

## **INTRODUCTION**

### **1.1 VISION**

*“TO BE A LEADER IN TECHNICAL AND MANAGEMENT EDUCATION IN INDIA AND TO ESTABLISH A UNIQUE IDENTITY FOR THE DEVELOPMENT OF HIGH QUALITY HUMAN AND KNOWLEDGE RESOURCE IN DIVERSE AREA OF TECHNOLOGY AND MANAGEMENT”*

### **1.2 MISSION**

*“TO RE-ENGINEER THE ENGINEERING EDUCATION AND TO MOULD YOUNG STUDENTS INTO RATIONAL THINKING ENGINEERS WHO ARE MOTIVATED BY A PASSION FOR PROFESSIONAL EXCELLENCE DRIVEN BY HUMAN VALUES AND PROACTIVELY ENGAGED IN BETTERMENT OF SOCIETY.”*

### **1.3 OBJECTIVES**

- *CREATING AN ENVIRONMENT TO MAKE TEACHING MORE LEARNING CENTRIC RATHER THAN CURRICULUM CENTRIC.*
- *TO ATTRACT AND RETAIN HIGHLY QUALIFIED, TALENTED, MOTIVATED STAFF.*
- *TO FOCUS NOT ONLY ON QUALITY EDUCATION BUT ON TOTAL QUALITY MANAGEMENT OF NIT RAIPUR.*
- *TO PROVIDE GOOD ACADEMIC SUPPORT FACILITIES (LAB, LIBRARY, INTERNET) ON CONTINUOUS BASIS.*
- *TO DEVELOP INDUSTRY INSTITUTE INTERFACE FOR COLLABORATIVE RESEARCH, INTERNSHIP AND FELLOWSHIP FOR PG PROGRAM.*

## **1.4 Historical Background**

National Institute of Technology, Raipur, (Formally known as Govt. Engineering College Raipur) situated in the capital of the newly incepted state of Chhattisgarh, has proven to be 'avant-garde' in the field of Science and Technology over past few decades in this region. With sweet memories of foundation laid by our first President Hon'ble Dr. Rajendra Prasad on 14<sup>th</sup> September 1956 and subsequent inaugurated by our first Prime Minister Hon'ble Pt. Jawaharlal Nehru, the Institute started with two Departments of Metallurgical and Mining Engineering housed in the heart of magnificent building that has towering head and strong long arms stretching East and West on the northern side of Howrah – Mumbai National Highway No. 6 called Great Eastern Road, leading to Bhilai.

The college was started in 1956 with two branches and since then it has never looked back. Stride after stride aloud medallion after medallion of success kept coming on. Presently, this is the only NIT with maximum number of branches available in the country. The students of this college have brought laurels to the Institute. They are very well placed and working in responsible position in Government organizations, Public Sectors, Private Sectors, Multinational companies, CSIR organizations, Universities, Colleges in India and abroad.

The Institute is now playing its important role of shaping not only the human resource of the newly born state but also in providing the technological support to the state in achieving higher and still higher goals

## **1.5 Campus & Location**

The Institute is located at Raipur, the capital city of Chhattisgarh, a mineral rich region having enormous potential for development with seemingly inexhaustible natural resources. The Institute is spread over an area of 85 acres. The Institute is 5 KM from the main railway station and 14 KM from the Airport. The city of Raipur is situated on Mumbai Howrah route of Indian Railways at a distance of 831 KM from Howrah and 311 KM from Nagpur.

The location of the Institute, in the mineral rich region, which has ample resources of coal, iron ore and other minerals, has given it a unique advantage of being in touch with the current industrial scenario. Many industries, such as those of cement, steel, alloy, mines, etc. are located in the vicinity of the Institute. This is the only Institute, not only in the present state but in the old state of Madhya Pradesh also, having the maximum number of branches. The Institute offers undergraduate, post graduate and Ph.D. academic programmes.

The campus is completely planned, one consisting of the main Institute building, six hostel blocks including two separate for girl's, residential quarters for teaching and non-teaching staff, canteen, bank, estate office for campus maintenance, a well equipped dispensary and a well maintained guest house. The campus also hosts a separate NCC office looking to the requirements of the students for NCC training. The campus has got an additional facility of a local railway station Sarswati Nagar meant especially for the benefit of the students coming from the nearby areas. The campus is away from hubbubs of the city yet easily accessible.

Under the expansion and development plans of the Institute recently, two separate buildings, one for Architecture and another for Central Computer Center, are under construction. Separate wing with classrooms and laboratories for Electronics and Communication Engineering has already been constructed. Looking to the increased

number of girl students, one more separate girl's hostel for 200 students is completed. One Boy's Hostel for 800 Student is at completion stage. 200 Acres of land is allotted for the new campus in Rakhi & Bharenga.

## 2. BOG AND OTHER COMMITTEES

### 2.1 Board of Governors

1	<b>Shri Vijay R Kirloskar</b> CMD Kirloskar Electric Company Ltd. Bangalore	Chairman (Till June 07, 2012)
2	<b>Shri Sudhir Vasudeva</b> CMD, Oil and Natural Gas Corporation Ltd (ONGC)	Chairman (from June 08, 2012)
3	<b>Dr. S S Gokhle</b> Director (I/c), NIT Raipur	Member (till 22 <sup>nd</sup> June 2012) (Ex-Officio)
4	<b>Dr. S. Tiwari</b> Director, NIT Raipur	Member (from 25 <sup>th</sup> July 2012) (Ex-Officio)
5	<b>Sp. Secretary/ Add. Secretary / Joint Secretary</b> (Technical) Ministry of Human Resource Development, Department of Higher Education, New Delhi	Member
6	<b>Financial Adviser, DHE</b> Ministry of Human Resource Development, Department of Higher Education, New Delhi	Member
7	<b>Shri Kamal Sarda</b> CMD, Sarda Energy & Minerals Ltd. Industrial Growth Center, Phase-I Siltara, Raipur	Member Nominee of Government of Chhattisgarh.
8	<b>Shri A K Sharma</b> Chief Engineer(EC), OSD(Technical Education, Raipur	Member Nominee of Government of Chhattisgarh
9	<b>Dr. C M Agarwal</b> Professor, Department of Mechanical Engineering, MANIT - Bhopal	Member
10	<b>Prof.(Mrs.) Krishna Pramanik</b> Professor, Department of Biotechnology & Biomedical Engineering, NIT - Rourkela	Member
11	<b>Dr. A M Rawani</b> Dean (Academic) & Professor Department of Mechanical Engineering, NIT -Raipur	Member

<b>12</b>	<b>Dr. S Sanyal</b> Associate Professor & Head Department of Mechanical Engineering, NIT - Raipur	Member
<b>13</b>	<b>Dr. Ravindra Sharma</b> Registrar, NIT Raipur	Secretary

## **2.2 Finance Committee**

<b>1</b>	<b>Shri Vijay R Kirloskar</b> CMD Kirloskar Electric Company Ltd. Bangalore	Chairman (Till June 07, 2012)
<b>2</b>	<b>Shri Sudhir Vasudeva</b> CMD, Oil and Natural Gas Corporation Ltd (ONGC)	Chairman (from June 08, 2012)
<b>3</b>	<b>Dr. S S Gokhle</b> Director (I/c), NIT Raipur	Member (till 22 <sup>nd</sup> June 2012) (Ex-Officio)
<b>4</b>	<b>Dr. S. Tiwari</b> Director, NIT Raipur	Member (from 25 <sup>th</sup> July 2012) (Ex-Officio)
<b>5</b>	<b>Financial Adviser</b> Ministry of Human Resource Development, Department of Higher Education, New Delhi	Member
<b>6</b>	<b>Dr. C M Agarwal</b> Professor, Department of Mechanical Engineering, MANIT - Bhopal	Member
<b>7</b>	<b>Dr. A M Rawani</b> Dean (Academic) & Professor Department of Mechanical Engineering, NIT -Raipur	Member
<b>8</b>	<b>Dr. Ravindra Sharma</b> Registrar, NIT Raipur	Member Secretary

## **2.3 The Senate**

<b>1</b>	<b>Dr. S S Gokhle</b> Director (I/c), NIT Raipur	Chairman (till 22 <sup>nd</sup> June 2012) (Ex-Officio)
<b>2</b>	<b>Dr. S. Tiwari</b> Director, NIT Raipur	Chairman (from 25 <sup>th</sup> July 2012) (Ex-Officio)
<b>3</b>	<b>Dr. D.K. Marothia</b>	President, National Institute of Ecology, New Delhi
<b>4</b>	<b>Er. L. N. Tiwari</b>	Secretary, Institution of Engineers, Raipur (C.G.)
<b>5</b>	<b>Dr. Jai Laxmi Thakur</b>	V.C., Bastar University
<b>6</b>	<b>Dr. A. S. Thoke</b>	Dean (Research & Consultancy) & Professor
<b>7</b>	<b>Dr. A. M. Rawani</b>	Dean (Academics Affairs) & Professor
<b>8</b>	<b>Dr.R.K.Tripathi</b>	Dean (Planning & Development) & Associate Professor

9	<b>Mr A.P. Rajimwale</b>	Dean (Students Welfare) & Associate Professor
10	<b>Dr. (Mrs) A.B.Soni</b>	Dean (F&W) Associate Professor
11	<b>Dr. K D Permar</b>	Professor, Head of Department Electrical Engineering, up to Oct. 2012
12	<b>Dr. M. K. Verma</b>	Head & Professor, Dept. of Civil Engineering
13	<b>Dr R. P. Pathak</b>	Head & Associate Professor, Dept of Mathematics
14	<b>Dr (Smt) F. Khan</b>	Head & Associate Professor, Dept. of Chemistry
15	<b>Dr. A. K. Shrivastav</b>	Head & Associate Professor, Dept. of Physics,
16	<b>Shri D. Sanyal</b>	Head & Associate Professor, Dept. of Architecture
17	<b>Dr. (Ms.) S. L. Sinha</b>	Head & Associate Professor, Dept. of Computer Science & Engineering
18	<b>Dr. P. K. Choudhari</b>	Head & Associate Professor, Dept. of Chemical Engineering
19	<b>Shri A. K. Poonia</b>	Head & Associate Professor, Dept. of Biotechnology & Biomedical
20	<b>Shri B. R. Parate</b>	Head & Associate Professor, Dept. of Mining Engineering
21	<b>Dr P Diwan</b>	Head & Associate Professor, Dept. of Applied Geology
22	<b>Shri Rahul Salhotra</b>	Head & Associate Professor, Dept. of Applied Mechanics
23	<b>Dr. Sameer Bajpai</b>	Head & Associate Professor, Dept. of Humanities & TPO
24	<b>Dr. S. Sanyal</b>	Head & Associate Professor, Dept. of Mechanical Engineering
25	<b>Shri M. Atulkar</b>	Head & Associate Professor, Dept. of MCA
26	<b>Shri B. Acharya</b>	Head & Assistant Professor, Dept. of E&TC
27	<b>Dr. Sudhakar Pandey</b>	Head & Assistant Professor, Dept. of IT
28	<b>Dr. Manoj Chopkar</b>	Head & Assistant Professor, Dept. of Metallurgy
29	<b>Dr. Shrish Verma</b>	Prof. (I/C) Exam Cell
30	<b>Shri Shailesh Vaidya</b>	Assistant Workshop Superintendent
31	<b>Dr. Manoj Pradhan</b>	Chief Warden – Boys Hostel
32	<b>Dr. (Mrs.) Subhrata Gupta</b>	Chief Warden - Girls Hostel
33	<b>Dr. Ravindra Sharma</b>	Registrar & Secretary

#### **2.4 Building & Works Committee**

1	<b>Dr. S S Gokhle</b> Director (I/c), NIT Raipur	Chairman (till 22 <sup>nd</sup> June 2012) (Ex-Officio)
2	<b>Dr. S. Tiwari</b> Director, NIT Raipur	Chairman (from 25 <sup>th</sup> July 2012) (Ex-Officio)
3	<b>Shri Rajesh Singh</b>	Director (NITs), MHRD, New Delhi
4	<b>Dr. R K Tripathi</b>	Dean (Planning & Development)
5	<b>Shri V P Singh</b>	Executive Engineer , CPWD
6	<b>Shri Ajay Chandekar</b>	Assistant Engineer(Electrical), CPWD
7	<b>Dr. S Sanyal</b>	Head & Associate Professor, Mechanical Engineering
8	<b>Dr. Ravindra Sharma</b>	Registrar & Member Secretary

### 3. ADMINISTRATION

#### 3.1 Administrative Officers & Deans

Name	Qualification	Designation/Section
<b>Dr. S S Gokhle</b>	Ph.D.	Director (I/c) (till 22 <sup>nd</sup> June 2012)
<b>Dr. S. Tiwari</b>	Ph.D. (IIT Roorkee)	Director (from 25 <sup>th</sup> July 2012)
<b>Dr. A. S. Thoke</b>	B.E, M.Tech & Ph.D.	Dean (Research & Consultancy)
<b>Dr. A M Rawani</b>	M.Tech , Ph.D	Dean (Academic Affairs)
<b>Dr. (Mrs) A.B.Soni</b>	B.E,M Tech., Ph.D	Dean (Faculty Welfare)
<b>Dr. R.K. Tripathi</b>	B.E., M.Tech., Ph.D.	Dean (Planning & Development)
<b>Shri A.P. Rajimwale</b>	B.E. M.Tech	Dean (Students Welfare)
<b>Dr. Ravindra Sharma</b>	Ph.D.	Registrar
<b>Shri Ajai Sharma</b>	B.E., M.Tech.	Deputy Registrar (Admin), PIO & Nodal Officer-Legal Cell, I/c Transport Section
<b>Shri P. Y. Dhekne</b>	B.E., M.Tech.	Deputy Registrar (I/c) (F&A)
<b>Shri Sunil Pandey</b>	B.E., M.Tech	System Administrator
<b>Shri Ravindra Chouhan</b>	B.Sc., MCA	Programmer
<b>Shri Astik Kumar</b>	B.E.	Junior Engineer
<b>Shri Balram Nayak</b>	B.E.	Security Officer

### 4. ACADEMIC AND OTHER DETAILS

#### 4.1 Courses Offered

**Under Graduate courses are offered in following disciplines**

1. Biomedical Engineering
2. Biotechnology
3. Chemical Engineering
4. Civil Engineering
5. Computer Science & Engineering
6. Electrical Engineering
7. Electronics & Telecommunication Engineering
8. Information Technology
9. Mechanical Engineering
10. Metallurgical Engineering
11. Mining Engineering
12. Architecture

## **Post Graduate courses are offered in following disciplines**

### **(a) M.Tech**

1. Applied Geology
2. Chemical Engineering (Chemical Process Design)
3. Mechanical Engineering (Energy System & Pollution)
4. Civil Engineering (Water Resource Engineering)
5. Electrical Engineering (Computer Technology)

### **(b) Master of Computer Applications**

## **4.2 Admission Procedure**

### **B.Tech. :**

The admission to 1<sup>st</sup> year of B.Tech. Programme is made through the All India Engineering Entrance Examination (AIEEE) conducted by CBSE and as per the guidelines framed by Ministry of Human Resource Development, Govt. of India, Department of Higher Education.

### **M. Tech. :**

The courses leading to M.Tech. are open to those who have obtained the B.E./B.Tech./M.Sc. in relevant discipline or any degree recognized as equivalent there to by the N.I.T. Raipur with 60% marks or 6.5 CGPA in aggregate in the qualifying examination. However, the eligibility criteria may vary from time to time as per decision of the Senate.

Relaxation up to 5% of marks or 0.5 CGPA can be allowed by Senate for sponsored Candidates with proven research or professional experience.

### **Regular Students:**

Only GATE qualified candidates are admitted to M.Tech. Programmes. Seats are reserved for various categories i.e. ST/SC/OBC as per norms. When GATE qualified candidates are not available, admissions are given to those who are not qualified in GATE on the basis of merit as detailed in P.G. regulation.

### **Sponsored Students:**

- i) Few seats are also available for sponsored candidates. Sponsored candidates are not eligible to receive scholarship even if they are GATE qualified.
- ii) The candidates must have a total of minimum two years full time work experience in the sponsored organization which should be a reputed one.
- iii) There is no age restriction. However, preference is given to those who are below 45 years of age.
- iv) Sponsorship certificate in proper proforma is required from the employer at the time of admission.

### **M.C.A. :**

The admission to 1<sup>st</sup> year of MCA programme is made through the NIT MCA Common Entrance Test(NIMCET) conducted by NIT and as per the guidelines framed by Ministry of Human Resource Development, Government of India.

**Ph.D. Courses:**

The Institute Provides facilities for research including that for the degree of Doctor of Philosophy (Ph.D.) in Engineering, Science, Humanities and Social Sciences. Total Fifty students have been registered for perusing Ph.D. Degree in this academic year.

**Students:**

National Institute of Technology Raipur has always been the preferred destination of the bright students. Students of N.I.T. Raipur also known for their excellence in socio-culture activities and sports. This multilingual and multicultural environment is particularly conducive to its future development. The alumni of NIT Raipur have made a mark in industry and public life. They are taking significant interest in the affairs of the Institute and will continue to do so in future. Huge number of alumni dedicated to further development of the Institute.

**4.3 Admission Statistics****Under Graduate (B.Tech)**

<b>Departments</b>	<b>Sanctioned Intake</b>	<b>Admissions</b>
Architecture	62	60
Bio. Medical Engineering	62	53
Bio. Technology	62	58
Chemical Engineering	62	57
Civil Engineering	78	77
Computer Science & Engineering	92	90
Electrical Engineering	92	92
Electronics& Telecommunication Engineering	92	91
Information Technology	92	87
Mechanical Engineering	92	92
Metallurgical Engineering	92	87
Mining Engineering	77	77
<b>Total</b>	<b>955</b>	<b>921</b>

**Post Graduate (M.Tech)**

<b>Departments</b>	<b>Sanctioned Intake</b>	<b>Admissions</b>
Applied Geology	15	14
Master of Computer Applications	92	82
Civil Engineering	17	6
Chemical Engineering	25	2
Mechanical Engineering	17	11
Electrical Engineering	25	21
<b>Total</b>	<b>191</b>	<b>136</b>



#### 4.4 Scholarship Details

Sr.No	Name of Scholarship	Sponsored by	UG / PG	No of Students	Amount Involved
1	Post Metric Scholarship for SC/ST/OBC	Tribal Welfare Dept. of C.G.	UG/PG	337	14465430
2	Minority Scholarship	Tribal Welfare Dept. C.G.	UG/PG	3	143640
3	Other State Scholarship for SC/ST/OBC/Minority	Other State	UG/PG	106	3504241
4	M.Tech	NIT Raipur	PG	67	5832742
5	Ph.D	NIT Raipur		24	5070249
<b>Total</b>				<b>537</b>	<b>29016302</b>

#### 4.5 Examination and Evaluation

Examinations are being conducted by the Institute under academic autonomy granted to it by MHRD through its Gazette notification no. 34 Dated 06.06.2007. The Institute has its own scheme of examination. The Institute has adopted the transparent system of evaluation. Students can see their answer books after valuation. Presently marks and absolute grading system have been adopted for results declaration.

#### 4.6 Result Statistics

<b>1st Semester</b>					
S. No.	Branch	No. of Students			% of Passing
		Appeared	Passed	Failed	
1	Architecture	60	23	37	38.33
2	Bio Medical Engineering	54	30	24	55.56
3	Bio Technology	58	27	31	46.55
4	Chemical Engineering	58	46	12	79.31
5	Civil Engineering	77	61	16	79.22
6	Computer Science & Engineering	90	64	26	71.11
7	Electrical Engineering	92	81	11	88.04
8	Electronics & Telecommunication Engg.	91	67	24	73.63
9	Information Technology	87	58	29	66.67
10	Mechanical Engineering	91	76	15	83.52
11	Metallurgical Engineering	86	58	28	67.44
12	Mining Engineering	75	44	31	58.67
<b>Total</b>		<b>919</b>	<b>635</b>	<b>284</b>	<b>69.10</b>

<b>2nd Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Architecture	89	61	28	68.54
2	Bio Medical Engineering	55	21	34	38.18
3	Bio Technology	61	27	34	44.26
4	Chemical Engineering	65	46	19	70.77
5	Civil Engineering	94	64	30	68.09
6	Computer Science & Engineering	110	78	32	70.91
7	Electrical Engineering	99	76	23	76.77
8	Electronics & Telecomm. Engineering	102	75	27	73.53
9	Information Technology	102	59	43	57.84
10	Mechanical Engineering	108	70	38	64.81
11	Metallurgical Engineering	116	65	51	56.03
12	Mining Engineering	90	44	46	48.89
	<b>Total</b>	<b>1091</b>	<b>686</b>	<b>405</b>	<b>62.88</b>

<b>3rd Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Architecture	72	54	18	75.00
2	Bio Medical Engineering	47	19	28	40.43
3	Bio Technology	53	19	34	35.85
4	Chemical Engineering	68	45	23	66.18
5	Civil Engineering	86	65	21	75.58
6	Computer Science & Engineering	108	77	31	71.30
7	Electrical Engineering	108	74	34	68.52
8	Electronics & Telecommunication Engg.	118	71	47	60.17
9	Information Technology	99	60	39	60.61
10	Mechanical Engineering	110	80	30	72.73
11	Metallurgical Engineering	102	78	24	76.47
12	Mining Engineering	76	44	32	57.89
	<b>Total</b>	<b>1047</b>	<b>686</b>	<b>361</b>	<b>65.52</b>

<b>4th Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Architecture	53	25	28	47.17
2	Bio Medical Engineering	32	19	13	59.38
3	Bio Technology	44	29	15	65.91
4	Chemical Engineering	52	46	6	88.46
5	Civil Engineering	73	60	13	82.19

6	Computer Science & Engineering	88	70	18	79.55
7	Electrical Engineering	88	62	26	70.45
8	Electronics & Telecomm. Engineering	90	60	30	66.67
9	Information Technology	81	63	18	77.78
10	Mechanical Engineering	93	77	16	82.80
11	Metallurgical Engineering	87	65	22	74.71
12	Mining Engineering	67	53	14	79.10
	<b>Total</b>	<b>848</b>	<b>629</b>	<b>219</b>	<b>74.17</b>

<b>5th Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Architecture	53	20	33	37.74
2	Bio Medical Engineering	23	16	7	69.57
3	Bio Technology	35	26	9	74.29
4	Chemical Engineering	50	43	7	86.00
5	Civil Engineering	67	54	13	80.60
6	Computer Science & Engineering	80	69	11	86.25
7	Electrical Engineering	85	56	29	65.88
8	Electronics & Telecommunication Engg.	83	59	24	71.08
9	Information Technology	78	54	24	69.23
10	Mechanical Engineering	89	78	11	87.64
11	Metallurgical Engineering	74	58	16	78.38
12	Mining Engineering	62	47	15	75.81
	<b>Total</b>	<b>779</b>	<b>580</b>	<b>199</b>	<b>74.45</b>

<b>6th Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Architecture	49	26	23	53.06
2	Bio Medical Engineering	12	6	6	50.00
3	Bio Technology	11	8	3	72.73
4	Chemical Engineering	69	46	23	66.67
5	Civil Engineering	83	65	18	78.31
6	Computer Science & Engineering	86	71	15	82.56
7	Electrical Engineering	101	62	39	61.39
8	Electronics & Telecomm. Engineering	82	73	9	89.02
9	Information Technology	78	65	13	83.33
10	Mechanical Engineering	87	80	7	91.95
11	Metallurgical Engineering	79	72	7	91.14
12	Mining Engineering	52	43	9	82.69
	<b>Total</b>	<b>789</b>	<b>617</b>	<b>172</b>	<b>78.20</b>

7th Semester					
S. No.	Branch	No. of Students			% of Passing
		Appeared	Passed	Failed	
1	Architecture	48	18	30	37.50
2	Bio Medical Engineering	6	2	4	33.33
3	Bio Technology	12	10	2	83.33
4	Chemical Engineering	62	45	17	72.58
5	Civil Engineering	80	68	12	85.00
6	Computer Science & Engineering	78	64	14	82.05
7	Electrical Engineering	86	66	20	76.74
8	Electronics & Telecommunication Engg.	81	80	1	98.77
9	Information Technology	74	62	12	83.78
10	Mechanical Engineering	86	71	15	82.56
11	Metallurgical Engineering	76	73	3	96.05
12	Mining Engineering	45	39	6	86.67
	<b>Total</b>	<b>734</b>	<b>598</b>	<b>136</b>	<b>81.47</b>

8th Semester					
S. No.	Branch	No. of Students			% of Passing
		Appeared	Passed	Failed	
1	Architecture	37	36	1	97.30
2	Bio Medical Engineering	15	14	1	93.33
3	Bio Technology	24	19	5	79.17
4	Chemical Engineering	51	45	6	88.24
5	Civil Engineering	59	56	3	94.92
6	Computer Science & Engineering	73	69	4	94.52
7	Electrical Engineering	78	71	7	91.03
8	Electronics & Telecomm. Engineering	70	70	0	100.00
9	Information Technology	50	47	3	94.00
10	Mechanical Engineering	75	70	5	93.33
11	Metallurgical Engineering	75	72	3	96.00
12	Mining Engineering	44	42	2	95.45
	<b>Total</b>	<b>651</b>	<b>611</b>	<b>40</b>	<b>93.86</b>

9th Semester					
S. No.	Branch	No. of Students			% of Passing
		Appeared	Passed	Failed	
1	Architecture	39	33	6	84.62

10th Semester					
S. No.	Branch	No. of Students			% of Passing
		Appeared	Passed	Failed	
1	Architecture	34	34	0	100.00

<b>Master of Computer Application</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	M.C.A. (1 <sup>st</sup> Sem.)	83	69	14	83.13
2	M.C.A. (2 <sup>nd</sup> Sem.)	83	67	16	80.72
3	M.C.A. (3 <sup>rd</sup> Sem.)	82	68	14	82.93
4	M.C.A. (4 <sup>th</sup> Sem.)	38	35	3	92.11
5	M.C.A. (5 <sup>th</sup> Sem.)	38	38	0	100.00
6	M.C.A. (6 <sup>th</sup> Sem.)	62	62	0	100.00
	<b>Total</b>	<b>386</b>	<b>339</b>	<b>47</b>	<b>87.82</b>

<b>M. Tech 1st Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Applied Geology	15	12	3	80.00
1	Chemical Engineering	16	8	8	50.00
2	Civil Engineering	6	6	0	100.00
3	Electrical Engineering	24	23	1	95.83
4	Mechanical Engineering	16	14	2	87.50
	<b>Total</b>	<b>77</b>	<b>63</b>	<b>14</b>	<b>81.82</b>

<b>M. Tech 2nd Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Applied Geology	14	12	2	85.71
2	Chemical Engineering	2	2	0	100.00
3	Civil Engineering	6	6	0	100.00
4	Electrical Engineering	21	20	1	95.24
5	Mechanical Engineering	11	11	0	100.00
	<b>Total</b>	<b>54</b>	<b>51</b>	<b>3</b>	<b>94.44</b>

<b>M. Tech 3rd Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Applied Geology	14	12	2	85.71
1	Chemical Engineering	2	2	0	100.00
2	Civil Engineering	6	6	0	100.00
3	Electrical Engineering	21	21	0	100.00
4	Mechanical Engineering	11	11	0	100.00
	<b>Total</b>	<b>54</b>	<b>52</b>	<b>2</b>	<b>96.30</b>

<b>M. Tech 4th Semester</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Applied Geology	14	14	0	100.00
2	Chemical Engineering	2	2	0	100.00
3	Electrical Engineering	28	28	0	100.00
4	Mechanical Engineering	3	3	0	100.00
	<b>Total</b>	<b>47</b>	<b>47</b>	<b>0</b>	<b>100</b>

<b>M. Tech Yearly Pattern</b>					
<b>S. No.</b>	<b>Branch</b>	<b>No. of Students</b>			<b>% of Passing</b>
		<b>Appeared</b>	<b>Passed</b>	<b>Failed</b>	
1	Applied Geology (3rd Year)	12	12	0	100.00

**Ph.D Scholars on Spring 2012**

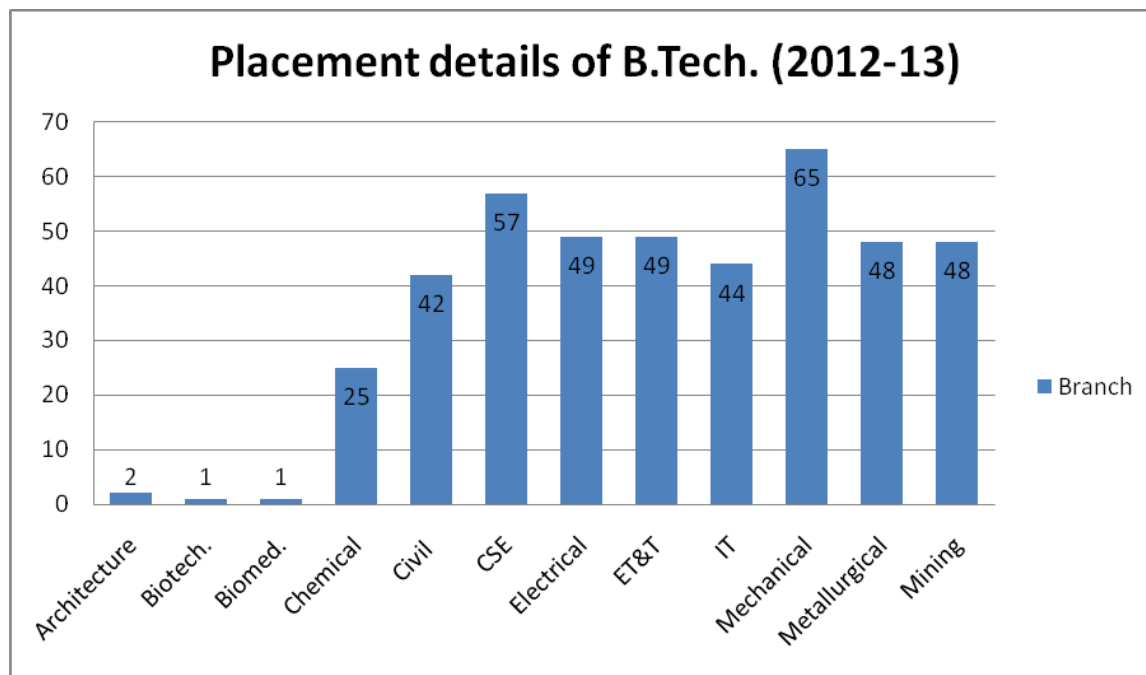
<b>S. No.</b>	<b>Branch</b>	<b>Semester wise Ph.D. Candidates</b>	
		<b>1st</b>	<b>2nd</b>
1	Applied Mechanics	1	NA
2	Bio Technology	2	NA
3	Chemical Engineering	4	NA
4	Chemistry	6	NA
5	English	2	NA
6	Mathematics	5	NA
7	Mechanical Engineering	6	4
8	Physics	7	NA
9	Architecture	1	NA
10	Civil Engineering	7	NA
11	Mining Engineering	1	NA
<b>Total no. of Ph.D. candidates appeared in the Examination:</b>		<b>42</b>	<b>4</b>
<b>Grand Total</b>		<b>46</b>	
* NA : None Appeared.			

**Ph.D. Scholars, Autumn 2012**

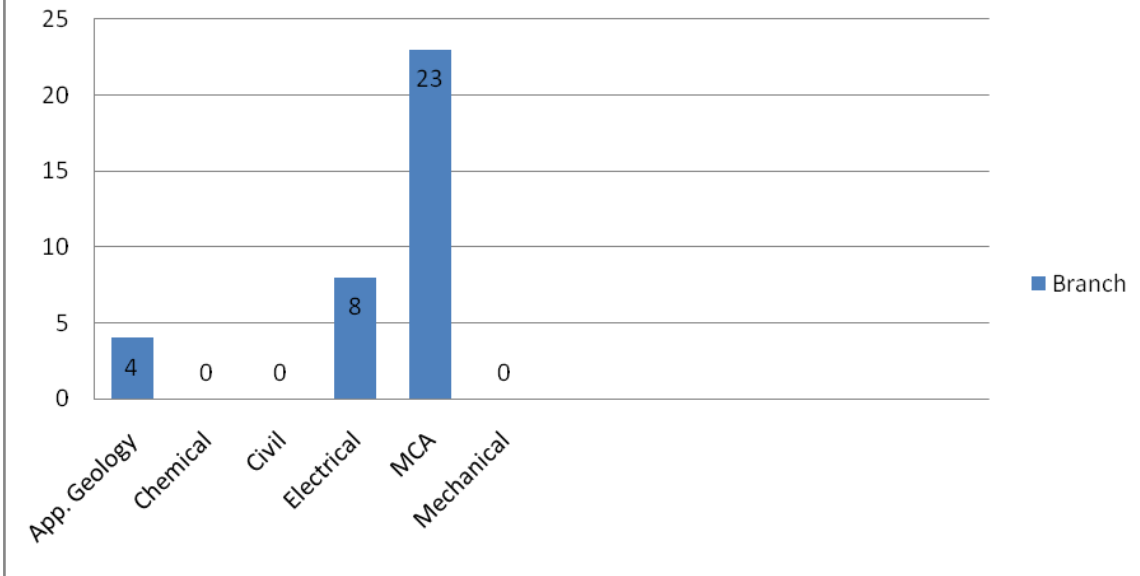
<b>S. No.</b>	<b>Branch</b>	<b>No. of Candidates in each Semester</b>	
		<b>1st</b>	<b>2nd</b>
1	Applied Geology	3	NA
2	Architecture	3	1

3	Bio Technology	1	2
4	Chemical Engineering	3	NA
5	Chemistry	4	6
6	Humanities & Social Sciences (English)	NA	2
7	Mathematics	NA	4
8	Physics	4	7
9	Civil Engineering	4	1
10	Electrical Engineering	4	NA
11	Mining Engineering	3	NA
12	Computer Applications	3	NA
13	Mechanical	3	4
<b>Total no. of Ph.D. candidates appeared in the Examination:</b>		<b>35</b>	<b>27</b>
<b>Grand Total :</b>		<b>62</b>	
* NA : None Appeared.			

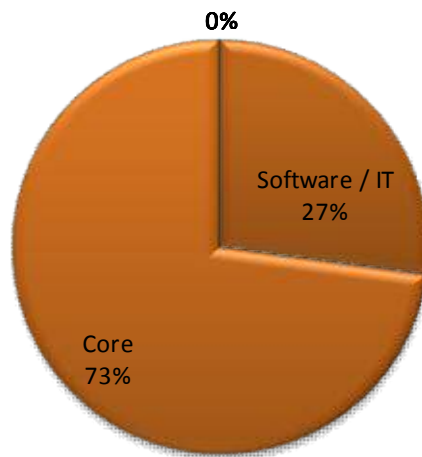
#### 4.7 Training & Placement Details



### Placement details of MCA/M.Tech. (2012-13)

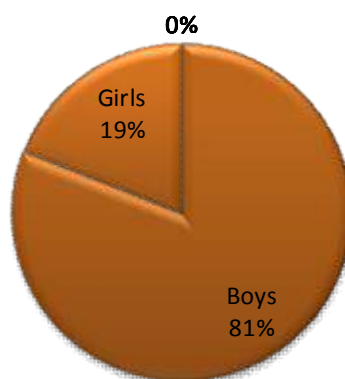


### Placement details sector - wise





## Placement details Category - wise (Boys/Girls)



### 4.8 THIRD CONVOCATION PROGRAM OF NIT RAIPUR

The Institute has successfully organised and celebrated its Third Convocation Program which was held on 14th January, 2013. Total 751 degrees for various disciplines were awarded on the occasion and 36 gold and silver medals were awarded to the meritorious students of 2012 batches. The ceremony was blessed with the benign presence of Dr Anil Kakodkar, Homi Bhabha Chair Professor, Department of Atomic Energy, Mumbai, as Chief Guest while Shri Sudhir Vasudeva Chairman, NIT Raipur presided over the function. The entire ceremony was very well managed. Every passed-out student received good amount of warmth and hospitality from the institute in which they celebrated four years of life.

#### LIST OF GOLD AND SILVER MEDAL RECIPIENTS

**Overall Topper: PRASHUTOSH GUPTA (Electronics & Telecomm. Engg-Honours)**

#### B. Tech & B. Arch. Programme 2012

Sr. No.	Programmes	Student Name	Medal
1	Bachelor of Architecture	HELOISE RAJKUMARI	GOLD
2	Bachelor of Architecture	NEHA AWASTHI	SILVER
3	B.Tech. in Bio-Medical Engineering	SWETA SWASTIKA SAHOO	GOLD
4	B.Tech. in Bio-Medical Engineering	DIPTAGNI KAYSHOP	SILVER
5	B.Tech. in Bio-Technology	MEGHA AGRAWAL	GOLD
6	B.Tech. in Bio-Technology	KOMAL JOSHI	SILVER
7	B.Tech. in Chemical Engineering	PRIYA SHUKLA	GOLD
8	B.Tech. in Chemical Engineering	AMRIT RAJ	SILVER
9	B.Tech. in Civil Engineering	SAURABH SINGH	GOLD
10	B.Tech. in Civil Engineering	YOGESH KUMAR NIRMALKAR	SILVER
11	B.Tech. in Computer Science &	VARUN KUMAR AGRAWAL	GOLD

	Engineering		
12	B.Tech. in Computer Science & Engineering	VIJETA VERMA	SILVER
13	B.Tech. in Electronics & Tele.Engg.	PRASHUTOSH GUPTA	GOLD
14	B.Tech. in Electronics & Tele.Engg.	ANSHNI DATA	SILVER
15	B.Tech. in Electrical Engineering	ABHINAY SWARUP	GOLD
16	B.Tech. in Electrical Engineering	ROMIL GUPTA	SILVER
17	B.Tech. in Information Technology	RAUNAK YADAV	GOLD
18	B.Tech. in Information Technology	ROHIT BOHARA	SILVER
19	B.Tech. in Mechanical Engineering	SUMIT SINGH	GOLD
20	B.Tech. in Mechanical Engineering	NILANJAN CHAUDHURI	SILVER
21	B.Tech. in Metallurgical Engineering	VISHAL SINGH	GOLD
22	B.Tech. in Metallurgical Engineering	SHREEKANT RANE	SILVER
23	B.Tech. in Mining Engineering	RAJENDRA KUMAR AGRAWAL	GOLD
24	B.Tech. in Mining Engineering	ARUN DHABAKE	SILVER

#### MCA Programme 2012

Sr. No.	Programmes	Student Name	Medal
1	Master of Computer Applications	PRERANA JAIN	GOLD
2	Master of Computer Applications	GAUTAM PILLA	SILVER

#### M.Tech. Programme 2012

Sr. No.	Programmes	Student Name	Medal
1	M. Tech. in Applied Geology	Kabita Patel	GOLD
2	M. Tech. in Applied Geology	Souvik Acharya	SILVER
3	M. Tech. in Chemical Engineering	Priyanka Malhotra	GOLD
4	M. Tech. in Chemical Engineering	Manjari Jha	SILVER
5	M. Tech. in Civil Engineering	Bharti Prasad	GOLD
6	M. Tech. in Civil Engineering	Rampalli Madhuri	SILVER
7	M. Tech. in Electrical Engineering	Nazil Perveen	GOLD
8	M. Tech. in Electrical Engineering	Mitali Shrivastava	SILVER
9	M. Tech. in Mechanical Engineering	Viplove Ranjan Ganguly	GOLD
10	M. Tech. in Mechanical Engineering	Madhusudan Patel	SILVER

## 5.0 DETAILS OF DEPARTMENTS & OTHER ACTIVITIES

### 5.1 Departments

#### DEPARTMENT OF APPLIED GEOLOGY

##### Faculty

Dr. P. Diwan	Associate Professor & Head	M. Tech., Ph.D.
Dr. N. Vishwakarma	Assistant Professor	M. Tech., Ph.D.
Dr. D. C. Jhariya	Assistant Professor	M. Tech., Ph.D.

##### M. Tech Thesis Completed

Name of the Supervisor	:	<b>Dr. N. Vishwakarma</b>
Name of the Scholar	:	<b>1.</b> Deepak Tiwari <b>2.</b> Piyush Sharma <b>3.</b> Rakesh Verma <b>4.</b> Siddharth Singh
Title of the thesis	:	The Techniques of Exploration and Mining at Rampura-Agucha Lead-Zinc Mine Dist.-Bhilwara, Rajasthan
Name of the Supervisor	:	<b>Dr. N. Vishwakarma</b>
Name of the Scholar	:	<b>1.</b> Munesh Kumar Sahu <b>2.</b> Rohit Kumar Sahu <b>3.</b> Vivek Sahu
Title of the thesis	:	Manganese Deposit of Balaghat Mine, Balaghat District (M.P.) With Special Focus on Its Exploration and Mining Methods
Name of the Supervisor	:	<b>Dr. P. Diwan</b>
Name of the Scholar	:	<b>1.</b> Deepika Tirpude <b>2.</b> Mukesh Kumar Badtya <b>3.</b> Sagar Misra
Title of the thesis	:	Geology, Exploration and Mining at Malanjkhand Copper Project, Malanjkhand, Balaghat (M.P.)
Name of the Supervisor	:	<b>Dr. P. Diwan</b>
Name of the Scholar	:	<b>1.</b> Aditya Kumar Mohanta <b>2.</b> Bhavesh Kumar Dewangan <b>3.</b> Bhupendra Singh Chanap <b>4.</b> Manoj Kumar Sahu
Title of the thesis	:	Techniques of Exploration, Mining and Quality Control at NMDC Ltd. Bailadila Iron ore Mine, Kirandul Complex, Kirandul, Distt- Dantewada (South Bastar), Chhattisgarh

##### Seminar/ Workshop/Conferences/Short term courses

**Dr. N. Vishwakarma**

1. Successfully completed training program on APPLICATION OF REMOTE SENSING AND GIS IN GROUND WATER STUDIES conducted by Rajiv Gandhi National Ground Water Training and Research Institute, Raipur. From 09-04-2012 to 13-04-2012.

**Dr. D. C. Jhariya**

1. 11<sup>th</sup> Chhattisgarh Young Scientist Congress-13 attended and presented research paper on topic entitled “Fluoride contamination in the groundwater of Chhattisgarh and its mitigation strategies” which is organised by Government Nagarajuna Post Graduate College of Science, Raipur and Sponsored by Chhattisgarh Council of Science and Technology, Raipur (Chhattisgarh) From 28th February to 1<sup>st</sup> March, 2013.

**Publications**

**Dr. N. Vishwakarma**

1. Sandeep Vansutre, K.R. Hari (2013): Implications of Geochemistry in support of Palaeo-Proterozoic Tectonothermal Evolution of Bhopalpatnam Granulite Belt, Bastar Craton, Central India.; Journal of the Geological Society of India, Vol. 81, pp.503-513.

**Dr. D. C. Jhariya**

1. Rakesh Dewangan, (2013) Fluoride contamination and its possible source in the groundwater of Chhattisgarh. Madhya Bharti Research Journal, Vol. LVII, pp.75-85.

**Consultancy Projects**

**Dr. P. Diwan**

1. “Characterization of Ore Deposit” for M/s Shivam Minerals, Sai Homes, Near Shiv Mandir Vidhya Nagar, Bilaspur. Consultancy Amount Rs. 16,854/- 20/02/2013

**Dr. N. Vishwakarma**

1. “Petrographic Study of Rock Samples” for M/s Project Manager L&T Construction, Near Ramkrishna Care Hospital Lalpur, Raipur (C.G.) Consultancy Amount Rs. 3,371/- 20/03/2013

**Awards / Any other Achievements**

**D.C.Jhariya**

1. Completed Ph.D degree in Applied Geology (Faculty of Engineering) on topic titled “Studies on quality of groundwater and its management in and around Sagar town, Madhya Pradesh” under the supervision of Prof. Arun Kumar Shandilya, Department of Applied Geology Dr. H.S. Gour University, Sagar, Madhya Pradesh.

**DEPARTMENT OF APPLIED MECHANICS**

**Faculty**

Dr. Rahul Salhotra	HOD & Associate Professor	M.Tech, Ph.D.
Shri. Satish K. Dewangan	Assistant Professor	M.Tech.
Dr. N. K. Jain	Assistant Professor	M.Tech., Ph.D.

## **DEPARTMENT OF ARCHITECTURE**

### **Faculty**

Shri. Debasis Sanyal	HOD & Associate Professor	B.Arch., M.Arch.
Dr. Abir Bandyopadhyay	Associate Professor	B.Arch., M.Plan, Ph.D.
Mrs. Swasti Sthapak	Associate Professor	B.Arch., AITP
Shri Himanshu Poptani	Assistant Professor	B.Arch., M.Arch.

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Dr. Abir Bandyopadhyay**

1. When Occident meets the Orient: Impact of Colonialism on Architecture of India International conference of IJAS at American University of Rome, Rome , Italy, 29 Oct. To 1 Nov. 2012.

#### **Ar. Debashis Sanyal**

1. A Study Of Intelligent Buildings”, Faculty of Engg, University of Pisa, 31.10.2012
2. Intelligent Buildings Dept. of Architecture, SIUPA, Rohtak, 21.12.2012
3. Two Days Workshop on INTELLIGENT BUILDINGS”, GITAM School of Architecture, GITAM University, Visakhapatnam, 24 to 25.01.2013
4. Energy Efficient Homes”, School of Architecture, MIT Aurangabad, 25.02.2013
5. Health Impacts Of Asian Building Construction Activities: A Study Of Resultant Indoor Air Quality International Conference for Academic Disciplines, Rome, 29 Oct. To 1 Nov. 2012.

#### **Ar. Swasti Sthapak**

1. Workshop attended on “Implementation Of ECBC in Chhattisgarh” Raipur, 30.07.2012

#### **Ar. Himanshu Poptani**

1. Early Faculty Induction Programme Council of Architecture, National Institute of Advanced Studies in Architecture, CDSA Pune, 30<sup>th</sup> July to 9<sup>th</sup> Aug. 2012.

### **Publications**

#### **Dr. Abir Bandyopadhyay**

1. Implementation Of Space Syntax Analysis In Post- Tsunami Rebuilding Process – Case Study: Nagapattinam, Tamil Nadu” published in the journal of Indian Institute of Architects, Vol.No. 77, Issue 06 of June 2012; pp 12-16. ISSN No. 0019-4913.(jointly with Deepali Mishra), Issue 06 of June 2012
2. Climate Response Of Traditional Mansions: Understanding Thermal Behaviour Of Indoor Spaces”, In Spandrel (journal of School of Planning and Architecture- ISSN 2231- 4601 SPANDREL of SPA, Bhopal) Monsoon 2012, Issue.5 , pages 01 -10 .(jointly with Neha Awasthi), Monsoon 2012
3. THE HAVELIS OF PAMGARH, SHEKHAWATI, RAJESTHAN: A STUDY ON THERMAL RESPONSE OF BUILT HERITAGE ”, in ABACUS (A bi- annual internationally refereed journal on Architecture, Conservation and Urban Studies- ISSN 0973-8339 ABACUS of BIT Mesra, Ranchi) Monsoon 2012, Vol.7, no. 2 , pages 28-34 .(jointly with Neha Awasthi), Monsoon 2012

## **Awards / Any other Achievements**

### **Ar. Debashis Sanyal**

1. Expert Reviewer, Energy the International Journal, Elsevier, USA, 1999-2013
2. Convener, Committee for Inspection of Architectural institutions in India, Council of Architecture (India), 2013, 23.3.13
3. Expert Reviewer, Energy & Buildings, Elsevier, USA, 2002-2013
4. Expert Reviewer, Energy Policy, Elsevier, USA, 2011-2013
5. State Co-convener, Indian National trust for Art and Cultural Heritage, Chhattisgarh State, 2010--2013.

## **DEPARTMENT OF BIOMEDICAL ENGINEERING**

### **Faculty**

Mr. A. K. Poonia	HOD & Associate Professor	B.E., M.Tech.
Mr Bikesh Kumar Singh	Assistant Professor	B.E., M.Tech.

### **M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Bikesh Kumar Singh</b>
Name of the Scholar	:	Sudeshna Sikdar
Title of the thesis	:	Comparative Study of various Filtering Techniques for Speckle Removal in Breast Ultrasound Images

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Bikesh Kumar Singh**

1. Mathematical Modeling, Chemo informatics and Quantum Chemistry 19/03/2013 to 19/03/2013
2. Deployment and Collaboration of Analytical Reports and Models 01/02/2013 to 01/02/2013
3. Matlab and Simulink for Engineering Education (01/03/2013 to 01/03/2013)

### **Publications**

#### **Bikesh Kumar Singh**

1. Distance measurement using Enhanced Histogram Approach for Irregular Images, International Journal of Computer Science and Information Technology & Security, pp. 216-219, Vol. 2, No.1, 2012.

### **Research Projects**

#### **Bikesh Kumar Singh**

1. Medical image analysis, Breast cancer classification.

## **Awards / Any other Achievements**

### **Bikesh Kumar Singh**

1. IEI Young Engineer Award-2012

## **DEPARTMENT OF BIOTECHNOLOGY ENGINEERING**

### **Faculty**

Mr. A. K. Poonia	HOD & Associate Professor	B.E., M.Tech.
Dr. Lata S. B. Upadhyay	Assistant Professor	M. Sc., Ph. D.
Dr. Pratima Gupta	Assistant Professor	M. Sc., Ph. D.

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Dr Lata Sheo Bachan Upadhyay**

1. Short term course on “Soft computing tools & practice on signal and image processing application” National Institute of Technology, Rourkela from 09.07.2012 to 14.07.2012.
2. CEOP-AEGIS 2<sup>nd</sup> Advance training Session, National Institute of Technology, Rourkela from 16.04.2012 to 20.04.2012.
3. Short term course on “Waste treatment and cleaner Technologies”, National Institute of Technology, Raipur from 28.05.2012 to 01.06.2012.

#### **Dr Pratima Gupta**

1. Short Term Course at IIT Chennai, July 9 to July 13, 2012

### **Publications**

#### **Lata Sheo Bachan Upadhyay**

1. Saccharification of starch by gelatin immobilized beet root amylase, Research Journal of Pharmaceutical, Biological and Chemical Sciences (2012), 3, 156-165. July, 2012
2. Urease Inhibitors: A review, Indian Journal of Biotechnology (2012), 11, 381-388. October, 2012
3. High efficient production of inverted syrup in an analytical column with immobilized invertase, Journal of Food Science and Technology, (2013), DOI 10.1007/s13197-013-0957-3. February, 2013

#### **Pratima Gupta**

1. Comparative Study Of Microbial Fuel cell for electricity generation by enriched exoelectron generating bacteria from environmental samples, July 2012 Asian Journal of Biotechnology, 4:137-142, 2012.

### **Research Projects**

#### **Dr Lata Sheo Bachan Upadhyay**

1. Project entitled “Lipase catalyzed bio diesel production from non edible oils by lipolytic bacteria” Funded by Department of Science and Technology (Rs.19,00,000.00) as Principle Investigator. 24-07-2012

## **DEPARTMENT OF CHEMICAL ENGINEERING**

### **Faculty**

Dr. P.K. Choudhari	HOD & Associate Professor	BE, M. Tech., Ph. D
Dr (Mrs) A B Soni	Associate Professor	B.E,M Tech., Ph.D
Mr Bidyut Mazumdar	Associate Professor	M. Tech., MBA
Mr A K Poonia	Associate Professor	B.E, M. Tech.
Mr V K Singh	Associate Professor	B.E, M. Tech. M.B.A.

Dr. Amit Keshav	Assistant Professor	B.E, M.Tech, Ph.D
Mr. Dharam Pal	Assistant Professor	B.E., M.Tech

### **M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Dr. (Mrs.) A. B. Soni</b>
Name of the Scholar	:	Priyanka Malhotra
Title of the thesis	:	A Comparative study of recovery of silver from waste X-ray film.
Name of the Supervisor	:	<b>Dr. Amit Keshav</b>
Name of the Scholar	:	Saurabh Chandrakar
Title of the thesis	:	Numerical prediction of laminar mixing using stirred tanks.
Name of the Supervisor	:	<b>Mr. V.K.Singh</b>
Name of the Scholar	:	Shraddha Verma
Title of the thesis	:	Characterization of lake water and investigation for suitable treatment method
Name of the Scholar	:	Manjari Jha
Title of the thesis	:	Study of performance of reheating furnace by using PHAST
Name of the Supervisor	:	<b>Mr.Dharm Pal</b>
Name of the Scholar	:	Sangeeta Yadav
Title of the thesis	:	Effect of temperature on extraction kinetics of citric acid
Name of the Supervisor	:	<b>Mr. Bidyut Mazumdar</b>
Name of the Scholar	:	Swati Gupta
Title of the thesis	:	Computational modelling of the heat transfer characteristic of nanofluids

### **Seminar/ Workshop/Conferences/Short term courses**

#### **P. K. Chaudhari**

1. Global Scenario in Environment and Energy, MANIT Bhopal. March 14-16, 2013
2. Neetu divya, Abhinesh Kumar Prajapati, Bidyut Mazumdar, "Electro chemical treatment of rice grain based distillery effluent using aluminium electrode". CHEMCON-2012, December 27-30, 2012, NIT Jalandhar, India.
3. Electrochemical process for removal of color from effluent of maize based starch processing unit, Global Scenario in Environment and Energy, March 14-16, 2013, MANIT Bhopal

#### **Dr. (Mrs.) A. B. Soni**

1. Workshop on Outcome based Accreditation Process and Parameters for UG Engg. Program, 02-11-2012
2. Praveen K Jha & Dr. T K Das, "Whathering of Coal: A Challenge to Coke Making" National Conference on Iron and steel Technologies- Research and Application (ISTRA-2012), BHU, Varanasi, Dec. 14-15, 2012.
3. Pooja V Shrivastava, "Adsorptive removal of dyes from aqueous solution using Activated charcoal and bentonite" National conference environmental and energy NCEEASD-2013, Nanded (MH), 06-07 March 2013.



**Dr. Amit Keshav**

1. Short term course on Computational Fluid Dynamics and Heat Transfer 14-18 May, 2012, IIT Bhubaneswar
2. One week refresher course on “Finite element method” organized by Department of Mechanical Engineering, NIT Raipur, 18-22, June 2012, NIT Raipur
3. Presented paper on “Hydrogen generation through aluminum, aluminum alloys in aqueous solutions” in International Conference on Global Scenario in Environment and Energy (ICGSE<sup>2</sup>-2013) from March 14-16, 2013, held in Department of Chemical and Energy Engineering, MANIT Bhopal. March 14-16, 2013
4. Presented paper on “Green chemistry for citric acid recovery from bioreactor: Effect of temperature” in International Conference on Global Scenario in Environment and Energy (ICGSE<sup>2</sup>-2013) from March 14-16, 2013, held in Department of Chemical and Energy Engineering, MANIT Bhopal, March 14-16, 2013
5. CFD of flow of fluid in a pipe line superimposed by convection. Indian Chemical Engineering Congress (CHEMCON)-2012, International conference on sustainable technologies for energy and environment in process industries and indo-US joint international conference on energy and environment. 27<sup>th</sup> – 30<sup>th</sup> December, 2012.
6. Kinetics of extraction of citric acid with TOA in sunflower oil. Indian Chemical Engineering Congress (CHEMCON)-2012, International conference on sustainable technologies for energy and environment in process industries and indo-US joint international conference on energy and environment. 27<sup>th</sup> – 30<sup>th</sup> December, 2012.

**V.K.Singh**

1. International Symposium On Environmental Analytical And Toxicological Issues Of Speciation In Atmospheric Organic Aerosols, 6-7/12/2012
2. National Seminar on Environmental Protection and Sustainable Development, 16/02/2013
3. D. Pal, D. Singh. & S. Soni, Biohydrogen production from organic wastes by anaerobic fermentation in a batch reactor-effect of pH and cyclic duration; International Conference on sustainable technologies for energy and environment in process industries and INDO-US International conference on energy and environment, CHEMCON 2012, 65<sup>th</sup> Indian Chemical Engineering Congress, NIT Jalandhar, 27-30/12/2012

**Dharm Pal**

1. Finite Element Method, June 18-22, 2012
2. Environmental-Analytical & Toxicological Issues of Speciation in Atmospheric Organic Aerosols, Dec. 6-7, 2012
3. CHEMCON-2012, Dec 27-30, 2012
4. Mathematical Modelling, Chemoinformatics & quantum chemistry, Feb 19, 2013
5. “Desulphurization of tyre pyrolytic oil – a photocatalytic approach” Technological advancement in chemical and environmental engineering (TACEE-2012), March 23-24, 2012, at BITS Pilani, Rajasthan.

6. Sandeep Soni “Bio-Production of Citric Acid - Recent Advances” North Maharashtra University Jalgaon, Maharashtra, 2012.
7. “Improvement in fuel quality of tyre pyrolytic oil using tetralin” [M.Tech. Work], CHEMCON -2012,NIT Jalandhar-144011,Punjab,India, 27-30 Dec. 2012.
8. Amit Keshav, Puli Mahesh and Bhushan Yadav “ Sorption of Nickel (II) ions using plywood sawdust, CHEMCON -2012,NIT Jalandhar-144011,Punjab,India, 27-30 Dec. 2012.
9. V.K.Singh, D.Singh, S. Soni “Bio-hydrogen production from organic waste by anaerobic fermentation in a batch reactor:effect of pH and cyclic duration”, CHEMCON -2012,NIT Jalandhar-144011,Punjab,India, 27-30 Dec. 2012.

**Bidyut Mazumdar**

1. Neetu divya, Abhinesh Kumar Prajapati and P. K. Chaudhari, “Electro chemical treatment of rice grain based distillery effluent using aluminium electrode”. CHEMCON-2012, December 27-30, 2012,NIT Jalandhar, India.

**Dr. Amit Keshav and Dr. PK Chaudhari**

1. Coordinator of Short term course on Waste treatment and Cleaner technology, May 28- 1<sup>st</sup> June, 2012 at NIT Raipur

**Publications**

**Dr. (Mrs.) A. B. Soni**

1. Pooja V. Shrivastava, A. B. Soni, H. Kumar, “Prediction of onset semi-fluidization velocity of three phase Semi-fluidized beds” Int. J. Chem. Sci.: 10(4), 2012, 2218-2224.
2. Pooja V. Shrivastava, A. B. Soni, H. Kumar, Minimum semi-fluidization velocity of gas-liquid-solid semi-fluidized beds, Inter. J. of Chemical engg. Research, 5(2), pp. 75.
3. Pooja V. Shrivastava, A. B. Soni, H. Kumar, “ Hydrodynamic study of three-phase Semi-fluidized bed of Irregular Particles”, Indian journal of Chemical Technology, 20, pp. 294.

**Amit Keshav**

1. Prakriti Norge,Kailas Wasewar, Reactive extraction of citric acid using tri-n-octylamine in non-toxic natural diluents: part 1- equilibrium studies from aqueous solutions. Applied Biochemistry and Biotechnology. 167, 197–213, 2012.

**Research Projects**

**Dr. (Mrs.) A. B. Soni, (Co-PI)**

1. Kinetic of thermal degradation of chlorophyll in green leafy vegetables and increasing the shelf life of the vegetables. SERB/ MFPI, New Delhi, India, Jan 2013

**Dr. Amit Keshav**

1. Kinetic of thermal degradation of chlorophyll in green leafy vegetables and increasing the shelf life of the vegetables, SERB/MFPI, New Delhi, India, Amount 11,70,400.00, duration 2 years Date of release January 2013

## **Books Publications**

### **Dr. Amit Keshav**

1. Text book of Separation Processes. Author Dr. Amit Keshav and Dr. S. Suresh on 2012.

## **DEPARTMENT OF CHEMISTRY**

### **Faculty**

Dr. (Mrs) Fahmida Khan	HOD & Associate Professor	M.Sc., Ph.D.
Dr. (Mrs) Kavita Tapadiya	Assistant Professor	M.Sc, Ph.D.
Dr. Shyama Prasad Mahapatra	Assistant Professor	M.Sc., Ph.D.

### **Doctoral Thesis Completed (PhD)**

Name of the Supervisor	:	<b>Dr. (Mrs.) Fahmida Khan</b>
Name of the Scholar	:	Mr. S.Ganesh
Title of the thesis	:	Evolution of advanced methods of analysis for spent nuclear fuel processing in India

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Dr. (Mrs.) Fahmida Khan**

1. Short term course on Waste Treatment & Cleaner Technologies, National Institute Technology, Raipur on 28 May to June 2012.
2. International Conference on Innovation and Research in Technology for Sustainable Development, Organized by O.P. Jindal Institute of Technology, Raigarh, C.G. on Nov 1-3, 2012
3. National conference on Luminescence and its applications(NCLA 2013), organised by dept. of science and humanities, PES Institute of technology, Bengaluru & Luminescence society of India, paper ID ML-01, p 162. 8-10 January,2013
4. National Seminar on "Application of Artificial intelligence in Bioinformatics/Life Sciences". National Institute Technology, Raipur on 17 January 2013

#### **Dr.(Mrs.)Kavita Tapadia**

1. Shaastrarth International conference, Title: Fluoride contamination in Dantewada District, Chhattisgarh, India, 8-9<sup>th</sup> February, 2013, Rungta group of Colleges, Bhilai, Chhattisgarh
2. Title: Fluoride contamination in Dantewada District, Chhattisgarh, India, published in International conference, 8-9<sup>th</sup> February, 2013

#### **Dr. Shyama Prasad Mahapatra**

1. Attended, 17<sup>th</sup> National Seminar on Ferroelectrics & Dielectrics, Bhubaneswar on 17<sup>th</sup> – 19<sup>th</sup> December 2012

### **Publications**

#### **Dr. (Mrs.) Fahmida Khan**

1. S.Ganesh, M.K.Ahmed, P.Velavendan, N.K.Pandey and U.K. Mudali, "Spectrophotometric determination of hydrazine with para

- dimethylaminobenzaldehyde in aqueous streams of Purex process”, Int. Journal of Nucl. Energy Science and Engineering, Vol 2, 1, 1-4. 2012
2. S.Ganesh, M.K.Ahmed, P.Velavendan, N.K.Pandey, U.K... Mudali, “Spectrophotometric detection of trace amounts of phosphate in water and soil”, Water science and technology, Vol 66, 12, 2653-58. 2012
  3. S.Ganesh, M.K.Ahmed, P.Velavendan, N.K.Pandey and U.Kamachi Mudali, “Developed new procedure for low concentration of hydrazine by spectrophotometry: Hydrazine - potassium permanganate system”, Journal of Analytical Sciences, Methods and Instrumentation, Vol 2, 2, 98-102. 2012
  4. K.K.Satapathy, “Influence of the fuels on the Mechanoluminescence properties of Dy doped ZnAl<sub>2</sub>O<sub>4</sub> phosphors”, Chemistry and Materials Research, Vol 2, No.4. 2012
  5. K.K. Satapathy, “Correlation between thermoluminescence and mechanoluminescence of  $\gamma$ -ray irradiated Dy doped ZnAl<sub>2</sub>O<sub>4</sub> phosphors prepared by solution combustion technique”, International Journal of Chemical Sciences and Applications, Vol 3, Issue 3, 366-372. 2012
  6. K.K.Satapathy, “Luminescence characterization of gamma ray-irradiated ZnAl<sub>2</sub>O<sub>4</sub>:Dy phosphor by using various fuels”, Int. eJournal of Mathematics and Engineering 194, 1856-1863. 2013
  7. K.K.Satapathy & G.C.Mishra, “Role of dopants on Mechanoluminescence properties of gamma ray irradiated MgAl<sub>2</sub>O<sub>4</sub> phosphors”, International Journal of Chemistry, Vol 33, (12), 2013, 384. 2013
  8. K.K.Satapathy & G.C.Mishra “BaAl<sub>2</sub>O<sub>4</sub>: Dy phosphor: Synthesis and Mechanoluminescence characterization” International Journal of Engineering Science Invention, Vol 2, (4), 2013, 34. 2013
  9. K.K.Satapathy, “Impulsive excitation of mechanoluminescence in gamma ray irradiated ZnAl<sub>2</sub>O<sub>4</sub>: Dy phosphors synthesized by solution combustion technique”, Advanced Material Letters, Vol.4, 2013, Issue4, 323-326. 2012.
  10. Sonalika Agrawal and S.Ganesh “Spectrophotometric studies on chelating behavior of oxalohydroxamic acid with uranium in aqueous streams”, Chemistry and Material Research Vol. 2, No. 7, 58-63 2013
  11. Sonalika Agrawal, S.Ganesh and M.K. Ahmed “On-site monitoring of trace level of nickel by Ni-DMG strip indicator paper in water samples”, Research Journal of chemistry and Environment Vol.17 (1), 10-13. 2013
  12. Sonalika Agrawal and S. Ganesh, “Reaction mechanism of the ceric oxidation of Benzohydroxamic acid with different acid medium Research Journal of Chemistry and Environment, Vol. 17, 5, 4-12. 2013
  13. Sonalika Agrawal, “Hydroxamic acids as reductometric titrants: determination of Cerium in Alloys”, Chemical Science Transactions, Vol.2 (3), 847-852. 2013
- Dr. Shyama Prasad Mahapatra**
1. International Journal: 01, Journal of Polymer Research, 20:176 (2013), 1-12. 27<sup>th</sup> Jan 2013
  2. National Journal: 01 Journal of Metallurgy and Materials Science, 54 (4), 279-289. Oct-Dec 2012

## **Consultancy Projects**

### **Dr.(Mrs.) Kavita Tapadia**

1. Project Title: Micro-extraction analysis of toxicants in a single drop of environmental and biological sample, Funded by Chhattisgarh Council of Science and Technology, Raipur. 28-12-2012

### **Dr. Shyama Prasad Mahapatra**

1. Ongoing: Preparation and Characterization of Microcellular Elastomer Nanocomposites for Packaging and Semi-conducting Application on 2011-2013 and extended to 2014.

## **Research Projects**

### **Dr. (Mrs.) Fahmida Khan**

1. Oxalohydroxamic Acid as an agent in PUREX process of nuclear fuel reprocessing by CGCOST on 22 December 2012.

### **Dr.(Mrs.)Kavita Tapadia**

1. Synthesis and application of nanoparticles for the analysis of biomolecule and toxicants. 27-09-2012
2. Micro extraction analysis of toxicants in environmental sample by using some novel reagents. 01-10-2012

### **Dr. Shyama Prasad Mahapatra,**

1. Preparation and Characterization of Chlorobutyl Elastomer Nanocomposites.
2. Preparation and Characterization of Silicone Elastomer Nanocomposites.
3. Preparation and Characterization of Microcellular Silicone Nanocomposites.
4. Assessment of Groundwater Quality in Bailadila Iron Ore Mine Area and its Periferal, Physico-Chemical, Some Heavy Metal Analysis and Removal of Heavy Metal from Ground Water.

## **Awards / Any other Achievements**

### **Dr. (Mrs.) Fahmida Khan**

#### **Invited Talk Delivered**

1. "Green Chemistry: - Zero Waste Production". Invited Talk delivered at the International Conference on Innovation & Research in Technology for Sustainable Development, organized by OP Jindal Institute of Technology, Raigarh, Chhattisgarh. November 1-3, 2012
2. "Environmental Management & Waste Minimization" Invited Talk delivered at the Short term course on Waste Treatment & Cleaner Technologies National Institute Technology, Raipur. 28 May-01-June 2012
3. Chaired a Session in the International Conference on Innovation & Research in Technology for Sustainable Development, organized by OP Jindal Institute of Technology, Raigarh, Chhattisgarh. November 1-3, 2012

#### **Research papers reviewed**

1. Title: Synthesis, Spectral and Electrochemical Studies of Complex of Uranium (IV) with Histidine. Journal: International Research Journal of Pure of Applied Chemistry. MS Ref. No. : 2013\_IRJPAC\_3119. 29 January 2013

- Title: Gas phase catalytic hydrodechlorination of chlorobenzene over cobalt phosphide catalysts with different P content. Journal: Journal of Hazardous Materials. MS Ref No. : HAZMAT-D-13-00961. 26 March 2013

## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### **Faculty**

Dr. (Ms.)Shobha Lata Sinha	HOD & Associate Professor (Mechanical Engg)	M.E, Ph.D.
Shri. Naresh Kumar Nagwani	Assistant Professor	M.Tech.
Shri. Dilip Singh Sisodiya	Assistant Professor	M.Tech.
Shri. Pradeep Singh	Assistant Professor	M.Tech.

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Mr. Dilip Singh Sisodia**

- IEEE 9<sup>th</sup> International JCSSE 2012 at Bangkok Thailand, from May 30-June 1, 2012
- Development and Collaboration of Analytical Reports and Models at NIT Raipur, 2013. Feb. 1, 2013
- Mathematical Modelling Chemo Informatics and Quantum Chemistry at NIT Raipur, Feb 9, 2013

#### **Mr. Pradeep Singh**

- Empirical Investigation of Fault Prediction Capability of Object Oriented Metrics of Open Source Software 9<sup>th</sup> International Joint Conference on Computer Science and Software Engineering (JCSSE 2012) held at and organized by University of the Thai Chamber of Commerce (UTCC), Bangkok, Thailand., May 30 – June 01, 2012
- Mr. Pradeep Singh, Attended workshop on Mathematical modelling, chemo Informatics and Quantum chemistry organised by Dept. of Electronic & Telecommunication NIT Raipur., Feb. 19, 2013

### **Publications**

#### **Mr. Naresh Kumar Nagwani**

- Verma S., "CLUBAS: An Algorithm and Java Based Tool for Software Bug Classification Using Bug Attributes Similarities." Journal of Software Engineering and Applications, Vol. 5, No. 6, pp. 436-447, 2012. April 2012
- Verma S., "ML-CLUBAS: A Multi Label Bug Classification Algorithm." Journal of Software Engineering and Applications, Vol. 5, No. 12, pp. 983-990, 2012. June 2012
- Verma S., "On Studying the Effect of Sample Size in Evaluation of Bug Classifiers." Indian Journal of Science and Technology, Vol. 6, No. 1, pp. 3849-3855, 2013. Jan 2013

#### **Mr. Dilip Singh Sisodia**

- S. Verma "Web usage Pattern analysts through web logs: A Review in 9<sup>th</sup> International JCSSE-12" organized by school of Engineering, UTCC, Bangkok, Thailand May 30-1 June 2012.

## **Awards / Any other Achievements**

### **Dr. S.L. Sinha**

1. Presented an expert lecture on “Theory & Practice of Environmental Impact Assessment” in short term course on “Waste Treatment & Cleaner Technologies” organized by Chemical Engineering Department, N I T, Raipur, CG 2012. May 28-June 1, 2012
2. Presented an expert lecture on “Alternative Fuels For I C Engines” in short term course on “Waste Treatment & Cleaner Technologies” organized by Chemical Engineering Department, N I T, Raipur, CG 2012. May 28-June 1, 2012
3. Chaired the two technical sessions of International Conference on Computer Science, Electrical & Mechanical Engineering organized by Inter science Research & Network, Bhubaneswar at Hotel Grand Arjun, Raipur, CG 2012. Nov. 25, 2012

### **Mr. Dilip Singh Sisodia**

1. SRF, Indian Academy of Science, Bangalore, 2013,
2. Best Citizens of India Awards by International Publishing House, 2013
3. Shiksha Rattan Puraskar by IIFS, 2013

## **DEPARTMENT OF CIVIL ENGINEERING**

### **Faculty**

Dr. M.K.Verma	Head & Professor	B.E., M.Tech., Ph.D.
Dr. R. K. Tripathi	Associate Professor	B.E., M.Tech., Ph.D.
Dr. Samir Bajpai	Associate Professor	B.E., M.Tech., Ph.D.
Dr. U. K. Dewangan	Associate Professor	B.E., M.Tech., Ph.D.
Dr. G. D Ramtekkar	Associate Professor	B.E., M.E., Ph.D.
Shri Ajay Vikram Ahirwar	Assistant Professor	B.E , M.Tech.
Mr. Laxmikant Yadu	Assistant Professor	B.E , M.Tech.
Dr. (Mrs.) C.P. Devatha	Assistant Professor	B.E., M.E., Ph.D.
Dr. Shirish V. Deo	Assistant Professor	Ph.D.

### **M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Dr. M. K. Verma</b>
Name of the Scholar	:	Abhijeet Soni
Title of the thesis	:	Hydrological modeling of ungauged catchments: SCH approach for Lower Narbada Subcatchment
Name of the Scholar	:	S. K. Modek
Title of the thesis	:	Application of ARC-GIS for Estimation of Basin Potential and reservoir planning (A Case Study-Kharun River Basin)
Name of the Scholar	:	S. K. Dani
Title of the thesis	:	Development of Sustainable Ground Water Recharging Pattern for Block Dharsiwa of Raipur.

Name of the Scholar	:	S. K. Srivastava
Title of the thesis	:	Optimization Modeling For Crop Planning of Hasdeo Bango Command.
Name of the Scholar	:	Bharti Prasad
Title of the thesis	:	Rainfall and Runoff Relation for Kharun River Basin Using Arc GIS and Matlab.
Name of the Scholar	:	R. Madhuri
Title of the thesis	:	Impact of Urbanisation Water Resources in Raipur City Using GIS and Remote Sensing.
Name of the Supervisor	:	<b>Dr. R. K. Tripathi</b>
Name of the Scholar	:	Mrs Gaurva
Title of the thesis	:	“Dynamic analysis of Ravishankar and Hirahud Dams”
Name of the Scholar	:	Aryak Sori
Title of the thesis	:	“Seismic analysis of Sondur and Rupsiabagar-Khasiabara Dams”

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Dr. M. K. Verma**

1. Regional Educational Workshop on “Structural Engineering Solutions” at Department of Civil Engineering, N. I. T. Raipur as Principal Coordinator,. 29<sup>th</sup> – 30<sup>th</sup> October 2012

#### **Dr. Rajesh Kumar Tripathi**

1. Coordinated A Regional Educational Workshop on “Structural Engineering Solutions” organized by Civil Engineering Department, National Institute of Technology Raipur in association with Concept Tele Systems (Bentley Channel Partner) on 29<sup>th</sup> and 30<sup>th</sup> October 2012.
2. Coordinated All India Workshop on Awareness of Indian Standard with particular Reference to National Building Code (NBC )-2005 in association with CG State Centre of I. E (India) and BIS New Delhi on 27<sup>th</sup> April 2012
3. Coordinated National Seminar on Application of Artificial Intelligence in Bioinformatics / Life Sciences at National Institute of Technology Raipur on 17<sup>th</sup> Jan. 2013

#### **L K Yadu**

1. Short term course on “Finite Element Method” Organised by Department of Mechanical Engineering, National Institute of Technology Raipur at NIT Raipur from 18-22<sup>nd</sup> June 2012.
2. Short term course on “Waste Treatment and Cleaner Technologies” held at National Institute of Technology Raipur organised by Department of Chemical Engineering during 28<sup>th</sup> May to 1<sup>st</sup> June 2012.
3. Short term course on “Finite Element Method, Constitutive Modeling and Applications” held at Indian Institute of Technology Gandhinagar during April 02-05, 2012.
4. Workshop on Mathematical Modelling, Chemoinformatics and Quantum Chemistry on 19<sup>th</sup> February 2013 conducted by Department of Electronics & Telecommunication and Central Computing Center, held at National Institute of Technology, Raipur.



5. Workshop on “Deployment and Collaboration of Analytical Reports & Models” on February 1, 2013 held at National Institute of Technology Raipur.
6. Regional Educational Workshop on “Structural Engineering Solutions” organized by Civil Engineering Department, National Institute of Technology Raipur in association with Concept Tele Systems (Bentley Channel Partner) on 29<sup>th</sup> and 30<sup>th</sup> October 2012 at National Institute of Technology Raipur.
7. All India workshop on ”Awareness of Indian Standards with Particular Reference to National Building Code (NBC) 2005” organised by The Institution of Engineers (India) Chhattisgarh State Centre, Raipur (Under the aegis of Civil Engineering Division Board IEI Kolkata) in association with Bureau of Indian Standards, New Delhi on 27<sup>th</sup> April 2012, at Raipur Chhattisgarh.
8. A Regional Educational Workshop on “Structural Engineering Solutions” organized by Civil Engineering Department, National Institute of Technology Raipur in association with Concept Tele Systems (Bentley Channel Partner) on 29<sup>th</sup> and 30<sup>th</sup> October 2012 at National Institute of Technology Raipur as Member of Organizing Committee.

#### **Ajay Vikram Ahirwar**

1. Workshop on “Mathematical Modelling, Chemoinformatics and Quantum Chemistry” Dept. of Electronics & Telecommunication and Central Computing Center, NIT, Raipur 19<sup>th</sup> February 2013
2. One day seminar on “Emerging concept of green buildings in Chhattisgarh” Hotel Golden Tulip Raipur ADaRSH, GRIHA and EC Structural Consultants 17<sup>th</sup> October 2012
3. Regional Educational Workshop on “Structural Engineering Solutions” Civil Engineering Dept, NIT Raipur in association with Concept Tele Systems (Bentley Channel Partner) 29<sup>th</sup> and 30<sup>th</sup> October 2012

#### **Publications**

##### **Dr. M. K. Verma**

1. “Phytotherapy in the Treatment of Arthritis: A Review”, International Journal of Pharmaceutical Science & research, (2013), Vol. 4, Issue 8, pp-2853-2865.
2. “Impact of Urbanisation on Water Resources in Raipur City using GIS and Remote Sensing”, International Journal of Earth Sciences and Engineering (IJEE), Vol. 5 No.-6 (1), 2012.
3. “Application of Fuzzy Logic in Biomedical Informatics”, Journal of Emerging Trends in Computing and Information Sciences, Vol.4 No.1, pp- 57-62, January 2013.
4. “Application Of Arc Gis For Estimation Of Basin Potential (A Case Study - Kharun River Basin)”, International Journal of Engineering Research & Technology (IJERT), Vol. 1 Issue 9, November- 2012
5. “Optimization Modelling For Crop Planning of Hasdeo Bango Command”, International Journal of Engineering Research & Technology (IJERT), Vol. 1 Issue 9, November- 2012.
6. “Dynamic Analysis of Hirakund Dam Due to Seismic Forces”, International Journal of Scientific and Research Publications, Volume 2 Issue 9, September, 2012

7. "Safty Check of Existing Dams Against Altered Sesmic Hazard Condition", International Journal of Civil and Structural Engineering, 2012, Vol.-3, No.-1, pp-239-244. (IC-4.1)
8. Safety Analysis of Rupsiabagar-Khasiabara Dam Under Seismic Conditions, Using CADAM:, International Journal of Scientific and Research Publications, Volume 2 Issue 9, September, 2012
9. "Safety check of Sondur Dam for changed Seismic Conditions", International Journal of Engineering Research & Technology, Vol. 1 Issue 5, July – 2012, pp-1 -14
10. "Development of Rule Curve for Ravishankar Sagar Reservoir by Simulation", International J. of Engg. Research & Indu. Appls. (IJERIA), Vol.5, No. II (May 2012), pp 89-98
11. "Modeling of glycogen phosphorylase by protein-ligand complex based on multiple templates and loop", National Seminar on Application of Artificial intelligence in Bioinformatics/Life Sciences, organized by Sub-DIC Bioinformatics, NIT Raipur, January 17th 2013, pp-224-230.
12. "Anfis approach for the diagnosis of asthma severity", National Seminar on Application of Artificial intelligence in Bioinformatics/Life Sciences, organized by Sub-DIC Bioinformatics, NIT Raipur, January 17th 2013, pp-183-190.
13. "Insilico Interaction Analysis of Single and Multi Wall Carbon Nanotube with Different Ion Channel" National Seminar on Application of Artificial intelligence in Bioinformatics/Life Sciences, organized by Sub-DIC Bioinformatics, NIT Raipur, January 17th 2013, pp-176-182.
14. "A Computational Approach for Structure prediction of Adenosine Deaminase [Bos Taurus]" National Seminar on Application of Artificial intelligence in Bioinformatics/Life Sciences, organized by Sub-DIC Bioinformatics, NIT Raipur, January 17th 2013, pp-87-92.
15. "Molecular Modeling and Docking Analysis of Novel Drug like Compounds for NDM-1" National Seminar on Application of Artificial intelligence in Bioinformatics/Life Sciences, organized by Sub-DIC Bioinformatics, NIT Raipur, January 17th 2013, pp-36-48.
16. "Insilico Docking Analysis of Nitrogen Containing Bisphosphonate with Human Fernasyl Pyrophosphate Synthase", National Seminar on Application of Artificial intelligence in Bioinformatics/Life Sciences, organized by Sub-DIC Bioinformatics, NIT Raipur, January 17th 2013, pp-16-24

**L.K. Yadu and R.K. Tripathi**

1. "Stabilization of Soft Soil With Granulated Blast Furnace Slag and Fly Ash" International Journal of Research, Engineering and Technology, Volume 2, Issue 2, 2013, pp115-119
2. "Effects of Granulated Blast Furnace Slag in the Engineering Behavior of Stabilized Soft Soil" Elsevier Procedia Engineering, 51(2013), pp 125-131.

**Dr. R.K. Tripathi, Dr. M. K. Verma & A Shori**

1. " Safety check of Sondur Dam for changed Seismic Condition" International Journal of Engineering Research and Technology" (ISSN 2278-0181) Vol. 01, Issue. 05, July 2012.

2. “ Safety Analysis of Rupsiabagar Dam under Seismic Conditions using CADAM” International Journal of Scientific and Research Publications” (ISSN 2250-3153) Vol. 02, Issue. 09, September 2012, pp 437-447.

**Verma G, Verma M K and Tripathi R K**

1. “Safety Check of Existing Dam against altered Seismic Hazard Conditions” International Journal of Civil and Structural Engineering” (ISSN 0976-4399) Vol. 03, No. 01, August 2012, pp 239-248.
2. “Dynamic Analysis of Hirakud Dam due to Seismic Forces” International Journal of Scientific and Research Publications” (ISSN 2250-3153) Vol. 02, Issue. 09, September 2012, pp 331-340.

**Madhuri R, Verma M K and Tripathi R K**

1. “Impact of Urbanisation on Water Resources in Raipur City using GIS and Remote Sensing”. International Journal of Earth Sciences and Engineering (ISSN 0974-5904) Vol. 06 Issue 1 February 2013 or Issue 2 April 2013.

**Consultancy Projects**

**Dr. Rajesh Kumar Tripathi**

1. Successfully executed more than Thirty Five ( >35) Nos CONSULTANCY PROJECTS (Consultancy Amount > 50.00 lakhs)

**L.K. Yadu**

1. SBC Test by Plate load test, Standard Penetration test and Triaxial test by various agencies i.e. CPWD, PWD etc.
2. Material test for filter design of ash dykes, civil buildings and Industrial sites.

**Research Projects**

**L.K. Yadu (Co-PI) R.K. Tripathi (PI),**

1. “Improving soft subgrade for the construction of low volume roads using locally available materials” Sponsored by Chhattisgarh Council of Science and Technology, Government of Chhattisgarh for two years of Amount 2.0 Lakhs. (Running)

**Patents**

**Dr. M. K. Verma**

1. ArthMedBase: Database on Medicinal Plants for Arthritis. No.- L-45478/2013, 9th January 2013

**Awards / Any other Achievements**

**Dr. Rajesh Kumar Tripathi**

1. Coordinator, State Technical Agency, for Pradhan Mantri Gram Sadak Yojana

**DEPARTMENT OF ELECTRICAL ENGINEERING**

**Faculty**

Dr. A.S. Thoke	HOD & Professor	B.E, M.Tech & Ph.D.
Dr. (Mrs) S. Gupta	Associate Professor	M.Tech, Ph.D.
Shri. P.D. Dewangan	Associate Professor	B.E. & M.Tech

Dr.(Mrs) Anamika Yadav	Assistant Professor	B.E., M.Tech & Ph.D.
Dr. Narendra Londhe	Assistant Professor	M.Tech & Ph.D
Mrs. Ebha Koley	Assistant Professor	B.E & M.E.
Mrs. Varsha Singh	Assistant Professor	B.E & M.Tech.

### **M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Dr. A.S. Thoke</b>
Name of the Scholar	:	Pritam Singh
Title of the thesis	:	Face Detection & Recognition using Neural Network
Name of the Scholar	:	Ankita Chandrakar
Title of the thesis	:	Image Information Retrieval from Incomplete Quarries using colour, texture and shape feature
Name of the Supervisor	:	<b>Dr. A.S. Thoke &amp; Mr. Bikesh Singh</b>
Name of the Scholar	:	Nilam Marskole
Title of the thesis	:	Development of Computer Aided Diagnosis System for Retrieval and Classification of Brain Tumours.
Name of the Supervisor	:	<b>Mrs. Shubhrata Gupta</b>
Name of the Scholar	:	Dharmendra Kr. Singh
Title of the thesis	:	Artificial Neural Network Based Fault Detector and Classifier for phase to phase faults on six phase transmission lines
Name of the Supervisor	:	Mrs. Shubhrata Gupta & Mrs. Kesari Verma
Name of the Scholar	:	Nazil Parveen
Title of the thesis	:	Facial expression Recognition by statistical or Spatial Features using CART,NN and PCA
Name of the Supervisor	:	<b>Dr. Narendra D Londhe</b>
Name of the Scholar	:	Ishan Baradwaj
Title of the thesis	:	'HMM Based Hindi Speech Recognition'
Name of the Scholar	:	Devendra Joshi
Title of the thesis	:	'An auto detection of focal liver lesions in medical images,
Name of the Scholar	:	Ashwini Kumar Upadhyay
Title of the thesis	:	'A human identification systems based on iris recognition
Name of the Scholar	:	Sunil Chaware
Title of the thesis	:	'An improved less complex region based compression technique for telemedicine.
Name of the Supervisor	:	<b>Mrs. Varsha Singh</b>
Name of the Scholar	:	Manish Singh Choudhary
Title of the thesis	:	Simulation and study of AODV routing protocol under CBR and TCP Traffic Source
Name of the Scholar	:	Mitali Shrivastava

Title of the thesis	:	ANN Based Comparative Analysis of PWM modulation technique for control of single phase and three phase multilevel inverter
Name of the Scholar	:	Madhusmita Das
Title of the thesis	:	Improved Dynamic Response of DSTATCOM using Genetic Algorithm
Name of the Supervisor	:	Dr. (Mrs.) Anamika Yadav
Name of the Scholar	:	Miss Reshmita Sharma
Title of the thesis	:	ANN Based Open Conductor Fault Detector Classified and Distance Locator for Protection of Double Circuit Transmission Lines
Name of the Scholar	:	Miss Shailja
Title of the thesis	:	ANN based computer aided diagnosis system for enhancement, retrieval and classification of mammographic images.
Name of the Supervisor	:	<b>Mrs. Ebha Koley</b>
Name of the Scholar	:	Tejash Kodyar
Title of the thesis	:	Artificial Neural Network Based Fault Detector and Classifier for phase to phase faults on six phase transmission lines

#### **Seminar/ Workshop/Conferences/Short term courses**

##### **Mrs. Shubhrata Gupta**

1. International Network of Women in Sc. AND Engg., OCT. '12'
2. International conf. on C.Sc, Electrical and Mechanical Engg.

##### **Narendra D. Londhe**

1. Attended a one day workshop on 'Mathematical Modeling. Chemo informatics and Quantum Chemistry at National Institute of technology, Raipur., Feb. 19, 2013
2. Attended a one day workshop on 'Deployment and Calibration of Analytical Reports & Model's at National Institute of technology, Raipur Feb. 1, 2013
3. Completed two days training on 'PSCAD'. at National Institute of technology Raipur, 23 – 24 April 2012

##### **Dr. (Mrs.) Anamika Yadav**

1. Attended Training course on PSCAD software, 23.04.2012 to 24.04.2012
2. Attended Workshop on "Programming in Matlab, simulink and Designing of GUI", 25.06.2012 to 30.06.2012

##### **Varsha Singh**

1. PSCAD power system simulator Nayak Power Systems at Deptt. of Electrical Engg. NIT Raipur, 22.04.2012 to 23.04.12
2. International Conference: ACSEE, IR-NET Raipur, 25 Nov. 2012

##### **Mrs. Ebha Koley**

1. PSCAD power system simulator Nayak Power Systems at Deptt. of Electrical Engg. NIT Raipur, 22.04.2012 to 23.04.12

## **Publications**

### **A.S.Thoke**

1. Anamika Yadav & Prarthna Warliyani, Fault Classification, Distance Location & faulty Section Identification in Teed Transmission Circuits using ANN> IJCA (USA) Vol. 47, No. 15, June, 2012 pp 14 – 21.
2. Ebha Koley, A Naresh Kumar & Anamika Yadav, ANN Based fault Location for six open conductor fault in six phase transmission line National Conference on Recent Advancement in Power System Engineering, Jaipur, 21-22 March 2013.
3. Devashree Rai & Kesari Verma, Article MSA prioti using Total Support Tree Data Structure international Journal of computer Application 43(23), 45-49 April 2012 Published by Foundation of computer Science. New York USA (Impact factor: 834)
4. Keshri Verma Classification Algorithm based International Journal of Computer Applications (0975-8887) Volume 48- No. 22. June 2012 pp 52-56 (Impact factor = 834)
5. Devashree Rai & Kesari Verma, Comparative Analysis of Single and Multiple Minimum Support Based Association Rule Mining Algorithms International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958. Volume-1, (Issue -4, April 2012 (Impact factor = 1.0)

### **Mrs. Shubhrata Gupta**

1. “Power- Quality Improvement Using PWM Voltage Regulator” International Journal of Management, IT and Engineering (UMIE), ISSN: 2249-0558, Vol. 2. 5, May 2012 pp 352-367
2. “Facial Expression Recognition system Using Statistical Features and Neural Network”. International Journal of Computer Application, UCA (0975-888), Vol. 48, No. 18 June 2012, pp 17-23
3. “Facial Expression Classssification Using Statistical Spatial Features and Neural Network”. International Journal of Advances in Engineering & Technology (UAET), ISSN: 2231-1963 Vol.4, Issue 1, July 2012, pp 424-435.
4. “Power Quality: Problems, Effects and Economic Impacts” International Academy of Science, Engineering and Technology (IASET), International Journal of Electrical and Electronics Engineering (IJEET), ISSN: 2278-9944 Vol. 1, Issue 1, Aug. 2012 pp. 94-102.
5. “Power – Quality Assessment Using Artificial Neural Network”. Regional Conference of the International Network of Women Engineers and Science (INWES) at India International Centre Rew Delhi. India Oct. 12 -13. 2012 pg 87. Organized by WISEINDIA.
6. “Analysis of Space Vector Pulse Width Modulation Technique (for Power – Quality Improvement in Multiphase Power System)” International Conference on Recent Trends in Control Communication And Computer Technology (RTCCCT-2012) 25<sup>th</sup> Nov. 2012. Raipur, INDIA.

### **Narendra D Londhe**

1. Ishan Bhardwaj, “Hidden Markov Model Based Isolated Hindi Word Recognition.” IEEE International Conference on Power, Control and Embedded Systems (ICPCES – 2012), Dec. 16.10.2012

2. R.S. Anand, "Super harmonic Imaging: A Review", XIX National Symposium of Ultrasonic, 30-31 Oct. 2012
3. Princy Marlani, "A Cloud Computing Based Telemedicine Service." IEEE-EMBS Special Topic Conference on Point – Of-Care (POC) Healthcare Technologies at Bangalore. 16-18 Jan 2013
4. Shweta Arora , Anuja Kumar Acharya. "Human Identification Based on Iris Recognition for Distant Images," Int. J of Computer Applications 45(16) 32-39. May 2012
5. Ishan Bhardwaj, " Speaker Dependent and Independent Isolated hindi word Recognizer using Hidden Markov Model (HMM)" Int. J. of Computer Applications Vol. 52, No. 7 pp. 34-40, Aug.. 2012
6. Devendra Joshi, "Automatic Detection of Liver Tumors in Abdomen CT Images," International Journal of Computer Technology and Electronic Engineering, Volume 3, Issue 1, Jan-Feb 2013
7. Sunil Charware, "Region of Interest Based Coding of Abdominal CT Images." Conidian Journal on Images Processing and Computer Vision Vol. 4 No. 1, pp, 9-15, January 2013
8. "PhD Thesis Summary: Behavioral Study of Ultrasound Wave Propagation in Biological Tissues," J.Pure Appl Ultra son. 34 (4) pp 94. 2012

**Dr. (Mrs.) Anamika Yadav**

1. Himanshu Rai, Biometric Based Human Identification System: A review", International Journal of Electronic and Electrical Engineering Vol.5, No. 2 Special issue Sep, 2012. pp. 139-142 Sep. 2012
2. Sourabh Jaiswal, "GITP Congestion control mechanism for gray level image transport protocol." International Journal of Electronic and Electrical Engineering. International Research Publication House Doha Qatar. Vol.5, No. 2 Special issue Sep, 2012. pp. 409-412. Sep. 2012
3. "Comparison of Single and Modular ANN Based Fault Detector and Classifier for Double Circuit Transmission Lines". International Journal of Engineering Science and Technology. www. Ijest-ng.com Vol. 4. No. 2, 2012 pp 122-136. 2012
4. Aleena Sweta Padma "Combined Wavelet and ANN based protection technique for double circuit transmission line against fault and power swing". International Journal of Electronic and Electrical Engineering, Vol 5. No. 1 Special issue. Sep 2012 pp 1-4 2012
5. "Artificial Neural Network-Based Fault Distance Locator for Double – Circuit Transmission Lines." Advances in Artificial Intelligence vol. 2013. Article ID 271865, 12 pages, 2013.
6. Rai, H, Iris recognition using combined support vector machine and Hamming distance approach, Article in press, Expert Systems with Applications (2013, [http: dx doi.org. 10.1016 j.eswa.2013 07.083.2013](http://dx.doi.org/10.1016/j.eswa.2013.07.083)
7. Aleena Sweta padma, "Improved first zone reach setting of ANN based directional relay for protection of double circuit transmission lines", paper under minor revision in IET Generation, Transmission & Distribution, 2013.

**Mrs. Varsha Singh**

1. Manish Singh Choudhary, National Conference 'TECHNOLOGIA' -2012 of Traffic Pattern Based Simulation Study of Reactive and Proactive Routing Protocol. 19 April 2012
2. Manish Singh Choudhary, IJCA – 2012 an Adaption of Reactive Measure for Enhancement and Performance Characterization of Routing Protocol under Different Traffic Source
3. Dr. Swapanjit Pattanayak & Mr. Darshan Kumar, Genetic Algorithm based approach for optimization of conducting angles in cascade multilevel inverter " IJERA Vol. 2 Issue 3 pp 2389 – 2395 May – June 2012
4. Dr. Swapanjit Pattanayak & Mr. Darshan Kumar, "GA for improved Dynamic Response of DSTATCOM" IJERA Vol 3 Issue 3 pp 2145-2152. May – June 2012
5. Dr. Swapanjit Pattanayak & Mr. Darshan Kumar, "Improved Dynamic Response of DSTATCOM" using Genetic Algorithm" IISTE. ISSN 22221719 (paper), ISSN 2222-2863 (online), Vol. X, No. X, June-July 2012
6. Mitali Singh & Swapnjit Pattanayak, "Comparative analysis of PWM Techniques for Multilevel Inverter using ANN "LJCA (0975-8887) Vol. 46 No. 19, , pp – 20-24, May 2012
7. Mitali Singh & Swapnjit Pattanayak, "Artificial Neural Network based implantation of Space Vector PWM for Control of Three – Phase Voltage Source Inverter" IJERA Vol. 2 Issue 3 pp 2209—2216, May-June 2012
8. N. Shastri & Swapnjit Pattanayak, "Reduction of ripple in a single phase buck converter by fuzzy logic control" IJERA. Vol. 2. Issue 3 ISSN: 2248-9622., May-June 2012
9. Mitali Singh & Swapnjit Pattanayak, "Artificial Neural Network based Harmonic Optimization of Multilevel inverter to Reduce THD" UACEE International Journal of Artificial Intelligence and Neural Networks – Volume 2: Issue 2 (ISSN 2250 – 3749), July-Aug. 2012
10. Shivam Gautam, RTEECE – 2012 International Conference "Survey of Topologies of Multilevel Inverter with reduced no. of switches" Krishi Sanskriti New Delhi, 29 – 30 Sep 12
11. S. Gupta & Swapnjit Pattanayak, "Analysis of space vector pulse width modulation techniques", 25 Nov. 12

**Awards / Any other Achievements****Dr. (Mrs.) Anamika Yadav**

1. POSOCO Power system Award (PPSA-2013) in Master's Category given by joint venture of Power Grid and IIT Delhi:- Bagged by my M.Tech. Research scholar Miss Reshmita Sharmna of 2012 batch. March 2013

**Mrs. Shubhrata Gupta**

1. Awarded Shiksha Ratan Puraskar – 2013.

**Narendra D. Londhe**

1. Received Dr. T.K. Saxena Memorial Award of Ultrasonic Society of India for Best PhD Thesis in the field of Ultrasonic and applied research in XIX National Symposia of Ultrasonic 2012 (XIX NSU – 2012) organized at National Physical Laboratory , New Delhi, 30 Oct. 2012



## **DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION**

### **Faculty**

Dr. Shrish Verma	Associate Professor	M.Tech., Ph.D.
Shri. Bibhudendra Acharya	HOD & Assistant Professor	M.Tech.
Shri Sujay Chakraborty	Assistant Professor	M.E.
Shri Saikat Majumdar	Assistant Professor	M.Tech.

### **Seminar/ Workshop/Conferences/Short term courses**

#### **B. Acharya**

1. MATLAB & Simulink for Engineering Education, 1<sup>st</sup> Mar, 2013
2. Deployment and collaboration of analytical Reports and Models at NIT, Raipur, 1<sup>st</sup> Feb, 2013
3. Workshop on RF and MW testing and Digital Debugging at Education Symposium, 28 August, 2012
4. Short term course on Modern Communication from Analog to 4G and Beyond At National Institute of Technology, Rourkela, 4 June 2012 to 29 June 2012
5. workshop on Next Generation Networks at National Institute of Technology, Srinagar, 26 May, 2012

#### **S Majumder**

1. Deployment and collaboration of analytical Reports and Models at NIT, Raipur, 1<sup>st</sup> Feb, 2013
2. Workshop on Mathematical Modeling, Chemoinformatics and Quantum Chemistry, 19<sup>th</sup> Feb, 2013
3. MATLAB & Simulink for Engineering Education, 1<sup>st</sup> Mar, 2013
4. Wireless sensor networks- from theory to practice at IIT Kanpur, 24 to 26<sup>th</sup> May 2012

#### **Dr. S Verma, B Acharya**

1. Workshop on Mathematical Modeling, Chemoinformatics and Quantum Chemistry. 19<sup>th</sup> Feb, 2013

#### **Dr. S Verma , B Acharya and S Majumder**

1. Workshop on FPGA and Embedded Systems- with hands on experiments, 5<sup>th</sup> Feb, 2013

### **Publications**

#### **Dr. Shrish Verma**

1. Nagwani, N. K., "Rank-Me: A Java Tool for Ranking Team Members in Software Bug Repositories," Journal of Software Engineering and Applications, Vol. 5 No. 4, pp. 255-261, APRIL 2012. April 2012 to March 2013
2. Nagwani, N. K., "CLUBAS: An Algorithm and Java Based Tool for Software Bug Classification Using Bug Attributes Similarities," Journal of Software Engineering and Applications, Vol. 5, No. 6, pp. 436-447, June 2012.
3. Nagwani, N. K., "ML-CLUBAS: A Multi Label Bug Classification Algorithm," Journal of Software Engineering and Applications, Vol. 5 No. 12, pp. 983-990, December 2012.

4. Nagwani, N. K., "On Studying the Effect of Sample Size in Evaluation of Bug Classifiers," Indian Journal of Science and Technology, Vol. 6, No. 1, January 2013.
5. Singh, P.; "Empirical investigation of fault prediction capability of object oriented metrics of open source software," Computer Science and Software Engineering (JCSSE), 2012 International Joint Conference on , vol., no., pp.323,327, May 30 2012-June 1 2012 doi: 10.1109/JCSSE.2012.6261973

#### **B Acharya**

1. Mohammad Imroze Khan, Samiksha Soni and Shrish Verma, "Implementation of Digital Watermarking using VHDL" International Journal of computer Science and Communication, Vol-2, No.-2, July- December 2012, pp. 15-21.
2. Neetu Ahirwar and Sapnojit Pattnaik "Advanced Image analysis Based System for Automatic Detection and classification of Malarial Parasite in Blood Images" International Journal of Information Technology and Knowledge Management January-June 2012, Volume 5, No. 1, pp. 59-64.

### **DEPARTMENT OF HUMANITIES**

#### **Faculty**

Dr. Samir Bajpai	HOD & Associate Professor (Civil Engg)	B.E., M.Tech., Ph.D.
Dr Jaya Dwivedi	Assistant Professor	M.A., Ph.D.
Dr Anoop Tiwari	Assistant Professor	M.A., Ph.D.

#### **Seminar/ Workshop/Conferences/Short term courses**

**Dr. Jaya Dwivedi**, Swarnita Sharma, Conducted One session on 2<sup>nd</sup> Feb 2013 at OPJIT Raigarh on Softskill and PD.

#### **Publications**

##### **Dr. Jaya Dwivedi**

1. Swarnita Sharma, Transstellar V3.I1 ISSN:22496912 "Societal context in the writing of Arundhati Roy(International Journal), April 2012
2. Dolly Sharma, Ripples International Journal Vol.6 Issue 2 "The Struggle to attain selfhood in Bharthi Mukherjee Jasmine, July 2012

### **DEPARTMENT OF INFORMATION TECHNOLOGY**

#### **Faculty**

Dr. Sudhakar Pandey	HOD & Assistant Professor	Ph.D
Mr. Satya Prakash Sahu	Assistant Professor	M.Tech.
Mr. Rakesh Tripathi	Assistant Professor	M.Tech.
Mr. Sanjay Kumar	Assistant Professor	M.Tech.

#### **M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Dr.Sudhakar Pandey</b>
Name of the Scholar	:	Pushpendra Kumar Verma

Title of the thesis	:	“Comparison of Cluster Based Protocols in MANET”
Name of the Supervisor	:	<b>Mr. Rakesh Tripathi</b>
Name of the Scholar	:	Shweta Sirothiya
Title of the thesis	:	“Range Free Localization Scheme for Circular Network.”
Name of the Scholar	:	Pranjali Diwan
Title of the thesis	:	“Performance Analysis of Distributed Adaptive CSMA Algorithm for Windows Network”
Name of the Supervisor	:	<b>Mr. Sanjay Kumar</b>
Name of the Scholar	:	Manish Dongre
Title of the thesis	:	Concentric Clustering Hierarchical Scheme For Wireless Sensor Network

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Dr. Sudhakar Pandey**

1. International Conference on Network & Information (ICNI 2012) held on Bangkok, Thailand.
2. Short-term course on “Wireless Sensor Network” from theory to Practiced organized by Department Electrical Engineering, IIT Kanpur during May 24<sup>th</sup> to 26<sup>th</sup> 2012.
3. Mathematical Modeling, Chemoinformatics and Quantum Chemistry on 19.2.2013. worked as a co-ordinator.
4. Sanjay Kumar, Faculty Development Program in “Loophole & Ethical Hacking” workshop at NIT Raipur on 29<sup>th</sup>-30<sup>th</sup> Sep 2012 organized.

#### **Satya Prakash Sahu**

1. “Workshop on “Loophole & Ethical Hacking ”, 29<sup>th</sup> to 30<sup>th</sup> September 2012, organized by NIT Raipur (CG) India.”
2. “Workshop on “Digital Image Processing (WiSDIP - 2012)”, 10<sup>th</sup> to 16<sup>th</sup> December 2012, organized by NIT Rourkela (Odisha) India.”

#### **Sanjay Kumar**

1. International Conference on “Network & Information (ICNI 2012)” held on Bangkok, Thailand.
2. “Workshop on Mathematical Modeling Chemo informatics & Quantum Chemistry” at NIT Raipur.”
3. “Deployment Collaboration & Analytical Reports & Model at NIT Raipur.”

### **Publications**

#### **Dr.Sudhakar Pandey, Rohit Bohra and Dr. Neetu Agrawal**

1. “Flexible Weighted Clustering Algorithm Influenced by LFPQR ” in International Conference on Network & Information (ICNI 2012) held on Bangkok, Thailand.

#### **Sanjay Kumar, Ashok Patil**

1. An Approach For Feature Detection of Moving Object using Image Mining” at International conference Of Network & Information -2012 at Bangkok, Thailand.

## Research Projects

### Rakesh Tripathi

Title :-“Design & Development of Dynamically Controlled Walker System”.

Amount : 23,12,1460/-  
Funding Agency : DST(SEED)  
Duration : 2011-2013

## DEPARTMENT OF MATHEMATICS

### Faculty

Dr. R.P. Pathak	HOD & Associate Professor	M.Sc, Ph.D.
Dr. Arvind Kumar Sinha	Assistant Professor	M.Sc, M.Phil, Ph.D

## Seminar/ Workshop/Conferences/Short term courses

### Dr. R. P. Pathak

1. Participated in the Short Term Course on Waste Treatment and Cleaner Technologies from 28 May 2012 to 1 June 2012 at NIT Raipur organized by Department of Chemical Engineering, NIT Raipur
2. Participated in the National Workshop on Application of Mathematics in Different Field of science from 12 October 2012 to 14 October 2012 organized by the Department of Mathematics, Govt. Nagarjuna P. G. College of Science, Raipur.
3. Shiv Kumar Sahoo , “Korovkin’s-type Theorems on Modified positive linear operators”, The rich heritage of Mathematics in India, NSRHMI-12, Durg . Oct 26-27, 2012.
4. Participated in the One day Workshop on Deployment and Collaboration of Analytical Reports & Models on 1 February 2013 organized by NIT Raipur.
5. Participated in the One day Workshop on Mathematical Modeling, Chemo informatics and Quantum Chemistry on 19 February 2013 organized by Department of Electronics & Telecommunication & Central Computing Center, NIT Raipur.

### Dr. Arvind Kumar Sinha

1. Participated in the Short Term Course on Waste Treatment and Cleaner Technologies from 28 May 2012 to 1 June 2012 at NIT Raipur organized by Department of Chemical Engineering, NIT Raipur.
2. Participated in One Week Refresher Course on Finite Element Method from 18 June 2012 to 22 June 2012 at NIT Raipur organized by Department of Mechanical Engineering, NIT Raipur.
3. Participated in the National Workshop on Application of Mathematics in Different Field of science from 12 October 2012 to 14 October 2012 organized by the Department of Mathematics, Govt. Nagarjuna P. G. College of Science, Raipur.
4. Participated in the National Seminar on The Rich Heritage of Mathematics in India(NSRHMI- 12) from 26 October 2012 to 27 October 2012 organized by Department of Mathematics, Govt. V. Y. T. P. G. Autonomous College, Durg

5. Participated in the National Workshop on Fuzzy Sets and Its Application and General Mathematics from 17 January 2013 to 19 January 2013 organized by Department of Mathematics, Govt J. Y. Chhatisgarh College , Raipur.
6. Participated in the One day Workshop on Deployment and Collaboration of Analytical Reports & Models on 1 February 2013 organized by NIT Raipur.
7. Participated in the One day Workshop on Mathematical Modeling, Chemo informatics and Quantum Chemistry on 19 February 2013 organized by Department of Electronics & Telecommunication & Central Computing Center, NIT Raipur.

## **Publications**

### **Dr. R. P. Pathak**

1. "A note on unsteady flow of a dusty viscous fluid through hexagonal duct", ISOR Journal of Mathematics, Vol. 1, Issue 1, May- June -2012 , page no. 44-49.
2. Shiv Kumar Sahoo, "Some approximation results on Otto Szazs type positive linear operators" , ISOR Journal of Mathematics, Vol. 1, Issue 1, May- June - 2012 , page no. 50-54.
3. Shiv Kumar Sahoo, "Some approximation results on positive linear operators" , CSVTU Research Journal , Vol. 5,(2012)pp.10-13.
4. "Heat transfer due to the Exponential rate of heat addition super-posed on Steady temperature of visco-elastic Rivlin Ericksen Fluid Between two Confocal Elliptic Cylinders" , CSVTU Research Journal , Vol. 5, (2012) pp.19-21.,
5. Urmila Mishra and Rashmi, "Common fixed point of absorbing mappings satisfying Lipschitz type contractive condition" International Journal of Pure and Applied Mathematics, Vol.77 No.2 (2012) pp.245-253
6. Shiv Kumar Sahoo "Some approximation results on Basakakov type special class of positive linear operators" , IJSRP , Vol. 2, Issue 7, July -2012 , page no. 01-04.
7. Shiv Kumar Sahoo, "Some approximation results on modified Basakakov type special class of positive linear operators" , IJSER , Vol. 3, Issue 7, July -2012 , page no. 01-04.
8. Shiv Kumar Sahoo, "Some results on Derivatives of Generalized Modified Baskakov Type Operators (C)", IJCST, Vol. 3, Issue 3,(July-September 2012).
9. Shiv Kumar Sahoo and Ashish Kumar Tiwari, "Some results on Derivatives of Generalized Modified Baskakov Type Operators (A)", IJECCE, Vol. 3, Issue 4, July-2012.
10. Shiv Kumar Sahoo and Ashish Kumar Tiwari, "Some approximation results on modified Basakakov type special class of positive linear operators" , Research Hunt Journal , Vol. VII, Issue III, May- June -2012 , page no. 111-119.
11. Hemant Kumar Nashine, Zoran Kadelburg and Stojan Radenovic, "Coincidence and fixed point results in ordered G-cone matric spaces", Mathematical and Computer Modelling 57(2013),pp.701-709.

### **Dr. Arvind Kumar Sinha**

1. "Small M- Pseudo Projective Modules", American Journal of mathematics and Mathematical Science (AJMMS), Vol. 1 , No. 1, January- June, 2012, Page 9-13. [ISSN: 2278-0874]

2. "On Some Dual Concepts In Modules" , International Journal of Advance Mathematics and Mathematical Sciences (IJAMMS) , Vol. 1, No. 1 , January-June ,2012, Page 25-30. [ISSN: 2278-0866]

#### **DEPARTMENT OF M. C. A.**

##### **Faculty**

Mr. Mithilesh Atulkar	HOD & Associate Professor	B.E., M.Tech
Mr. Harendra Bikrol	Associate Professor	B.E., M.Tech
Dr.(Mrs.) Priyanka Tripathi	Assistant Professor	M.C.A., Ph.D.
Dr. (Mrs.) Kesari Verma	Assistant Professor	M.C.A., Ph.D.
Mrs. Manju Pandey	Assistant Professor	M.C.A.

#### **Seminar/ Workshop/Conferences/Short term courses**

##### **Mrs. Manju Pandey**

1. Multivariate Data Analysis (MDA 2012) at IIT Kharagpur, 04/06/2012 to 09/06/2012.

#### **Publications**

##### **Deepak Agnihotri, Mithilesh Atulkar & Harendra Bikrol**

1. Applied Physics Computing using Java Parallel Processing Framework in Clusters Environment of Parallel Computing, Seek Digital Library, ISBN: 978-981-07-1847-3 doi:10.3850/978-981-07-1847-3 P0550

##### **Mithilesh Atulkar**

1. Detection of Edges Using Fuzzy Inference System, International Journal of Innovative Research in Computer and Communication Engineering Vol. 1, Issue 1, March 2013
2. Fuzzy Inference System for Image Processing, International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 2, Issue 3, March 2013

##### **Mrs. Manju Pandey**

1. Transform for Simplified Weight Computations in the Fuzzy Analytic Hierarchy Process, Intelligent Informatics, Advances in Intelligent and Soft Computing 182, pp. 109-117, Springer- Verlag, Berlin Heidelberg ,2012
2. New Aggregation Operator for Trapezoidal Fuzzy Numbers based on the Geometric Means of the Left and Right Apex Angles, International Journal of Computer Technology and Applications, Vol. 3(3), pp 940-943, May-June 2012
3. New Aggregation Operator for Triangular Fuzzy Numbers based on the Geometric Means of L- and R- Apex Angles, International Journal for Advanced Research in Computer Science, pp. 581-583, May-June 2012
4. New Aggregation Operator for Triangular Fuzzy Numbers based on the Geometric Means of the Slopes of the L- and R- Membership Functions, International Journal of Computers and Technology, Vol. 2, No. 2, pp. 74-76, April 2012

**Dr. (Mrs.) Kesari Verma**

1. Classification using Neural Network & Support Vector Machine for Sonar dataset, International Journal of Computer Trends and Technology- volume4Issue2- 2013 pp 116-119.
2. Study and Analysis of Methods of Object Detection in Video, International Journal of Softcomputing and Engineering (IJSCE) Volumn-2, Issue-6, January 2013
3. MSAPriori using Total Support Tree Data Structure, International Journal of Computer Applications 43(23):45-49, April 2012. Published by Foundation of Computer Science, New York, USA
4. From Coal Mining to Intelligent Data Mining, International Journal of Engineering Research & Technology (IJERT) Vol. 2 Issue 2, February- 2013
5. Classification Algorithm based on MS Apriori for Rare Classes, International Journal of Computer Applications (0975 – 8887) Volume 48– No.22, June 2012. pp 52-56
6. Comparative Analysis of Single and Multiple Minimum Support Based Association Rule Mining Algorithms, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-1, Issue-4, April 2012.

**Research Projects**

**Dr. (Mrs.) Kesari Verma**, CGCOST, 2010 - 2013

**DEPARTMENT OF MECHANICAL ENGINEERING****Faculty**

Dr. S.Sanyal	HOD & Associate Professor	B.E., M.E., Ph.D.
Dr. A.M. Rawani	Professor	M.Tech. Ph.D.
Dr. Shobha Lata Sinha	Associate Professor	M.E, Ph.D.
Dr. S.D.Patle	Associate Professor	M.Tech, Ph.D.
Dr. Anil Kr.Tiwari	Associate Professor	M.Tech, Ph.D.
Dr. Rahul Salhotra	Associate Professor	M.Tech, Ph.D.
Dr. S. P. S. Matharu	Associate Professor	B.Tech, M.Tech, Ph.D.
Shri. Ravindra Kumar Yadav	Associate Professor	M.Tech.
Shri G.K. Sahu	Assistant Professor	M.Tech.
Dr. Subhankar Bhowmick	Assistant Professor	M.E.,Ph.D.
Shri. Suraj Kumar Mukti	Assistant Professor	M.E.
Shri. Vivek Kumar Gaba	Assistant Professor	M.E.

**M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Dr. A. K. Tiwari</b>
Name of the Scholar	:	V. R. Ganguly
Title of the thesis	:	Development of software to estimate solar radiation at any time, place and day on the globe: comparing for solar application.
Name of the Scholar	:	SaumyaTiwari
Title of the thesis	:	Techno economic analysis of earth air heat exchanger: Designing for new indoor stadium.

Name of the Scholar	:	G. P. Gupta
Title of the thesis	:	Theoretical analysis of single slope passive solar distillation for higher yield: comparing for different climatic zones of India.
Name of the Supervisor	:	<b>Mr. V.K. Gaba &amp; Dr. S. Bhowmick</b>
Name of the Scholar	:	AshishUpadhyay
Title of the thesis	:	Design of an air-conditioning system based on absorption system
Name of the Scholar	:	Vishal Chhugani
Title of the thesis	:	Optimization of annular fins of FGM material
Name of the Scholar	:	AnimeshDewangan
Title of the thesis	:	Combustion modeling of CI engine using hydrogen as a fuel
Name of the Scholar	:	Madhusudan Patel
Title of the thesis	:	Parametric Study of annular fins for constant weight

### **Seminar/ Workshop/Conferences/Short term courses**

#### **Dr. S. L. Sinha**

1. Workshop on “Mathematical Modeling, Chemoinformatics and Quantum Chemistry” in NIT, Raipur, CG organized by M/S SCUBE Scientific Software Solution (P) Ltd, New Delhi. Feb. 19, 2013
2. Workshop on “Deployment and Collaboration of Analytical Reports & Models” in NIT, Raipur, CG organized by M/S Inventor, Analuo, Predictive Analytics. Feb. 1, 2013
3. S. K. Dewangan, International Conference on Computer Science, Electrical & Mechanical Engineering in Hotel Grand Arjun, Raipur, CG organized by Inter science Research & Network, Bhubaneswar Nov 25, 2012
4. Regional Conference of the International Network of Women Engineers & Scientists (INWES) in India International Centre, organized by Women in Science & Engineering in association with International Network of Women Engineers & Scientist Oct. 12-13, 2012.
5. Workshop on “ Air-conditioning Heat Load, Psychromatics& Air Duct Design” in ISHRAE, Raipur Chapter, CG Aug 10, 2012
6. Mr. S. K. Mukti, Short term course on “Waste Treatment & Cleaner Technologies” organized by Chemical Engineering Department, N I T, Raipur, CG May 28-June 01, 2012
7. Use of Bio-fuel in transportation sector: A Step Towards the Use of Green Renewable Energy and Better Environment, Regional Conference of the International Network of Women Engineers & Scientists (INWES) India International Centre, organized by Women in Science & Engineering in association with International Network of Women Engineers & Scientist October 12-13, 2012.

#### **Dr. S. Sanyal**

1. Dr. S. L. Sinha & Dr. S. Bhowmick, TEQIP Conclave of Educators on Quality of Delivered Academics in Mechanical Sciences, Jointly organized by NPIU and IIT Kanpur, 22 – 23 Dec 12.



**Mr. S. K. Mukti**

1. Enterprises Resource planning System, IIT Kanpur, 18 to 22/06/2012
2. Knowledge management –A powerful tool to success of ERP system, RungtaBhilai 08 to 09/02/2013

**Mr. S. Dewangan**

1. CFD and Heat transfer, IIT Bhuvneshwar 14 to 18/05/2012
2. Rheology of paints and emulsion, NCL Pune, 10 to 12/12/2012

**Dr. Sanyal and Dr. S. Bhowmick**

1. One week Short Term Course in Finite Element Method June 18-22, 2012

**Dr. A.M. Rawani**

1. One day workshop on “Deployment and Collaboration of SPSS Reports and Models using Analuo” at NIT Raipur, organized by Predictive Analytics Solutions Pvt. Ltd., Bangalore. February 01, 2013

**Dr. A. M. Rawani and Sharma D G**

1. Potentials and Challenges in Procurement Strategy of an Indian Cement Industry’ International Conference on Best Practices in Supply Chain Management held on 22-23 Nov.’12 at Bhubaneswar.

**Dr. S. L. Sinha & T. N. Verma**

1. Contaminant Control in Intensive Care Unit (ICU) using CFD Modeling, International Conference on Computer Science, Electrical & Mechanical Engineering organized by Inter science Research & Network, Bhubaneswar on 25.11.2012 at Hotel Grand Arjun, Raipur, CG.

**Dr. A. M. Rawani & Loya M I M**

1. ‘Fly Ash Utilization: Opportunities and Challenges’ published in Conference on Wealth from Waste, a Mega in Support of Innovation in Fly Ash Management held on 17th Feb.’13 at Raipur.
2. Adoption of Innovation: A study of Fly Ash Based Construction Materials” International conference on Contemporary Business held on 18-19 Oct. 2012 at IIT Delhi.

**Mr. S. K. Dewangan & Dr. S. L. Sinha**

1. Comparison of various Numerical Differencing Schemes in Predicting Non-newtonian transition flow through Eccentric Annulus with Inner Cylinder in Rotation, International Conference on Computer Science, Electrical & Mechanical Engineering organized by Inter science Research & Network, Bhubaneswar on 25.11.2012 at Hotel Grand Arjun, Raipur, CG.
2. CFD Modeling of Blood Flow Hemodynamics for Femoral artery bends, National Seminar on Application of Artificial intelligence in Bio-informatics / Life Sciences held on Jan 17, 2013 at NIT, Raipur, CG.

**Dr. S. D Patle, R. K. Sahoo & Dr. S. L. Sinha**

1. Development of Simple Test Rig for Measurement of Thermal Diffusivity, the proceedings of National Conference on Recent advances in Mechanical Engineering organized by Mechanical Engineering Department, Hindustan College of Science & Technology, Farah, Mathura, UP on June 8-9, 2012.
2. Principles of Experiments for Measurement of Thermal Diffusivity, National Conference on Recent advances in Mechanical Engineering organized by

Mechanical Engineering Department, Hindustan College of Science & Technology, Farah, Mathura, UP on June 8-9, 2012.

**Dr. N. K. Jain, Moon Banerjee and Dr. S. Sanyal**

1. Stress Concentration in isotropic & orthotropic composite plates with center circular hole subjected to transverse static loading, International Conference on Advanced Technologies in Mechanical Engineering, 25<sup>th</sup> November 2012, organized by- IRNET at Raipur.
2. Effect of fiber orientation on stress concentration factor in fixed rectangular fibrous composite plate with center circular hole subjected to transverse loading, , Third Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2012), 5-8 December 12, IIT Delhi.
3. Analysis of Stress Concentration for Rectangular Plate with Hole under Transverse Loading by Three Dimensional Finite Element Analyses, The Indian Society of Theoretical and Applied Mechanics ISTAM, 17-20 December 2012, Organized by IIT KGP at Defense Institute of Advanced Technology, Pune.
4. Three dimensional Analyses for effect of fibre orientation on stress concentration factor in fibrous composite plates with central circular hole subjected to in-plane static loading, International Conference on Intelligent System and Control, ISCO-2013, 4-5<sup>th</sup> January 2013, Karpagam College of Engineering, Coimbatore, Tamil Nadu.
5. Three dimensional analysis of rectangular plate with hole under in plane loading conditions for an isotropic material under varying parametric conditions, , International Conference on Recent Advances in Material Processing Technology, RAMPT, 7-9<sup>th</sup> January 2013, National Engineering College, Kovilpatti, Tamil Nadu.
6. Analysis of stress concentration for rectangular fibrous composite plates with central circular hole under transverse load, International conference on recent advances in composite materials ICRACM, 18-21 February-2013, Organized by- IIT-BHU, Venue-Goa.
7. Parametric analyses for stress distribution in laminated composite rectangular plate with center circular hole subjected to transverse loading, National Conference on Advances in Modeling and Dynamics of Aerodynamic Systems (AMAAS- 2013), 1st and 2nd March 2013.

**Dr. A.K. Tiwari**

1. Conceptual analysis of desalination system working on humidity and dehumidify technique using solar air heater. International conference on Mechanical Engineering and Robotics, Phuket, Thailand May 26-27, 2012.

**Mr. V. K. Gaba and Dr. S. Bhowmick**

1. Combustion modeling of diesel engine using bio-diesel as secondary fuel, International conference on Mechanical Engineering and Robotics, Phuket, Thailand May 26-27, 2012.

**Dr. S. Bhowmick, K.N. Saha & D.Mishra**

1. Large amplitude dynamic study of rotating disks carrying attached masses, Dec. 12, 57<sup>th</sup> Congress of ISTAM, Organized by IIT KGP at Defense Institute of Advanced Technology, Pune.

## **Publications**

- 1. S. K. Dewangan & S. L. Sinha**, Comparison of various Numerical Differencing Schemes in Predicting Non-newtonian transition flow through Eccentric Annulus with Inner Cylinder in Rotation, International Journal of Mechanical & Industrial Engineering, Volume 3, Issue 1, 2013, pp 126-136.
- 2. T. N. Verma & S. L. Sinha**, Contaminant Control in Intensive Care Unit (ICU) using CFD modeling, International Journal of Mechanical & Industrial Engineering, Volume 3, Issue 1, 2013, pp 121-125.
- 3. S. D Patle, S. L. Sinha, R. K. Yadav & R. K. Sahoo**, Analysis and Measurement of Thermo Physical Properties by Temperature Oscillation, International Journal of Engineering and Innovative Technology (IJEIT), Volume 1, Issue 5, May 2012, pp 173.
- 4. T. N. Verma & S. L. Sinha**, Numerical Simulation of Contaminant Control in Intensive Care Unit with & without Enclosure, 39<sup>th</sup> National Conference on Fluid mechanics & Fluid Power, pp 36-37, Dec 13-15, 2012 at SardarVallabhbai National Institute of Technology, Surat, Gujarat.
- 5. S.Sanyal and G.S. Bedi**, Joint - Loop Representative Table for Detection of Isomorphism among Kinematic Chains, , CSVTU Research Journal, Vol. 05, 2012, pp 82 - 87.
- 6. Shubhrata Nagpal, S.Sanyal, Nitin Jain**, Mitigation Curves for determination of relief holes to mitigate stress concentration factor in thin plates loaded axially for different discontinuities, International Journal of Engineering and Innovative Technology (IJEIT) Volume 2, Issue 3, September 2012, pp1-7.
- 7. Mukti S K and Rawani A M**, Identification of Progress and Success Factors during implementation of ERP in Indian Steel Industry – A Case study of Bhilai Steel Plant, International Journal of Engineering and Innovative Technology, 1(2), 2012.

### **Moon Banerjee, Dr. N. K. Jain and Dr. S. Sanyal**

- 1.** Three dimensional parametric analyses on effect of fibre orientation for stress concentration factor in fibrous composite cantilever plate with central circular hole under transverse loading, IIUM Engineering Journal, Malaysia, Vol.13, No-2, 2012.
- 2.** Optimization of Rectangular Plate with Central Square Hole Subjected to In-Plane Static Loading for Mitigation of SCF, Volume 1, Issue 6, August -2012, International Journal of Engineering Research and Technology “ ISSN 2278-0181.
- 3.** Three dimensional parametric analyses on effect of fibre orientation for stress concentration factor in fibrous composite cantilever plate with central circular hole under transverse loading, International Islamic University, Malaysia, Engineering Journal, , Vol.13, No-2, 2012.
- 4.** Parametric analyses on effect of fibre orientation for stress concentration factor in two edges fixed and two edges simply supported fibrous composite plate with central circular hole under transverse loading, International Journal of Mechanical Engineering, Serial Journals, Vol 5, No- 2.July-December 2012.
- 5.** Stress concentration in isotropic & orthotropic composite plates with center circular hole Subjected to transverse static loading, International Journal of Mechanical and Industrial Engineering (IJMIE)ISSN No. 2231-6477, Vol-3, No-1, 2013.

### **J.Tiwari and Rawani A M**

1. "Environmental Challenges to Thermal Power Industries: An Exploratory Study in Indian Context" International Journal of Science and Nature 3 [4], 2012.
2. "Environmental Impact Analysis- A case study in ACC Plant, accepted for publication in Journal of Environment Research and Development.

### **Research Projects**

#### **Dr. A.M. Rawani and JeetendraTiwari**

1. Title - Strategies for Effective Environmental Management in Thermal Power Plants in Chhattisgarh Organized by CCOST, Raipur Financial Outlay – 05.00 Lacs, Continuing

### **Awards / Any other Achievements**

#### **Dr. A. M. Rawani**

1. Nominated for 'Glory Achievers Award 2012' by All India Economic Survey Award Council, New Delhi 2012
2. Nominated for 'Shining Image of India Gold Medal for life time achievements' and 'RashtriyaPragati Gold Medal' in 2013 by All India Economic Survey Award Council, New Delhi. 2013

#### **Dr. S. L.Sinha**

1. Honoured on Teacher's day for excellent services by Institution of Engineers (I), State Centre, Raipur, CG 05.09.2012
2. Authorised to use the style and title of Chartered Engineer by virtue of professional training, experience and corporate membership of Institution of Engineers (India). 2012

### **DEPARTMENT OF METALLURGICAL ENGINEERING**

#### **Faculty**

Dr. Manoj K Chopkar	HOD & Assistant Professor	B.E., M.Tech. Ph.D
Shri A. P. Rajimwale	Associate Professor	B.E. M.Tech
Shri Manwendra Tripathi	Assistant Professor	B.E. M.Tech
Shri Manoranjan K. Manoj	Assistant Professor	B.E. M.Tech

#### **M. Tech Thesis Completed**

Name of the Supervisor	:	<b>Dr. Manoj Kumar Chopkar and Prof. Bidyut Majumdar</b>
Name of the Scholar	:	Miss Swati Gupta
Title of the thesis	:	Computation modeling of Heat Transfer Characteristics of Nanoflud

#### **Seminar/ Workshop/Conferences/Short term courses**

##### **Dr. Manoj Kumar Chopkar**

1. Attended NRC-M Summer Workshop on Mechanical Property Characterization at Department of Materials Engineering, IISc Bangalore, 25 June - 14 July 2012

## **Publications**

**M. Chopkar, A.K. Mishra, C. Srinath, P.K. Jain & B. Padya**

1. "Characterization of Intermediates in the Synthesis of Reduced Graphene-oxide Through Sequential De-oxygenation", Nano Trends: A Journal of Nanotechnology and Its Applications, Volume 14, Issue 2, (March 2013), ISSN: 0973-418X.

## **Consultancy**

M/s Aditi Ispat Bhilai of Rs. 10,000/-

## **Patents**

**M. Chopkar, I. Manna & P. K. Das**

1. A Device for measuring the Thermal Conductivity of a fluid with dispersion of ultra- fine solid particles. An application for an Indian patent (390/Kol/2005) filed in February 2005, under review.

## **DEPARTMENT OF MINING ENGINEERING**

### **Faculty**

Shri B.R Parate	HOD & Associate Professor	B.E, M.Tech
Dr.Manoj Pradhan	Associate Professor	B.E, M.Tech, Ph.D
Shri P.Y Dhekne	Associate Professor	B.E, M.Tech
Shri M.D Patel	Associate Professor	B.E, M.Tech
Shri P.K Dewangan	Associate Professor	B.E, M.Tech
Dr. Nawal Kishore	Assistant Professor	B.E, M.Tech, Ph.D.
Dr. R. K. Jade	Assistant Professor	M.Tech, Ph.D.

## **Seminar/ Workshop/Conferences/Short term courses**

**Dr. M. Pradhan**

1. Workshop on "Environmental clearance procedures for small scale mining of minor minerals, Circuit House, Raipur, Govt. of Chhattisgarh. 2013
2. P Dewangan and R K Jade, "Punch Mining: An Efficient method to Extract High Stripping Ratio Coal Deposit, National Conference on Challenges in 21<sup>st</sup> conference Mining & Allied Issues, 19-23 Feb 2013
3. R K Jade; "Detonation Behaviour of Bulk Emulsion Explosives in Watery Blast holes", Tenth International Symp on Rock Fragmentation by Blasting, Fragblast 10, New Delhi 2012
4. G K Pradhan, "Explosive Energy Distribution in an Explosive Column through use of Non Explosive material-Case Studies of Some Indian Mines", Tenth International Symp on Rock Fragmentation by Blasting, Fragblast 10, New Delhi 2012

**Prof P.Y.Dhekne**

1. National Conference on challenges in 21<sup>st</sup> century mining-environment & allied issues, 19-21 Feb, 2013.

2. An overview of accidents due to fly-rock: predictions & mitigative measures, N.R. Thote, R.R. Dongre, National Conference on challenges in 21<sup>st</sup> century mining-environment & allied issues 19-21 Feb, 2013

**Prof. M.D.Patel & Dr. N. Kishore**

1. Workshop on Statistical & Analytical research using Mathematica, , NIT Raipur, 19-02-2013

**Dr. R. K. Jade**

1. Workshop on “Deployment and collaboration of analytical reports and models”, , NIT Raipur & Predictive Analytics, NIT Raipur 01-02-2013
2. Workshop on Statistical & Analytical research using Mathematica, , NIT Raipur, 19-02-2013

**Prof. P. Dewangan, M Pradhan and R K Jade**

1. “Punch Mining: An Efficient method to Extract High Stripping Ratio Coal Deposit, National Conference on Challenges in 21<sup>st</sup> conference Mining & Allied Issues, 19-21 Feb 2013.

**Manoj Pradhan, & R K Jade**

1. “Detonation Behaviour of Bulk Emulsion Explosives in Watery Blast holes”, Tenth International Symp on Rock Fragmentation by Blasting, Fragblast 10, New Delhi 2012

**Publications**

**Dr. R. K. Jade**

1. Policy Issues & reforms needed for growth of Indian thermal power sector in an economical and eco-friendly way, MineTech’12: Golden Jubilee Workshop on Mining Technology, 04-05 May 2012, Bhubhaneswar, 04-05 May 2012
2. P Dewangan, M Pradhan and R K Jade, “Punch Mining: An Efficient method to Extract High Stripping Ratio Coal Deposit, National Conference on Challenges in 21<sup>st</sup> conference Mining & Allied Issues, 19-21 Feb 2013.
3. Intelligent Data Mining Techniques For Coal Mining Data, R. K. Jade, L.K. Verma, K. Verma, International Journal of Engineering Research & Technology (IJERT), Vol 2, Issue 2, Feb. 2013, ISSN: 2278-0181
4. Classification using Neural Network & Support Vector Machine for Sonar dataset, R. K. Jade, L.K. Verma, K. Verma, International Journal of Computer Trends and Technology (IJCTT), Feb 2013 issue volume number 4 issue2. ISSN: 2231-2803

**Consultancy Projects**

**Dr. M. Pradhan**

1. Consultancy Project on “Evaluation of SD activities undertaken by SECL 2012-13”, SECL, Rs. 825846, 2012-13, Dr M K Verma, Dr A S Thoke, NIT Raipur.
2. Consultancy Project on “Evaluation of R & D activities undertaken by SECL in 2012-13”, SECL, Rs. 262737,

## DEPARTMENT OF PHYSICS

### Faculty

Dr. A.K. Srivastav	HOD & Associate Professor	M.Sc., Ph.D.
Dr. (Mrs.) Sadhana Agrawal	Associate Professor	M.Sc., M. Phil., Ph.D.
Dr. Bijay Kumar Sahoo	Assistant Professor	M.Sc. Ph.D.
Dr. Ayush Khare	Assistant Professor	M.Sc. Ph.D.
Dr. Sapan Mohan Saini	Assistant Professor	M.Sc., M.Phil., Ph.D.

### Seminar/ Workshop/Conferences/Short term courses

#### Dr. Sadhana Agrawal

1. NCLA 2013 Bangalore, 08-01-2013 to 10-01-2013

#### Dr. Ayush Khare

1. Training Programme on TRANSIT of VENUS organized by Chhattisgarh Council of Science and Technology(CCOST) 01/06/2012

#### Dr. B.K. Sahoo

1. International Conference on Physical Sc. At : Amsterdam, Netherland,, May 2012

#### Dr. S.M. Saini

1. International Conference on Condensed Matter and Materials Physics – ICCMMP- 2012, Amsterdam, Netherlands 13 May-14 May 2012,

#### Dr. A. K. Shrivastav

1. Brightness-current-voltage characteristic of bilayer Organic Light Emitting Diodes, National Conference of luminescence and its Application, NCLA 2013, Bangalore,

### Publications

#### Dr. Ashok Kumar Shrivastav

1. Piezoelectric Polarization Effect on Debye Frequency and Temperature in Nitride Wurtzites, International Journal of Engineering and Applied Science, 6 (2012 ), 140 – 144
2. Full Potential Study of Electronic and Optical Properties of NdF<sub>3</sub>, World Academy of Science, Engineering and Technology -WASET, 13 – 14 may 2012, Amsterdam Netherland , 65 ( 2012 ), 344 – 346
3. Electric - Field dependence of the delay time of Organic Light Emitting Diodes, Nanomaterials : Synthesis and Application ( NSNSA, 4-6 March 2013 ) Chhindwada ( M.P.)
4. Carrier injection in Organic Light Emitting Diode, Nanomaterials : Synthesis and Application ( NSNSA, 4-6 March 2013 ) Chhindwada ( M.P.)

#### Dr. Sadhana Agrawal

1. Thermoluminescence study of UV and gamma irradiated Limestone, IJNA (International Journal of Nano Tech. and Appl.), Vol 6 (2)2012, 97-104
2. TL glow curve analysis of beta irradiated Eu<sup>3+</sup> doped Y<sub>4</sub>Al<sub>2</sub>O<sub>9</sub> phosphor, IJLA (International Journal of luminescence and Application), Vol 2(1) 2012, 60-62

3. TL and PL Study of beta irradiated Bhutanese Stones collected from Bhutan, IJLA (International Journal of luminescence and Application), Vol 2(1) 2012, 24-26
4. Thermoluminescence and kinetics of gamma irradiated Bhutanese stone, Material Physics and Mechanics, Vol 15 (2012), 1-8
5. TL study of beta irradiated Quartz collected from semaria mines of C.G.Basin, CSVTU research journal, Vol. 05 2012, 27-29
6. Synthesis and Characterization of Eu<sup>3+</sup> doped Y<sub>2</sub>O<sub>3</sub> Phosphor, Research on chemical intermediates, Vol 39 (5) 2013, DOI 10.1007/s11164-013-1201-5
7. TL glow curve analysis of beta irradiated Eu<sup>3+</sup> doped SrY<sub>2</sub>O<sub>4</sub> phosphor, RAM 2013 ISBN No. 978-93-80858-36-4
8. Synthesis and Characterization of Eu<sup>3+</sup> doped YBO<sub>3</sub> Phosphor, NCLA 2013 Bangalore
9. Thermoluminescence and chemical characterization of natural quartz collected from Bhutan, NCLA 2013 Bangalore.

**Dr. Ayush Khare**

1. T.Abdul Kareem, A.Anu Kaliani and Ayush Khare, Characterization of Mn doped ZnS Nanocrystalline Powder Dispersed in Polyvinyl Alcohol, Arabian Journal of Chemistry 5 (2012) 425-429
2. Ayush Khare, Factors Affecting the Electro-optical and Structural Characteristics of Nanocrystalline Zn<sub>1-x</sub>Cd<sub>x</sub>S Films, Journal of Physics and Chemistry of Solids 73 (7) (2012) 839-845.
3. Ayush Khare, R.B.Sahu and Suchinder K. Sharma, Effects of NaF on Optical and Structural Properties of Cd<sub>x</sub>Zn<sub>1-x</sub>S Nano Crystalline Films, Optik-International Journal of Light and Electron Optics 123 (2012) 1133-37.
4. D.S. Khatri, Ayush Khare and Piyush Jha, Thermoluminescence studies of SrAl<sub>2</sub>O<sub>4</sub>: Eu phosphors at different Dy concentrations, Chalcogenide Letters 10 (3) (2013) 121 - 129.
5. D.S. Kshatri, Ayush Khare and Piyush Jha, Effects of Dy concentration on luminescent properties of SrAl<sub>2</sub>O<sub>4</sub>: Eu Phosphors” Optik: Intl. Journal of Light and Electron Optics 124 (2013) 2974 -2978.

**Dr. B.K. Sahoo**

1. Piezoelectric Polarization Effect on Debye Frequency and Temperature in Nitride Wurtzites; B. K. Sahoo et al., International Journal of Engineering and Applied Sciences, vol- 6, page-140, year- 2012
2. Piezoelectric Polarization Effect on Phonon Relaxation Rates in Nitride Wurtzites B. K. Sahoo et al., Journal of International Academy of Physical Sciences, Vol. 16 No.2 (2012)
3. The effect of spontaneous and piezoelectric polarization on thermal conductivity of InN; B. K. Sahoo et al., Int. Journal of modern Physics B, vol- 27, page-1350031, year- 2013.
4. Macroscopic polarization and thermal conductivity of GaN, Journal of Physics and Chemistry of Solids, B. K. Sahoo, et al (2013), <http://dx.doi.org/10.1016/j.jpcs.2013.05.014>
5. Piezoelectric polarization effect and phonon relaxation rates in binary Wurtzite nitrides, B. K. Sahoo et al, Advanced Material letters (2013),
6. Mysteries of Higg’s Boson, B. K. Sahoo et al, Int. Jour. Phys.Sc, (2013)



**Dr. S.M. Saini**

1. Role of f-states in electronic and optical properties of rare earth trifluorides ( $RF_3$ ,  $R=Ce$  and  $Gd$ ), Journal of Materials Science 47, 21 (2012) 7665-7670
2. Full Potential Study of Electronic and Optical Properties of  $NdF_3$ , World Academy of Science, Engineering and Technology -WASET, 13 – 14 may 2012, Amsterdam Netherland , 65 ( 2012 ), 344 – 346
3. First principle study of electronic and optical properties of  $Cef_3$  compound, AIP Conf. Proc. 1536, 431, 2012,

**Research Projects****Dr. Sadhana Agrawal**

1. Preparation and characterization of Microcellular silicon elastomer nanocomposites for packaging and semiconducting applications. Sanctioned by Chhattisgarh Council of Science and Technology (CCOST), Raipur is in progress.

**Dr. Ayush Khare**

1. Project entitled “An investigation on the Optical and Structural Characteristics of Some Ferroelectric Materials” sanctioned by Chhattisgarh Council of Science and Technology (CCOST), Raipur is in progress.

**Dr. B.K. Sahoo**

1. Macroscopic polarization effect on thermal properties of binary nitrides, Principal Investigator: Dr. B. K. Sahoo, Funding Agency: CCOST, Raipur, Chattisgarh, Date of beginning- 1<sup>st</sup> March 2013.

**Dr. S.M. Saini**

1. One on going CGCCOST sponsored project on “Frist Principle Study of electronic, optical and Magneto- optical properties of rare earth Compound (2013- 2016), (Principal Investigator)

**Books Publications****Dr. B.K. Sahoo**

1. Published a book chapter in book: Advanced Materials, Chapter title: Polarization effect on thermal conductivity of International publication: Wiley publisher, year:2013.

**Awards / Any other Achievements****Dr. Sadhana Agrawal,**

1. Project Reviewer, For COST C.G.
2. Research papers reviewed, Manuscript ID GRAD-2013-0014 for Radiation Effects and Defects in Solids.(Fink)
3. Editorial board member for CSVTU Research Journal

**Dr. Ayush Khare**

1. Nominated member of American Nano Society.
2. Project Reviewer, For Croatian Science Foundation, Croatia.
3. Reviewer for (i) Materials research bulletin (Elsevier) (ii) Applied Surface Science (Elsevier) (iii) American journal of condensed matter physics

## DEPARTMENT OF SUB-DIC BIOINFORMATICS

### Faculty

Dr. M. K. Verma

Coordinator/PI

PhD

Mr. Ashish Patel

Information Officer

### Seminar/ Workshop/Conferences/Short term courses

#### Dr. M. K. Verma, Mr. Ashish Patel

1. National Seminar on “Application of Artificial Intelligence in Bioinformatics and Life Science’s 17<sup>th</sup> January, 2013

### Patents

#### Dr. M. K. Verma, Mr. Ashish Patel

1. ArthMedBase: Database on Medicinal Plants for Arthritis. No.-L-45478/20139<sup>th</sup> January, 2013

### Awards / Any other Achievements

#### Mr. Ashish Patel

1. Best paper award in National Seminar on AAIBLS-2013

## 6 CENTRAL FACILITIES

### 6.1 LABORATORIES

#### Departments wise details of Laboratories

Name of Department	Name of Laboratories and other facilities available
<b>Applied Geology</b>	Optical Lab, Geological Museum, Remote Sensing & GIS Lab, ROCK/ORE Cutting Polishing Lab, Field Geology Lab, Hydrogeology Lab
<b>Architecture</b>	Climatology, Model Making Workshop, Building Material Museum, Computer, Architecture
<b>Biomedical Engineering / Biotech</b>	Computer Lab, Anatomy & Physiology Lab, Bio Chemistry Lab
<b>Chemical Engineering</b>	Waste water treatment, Mass Transfer, Heat Transfer, Fluid Mechanics, Reaction Engineering, Chemical Technology, Fuel Technology Laboratory, Computer Centre, Environmental Lab, Instrumentation & Process Control, Simulation & Modeling
<b>Chemistry</b>	UG Lab, PG Lab, Research Lab
<b>Civil Engineering</b>	Computer Centre, Concrete Technology, Environmental Engineering, Geotech Engineering, Hydraulics, Structural Engineering, Survey Laboratory, Transportation Engineering, Water Resources Engineering
<b>Computer Science and Engineering</b>	Advanced Software Engg. Lab, Computer Programming Lab, Advanced Computer Network, Linux Unix Lab
<b>Electrical Engineering</b>	High Voltage, Research Lab, Workshop, Instrumentation, Electronics Lab, M.Tech Lab

<b>Electronics &amp; Telecommunication Engineering</b>	Electronics Devices and Electronic Workshop, Instrumentation, Microwave and Optical Communication, Computer Programming, Digital Signal Processing, Microprocessor, Electronic and Tele Communication, Digital Electronics, Analog Electronics
<b>Information Technology</b>	Computer Networking, Data Base Management, Electronic and Tele Communication, Operating System (Unix/Linux), Graphics, Image &Multimedia
<b>Mechanical Engineering</b>	Strength of Material, Automobile Engineering, Heat and Mass Transfer, Energy Conversion, Thermodynamics, Refrigeration, Dynamics, CAD&CAM, Meteorology and Instrumentation, Turbo-machinery, I C Engines, Engineering Mechanics, Workshop, PG Computer Lab
<b>Metallurgical Engineering</b>	Foundry Laboratory, Heat Transfer and Furnace Lab, Project Lab, Materials Science Lab, Instrumentation Lab, X-Ray diffraction Lab, Electro Metallurgy Lab, Physical Met & Metallography, Fuel Technology Lab
<b>Mining Engineering</b>	Mine Environment Lab, Rock Mech. Lab, General Mining Lab, Computer Lab, Mine Survey Lab, Mineral Dressing Lab
<b>Physics</b>	General Lab, Laser and Fiber Optics Lab, Research Lab

## 6.2 LIBRARY

Dr Sunil Kumar Satpathy	Dy. Librarian	MLIS, Ph.D(LIS),M.A(Pol sc) DCA,PGDLAN
Mrs. Mridul Mahant	Asst. Librarian	MLIS
Mr. Ajay Kumar Sharma	Asst. Librarian	M.A,MLIS
Mrs. Neelam Soni	Asst. Librarian	M.A,MLIS

## Seminar/ Workshop/Conferences/Short term courses

### Mr.s M. Mahant

1. Orientation Programme of UCG-Academic Staff College of Pt.Ravishankar Shukla University, Raipur . 4<sup>th</sup> -31<sup>st</sup> July 2012
2. Workshop on e-learning at Pt.Ravishankar Shukla University, Raipur . 28/1/2013 to 30/1/2013

### Dr Sunil Ku Satpathy

1. ICSSR National Seminar on "Electronic Librarianship in India: Trends and Issues" organized by OUAT, Bhubaneswar & NASSDOC, New Delhi . 19-20 May 2012
2. Orientation Programme of UCG-Academic Staff College of Pt.Ravishankar Shukla University, Raipur . 4<sup>th</sup> -31<sup>st</sup> July 2012
3. INDEST-AICTE workshop and 9<sup>th</sup> Annual meet, organized by IIM, Ahmedabad, IIT, Gandhinagar and INDEST-AICTE consortium, New Delhi . 18-19 January 2013

### Mrs. Neelam Soni

1. Workshop on e-learning at Pt . Ravishankar Shukla University, Raipur . 28/1/2013 to 30/1/2013

## **Publications**

### **Dr Sunil Ku Satpathy**

1. Web Impact Factor and Webometric Study of National Institute of Technology (NITs) of India/S.K.Satpathy & R.K.Maharana.Pearl: A journal of Library & Information Science.6(1),2012.47-55.( Print ISSN : 0973-7081. Online ISSN : 0975-6922). April 2012
2. Awareness and adoption of Open Source Software among LIS professionals of Engineering colleges of Odisha/ S.K.Satpathy & R.K.Maharana. DESIDOC Journal of Library & Information Technology, Vol. 32, No. 5, September 2012, pp. 421-426. Sept.2012
3. Information need and seeking behavior of faculty members: a case study of premier engineering college of Orissa/S.K.Satpathy and U.N.Rout. International Journal of Information Library and Society.Vol-1,Iss-1,2012.P.27-36.(ISSN: 2278-0386) Sept 2012
4. Use of Information communication Technology based services by Faculty Members and students of one premier engineering college of Odisha / S.K.Satpahty, R.K.Maharana, S.Panda. International Journal of Digital libraryservices.Vol-2,Iss-3,July-September 2012,P.76-91. [www.ijodls.in](http://www.ijodls.in) (ISSN-2205-1142). October 2012
5. Dissemination of agricultural information to farmers of odisha through web 2.0 based library services: a conceptual study/Dr Sunil Kumar Satpathy.In Innovative Practices in Management of Agricultural Libraries in ICT Environment/R.K.Mahapatra et al.AALDI:Hyderabad.P.300-304. ISBN -81-88897-13-2 . May 2012
6. Users' perception on Medical college libraries systems and services of Odisha/S.K.Satpathy & S.K.Satapathy. DESIDOC Journal of Library & Information Technology, Vol. 33, No. 2, March 2013, pp. 87-89. March 2013

## **Books Publications**

**Dr Sunil Ku. Satpathy**, Strategic issues in Library Management.Ed. by C.K.Swain, S.K.Satpathy & B.Rautray .Avon Publications; New Delhi,2012.(ISBN-978-93-8183-902-7) April 2012

### **6.3 DISPENSARY**

The Institute has a dispensary with following staff:

**Dr. Sanjeev Pandey** Medical Officer M.B.B.S.

All the staff & Students of the Institute avail the medical facilities from the dispensary. Also the Dispensary has an ambulance for carrying the patients for emergency treatment.

1. Total No. of patient treated at NIT Dispensary during the year 2012-13 – 5449
2. Centre for PPI (Pulse Polio Immunisation) Programme 2012-13 (100% Target achievement within the campus)
3. Centre for National Filariasis Programme. (100% Target achievement within the campus)

## **6.4 GAMES & SPORTS**

**Dr. Alok Kumar Dubey**

Sports Officer

MPh., Ph.D

### **SPORTS ACTIVITIES REPORT : FROM APRIL 2012 TO MARCH 2013**

1. IIT Khargpur Organised Sports fest "SOURYA-12" From 12.10.12 to 14.10.12. 11 Students of our Institute attended the above tournament in Athletics & Table Tennis. Our Students had won 3 Silver & 2 Bronze Medals in the athletics & in Table Tennis.
2. Late Neeraj Agrawal Memorial Chhattisgarh state level Inter- College Football tournament, 15 Sept. to 30 Sept. 2012. NIT Raipur won this tournament, Sumant & Vimal were awarded best player of tournament.
3. Chhattisgarh State level Inter- College Volleyball Tournament from 10.10.2012 to 16.10.2012 organised by city sports club Raipur. NIT Raipur was Runner Up of this tournament, Paritosh Swarnkar and Varun were awarded best player of tournament.
4. All India Inter NITs Tournament from 2 Feb. to 5 Feb. 2013 organised by NIT Trichy. NIT Raipur participated in Basket Ball (Girls and Boys)'Cricket (boys), Table Tennis (Boys) Handball (Boys) Kabbadi (Boys) Chess (Girls & Boys). Our Cricket team was Runner Up.
5. All India Inter NITs Tournament From 4 March to 7 March 2013 organized by SVNIT Surat. NIT Raipur participated in Badminton (Girls and Boys) Football (Boys), Kho-Kho (Boys), Volleyball (Boys) of 46 Students.
6. "SAMAR-13" Annual Sports of NIT Raipur 15-17 March 2013. This sports meet was organized very successfully. Cricket, Football, Volleyball, Basketball & Kho-Kho were played in Flood Light. There were 14-15 outdoor, indoor games as well as athletic games organized by sports committee of the Institute. Closing ceremony and prize distribution was organized in the presence of former International Cricket player Shri Rajesh Chowhan and former International Basketball player as well as Coach Shri Rajesh Patel.

## **6.5 HOSTELS & STAFF QUARTERS**

The Institute has 5 No's of boys Hostels (A, B, C, D & F). Each hostel has a capacity of 100 students. There are facilities for residing UG as well as PG students, There are three girl's hostels (E, G and PG Girl's hostel), Hostel E has a Capacity of 100 students, Hostel G has a capacity of 200 students & PG Girls Hostel has a capacity of 40 students. Each hostel is well equipped, with Sports facility like carom, chess, volleyball, football, cricket & table-tennis. There is sufficient infrastructure like iron cots, chairs, tables for the students. In hostel campus there is also a gymnasium for work out by students. Maintenance of hostel is done by the Estate Office.

There are sufficient numbers of quarters for the staff members.



**Confidential**



**OFFICE OF THE DIRECTOR GENERAL OF AUI  
(CENTRAL RECEIPT), NEW DELHI  
BRANCH- GWALIOR  
Audit Bhavan, Jhansi Road,  
Gwalior-474002 (M.P.)**

No. AMG-II/SAR/NIT. Raipur/2012-13/121

Dated: 14.10.2013

To

The Director,  
National Institute of Technology, Raipur  
GE Road,  
Raipur-492010 (CG)

**Subject: Separate Audit Report on the accounts of National Institute of Technology, Raipur for the year 2012-13.**

Sir,

Please find enclosed herewith Separate Audit Report (SAR) on the accounts of National Institute of Technology, Raipur for the year 2012-13. You are requested to ensure that the SAR and audited accounts are adopted by the Board of Governors before placing the same before the Parliament.

2. The date of placement of the above Report on the table of both houses of the Parliament may please be intimated and a copy of the printed material may be provided to the undersigned for information.


3. It may please be ensured that SAR of the previous year is presented in the Lok Sabha either before or simultaneously along with the current SAR.

**Encl:-** 1. Separate Audit Report  
with Annexure

Yours faithfully,

N.A.

Reg :

  
23/10/13

  
Director (Central)

DR (Adm) / DR (FID)

by 23/10/13

4617  
23/10/13

**Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of the National Institute of Technology, Raipur for the year ended 31 March 2013.**

We have audited the attached Balance sheet of the National Institute of Technology (NIT), Raipur as at 31 March 2013, the Income & Expenditure Account and Receipt & Payment Account for the year ended on that date under section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with section 22(2) of the National Institutes of Technology Science Education and Research Act, 2007. These financial statements are the responsibility of NIT's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

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

4. Based on our audit, we report that:

- (i) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.
- (ii) The Balance Sheet, Income & Expenditure Account and Receipt & Payment Account dealt with by this report have been drawn up in the format approved by the Government of India, Ministry of Finance.
- (iii) In our opinion, proper books of accounts and other relevant records have been maintained by the NIT as required under Section 22(1) of the Act, in so far as it appears from our examination of such books.
- (iv) We further report that:



**A. Balance Sheet**

**Assets**

**1. Fixed Assets (Schedule-5) - ₹ 75.28 crore**

**1.1** This does not include ₹ 10,70,289/- being expenses incurred on developing a master plan for NIT and topographic survey work of Rakhi Bharenga site (new project site for construction of NIT) booked as revenue expenditure. This resulted in understatement of Fixed Assets (Capital Works-in-Progress) by ₹ 10,70,289/- and overstatement of Expenditure by ₹10,70,289/-

**B. Grant-in-Aid**

During the year 2012-13, the NIT received grant-in-aid of ₹ 21.00 crore. In addition, it had unspent balance of ₹ 26.53 crore of the previous year and internal revenue of ₹ 13.69 crore. Thus, out of total available funds of ₹ 61.22 crore, the NIT utilized ₹ 41.24 crore leaving unutilized balance of ₹ 19.98 crore.

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

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

- (a) In so far as it relates to the Balance Sheet, of the state of affairs of the NIT, Raipur as at 31<sup>st</sup> March 2013; and
- (b) In so far as it relates to the Income & Expenditure Account of the deficit for year ended on that date.

**For and on behalf of the CAG of India**

**Place: New Delhi**

**Date: 11.10.2013**

  
**Director General of Audit**  
**(Central Receipt) New Delhi**

**Annexure**

**1. Adequacy of Internal Audit System.**

The NIT has no system of Internal audit.

**2. Adequacy of Internal Control System:**

(i) The Institute has not prepared its Accounting Manual.

(ii) Vouchers were not serially numbered.

(iii) The meeting of BOG, Senate, Finance Committee and Building and Works Committee are not held as per the provision mentioned in the statute. :

Name of the Committee	Frequency of meeting as per statutes	Frequency of meeting actually held
BOG	Ordinarily 4 times in a year	02
Senate	Ordinarily not less than 4 times in a year	03
Finance Committee	Ordinarily 4 times in a year	01
Building and Works Committee	Ordinarily not less than 4 times in a year	01

**3. System of physical verification of fixed assets:**

Physical verification of fixed assets has not been done during the year.

**4. System of physical verification of inventories:**

Physical verification of inventories has not been done during the year.

**5. Regularity in payment of statutory dues:**

No irregularity was noticed in payment of statutory dues.

  
**Audit Officer/AMG-II**

**FINANCIAL STATEMENT AS ON 31ST MARCH ,2013**  
**NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR**

<b>BALANCE SHEET AS ON 31.03.2013</b>			
<b>SOURCES OF FUNDS</b>	<b>Schedule</b>	<b>As on 31.03.2013</b>	<b>As on 31.03.2012</b>
		(Amount in Rs)	(Amount in Rs)
<b><u>CORPUS/CAPITAL FUND AND LIABILITY</u></b>			
-			
CAPITAL/CORPUS FUND	1	225,000,000.00	225,000,000.00
RESERVE AND SURPLUS	2	75,014,433.02	84,188,709.97
PROVIDENT/EARMARKED/ENDOWMENT FUND	3	933,086,586.00	806,959,368.00
SECURED LOANS AND BORROWINGS		0.00	0.00
UNSECURED LOANS AND BORROWINGS		0.00	0.00
DEFFERED CREDIT LIABILITIES		0.00	0.00
CURRENT LIABILITIES AND PROVISION	4	143,404,481.89	70,860,836.89
-			
<b>TOTAL</b>		<b>1,376,505,500.91</b>	<b>1,187,008,914.86</b>
<b><u>APPLICATION OF FUNDS</u></b>			
FIXED ASSETS	5	752,759,068.13	644,065,736.13
INVESTMENT- FROM EARMARKED/ENDOWMENT FUND	6	329,988,558.50	221,315,202.00
INVESTMENT(Others)	6	225,000,000.00	225,000,000.00
CURRENT ASSETS,LOANS ADVANCES ETC	7	68,757,874.28	96,627,976.73
MISC EXPENDITURE (To the extent not written off)		0.00	0.00
<b>TOTAL</b>		<b>1,376,505,500.91</b>	<b>1,187,008,914.86</b>

CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS

Dy. Registrar (F&A)

Registrar

Director

**NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31st MARCH,2013**

Particulars	Schedule	For the period ended on 31st March,2013	For the period ended on 31st
<b>INCOME</b>		(Amount in Rs)	(Amount in Rs)
INCOME FROM SALE AND SERVICES	8	9,886,256.00	16,613,615.00
GRANTS/SUBSIDIES		60,000,000.00	120,000,000.00
FEES/SUBSCRIPTION	9	143,947,793.00	124,444,260.00
INCOME FROM INVESTMENTS		0.00	0.00
INCOME FROM ROYALTY PUBLICATIONS			0.00
INTEREST EARNED	10	46,311,750.05	33,694,940.00
OTHER FEES	11	5,590,067.00	4,678,883.00
OTHER INCOME	12	23,993,377.00	18,994,411.91
HOSTEL FEES	13	4,785,650.00	4,851,000.00
INCREASE/DECREASE IN STOCK OF FINISHED GOODS AND WORK IN PROGRESS		0.00	0.00
<b>TOTAL(A)</b>		<b>294,514,893.05</b>	<b>323,277,109.91</b>
<b>EXPENDITURE</b>			
ESTABLISHMENT EXPENSES	14	230,167,142.00	173,493,550.00
EXAM/SCHOLORSHIP EXPENSES	15	4,137,672.00	5,786,920.00
OTHER ADMINISTRATIVE EXPENSES	16	36,550,030.00	33,769,342.00
EXPENDITURE ON GRANT/SUBSIDIES ETC			0.00
DEPARTMENTAL OPERATING EXPENSES		17	4,515,560.00
HOSTEL EXPENSES	18	1,249,296.00	873,214.00
ESTATE OFFICE EXPENSES	19	4,479,110.00	3,256,477.00
DEPRICIATION	5	22,590,360.00	17,887,627.00
<b>TOTAL(B)</b>		<b>303,689,170.00</b>	<b>237,708,564.00</b>
BALANCE BEING EXCESS OF INCOME OVER EXPENDITURE(A-B)			-9,174,276.95
TRANSFER TO SPECIAL RESERVE			-
TRANSFER TO GENERAL RESERVE		-9,174,276.95	85,568,545.91
BALANCE BEING SURPLUS/DEFICIT CARRIED TO CORPUS/CAPITAL FUND		0.00	0.00

CURRENT LIABILITIES AND NOTES TO ACCOUNTS

Dy. Registrar(F&A)

Registrar

Director

**NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR**  
**SCHEDULES FORMING PART OF THE BALANCE SHEET**  
**SCHEDULE- 1**  
**CORPUS/CAPITAL FUND**

		<b>As on 31.03.2013</b>		<b>As on 31.03.2012</b>
<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Balance at the beginning of the year	150,000,000.00		150,000,000.00	
Add Contribution towards Corpus/Capital Fund	75000000.00		75000000.00	
Less: Trf to Reserve and surplus	0.00	225,000,000.00	0.00	225,000,000.00
Add/deduct Balance of Net Income transferred from Income & Expenditure Account				0.00
<b>CLOSING BALANCE</b>		<b>225,000,000.00</b>		<b>225,000,000.00</b>

**SCHEDULE- 2**  
**RESERVE AND SURPLUS**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
<b>1. Capital Reserve</b>		<b>0.00</b>		<b>0.00</b>
<b>2. General Reserve</b>	-	-	-	-
As per last Accounts	84,188,709.97		73,620,164.06	
Addition/Deduction during the year	-9,174,276.95		85,568,545.91	
Trf to Corpus Fund	0.00	75,014,433.02	75000000.00	84,188,709.97
<b>TOTAL</b>		<b>75,014,433.02</b>		<b>84,188,709.97</b>

**SCHEDULE- 3**  
**PROVIDENT/EARMARKED/ENDOWMENT FUND**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
(i) Opening Balance of Provident Funds	56,791,613.00		47,954,020.00	
Addition/Deduction to funds	-1,277,422.00	55,514,191.00	8,837,593.00	56,791,613.00
(ii) Opening Balance of Plan (General+OSC)Funds	106,102,018.87		128,690,057.87	
Add:Grant received/Receivable	149,995,000.00		220,000,000.00	
Less:Utilisation of grant towards Objective of Funds	131,283,692.00	124,813,326.87	242,588,039.00	106,102,018.87
Deffered Government Grant		752,759,068.13		644,065,736.13
<b>CLOSING BALANCE</b>		<b>933,086,586.00</b>		<b>806,959,368.00</b>

**SCHEDULE- 4**  
**CURRENT LIABILITIES AND PROVISION**

<b>A CURRENT LIBILITIES</b>		<b>As on 31.03.2013</b>		<b>As on 31.03.2012</b>
<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
<b>Funds</b>				
Fund from erstwhile govt. college	5,341,016.89		1,395,049.89	
Poor student fund	950,195.00		950,195.00	
Amalgamated fund	36,750.00		36,750.00	
Alumini Fund	534,750.00		265,000.00	
Project Fund(Unutilised)	6,340,344.00		1,706,445.00	
Student aid fund	511,400.00		327,000.00	
Virtual class room	1,314,694.00		1,099,080.00	
Training Programme CG govt	0.00	15,029,149.89	118,870.00	5,898,389.89
<b>Other liabilities</b>				
Net Caution money	7,760,000.00		6,226,000.00	
Admission fess refundable	1,410,747.00		81,660.00	
TDS payable	709,500.00		518,115.00	
Earnest money Deposit with NIT	5,003,556.00		814,014.00	
Security Deposit(Employee)	1,104,165.00		832,649.00	
Scholarships to Students	0.00		11,554,900.00	
Sundry Creditors	278,494.00		321,114.00	
Sundry Creditors(Capital goods)	11,404,540.00		2,085,548.00	
Scholarships to Students(Other state)	6,959,206.00		1,540,618.00	
Bridge loan	14,400.00		14,400.00	
Performance bank Guarantee	428,941.00		273,750.00	
Interest(GPF)	231,296.00		31,478.00	
Bal of A/c 30013468813	0.00	35,304,845.00	236.00	24,294,482.00
<b>TOTAL A</b>		<b>50,333,994.89</b>		<b>30,192,871.89</b>
<b>B PROVISIONS</b>				
Salary Regular staff Payable	7,892,094.00		7,309,503.00	
PF Payable	207,700.00		198,100.00	
GPF Contribution Payable	30,000.00		10,800.00	
DPF Contribution payable	4,050.00		4,050.00	
GIS/FBF contribution payable	14,680.00		15,770.00	
NPS Contribution of NITRR payable	294,952.00		277,523.00	
NPS Contribution of Employees payable	294,952.00		277,523.00	
Salary Contract Staff payable	4,079,180.00		3,841,567.00	
Salary Daily wages payable	1,269,263.00		791,724.00	
Faculty Association payable	7,700.00		8,200.00	
Advertisement esp payable	21,013.00		0.00	
Department consumable payable	230,281.00		435.00	
Department misc payable	32,138.00		4,785.00	
Hostel electricity payable	75,920.00		71,140.00	
Hostel maintainance payable	63,683.00		0.00	
Testing and Con remuneration payable	7,746,675.00		6,120,484.00	
Telephone Charges payable	21,072.00		10,651.00	
Travelling & Hotel Expenses payable	118,582.00		109,615.00	
Printing & Stationery payable	74,042.00		0.00	
Electricity Expenses payable	878,880.00		669,670.00	
Consultency and Legal charges payable	90,000.00		50,535.00	
Function and other activity payable	56,820.00		0.00	
CPDA Expenses payable	665,926.00		118,855.00	
Fuel Charges payable	18,157.00		8,478.00	
Repairs & Maintenance to Collage Building payable	17,472.00		0.00	
Repairs & Maintenance to Electrical payable	0.00		4,365.00	

Children Education Allowance payable	42,269.00		79,307.00	
Medical Grant and Expenses payable	50,068.00		38,407.00	
Exam Expenses and remuneration payable	142,224.00		770,964.00	
Training & Placement payable	6,949.00		0.00	
Internet and Website maintainance payable	327,500.00		327,500.00	
Repair Maint equipment payable	12,400.00		45,451.00	
Repair Maint Hostel payable	0.00		14,980.00	
Computer Consumable & Repairing payable	562,401.00		22,000.00	
Gardening expenses payable	0.00		2,000.00	
Indian coffee house expenses payable	0.00		125,000.00	
News paper exp payable	11,058.00		428.00	
Office expenses payable	0.00		4,577.00	
Scholarship to M tech/phd Payable	1,015,519.00		667,167.00	
Leave salary payable	8,250.00		0.00	
Pension Director payable	15,484.00		0.00	
Recruitment expenses payable	981,591.00		0.00	
Provision for Gratuity	34,255,222.00		12,099,100.00	
Provision for leave Encashment	31,434,320.00	93,070,487.00	6,567,311.00	40,667,965.00
<b>TOTAL B</b>		<b>93,070,487.00</b>		<b>40,667,965.00</b>
<b>TOTAL (A+B)</b>		<b>143,404,481.89</b>		<b>70,860,836.89</b>

**NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR**  
**SCHEDULES FORMING PART OF THE BALANCE SHEET**

**Schedule- 5 :**  
**(A)Fixed Assets:**

S.No.	Description of assets	Rate of Dep	GROSS BLOCK				ACCUMULATED DEPRICIATION				NET BLOCK	
			Cost of Assets as on 01.04.2012	Addition During the year 2012-13	Disposal / Transfer of ASsets	Closing Balance as on 31.03.2013	Depriciation upto 31.03.2012	Depre ciation for 2012-13	Dispos al/tran sfer	Closing Depreciation as on 31.03.2013	WDV as on 31.03.2012	WDV as on 31.03.2013
1	Air Conditioners	12.77 %	2,305,066.00	154,440.00	-	2,459,506.00	1,245,274.00	309,459.00	-	1,554,733.00	1,059,792.00	904,773.00
2	Campus development	3.02%	1,878,190.00	-	-	1,878,190.00	224,734.00	56,721.00	-	281,455.00	1,653,456.00	1,596,735.00
3	Computer & Networking	12.77 %	49,633,977.00	12,126,303.00	-	61,760,280.00	29,500,165.00	7,635,584.00	-	37,135,749.00	20,133,812.00	24,624,531.00
4	Cooler Purchase	12.77 %	366,459.00	57,152.00	-	423,611.00	122,458.50	54,095.00	-	176,553.50	244,000.50	247,057.50
8	Washing machine	12.77 %	10,000.00	-	-	10,000.00	3,831.00	1,277.00	-	5,108.00	6,169.00	4,892.00
6	Education and other Software	12.77 %	9,902,630.00	13,209,215.00	-	23,111,845.00	3,528,514.50	2,658,620.00	-	6,187,134.50	6,374,115.50	16,924,710.50
7	Electrical & Light fitting	12.77 %	3,137,898.00	-	-	3,137,898.00	1,917,738.00	400,710.00	-	2,318,448.00	1,220,160.00	819,450.00
8	Equipment & Instruments	12.77 %	35,140,459.00	12,275,165.00	-	47,415,624.00	10,688,040.00	5,049,003.00	-	15,737,043.00	24,452,419.00	31,678,581.00
9	Fans	12.77 %	240,798.00	105,690.00	-	346,488.00	53,210.00	38,453.00	-	91,663.00	187,588.00	254,825.00
10	Fax Machine	12.77 %	78,160.00	-	-	78,160.00	33,343.00	9,981.00	-	43,324.00	44,817.00	34,836.00
11	Furniture & Fixtures	12.77 %	18,381,792.00	955,064.00	-	19,336,856.00	5,995,916.00	2,435,413.00	-	8,431,329.00	12,385,876.00	10,905,527.00
12	Gas Pipeline Installation	12.77 %	86,569.00	-	-	86,569.00	49,747.00	11,055.00	-	60,802.00	36,822.00	25,767.00
13	Gyser	12.77 %	160,975.00	23,338.00	-	184,313.00	17,161.00	22,047.00	-	39,208.00	143,814.00	145,105.00
14	Gym and Sports equipment	12.77 %	575,227.00	273,888.00	-	849,115.00	328,419.00	97,041.00	-	425,460.00	246,808.00	423,655.00
15	Infra. for traning and placement	12.77 %	695,000.00	-	-	695,000.00	576,888.00	88,752.00	-	665,640.00	118,112.00	29,360.00
16	Laboratory development	3.02%	2,892,373.00	-	-	2,892,373.00	254,850.00	87,350.00	-	342,200.00	2,637,523.00	2,550,173.00



<b>17</b>	Library Books/Journals	7.69%	21,896,068.00	5,164,171.00	3,476,734.00	23,583,505.00	3,267,858.00	1,882,372.00	267,361.00	4,882,869.00	18,628,210.00	18,700,636.00
<b>18</b>	Motor Cars	7.69%	3,761,834.13	-	-	3,761,834.13	1,138,126.00	289,285.00	-	1,427,411.00	2,623,708.13	2,334,423.13
<b>19</b>	Musical Instrument	12.77%	190,221.00	91,417.00	-	281,638.00	21,845.00	33,742.00	-	55,587.00	168,376.00	226,051.00
<b>20</b>	Office equipment	12.77%	158,507.00	-	-	158,507.00	37,062.00	20,241.00	-	57,303.00	121,445.00	101,204.00
<b>21</b>	Oscilloscopes monochrome model	12.77%	306,665.00	-	-	306,665.00	254,547.00	39,161.00	-	293,708.00	52,118.00	12,957.00
<b>22</b>	Photocopier Machine	12.77%	2,298,366.00	383,434.00	-	2,681,800.00	1,159,619.50	320,833.00	-	1,480,452.50	1,138,746.50	1,201,347.50
<b>23</b>	Projector Purchase	12.77%	4,974,203.00	133,482.00	-	5,107,685.00	1,374,005.50	643,730.00	-	2,017,735.50	3,600,197.50	3,089,949.50
<b>24</b>	Refridgerator	12.77%	152,300.00	24,000.00	-	176,300.00	67,342.00	22,514.00	-	89,856.00	84,958.00	86,444.00
<b>25</b>	Misc assets	12.77%	354,784.00	77,208.00	-	431,992.00	53,484.00	51,859.00	-	105,343.00	301,300.00	326,649.00
<b>26</b>	T.V. Purchase	12.77%	118,060.00	166,050.00	-	284,110.00	68,623.00	29,583.00	-	98,206.00	49,437.00	185,904.00
<b>27</b>	UPS	12.77%	1,290,217.00	-	-	1,290,217.00	424,356.50	164,761.00	-	589,117.50	865,860.50	701,099.50
<b>28</b>	Voltage Stablizer	12.77%	81,380.00	16,100.00	-	97,480.00	29,585.00	12,448.00	-	42,033.00	51,795.00	55,447.00
<b>29</b>	Water Cooler, purifier and filter	12.77%	1,580,370.00	174,309.00	-	1,754,679.00	929,609.50	221,743.00	-	1,151,352.50	650,760.50	603,326.50
<b>30</b>	Writing and other boards	12.77%	1,330,368.00	-	-	1,330,368.00	540,893.00	169,888.00	-	710,781.00	789,475.00	619,587.00
<b>TOTAL</b>			<b>163,978,916.13</b>	<b>45,410,426.00</b>	<b>3,476,734.00</b>	<b>205,912,608.13</b>	<b>63,907,245.00</b>	<b>22,857,721.00</b>	<b>267,361.00</b>	<b>86,497,605.00</b>	<b>100,071,671.13</b>	<b>119,415,003.13</b>
<b>(B) Capital Work in Progress</b>			<b>543,994,065.00</b>	<b>89,350,000.00</b>	<b>0.00</b>	<b>633,344,065.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>543,994,065.00</b>	<b>633,344,065.00</b>
<b>TOTAL (A+B)</b>			<b>707,972,981.13</b>	<b>134,760,426.00</b>	<b>3,476,734.00</b>	<b>839,256,673.13</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>644,065,736.13</b>	<b>752,759,068.13</b>

**SCHEDULE- 6****A. INVESTMENT(FROM EARMARKED/ENDOWMENT FUND)**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
FDR(GPF)	49,816,970.00		51,065,232.00	
FDR/Flexi With SBI GCET Branch	76,081,990.50		30,249,970.00	
FDR/Flexi with Canara Bank	204,089,598.00	329,988,558.50	140,000,000.00	221,315,202.00
<b>TOTAL(A)</b>		<b>329,988,558.50</b>		<b>221,315,202.00</b>

**B. INVESTMENT(OTHERS)**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
FDR with Canara Bank	225,000,000.00	225,000,000.00	225,000,000.00	225,000,000.00
<b>TOTAL(B)</b>		<b>225,000,000.00</b>		<b>225,000,000.00</b>
<b>TOTAL(A+B)</b>		<b>554,988,558.50</b>		<b>446,315,202.00</b>

**SCHEDULE- 7****LOANS,ADVANCES AND OTHER CURRENT ASSETS****A CASH AND BANK**

<b>PARTICULAR</b>		<b>As on 31.03.2013 AMOUNT(IN RS)</b>		<b>As on 31.03.2012 AMOUNT(IN RS)</b>
<b>CASH BALANCE</b>	117750.00	117,750.00	70000.00	70,000.00
<b>BANK BALANCE</b>				
Canara Bank A/C No. 20996	705,633.00		5,481,204.00	
Non-Plan (saving) 30054181310	23,821,238.00		1,199,729.78	
State Bank of Indore 63027813713	0.00		480,871.00	
SBI Bank A/c 30042955244	2,882,966.28		1,193,183.00	
SBI Bank A/c 31794300805	2,686,630.00		38,552.00	
SBI Bank A/c 10071113698	0.00		1,296,332.95	
GPF Banl A/c 31255750394	644,192.00		349,119.00	
SBI Bank A/c 30007211525	662,689.00	31,403,348.28	3,771,005.00	13,809,996.73
<b>TOTAL (A)</b>		<b>31,521,098.28</b>		<b>13,879,996.73</b>

**B) LOANS ADVANCES AND OTHER ASSETS**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Earnest money deposited by NIT	655,855.00		146,175.00	
Festival Advances	48,109.00		48,109.00	
Advance to Staff	1,523,901.00		1,054,022.00	
T A Adnances	25,000.00		25,000.00	
LTC Advances	866,016.00		25,000.00	
GPF Advances	490,733.00	3,609,614.00	2,575,940.00	3,874,246.00
<b>OTHER CURRENT ASSETS</b>				
FDR received from party	222,962.00		193,462.00	
TDS Receivable	45.00		2,758.00	

Service Tax(Cenvat Credit)	843,794.00		764,850.00	
Rent receivable	66,000.00		0.00	
Electricity and water ch receivable	10,845.00		17,854.00	
Employees outstanding	0.00		7,995.00	
Testing Fees receivable	412,924.00		497.00	
Misc amount receivable	0.00		0.00	
Interest Accrued	22,953,041.00		25,374,390.00	
Admission Fees Receivable	1,840,545.00		380.00	
CCB Fund receivable	0.00		511,548.00	
Deffered Library expenses	7,277,006.00		0.00	
MHRD Grant receivable	0.00	33,627,162.00	52,000,000.00	78,873,734.00
<b>TOTAL (B)</b>		<b>37,236,776.00</b>		<b>82,747,980.00</b>
<b>TOTAL(A+B)</b>		<b>68,757,874.28</b>		<b>96,627,976.73</b>

**SCHEDULE- 8  
INCOME FROM SALE & SERVICES**

		<b>As on 31.03.2013</b>		<b>As on 31.03.2012</b>
<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Tendor Form Sale	70,500.00		3,000.00	
Consultancy Fee	8,914,720.50		14,277,478.00	
Testing Fee	901,035.50	9,886,256.00	2,333,137.00	16,613,615.00
<b>TOTAL</b>		<b>9,886,256.00</b>		<b>16,613,615.00</b>

**SCHEDULE- 9  
FEES/SUBSCRIPTION**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Tuition Fees	128,822,660.00		109,959,180.00	
Identity card Fee	368,800.00		346,100.00	
Magazine fees	368,800.00		346,100.00	
Registration Fee	922,000.00		865,250.00	
Sports fees	922,000.00		865,250.00	
LibraryFees	1,844,000.00		1,730,500.00	
Main Exam Fees(Acadamic year)	6,863,300.00		6,420,950.00	
Internet Fee	1,106,400.00		1,038,300.00	
Insurance Fee	1,807,833.00		2,007,380.00	
Training & placement fees	922,000.00	143,947,793.00	865,250.00	124,444,260.00
<b>TOTAL</b>		<b>143,947,793.00</b>		<b>124,444,260.00</b>

**SCHEDULE- 10  
INTEREST EARNED**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Interest on FDR	44,195,186.00		30,722,486.00	
Interest on Savings	2,116,564.05		2,972,454.00	
TDS on Fixed deposit refunded	0.00	46,311,750.05	0.00	33,694,940.00
<b>TOTAL</b>		<b>46,311,750.05</b>		<b>33,694,940.00</b>

**SCHEDULE- 11  
OTHER FEES**

PARTICULAR	As on 31.03.2013		As on 31.03.2012	
		AMOUNT(IN RS)		AMOUNT(IN RS)
Exam Fees	1,174,240.00		2,651,517.00	
Misc and other late Fees	720,942.00		21,107.00	
Recruitment Fees	1,145,095.00		51,400.00	
Application and Registration Fee	376,975.00		405,500.00	
Exam Conduct received	0.00		43,000.00	
Phd fees	438,900.00		662,993.00	
Late Fees	0.00		216,034.00	
Fine	49,875.00		91,577.00	
Admission Fees Refund(Cancellation)	1,068,790.00		434,755.00	
Convocation Fee	615,250.00	5,590,067.00	101,000.00	4,678,883.00
<b>TOTAL</b>		<b>5,590,067.00</b>		<b>4,678,883.00</b>

**SCHEDULE- 12  
OTHER INCOME**

PARTICULAR		AMOUNT(IN RS)		AMOUNT(IN RS)
Electric & water charges received	414,868.00		93,764.00	
House and other rent	269,886.00		256,040.00	
Information rights	1,996.00		892.00	
Misc received	83,153.00		19,992.00	
Sponsorship	439,000.00		636,053.00	
Guest house charges	3,150.00		47,250.00	
Expenses reimbursed from Testing/Consultancy	33,135.00		51,242.00	
Project account	157,829.00		0.00	
Other amount credited by bank	0.00		1,551.91	
Deferred Income charged on account of Depreciation	22,590,360.00	23,993,377.00	17,887,627.00	18,994,411.91
<b>TOTAL</b>		<b>23,993,377.00</b>		<b>18,994,411.91</b>

**SCHEDULE- 13  
HOSTEL FEES**

PARTICULAR				
Hostel Rent and Electricity Charges received	4,785,650.00		4,851,000.00	
Hostel room Rent	0.00	4,785,650.00	0.00	4,851,000.00
<b>TOTAL</b>		<b>4,785,650.00</b>		<b>4,851,000.00</b>

**SCHEDULES FORMING PART OF THE BALANCE SHEET****SCHEDULE- 14****ESTABLISHMENT EXPENSES**

		<b>As on 31.03.2013</b>		<b>As on 31.03.2012</b>
<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Contract Salary and Daily wages	54,480,243.00		49,814,244.00	
Salary-regular staff	97,528,771.00		85,467,123.00	
DA Arrears	2,002,249.00		1,701,067.00	
Pay Arrears	6,038,700.00		6,653,917.00	
Children education allowance	1,206,612.00		1,214,117.00	
GPF/GIS Director salary	326,836.00		305,843.00	
Director Leave salary remittance	67,863.00		68,927.00	
Director Pension remittance	127,368.00		144,121.00	
PF	2,613,717.00		2,771,880.00	
LTC expenses	2,765,231.00		314,799.00	
DPF	55,085.00		279,958.00	
Faculty association raipur	96,600.00		16,400.00	
Family planning allowance	0.00		528.00	
FBF and GIS	181,240.00		189,640.00	
Pension	4,021,787.00		3,875,877.00	
NPS Contribution by NIT	3,339,052.00		2,880,109.00	
NPS Contribution of Employee	3,339,052.00		2,880,109.00	
Leave Encashment	226,512.00		108,622.00	
CPDA expenses	3,700,733.00		14,806,269.00	
CPF	26,360.00		0.00	
Gratuity for employees	23,156,122.00		0.00	
Leave for employee	24,867,009.00	230,167,142.00	0.00	173,493,550.00
<b>TOTAL</b>		<b>230,167,142.00</b>		<b>173,493,550.00</b>

**SCHEDULE- 15****EXAM/SCHOLARSHIP EXPENSES**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
AICTE and other exam remuneration to staff	1,420,648.00		2,815,819.00	
Exam department Expenses	1,112,617.00		255,862.00	
Phd Scholarship	1,604,407.00	4,137,672.00	2,715,239.00	5,786,920.00
<b>TOTAL</b>		<b>4,137,672.00</b>		<b>5,786,920.00</b>

**SCHEDULE- 16****OTHER ADMINISTRATIVE EXPENSES**

		<b>As on 31.03.2013</b>		<b>As on 31.03.2012</b>
<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Testing and Consultancy Remuneration & expenses	954,352.00		8,325,580.00	
Conveyance expenses	1,765.00		2,825.00	
Service Tax Arrear and	0.00		535,346.00	

Interest			
Bank Charges	36,373.00		14,004.00
NIT Transit house contribution	150,000.00		150,000.00
Prize Money	8,000.00		0.00
Training & placement expenses	332,472.00		354,855.00
Transfer Grant	93,820.00		75,000.00
BOG/Finance/HODs/Deans/ etc meeting expenses	208,473.00		162,151.00
Functions & activities expenses	3,040,914.00		2,172,823.00
Other Meeting and Conference expenses	0.00		105,458.00
Advertisement	1,115,058.00		743,868.00
Audit expenses	0.00		21,078.00
Interest on TDS	0.00		42,500.00
Internet charges and Web maintainance	1,467,866.00		2,223,544.00
Consultancy and Legal Expenses	2,085,678.00		1,007,826.00
GPF Interest shortfall	0.00		249,491.00
Miscellaneous expenses	0.00		39,522.00
Postage & stamp Expenses	150,040.00		60,000.00
Printing & Stationery charges	595,050.00		1,721,906.00
Travelling and Hotel expenses	1,030,109.00		1,166,191.00
Recruitment expenses	2,335,241.00		266,210.00
Library Expenses	6,365,490.00		276,283.00
Medical grant & expenses	1,313,707.00		860,816.00
Indian Coffee house expenses	179,166.00		1,441,666.00
Water, Electricity & Telephone charges	9,822,359.00		8,813,853.00
Convocation expenses	2,013,284.00		0.00
Fuel charges	200,941.00		142,529.00
Vehicle Repairs and Maintainance	62,039.00		108,341.00
Insurance charges	103,630.00		105,468.00
Sports,Yoga and other activity	647,539.00		437,129.00
Office upkeep expenses	109,683.00		125,137.00
Statutory expenses	80,973.00		33,827.00
Student safety insurance	1,807,833.00		1,984,115.00

Computer consumable expenses	<u>238,175.00</u>	36,550,030.00	<u>0.00</u>	33,769,342.00
<b>TOTAL</b>		<b>36,550,030.00</b>		<b>33,769,342.00</b>

**SCHEDULE- 17**

**DEPARTMENTAL OPERATING EXPENSES**

		<b>As on 31.03.2013</b>		<b>As on 31.03.2012</b>
<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Computer consumable expenses	1,487,226.00		1,219,625.00	
Department Misc Expenses	207,999.00		285,886.00	
Department/lab consumable expenses	1,494,456.00		726,356.00	
Workshop expenses	62,817.00		0.00	
Repair and maintainance instrument/equipments	219,821.00		290,222.00	
deparmental Technical events	0.00		119,345.00	
Department stationary expenses	<u>1,043,241.00</u>	4,515,560.00	<u>0.00</u>	2,641,434.00
		<b>4,515,560.00</b>		<b>2,641,434.00</b>

**SCHEDULE- 18**

**HOSTEL EXPENSES**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Hostel electricity	957,550.00		850,250.00	
Hostel Maintanance	291,746.00		22,964.00	
Hostel Telephone	<u>0.00</u>	1,249,296.00	<u>0.00</u>	873,214.00
<b>TOTAL</b>		<b>1,249,296.00</b>		<b>873,214.00</b>

**SCHEDULE- 19**

**ESTATE OFFICE EXPENSES (Maintenance Expenses)**

<b>PARTICULAR</b>		<b>AMOUNT(IN RS)</b>		<b>AMOUNT(IN RS)</b>
Guest house expenses	0.00		3,312.00	
Gardning & Horticulture	78,350.00		31,583.00	

Repair & Maintenance to Furniture	0.00		36,980.00	
Electrical maintainance	520,483.00		1,138,591.00	
Repair & Maintenance to College Building	3,000,442.00		787,140.00	
Repair & Maintenance to Hostel Building	346,697.00		961,384.00	
Repair & Maintenance to Staff Quarters	346,323.00		177,138.00	
Sanitary/cleaning Expenses	<u>186,815.00</u>	4,479,110.00	<u>120,349.00</u>	3,256,477.00
<b>TOTAL</b>		<b>4,479,110.00</b>		<b>3,256,477.00</b>

**NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR**

**SCHEDULE - "20" SIGNIFICANT ACCOUNTING POLICIES AND NOTES TO ACCOUNTS :**

**A. INSTITUTE OVERVIEW :**

The National Institute of Technology, Raipur is established by an Act of Parliament called "The National Institute of Technology Act 2007" as Institute of National Importance, having status of deemed University to provide for instruction and research in branches of Engineering, Science and Technology and is fully funded by the Government of India, Ministry of Human Resource Development. The Institute prepares its Annual Accounts as per the Common format provided by the Government of India.

**B. SIGNIFICANT ACCOUNTING POLICIES**

**1. BASIS OF ACCOUNTING**

The Institute is governed by NIT act 2007.As per Government of India D.O.No. CDN/MF-CGA/98/99 DT 31.08.2000 the accounts of the Institute is prepared in Common accounting format applicable to all Central autonomous bodies. The accounts of the Institute are prepared under Historical Cost convention and in accordance with applicable accounting standards, except where otherwise stated. For recognition of Income & Expenditure accrual basis of accounting is followed. Cash basis of accounting was being followed by the Institute up to financial year 2009-10. From financial year 2010-11 onwards, Accrual system of accounting has been applied in the Institute.

**2. USE OF ESTIMATES:**

The preparation of financial statements requires estimates and assumptions to be made that affect the reported amount of assets and liabilities on the date of the financial statements and the reported amount of revenues & expenses during the



reported period. Difference between the actual results and the estimates are recognised in the period in which the results are known / materialised.

### **3. REVENUE RECOGNITION :**

Mercantile method of accounting is employed unless otherwise specifically stated. However, where the amount is immaterial /negligible and/or establishment of accrual/ determination of amount are not possible, no entries are made for the accrual. Following Major recognitions are there-

- (a) Misc. Fees received, rent received, recoveries against electricity and water, settlement of advance etc are accounted through Daily Fees Register. (i.e.DFR) and the DFR is accounted for on daily basis.
- (b) Interest on Deposits is accounted for on accrual basis.
- (c) Grants received for Capital and Revenue purposes are recognized on accrual basis of accounting.
- (d) Student Admission Fees and Hostel fees are accounted for on Academic Session basis i.e. July to June.
- (e) All other revenues are recognized on the basis of accrual system of accounting.

### **4. FIXED ASSETS**

- i) Fixed Assets are stated at cost of acquisition inclusive of inward freight, duties and taxes and incidental and direct expenses related to acquisition. All material related cost, labour or contractor charges payable to outsider for work by them in respect of capital jobs are included in the cost of concerned capital assets.
- ii) In respect of projects involving construction, related pre-operational expenses (including interest on loans for specific project prior to its completion), and form part of the cost of the assets capitalized.
- iii) Fixed Assets received by way of non-monetary grants (other than towards the Corpus Fund), are capitalized at values stated, by corresponding credit to Capital Reserve.
- iv) All capital expenditure is accounted for through capital work-in-progress accounts. On commissioning of the assets, the expenditure is transferred to appropriate fixed assets accounts.

### **5. DEPRECIATION**

- i) The Govt. of India has recently directed that the Annual Accounts shall be presented in the modified format applicable to “Central Autonomous Bodies (Non-profit organizations and similar Institutions)”. As per this format depreciation is required to be charged on fixed assets on SLM(Straight line method) method as prescribed in Income tax act. .At the time of publication of this format IT act prescribe SLM and WDV(Written down value) method for

charging of depreciation, but amended IT act thereafter discontinued charging of depreciation on SLM method except for the power generation company, Henceforth in the absence of any specific direction depreciation is charged on the basis of SLM method as per the rate prescribed for the power generation company under the Income Tax act.

- ii) Full cost of all small and low value assets each costing Rs.5000/- or less under lab equipments is fully charged to revenue in the year in which the assets are put to use. No part of the cost of such items shall therefore be included in the cost of fixed assets nor shall any depreciation be charged thereon.

#### **6. GOVERNMENT GRANTS/SUBSIDIES**

- i) Government grants of the nature of contribution towards capital cost of setting up projects are treated as Capital Reserve.
- ii) Grants in respect of specific fixed assets acquired are shown as a deduction from the cost of the related assets.
- iii) Grants Relatable to depreciable fixed Assets are treated as deferred income and recognised in the Income and Expenditure account over the useful life of such assets i.e. such grants are allocated to income over the periods and in the proportions in which depreciation is charged. Accounting for cost of a capital asset is done in the normal course without considering any contribution, subsidy or grants towards the cost of the asset. Depreciation are been charged in the normal course on the 'full cost' of the asset.
- iv) Grants relatable to Non depreciable Assets are treated as "capital reserve".

#### **7. INVESTMENTS**

- i) Long Term Investments are stated at cost including directly attributable cost. A provision for diminution in the value of long term investments is made only if such is other than temporary, in the opinion of Management.
- ii) The surplus money of the Institute is invested in the fixed deposits in the nationalized banks, keeping in view the directives from the Finance Committee of the Institute and the guidelines provided by the Govt. of India, Ministry of Human Resource Development on the subject.
- ii) Current Investments are stated at lower of cost and fair value.

#### **8. INVENTORY**

Items of inventories are measured at cost. Cost comprises of all cost of purchase, cost of conversion and other costs incurred in bringing the inventories to their present location and condition.

Cost of Consumables are charged to income and expenditure account as when purchased, as the total expenditure on Consumables comprises of very minor share i.e. less than 1% of total expenses.

**9. CONTINGENT LIABILITIES :**

Liabilities which are material and whose future outcome cannot be reasonably ascertained are treated as contingent and not provided for and disclosed by way of notes to the accounts.

**10. EMPLOYEES RETIREMENT BENEFIT**

- i) Liability towards gratuity payable on death/retirement of employees is accrued based on valuation. The valuation has been done in respect of those persons who have become entitled for the same.
- ii) Provision for accumulated leave encashment benefit to the employees is accrued and computed on the assumption that employees are entitled to receive the benefit as at each year end.
- iii) Short term and other long term employee benefits are recognized as an expense at the undiscounted amount in profit and loss account of the year in which the related service is rendered.

**11. PROVISIONS**

Provisions are recognized, where the Institute has any legal or constructive obligation or where reliable estimate can be made for the amount of the obligation and as a result of past events, for which it is probable that an outflow of economic benefits will be required to settle the obligation at the balance sheet date. These are reviewed at each balance sheet date and adjusted to reflect the current best estimates.

**12. FOREIGN CURRENCY TRANSACTIONS**

Foreign currency transactions are recorded in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of transaction.

**13. CASH AND CASH EQUIVALENT**

Cash and Cash equivalents in the balance sheet comprise cash at bank and in hand.

**C. NOTES TO THE ACCOUNTS**

**1. BALANCE FUND OF GOVERNMENT ENGG COLLEGE:**

As per Government of India, Notification No. F.20-5/2004-TS.III Dt 29/11/2005 all Liabilities of the Institute up to 30.11.2005 will be borne by Chhattisgarh government. However the Notification is silent regarding transfer of assets of Govt. Engg. College to National Institute of Technology Raipur.

The list of fixed assets as well as liabilities of the Institute is not prepared as on 01.12.2005, Hence not reflected in the Balance sheet of National Institute of Technology Raipur.

The current assets of the Govt. Engg. College in the form of Bank balances, Loans and Advances etc. are reflected in the books of Accounts of National Institute of Technology Raipur under the head "Fund from Erstwhile Govt. Engg. College" in Schedule "D" **CURRENT LIABILITIES AND PROVISION** amounted to Rs 5341016.89.

## **2. TAXATION**

In view of there being no taxable income under Income-tax Act 1961, no provision for Income tax has been considered necessary.

## **3. DEPRICIATION ON FIXED ASSETS IN 2012-13:**

Depreciation on Fixed Assets purchased in 2012-13 has been calculated as prescribed in common format of Accounting and charged to Income and Expenditure account. The same amount is recognized in Income and expenditure account in Schedule 12 under the head "**Other Income**" by corresponding debit to Deffered Government Grant.

<b>PARTICULARS</b>	<b>DEPRICIATION FROM 01.04.2012 TO 31.03.2013</b>
DEPRICIATION	22,590,360.00
TOTAL	22,590,360.00

The value of Fixed Assets decreased by Rs 22590360.00 and Deffered Government Grant reduced by the same amount in Balance sheet.

## **4. GPF (CORPUS) - SCHEDULE- C**

- i) The Institute has provided interest on GPF fund balance for the year 2012-13.
- ii) The GPF corpus fund is invested in Fixed deposits till the statutory formalities are not completed.

## **5. RETIREMENT BENEFITS**

The Disclosures with respect to Accounting Standard (AS -15) (Revised 2005) "Employee Benefits" are as under-

### **1. Defined Contribution Plans**

#### **a. Employers Contribution to New Pension Scheme**

Following amount has been recognized in Profit & Loss Account

<b>PARTICULARS</b>	<b>As on 31.03.2013</b>	<b>As on 31.03.2012</b>
Employers Contribution to New Pension Scheme	3,339,052.00	2,880,109.00

## **2. Defined Benefit Plan**

- a) Provision for Gratuity is made on the basis of calculations made as per the rules and restricted to a maximum limit of Rs.10,00,000=00 {applicable from 01.01.2006.
- b) Provision for Leave is made as per rules

## **6. FIXED ASSETS MANAGEMENT WORK**

As per Government of India, Notification No. F.20-5/2004-TS.III Dt 29/11/2005 the erstwhile Govt. Engg College upgraded as National Institute of Technology Raipur w.e.f. 01.12.2005.

The list of fixed assets as well as liabilities of the Institute was not prepared as on 01.12.2005, Hence the Balance sheet of National Institute of Technology Raipur reflects the Assets purchased after 01.12.2005 only.

However the work of preparation of Fixed asset Register purchased prior to conversion is in process and will be incorporated in the Balance sheet in future year.

## **7 Prior period items-**

An amount of Rs .22 lakh included in Rent(canteen), and Rs 886279 included in library books/journals pertains to the year 2011-12 but omitted to taken in that year now included in this year.

- 8.** An amount of Rs 3584560/- was included in Library books and Journals in the year 2011-12. As per audit observation the balance amount after depreciation amounted to Rs 3476734/- transferred to expenses account in current year as it pertains to the year 2012-13.
- 9** Corresponding figures for the previous year have been regrouped/rearranged, wherever necessary.
- 10** In the opinion of management there is no such events occurred after the date of balance sheet of material value which needs disclosure in the accounts.
- 11** Schedules 1 to 20 are annexed to and form an integral part of the Balance Sheet as at 31.03.2013 and the Income and Expenditure account for the year ended on that date.