period, this Department has already developed some new laboratories with modern facilities; however some are under the process of development. A continuous effort has been put in place towards setting up of new laboratories and improvement of facilities in the existing ones.

The objective is to provide students with a sound knowledge of mechanical engineering education, while enhancing their understanding and skill of application of principles of mechanical engineering for techno-economical development of the country, and improving the quality of life of our citizens through teaching, research, and outreach programmes. The mission is further to provide an environment where students have extensive avenues to excel, improve technical exposure and develop personality and then get placed in reputed organizations with good future so as to ensure their global presence, in various roles and responsibilities, and also to meet the mission of NIT-Arunachal Pradesh, North-Eastern region and the nation at large.

### Faculty Members

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Mr. Bapi Sarkar	03.08.2012	Assistant Professor	Aerodynamics
ii	Mr. Sandip Kumar Mandal	19.09.2013	Assistant Professor	Manufacturing

### Students' Strength

	Male	Female	Total
B. Tech 1st year	19	0	19
B. Tech 2nd year	0	0	0
B. Tech 3rd year	0	0	0
B. Tech 4th year	0	0	0
<b>Total</b>	<b>18</b>	<b>1</b>	<b>19</b>

#### 5.14 Department of Physics, Chemistry and Bio-Technology

Department of Physics, Chemistry and Bio-Technology has been established right at the inception of the Institute in 2010. Currently, the Department comprises of Physics, Chemistry and Biotechnology. The Department has a rich heritage of qualified teaching and research works in the field of aforesaid subjects. The faculty members of the department have been actively involved in departmental activities and participating in administrative work as well including developmental activities of the Institute for its future growth, with the objectives of (i) imparting theoretical and practical knowledge to the students in the area of Chemistry, Physics and Biotechnology and (ii) providing teaching and learning to make the students acquainted with advanced science and technology.

The objective is to inject the future scope and the research direction encompassing all the disciplines while making students competent towards research and development in advance science and technology. Upon completion of the subjects, the learning outcomes will train the students who will become Physicists, Chemists, Scientists and Engineers. Students will be skilled both theoretically and practically to do operation, control and maintenance of works in all the disciplines. Students will also be substantially prepared to take up prospective research assignments.

### Faculty Members

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Dr. Pinaki Chakraborty	01.12.2011	Assistant Professor	Microelectronics
ii	Dr. Nabakumar Pramanik	29.12.2011	Assistant Professor	Inorganic Chemistry
iii	Dr. Ananta Kumar Atta	03.09.2013	Assistant Professor	Organic Chemistry
iv	Dr. Pratap Kumar Swain	18.10.2013	Assistant Professor	Theoretical Particle Physics (String Theory)

### 5.15 Department of Mathematics, Management and Humanities

Mathematics, Management and Humanities is an inter-disciplinary branch of engineering which integrates several fields such as Mathematics, Life Science and English. The Department of Mathematics, Management and Humanities was established right from the inception of the Institute in 2010. The mission of the Department is to impart knowledge of basic science to the engineering students and make students competitive and to develop their communication skill which will help them to build their career.

It is the objective of the Institute to prepare the students to be successful in all the fields of science and engineering, and to be able to pursue advanced studies in near future. The mission is a culmination of the effort to meet the mission of NIT-Arunachal Pradesh, North-Eastern region and the nation at large.

### Faculty Members

Sl. No.	Name of the faculty	Date of joining	Designation	Area of Specialization
i	Dr. Mihir Kumar Shome	27.12.2013	Associate Prof.	Human Resource Management
ii	Dr. Utpal Kumar Daha	27.01.2012	Assistant Prof.	Special Function
iii	Dr. K Ratan Singh	31.01.2012	Assistant Prof.	Graph Theory
iv	Dr. Susanta Maity	16.09.2013	Assistant Prof.	Fluid Mechanics
v	Ms. Narang Rija	28.03.2012	Assistant Prof.	Folk lore

**Special Lectures**

Sl. No.	Expert Faculty from reputed Institutions
i	Prof. Jibon Chakraborty, Adjunct Professor, Department of Basic sciences & Humanities, Kolkata
ii	Prof. Gulab Jha, Department of Foreign Languages, Guwahati University
iii	Dr. S. K. Dutta, Professor, National Institute of Rural Development, Guwahati
iv	Dr. Madan Mohan Singh, Department of Mathematics, NEHU, Shillong
v	Pranab Sharma, EDP , IIE, Guwahati
vi	Subhabrata Barman, HIT, West Bengal
vii	Sonjib Mitra, AOT, West Bengal University, Kolkata
viii	Udahab Bharali, Entrepreneur, North Lakhimpur, Assam

	<p><b>Prof. B. P. Sinha</b> Professor Advanced Computing and Microelectronics Unit, Indian Statistical Institute, Kolkata, India</p>
	<p><b>Prof. S. L. Maskara</b> Former Professor Electronics and Electrical Communication Engineering, Indian Institute of Technology-Kharagpur, India</p>
	<p><b>Prof. S. C. Dutta Roy</b> Former Professor Department of Electrical Engineering, Indian Institute of Technology-Delhi, India</p>
	<p><b>Prof. D. P. Kothari</b> Former Dy Director Indian Institute of Technology-Delhi, India</p>
	<p><b>Prof. Bibek Bandyopadhyay</b> Former Director, Solar Energy Centre Ministry of New and Renewable Energy, Government of India Electronics and Electrical Communication Engineering Indian Institute of Technology - Kharagpur, India</p>

## 5.16. Academic growth plan of the Institute is as follows:

Level	Department	Specialization	Expected Year of Starting	Expected Intake
B.Tech	Bio-Technology	Bio-Technology	2014-15	30
	Electrical Engineering	Electrical Engineering	2014-15	30
	Chemical Engineering	Chemical Engineering	2015-16	30
	Spacecraft Engineering Engineering	Spacecraft	2015-16	30
	Food Technology	Food Technology	2015-16	30
M.Tech & M.Arch	Electronics & Communication Engineering	Electronics Design and Manufacturing	2014-15	20
	Mechanical Engineering	Mechanical Engineering	2015-16	20
	Bio-Technology	Bio-Technology	2015-16	20
	Electrical Engineering	Electrical Engineering	2015-16	20
	Chemical Engineering	Chemical Engineering	2015-16	20
	Civil Engineering	Civil Engineering	2015-16	20
Integrated M.Tech-Ph.D.	Computer Science & Engineering	Information Security	2014-15	20
	Electronics & Communication Engineering	Electronics Design and Manufacturing	2015-16	20
M.S	Mathematics, Management and Humanities	Mathematics & Computing (Holiday Course)	2014-15	20
M.B.A.	Mathematics, Management and Humanities	HR, Finance, IT (System)	2014-15	30

**Present Faculty Position (Department-wise)—as on 31.03.2014**

Department	No. of Faculty			Faculty with Ph.D degree		No. of faculty currently pursuing Ph.D
	No. of Male Faculty	No. of Female Faculty	Total	No. of Faculty with Ph.D	No. of Faculty received Ph.D from abroad	
Computer Science & Engineering	06	00	06	00	00	06
Electronics & Communication Engineering	04	02	06	00	00	04
Electrical & Electronics Engineering	06	00	06	00	00	02
Civil Engineering	00	01	01	00	00	01
Mechanical Engineering	02	00	02	00	00	01
Chemistry	02	00	02	02	00	00
Physics	02	00	02	02	00	00
Mathematics	03	00	03	03	00	00
Mgmt& HU	02	01	03	02	00	00

## 6. RESEARCH ACTIVITIES

### 6.0. Introduction

During the period under report, substantial research activities have been undertaken by the faculty members of the Institute and a summary of the same is given in the subsequent paragraphs.

### 6.1 Research Programmes

#### Doctoral Programme

During the year under report, thirteen Faculty members have registered for the Ph.D. programme in NIT-Arunachal Pradesh (and other nearby Institutes) as against two faculty members during the previous year. The complete list of such faculty members is given here under:

Sl. No.	Name	Designation	Category	Dept.	Date of Joining the Institute		Pursuing Ph.D. at
i	Shri Swarnendu Kr. Chakraborty	Asstt. Prof.	GEN	CSE	01/12/2011	July 2012	NIT-Arunachal Pradesh
ii	Shri Rajat Subhra Goswami	Asstt. Prof.	GEN	CSE	01/12/2011	July 2012	NIT-Arunachal Pradesh
iii	Shri Rajen Pudur	Asstt. Prof.	ST	EE	01/02/2012	July 2012	NERIST
iv	Shri Abhishek Kumar	Asstt. Prof.	GEN	EE	01/08/2012	July 2013	NERIST
v	Shri Bapi Sarkar	Asstt. Prof.	SC	ME	03/08/2012	July 2013	NERIST
vi	Shri Koj Sambyo	Asstt. Prof.	ST	CSE	07/08/2012	July 2013	NIT-Arunachal Pradesh
vii	Miss Yaka Bulu	Asstt. Prof.	ST	ECE	07/08/2012	July 2013	NIT-Arunachal Pradesh
viii	Mr. Sahadev Roy	Asstt. Prof.	GEN	ECE	13/08/2012	July 2013	NIT-Arunachal Pradesh

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Sl No.	Name	Design-ation	Cate-gory	Dept.	Date of Joining the		Pursuing Ph.D. at
					Institute	Ph.D.	
ix	Mr. Anish Kumar Saha	Asstt. Prof.	GEN	CSE	03/10/2012	July 2013	NIT-Arunachal Pradesh
x	Mr. Subhasish Banerjee	Asstt. Prof.	GEN	CSE	27/02/2013	Jan. 2014	NIT-Arunachal Pradesh
xi	Ms. Yang Saring	Asstt. Prof.	ST	ECE	11/04/2013	Jan. 2014	NIT-Arunachal Pradesh
xii	Mr. Ralli Sangno	Asstt. Prof.	ST	EE	06/09/2013	Jan. 2014	NERIST
xiii	Mr. Manash Pratim Dutta	Asstt. Prof.	OBC	CSE	23/09/2013	Jan. 2014	NIT-Arunachal Pradesh
xiv	Ms. Jumrik Taipodia	Asstt. Prof.	ST	CE	09/12/2013		IIT-Guwahati
xv	Mr. Brajagopal Datta	Asstt. Prof.	GEN	EE	10/12/2013	Jan. 2014	NERIST

### Research Projects

The projects submitted during the year under report are as follows:

Title of the Project	Name of the Principal Investigator	Name of the Co-Principal Investigator	Submitted to
Investigation to design & develop new techniques & theories for accurate and secured transport of information over future generation of networks with guaranteed quality of services and with higher throughputs, lower delay and higher level of security.	Prof. (Dr.) C T Bhunia	Shri Rajat Subhra Goswami and Shri Swarnendu Kr. Chakraborty	Council of Scientific and Industrial Research, Gol.

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<b>Title of the Project</b>	<b>Name of the Principal Investigator</b>	<b>Name fo the Co-Principal Investigator</b>	<b>Submitted to</b>
Analytical and Numerical Methods for Non-linear Fractional Dynamic System	Dr. Utpal Kumar Saha	—	Department of Science and Technology, Gol.
A study on p-graphoidal graphs	Dr. Karam Ratan Singh	—	National Board of Higher Mathematics (D/o. Atomic Energy, Gol)
Composite Materials: synthesis, Surface Modification, Characterization and Biomedical Studies.	Dr. Nabakumar Pramanik	Dr. Ananta Kumar Atta	NIT-Arunachal Pradesh (Sanctioned)
CNT to enhance the performance of gas sensor	Dr. Pinaki Chakraborty	Dr. Santanu Maity	NIT-Arunachal Pradesh (Sanctioned)
Studies of unsteady thin nano liquid film development on a stretching surface	Dr. Susanta Maity	—	NIT-Arunachal Pradesh (Sanctioned)
Intelligent voice stick for blind and partially sighted people	Prof. (Dr.) C. T. Bhunia	Dr. Pinaki Chakraborty	NIT-Arunachal Pradesh (Sanctioned)
Design and implication of electrical motor cycles, using BLDC motor	Shri Rajen Pudur	Shri Saibal Chatterjee (NERIST)	NIT-Arunachal Pradesh (Sanctioned)
Amino sugars, amino acids, heavy metal sensors and other valuable compounds from highly reactive sugar derived unsaturated lactones	Dr. Ananta Kumar Atta	Dr. Nabakumar Pramanik	Department of Science and Technology

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Title of the Project	Name of the Principal Investigator	Name fo the Co-Principal Investigator	Submitted to
Design and synthesis of Carbohydrate based Sensors for Efficient Determination of Heavy Metal Icons	Dr. Ananta Kumar Atta	—	Science and Engineering Research Board
Development of thin nano liquid film over the surface of a rotating disk	Dr. Susanta Maity	Dr. Pratap Kumar Swain	Department of Science and Technolgy
Inorganic-Organic Hybrid Characterisation and Bio-Medical Studies	Dr. Nabakumar Pramanik	Dr. Ananta Kumar Atta	NIT-Arunachal Pradesh

### 6.2 Research Projects (during the last five years):

#### Year-wise details

Sl. No.	Academic year	No. of ongoing projects	Year wise total fund received under project head
i	2013	01	Rs.5,00,000.00
ii	2012	-	-
iii	2011	-	-
iv	2010	-	-
v	2009	-	-
<b>TOTAL</b>		<b>01</b>	<b>Rs.5,00,000.00</b>

#### Year-wise sources of major funding agencies

Sl. No.	Year	Name of major funding agencies	Fund received
i	2013	NIT-Arunachal Pradesh	Rs.5,00,000.00
ii	2012	-	-
iii	2011	-	-
iv	2010	-	-
v	2009	-	-
<b>TOTAL</b>		<b>-</b>	<b>Rs.5,00,000.00</b>

## Department / Centre-wise Project fund received on R&amp;D head

Sl. No.	Year	Name of major funding agencies	Fund received
i	2013	NIT-Arunachal Pradesh	Rs.5,00,000.00
ii	2012	-	-
iii	2011	-	-
iv	2010	-	-
v	2009	-	-
	<b>TOTAL</b>	-	<b>Rs.5,00,000.00</b>

### 6.3 List of major academic initiatives for achieving R&D excellence to be undertaken in near future :

- 2nd National Conference on "Futuristic Technical Education (FTE-2014)" will be held on November 7-8, 2014 at NIT-Arunachal Pradesh.
- Celebration of National Technology Day on 11th May every year.
- Bi-annual Journal Publication namely "International Journal on Current Science and Technology (ISSN 23203656)"
- 3 Scientific Meetings will be held in the month of November, 2014 under TWAS/ICTP Italy

### 6.4 Research facilities

Free analytical and Inter-NET research facility to the research scholars has been developed and provided during the year.

### Research and Development Cell

Research is an integral component of any educational programme. In order to do research in a meaningful manner, it is imperative to review the recent advances in the concerned subjects from time to time. The sole purpose of the conference held is to have interaction between the scientists, mathematicians, engineers and management experts, and thus come to know about the advances made in the recent past in the broad areas of Chemical Sciences, Earth System Sciences, Engineering Sciences, Environmental Sciences and Sustainable Development, Material Sciences, Mathematical Sciences and Physical Sciences. This is expected to provide a boost to the R & D programmes.

### Research and Development Programmes

- Ph. D. Programme.
- Junior Research Fellowship Programme (JRF) [HYPERLINK "<http://www.nitap.in/Menu/RnD/docs/ADVT%20JRF.pdf>"]
- North Eastern Regional Science Congress on "Science For Shaping The Future of India" 2013

#### Advanced / Research Laboratories

Sl. No.	Department	Name of Advanced/ Research Lab	Research area
i	ECE	Simulation Laboratory	VLSI & Antenna
		Embedded System Laboratory	Robotics, Android

#### Major/High-end Equipment in departments and centres

Sl. No.	Department /Centre	List of Equipment above Rs. 25.00 Lakh	Purpose
i	ECE	Spectrum Analyzer (9KHz-13 GHz)	Patch Antenna, Radio Wave research
		Spectrum Analyzer (9KHz - 48 GHz)	Satellite Communication, Raddar
ii	EEE	Transmission Line Simulator	To study the transmission line

### 6.5 Patents (during the last five years)

#### Year-wise details

Sl. No.	Academic year	No. of Indian patents granted	No. of Indian patents filed	No. of Foreign patents granted	No. of Foreign patents filed
i	2013	Nil	03	Nil	Nil
ii	2012	Nil	-	Nil	Nil
iii	2011	Nil	-	Nil	Nil
iv	2010	Nil	-	Nil	Nil
v	2009	Nil	-	Nil	Nil
	<b>TOTAL</b>	<b>Nil</b>	<b>03</b>	<b>Nil</b>	<b>Nil</b>

## Department wise patent details (during the last five years)

Sl. No.	Academic year	No. of Indian patents granted	No. of Indian patents filed	No. of Foreign patents granted	No. of Foreign patents filed
i	Computer Science & Engineering	Nil	03	Nil	Nil
<b>TOTAL</b>		<b>Nil</b>	<b>03</b>	<b>Nil</b>	<b>Nil</b>

**6.6 Publications**

The faculty members published several papers in National / International Seminars during the year under report. The different publications published during the year under report are listed below:

**Dr. Nabakumar Pramanik**

- i. N. Pramanik and S. Chakraborty; "A facile route for the preparation of phosphonic acid grafted nanosized hydroxyapatite biomaterial"; Research Journal of Chemical Science, vol.3 (2013) pp.1-4.
- ii. A. Bhunia, A. Bhunia, S. K. Chakraborty, P. Chakraborty, R. S. Goswami, N. Pramanik, M. K. De, P. K. Samanta, C. T. Bhunia; "Review and suggestions for revamping technical higher education in India to meet the challenges of future", International Journal on Current Science and Technology, vol.1 (2013) pp.21-29.
- iii. S. Chakraborty and N. Pramanik; "Characterization of ruthenium based metal complex nanoparticles decorated on carbon supported surface", Research Journal of Chemical Science, vol.3, (2013) pp.31-34.

**Alak Majumder**

- i. Alak Majumder; "Design of an H-shaped Microstrip Patch Antenna for Bluetooth Applications," International Journal of Innovation and Applied Studies, vol. 3, no. 4, pp. 987-994, August 2013.
- ii. Alak Majumder; "Design of a Microstrip Patch Antenna for UWB application using CRLH TL", Electronics Letter (Communicating)

**Swarnendu Kumar Chakraborty**

- i. Rajat Subhra Goswami, Swarnendu Kumar Chakraborty, Abhinandan Bhunia, C. T. Bhunia; "New Techniques for generating of Automatic Variable Key in Achieving Perfect Security", Journal of the Institution of Engineers (India), DOI: 10.1007/s40031-013-0066-8.
- ii. Rajat Subhra Goswami, Swarnendu Kumar Chakraborty, Abhinandan Bhunia, C. T. Bhunia; "Generation of Automatic Variable Key under various approaches in Cryptography System", Communicated to Journal of the Institution of Engineers (India), DOI: 10.1007/s40031-013-0066-8.
- iii. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Investigation of Two New Protocols of Aggressive Packet combining scheme in achieving better throughput", Journal of the Institution of Engineers (India), Springer.
- iv. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Studies of several new modifications of Aggressive Packet Combining to achieve higher throughput, based on correction capability of disjoint error vectors", Communicated to Journal of the Institution of Engineers (India).
- v. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Three New Investigations of Aggressive Packet Combining to get High throughput", International Journal of Computer Applications, USA, (0975-8887), Vol: 81-No. 5, Nov 2013, pp-41-44
- vi. YakaBulo, Swarnendu K Chakraborty, Chandan T Bhuia; "New Protocol of Aggressive packet combining scheme", International Journal of Computer Applications, USA, (0975-8887), Vol: 85-No. 6, Jan 2014, pp-17-20
- vii. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Method of Non Majority Decision Making in Aggressive Packet Combining Scheme", IEEE,ITNG, 2014, IEEE Computer Soc, CPS,LAs Vegas
- viii. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "New Protocol of Aggressive Packet Combining in Gilbert Two state method", IEEE,CIEC, 2014, University of Calcutta

- ix. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Aggressive Packet Combining Schemes: Review", National Conference on Emerging Trends in Computing, NCETIS-2013, during 13<sup>th</sup>-15<sup>th</sup> June 2013, Thrissur, Kerala, India
- x. Rajat Subhra Goswami, Swarnendu Kumar Chakraborty, Abhinandan Bhunia, C. T. Bhunia; "Various New Methods of Implementing AVK", 2nd International Conference on Advances in computer Science & Engineering, CSE2013, 1st - 2nd July' 2013, Atlantis Press, pp: 149-152.

#### **Rajat Subhra Goswami**

- i. Rajat Subhra Goswami, Swarnendu Kumar Chakraborty, Abhinandan Bhunia, C. T. Bhunia; "New Techniques for generating of Automatic Variable Key in Achieving Perfect Security", Journal of the Institution of Engineers (India), DOI: 10.1007/s40031-013-0066-8.
- ii. Rajat Subhra Goswami, Swarnendu Kumar Chakraborty, Abhinandan Bhunia, C. T. Bhunia; "Generation of Automatic Variable Key under various approaches in Cryptography System", Journal of the Institution of Engineers (India), DOI: 10.1007/s40031-013-0066-8.
- iii. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Investigation of Two New Protocols of Aggressive Packet combining scheme in achieving better throughput", Communicated to Journal of the Institution of Engineers (India).
- iv. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Studies of several new modifications of Aggressive Packet Combining to achieve higher throughput, based on correction capability of disjoint error vectors", Communicated to Journal of the Institution of Engineers (India).
- v. Rajat Subhra Goswami, Swarnendu Kumar Chakraborty, Abhinandan Bhunia, C. T. Bhunia; "Various New Methods of Implementing AVK", 2nd International Conference on Advances in computer Science & Engineering, CSE2013, 1st - 2nd July' 2013, Atlantis Press, pp: 149-152.
- vi. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Approach towards Optimum Data Transfer with Various Automatic Variable Key (AVK) Techniques to Achieve

- Perfect Security with Analysis and Comparison", International Journal of Computer Applications (0975 - 8887)
- vii. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Cypher Combining Technique to Tackle Error Propagation Behavior of AES", International journal of Current Science & Technology, March, 2013.
  - viii. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "New Approaches to Generate Automatic Variable Key for Achieving Perfect Security in Cryptography", Communicated to Journal of the Institution of Engineers (India) IEIB (Springer).
  - ix. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "New Approaches to Generate Automatic Variable Key for Achieving Perfect Security in Cryptography", Communicated to Journal of the Institution of Engineers (India) IEIB (Springer).
  - x. Swarnendu K Chakraborty, Rajat S Goswami, Abhinandan Bhunia, Chandan T Bhunia; "Experimental study to examine the superiority of CSAVK, AVK over conventional encryption with a single key", Communicated to Journal of the Institution of Engineers (India) IEIB (Springer).

#### **Anish Kumar Saha**

Anish Kumar Saha, Hrituparna Paul, Partha Pratim Deb; "Integration of Caching and Prefetching in Proxy Server", International Journal of Research and Technology, ISSN: 2278-0181, Vol: 3, Issue:3, 2014.

#### **Koj Sambyo**

Koj Sambyo, C T Bhunia; "Multi Level ATM for reducing latency in cloud computing" ITNG 2014, International Conference, Las Vegas, USA

#### **Sahadev Roy**

- i. Disha Bhattacharjee, Deepti Tripathi, Rubi Debnath, Vivek Hanumante and Sahadev Roy; "A Novel Approach for Character Recognition," in International Journal of Engineering Trends and Technology (IJETT) - Volume 10 Number 6 - Apr 2014 pp 271-275.
- ii. Vivek Hanumante, Rubi Debnath, Disha Bhattacharjee, Deepti Tripathi and Sahadev Roy; "English Text to Multilingual Speech

- Translator Using Android, "International Journal of Inventive Engineering and Sciences (IJIES) ISSN: 2319-9598, Volume-2, Issue-5, pp 4-9, April 2014.
- iii. Sahadev Roy and Chandan Tilak Bhunia; "Minimization Algorithm For Multiple Input to Two Input Variables" in 2014 International Conference on Control, Instrumentation, Energy and Communication (CIEC) IEEE Conference ISBN No: 978-1-4799-2043-3 pp 622-624, Jan 2014.
- iv. Vivek Hanumante, Panchatapa Bhattacharjee, Sahadev Roy, Pinaki Chakraborty and Santanu Maity; "Performance Analysis of Rectangular Patch Antenna for Different Substrate Heights, "International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering www.ijireeice.com Vol. 2 Issue 1, ISSN (Online) 2321-2004 (Print) 2321-5526 pp 515-518 January 2014.
- v. Sahadev Roy and Chandan Tilak Bhunia; "Minterms Generations Algorithm Using Weighted Sum Method, "International Journal on Current Science & Technology ISSN: 2320 5636 pp 132-135, 11th-14th December, 2013.
- vi. Panchatapa Bhattacharjee, Vivek Hanumante and Sahadev Roy; "Design of U-Slot Rectangular Patch Antenna for Wireless LAN at 2.45GHz, "9th International Conference on Microwaves, Antenna Propagation and Remote Sensing ICMARS-2013, Jodhpur, INDIA, pp 132-135, 11th-14th December 2013.
- vii. Vivek Hanumante and Sahadev Roy; "Comparative Study of Microstrip Patch Antenna Using Different Dielectric Materials," in 9th International Conference on Microwaves, Antenna, Propagation and Remote Sensing ICMARS-2013, Jodhpur, INDIA, pp 56-60, 11th - 14th December, 2013.
- viii. Vivek Hanumante, Sahadev Roy and Santanu Maity; "Low Cost Obstacle Avoidance Robot, "International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307 Volume-3, Issue-4, pp 52-55, September 2013.
- ix. Mr. Santanu Maity, Mr Abhishek Kumar, Mr. Sahadev Roy, Mr. Vinay K Dwivedi, Balaji Tripathi, Ashmit Sharma and Dayasagar; "Fabrication of Microheater and Interdigitated Electrodes on Silicon Platform for Low Power Integrated Gas Sensor Applications," in Journal of Research in Electrical and Electronics Engineering (ISTP-JREEE) ISSN: 2321 -2667 Volume 2, Issue 4, pp 6-10, July 2013.

- x. Santanu Maity, Sahadev Roy and Abhishek Kumar; "Silver nanoparticles to enhance the efficiency of silicon solar cells," in International Journal of Engineering Science Invention [www.ijesi.org](http://www.ijesi.org) ISSN (Online): 2319-6734, ISSN (Print): 2319-6726 Volume 2 Issue 7 PP.101-104 July 2013.
- xi. Santanu Maity and Sahadev Roy; "Near Sub-Wavelength Texturization of Silicon Surfaces For Solar Cell Applications," International Journal of Scientific Engineering and Technology ISSN: 2277-1581 Volume No. 2, Issue No. 6, pp:511-515 1 June 2013.
- xii. Santanu Maity, Sahadev Roy, Abhishek Kumar; "Silver nanoparticles to enhance the efficiency of silicon solar cells", International Journal of Engineering Science Invention, Volume 2 Issue 7 PP.101-104.
- xiii. Santanu Maity , Abhishek Kumar, Sahadev Roy, Vinay Kumar Dwive-di BalajiTripathi, Ashmit Sharma, Dayasagar; "FABRICATION OF MICROHEATER AND INTER- DIGITED ELECTRODES ON SILICON PLATFORM FOR LOW POWER IN-TEGRATED GAS SENSOR APPLICATIONS", Journal of Research in Electrical and Electronics Engineering, Volume 2, Issue 4, Pp 6-10.
- xiv. Vivek Hanumante, Sahadev Roy, Santanu Maity; "Low Cost Obstacle Avoidance Robot", International Journal of Soft Computing and Engineering, Volume-3, Issue-4, Pp 52-55.

#### **Santanu Maity**

- i. Santanu Maity; "Surface voids improvement of front side contact And plasmonic effect in light induced plating of c-si solar cell", International Journal of Engineering Sciences, 2013. ([http://www.thescitechpub.com/journals/IJES/ijes\\_issue.aspx](http://www.thescitechpub.com/journals/IJES/ijes_issue.aspx))
- ii. Santanu Maity, Sahadev Roy, Abhishek Kumar; "Silver nanoparticles to enhance the efficiency of silicon solar cells", International Journal of Engineering Science Invention, Volume 2 Issue 7 PP.101-104.
- iii. Santanu Maity , Abhishek Kumar, Sahadev Roy, Vinay Kumar Dwive-di Balaji Tripathi, Ashmit Sharma, Dayasagar; "fabrication of microheater and inter- digited electrodes on silicon platform for low power in-tegrated gas sensor applications", Journal of Research in Electrical and Electronics Engineering, Volume 2, Issue 4, Pp 6-10.

- iv. Abhishek Kumar, Vinay Kumar Dwivedi, Santanu Maity, Mohit Bajaj, "Performance comparison of control algorithms for load compensation using D-satcom under abnormal source voltage", ICPEE 2013, Thailand.
- v. Vivek Hanumante, Sahadev Roy, Santanu Maity; "Low Cost Obstacle Avoidance Robot", International Journal of Soft Computing and Engineering, Volume-3, Issue-4, Pp 52-55. International Conferences.

#### **Rajen Pudur**

- i. Sarsing Gao, Rajen Pudur; Harnessing hydroelectric power using savonius rotor coupled with asynchronous generator connected to grid", IEEE APPEEC-2013, Hong Kong.
- ii. Rajen Pudur; "Wireless Power Transmission: A Survey", IEEE ICRAIE-2014, Jaipur.
- iii. Bikash Sah, Rajen Pudur; "Study of Unsymmetrical Faults in Power System Using Morlet Wavelet Technique", IEEE SCC-2014, Bhopal.

#### **Brajagopal Datta**

- i. Brajagopal Datta, Dr. Saibal Chattarjee; "Simulation of Bewley's Lattice Diagram using MATLAB", IEEE CATCON-2013, Jadavpur University.
- ii. Kamaljyoti Gogoi, Nrilanjali Debnath, Diganta Mishra, Brajagopal Datta, Dr. Saibal Chattarjee; "Load flow studies on transmission line of 220 kv and 400 kv of NER Grid India using PSSE", NPSC-2014, IIT-Guwahati. (Communicated).

#### **Shantanu Chatterjee**

- i. Shantanu Chatterjee; "A Novel Hybrid Multilevel Inverter for Photovoltaic Application Using Dual Reference Modulation Scheme", NPEC-2013, IIT-Kanpur.
- ii. Shantanu Chatterjee; "Modelling & Simulation of VSC base SSSC", NPSC-2014, IIT-Guwahati. (Communicated).
- iii. Shantanu Chattarjee, Ankit Garg; "Chaotic PWM Spread Spectrum Scheme for Conducted Noise Mitigation in DC-Dc Convertors", NPSC-2014, IIT-Guwahati

**6.7 Publications by faculty members (during the last five years):**

**Year-wise number of publication in peer reviewed journals and conferences**

Sl. No.	Year	National Journals	International Journals	International conferences	National conferences	Books	Book chapters, Monographs Published
i.	2013	05	37	18	11	01	01
ii.	2012	01	12	03	03	00	01
iii.	2011	04	09	01	01	00	00
iv.	2010	-	-	-	-	-	-
<b>Total</b>		<b>10</b>	<b>58</b>	<b>22</b>	<b>15</b>	<b>01</b>	<b>02</b>

**Department-wise total publications**

Sl. No.	Name of the Department	2013		2012		2011		2010	
		Journals and Books (J&B)	Conference and Book chapters (C&B)	(J&B)	(C&B)	(J&B)	(C&B)	(J&B)	(C&B)
	ECE	11	06	02	02	02	00	-	-
	CSE	12	16	00	00	00	00	-	-
	EEE	06	03	03	02	02	01	-	-
	ME	00	01	00	00	00	00	-	-
	CE	00	00	00	00	00	00	-	-
	PCB	06	02	07	00	02	00	-	-
	MMH	02	01	00	02	08	02	-	-
<b>Total</b>		<b>37</b>	<b>29</b>	<b>12</b>	<b>06</b>	<b>14</b>	<b>03</b>	<b>-</b>	<b>-</b>



Lt. Gen J.J. Singh, H.E. the Governor of Arunachal Pradesh is delivering Inaugural address of North East Regional Science Congress 2013

## 7. STUDENTS' AMENITIES AND ACTIVITIES

### 7.0 Introduction

The details of the amenities for the students provided by the Institute are something unique. All of them actually love the Institute which is situated on the lap of the MOTHER NATURE.

### 7.1 Hostels

The hostels of the Institute are the units of dwelling place i.e., a home away from the home cared by the Hostel Provost, Wardens and Hostel Staff. The rooms are well-spaced for all the students to live in and to study, and are provided with individual cots. Landscape in and around the hostels makes the environment healthier and beautiful. The hostels are supported with playground for the students. Well-equipped common rooms exist in each boys' and girls' hostel separately.

Medical facility is available to the students and members of faculty and staff to tackle the health hazards and to ensure physical well-beings.

Details of the Medical Officer are as under:

**Dr. P.K. Deb**

**Designation:** Medical Officer (Part-time)

**Email:** mo@nipap.in

**Contact:** 0360-2284801 (O), 09862850343 (M)

### 7.2 Hostel Accommodation

At present, the Institute has six (6) hostels, of which four hostels are for boys and two hostels are for girls. The total capacity of these hostels is 362. The Institute is fully residential and all the students (i.e. boys and girls) are accommodated in their respective hostels.

**Table 7.1**  
**Details of Accommodation in the Students' hostels**

Sl. No.	Name of hostel	Year of establishment	Type of accommodation	No. of rooms	Total no. of inmates
i	Tiger Hall	2010	Triple Room	25	64
ii	Lotus Hall	2010	Triple Room	12	35
iii	Peacock Hall	2011	Triple Room	18	43
iv	Pragati Hall	2012	Triple Room	41	94

**Table 7.1**  
**Details of Accommodation in the Students' hostels..... Cont.**

Sl. No.	Name of hostel	Year of establishment	Type of accommodation	No. of rooms	Total no. of inmates
v	Deer Hall	2012	Multi-bedded Room	18	76
vi	Dormitory	2011	Double Room	15	24
vii	Fairy Home	2013	Multi-bedded Room	9	22
viii	M.Tech G.H. Type-IV	2013	Double Room	2	4

### 7.3 Hostel Administration

The Institute has provided supporting staff to maintain the hostels. The duties of the hostel administration are being carried out under the direction of the Hostel Provost who heads the management of boys' and girls' hostels. He is supported by wardens and office staffs. The details of the Wardens of the hostels are given below:

#### Boys' Hostels:

- i. Dipak Jana, Warden, Tiger Hall of Residences, Yupia, Arunachal Pradesh
- ii. Sugriv Kumar, Warden, Peacock Hall of Residences, Yupia, Arunachal Pradesh
- iii. Tapbarata Adhikari, Warden, Pragati Hall of Residence, Nirjuli, Arunachal Pradesh
- iv. Ujjal Samanta, Assistant Warden, Pragati Hall of Residence, Nirjuli, Arunachal Pradesh

#### Girls' Hostels:

- i. Ms Abi Taying, Warden, Rose Hall of Residence, Nirjuli, Arunachal Pradesh
- ii. Vacant for Lotus Hall of Residence, Yupia, Arunachal Pradesh

### 7.4 Hostel Mess

Students who are admitted to the hostels are provided with food in the mess. Hostel mess is compulsory for all hostellers. No permission is granted for dining outside the respective hostel mess under any circumstances. All the messes have been outsourced. The hostel messes are run by experienced and qualified caterers. The messes offer healthy meals at moderate rates.

### 7.5 General Facilities

- The Institute's Health Centre offers medical facilities.
- Proper lighting arrangement has been made inside and outside the hostels.
- Each hostel has a separate common/recreation hall
- Wi-Fi connection is also provided in all the hostels.
- All the hostels are connected to the roads by well-built pathways.

### 7.6 Subsidy

The Institute is also planning to provide mess subsidy to the inmates of the hostels based on the income of the parents. The amount should not exceed certain minimum level subject to the approval of the Director of the Institute.

### 7.7 Scholarship

To encourage the students to excel in their academic pursuits, the Institute provides scholarship to its 10% students, subject to the conditions that the concerned students is not availing any other scholarship from any other sources. List of students, getting scholarship/stipend from various foundations/organizations are as follows:

Sl. No.	Name of Students	Branch	Amount (Rs.)	Received from
i.	Ms. Nanu Gumsar Sorum	CSE	5,100.00	As a stipend from Govt. of Arunachal Pradesh for the period from 1.07.2011 to 31.03.2012.
ii.	Ms. Tangha Lendon	CSE	5,100.00	-do-
iii.	Mr. Nabam Bida	EEE	5,100.00	-do-
iv.	Ms. Tenzing Lhadon	EEE	4,600.00	As a stipend from Govt. of Arunachal Pradesh for the period from 1.08.2011 to 31.03.2012.
v.	Ms. Tenzin Choney	EEE	4,600.00	-do-
vi.	Mr. Kago Apang	EEE	13,400.00	As a stipend from Govt. of Arunachal Pradesh for the period of one year from August 2011

Sl. No.	Name of Students	Branch	Amount (Rs.)	Received from
vii.	Mr. Rahul Kumar	EEE	23,100.00	As a stipend from Govt. of Bihar
viii.	Ms. Sweta Rani	EEE	25,000+ 50,000	From Foundation for Academic Excellence & Access (FAEA)
ix.	Mr. Surender Kr. Sharma	ECE	40,000.00	As a stipend from Govt. of Bihar
x.	Mr. Akash Kumar	CSE	40,750.00	-do-
xi.	Mr. Nitesh Kumar	EEE	43,080.00	As a stipend from Govt. of UP
xii.	Mr. Kunal Kumar	EEE	43,700.00	As a stipend from Govt. of Bihar
xiii.	Mr. Priyanshu	ECE	48,200.00	-do-
xiv.	Mr. V. Hanumante	ECE	36,969.00	As a stipend from Govt. of MP
xv.	Mrs. Neha Tripathi	CSE	5,700.00	As a scholarship from Sitaram Jindal Foundation.

### 7.8 Placement Cell

Placement Cell plays a very important role in counselling and guiding the students of the Institute for their professional growth and successful career placement. This chapter is a crucial interface between the stage of completion of academic programme of studies and that of entry into suitable employment and entrepreneurship.

Besides, in order to provide ample opportunities to the students to get proper placement in industries and companies, the Placement Cell conducts workshops and mock interviews. It has prepared a draft Placement Brochure and the same has been released in the year under report 2013-14 to invite the industries/organizations for campus interviews and placements. Video-conferencing facility has already been established in 2012-13 for conducting one-to-one interview.

The Training and Placement Cell of the Institute centrally handles all aspects of campus replacements for the graduating students of all the Departments. The Cell is well-equipped with excellent infrastructure to support each and every stage of the placement processes. The T & P staff members also assist in arranging Pre-Placement Talks, Written Tests, Group Discussions and Interviews etc. as per the requirements of the Organizations.

## ANNUAL REPORT 2013-14

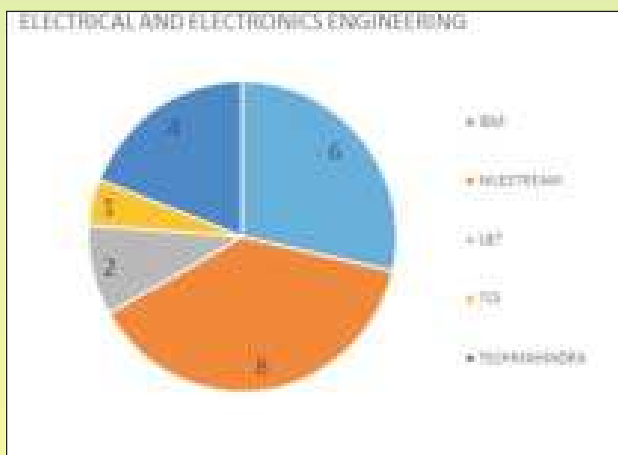
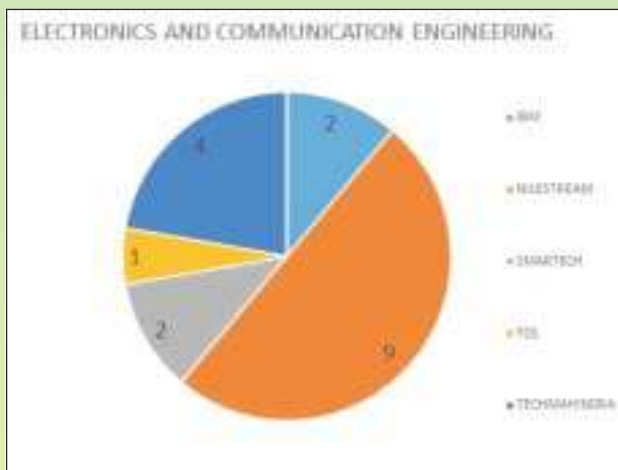
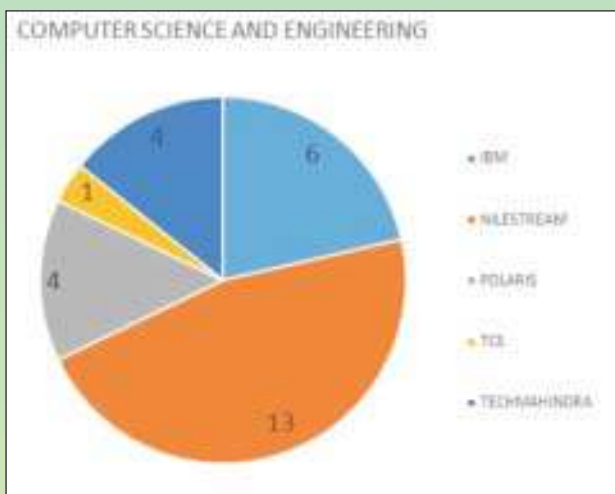
The details of students (batch 2010-14) who are already placed and already left for higher studies abroad are as under:

Sl. No.	Corporate/PSU	No. of Students	Package offered (in Rs.)	Remarks
i.	Polaris	04	4.5 Lakh/annum	6 shortlisted
ii.	Nilestream	30	3.0 Lakh/annum	35 shortlisted
iii.	IBM	14	3.4 lakh/annum	15 shortlisted
iv.	L&T	02	5.2 lakh/annum + other allowances	One get rejected (being medically unfit)
v.	SmartTek	02	3.5 lakh/annum	6 shortlisted
vi.	Tech Mahindra	11	3.2 lakh/annum	13 shortlisted
vii.	TCS	03	3.2 lakh/annum	6 shortlisted
viii.	Power grid Corporation	01	13.8 lakh/annum	6 shortlisted. (This was only for OBC students.)
ix.	Left abroad for higher studies	3 (2 in USA & 1 in Singapore)	With scholarship	Didn't appear for placement process
x.	<b>Total</b>	<b>70 (Seventy)</b>		

Placement of the First Batch (2010-14) of Students (Department-wise)

DEPTT.	No. of STUDENTS	MULTIPLE OFFERED	TOTAL PLACED
ECE	24	1	10
CSE	29	3	20
EEE	27	5	11

**Placement status Department-wise (in pie chart)**



## 7.9 Research related information pertaining to students :

### I. Department-wise students' publications (during the last five years)

Sl. No.	Department	2013		2012		2011		2010		2009	
		Conference (C+B)	(J)	(C+B)	(J)	(C+B)	(J)	(C+B)	(J)	(C+B)	(J)
i	ECE	02		08		-		-		-	
ii	CSE	-		-		-		-		-	
iii	EEE	-		-		-		-		-	
<b>Total</b>		<b>02</b>		<b>08</b>		<b>-</b>		<b>-</b>		<b>-</b>	

[Hint: Conference (C), Journals (J), Book Chapters (BC).]

### II. Participation of students in conferences

Programme	Departments	No. of students attended										Total	
		National/International Conferences in India					National Conferences abroad						
		2013	2012	2011	2010	2009	2013	2012	2011	2010	2009		
B. Tech/B. Arch	ECE	30	-	-	-	-	-	-	-	-	-	-	30
	CSE	30	-	-	-	-	-	-	-	-	-	-	30
	EEE	30	-	-	-	-	-	-	-	-	-	-	30
M.Tech/ M.Sc./ MBA/ MCA/ M.Arch	-	-	-	-	-	-	-	-	-	-	-	-	-
Ph.D	CSE	04	-	-	-	-	02	-	-	-	-	-	06
	ECE	02	-	-	-	-	00	-	-	-	-	-	02
	EEE	01	-	-	-	-	02	-	-	-	-	-	03
<b>Total</b>		<b>97</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>101</b>

### III. Inter-disciplinary nature of projects/thesis work of students (in the last 5 years)

#### [Discipline-wise details (number only)]

Branch	B.Tech					M.Tech					Ph.D				
	2013	2012	2011	2010	2009	2013	2012	2011	2010	2009	2013	2012	2011	2010	2009
ECE	02	-	-	-	-	-	-	-	-	-	02	-	-	-	-
CSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EEE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>02</b>	-	-	-	-	-	-	-	-	-	<b>02</b>	-	-	-	-

#### [Year-wise projects]

Academic Session	B.Tech	M.Tech/M.Sc/MBA/MCA	Ph.D
2009	-	-	-
2010	-	-	-
2011	-	-	-
2012	-	-	-
2013	02	-	-
<b>Total</b>	<b>02</b>	-	-

#### 7.10. Programme organized by National Service Scheme (NSS) Unit of the Institute

Mass Social Service was organized by the NSS unit to mark the Teacher's Day with Tree plantation by Director, Dean (Acad.), Officer on Special Duty in the presence of members of staff and students.



(Tree plantation by Director and OSD in the presence of members of staff and students)



**Tree plantation by Dean (Academic) in the presence of members of staff and students**

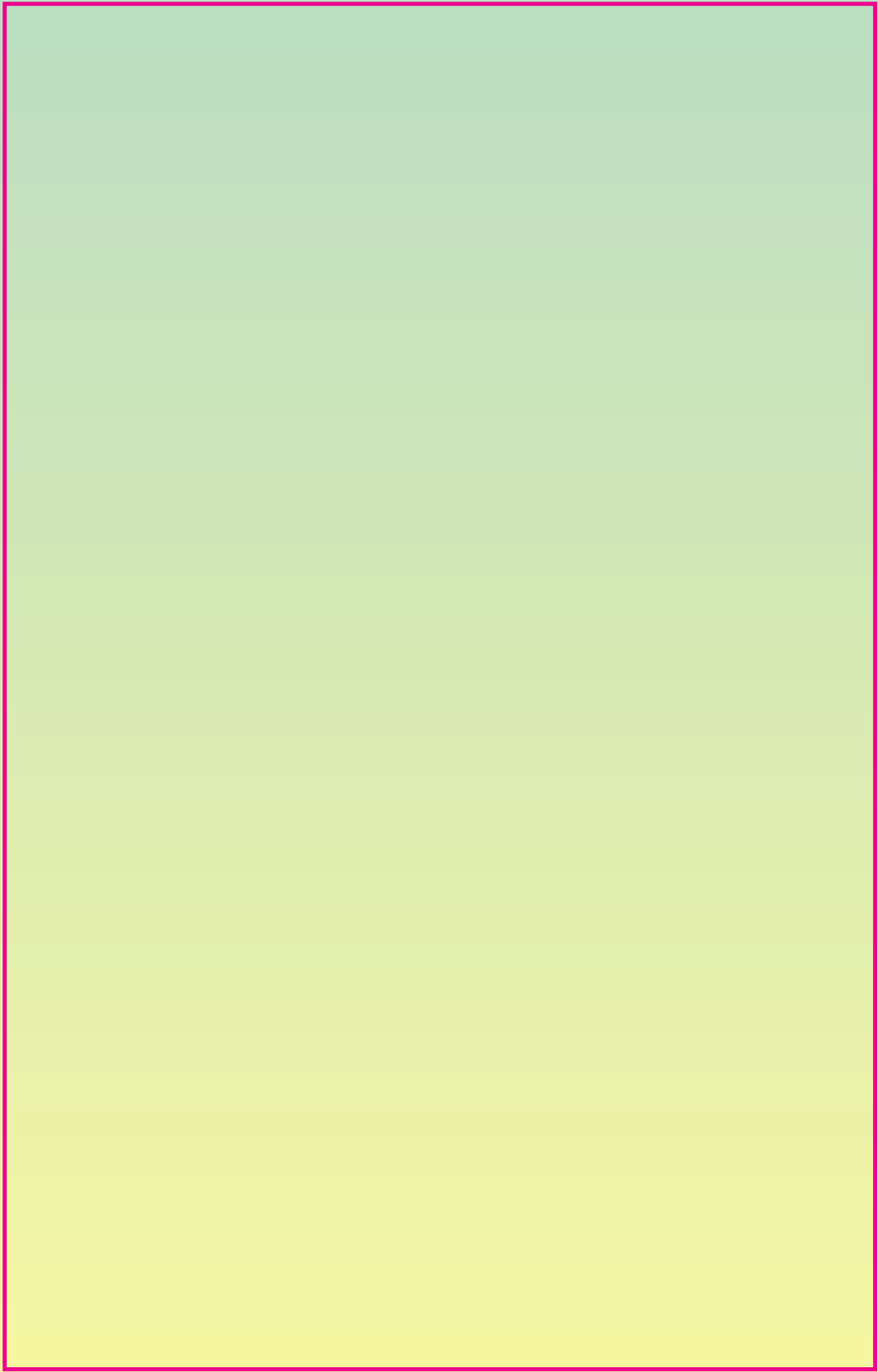
The Blood Donation Camp was organized in collaboration with the Arunachal State Hospital, Naharlagun, where students and members of faculties and staff donated their blood voluntarily.



**Astt. Dean (Examination) participating in the Blood Donation Camp**



**HoD, CSE participating in the Blood Donation Camp**



## 8. Innovations and Emerging needs

### 8. Introduction

The National Institutes of Technology (NITs) were established with the mandate to impart higher technical education and also to carry out research work at par with the standards adopted by international universities. In pursuance of achieving excellence at par and meeting the basic objectives of establishing the NITs, this Institute has initiated various innovative measures not known to be in operation as such elsewhere. These innovations are meant to do things differently rather than to do different things. It is pertinent to mention here that the ten new NITs are in addition to the existing twenty older NITs in the country. The older NITs have required huge experience and have become matured with the passage of time. The ten new NITs are young enough and need to be innovative from the very beginning for achieving excellence. NIT-Arunachal Pradesh has started with a perfect tune and innovative ideas wherever and whenever possible within the existing frameworks of the NIT Act and Statues.

The following paragraphs portray a summary of things initiated in NIT-Arunachal Pradesh for stepping in the hall of fame. The motive of doing so is to invite constructive review opinions and suggestions for possible addition to, deletion from and modifications of current actions of the Institute for steering the wheel in the right direction for perfect achievements while ensuring an inclusive growth.

### 8.1 Academic Innovations

The Vision and Mission of NIT-Arunachal Pradesh stand on the four pillars viz. EDUCATION, RESEARCH, SERVICE TO SOCIETY and ETHICS. In pursuit of this, several noble approaches are made in framing syllabi, selecting judicious new disciplines for UG & PG studies, introducing Ph. D. programmes, undertaking social services and adopting country-specific programmes. The following are the details in this regard:

#### **Education in a frame of productive & forward looking syllabi in producing right and prospective engineers for the country**

The UG syllabi are chalked out with unique & distinct compulsory credit courses for all the disciplines and those are: NCC/NSS to make the students mentally & physically competent; Historiography in Science & Technology to make future engineers to know about the philosophy & struggle of

their great predecessors to establish scientific & technological temper in the societal cause; Values & Ethics to produce future engineers with ethical mind and value-oriented human beings; Design Contest as an attempt to produce Technical Engineers rather than only Academic Engineers within the current framework of the fixed four-year programme; Research Paper Communication to ignite young minds in thinking process and research viability; and Environmental Engineering & Disaster Management to provide time-relevant courses to meet emerging needs.

To make the students globally employable and competitive, several excellent courses are offered. These are basically communication skill development papers on English, French, German, Japanese and Chinese. All Electives are made open to students of any & all branches. Now-a-days, employability of students of CSE & IT (for that purpose all other disciplines too) is based on sometimes how much they know about Java, PH P, Ruby rather than that of core subjects. Hence in order to enhance the employability, which is one of the responsibilities of any Institute of National Importance, add-on courses (non-credit) are offered to the students during vacation/holidays, preferably by the Industrial Houses.

### **Fabulous measures in examination process**

Several bold measures have been introduced or are in process of implanting in revamping the examination system in NIT-Arunachal Pradesh. The measures so undertaken are believed to examine as to how far the students know rather than what they do not know. Besides, engineers should be made to take up design on given problem with available formula and imaginative orientation rather than memorizing of dates, data and quotations. A few noteworthy initiatives taken up are: setting question paper of more marks (say 150 marks rather than the conventional 100 marks) and asking students to write whatever they can with a maximum given score (for example 100 marks), open book examination in selective mathematics and design oriented papers, and on-line examination in papers of objective type.

### **Catering Industrial Flavours in imparting Education**

Since the days of recommendation of Kothari Commission for Institute-Industry interaction, various steps are in operation in different universities through many different ways to realize the concept. However, NIT-Arunachal Pradesh promises to do the interaction through an approach reportedly never seen hitherto. The big ideas in operation in the Institute are I-course and compulsory industrial training for members of faculty.

One paper in each semester of all branches is marked as I-course meaning that at least 50% of the course content of the paper will be taught by an Industrial Expert. In order to meet the challenges of not getting industrial experts for delivering lecture, other way around approach has been adopted up in NIT-Arunachal Pradesh. During summer vacation, teachers on rotation are sent to industry for training at least for a month at full cost of the Institute to allow them to acquire Industrial experience gradually.

### **Inspiring changes through judicious selection of new UG & PG courses**

Several research works on technical education systems in India categorically pointed about the spurt of growth of institutes/universities owing to LPG (Liberalization, Privatization & Globalization) adopted in India after 1990s. But the emphatic spurt has resulted in creating several imbalances in the technical education in India primarily due to Private Investment Policy of low investment and high return clubbed with the profit-only motive in most of the cases. The disciplines, popularity in respect which are increasing in leaps and bounds, are low investment and service-oriented courses like Computer Science & Engineering, Information Technology and Electronics & Communication Engineering. Mother Core Sector engineering and high investment disciplines of Mechanical Engineering, Civil Engineering and Electrical Engineering are pathetically ignored. Any '*Institute of National Importance*' must act to correct this imbalance and, therefore, NIT-Arunachal Pradesh has resolved to start B Tech programme in Mechanical Engineering and Civil Engineering in 2013-14. At the same time, the Institute does not like to ignore the emergent areas for taking a giant leap forward. It has aspired to start M Tech in Mobile Computing & Communication Engg., being one of the most promising emergent fields, in 2013-14.

NIT-Arunachal Pradesh has taken a bold decision to introduce M Tech programme on Appropriate Technology & Entrepreneurship Practice in 2013-14 as a sole course in collaboration with the National Institute of Rural Development, Hyderabad. Several studies and statistics predict that the unemployment of engineering graduates in India will be a social crux and may be highly dismissive for engineering education in India to flourish and progress. As of today, around 40% engineering graduates are either jobless or in job with under-paid monthly emoluments. Most of the employed engineers suffer from frustration due to lack of job-satisfaction and lack of innovative strategies of the employers. In the age of LPG (Liberalization, Privatization and Globalization), it was predicted that the BRIC countries (i.e. Brazil, Russia, India and China) will be the

power-centres to reckon with. The fact is that except in respect of China, it is difficult to believe that the prediction has been true. China has progressed based on several innovative measures one of which is the revolution in entrepreneurship in manufacturing sectors with global market. India has not progressed much in entrepreneurship in manufacturing industries, though it has some impacts only in service sectors, that too in basically IT sectors. Therefore, it will be a wise approach either to introduce noble new M Tech programme in India to tackle the gaps mentioned above. Today in India, there is a need to produce engineers who will create jobs rather than running after jobs. At the same time, in India, one important unattended sector is appropriate technology relevant to rural, cultural and environmental development. A little attention has so far been given to bamboo technology, low cost & local made farming technology, rural home-made food processing technology, bio-gas technology, renewable energy resources, and environment and sustainable development. In order to address both the issues mentioned above, an innovative M Tech programme on Appropriate Technology & Entrepreneurship Practice (AT & EP) has been started for 2013-14 as mentioned above. The "Think Tank" of the Institute is also seized of the need of other aspects of inclusive growth in the present-day scenario.

### Forward thinking research activities

NIT-Arunachal Pradesh has taken up challenges to create potential and productive research culture in the Institute in the process of which notable exercises are introduction of Ph. D. programmes in Computer Science & Engineering, Electronics & Communication Engineering, Physics, Chemistry and Mathematics; regular organization of research conferences including the North-eastern Regional Science Congress in the centenary year of Indian Science Congress Association (proposals have been sent for organization of a full Indian Science Congress in 2015, Indian Engineering Congress in 2015 and Annual Convention of Indian Society for Technical education in 2016); publication of regular bi-annual journal called Int'l Journal on Current Science & Technology; encouraging and sponsoring members of faculty to enrol as members of scientific & professional societies like IEEE, IETE, IE(I), ISTE and ISCA leading to creating sections/chapters in short future. Lots of accolades are achieved in research productivity in NIT-Arunachal Pradesh [e.g. in 2011, two Professors / Assistant Professor visited USA, Italy and Jordan to present research papers & chair technical session; in 2012, two Professors / Assistant Professor to visit USA for the same function in 2013-14, four faculty members visited USA and to attend International Conferences; and many Professors have published research papers in leading national & international journals].

### Developing resourceful laboratories & libraries

NIT-Arunachal Pradesh has left no stone unturned in installing world class laboratories and those are: English Communication Laboratory, Computing & Network Laboratory, Campus Wi-Fi connectivity, Video Conferencing & other ten laboratories in last one year with M Tech class rooms with a computer with NET facilities to each student. The library is immensely resourceful as is evident from the following table of comparison based on data available in different websites.

**Table: Books per student available in libraries of leading Universities/ Institutions**

Sl. No.	Name of the Institute/University	Total number of students	Total number of books in library	Book collection per student
i	Stanford University, California	19,945	13,10,000	65.12
ii	IIT-Khargpur	6,450	3,00,000	46.51
iii	MANIT-Bhopal	4,000	1,40,719	44.26
iv	NIT-Arunachal Pradesh	372	16,433	44.17
v	IIT-Bombay	5,700	2,28,077	40.18
vi	MNNIT-Allahabad	3,179	1,04,382	32.83
vii	IIT-Guwahati Pradesh	3,900	1,17,000	30.00
viii	NIT-Agartala	2,200	34,000	15.45

### Fast Track students' activities

The Institute has provided enough encouragement to its students with partial financial support to make them enrolled as IEEE student member following which petition has been submitted for opening students' branch at NIT-Arunachal Pradesh. On every year on Technology Day on 9th May, the Institute has decided to organize National Students' Essay Contest with best essays awarded with cash prizes and with publication of the proceedings containing the selected essays. As a matter of bringing togetherness and to bring respect for seniors as well as confidence in juniors, senior students are encouraged to teach juniors on some selected

course papers. The approach is believed to decrease/minimize conflicts between seniors and juniors often common in universities particularly on egoistic issues. NSS/NCC chapter has been opened in the Institute under the banner of which students took part in plantation and beautification programmes in Yupia. Students have since organized two blood donation camps.

#### **Regular symposium of Visiting Professors**

In each semester, a conclave of eminent professors from leading universities is initiated to supplement the regular teaching process and also to have interaction by teachers for research direction. A few distinguished professors invited for such conclave are: Prof S C Dutta Roy, IIT- Delhi; Prof S L Maskara, IIT- Kharagpur; Prof Ajit Pal, IIT- Kharagpur; Prof P K Basu, University of Calcutta; Prof Atal Chowdhuri, Jadavpur University; and Prof Karmeshu, JNU, among others.

### **8.3. Administrative Innovations**

Administrative reforms & innovations in NIT-Arunachal Pradesh go in tandem with those of academics so as to achieve maximum benefits. Administrative philosophy adopted by the Institute is binary : "0" for love, affection and humanitarian attitude with zero action while activities are performed to meet the defined objective in the framework of prevailing rules & regulations; and "1" while action is stringent when given function has failed to meet the targeted goal with non-acceptable pretext. The Institute categorically rejects the common excuse of not doing things on the pretext of having no time as its philosophy of time management is that "Busy men always get time to execute; but it is the idle men only who do not get time." Accordingly, innovative practices introduced in NIT-Arunachal Pradesh are brought out hereunder.

#### **Six days a week**

NIT-Arunachal Pradesh is in the practice of 'six days a week' in first three/ four weeks of a month, followed by holiday of the last week clubbed with cumulative 3 or 4 days' compensatory leave for working on Saturdays/ Sundays/Holidays of the previous weeks. The process has got multiple benefits of providing a substantial period of holiday at a stretch at least once in a month to the employees and students from distant places to enable them to go home for family togetherness without disturbing the effective continuity of teaching & learning process with a small gap for avoiding monotony and providing a short break in studies.

### Practice of E-office

NIT-Arunachal Pradesh is in the process of being transformed into a paperless office. Most of the communications are made by and through e-mails. ERP solutions are to be installed for complete automation of the offices in short future.

### Greenovations

Plenty of initiatives are implanted to make NIT-Arunachal Pradesh a zero-tolerance zone so far as the noise and pollution are concerned with the facilities of in-built waste disposal and energy conservation in place. The present temporary campus has an installed captive solar power plant of 100 kw serving all purposes of energy requirement. This is reported to be the first of its kind in the entire North-eastern region. Necessary plan has been sanctioned to make the permanent campus (at Jote) a fully solar powered, earth-quake resistant, in-built waste disposal system with possible bio-gas plant and water recycling plant. Cost escalation for such a planned noble campus is of course a matter of concern. The permanent campus is proposed to have a tram line communication with conventional vehicles deployed at the entrance only. The proposal is meant to make the campus less noisy and pollution-free.

### Attitudinal U-turn

NIT-Arunachal Pradesh believes to see half a glass of water as half-full rather than half-empty. Institute's authorities have since given verbal directions to all concerned to review and analyze all & every proposal with positive attitude as far as practicable. It has been categorically instructed all in the administration and academics to behave like Teachers rather than as Officers; but that does not mean any deviation from the existing rules & regulations. It envisages that if the reply in response to anything is "NO", the same is to expressed as "*NOT BEING POSSIBLE, PLEASE.*"

### Continuous encouragement

NIT-Arunachal Pradesh is in the practice of yearly award of best teacher, best student and best employee on performance matrix. The practice is to reward for good works. The Institute believes in rectification and, therefore, there is only "Reward" scheme and no "Punishment" scheme. The punishment scheme is rectification and providing suitable counselling and further renewed opportunities to excel.

#### 8.4 Conclusions

It is the goodness and hard work of the members of faculty, officers, members of staff and students that NIT-Arunachal Pradesh is in continuous practice of doing innovations in chain to become second to none. Their art of converting difficulties into opportunities and the attitude of " never say no" have made the Institute to do such splendid works in a short span of four (4) years logically and practically during a period of one and half a years. To NIT-Arunachal Pradesh, "Yesterday is Memory, Today is Gift and Tomorrow is Hope". To fulfill the cherished hopes and aspirations, the Institute pledges support, review decision and constructive criticism from readers towards redefining the practices for greater societal benefits and to reach the sky which is the only limit to NIT-Arunachal Pradesh.

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## 9. MISCELLANEOUS

### 9.0 Introduction

Various other important issues pertaining to the Institute are brought out hereunder in a succinct form.

### 9.1 Remedial Measures

The Institute has already set up certain units/cells for properly handling the following items of works which are of very much importance in the functioning of the administration of an '*Institute of National Importance*':

#### Prevention of Sexual Harassment

The sexual harassment cell functioning in the Institute is maintaining a vigilant watch on any untoward incident which may outrage the modesty of girl students or lady employees or women family members of the employees. Till date, no such incident has come to the notice. The cell is functioning under the Chairmanship of Ms. Yaka Bulo, Assistant Professor, Electronics and Communication Engineering, along with other supporting members.

#### Prevention of harassment towards SC/ST

There is also a cell for prevention of harassment towards SC/ST students and employees etc. in the Institute. The cell is keeping watch on all of them. The cell is headed by Shri Rajen Pudur, HoD, Electrical and Electronics Engineering Department.

#### Public Grievances

The Institute has also a Public Grievances Cell which handles all the cases of grievances received from the students and employees of the Institute. Dr. M.K. Shome, Associate Professor, MMH Department is the Co-ordinator of this Cell.

#### RTI Matters

A RTI Cell is functioning under the supervision of Rajat Subra Goswami, Assistant Professor, Computer Science and Engineering Department. He is also the CPIO of the Institute. The Appellate Authority of the Institute is Dr. Pinaki Chakraborty, Assistant Dean (R&D).other details are as under:

**Sh. Rajat Subhra Goswami**

**Designation:** Central Public Information Officer (CPIO)

**Email:** [cpio@nitap.in](mailto:cpio@nitap.in)

**Contact:** 0360-2284801 (O), 09436271052 (M)

**FAX No.:** 0360-2284972

**Dr. Pinaki Chakraborty**

**Designation:** First Appellate Authority

**Email:** [pchakraborty.ece@nitap.in](mailto:pchakraborty.ece@nitap.in)  
[pinakichk@gmail.com](mailto:pinakichk@gmail.com)

**Contact:** 0360-2284801 (O), 09436271840 (M)

**FAX No.:** 0360-2284972

**Dr. Nabakumar Pramanik**

**Designation:** Transparency Officer

**Email:** [pramaniknaba@gmail.com](mailto:pramaniknaba@gmail.com)  
[nkpramanik.chem@nitap.in](mailto:nkpramanik.chem@nitap.in)

**Contact:** 0360-2284801 (O), 09436271050 (M)

**FAX No.:** 0360-2284972

**Care for Physically Handicapped Persons**

The Physically Handicapped Care cell is instrumental in ensuring that the physically handicapped students do not face any problem in attending classes and going to or staying in hostels in this hilly region. The cell fixes all the cases of problem being faced by physically handicapped students and employees of the Institute. Shri Swarnendu Chakraborty, Assistant Professor, CSE Department is the Co-ordinator of the Cell.

**Anti-ragging Machinery**

The Institute and its campus as well as the hostels are totally free from the menace of ragging. The Cells (one in day time and other in the night time) are keeping a strict watch and vigilance on the state of affairs in this regard. Prof. P.D. Kashyap and Shri Mohit Kr. De are chairing the Cells.

**9.2 Security arrangements**

Security of the campus of the Institute is being maintained through outsourcing. Shri N.M. Sarmah, Security Officer is responsible for maintenance of security and sorting out the law and order problems in the campus. He is at present supported by one Security Officer, one Assistant Security Officer, one Security Supervisor and seventy-three

Security Guards including the Lady Security Guards for girls' hostels. The existing security team is also responsible for running rescue operations in the campus in case of any accident or natural disaster.

### **9.3 Medical attention**

Necessary arrangements of medical facilities have been provided by the Institute round the clock in the campus including the Academic block and Residential block. One ambulance always remains present in the campus so as to tackle all types of emergencies. Necessary tie-ups have been made with the important hospitals (Govt. & Private) and Nursing Homes in the adjoining area. Suitable counselling is provided to the students so as to enable them to overcome any stress. Necessary steps have also been taken to ensure confidence building among the students so that they can continue their studies in a tension-free ambience.

### **9.4 Scholarship to SC/ST & Minority students**

The Institute is providing scholarships to SC/ST and minority students and merit scholarships to the meritorious students. The Institute is also planning for granting waiver in fees to the deserving students. The scholarship section is being headed by Dr. Karam Ratan Singh, Assistant Professor, Mathematics & TPO of the Institute.

### **9.5 Annual Report**

The Institute started functioning in 2010 under the mentorship of NIT-Durgapur and the arrangement continued till 31.10.2011. The Annual Reports of 2010-2011, 2011-12 and 2012-13 prepared by the Institute and approved by the Board of Governors in the 5th meeting of the BoG have been forwarded to the Ministry of Human Resource Development, Government of India.

### **9.6 Celebrations**

The Institute celebrates the Independence Day Ceremony on 15th August and Republic Day Ceremony on 26th January every year in a colourful manner. The National Flags are hoisted with due honour and the celebrations in the presence of dignitaries. Photographs of the celebrations are attached below:

The National Voter's Day was celebrated at the temporary campus (along with the whole nation). Essay, Quiz, Debate and Drawing competitions were organized to mark the occasion.



National Voter's Day Celebration

## 9.6 National Integration

In the National Institutes of Technology, students of all the States and Union Territories of India are studying as per the existing scheme of admission approved by the Government of India. NIT-Arunachal Pradesh has become a miniscule India with students from all the parts of the country. The students arrange various cultural programmes which provide a wide range of colourful regional flavour with an overall fusion of national taste and federal character. The students from all the parts of the country are mixing up with each other and they share various ethnic cultures, regional practices, ethical norms, societal behaviour and religious experiences while promoting the spirits of National Integration. This is the stepping stone to be the perfect citizens of India.

**ANNUAL REPPORT  
PART - II**



## INSTITUTE'S AUTHORITIES

(2013-14)

### I – Board of Governors

<b>Chairperson</b>	1	Dr. Gangan Prathap, Chairperson, Board of Governors, NIT-Arunachal Pradesh and Director, NISCAIR, New Delhi E-mail ID: <a href="mailto:gp@niscair.res.in">gp@niscair.res.in</a>
<b>Member (Ex-officio)</b>	2	Prof. (Dr.) C T Bhunia Director, NIT-Arunachal Pradesh, Po - Yupia, Dist. -Papum Pare, Arunachal Pradesh - 791112. E-mail ID: <a href="mailto:directornitap@gmail.com">directornitap@gmail.com</a>
<b>Members</b>	3	Ms Amita Sharma Additional Secretary, D/o. Higher Education, MHRD, Gol, Shastri Bhawan, "C" Wing, New Delhi E-mail ID: <a href="mailto:amitasharma.edu@nic.in">amitasharma.edu@nic.in</a>
	4	Shri A N Jha Joint Secretary & Finance Adviser, D/o. Higher Education, MHRD, Govt. of India, Shastri Bhawan, "C" Wing, New Delhi E-mail ID: <a href="mailto:internalfinance1@gmail.com">internalfinance1@gmail.com</a>
	5	Dr. Joram Begi Director of Higher Education, Govt. of Arunachal Pradesh, Itanagar, Arunachal Pradesh, E-mail ID: <a href="mailto:begi_dhe@rediffmail.com">begi_dhe@rediffmail.com</a>
	6	Prof. Dr. Ajoy Ghose Former Director, Indian School of Mines, Dhanbad, E-mail ID: <a href="mailto:ghose.ajoy@gmail.com">ghose.ajoy@gmail.com</a>

	7	Ms Mamang Dai Former Civil Servant and Poet, Arunachal Pradesh E-mail ID: <a href="mailto:mamangdai@hotmail.com">mamangdai@hotmail.com</a>
	8	Prof. Dr. Sukumar Nandi Representative of Director, IIT-Guwahati, Assam E-mail ID: <a href="mailto:sukumar@iitg.ernet.in">sukumar@iitg.ernet.in</a>
	9	Shri Tomi Ete Secretary, PHED, Govt. of Arunachal Pradesh, Itanagar, Arunachal Pradesh E-mail ID: <a href="mailto:tomiete@yahoo.com">tomiete@yahoo.com</a>
	10	Dr. Pinaki Chakraborty Assistant Professor, NIT- Arunachal Pradesh E-mail ID: <a href="mailto:pinakichk@gmail.com">pinakichk@gmail.com</a>
	11	Dr. Nabakumar Pramanik Assistant Professor, NIT- Arunachal Pradesh E-mail ID: <a href="mailto:pramaniknaba@gmail.com">pramaniknaba@gmail.com</a>
<b>Non-member Secretary</b>	12	Sri P K Modak OSD, NIT- Arunachal Pradesh, E-mail ID: <a href="mailto:pkm6972@gmail.com">pkm6972@gmail.com</a>
<b>II - SENATE</b>		
<b>Chairman(Ex-officio)</b>	1	Prof. (Dr.) C T Bhunia Director, NIT-Arunachal Pradesh, Po - Yupia, Dist. - Papum Pare, Arunachal Pradesh - 791112. E-mail ID: <a href="mailto:nitarunachal@gmail.com">nitarunachal@gmail.com</a>
<b>Member (Nominated)</b>	2	Prof. Dr. Dilip Kumar Sinha Former Vice-Chancellor, Visva Bharati University (Central University), Santiniketan

<b>Member (Nominated)</b>	3	Prof. Dr. Swapan Bhattacharjee Computer Science & Engineering, Jadavpur University, Kolkata & Director, NITK-Surathkal
<b>Members (Nominated)</b>	4	Prof Dr. Surabhi Banerjee Vice-Chancellor, Central University of Orissa
<b>Member (Distinguished invitee)</b>	5	Prof. Dr. S. Bandyopadhyay Vice-Chancellor, West Bengal University of Technology, Kolkata
<b>Member (Distinguished invitee)</b>	6	Prof. Dr. R N Bera, Sikim Manipal University
<b>Member (Invitee)</b>	7	Dr. Pinaki Chakraborty Asstt. Dean (R&D) & Assistant Professor, Physics, NIT- Arunachal Pradesh
<b>Member (Invitee)</b>	8	Dr. Nabakumar Pramanik Assistant Dean (Exam) & Assistant Professor, Chemistry, NIT-Arunachal Pradesh
<b>Member (Invitee)</b>	9	Sri Mohit Kumar De Assistant Librarian, NIT- Arunachal Pradesh
<b>Non-member Secretary</b>	10	Sri P K Modak OSD, NIT- Arunachal Pradesh

### III - FINANCE COMMITTEE

<b>Chairperson</b>	1	Dr. Gangan Prathap Chairperson, Board of Governors, NIT- Arunachal Pradesh and Director, NISCAIR, New Delhi, E-mail ID: <a href="mailto:gp@niscair.res.in">gp@niscair.res.in</a>
<b>Member (Ex-officio)</b>	2	Prof. (Dr.) C T Bhunia Director, NIT-Arunachal Pradesh, Po - Yupia, Dist. - Papum Pare, Arunachal Pradesh - 791112. E-mail ID: <a href="mailto:nitarunachal@gmail.com">nitarunachal@gmail.com</a>

<b>Members</b>	3	Representatives of MHRD
	4	Dr. Bubu Bhuyan, Associate Professor and Head, Department of Information Technology, NEHU, Shillong E-mail ID: <a href="mailto:b.bhuyan@gmail.com">b.bhuyan@gmail.com</a>
	5	Prof. P. P. Sahoo Head, Electronics and Communication Engineering Tezpur University, Tezpur, Assam, E-mail ID: <a href="mailto:pps@tezu.ernet.in">pps@tezu.ernet.in</a>
<b>Member-Secretary</b>	6	Sri P K Modak OSD, NIT- Arunachal Pradesh, E-mail ID: <a href="mailto:pkm6972@gmail.com">pkm6972@gmail.com</a>

#### IV - BUILDING AND WORKS COMMITTEE

<b>Chairman</b>	1	Prof. (Dr.) C T Bhunia Director, NIT- Arunachal Pradesh, Po - Yupia, Dist. - Papum Pare, Arunachal Pradesh - 791112. E-mail ID: <a href="mailto:nitarunachal@gmail.com">nitarunachal@gmail.com</a>
<b>Members</b>	2.	Representative of the MHRD
	3	Dr. Binay Singh, Director, NIRD, Guwahati
	4	Shri Munindra Chandra Deka, Consultant Engineering, NERC
	5	Er. S.R.Kumar Superintending Engineer, PHED, Western Zone, Govt. of Arunachal Pradesh, Itanagar
	6	Er. Tana Chiyi, AE, NIT-Arunachal Pradesh
<b>Member -Secretary</b>	7	Registrar/OSD, NIT-Arunachal Pradesh

**V - BOARD OF STUDIES****Department of Computer Science & Engineering**

<b>Chairman (<i>Ex-Officio</i>)</b>	1	Head, Department of Computer Science & Engineering (at the grade of Professor only), National Institute of Technology- Arunachal Pradesh
<b>Members</b>	2	Prof (Dr.) Ajit Pal Department of Computer Science & Engineering, IIT-Kharagpur, WB
	3	Prof (Dr.) Atal Chowdhury Department of Computer Science & Engineering, Jadavpur University, Kolkata
	4	Prof (Dr.) Bubu Bhuyan Associate Professor and Head of the Department of Information Technology, NEHU, Shillong
	5	Prof (Dr.) Samir Roy Department of Computer Science & Engineering, NITTTR, Kolkata, West Bengal

**Department of Electronics & Communication Engineering**

<b>Chairman (<i>Ex-Officio</i>)</b>	1	Head, Department of Electronics & Communication Engineering (at the grade of Professor only), National Institute of Technology- Arunachal Pradesh
<b>Members</b>	2	Prof. (Dr.) P.P.Sahu Head of the Department, Electronics & Communication Engineering, Tezpur University, Tezpur, Assam
	3	Prof. (Dr.) A. Hussain Department of Electronics & Communication Engineering, NERIST, Nirjuli, Arunachal Pradesh

- 4 Prof. (Dr.) Monojit Mitra  
Department of Electronics &  
Communication Engineering, BESU,  
Shibpur, West Bengal
- 5 Prof. (Dr.) P.K Basu  
Department of Radio Physics &  
Electronics, Calcutta University,  
Kolkata, West Bengal

**Department of Electrical & Electronics Engineering**

- Chairman (*Ex-Officio*)** 1 Head, Department of Electrical &  
Electronics Engineering  
(at the grade of Professor only),  
NIT-Arunachal Pradesh
- Members** 2 Prof. (Dr.) U.K.Sharma  
Former Professor Electrical  
Engineering & Director, NERIST,  
Nirjuli, Arunachal Pradesh
- 3 Prof. (Dr.) P. Sarkar  
Department of Electrical Engineering  
NITTTR-Kolkata, Salt Lake  
West Bengal
- 4 Prof. (Dr.) S.S. Pattanaik  
Department of Electrical Engineering  
NITTR-Chandigarh
- 5 Prof. (Dr.) S. Sen  
Department of Radio Physics &  
Electronics, Calcutta University,  
Kolkata, West Bengal

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**Department of Computer Science & Engineering**

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National Institute of Technology  
Arunachal Pradesh
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Former Professor  
Department of Computer Science &  
Engineering, TIFR, Mumbai

- 3 Prof (Dr.) Ajit Pal  
Department of Computer Science & Engineering, IIT- Kharagpur, West Bengal
4. Dr. Bubu Bhuyan  
Associate Professor and Head of the Department of Information Technology, NEHU, Shillong

**Department of Electronics & Communication Engineering**

- |                                     |   |  |
|-------------------------------------|---|--|
| <b>Chairman (<i>Ex-Officio</i>)</b> | 1 | Director<br>National Institute of Technology-<br>Arunachal Pradesh   |
| <b>Members</b>                      | 2 | Prof. Gautam Ghosh<br>ECE, RP & Electronics, CU, Kolkata   |
|                                     | 3 | Dr. D. P. Kothari<br>Director General,<br>J. B. Group of Educational Institutions  |
|                                     | 4 | Prof. Rabindranath Bera<br>Head, Department of Electronics &<br>Communication Engineering,<br>Sikkim Manipal University (Sikkim) |

**Department of Electrical & Electronics Engineering**

- |                                     |   |  |
|-------------------------------------|---|--|
| <b>Chairman (<i>Ex-Officio</i>)</b> | 1 | Director<br>National Institute of Technology-<br>Arunachal Pradesh   |
| <b>Members</b>                      | 2 | Prof. Gautam Ghosh<br>ECE, RP & Electronics,<br>University of Calcutta, Kolkata  |
|                                     | 3 | Dr. D. P. Kothari<br>Director General,<br>J. B. Group of Educational Institutions  |
|                                     | 4 | Prof. Rabindranath Bera<br>Head, Department of Electronics and<br>Communication Engineering,<br>Sikkim Manipal University (Sikkim) |



**ANNUAL REPPORT  
PART - III**



NATIONAL INSTITUTE OF TECHNOLOGY  
ARUNACHAL PRADESH, YUPIA - 791112

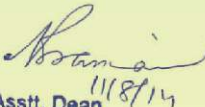
BALANCE SHEET AS ON 31<sup>ST</sup> MARCH, 2014

Amount in Rs.

CORPUS / CAPITAL FUND AND LIABILITIES	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
Corpus / Capital Fund	1	1196345355.38	241940491.00
Earmarked / Endowment Funds	2	3398252.00	1569658.00
Current Liabilities & Provisions	3	-	-
<b>Total</b>		<b>1199743607.38</b>	<b>243510149.00</b>

ASSETS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
Fixed Assets	4	1038886758.00	225151097.00
Investment from Earmarked / Endowment Funds	5	3398252.00	1569658.00
Current Assets, Loan, Advances etc.	6	157458597.38	16789394.00
<b>Total</b>		<b>1199743607.38</b>	<b>2435101049.00</b>

  
11/8/14  
Accountant  
National Institute of Technology  
Yupia, Arunachal Pradesh

  
11/8/14  
Asstt. Dean  
Finance & Accounts  
National Institute of Technology  
Arunachal Pradesh

  
11/8/14  
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**NATIONAL INSTITUTE OF TECHNOLOGY**  
ARUNACHAL PRADESH, YUPIA - 791112

SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31<sup>ST</sup> MARCH, 2014

Amount in Rs.

SCHEDULE-1 CORPUS FUNDS / CAPITAL FUND	CURRENT YEAR	PREVIOUS YEAR
Balance at the beginning of the year	241940491.00	76169019.00
Add : Contribution towards Corpus / Capital Fund :		176210000.00
Grant-in-aid received from Ministry of Human Resource Development, Department of Education Govt. of India, vide sanction order No. (Details given in a separate sheet)	981500000.00	
<b>Total</b>	<b>1223440491.00</b>	<b>252379019.00</b>
Add/Deduct : Balance of net (Income / Expenditure from Income / Expenditure Account)	(-) 27095135.62	(-) 10438528.00
<b>Total</b>	<b>1196345355.38</b>	<b>241940491.00</b>

SCHEDULE-2 EARMARKED / ENDOWMENT FUNDS	CURRENT YEAR	PREVIOUS YEAR
Opening balance of funds	3398252.00	
Students Welfare Funds		1569658.00
Contributory Pension Scheme		
<b>Total</b>	<b>3398252.00</b>	<b>1569658.00</b>

SCHEDULE-3 CURRENT LIABILITIES & PROVISIONS	CURRENT YEAR	PREVIOUS YEAR
<b>A : Current Liabilities</b>	<b>NIL</b>	<b>NIL</b>
1. Caution Money of Students		-
2. Security Deposits and others		
<b>Total (A)</b>	<b>NIL</b>	<b>NIL</b>
<b>B : Provisions : Outstanding Expenses Total (B)</b>	<b>NIL</b>	<b>NIL</b>
<b>Total (A+B)</b>	<b>NIL</b>	<b>NIL</b>

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NATIONAL INSTITUTE OF TECHNOLOGY  
ARUNACHAL PRADESH, YUPIA - 791112

SCHEDULE FORMING PART OF BALANCE SHEET AS ON 31<sup>ST</sup> MARCH, 2014

Rupees

S/No.	Description	GROSS BLOCK				DEPRECIATION			NET BLOCK		
		Cost / Valuation at beginning of the year	Addition during the year	Deduction during the year	Cost / Valuation at end of the year	As at the beginning of the year	Addition during the year	Deduction during the year	Total upto the year end	As at the current year end	As at the previous year end
1	Fixed Assets Buildings	172320655	773019912	-	945340567	743808	17232066	-	17975874	927364693	-
2	Laboratory Equipment	34381418	38511120	-	72892538	1678850	3438142	-	5116992	67775546	-
3	Furniture	11305457	9276625	-	20582082	5955597	1130546	-	1726143	18855939	-
4	Vehicles	-	1878602	-	1878602	-	-	-	-	1878602	-
5	Office equipment	993818	567425	-	1561243	51247	99382	-	150629	1410614	-
6	Sports equipment	-	-	-	-	-	-	-	-	-	-
7	Medical equipment	-	-	-	-	-	-	-	-	-	-
8	Hostel equipment	-	-	-	-	-	-	-	-	-	-
9	Library equipment	-	-	-	-	-	-	-	-	-	-
10	Guest House furnishing	-	-	-	-	-	-	-	-	-	-
11	Guest house equipment	-	-	-	-	-	-	-	-	-	-
12	Musical Instruments	-	-	-	-	-	-	-	-	-	-
13	Hostel furnishing	-	-	-	-	-	-	-	-	-	-
14	Library books	6211095	11695536	-	17906631	272501	621110	-	893611	17013020	-
15	Air conditioner	-	-	-	-	-	-	-	-	-	-
16	Purchase of Gen Set	840314	-	-	840314	70481	84031	-	154512	665802	-
17	Canteen utensils	80824	-	-	80824	-	8082	-	8082	72742	-
18	Hostel utensils	-	-	-	-	-	-	-	-	-	-
19	Solar Electrification, Jote	2700000	1689800	-	4369800	270000	270000	-	540000	3829800	-
20	Club equipment	-	-	-	-	-	-	-	-	-	-
	<b>Total of current year</b>	<b>228833581</b>	<b>836619020</b>	<b>-</b>	<b>1065452601</b>	<b>3682484</b>	<b>22883359</b>	<b>-</b>	<b>26565843</b>	<b>1038886758</b>	<b>-</b>
21	Building in progress										
	<b>Total</b>										
	Previous year										

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**NATIONAL INSTITUTE OF TECHNOLOGY**  
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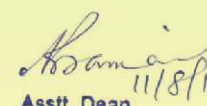
SCHEDULE-5 INVESTMENT FROM EARMARKED / ENDOWMENT FUNDS	CURRENT YEAR	PREVIOUS YEAR
1. Contributory Pension Scheme	3398252.00	1569658.00
<b>Total</b>	<b>3398252.00</b>	<b>1569658.00</b>

Amount in Rs.

SCHEDULE-6 CURRENT ASSETS, LOAN ADVANCES ETC	CURRENT YEAR	PREVIOUS YEAR
<b>A : CURRENT ASSETS</b>		
1) Cash in Hand	245529.00	245529.00
2) Imprest	1919.00	10000.00
<b>Total</b>	<b>247468.00</b>	<b>255529.00</b>
<b>Bank Balance with Schedule Banks</b>		
a) On Current Account with SBI, Nirjuli	32616351.38	5349030.00
<b>Total</b>	<b>32616351.38</b>	<b>5349030.00</b>
<b>Total (A)</b>	<b>32863799.38</b>	<b>5604559.00</b>

<b>B : LOANS, ADVANCE AND OTHERS</b>		
<b>1) Loan</b>		
a) Staff		
2) advance and other amounts recoverable in Cash or kind or for value to be received	14712123.00	9743762.00
a) <b>On Current Accounts</b>	109882675.00	1441073.00
I) United India Insurance Co. Ltd.		
II) Advance for purchase of Equipments		
<b>Total (B)</b>	<b>124594798.00</b>	<b>11184835.00</b>
<b>Total (A+B)</b>	<b>157458597.38</b>	<b>16789394.00</b>

  
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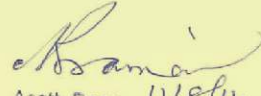
**NATIONAL INSTITUTE OF TECHNOLOGY**  
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**INCOME & EXPENDITURE ACCOUNTS FOR YEAR ENDED 31<sup>ST</sup> MARCH, 2014**

Amount in Rs.

A. Income	Schedule	CURRENT YEAR	PREVIOUS YEAR
Grant-in-Aid	7		
112-36		25795000.00	21490000.00
789-36		5025000.00	1500000.00
796-36		2680000.00	800000.00
Fees from Students	8	20726008.38	14465291.00
Interest earned	9	4096637.00	1967667.00
Other Income	10	13080085.00	5081436.00
<b>Total (A)</b>		<b>71402730.38</b>	<b>45304394.00</b>
<b>B. Expenditure</b>			
112-36 Estt. Expd.& Admn. Expd.		76335846.00	14830307.00
789-36 Estt. Expd. Admn. Expd.		14774680.00	17736183.00
796-36 Estt. Expd. Admn. Expd.		7387340.00	1766754.00
			986341.00
			7085961.00
			1972683.00
Total Establishment Expenses		36539932.00	24651402.00
Total Other Admn. Expenses		61957934.00	31091520.00
<b>Total (B)</b>		<b>98497866.00</b>	<b>55742922.00</b>
Balance being excess / deficit of Expenditure over income (B-A)		27095135.62	
<b>Total</b>		<b>27095135.62</b>	<b>10438528.00</b>
Balance being deficit / excess carried over to corpus fund		27095135.62	10438528.00

  
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National Institute of Technology  
Yupia, Arunachal Pradesh

  
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Finance & Accounts  
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Yupia, Arunachal Pradesh

  
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National Institute of Technology  
Yupia, Arunachal Pradesh

**NATIONAL INSTITUTE OF TECHNOLOGY**  
ARUNACHAL PRADESH, YUPIA - 791112


Amount in Rs.

SCHEDULE-7 – GRANTS	CURRENT YEAR	PREVIOUS YEAR
Ministry of Human Resource Development, Deptt. of Higher Education, vide sanction order No.		
i) MHRD F. No. 34-3/2013 -TS-III dt. 12/06/13		
(A) 112-36	14245000.00	
(B) 789-36	2775000.00	
(C) 796-36	1480000.00	
ii) MHRD F. No. 34-3/2013 -TS-III dt. 05/08/13		
(A) 112-36	11550000.00	
(B) 789-36	2250000.00	
(C) 796-36	1200000.00	
<b>Total</b>	<b>33500000.00</b>	<b>23790000.00</b>

SCHEDULES-8 – FEES	CURRENT YEAR	PREVIOUS YEAR
1. Fees for Empanelment of Contractor		
2. Registration Fees	13858662.00	14113992.00
3. Others Fees	6511510.38	79760.00
4. Misc receipt	355836.00	271539.00
<b>Total</b>	<b>20726008.38</b>	<b>14465291.00</b>

SCHEDULES-9 – INTEREST EARNED	CURRENT YEAR	PREVIOUS YEAR
Short Term Deposit with State Bank of India / IDBI Bank	4096637.00	1967667.00
Misc Deposit		
<b>Total</b>	<b>4096637.00</b>	<b>1967667.00</b>

SCHEDULES-10 – OTHER INCOME	CURRENT YEAR	PREVIOUS YEAR
Miscellaneous Income	2342218.00	
Advance	4981316.00	1125259.00
Other Receipt	5756551.00	3956177.00
<b>Total</b>	<b>13080085.00</b>	<b>5081436.00</b>

  
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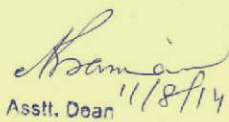
  
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National Institute of Technology  
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11/08/2014

SCHEDULES-11 – ESTABLISHMENT EXPENSES	CURRENT YEAR	PREVIOUS YEAR
a) Salary and Wages	34576795.00	23265682.00
b) Bonus	17181.00	
c) Contribution to Provident Fund		
d) Liveries and Uniforms	57200.00	
e) Honorarium	927760.00	885180.00
f) Computer Grants to Faculty Members		83200.00
g) Purchase of Medicine for Staff	766532.00	417340.00
h) Book Grants to Faculty Members	194464.00	
<b>Total</b>	<b>36539932.00</b>	<b>24651402.00</b>

**SCHEDULES 12-OTHER ADMINISTRATIVE EXPENSES ETC.**

CORPUS / CAPITAL FUND AND LIABILITIES	CURRENT YEAR	PREVIOUS YEAR
1. Travelling Allowance	5934242.00	3431156.00
2. Printing & Stationery	721310.00	569201.00
3. Vehicle running & Maintenance	7426312.00	4033846.00
5. Advertisement	3659290.00	2021637.00
6. Office expenses	2352176.00	1421904.00
7. Mess Account	661470.00	
8. Electricity Charges	643190.00	511279.00
9. Postage, Telegram & Telephones	342403.00	336970.00
10. Sports & Extra curricular activities & study tour of students	1772893.00	291079.00
11. Consumable items for Teaching	295673.00	
12. Repairs & Maintenance of buildings / rent	3058751.00	2828900.00
13. Maintenance of Office Equipments	8125.00	31083.00
14. Fixed Asset written off		
15. Depreciation	22883359.00	3682484.00
16. Legal Charges		25000.00
17. Rent on Building	11572902.00	4224772.00
18. Laying of Foundation Stone at Jote.		7682209.00
19. Seminar	36706.00	
20. Scholarship	589132.00	
<b>Total</b>	<b>61957934.00</b>	<b>31091520.00</b>

  
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 11/08/2014

**NATIONAL INSTITUTE OF TECHNOLOGY**  
ARUNACHAL PRADESH, YUPIA - 791112

**SCHEDULES FORMING PART OF RECEIPTS AND PAYMENTS ACCOUNTS**  
FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2014

**SCHEDULE 13 – Opening Balance**

(Amount in Rs.)

	CURRENT YEAR	PREVIOUS YEAR
i) Cash in hand	2,45,529.00	1,83,850.00
ii) Imprest	10,000.00	10,000.00
iii) State Bank of India	53,49,030.00	3,90,32,594.00
<b>Total</b>	<b>56,04,559.00</b>	<b>3,92,26,444.00</b>

**SCHEDULE 14 – Other Income**


	CURRENT YEAR	PREVIOUS YEAR
i) Fees from Students (Registration)	1,38,58,662.00	1,41,13,992.00
ii) Others Fees	65,11,510.38	79,760.00
iii) Miscellaneous Receipt	3,55,836.00	2,71,539.00
iv) Consultancy Fee	-	-
<b>Total</b>	<b>2,07,26,008.38</b>	<b>1,44,65,291.00</b>


**SCHEDULE 15 –Any Other receipts**

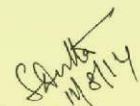
	CURRENT YEAR	PREVIOUS YEAR
i) Interest earned on investment	40,96,637.00	1967867.00
ii) Other receipt	57,56,551.00	3956177.00
iii) Security Deposit	22,93,632.00	NIL
iv) Students Welfare Fund	48,586.00	NIL
v) Advance	49,81,316.00	11,25,259.00
<b>Total</b>	<b>1,71,76,722.00</b>	<b>70,49,103.00</b>

**SCHEDULE 16 –Establishment Expenses**

	CURRENT YEAR	PREVIOUS YEAR
i) Salary & Wages	3,45,76,795.00	2,32,65,682.00
ii) Bonus	17,181.00	NIL
iii) Contribution to Provident Fund	NIL	NIL
iv) Computer grants	NIL	83,200.00
v) Honorarium	9,27,760.00	8,85,180.00
vi) Purchase of Medicine for Staff	7,66,532.00	4,17,340.00
vii) Book Grant to Faculty Members	1,94,464.00	NIL
viii) Liveries & Uniform	57,200.00	NIL
<b>Total</b>	<b>3,65,39,932.00</b>	<b>2,46,51,402.00</b>

  
Accountant  
National Institute of Technology  
Yupia, Arunachal Pradesh

  
Finance & Accounts  
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Arunachal Pradesh

  
O.S.D.  
National Institute of Technology  
Yupia, Arunachal Pradesh

  
DIRECTOR  
National Institute of Technology  
(Established by Ministry of Human  
Resource Development, Govt. of India)  
Yupia, Arunachal Pradesh

  
Chairperson  
National Institute of Technology  
Yupia, Arunachal Pradesh  
11/08/2014

NATIONAL INSTITUTE OF TECHNOLOGY  
ARUNACHAL PRADESH, YUPIA - 791112

RECEIPTS & PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2014

Receipts		Payments			Previous year
Schedule	Current year	Previous year	Schedule	Current year	Previous year
1. Opening Balance a) Cash in hand b) Imprest c) Bank Balance	Rs 245529/- Rs 10000/- Rs 5349030/-	Rs 183850/- Rs 10000/- Rs 390325594/-	16 17	36539932/- 39074575/-	
2. Grants in-Aid Received from Ministry of HRD, Deptt. of Education, Govt. of India, New Delhi vide Sanction Order No. <b>Plan</b> MHRD F.No.34-3/2013 TS-III dated 12/06/2013 112-31 Rs 14245000/- 112-35 Rs 113960000/- 112-36 Rs 14245000/- 789-31 Rs 2775000/- 789-35 Rs 22200000/- 789-36 Rs 2775000/- 796-31 Rs 1480000/- 796-35 Rs 11840000/- 796-36 Rs 1480000/- MHRD F.No.34-3/2013 TS-III dated 05/08/2013 112-31 Rs 11550000/- 112-35 Rs 92400000/- 112-36 Rs 11550000/- 789-31 Rs 2250000/- 789-35 Rs 18000000/- 789-36 Rs 2250000/-		18A 18B 18C 18D 18E 18F 19	743375019/- 38511120/- 11695536/- 9276625/- 31314693/- 2446027/- 113409963		
	185000000				

*Chairperson*  
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*Assit. - 11/8/14*  
National Institute of Technology  
Yupia, Arunachal Pradesh

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**NATIONAL INSTITUTE OF TECHNOLOGY**  
ARUNACHAL PRADESH, YUPIA - 791112

SCHEDULES FORMING PART OF RECEIPTS AND PAYMENTS ACCOUNTS  
FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2014


**SCHEDULE 17 – Other Administrative Expenses**

(Amount in Rs.)

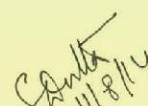
	CURRENT YEAR	PREVIOUS YEAR
i) Consumable item for Teaching	295673.00	NIL
ii) Printing & Stationary	721310.00	569201.00
iii) Travelling Allowances	5934242.00	3431156.00
iv) Vehicle Running & Maintenance	7426312.00	4033846.00
v) Advertisement	3659290.00	2021637.00
vi) Maintenance of building	3058751.00	2828900.00
vii) Postage, Telephone & Telegram	342403.00	336970.00
viii) Electricity Charges	643190.00	511279.00
ix) Entertainment	NIL	NIL
x) Office Expenses	2352176.00	1421904.00
xi) Sports, Extra Curricular Activities	1772893.00	291079.00
xii) Legal Charges	NIL	25000.00
xiii) Rent on Building	11572902.00	4224772.00
xiv) Mess Accounts	661470.00	NIL
xv) Maintenance of Office Eqpts.	8125.00	31083.00
xvi) Laying of Foundation Stone at Jote.	NIL	7682209.00
xvii) Seminar	36706.00	NIL
xviii) Scholarship	589132.00	NIL
<b>Total</b>	<b>3,90,74,575.00</b>	<b>2,74,09,036.00</b>


**SCHEDULE 18A – Expenditure on Capital Works in Progress**

	CURRENT YEAR	PREVIOUS YEAR
i) C/o Approach Road Culvert & R/Wall (PWD)	104932169.00	4411081.00
ii) Other Contractors	14688237.00	NIL
iii) C/o Academic Building (HPL)	124513800.00	50000000.00
iv) Providing water supply at NIT, A.P. Jote (APPHE & WS)	31081967.00	21773000.00
v) C/o Boundary Wall at NIT, A.P. Jote (CPWD)	64969253.00	21460000.00
vi) C/o Laboratory / Workshop	7465193.00	NIL
vii) C/o Hostel	179549400.00	NIL
viii) C/o Library Building	186775000.00	NIL
ix) C/o Shopping Complex	29400000.00	NIL
Arunachal Pradesh	Arunachal Pradesh	
<b>Total</b>	<b>74,33,75,019.00</b>	<b>9,76,44,081.00</b>

  
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**SCHEDULE 18B – Expenditure on the Purchase of Lab/Workshop equipments**

	CURRENT YEAR	PREVIOUS YEAR
<b>Equipments</b>	3050565.00	NIL
i) Mechanical Engg. Department	9696216.00	106568.00
ii) Electrical Engg. Department	5270992.00	3715894.00
iii) Computer Science & Engg. Department	NIL	4372017.00
iv) Office Equipment	10290.00	NIL
v) Humanities & Social Science Department	NIL	NIL
vi) Physics Department	NIL	NIL
vii) E. T. Cell	NIL	NIL
viii) Medical Equipments for NHU	NIL	NIL
ix) Mathematics Department	18366937.00	NIL
x) Language Laboratory	NIL	NIL
xi) Electronics & Commn. Engg.	NIL	9398444.00
xii) Civil Engg. Department	NIL	NIL
xiii) Solar Electrification at Jote	NIL	NIL
xiv) Chemistry Department	29840.00	NIL
xv) Networking	2086280.00	NIL
<b>Total</b>	<b>3,85,11,120.00</b>	<b>1,75,92,923.00</b>
<b>SCHEDULE 18C – Library Books / Journals</b>	<b>CURRENT YEAR</b>	<b>PREVIOUS YEAR</b>
i) Library Books / Journals	11695536.00	3486083.00
<b>Total</b>	<b>1,16,95,536.00</b>	<b>34,86,083.00</b>

<b>SCHEDULE 18D – Furniture &amp; Fixtures</b>	CURRENT YEAR	PREVIOUS YEAR
i) Furniture	9276625.00	5349490.00
<b>Total</b>	<b>92,76,625.00</b>	<b>53,49,490.00</b>

<b>SCHEDULE 18E – Others Construction Works</b>	CURRENT YEAR	PREVIOUS YEAR
i) Land Development	3620947.00	52354377.00
ii) Construction of Gate	NIL	1243619.00
iii) C/o Temporary Wood Bridge with CC	3844000.00	1100000.00
iv) Addition / Alternation of Building	4355806.00	12140492.00
v) Payment to Architect / Consultant	17824140.00	400000.00
vi) Solar Electrical at Jote	1669800.00	NIL
<b>Total</b>	<b>3,13,14,693.00</b>	<b>6,72,38,488.00</b>
<b>Total of Schedule 18</b>		

<b>SCHEDULE 18F – Others Capital Expd.</b>	CURRENT YEAR	PREVIOUS YEAR
i) Office Equipment	567425.00	481345.00
ii) Purchase of Gen Set	NIL	135500.00
iii) Canteen Utensils	NIL	80824.00
iv) Vehicle	1878602.00	NIL
<b>Total</b>	<b>24,46,027.00</b>	<b>6,97,669.00</b>
<b>Total of Schedule 18</b>		

*Prakash*  
11/08/2014

**Chairperson**  
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*[Signature]*  
**Accountant**  
National Institute of Technology  
Yupia, Arunachal Pradesh

*[Signature]*  
**Asstt. Dean**  
Finance & Accounts  
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Arunachal Pradesh

*[Signature]*  
**O.S.D.**  
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*[Signature]*  
**DIRECTOR**  
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SCHEDULE 19 – Other Payments	CURRENT YEAR	PREVIOUS YEAR
i) Advances to Staff & others	496861.00	9626034.00
ii) Security Deposits	617387.00	NIL
iii) Misc deposits	107824215.00	1441073.00
<b>Total</b>	<b>11,34,09,963.00</b>	<b>1,10,67,107.00</b>

SCHEDULE 20 – Closing Balance	CURRENT YEAR	PREVIOUS YEAR
i) Cash in hand	245529.00	245529.00
ii) Imprest	1919.00	10000.00
iii) State Bank of India, Nirjuli	32616351.38	5349030.00
<b>Total</b>	<b>3,28,63,799.38</b>	<b>56,04,559.00</b>

  
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 Chairperson  
 National Institute of Technology  
 Yupia, Arunachal Pradesh  
 11/08/2014

**Schedule – 24 : Significance of Accounting Policies**

1. National Institute of Technology, Arunachal Pradesh is a newly setup Autonomous Institute in the form of a deemed University. It is established vide order No. F.23-13/TS-III dated 30.10.2009 by the Ministry of Human Resource Development Govt. of India, Deptt. of Higher Education. The Institute is fully financed by Plan/non plan grants of MHRD, New Delhi.
2. **Accounting Convention**
  - (A) The financial statements are prepared based on the historical convention, unless otherwise stated and on the accrual method of accounting.
  - (B) Investment has taken place during the financial year 2013-14.
  - (C) Fixed assets are stated at cost of acquisition inclusive of inward expenses incidental and direct expenses.
  - (D) Depreciation has been charged at the rate 10%.
  - (E) Govt. grants received during the financial year for Capital expenditure are treated as Corpus Fund. Government Grants are accounted on accrual basis.

**Schedule – 25 :- Contingent Liabilities and Notes on account.**

1. Contingent Liabilities : - Claims against the Institute under suit is NIL.

**Notes on Account :** A. Corresponding figure for the year have been regrouped / rearranged whenever necessary.


B. Capital assets acquired during the financial year of Rs. 225151097/- only.

C. Expd. Shown on average basis as


Estt. Expd. (Salary)	-	ST – 29.92%
		SC – 7.46%
		GE – 62.62% as per availability of officials.


Admn. Expd.	-	ST – 10%
		SC – 5%
		GE – 85%

Works Expd. booked as per availability of fund based on – head of a/c wise.

  
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