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, (Formerly 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 14th Sept. 1956 and subsequently inaugurated by our first Prime Minister Hon'ble Pt. Jawaharlal Nehru, the Institute started with two Departments; 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. 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 girls', residential quarters for teaching and non-teaching staff, canteen, bank, and 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.

2. BOG AND OTHER COMMITTEES

2.1 Board of Governors

| 1 | Shri Sudhir Vasudeva | Chairman |
|----|---|-----------------------------------|
| | CMD, Oil and Natural Gas Corporation Ltd (ONGC) | |
| | | |
| 2 | Dr. Sudarshan Tiwari | Member |
| | Director, NIT Raipur | |
| | | |
| 3 | Sp. Secretary / Add. Secretary / Joint Secretary | Member |
| | Ministry of Human Resource Development, | |
| | Department of Higher Education, New Delhi | |
| 4 | Financial Adviser, DHE | Member |
| | Ministry of Human Resource Development, | |
| | Department of Higher Education, New Delhi | |
| 5 | Prof.(Mrs.) Krishna Pramanik | Member |
| | Professor, Department of Biotechnology & Biomedical | |
| | Engineering, NIT Rourkela | |
| 6 | Dr. C.M.Agarwal | Member |
| | Retd.Professor Department of Mechanical | |
| | Engineering MANIT – Bhopal | |
| 7 | Shri Kamal Sarda | Member |
| | CMD, Sarda Energy & Minerals Ltd. | Nominee of Govt. of Chhattisgarh. |
| | Industrial Growth Center, Phase-I Siltara, Raipur | _ |
| 8 | Shri A K Sharma | Member |
| | Retd. Chief Engineer(EC), Raipur | Nominee of Govt. of Chhattisgarh |
| | | |
| 9 | Dr. A.S. Thoke | Member |
| | Professor & Head, Department of Electrical | (From 06/09/2013) |
| | Engineering, NIT Raipur | |
| 10 | Dr. Naresh Kumar Nagwani | Member |
| | Head, Department of Computer Science & | (From 06/09/2013) |
| | Engineering, NIT Raipur | |
| 11 | Dr. A M Rawani | Member |
| | Dean (Academic) & Professor | (Till 05/09/2013) |
| | Department of Mechanical Engineering, NIT –Raipur | |
| 12 | Dr. S Sanyal | Member |
| | Professor & Head Department of Mechanical | (Till 05/09/2013) |
| | Engineering, NIT - Raipur | |
| 13 | Dr. Ravindra Sharma | Secretary |
| | Registrar, NIT Raipur | |
| | | |
| | | |

2.2 Finance Committee

| | Shri Sudhir Vasudeva | Chairman |
|---|---|-------------------|
| 1 | CMD, Oil and Natural Gas Corporation Ltd (ONGC) | |
| | | |
| 2 | Dr. Sudarshan Tiwari | Member |
| | Director, NIT Raipur | |
| | Financial Adviser | Member |
| 3 | Ministry of Human Resource Development, | |
| | Department of Higher Education, New Delhi | |
| | Dr. C M Agarwal | Member |
| 4 | Retd. Professor, Department of Mechanical | |
| | Engineering, MANIT - Bhopal | |
| | Dr. A.S. Thoke | Member |
| 5 | Professor & Head, Department of Electrical | (From 06/09/2013) |
| | Engineering, NIT Raipur | |
| | Dr. A M Rawani | Member |
| 6 | Dean (Academic) & Professor | (Till 05/09/2013) |
| | Department of Mechanical Engineering, NIT –Raipur | |
| 7 | Dr. Ravindra Sharma | Member Secretary |
| ′ | Registrar, NIT Raipur | |

2.3 The Senate

| 1 | Dr. Sudarshan Tiwari | Director, NIT Raipur | Chairman |
|----|------------------------|--|--------------------------|
| 2 | Dr. (Ms) R R Bhargava | Professor, Dept of Mathematics, IIT Roorkee | Member (From 11/7/13) |
| 3 | Dr. R. P. Singh | Professor, Deptt of E&TC Engg. MNNIT, Bhopal | Member (From 11/7/13) |
| 4 | Dr. V. Upadhaya | Professor, Dept. of Humanities, IIT Delhi | Member (From 11/7/13) |
| 5 | Dr Shrish Verma | Dean (Faculty Welfare) | Member |
| 6 | Shri A. P Rajimwale | Dean (Students Welfare) | Member |
| 7 | Dr. G D Ramtekkar | Dean (Planning & Development) | Member |
| 8 | Dr. A M Rawani | Dean (Academics) | Member |
| 9 | Dr. S Sanyal | Dean (Research & Consultancy) | Member |
| 10 | Dr Prabhat Diwan | Head, Deptt of Applied Geology | Member |
| 11 | Dr. Abir Bandyopadhyay | Head, Deptt of Architecture | Member |
| 12 | Shri A. K. Poonia | Head, Deptt of Biotech. and Biomedical | Member |
| 13 | Dr. R. K. Tripathi | Head, Deptt of Civil Engineering | Member |
| 14 | Dr. M K Verma | Professor, Deptt of Civil Engineering | Member |
| 15 | Dr. U. K. Dewangan | Professor, Deptt of Civil Engineering | Member |
| 16 | Dr. Samir Bajpai | Professor, Deptt of Civil Engineering | Member |
| 17 | Dr. (Mrs) A.B. Soni | Head, Deptt. of Chemical Engineering | Member |
| 18 | Dr. (Mrs.) F. Khan | Head, Deptt of Chemistry | Member |
| 19 | Shri N K Nagwani | Head, Deptt of Computer Science and Engineering | Member (From 9/9/13) |

| 20 | Dr. A.S. Thoke | Head, Deptt. Of Electrical Engg. | Member |
|----|-----------------------|---|-------------------------|
| 21 | Dr. (Mrs) S Gupta | Professor, Deptt of Electrical Engineering | Member |
| 22 | Shri. B. Acharya | Head, Deptt of Electronics and Telecommunication Engg. | Member |
| 23 | Dr Sudhakar Pandey | Head, Deptt of Information Technology | Member |
| 24 | Dr. S P S Matharu | Head, Deptt of Humanities | Member |
| 25 | Dr. Rahul Salhotra | Head, Deptt of Mechanical Engineering | Member |
| 26 | Dr. S. L. Sinha | Professor, Deptt of Mechanical Engineering | Member |
| 27 | Dr. Anil Kumar Tiwari | Professor, Deptt of Mechanical Engineering | Member |
| 28 | Dr. S. D. Patle | Professor, Deptt of Mechanical Engineering | Member |
| 29 | Dr. Manoj Chopkar | Head, Deptt of Metallurgical Engineering | Member |
| 30 | Shri M.D.Patel | Head, Deptt of Mining Engineering | Member (From 9/9/13) |
| 31 | Dr. Manoj Pradhan | Professor, Deptt of Mining Engineering | Member |
| 32 | Shri H Bikrol | Head, Deptt of Computer Applications | Member (From 9/9/13) |
| 33 | Dr Arvind Kumar Sinha | Head, Deptt. of Mathematics | Member (From 9/9/13) |
| 34 | Dr. R. P Pathak | Professor, Deptt. of Mathematics | Member |
| 35 | Dr. (Mrs.) S. Agrawal | Head, Deptt. of Physics | Member |
| 36 | Dr. A. K. Srivastava | Professor, Deptt of Physics | Member |
| 37 | Shri Mithlesh Atulkar | Faculty(I/c) Examinations | Special-Invitee |
| 38 | Dr. Ravindra Sharma | Registrar | Secretary |

2.4 Building & Works Committee

| 1 | Dr. Sudarshan Tiwari Director, NIT Raipur | Chairman |
|---|--|---------------------------|
| 2 | Director/Deputy Secretary MHRD New Delhi | Member |
| 3 | Executive Engineer(Civil) CPWD, Tikarapara, C-D Block, Raipur | Member |
| 4 | Asst. Engineer(Electircal) CPWD Near Geological Survey of India Raipur(C.G) | Member |
| 5 | Dr. G.D.Ramtekkar Dean P&D NIT Raipur | Member (From 9/9/13) |
| 6 | Dr. R. K. Tripathi Head, Deptt of Civil Engineering | Member (Till 8/9/13) |
| 7 | Dr. L.K.Mishra Associate Professor Dept. of Civil Engg. Motilal Nehru National Institute of Technology, Allahabad – 211 004 | Member (From 02/12/13) |
| 8 | Dr. Ravindra Sharma Registrar NIT Raipur | Member - Secretary |

3. ADMINISTRATION

3.1 Administrative Officers & Deans

| Sl.No. | Name | Qualification | Designation/Section |
|--------|------------------------------|----------------------|---|
| 1 | Dr. Sudarshan Tiwari | Ph.D. (IIT Roorkee) | Director |
| 2 | Dr. Ravindra Sharma | Ph.D. | Registrar |
| 3 | Dr. A M Rawani | M.Tech , Ph.D | Dean (Academic Affairs) |
| 4 | Dr. S. Sanyal | B.E, M.Tech & Ph.D. | Dean (Research & Consultancy) |
| 5 | Dr. G. D. Ramtekkar | B.E., M.Tech., Ph.D. | Dean (Planning & Development) |
| 6 | Dr. Shrish Verma | B.E,M Tech., Ph.D | Dean (Faculty Welfare) |
| 7 | Shri A.P. Rajimwale | B.E. M.Tech | Dean (Students Welfare) |
| 8 | Shri Ajaii Sharma | B.E., M.Tech. | Deputy Registrar (Admin) & Nodal Officer-Legal Cell, |
| 9 | Shri P. Y. Dhekne | B.E., M.Tech. | Deputy Registrar (I/c) (F&A) |
| 10 | Shri Sunil Pandey | B.E., M.Tech | System Administrator |
| 11 | Shri Vijay Singh | M.Com, MBA | Assistant Registrar (S&P) |
| 12 | Shri Liju Mathew | MBA, MPBA | Assistant Registrar (Eatablishment) |
| 13 | Shri Mani Shankar Singh | PGDFM, MBA | Assistant Registrar (F&A) |
| 14 | Shri Jitendra Dimri | M.Phil | Assistant Registrar (Student Section) |
| 15 | Shri Ravindra Chouhan | B.Sc., MCA | Programmer |
| 16 | Shri Suraj Pratap Shrivastav | B.E. | Executive Engineer |
| 17 | Shri Astik Kumar | B.E. | Junior Engineer |
| 18 | Shri Balram Nayak | BA, MA, MH | 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^{st} year of B.Tech. Programme is made through the Joint Entrance Examination (JEE) 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 B.E./B.Tech./M.Sc. in relevant discipline or any degree recognized as equivalent thereto 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 1st 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 are also known for their excellence in socio-cultural 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)

| Departments | Sanctioned Intake | Admissions |
|--|-------------------|------------|
| Architecture | 62 | 59 |
| Bio. Medical Engineering | 62 | 46 |
| Bio. Technology | 62 | 50 |
| Chemical Engineering | 62 | 57 |
| Civil Engineering | 78 | 73 |
| Computer Science & Engineering | 92 | 87 |
| Electrical Engineering | 92 | 91 |
| Electronics& Telecommunication Engineering | 92 | 89 |
| Information Technology | 92 | 87 |
| Mechanical Engineering | 92 | 91 |
| Metallurgical Engineering | 92 | 87 |
| Mining Engineering | 77 | 76 |
| Total | 955 | 893 |

Post Graduate (M.Tech)

| Departments | Sanctioned Intake | Admissions |
|---------------------------------|-------------------|------------|
| Applied Geology | 15 | 14 |
| Master of Computer Applications | 92 | 91 |
| Civil Engineering | 17 | 10 |
| Chemical Engineering | 25 | 16 |
| Mechanical Engineering | 17 | 16 |
| Electrical Engineering | 25 | 25 |
| Total | 191 | 172 |

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 | 382 | 16456210 |
| 2 | Minority Scholarship | Tribal Welfare Dept. C.G. | UG/PG | 4 | 203400 |
| 3 | Other State Scholarship for SC/ST/OBC/Gen | Other State | UG/PG | 153 | 12424992 |
| 4 | ONGC Scholarship | Oil And Natural Gas Corpo. Ltd. ONGC Academy Kaulagarh Road, Dehradun 248195 | UG/PG | 3 | 220000 |
| 5 | NHFDC Scholarship | National Handicapped Finanace and dev. Corpo. Red. Cross. Bhawan Sector-12, Faridabad-121007 | UG/PG | 9 | 416650 |
| 6 | IOCL Scholarship | Indion Oil Education Scholarship-B7, Sector 132 Gautam Budh Nagar Greater Noida Ex. Noida U.P. | UG/PG | 14 | 270000 |
| 7 | Minority Scholarship | Other State | UG/PG | 6 | 257635 |
| 8 | M.Tech | NIT Raipur | PG | 77 | 5976487 |
| 9 | Ph.D | NIT Raipur | | 34 | 6778431 |
| | Total | | | | 43003805 |

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

| | 1st Semester | | | | | |
|-----|---------------------------------|----------|-----------|--------|---------|--|
| S. | Branch | No. o | f Student | s | % of | |
| No. | Branch | Appeared | Passed | Failed | Passing | |
| 1 | Architecture | 66 | 47 | 19 | 71.21 | |
| 2 | Bio Medical Engineering | 80 | 31 | 49 | 38.75 | |
| 3 | Bio Technology | 92 | 35 | 57 | 38.04 | |
| 4 | Chemical Engineering | 67 | 49 | 18 | 73.13 | |
| 5 | Civil Engineering | 83 | 62 | 21 | 74.70 | |
| 6 | Computer Science & Engineering | 109 | 81 | 28 | 74.31 | |
| | Electronics & Telecommunication | | | | | |
| 7 | Engg. | 101 | 82 | 19 | 81.19 | |
| 8 | Electrical Engineering | 100 | 75 | 25 | 75.00 | |
| 9 | Information Technology | 113 | 76 | 37 | 67.26 | |
| 10 | Mechanical Engineering | 106 | 83 | 23 | 78.30 | |
| 11 | Metallurgical Engineering | 117 | 82 | 35 | 70.09 | |
| 12 | Mining Engineering | 99 | 69 | 30 | 69.70 | |
| | Total | 1133 | 772 | 361 | 68.14 | |

| | 2nd Semester | | | | | |
|-----|---------------------------------|----------|-----------------|--------|---------|--|
| S. | Branch | No. o | No. of Students | | | |
| No. | | Appeared | Passed | Failed | Passing | |
| 1 | Architecture | 62 | 44 | 18 | 70.97 | |
| 2 | Bio Medical Engineering | 79 | 34 | 45 | 43.04 | |
| 3 | Bio Technology | 83 | 28 | 55 | 33.73 | |
| 4 | Chemical Engineering | 68 | 52 | 16 | 76.47 | |
| 5 | Civil Engineering | 90 | 63 | 27 | 70.00 | |
| 6 | Computer Science & Engineering | 107 | 63 | 44 | 58.88 | |
| | Electronics & Telecommunication | | | | | |
| 7 | Engg. | 102 | 71 | 31 | 69.61 | |
| 8 | Electrical Engineering | 106 | 88 | 18 | 83.02 | |
| 9 | Information Technology | 110 | 66 | 44 | 60.00 | |
| 10 | Mechanical Engineering | 110 | 78 | 32 | 70.91 | |
| 11 | Metallurgical Engineering | 124 | 68 | 56 | 54.84 | |
| 12 | Mining Engineering | 110 | 60 | 50 | 54.55 | |
| | Total | 1151 | 715 | 436 | 62.12 | |

| | 3rd Semester | | | | | |
|-----|---------------------------------|----------|-----------------|--------|---------|--|
| S. | Branch | No. o | No. of Students | | | |
| No. | | Appeared | Passed | Failed | Passing | |
| 1 | Architecture | 61 | 47 | 14 | 77.05 | |
| 2 | Bio Medical Engineering | 55 | 17 | 38 | 30.91 | |
| 3 | Bio Technology | 67 | 24 | 43 | 35.82 | |
| 4 | Chemical Engineering | 72 | 51 | 21 | 70.83 | |
| 5 | Civil Engineering | 93 | 70 | 23 | 75.27 | |
| 6 | Computer Science & Engineering | 113 | 82 | 31 | 72.57 | |
| | Electronics & Telecommunication | | | | | |
| 7 | Engg. | 122 | 74 | 48 | 60.66 | |
| 8 | Electrical Engineering | 111 | 81 | 30 | 72.97 | |
| 9 | Information Technology | 104 | 63 | 41 | 60.58 | |
| 10 | Mechanical Engineering | 111 | 77 | 34 | 69.37 | |
| 1.1 | Metallurgical Engineering | 104 | 85 | 19 | 81.73 | |
| 12 | Mining Engineering | 97 | 57 | 40 | 58.76 | |
| | Total | 1110 | 728 | 382 | 65.59 | |

| | 4th Semester | | | | | | | | |
|-----|---------------------------------|----------|-----------|--------|---------|--|--|--|--|
| s. | Branch | No. o | f Student | s | % of | | | | |
| No. | Dianen | Appeared | Passed | Failed | Passing | | | | |
| 1 | Architecture | 66 | 35 | 31 | 53.03 | | | | |
| 2 | Bio Medical Engineering | 39 | 16 | 23 | 41.03 | | | | |
| 3 | Bio Technology | 48 | 23 | 25 | 47.92 | | | | |
| 4 | Chemical Engineering | 61 | 43 | 18 | 70.49 | | | | |
| 5 | Civil Engineering | 85 | 65 | 20 | 76.47 | | | | |
| 6 | Computer Science & Engineering | 100 | 79 | 21 | 79.00 | | | | |
| | Electronics & Telecommunication | | | | | | | | |
| 7 | Engg. | 111 | 88 | 23 | 79.28 | | | | |
| 8 | Electrical Engineering | 108 | 73 | 35 | 67.59 | | | | |
| 9 | Information Technology | 93 | 57 | 36 | 61.29 | | | | |
| 10 | Mechanical Engineering | 99 | 71 | 28 | 71.72 | | | | |
| 11 | Metallurgical Engineering | 100 | 79 | 21 | 79.00 | | | | |
| 12 | Mining Engineering | 72 | 41 | 31 | 56.94 | | | | |
| | Total | 982 | 670 | 312 | 68.23 | | | | |

| | 5th Semester | | | | | | | | | |
|-----|---------------------------------|----------|-----------|--------|---------|--|--|--|--|--|
| S. | Branch | No. o | f Student | s | % of | | | | | |
| No. | Branch | Appeared | Passed | Failed | Passing | | | | | |
| 1 | Architecture | 73 | 47 | 26 | 64.38 | | | | | |
| 2 | Bio Medical Engineering | 32 | 15 | 17 | 46.88 | | | | | |
| 3 | Bio Technology | 33 | 19 | 14 | 57.58 | | | | | |
| 4 | Chemical Engineering | 63 | 46 | 17 | 73.02 | | | | | |
| 5 | Civil Engineering | 89 | 66 | 23 | 74.16 | | | | | |
| 6 | Computer Science & Engineering | 97 | 76 | 21 | 78.35 | | | | | |
| | Electronics & Telecommunication | | | | | | | | | |
| 7 | Engg. | 107 | 77 | 30 | 71.96 | | | | | |
| 8 | Electrical Engineering | 107 | 83 | 24 | 77.57 | | | | | |
| 9 | Information Technology | 93 | 66 | 27 | 70.97 | | | | | |
| 10 | Mechanical Engineering | 89 | 72 | 17 | 80.90 | | | | | |
| 11 | Metallurgical Engineering | 95 | 77 | 18 | 81.05 | | | | | |
| 12 | Mining Engineering | 70 | 43 | 27 | 61.43 | | | | | |
| | Total | 948 | 687 | 261 | 72.47 | | | | | |

| | 6th Semester | | | | | | | | |
|-----|---------------------------------|----------|-----------------|--------|---------|--|--|--|--|
| S. | Branch | No. o | No. of Students | | | | | | |
| No. | Branch | Appeared | Passed | Failed | Passing | | | | |
| 1 | Architecture | 51 | 23 | 28 | 45.10 | | | | |
| 2 | Bio Medical Engineering | 21 | 19 | 2 | 90.48 | | | | |
| 3 | Bio Technology | 35 | 25 | 10 | 71.43 | | | | |
| 4 | Chemical Engineering | 48 | 38 | 10 | 79.17 | | | | |
| 5 | Civil Engineering | 66 | 60 | 6 | 90.91 | | | | |
| 6 | Computer Science & Engineering | 79 | 72 | 7 | 91.14 | | | | |
| | Electronics & Telecommunication | | | | | | | | |
| 7 | Engg. | 84 | 73 | 11 | 86.90 | | | | |
| 8 | Electrical Engineering | 83 | 67 | 16 | 80.72 | | | | |
| 9 | Information Technology | 80 | 70 | 10 | 87.50 | | | | |
| 10 | Mechanical Engineering | 88 | 78 | 10 | 88.64 | | | | |
| 11 | Metallurgical Engineering | 67 | 66 | 1 | 98.51 | | | | |
| 12 | Mining Engineering | 57 | 54 | 3 | 94.74 | | | | |
| | Total | 759 | 645 | 114 | 84.98 | | | | |

| | 7th Semester | | | | | | | | |
|-----|---------------------------------|----------|-----------------|--------|---------|--|--|--|--|
| S. | Branch | No. o | No. of Students | | | | | | |
| No. | branch | Appeared | Passed | Failed | Passing | | | | |
| 1 | Architecture | 48 | 25 | 23 | 52.08 | | | | |
| 2 | Bio Medical Engineering | 19 | 19 | 0 | 100 | | | | |
| 3 | Bio Technology | 30 | 27 | 3 | 90 | | | | |
| 4 | Chemical Engineering | 48 | 44 | 4 | 91.67 | | | | |
| 5 | Civil Engineering | 65 | 60 | 5 | 92.31 | | | | |
| 6 | Computer Science & Engineering | 78 | 76 | 2 | 97.44 | | | | |
| 7 | Electronics & Telecommunication | | | | | | | | |
| , | Engg. | 78 | 73 | 5 | 93.59 | | | | |
| 8 | Electrical Engineering | 84 | 79 | 5 | 94.05 | | | | |
| 9 | Information Technology | 78 | 67 | 11 | 85.9 | | | | |
| 10 | Mechanical Engineering | 86 | 75 | 11 | 87.21 | | | | |
| 11 | Metallurgical Engineering | 68 | 65 | 3 | 95.59 | | | | |
| 12 | Mining Engineering | 60 | 54 | 6 | 90 | | | | |
| | Total | 742 | 664 | 78 | 89.49 | | | | |

| 8th Semester | | | | | | | | |
|--------------|---------------------------------|----------|-----------------|--------|---------|--|--|--|
| S. | Branch | No. o | No. of Students | | | | | |
| No. | Branch | Appeared | Passed | Failed | Passing | | | |
| 1 | Architecture | 41 | 41 | 0 | 100.00 | | | |
| 2 | Bio Medical Engineering | 3 | 3 | 0 | 100.00 | | | |
| 3 | Bio Technology | 13 | 9 | 4 | 69.23 | | | |
| 4 | Chemical Engineering | 60 | 53 | 7 | 88.33 | | | |
| 5 | Civil Engineering | 76 | 70 | 6 | 92.11 | | | |
| 6 | Computer Science & Engineering | 80 | 77 | 3 | 96.25 | | | |
| | Electronics & Telecommunication | | | | | | | |
| 7 | Engg. | 86 | 79 | 7 | 91.86 | | | |
| 8 | Electrical Engineering | 82 | 80 | 2 | 97.56 | | | |
| 9 | Information Technology | 72 | 66 | 6 | 91.67 | | | |
| 10 | Mechanical Engineering | 88 | 81 | 7 | 92.05 | | | |
| 11 | Metallurgical Engineering | 74 | 71 | 3 | 95.95 | | | |
| 12 | Mining Engineering | 45 | 41 | 4 | 91.11 | | | |
| | Total | 720 | 671 | 49 | 93.19 | | | |

| | 9th Semester | | | | | | | | |
|--------|--------------|---------|-------------|--------|----------------|--|--|--|--|
| S. No. | Branch | No. | of Students | | % of Passing | | | | |
| S. NO. | o. Branch | Appeard | Passed | Failed | 70 OI I assing | | | | |
| 1 | Architecture | 46 | 24 | 22 | 52.17 | | | | |

| | 10th Semester | | | | | | | | |
|--------|---------------|-----------------|--------|-----------------|---------------|--|--|--|--|
| S. No. | Branch | No. of Students | | No. of Students | % of Passing | | | | |
| 5. No. | Dianch | Appeared | Passed | Failed | 70 Of Tassing | | | | |
| 1 | Architecture | 37 | 31 | 6 | 83.78 | | | | |

Master of Computer Applications

| S. No. | Branch | No. o | % of | | |
|--------|--------------|----------|--------|--------|---------|
| 5. NO. | branch | Appeared | Passed | Failed | Passing |
| 1 | 1st Semester | 93 | 68 | 25 | 73.12 |
| 2 | 2nd Semester | 82 | 72 | 10 | 87.80 |
| 3 | 3rd Semester | 83 | 55 | 28 | 66.27 |
| 4 | 4th Semester | 82 | 67 | 15 | 81.71 |
| 5 | 5th Semester | 82 | 65 | 17 | 79.27 |
| 6 | 6th Semester | 38 | 38 | 0 | 100.00 |
| | Total | 460 | 365 | 95 | 79.35 |

| | M. Tech, Applied Geology | | | | | | | | | |
|--------|--------------------------|-----------------|--------|--------|--------------|--|--|--|--|--|
| S. No. | Branch | No. of Students | | 5 | % of Possins | | | | | |
| 5. NO. | Dranch | Appeared | Passed | Failed | % of Passing | | | | | |
| 1 | 1st Semester | 14 | 14 | 0 | 100.00 | | | | | |
| 2 | 2nd Semester | 15 | 14 | 1 | 93.33 | | | | | |
| 3 | 3rd Semester | 15 | 15 | 0 | 100.00 | | | | | |
| 4 | 4th Semester | 13 | 13 | 0 | 100.00 | | | | | |
| 5 | 5th Semester | 13 | 13 | 0 | 100.00 | | | | | |
| 6 | 6th Semester | 14 | 14 | 0 | 100.00 | | | | | |
| | Total | 84 | 83 | 1 | 98.81 | | | | | |

| | M. Tech, Chemical Engineering | | | | | | | | | |
|--------|-------------------------------|----------|--------------|--------|--------------|--|--|--|--|--|
| S. No. | Branch | No. o | % of Passing | | | | | | | |
| 5. NO. | Branch | Appeared | Passed | Failed | % of Passing | | | | | |
| 1 | 1st Semester | 15 | 12 | 3 | 80.00 | | | | | |
| 2 | 2nd Semester | 15 | 9 | 6 | 60.00 | | | | | |
| 3 | 3rd Semester | 12 | 12 | 0 | 100.00 | | | | | |
| 4 | 4th Semester | 3 | 3 | 0 | 100.00 | | | | | |
| | Total | 45 | 36 | 9 | 80.00 | | | | | |

| | M. Tech, Civil Engineering | | | | | | | | | |
|--------|----------------------------|----------|-----------|--------|---------------|--|--|--|--|--|
| S. No. | Branch | No. o | f Student | s | 0/ of Dogging | | | | | |
| 5. No. | Branch | Appeared | Passed | Failed | % of Passing | | | | | |
| 1 | 1st Semester | 10 | 8 | 2 | 80.00 | | | | | |
| 2 | 2nd Semester | 6 | 4 | 2 | 66.67 | | | | | |
| 3 | 3rd Semester | 5 | 4 | 1 | 80.00 | | | | | |
| 4 | 4th Semester | 0 | 0 | 0 | 0.00 | | | | | |
| | Total | 21 | 16 | 5 | 76.19 | | | | | |

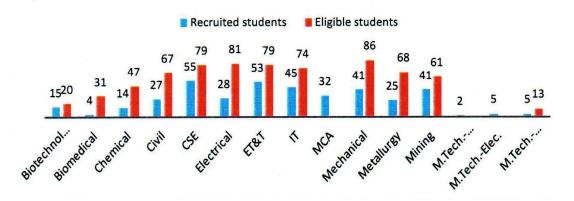
| | M. Tech, Electrical Engineering | | | | | | | | | |
|--------|---------------------------------|-----------------|--------|--------|--------------|--|--|--|--|--|
| S. No. | Branch | No. of Students | | | % of Passing | | | | | |
| S. NO. | Dianen | Appeared | Passed | Failed | % of Fassing | | | | | |
| 1 | 1st Semester | 25 | 18 | 7 | 72.00 | | | | | |
| 2 | 2nd Semester | 23 | 22 | 1 | 95.65 | | | | | |
| 3 | 3rd Semester | 23 | 20 | 3 | 86.96 | | | | | |
| 4 | 4th Semester | 17 | 17 | 0 | 100.00 | | | | | |
| | Total | 88 | 77 | 11 | 87.50 | | | | | |

| M. Tech, Mechanical Engineering | | | | | |
|---------------------------------|--------------|-----------------|--------|--------|---------------|
| S. No. | Branch | No. of Students | | | 0/ of Dogging |
| 5. NO. | branch | Appeared | Passed | Failed | % of Passing |
| 1 | 1st Semester | 16 | 8 | 8 | 50.00 |
| 2 | 2nd Semester | 14 | 13 | 1 | 92.86 |
| 3 | 3rd Semester | 12 | 12 | 0 | 100.00 |
| 4 | 4th Semester | 8 | 8 | 0 | 100.00 |
| | Total | 50 | 41 | 9 | 82.00 |

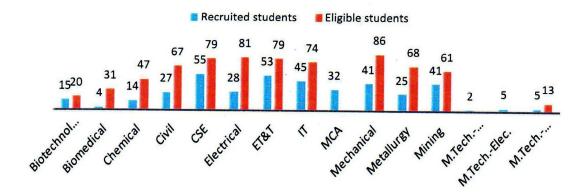
4.7 Training &Placement Details

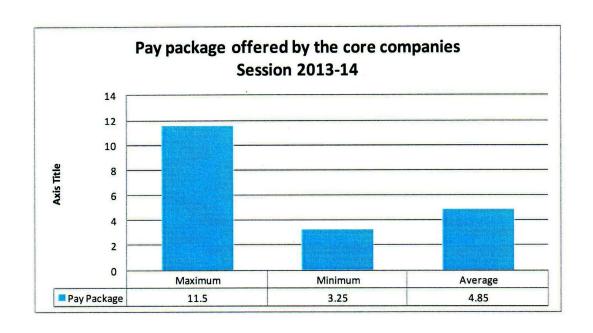
Details of campus recruitment Branch-Wise (UG & PG)

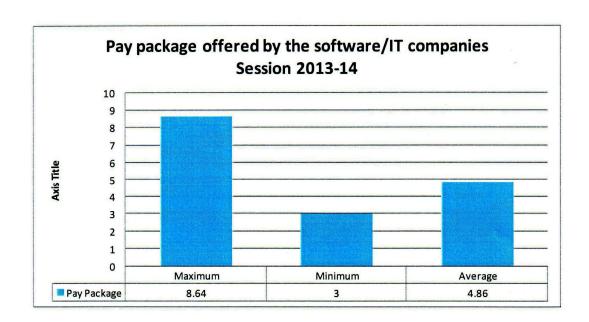
Session 2013-2014



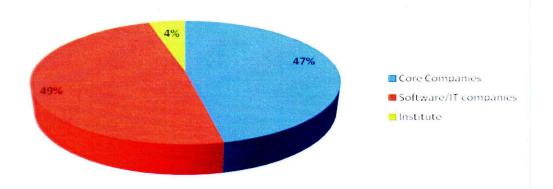
Details of campus recruitment Branch-Wise (UG & PG)
Session 2013-14











Seminar/Workshop /Training programs organized by the T&P department 2013-14

- 1. A seminar was organized on "Career opportunities in IT Sector" delivered by Mr. Rajendra Awasthi, Regional Delivery Head, Asia Pacific and African Countries, Infosys for the B.Tech. students on 19-07-2013.
- 2. A seminar was organized on "**Dream it Do it**" & "Excel in career, Excel in life!" on 30-07-2013. It was delivered by Mr. R. Sreenivasan, Founder, Career Launcher (M.Tech. JNU, PGDM-IIM-B) Raipur.
- 3. A workshop was organized on "Job opportunity in IT sector" and "Skills Development Program" for the students from (CSE, IT and ET&T) branches on 1st and 2nd August 2013. This workshop was conducted by Mr. Vishal Gupta, Assistant Manager (Samsung Electronics Ltd.).
- **4.** A seminar was organized on 17-09-2013 by Dr. Mukund Madhava Das (Director Choice) on "**Engineering Ethics**" (Topic: Relevance of Ethics in Engineering, Value in Engineering, Can Ethical Engineering practice be successful, The five P's of Ethical power, Indian Perspectives in Engineering Ethics).
- **5.** A seminar was organized on "**GRADUATE ENGINEERING STUDIES IN THE U.S.**" by Dr. Ryan Pereira, Senior Adviser, Education USA @ USIEF office in Mumbai for 3rd year and 4th year students planning for higher studies abroad, on 25-09-2013.
- **6.** The Training and Placement Cell, in association with PT Education organized series of seminar on "**General Knowledge and Current Affairs**" for pre and final year students on every Saturday starting from 08-02-2014.
- **7.** A seminar was organized on "**Stress Management**" by Dr. Mukund Madhava Das (Director: Choice) for first year students on 12-02-2014.
- **8.** Technical Training Session, Motivational Session, Latest Trends in Mobile Technology Session and Interview Skills Development Session was organized for the students from (CSE, IT ET&T & MCA) branches on Feb 28, March 01-02, 2014. These sessions were conducted by Mr. Vishal Gupta, Assistant Manager (Samsung Electronics Ltd.).

4.8 THIRD CONVOCATION PROGRAM OF NIT RAIPUR

The Institute has successfully organised and celebrated its Four Convocation Program which was held on 8th January, 2014. Total 785 degrees for various disciplines were awarded on the occasion and 36 gold and silver medals were awarded to the meritorious students of 2013 batch. The ceremony was blessed with the benign presence of Hon'ble Gevernor of Chhattisgarh, Shri Shekhar Dutt as Chief Guest, while Shri Sudhir Vasudeva Chairman, BoG, 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: ANKITA AGRAWAL (Electronics & Telecomm. Engg- Honours) B. Tech & B. Arch. Programme 2013

| Sr. | | | |
|-----|-------------------------------------|-----------------------|--------|
| No. | Programmes | Student Name | Medal |
| 1 | Bachelor of Architecture | SABYASACHI MUKHERJEE | GOLD |
| 2 | Bachelor of Architecture | SHANU SINGH | SILVER |
| 3 | B.Tech. in Bio-Medical Engineering | NITESH PRADHAN | GOLD |
| 4 | B.Tech. in Bio-Technology | SHIKHA AGRAWAL | GOLD |
| 5 | B.Tech. in Bio-Technology | SHIKHA JHA | SILVER |
| 6 | B.Tech. in Chemical Engineering | AKANKSHA KUMARI | GOLD |
| 7 | B.Tech. in Chemical Engineering | TANIYA KAR | SILVER |
| 8 | B.Tech. in Civil Engineering | NAINCY PARAKH | GOLD |
| 9 | B.Tech. in Civil Engineering | ASHVINI SINGH RAJPOOT | SILVER |
| 10 | B.Tech. in Computer Science & | | |
| 10 | Engineering | PRITHVI DEEP CHAWLA | GOLD |
| 11 | B.Tech. in Computer Science & | | |
| 11 | Engineering | PATEL MINAV SURESH | SILVER |
| 12 | B.Tech. in Electronics & Tele.Engg. | ANKITA AGRAWAL | GOLD |
| 13 | B.Tech. in Electronics & Tele.Engg. | PRAKRITI GUPTA | SILVER |
| 14 | B.Tech. in Electrical Engineering | SHREYASI SOM | GOLD |
| 15 | B.Tech. in Electrical Engineering | POOJASHREE DASH | SILVER |
| 16 | B.Tech. in Information Technology | PRACHI AGRAWAL | GOLD |
| 17 | B.Tech. in Information Technology | TWINKLE SAO | SILVER |
| 18 | B.Tech. in Mechanical Engineering | AYUSH SARASWAT | GOLD |
| 19 | B.Tech. in Mechanical Engineering | VINAY KUMAR | SILVER |
| 20 | B.Tech. in Metallurgical | | |
| | Engineering | SWAPNIL NIGAM | GOLD |
| 21 | B.Tech. in Metallurgical | | |
| | Engineering | LAXMI PRASAD PATLEY | SILVER |
| 22 | B.Tech. in Mining Engineering | KUMAR NANDAN | GOLD |
| 23 | B.Tech. in Mining Engineering | HARSHAL CHOUDHARY | SILVER |

MCA Programme 2013

| Sr. | | | |
|-----|---------------------------------|----------------|--------|
| No. | Programmes | Student Name | Medal |
| 1 | Master of Computer Applications | RAJDEEP MONDAL | GOLD |
| 2 | Master of Computer Applications | SONI KUMARI | SILVER |

M.Tech. Programme 2013

| Sr. | | | |
|-----|------------------------------------|---------------------------|--------|
| No. | Programmes | Student Name | Medal |
| 1 | M. Tech. in Applied Geology | BHAVESH KUMAR DEWANGAN | GOLD |
| 2 | M. Tech. in Applied Geology | MUNESH KUMAR SAHU | SILVER |
| 3 | M. Tech. in Chemical Engineering | SWATI GUPTA | GOLD |
| 4 | M. Tech. in Chemical Engineering | SANGITA YADAV | SILVER |
| 5 | M. Tech. in Civil Engineering | SUDHAKAR SINGHA | GOLD |
| 6 | M. Tech. in Civil Engineering | SOUMYA SUCHARITA DAS | GOLD |
| 7 | M. Tech. in Civil Engineering | MANEESH KUMAR SHUKLA | SILVER |
| 8 | M. Tech. in Electrical Engineering | VINITA THAWRANI | GOLD |
| 9 | M. Tech. in Electrical Engineering | PRINCY MATLANI | SILVER |
| 10 | M. Tech. in Mechanical Engineering | RAKESH SHARMA | GOLD |
| 11 | M. Tech. in Mechanical Engineering | HARPREET KAUR AASI | 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 : Dr. N. Vishwakarma

Name of the Scholar : 1. Deepak Tiwari
2. Piyush Sharma
3. Rakesh Verma

4. 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 : **Dr. P. Diwan**

Name of the Scholar : 1. Deepika Tirpude

2. Mukesh Kumar Badtya

3. Sagar Misra

Title of the thesis : Geology, Exploration and Mining at

Malanjkhand Copper Project, Malanjkhand,

Balaghat (M.P.)

Name of the Supervisor : **Dr. P. Diwan**

Name of the Scholar : 1. Aditya Kumar Mohanta

2. Bhavesh Kumar Dewangan3. Bhupendra Singh Chanap

4. 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.** Presented a paper in International Symposium on 'Role of Earth Sciences & Human Prosperity', held on at AMD, Hyderabad (23-25-Oct. 2013)
- **2.** Presented a paper in National Seminar on 'Recent Researches in Earth and Atmospheric Sciences, held at Pt. RSU Raipur (24-26- Feb. 2014)
- **3.** Attended training program on "Ground Water Resources Estimation" conducted by Rajiv Gandhi National Ground Water Training and Research Institute, Raipur (24- 28 June, 2013)
- **4.** Attended training program on "Integrated Watershed Development For Aquifer Management" Conducted by Rajiv Gandhi National Ground Water Training and Research Institute, Raipur (10-14 June, 2013)
- **5.** Attended training program on "Aquifer mapping: Approach" conducted by Rajiv Gandhi National Ground Water Training and Research Institute, Raipur (20-24 May, 2013)

Dr. D. C. Jhariya

1. *National Natural Resources Management System (NNRMS)* ISRO, Govt. of India, Sponsored Training completed conducted by India Institute of Remote Sensing, ISRO, Govt. of India, Dehradun (05 May–28 June, 2013).

Dr. N. Vishwakarma & Dr. D. C. Jhariya

- **1.** Participated in the Workshop on "E-Books in Libraries", organized by central Library, NIT Raipur (15-16 Nov., 2013)
- **2.** Attended Workshop on "Intellectual Property Rights" at NIT Raipur (14-15 Feb., 2014.

Publications:

Dr. P. Diwan

1. "Resource Effective Mapping through Integrated RS-GIS approach"; P. Diwan and D. K. Mishra; Inter. Journal of Engineering Research and Technology; Vol.2, Issue 10, Oct. 2013, pp. 1229-1233.

Dr. N. Vishwakarma

- "Petrography And Geochemistry of Charnockites From Asind, District Bhilwara Rajasthan: Implications For The Evolution" (Abstract); N. Vishwakarma and H. Thomas (32-25 Oct., 2013).
- **2.** "Geochemical characteristics of calc-silicate gneisses from Asind, district Bhilwara, Rajasthan" (*Abstract*); N. Vishwakarma and H. Thomas (24-26 Feb, 2014).

Research Projects:

Dr. D.C.Jhariya

1. 'Remote Sensing and GIS Approach for the Delineation of the Groundwater Potential Zone in the Doon Valley, Uttrakhand, India', completed under the supervision of Dr. R.S. Chatterjee, Scientist-F, Geoscience and Geohazard Department, Indian Institute of Remote Sensing, ISRO, Govt., of India, Dehradun as a NNRMS Trainee (May-June, 2013).

DEPARTMENT OF ARCHITECTURE

Faculty

Dr. Abir Bandyopadhyay Professor & Head B.Arch., M. Planning (Urban Planning),

Ph.D.

Shri. Debasis Sanyal Associate Professor M. ARCH. (By Research)

Mrs. Swasti Sthapak Associate Professor B.Arch., AITP

Shri Himanshu Poptani Assistant Professor B. Arch, M. Arch, Professional

Certificate in Environmental Planning

and Management

Seminar/ Workshop/Conferences/Short term courses:

Dr. Abir Bandyopadhyay

 Training of Architects: National Programme for Capacity Building of Architects in Earthquake Risk Management (NPCBAERM) Programme, NIT Raipur (27-31 January, 2014). **2.** Workshop on "Inspection reforms Experts Training Program" at School of Planning and Architecture, Bhopal (8th February, 2014).

Ar. Debashis Sanyal

- 1. Chairperson & key note speaker Smart Buildings India Summit 2013, Mumbai (04 October, 2013).
- **2.** Workshop on "*Inspection reforms Experts Training Program*" at School of Planning and Architecture, Bhopal (8th February, 2014).

Ar. Swasti Sthapak

- Training of Architects: National Programme for Capacity Building of Architects in Earthquake Risk Management (NPCBAERM) Programme, NIT Raipur (27-31January, 2014).
- **2.** International Conference on "Emerging Challenges and Issues in Environmental Protection" RITEE Raipur (23 -24 January, 2014).
- **3.** National Symposium on 'Sustainability and the Built Environment: Searching for Synergies', BESU, Howrah (21-22 February, 2014).

Ar. Himanshu Poptani

- 1. Two day workshop on "Training of Design Professionals, Architects & related Government Officials on Energy Conservation Building Code (ECBC)" under UNDP-GEF-BEE Project at Raipur (13-14 Sep., 2013).
- **2.** Three day Training on "Energy Conservation Building Code (ECBC)", organized by Bureau Of Energy Efficiency (BEE), at Ahmedabad, Gujarat (23 -25 Sep., 2013).
- **3.** One day sensitizing workshop on "Energy Conservation Building Code (ECBC)", Jointly organized by CREDA (Chhattisgarh State Renewable Energy Development Agency) and BEE (Bureau of Energy Efficiency), Ministry of Power, Govt. of India, New Delhi at Raipur (7 Feb. 2014).
- **4.** Two days workshop at NIT Raipur on "*Intellectual Property Rights*" (Under TEQIP-II) Organized by Industry-Institute Interaction Cell, NIT Raipur(14-15 Feb, 2014).

Publications:

Dr. Abir Bandyopadhyay

1. Fractals, Architecture and Sustainability Paper Proceedings of International Conference on "Emerging Challenges and Issues in Environmental Protection" RITEE Raipur (23-24 Jan., 2014).

Ar. Debashis Sanyal

- 1. INTRODUCTION OF SUSTAINABILITY IN SUPER TALL HOUSING: ARCHITECTURAL IMPLICATIONS, Paper Proceedings of International Conference on "Architecture & Engineering in Urban Development 2013", Colombo, ISBN 978-955-4543-18-8, pp67-78 (20-21 December, 2013).
- 2. POSSIBILITIES OF POLLUTION IN INDOOR AIR DUE TO USAGE OF CONVENTIONAL MATERIALS IN RESIDENTIAL CONSTRUCTION, All India Seminar on Innovations in Green building technology 2014, Nagpur, pp87-93 (17-18 January, 2014).

3. DEVELOPMENT OF INTELLIGENT SELF SUFFICIENT HOUSING AS COMPONENT OF ECOCITY IN DEVELOPING COUNTRIES, National Symposium On Sustainability And The Built Environment: Searching For Synergies 2014, Kolkata, pp76-80 (21-22 February, 2014).

Ar. Swasti Sthapak

- **1.** Courtyard houses and overview Paper Proceedings of International Conference on "Emerging Challenges and Issues in Environmental Protection" RITEE Raipur (23-24 Jan., 2014).
- **2.** "Bioclimatic significance of courtyard in Courtyard houses" Paper Proceedings of National Symposium on Sustainability and the Built Environment: Searching for Synergies, BESU, Howrah (21-22 February, 2014)

Ar. Himanshu Poptani

1. International Conference: Presented a research paper entitled: "Improper Solid Waste Management Increasing Material Consumption in Buildings: A Case of any Indian Society" at Young Researchers in Sustainable Building (YRSB) forum, held at Czech Technical University (CTU) in Prague, Czech Republic. ISBN 978-80-247-5016-3 (Printed edition) ISBN 978-80-247-5019-4 (Electronic edition) (25 June, 2013).

Awards / Any other Achievements:

Dr. Abir Bandyopadhyay

- **1.** PhD Adjudication of Harendra Bohra, Department of Architecture, BESU Howrah (March 2014).
- **2.** PhD Adjudication of G.Viswanandha Kumar, Andhra University Vishakhapatnam (AP) (Januray 2014).
- **3.** Invited at MPIET Gondia for conducting Progress Seminar for M.Arch Students (December 2013).
- 4. Invited for special lecture at BNCA Pune (August 2013).

Ar. Debashis Sanyal

- Member, W098-Customised Industrial Construction, W119- Intelligent and Responsive Buildings, International Council for Research and Innovation in Building and Construction (CIB), Netherlands (2013-2014).
- **2. Expert lecture:** PREFABRICATION OF BUILDING COMPONENTS, Department of Architecture & Planning, Visvesvaraiya National Institute of Technology, Nagpur (24 July, 2013).
- **3. Expert lecture:** DEVELOPMENT OF INTELLIGENT SELF SUFFICIENT HOUSING AS COMPONENT OF ECOCITY, International Conference on "Emerging Challenges And Issues In Environmental Protection", Raipur Institute Of Technology, Raipur (24 January, 2014).

DEPARTMENT OF BIOMEDICAL ENGINEERING

Faculty

Shri A. K. Poonia Associate Professor & Head B.E., M.Tech.

Shri Bikesh Kumar Singh Assistant Professor B.E., M.Tech.

Dr. Arindam Bit Assistant Professor M.E. PhD.

Dr. R.Periyasamy Assistant Professor B.E. PhD.

Mrs Neelamshobha Nirala Assistant Professor M.Tech

M. Tech Thesis Completed

Name of the Supervisor : Bikesh Kumar Singh

Name of the Scholar : Piyanka Batra

Title of the thesis : Speckle noise reduction in ultrasound

images using fuzzy shrinking technique.

(Electrical Engg.)

Seminar/ Workshop/Conferences/Short term courses:

Mr. Bikesh Kumar Singh

- **1.** Workshop on "*E –books in Libraries*" NIT Raipur (15-16 November, 2013).
- **2.** Workshop on "Intellectual Property Rights" NIT Raipur (15-16 February, 2014).
- **3.** Soft Computing Techniques for Optimization (17-21 Feb. 2014).
- **4.** Support Vector Machine in Pattern Recognition and its Applications in Biological Sciences (23-27 January, 2014).
- **5.** MATLAB Based design and implementation of advanced control, signal and image processing algorithms (16-21 August, 2013).
- **6.** Soft Computing tools and practice on signal and image processing application (09-14 July, 2013).
- 7. Fundamentals of Lab View (07 November, 2013)
- **8.** MATLAB Programming and its Engineering Applications mpea-2013 (26-30 December, 2013)

Mr. Arindam Bit

- 1. ASME Heat and Mass Transfer Conference (28-31 December, 2013).
- **2.** International Workshop on "Advances in Healthcare Engineering" (02-04 January, 2014)
- 3. Workshop on "Fundamentals of LabView" (07 November, 2013).
- 4. Workshop on "Advances in Computational Neuroscience" (24-29 March, 2014)
- **5.** STTP on A Glimpse of Differential Equations in Science and Engineering (10-14 March, 2014)
- **6.** Workshop on "Intellectual Property Rights" (14-15 February, 2014).

Mr. R.Periyasamy

- 1. Workshop on" Fundamentals of Labview" NIT Raipur (7th November 2013).
- **2.** Workshop on "*E -books in Libraries*" NIT Raipur (15-16 November, 2013).
- **3.** 1^{st} Cardiovascular Bio engineering symposium, at IIT Delhi (12 December 2013).

- **4.** Workshop on "Intellectual Property Rights" NIT Raipur (15-16 February, 2014).
- 5. Workshop on Labview and Matlab simulink (28-30 March, 2014).

Mrs. Neelamshobha Nirala

- **1.** Workshop on "Intellectual Property Rights" NIT Raipur (15-16 February, 2014).
- 2. Short term training programme on "A GLIMPS OF DIFFERENTIAL EQUATION IN SCIENCE AND ENGINEERING" NIT Raipur (10-14 March, 2014).
- 3. Workshop on "Academic Ethics and IPR" NIT Raipur (04-05 April, 2014).
- 4. Workshop on "LABVIEW & MATLAB" in NIT Raipur (28-30 March, 2014).

Publications:

Mr. Bikesh Kumar Singh

1. [Speckle noise reduction in ultrasound images using fuzzy shrinking techniques] in proceedings of Artcom 2013, pp272-276, 2013. (international) (20-21 September, 2013).

Mr. Arindam Bit

- 1. Assessment of rheological models for prediction of transport phenomena in stenosed artery; Progress in Computational Fluid Dynamics- An International Journal; In Press (November 2013)
- **2.** Investigation of Blood Flow Dynamics in Blood Vessels with Aneurysm; ASME Journal of Thermal Science and Engineering; Accepted (March 2014).
- **3.** Investigation Of Blood Flow Dynamics In Blood Vessel With Aneurysm; Proceedings of 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference; IIT Kharagpur (December 2013).
- **4.** Comparative study of Flow Structure in Arteries containing Stenosis and Aneurysm; Indian Conference on Applied Mechanics, ISBN: 978-93-5137-273-8; IIT Madras (July 2013).
- **5.** Designing and development of pulsatile cardiovascular flow simulator and comparative assessment of flow through stenosed blood vessel considering position of the chamber of blood, National Conference on Biomechanics, SOAU Bhubaneswar (March 2014).

Mr. R.Periyasamy

1. "Foot pressure distribution differences between young adult and older subject: a biomechanical parameters analysis" International Journal of Bio medical engineering and technology, **Inderscience publisher** 2013,Vol 13(3),201-217 (December 2013).

DEPARTMENT OF BIOTECHNOLOGY ENGINEERING Faculty

| • | | |
|-------------------------|----------------------------|--------|
| Shri A. K. Poonia | Associate Professor & Head | M.E. |
| Dr. Lata S. B. Upadhyay | Assistant Professor | Ph.D |
| Dr. Pratima Gupta | Assistant Professor | Ph.D |
| Dr Awanish Kumar | Assistant Professor | Ph.D |
| Mrs J Satya Eswari | Assistant Professor | M.Tech |

Seminar/ Workshop/Conferences/Short term courses:

Dr Lata Sheo Bachan Upadhyay

1. One Week Short term Course on "Technical Launching on Environmental Issue" (26 – 30 June, 2013).

Dr Lata Sheo Bachan Upadhyay & Dr Pratima Gupta

1. Workshop on "E-books in Libraries" NIT Raipur (15-16 November, 2013).

Dr Lata Sheo Bachan Upadhyay, Dr Pratima Gupta, Dr. Awanish Kumar & Mrs J. Satya Ishwari

1. Workshop on "Intellectual Property Rights in "NIT Raipur (15-16 February, 2014).

Dr Lata Sheo Bachan Upadhyay, Dr Pratima Gupta & Mrs C M Nisha

1. National Workshop on "Support Vector Machine in Pattern recognition & its application in Biological Sciences" (23 -27 January, 2014).

Publications:

Dr. Lata Sheo Bachan Upadhyay

- **1.** Dual Immobilization of Biomolecule on the Glass Surface Using Cysteine as a Bifunctional Linker, Process Biochemistry (Accepted) (March 2014).
- **2.** Synthesis and Characterization of Cysteine Functionalized Silver Nanoparticles for Biomolecule Immobilization, Bioprocess and Biosystems Engineering (Accepted) (March 2014)

Dr. Pratima Gupta

- **1.** Study of effect of nutitional factirs for optimization of lipase production by lipolytic fungi, British Microbiology Journal (Accepted) (March 2014).
- **2.** Design of microbial fuel cell and its transition to microbial electrolytic cell for hydrogen production by electrohydrogenesis, Indian journal of Experimental Biology (October 2013).
- **3.** Exoelectrogens & their potential applications, The 54th Annual Conference of the Association of Microbiologists of India (17 20 November, 2013).
- **4.** Microbial exopolysaccharides and its characteristics a novel polymeric material, International Conference on Polymer: Vision and Innovation (19 2 Feb., 2014).

Dr Awanish Kumar

- **1.** Improved production strategies and multifarious applications of a natural biopolymer Epsilon-Poly-L-Lysine. *Process Biochem (Accepted)* (February, 2014).
- **2.** Molecular characterization and polyclonal antibody generation against core component CagX protein of *Helicobacter pylori* type IV secretion system. *Bioengineered* (January 2014).
- **3.** Tocopherol from seeds of *Cucurbita pepo* against diabetes: Validation by *in vivo* experiments supported by computational docking. *J Formos Med Assoc* (November 2013).

- **4.** Strategies for the production of recombinant protein in *Escherichia coli. Protein J* (August 2013)
- **5.** Mass spectrometry based proteomic analysis of *L. donovani* soluble proteins in Indian clinical isolate. *Pathog Dis* (February 2014).
- **6.** Feasibility of available vaccines for management of Kala -azar: A fatal tropical disease (Abst No.: 6-P-8), Pg 132. XII international conference on Vector & Vector Borne Disease (16 18th September, 2013)

Research Projects:

Dr Lata Sheo Bachan Upadhyay

- **1.** Chemical and enzymatic modification of NSAID to overcome their side effect, CCOST (2 Lakh) (2012-2014).
- **2.** Lipase catalyzed bio diesel production from non edible oils by lipolytic bacteria, SERB (DST) (19 Lakh) (2012-2015)

Dr Pratima Gupta

1. Enzymatic hydrolysis of rice husk &straw and its conversion into biohydrogen by dark fermentation. CCOST (4.72 Lakh) (November 2013).

DEPARTMENT OF CHEMICAL ENGINEERING

Faculty

| • | | |
|----------------------|---------------------|----------------------|
| Dr (Mrs) A B Soni | Professor & Head | BE, M. Tech., Ph. D |
| Dr. P.K Chaudhary | Associate Professor | B.E, M Tech., Ph.D |
| Shri Bidyut Mazumdar | Associate Professor | M. Tech., MBA |
| Shri A K Poonia | Associate Professor | B.E, M. Tech. |
| Shri V K Singh | Assistant Professor | B.E, M. Tech. M.B.A. |
| Dr. Amit Keshav | Assistant Professor | B.E, M.Tech, Ph.D |
| Shri Dharam Pal | Assistant Professor | B.E., M.Tech |
| Dr. Prabir Ghosh | Assistant Professor | Ph.D |
| Dr. J. Anand Kumar | Assistant Professor | Ph.D |
| Dr. R. Manivarnan | Assistant Professor | Ph.D |

Ph.D Thesis Completed

Name of the Supervisor : **Dr. (Mrs.) A. B. Soni**Name of the Scholar : Mrs. Pooja V. Shrivastava

Title of the thesis : Hydrodynamic Aspects of Three Phase

Semifluidized Beds

Name of the Supervisor : **Dr. P.K Chaudhary** Name of the Scholar : Abhinesh Prajapati

Title of the thesis : Treatment of Waste Water of Rice Grain

Based

Distillery

M. Tech Thesis Completed

Name of the Supervisor : Mr Bidyut Mazumdar

Name of the Scholar : Swati Gupta
Title of the thesis : Vano particles
Name of the Supervisor : **Dr. Amit Keshav**

Name of the Scholar : Sangeta

Title of the thesis : 'Effect of Temperature on Extraction

Kinetics of Citric acid.

Name of the Supervisor : **Mr. V.K.Singh** Name of the Scholar : Shraddha Verma

Title of the thesis : Characterization of lake water and

investigation for suitable treatment method

Name of the Supervisor : **Mr.Dharm Pal**Name of the Scholar : Sangeeta Yadav

Title of the thesis : Effect of temperature on extraction kinetics

of citric acid

Name of the Supervisor : Mr. Bidyut Mazumdar

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:

Mr. Bidyut Majumdar

1. National Workshop on IPR, Feb 2014.

Dr. Amit Keshav

- 1. National Conference Asp-13, VNIT on 3-7 June, 2013
- 2. BECT-13, MNIT on 24-26 December, 2013

Mr. V.K.Singh

- 1. International Conference, ICACE-201305 (06th April, 2013).
- 2. ICACE-2013 on 05-06 April, 2013.
- **3.** M. Jha, V.K. Singh: Assessment of energy efficiency and waste heat recovery in reheating furnace of a steel plant by using process heating assessment and survey tool(PHAST) International Conference on advances in chemical engineering ICACE-2013 NIT Raipur (05-06 April, 2013)
- **4.** S. Hedau, V.K. Singh, B.Kartheek, P. K. Majee: Steady state simulation of methyl acetate reactive distillation column using aspen plus; International Conference on advances in chemical engineering ICACE-2013 NIT Raipur (05-06 April, 2013)
- A.K. Singh, V.K. Singh: Desalination of water using carbon nano-tubes; International Conference on advances in chemical engineering ICACE-2013 NIT Raipur (05-06 April, 2013)
- **6.** V.K. Singh, A.B. Soni, R.K. Singh: Biofules from biomass International Conference on advances in chemical engineering ICACE-2013 NIT Raipur (05-06 April, 2013)

Mr. Dharm Pal

- 1. National Conference "Intellectual Property Rights" (14 15 Februry, 2014).
- 2. National Conference "Cloud Computing" (20 21 July, 13).

Dr. Prabir Ghosh

1. "E-Books in Libraries" NIT Raipur (15 – 16 November, 2013).

Dr. J. Anand Kumar

1. "E-Books in Libraries" NIT Raipur (15 - 16 November, 2013).

Dr. R. Manivarnan

1. Matlab Programming & its Engineering Applications (26 – 30 December, 2013).

Publications:

Dr. P.K. Chaudhary

- International Conference, Omprakash Sahu, Bidyut Mazumdar and P.K. Chaudhary, Treatment of wastewater by electrocoagulation: a review, Environmental Science and Pollution Research (SCI) 2013, 17 November, Page No. 1-17. DOI: 10.1007/s11356-0132208-6.
- 2. International Conference, Abhinesh Kumar Prajapati, Rumi Choudhary, Kumar Verma, Parmesh Kumar Chaudhari and Amit Dubey, Decolorization and removal of chemical oxygen demand (COD) of rice grain based biodigester distillery effluent (BDE) using inorganic coagulants. Desalination and wastewater treatment (SCI) 2013, 22 November pabe no. 1-11. DOI: 10.1080/19443994.2013.862741
- **3.** International Conference, Abhinesh Kumar Prajapati and Parmesh Kumar Chaudhari, Electrochemical treatment of rice grain based distillery effluent: COD and Color removal Environmental Technology (SCI) 2013, August page no. 1-8, DOI:10.1080/09593330.2013.824507.
- **4.** International Conference, Abhinesh Kumar Prajapati and Parmesh Kumar Chaudhari, Electrochemical treatment of rice grain based distillery biodigester effluent, Chemical Engineering and Technology (SCI) 2014, February page no. 1-9. 37.
- **5.** International Conference, Bidyut Mazumdar and Parmesh Kumar Chaudhari, Electrochemical treatment of biodigester effluent of maize based starch industry: COD and Color removal, Desalination and wastewater treatment (SCI), March, 2014.
- **6.** International Conference, Bidyut Mazumdar and Parmesh Kumar Chaudhari, Indian Journal of Chemical Technology (SCI), March 2014 (Accepted).

Mr. V. K. Singh

- 1. Singh V. K., Soni A. B., Kumar S., Singh R. K.: Pyrolysis of Sal Seed to Liquid Product Bioresorce Technology, January, 2014, Pag- 151, 432-5
- **2.** Manjari Jha, V. K. Singh: Assessment of energy efficiency in reheating furnace of a steel plant by using process heating assessment and survey tool(PHAST) Recent Research in Science and Technology 2013,5(5):33-36.

Awards / Any other Achievements:

Mr. V. K. Singh

1. Member of SEAC Ministry of Environment & Forest New Delhi Govt of India.

DEPARTMENT OF CHEMISTRY

Faculty

| Dr. (Mrs) Fahmida Khan | Professor & Head | M.Sc., Ph.D. |
|-----------------------------|---------------------|--------------|
| Dr. (Mrs) Kavita Tapadiya | Assistant Professor | M.Sc, Ph.D. |
| Dr. Shyama Prasad Mahapatra | Assistant Professor | M.Sc., Ph.D. |
| Dr. Santhosh Penta | Assistant Professor | Ph.D |

Doctoral Thesis Completed (PhD)

Name of the Supervisor : Dr. (Mrs.) Fahmida Khan

Name of the Scholar : Sonalika Agrawal

Title of the thesis : Evolvement of advanced methods of analysis for

spent nuclear fuel processing in India

Name of the Scholar : Kabita Kumari Sathapathy

Title of the thesis : Influence of Fuels on the Luminescence Properties

of Rare Earth Doped Aluminates based Phosphorssynthesized by Combustion technique.

Seminar/ Workshop/Conferences/Short term courses:

Dr. (Mrs.) Fahmida Khan

- 1. Short term course on technical launching on environmental issues from National Institute Technology, Raipur (C.G.) (26 30 June, 2013).
- **2.** Short term course on Recent Trends in material Sciences II National Institute Technology, Raipur (C.G.) (30-09-13 to 04-10-13).
- **3.** Workshop on E-books in libraries National Institute Technology, Raipur (C.G.) (15 16 November, 2013).
- **4.** National Conference VIMARSH 2013 Chouksey Engineering college Bilaspur, (C.G.) (12-9-2013)
- National Seminar on Recent Advances in Meteorology, Climatology & Environment Bhilai Institute of Technology, Raipur, Chhattisgarh (25 Oct, 2013)
- **6.** International Conference on Quality Management (ICQM 2014), South Asia institute of Science & engineering and National Institute of Technology Raipur, Raipur, Chhattisgarh on (22 23 March, 2014).

Dr.(Mrs.)Kavita Tapadia

- Monitoring of fluoride contamination in ground water of south-east region of Chhattisgarh, India: correlation with physico-chemical parameters, poster presentation, International Conference on Advances in chemical engineering ICACE-2013, NIT, (5-6 April, 2013).
- **2.** "Silver Nanoparticles As An Concentrating And Affinity Probe For The Determination Of Cysteine International conference on nanotechnology in the service of health, environment and society, Chandigarh (13-15 Feb. 2014).
- **3.** Spectrophotometric Determination Of Iron In A Single Drop Of Environmental Sample, International conference on emerging challenges and issues in

- environmental protection, Raipur Institute of Technology, Raipur (23-24 Jan. 2014).
- **4.** Nano Drop Spectrophotometric Determination Of Bismuth In Environmental Sample Using Novel Organic Reagent, International conference on emerging challenges and issues in environmental protection, Raipur Institute of Technology, Raipur (23-24 Jan. 2014).
- **5.** A Simple Colorimetric Determination Of Iron In Biological Sample At Nano Level"International Conference on Advanced Research Applications in Engineering and Technology, Rungta Collrge Raipur (23 24 March, 2014).
- **6.** Organise self finance One week short term course on "Technical launching on environmental issues. (26-30 June, 2013).

Dr. Shyama Prasad Mahapatra

- S. K. Tiwari and S. P. Mahapatra (Corresponding Author), Relaxation behavior of nano-graphite reinforced chlorobutyl elastomer nanocomposites, International Conference on Advancements in Polymeric Materials APM Cipet Bhubaneswar, India (14-16 Feb, 2014)
- 2. Janita Saji, A. Khare, S. P. Mahapatra (Corresponding Author), Morphology, mechanical, dynamic mechanical and percolation studies of silicon elastomer nanocomposites, International Conference on Advancements in Polymeric Materials APM 2014, Cipet Bhubaneswar, India (14-16 Feb, 2014)
- 3. S. K. Tiwari, B. P. Sahoo, S. P. Mahapatra (Corresponding Author), Physico-Mechanical, Dynamic Mechanical and Bound Rubber Properties of Nanographite Reinforced Chlorobutyl Nanocomposites, International Conference on Advances in Chemical Engineering, ICACE-2013, NIT Raipur, India (5 6 April, 2013)
- **4.** J. Saji, A. Khare, S. P. Mahapatra (Corresponding Author), Studies on Silicon Elastomer Nanocomposites: AC Conductivity and Positive Temperature Coefficient, International Conference on Advances in Chemical Engineering, ICACE-2013, NIT Raipur, India (5 6 April, 2013).

Dr. Santhosh Penta

- 1. Recent trends in material science-II" organized by Department of Physics, National Institute of Technology-Raipur, C.G (Sep-30 –Oct, 4 2013).
- **2.** Recent Advances in Synthesis and Medicinal Applications of Heterocyclic Compounds" (RASMAHC), held at Department of Chemistry, National Institute of Technology, Warangal (8-10 November 2013).
- 3. Given a lecture entitled "A facile synnthesis of pyridinyl 1,2,4-triazinyl-chromen-2-derivatives via multicomponent approach" for oral presentation in $32^{\rm nd}$ Annual Conference Indian Council of Chemists, Department of studies in chemistry, Karnatak University, Dharwad (28-30 November, 2013).
- **4.** Accepted a paper in 6th international conference on "*Drug discovery &therapy on synthesis of novel* 1-(4-(2H-chromen-3-yl)thiazol-2-yl)-3,5 dimethyle-2-phenyl-1-H-,2-H-,3,4 bi pyrazole-5-ol derivatives held at Dubai (10-12 feb, 2014).
- **5.** Given an oral presentation on "An efficient one-pot synthesis of pyran substituted dihydropyrimidine-2(1H)-ones and thiones and their anticancer activity: A Biginelli approach" in INTERNATIONAL CONFERENCE (organized by department of chemistry vikrama Simhapuri University and UNT health

- science center Fort Worth, Texas, USA) conducted in vikrama simhapuri university, Nellore, andhrapradesh (27-29 December, 2013).
- **6.** Participated in a workshop "ACADEMIC ETHICS AND IPR organized by national institute of technology and Chhattisgarh council of science and technology at NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR (04-05 April, 2014)
- **7.** Given an oral presentation in Recent Development in Chemical Science and Technology: Young Scientists' Meet (RDCST -2014) (NIT, ROURKELA) (15-16 March, 2014).

Publications:

Dr. (Mrs.) Fahmida Khan

- 1. Sonalika Agrawal and Fahmida Khan, "Hydroxamic acids as reductometric titrants for determination of Cerium in Alloys", *Chemical Science transaction* Vol. 2 No.3, 847-852 (July 2013).
- 2. Fahmida Khan, Sonalika Agrawal and S.Ganesh, "Reaction Mechanism of The Ceric Oxidation of Benzohydroxamic Acid in Different Acid Medium", Research Journal of chemistry and Environment, Vol. 17, 5, 4-12 (May 2013).
- **3.** Agrawal Sonalika, Khan Fahmida and Ganesh S. "Study on chelation of Uranium with Benzohydroxamic acid by spectrophotometry", *Research Journal of chemistry and Environment*, Vol.18, 1, 77-81 (Jan. 2014).

Dr. Shyama Prasad Mahapatra

- 1. Shashi Kant Tiwari, Ram Naresh Prasad Choudhary, Shyama Prasad Mahapatra (Corresponding Author) Effect of multiwalled-carbon-nanotube and temperature on dielectric and impedance spectroscopy of chlorobutyl elastomer nanocomposites, Journal of Elastomers and Plastics, 1-24, February 2014, DOI: 10.1177/0095244314526742.
- J. Saji, A. Khare, R. N. P. Choudhary and S. P. Mahapatra (Corresponding Author) Visco-elastic and dielectric relaxation behavior of multiwalled carbon-nanotube reinforced silicon elastomer nanocomposites, Journal of Polymer Research 21:341, 1-13, January2014. DOI: 10.1007/s10965-013-0341-z.
- 3. S. K. Tiwari, B. P. Sahoo, S. P. Mahapatra (Corresponding Author), Morphology, mechanical, bound rubber, swelling and dynamic mechanical studies of chlorobutyl elastomer nanocomposites: effect of multiwalled carbon nanotube and solvent, Journal of Polymer Engineering, 34:1, 41-52, December 2013. DOI: 10.1515/polyeng-2013-0235,

Research Projects

Dr. Santhosh Penta

1. Received a Mini Research Project entitled "Design and synthesis of novel potent heterocyclic compounds and their biological evaluation" worth 4,95,000/- has been sanctioned to me by CCOST, Raipur on 31-03-14. CCOST, Raipur on 31-03-2014, Ongoing.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Faculty

| Dr. Naresh Kumar Nagwani | Assistant Professor & Head | Ph.D |
|---|--|--------------------------|
| Shri. Dilip Singh Sisodiya | Assistant Professor | M.Tech. |
| Shri. Pradeep Singh | Assistant Professor | M.Tech. |
| Dr. Manu Vardhan Ms. Aakanksha Sharaff | Assistant Professor Assistant Professor | M.Tech., Ph.D M.Tech. |
| Ms. Veena Anand Shri Jasraj Meena | Assistant Professor Assistant Professor | M.Tech. M.Tech. |

Seminar/ Workshop/Conferences/Short term courses:

Miss. Veena Anand

1. Workshop on "Communication Networks" under TEQIP-II at NIT Hamirpur (16-20 December, 2013).

Mr. Jasraj Meena

1. Workshop on Intellectual Property Rights under TEQIP-II at NIT Raipur (14-15 Feb, 2014)

Publications:

Dr. Naresh Kumar Nagwani

- Generating taxonomic terms for software bug classification by utilizing topic models based on Latent Dirichlet Allocation.ISBN-978-1-4799-2294-9 (20th Nov., 2013).
- **2.** ICQM2014-010-Systematic Review on Quality Assessment of Test Case Prioritization Techniques in Software Testing, Akash Goyal, Aakanksha Sharaff, Dr. N. K. Nagwani. (22nd March, 2014).

Mr. Pradeep Singh

 Cross Company and within Company Fault Prediction using Object Oriented Metrics, Published by Foundation of Computer Science, New York, USA from July 2013.

Dr. Manu Vardhan

1. "TBFR: A Threshold Based File Replication Approach for Increased File Availability and its Formal Verification". Vol. 5, No. 2, 2013, pp. 97-121, DOI:10.1504/IJICT.2013.053110 (8th April, 2013).

Miss. Veena Anand

1. "Simulation based Performance comparison of AODV, DSR and DSDV Protocols under varying node density", The International Conference on Recent Trends in Engineering Sciences – ICRTES'13 (23-24 Nov, 2013).

Mr. Jasraj Meena

 Jasraj Meena, Manu Vardhan, and Ritu Garg "To Optimize Task Tcheduling in Heterogeneous Computing Environment" in 7th International Conference on Advance Computing and Communication Technologies (ICACCT-2013) ISBN:978-93-83083-38-1 (16th November, 2013).

Research Projects:

Mr. Naresh Kumar Nagwani

1. "Predictive and Visual Analysis of the Price Distribution Information of Rice and Wheat across India" (4.5lakhs) (Dec. 2013).

Mr. Pradeep Singh

1. "Development of a comprehensive model for software fault prediction" (5Lakhs) (Dec. 2013)

Awards / Any other Achievements:

Mr. D S Sisodia

1. Summer Research Fellowship by IASC Bangalore (19/05/2013 -14/07/13)

DEPARTMENT OF CIVIL ENGINEERING

Faculty

| Dr. R. K. Tripathi | Professor & Head | B. E., M. Tech., Ph. D. |
|--------------------------|---------------------|-------------------------|
| Dr. M. K. Verma | Professor | B. E., M. Tech., Ph. D. |
| Dr. U. K. Dewangan | Professor | B. E., M. E., Ph. D. |
| Dr. Gangadhar Ramtekkar | Professor | B. E., M. E., Ph. D. |
| Dr. Samir Bajpai | Professor | B. E., M. E., Ph D |
| Dr. Shirish V Deo | Assistant Professor | B. E., M. E., Ph. D. |
| Shri Ajay Vikram Ahirwar | Assistant Professor | M.Tech |
| Shri Laxmikant Yadu | Assistant Professor | M.Tech |
| Shri Ishtiyaq Ahmad | Assistant Professor | M.Tech |
| Shri Mani Kant Verma | Assistant Professor | M.Tech |
| Shri Mohit Jaiswal | Assistant Professor | M.Tech |
| Ms. Meena Murmu | Assistant Professor | M.Tech |
| Shri Govardhan Bhat | Assistant Professor | M.Tech |
| Shri Sunny Deol G | Assistant Professor | M.Tech |
| Ms. Ansu Thomas | Assistant Professor | M.Tech |
| | | |

Ph.D Thesis Completed

Name of the Supervisor : Dr. Gangadhar Ramtekkar

Name of the Scholar : Mr. N. P.Dewangan

Title of the thesis : Response modeling of Raipur limestone aquifer

under

natural uncertainty with special focus to earthquake excitation using soft boundary

computations

M. Tech Thesis Completed

Name of the Supervisor : Dr. M. K. Verma & Dr. R. K. Tripathi

Name of the Scholar : Aryak Shori

Title of the thesis : Safety Analysis of Sondur & Rupsiabagar

Kashiabara

Dams

Name of the Scholar : Gaurva Verma

Title of the thesis : Safety Analysis of Gangrel & Hirakud Dams

Name of the Scholar : J Vishwakarma

Title of the thesis : Application of Remote Sensing & Geographical

Information System in Groundwater Prospects

Mapping.

Name of the Supervisor : Dr. M. K. Verma

Name of the Scholar : P Agrawal

Title of the thesis : Optimization of Canal Irrigation Scheduling for

Kharrif

Crops

Name of the Scholar : Maneesh K. Shukla

Title of the thesis : Flood Analysis And Flood Control At Rajim (C.G.)

Under MRP Complex

Name of the Supervisor : Dr. (Mrs.) C. P. Devatha & Dr. M. K. Verma

Name of the Scholar : Vaibhav Deshpandey

Title of the thesis : Estimation of Soil Erosion by Remote Sensing and

Geographical Information System for Kulhan

Watershed, Kharun River Basin

Name of the Scholar : Sudhakar Singha

Title of the thesis : Study of Changes to the Groundwater System Due

to

Mining Activity Using Visual Modflow.

Name of the Scholar : S.S. Das

Title of the thesis : Assessment and Mapping of Ground Water Quality

of

Surrounding Mining Region Using GIS

Seminar/ Workshop/Conferences/Short term courses:

Dr. R. K. Tripathi

- **1.** IIE Int'l Conference on "Emerging trends in Engineering and technology-ICETET 2013" at Patong Beach, Phuket, Thailand (7-8 December, 2013).
- **2.** Geo- Congress 2014 on "Geo-characterisation and modeling for sustainability" at Atlanta, US (23-26 February, 2014).

Dr. M. K. Verma

- 1. Delivered Expert Lecture on SVM (23-27 January, 2014).
- 2. India Data Portal A Govt. of India Initiative and Status" (22 July, 2013).
- **3.** Training Program on Image Processing Software- ERDAS & GeoMedia (27-29 August, 2013).
- **4.** Workshop on "Digital Cartographic Techniques of Map Updation & Digital Image Fusion for Large Scale Mapping & Entropy for Accuracy Assessment" (31st October, 2013).

- 5. Workshop on Visual MODFLOW (18 -22 November, 2013).
- **6.** Special Invited Lecture on "Introduction to Central Laboratory Facility & IPR" (15 January, 2014).
- **7.** Workshop on SVM in Pattern Recognition & its Applications in Biological Sciences (23–27 January, 2014).

Dr. Samir Bajpai

- **1.** Application of Non-conventional Materials and Technologies in rural Roads, NRDA PMGSY and IIT Bhubaneswar (14 -15 February, 2014).
- **2.** Workshop on "Support Vector Machine in Pattern Recognition & its Application in Biological Sciences", Sub-DIC Bioinformatics Centre and NIT Raipur (23.-27 January, 2014).

Prof. Laxmikant Yadu

- **1.** 2nd Conference of Transportation Research Group of India (2nd CTRG) Agra, India (12-15 December, 2013).
- **2.** Advances in engineering and Technology Convergence (AETC) Organised by Inter science Research Network, at Bangkok Thailand (28 April, 2013).

Prof. Ishtiyaq Ahmad

- 1. "MIKE FLOOD & MIKE BASIN", Civil Engg. NIT Rourkela (20-24 January, 2014).
- **2.** "Cloud Computing", Dept. of Computer Appl., Dept. of Computer Science & Inforamtion Tech., NIT Raipur (20-21 July, 2013).
- 3. "Image Processing Software ERDAS & GEOMEDIA" (27 -29 August, 2013).
- **4.** Co-cordinatior, One week national workshop on Visual MODFLOW (18-22 November, 2013).
- Co-cordinator, one day Workshop on Digital Cartographic Techniques for map updation & Digital Image Fusion for large Scale Mapping & Entropy for Accuracy Assessment (31st October, 2013).
- **6.** Organizing Member, National Workshop on Suport Vector Machine in Pattern Recognition & its Application in Biological Sciences. Sub-DIC Bioinformatics, NIT Raipur (23 -27 January, 2014).
- **7.** Organizing Member for Special Invited Lecture on Introduction to Centrallaboratory Facility & IPR, Sub-DIC Bioinformatics, NIT Raipur (15 January, 2014).

Prof. Mohit Jaiswal

1. "Computer Analysis of framed Structures", 3 day workshop organized by IVS Noble Solutions at IIT Kharagpur, Kolkata campus. (26-28 March, 2014).

Prof. Mani Kant Verma

- 1. Training Course on SWAT Modelling at NIH Roorkee (16-20 December, 2013).
- **2.** Introduction to Central Laboratory Facility & IPR at NIT Raipur (15 Jan. 2014).
- **3.** Erdas Emagine, GeoMedia and ArcGIS Software training Course at NIT Raipur (27-29 August, 2013).
- 4. National Workshop on Visual Modflow (18 22 November, 2013).

Prof. Meena Murumu

1. Introduction to Central Laboratory Facility & IPR at NIT Raipur (15 Jan. 2014).

Prof. Govardhan Bhat

- 1. 'Intellectual Property Rights', Industry –Institute Interaction cell, NIT Raipur (14 15 Feb, 2014).
- **2.** Co-cordinator, one day Workshop on Digital Cartographic Techniques for map updation & Digital Image Fusion for large Scale Mapping & Entropy for Accuracy Assessment (31 October, 2013).
- **3.** Organizing member, National Workshop on Visual Modflow (18 22 Nov. 2013).
- 4. One day workshop on J.K Cement Workshop (08 March, 2014).
- **5.** One day LABVIEW workshop (31 Jan., 2014).

Prof. Ansu Thomas

- **1.** Introduction to Central Laboratory Facility & IPR at NIT Raipur (15 Jan. 2014).
- **2.** Short course on Soil Structure Interaction: computer applications and Material models (21 24 Jan. 2014).
- **3.** 'Intellectual Property Rights', Industry –Institute Interaction cell, NIT Raipur (14 15 Feb. 2014).

Publications:

Dr. R. K. Tripathi & L.K. Yadu

1. "Bearing Capacity of Square Footing on Soft Soil Stabilized with Rice Husk Ash – An Experimental Study". International Conference on Emerging Trends in Engineering and Technology (ICETET'2013) Dec. 7-8, 2013 Patong Beach, Phuket (Thailand) (7-8 December, 2013).

Dr. M. K. Verma & Prof. Ishtiyaq Ahmad

- Ishtiyaq Ahmad and M.K. Verma, "Application of USLE Model & GIS in Estimation of Soil Erosion for Tandula Reservoir", International Journal of Emerging Technology & Advanced Engineering, Volume 3, Issue 4, pp. 570-576 (April 2013).
- 2. Sabyasachi Swain, Ishtiyaq Ahmad, M. K. Verma, "Impact of climate variability over Mahanadi river basin", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai (7 -8 March, 2014).
- **3.** Ishtiyaq Ahmad, M. K. Verma, "Application of remote sensing & geographical information system in ground water prospect mapping", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai (7 -8 March, 2014).
- **4.** Ishtiyaq Ahmad, M. K. Verma, "Role of remote sensing & GIS in the environmental protection", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in

- Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai (7 -8 March, 2014).
- **5.** Sanjeev Kumar Bhraria, Ishtiyaq Ahmad, M. K. Verma, "Application of remote sensing & GIS in flood plain mapping", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai (7th -8th March, 2014).
- **6.** Anju Jangde, Ishtiyaq Ahmad, M. K. Verma, "Application of modflow in water resource management", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai, (7th -8th March, 2014).

Dr. M. K. Verma

- 1. Elamuhil S, Ashish Patel, M. K. Verma, "An approach for environmental modeling of invasive Genus Acacia", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai (7th -8th March, 2014).
- 2. Sandeep Soni, Ashish Patel, M. K. Verma, "Mitigation measures to control gaseous air pollutants", 2nd National Conference on Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh organized by Parthivi College of Engineering & Management, Bhilai (7-8 March, 2014).

Dr. M. K. Verma & Dr. R. K. Tripathi

 Bharti Prasad, M.K. Verma, R. K. Tripathi, "Rainfall-Runoff Modeling using GIS", National Conference on Innovations and Challenges in Civil Engineering, Raja Rajeswari College of Engineering, Bangalore (September 2013).

Dr. Shirish V Deo

- 1. "Shear strength improving of RCC structures by steel fibres-A review", Proceedings of the fourth international FIB congress 2014, Mumbai, pp-791-795 (10-14 Feb 2014).
- 2. "A Review of High Volume Low Lime Fly Ash Concrete" Proceedings of the International Conference on Biological, Civil and Environmental Engineering, Dubai, pp-62-66 (17-18 March, 2014).

Consultancy Projects:

Dr. Rajesh Kumar Tripathi

- Structural Drawing and Design for Government Degree College Building at GUNDERDEHI, District Balod (Chhattisgarh [178:10/15/2013] for The Executive Engineer, Public Works Department, Division Balod, Balod-Chhattisgarh [6293:12/26/2012]
- **2.** Structural Drawing and Design for Girls Hostel Building [1766: 25/07/13] for The Executive Engineer, P.W.D. Division Raipur [7986: 14/01/13]
- **3.** Concrete Mix Design [1374:8/7/2013] for M/s Jai Shree Infrastucture Ghaziabad, U.P. [Nil:16/04/13]
- **4.** Proof checking of Structural Design and Drawings of boundary wall for acquired land at wami Vivekanand Airport Raipur. [168: 3/7/2014] for The

- Assistant General Manager (Civil Engg), Swami Vivekanand Airport Raipur, Raipur Chhattisgarh [280-85:1/22/2014]
- Checking of Design Calculations of High Rise Buildings. [1773:05/08/13] for M/s A. C. C Ltd, Jamul Integrated Projects, P O Jamul Cement Works, Distt Durg-490024, Chhattisgarh India [001:23/05/13].
- **6.** Concrete Mix Design [262: 11/21/2013] for M/S SMS INFRASTRUCTURE LTD DURG BYPASS ROAD PROJECT GRAM PANCHYAT KHAPARI [871:8/14/2013]
- **7.** Design and Drawings of various RCC Structures for The Managing Director CG POLICE HOUSING CORP. LTD RAIPUR [1785:26-8-13]
- **8.** Design and Drawings of various RCC Structures [87:18-2-13] for The Managing Director CG POLICE HOUSING CORP. LTD RAIPUR [1259: 24-8-13]
- **9.** Concrete Mix Design for The Assistant General Manager (Civil Engg), Swami Vivekanand Airport Raipur, Raipur Chhattisgarh [1: 10/9/2013]
- 10. Proof Checking of Design and drawing of Hostel Building [460: 16/01/14] for The Hidayatullah National Law University Uparwara Raipur [13466: 06/12/13]
- 11. Safe Bearing Capacity by Plate Load Test [469: 17/01/2014] for M/s sms paryavaran Ltd. SH- Vardhaman Grand, [01/290763:23/11/2013]
- **12.** Safe Bearing Capacity by Plate Load Test [429: 7/01/2014] for M/s sms paryavaran Ltd. SH- Vardhaman Grand, [01/290772:07/01/2014]
- 13. Proof checking of Design of Atal Vihar Awash Yogana [171: 3/11/2014] for M/s Sachidanand Pandey Builder Civil Engineer & Transport Contractor [Nil: 2/3/2014]

Research Projects:

Dr. M. K. Verma

- **1.** Environmental Performance Assessment of Major City of Chhattisgarh Based on Green City Index (2013 to 2015).
- **2.** Sub-DIC Bioinformatics (2004 to 2017)

Dr. R.K. Tripathi & L.K. Yadu (Co-PI)

 "Construction of Low Volume Roads on Soft Subgrade Soil Imporved by Locally Available Marginal Materials" Funded by Human Settlement Managment Institute - Housing and Urban Development Corporation (HSMI-HUDCO), New Delhi for two year of Amount 25.0 Lakhs (on going – Awarded in Feb 2014).

Awards / Any other Achievements:

Dr. Rajesh Kumar Tripathi

 Session Chair in IIE Int'l Conference on Emerging Trends in Engineering and Technology ICETET 2013 at Patong Beach, Phuket, Thailand from Dec 7-8, 2013.

Prof. Laxmikant Yadu

1. Received Young Investigator Award for the best paper entitled "Effectiveness of Granulated Blast Furnace Slag over Sand as Overlay for the Stabilization of Soft Clay" in International Conference on Advances in engineering and

Technology Convergence (AETC) Organised by Interscience Research Network, at Bangkok Thailand on 28th April 2013,

DEPARTMENT OF ELECTRICAL ENGINEERING

Faculty

Dr. A.S. Thoke Professor & Head B.E, M.Tech & Ph.D.

Dr. (Mrs) S. Gupta 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.

Shri Lalit Kumar Assistant Professor M.Tech.

Dr. Vinay Pratap Singh Assistant Professor Ph.D

Dr. Subhojit Ghosh Assistant Professor Ph.D

M. Tech Thesis Completed

Name of the Supervisor : **Dr. A.S. Thoke**Name of the Scholar : Priyanka Batra

Title of the thesis : Speckle noise reduction in ultrasound

images using fuzzy shrinking technique

Name of the Supervisor : Mrs. Shubhrata Gupta

Name of the Scholar : Kumar Rahul

Title of the thesis : Realization of Space Vector PWM using

Genetic Algorithm

Name of the Supervisor : **Dr.(Mrs.) Anamika Yadav**Name of the Scholar : Miss aleena Swetapadma

Title of the thesis : Combined Wavelet and ANN Based

Directional Relaying for Double Circuit

Transmission Line

Name of the Scholar : Himanshu Rai

Title of the thesis : Iris recognition through fusion of support

vector machine and Hamming distance

approach

Name of the Scholar : Sourabh Jaiswal

Title of the thesis : Fuzzy Based Adaptive Congestion Control in

a Wireless Sensor Networks

Name of the Supervisor : **Dr. Narendra D Londhe**

Name of the Scholar : Ms. Princy Matlani

Title of the thesis : 'Use of Cloud Computing in Telemedicine

Name of the Scholar : Ms. Vinita Tharwani

Title of the thesis : 'Data Verification by Crowd Resourcing'

Name of the Scholar : Rudresh Dwivedi

Title of the thesis : 'EEG Signal Classification for Detection of

Body Movements'

Name of the Scholar : Anu Kumari

Title of the thesis : 'Automatic Detection Liver Desions in CT

images'

Name of the Supervisor : **Mrs. Varsha Singh**Name of the Scholar : Avinash pandey

Title of the thesis : Harmonics Compensation By Ts-Fuzzy

Logic Controlled Hybrid Power Filter

Name of the Scholar : Shivam Prakash Gautam

Title of the thesis : New Topology For Grid Connected Cascaded

Multilevel Inverter With Reduced Number Of

Switches

Name of the Scholar : Umesh Kumar Chourasia

Title of the thesis : MADOV: modified worm-whole detection

AODV protocol

Name of the Supervisor : Mrs. Ebha Koley

Name of the Scholar : Ravi Kumar

Title of the thesis : Fault classification of phase to phase and

phase to ground faults in six phase transmission line using haar wavelet and

ANN

Name of the Scholar : A Naresh kumar

Title of the thesis : Artificial neural network based fault locator

for series fault in six phase transmission

line

Name of the Supervisor : **Dr. Subhojit Ghosh**Name of the Scholar : Prasanna Priyadarshi

Title of the thesis : Optimal Controller Design for Inverted

Pendulum System: An Experimental Study

Name of the Scholar : Ankush

Title of the thesis : Controller Design for Fractional Order

Systems

Name of the Scholar : Ankesh Agarwal

Title of the thesis : Optimal Controller Design for Twin Rotor

MIMO System

Seminar/ Workshop/Conferences/Short term courses:

Dr. A.S. Thoke

1. Short term course on MATLAB based design and implementation of advance control, signal and image processing algorithms (16 -21 Aug. 2013).

2. International Conference on "Signal Processing and Integrated Networks" (20-21 February, 2014).

3. International conference on "Quality Management-2014" (23-24 March, 2014).

4. Speckle noise reduction in ultrasound images using fuzzy shrinking technique from Proceedings of ART com 2013.

Mrs. Shubhrata Gupta

1. Workshop on 'INTELLECTUAL PROPERTY RIGHTS' (under TEQIP II) (14-15 Feb.2014).

Narendra D. Londhe

- **1.** Attended workshop on "Intellectual Property Rights" held at National Institute of technology. Raipur (14-15 Feb, 2014).
- **2.** Attended workshop on "*Cloud Computing*' at National Institute of technology. Raipur (20-21 July, 2013).
- **3.** Organized a short term course on 'MATLAB based Design and Implementation of Advanced Control, Signal & Image Processing Aglorithms" Department of Electrical Engg, NIT Raipur (16-21 August, 2013).
- **4.** Organized IEEE SB NIT Raipur Student's Workshop on "MATLAB & LabVIEW" (28-30 March, 2014).

Dr. (Mrs.) Anamika Yadav

- 1. Training on PSCAD software (23 24 April, 2013).
- **2.** Short term course on "MATLAB based Design and Implementation of Advanced Control, Signal & Image Processing Algorithms" (16 -21 August, 2013).
- 3. Short term course on "LABVIEW AND MATLAB" (28 -30 March, 2014).

Mrs. Varsha Singh

- 1. Short term course on "Matlab based design and implementation of advanced control, signal and image processing algorithms", NIT Raipur (16 -21 Aug. 2013).
- **2.** Workshop on "Multilevel Inverter and its Applications", IIT Roorkee (30 Dec. 2013-3 Jan, 2014).

Mrs. Ebha Koley

- 1. Short term course on MATLAB based design and implementation of advance control, signal and image processing algorithms (16 -21Aug. 2013).
- **2.** International Conference on "Signal Processing and Integrated Networks" (20-21 February, 2014).
- 3. International conference on "Quality management-2014" (23-24 March, 2014).

Dr. Subhojit Ghosh

- 1. Short term course on "MATLAB based design and implementation of advanced control, signal and image processing algorithms" (16-21 August, 2013).
- 2. Workshop on "LABVIEW" and" MATLAB" (28-30 March, 2014).

Publications:

Dr. (Mrs.) Anamika Yadav

- Anamika Yadav and Aleena Swetapadma, "Improved first zone reach setting of ANN based directional relay for protection of double circuit transmission lines", IET Generation, Transmission & Distribution, Volume 8, Issue 3, March 2014, p. 373 – 388, DOI: 10.1049/jet-gtd.2013.0239.
- Rai, H., & Yadav, A. Iris recognition using combined support vector machine and Hamming distance approach. Expert Systems with Applications, Volume 41, Issue 2, 1st February 2014, Pages 588–593, http://dx.doi.org/10.1016/j.eswa.2013.07.083.
- **3.** Koley, E., Yadav, A. and Thoke, A. S. (2014), A new single-ended artificial neural network-based protection scheme for shunt faults in six-phase transmission line. International Transactions on Electrical Energy Systems. Article first published online: 7 Mar 2014, doi: 10.1002/etep.1901

- **4.** Jaiswal, S.; Yadav, A., "Fuzzy based adaptive congestion control in wireless sensor networks," Contemporary Computing (IC3), 2013 Sixth International Conference on, pp.433-438, 8-10 Aug. 2013, doi: 10.1109/IC3.2013.6612234.
- 5. Ravi Kumar, Ebha Koley, Anamika Yadav, A.S. Thoke, "Fault Classification of Phase to Phase Fault in Six Phase Transmission Line using Haar Wavelet and ANN" paper ID No. 178, International Conference on Signal Processing and Integrated Networks (SPIN-2014), Amity School Of Engineering and Technology, Noida, U.P. 20-21 Feb. 2014.

Mrs. Varsha Singh

- **1.** MADOV: modified worm-whole detection AODV protocol",,pp 239-24310.1109/IC3.013.6612117 (8-10 August, 2013).
- **2.** Hybrid Topology for a single phase 9 level MLI using a single DC source International conference on quality management(ICQM 2014), pp 46-51 from (22-23 March, 2014).

Dr. Subhojit Ghosh

- **1.** A Differential Evolution Based Approach for Estimating Minimal Model Parameters from IVGTT Data Computers in Biology and Medicine (an Elsevier publication), DOI: 10.1016/j.compbiomed.14/12/2013.
- **2.** Adaptive Fuzzy PI Controller Design for Coupled Tank System: An Experimental Validation, Proceedings of *ACODS-2014*, held at IIT Kanpur (13-15 March, 2014).
- **3.** Iterative Learning Control of a SingleLink Flexible Manipulator Based on an I dentified Adaptive NARX Model, Proceedings of *INDICON 2013*, held at IIT Mumbai, (14 Dec., 2013).
- **4.** Evolutionary Optimization based Tuning for Multivarible Process, Proceedings of *INDICON 2013*, held at IIT Mumbai (14 Dec, 2013).

Research Project:

Dr. Subhojit Ghosh

1. Development of a Circuit Based Model for the Analysis of Glucose Regulation System (SERC/ET-0070/2012) (Jan 2013- Jan 2016).

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION Faculty

| Shri B. Acharya | Assistant Professor & Head | M.Tech |
|-----------------------------|----------------------------|---------------------|
| Dr. Shrish Verma | Professor | Ph.D |
| Shri Saikat Majumder | Assistant Professor | M.Tech |
| Shri Sujay Chakraborty | Assistant Professor | ME |
| Dr. Ajay Singh | Assistant Professor | Ph.D. |
| Shri Toshanlal Meenpal | Assistant Professor | M.Tech |
| Shri Anshul Gupta | Assistant Professor | M.TECH |
| Shri Rahul Kumar Chaurasiya | Assistant Professor | M.E., B. Tech & PhD |

PhD Thesis Completed

Name of the Supervisor : **Dr. Shrish Verma** Name of the Scholar : Naresh Nagwani

Title of the thesis : "On classification and Similarity Detection of

Software Bugs using Bug Database Mining"

Seminar/ Workshop/Conferences/Short term courses:

Mr. B. Acharya

1. Attended workshop Program on "*E-Books in Libraries*" organised by Central Library, NIT Raipur (15th & 16th November, 2013).

- 2. Attended & successfully completed Training Program on "Management Capacity Development "Future Leaders" for Middle Level Faculty of Centrally Funded Institutions (CFIs) including National Institutes of Technology (NITs) organized by Effective Quality Upgradation Assistance for Technical Education (30th January -1st February, 2014).
- **3.** Attended workshop Program on "Intellectual Property Rights" (Under TEQIP-II) organised by Industry-Institute Interaction Cell, NIT Raipur (14-15 February, 2014).
- **4.** Successfully coordinated one day workshop on "Fundamentals of Labview" at NIT Raipur. The workshop has been jointly conducted by department of Electronics & Telecommunication, NIT Raipur and AI Instruments Pvt. Limited, Pune (7th November 2013).

Mr. R. K. Chaurasiya

- 1. Short term Course: "Matlab Based Design and Implementation of Advanced Control, Signal and Image Processing Algorithms", NIT Raipur, (16-21 Aug. 2013)
- **2.** Short term Course: "Advanced Engineering Optimization Through Intelligent Techniques" at NIT Surat, (24-28 March, 2014)

Mr. Anshul Gupta

- **1.** Short Term Course on "Microwave Material Processing, Modelling and Nondestructive Testing" at IIT Kanpur (16-20 Sept. 2013).
- 2. Workshop on "Fundamentals of Labview" at NIT Raipur (7 Nov. 2013).
- 3. Workshop on "Intellectual Property Rights" at NIT Raipur (14-15 Feb. 2014).
- **4.** International Conference by IEEE AP-MTT Chapter, Kolkata Section in association with KIIT University, Bhubaneswar (18-20 Dec. 2013).

Publications:

Naresh Kumar Nagwani, Dr. Shrish Verma and Dr. K K Mehta

 "Generating taxonomic terms for software bug classification by utilizing topic models based on Latent Dirichlet Allocation ", IEEE 9th International Conference on ICT and Knowledge Engineering 2011 Conference, Siam University, Bangkok, Nov 20-22, pp. 1-5, 2013.

Pradeep Singh ,Shrish Verma

 "Cross Company and within Company Fault Prediction using Object Oriented Metrics." International Journal of Computer Applications 74(8):5-11, July 2013. Published by Foundation of Computer Science, New York, USA

Saikat Majumder

- 1. Accumulator aided decoding of low complexity SISO arithmetic codes with image transmission applications, International journal of computer applications, vol. 79, no. 7, 2013.
- **2.** Noise robust transmission of multiple description image over wireless channels, International journal of engineering science and technology, vol. 5, no. 11, 2013.

Dr. Ajay Singh

 A. Singh, M. R. Bhatnagar, and R. K. Mallik, "Threshold Optimization of A Finite Sample Based Cognitive Radio Network Using Energy Detector," EURASIP Journal on Wireless Communications, vol. 2013, pp. 1-17, doi:10.1186/1687-1499-2013-165, June 2013.

Mr.Anshul Gupta

 Conference Paper: "Four-Element High Gain Conformal Strip Excited Rectangular Dielectric Resonator Antenna Array", IEEE AP-MTT Chapter, Kolkata Section (19 Dec. 13).

Awards / Any other Achievements:

Dr. Ajay Singh

1. Travel grant to present paper at IEEE conference from International Project through IIT Delhi (8-11 Sept. 2013).

DEPARTMENT OF HUMANITIES

Faculty

Dr. S.P.S. Matharu Professor & Head 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

- 1. Workshop on "E-Books in Libraries" at NIT Raipur (15-16 Nov. 2013).
- 2. Workshop on "Intellectual *Property Rights*" at NIT Raipur (15-16 Feb. 2014).

Publications:

Dr. Jaya Dwivedi

1. 'Literati' a referred International Journal of English Studies ISSN 09731474 Topic "Anita Desai's Novella The Artist of Disappearance: *A Reflection of the Global World*" from Winter 2013.

DEPARTMENT OF INFORMATION TECHNOLOGY

Faculty

| Dr. Sudhakar Pandey | Assistant Professor & Head | Ph.D |
|-------------------------|----------------------------|---------|
| Shri Satya Prakash Sahu | Assistant Professor | M.Tech. |
| Shri Rakesh Tripathi | Assistant Professor | M.Tech. |
| Shri Sanjay Kumar | Assistant Professor | M.Tech. |
| Shri Pavan Kumar Mishra | Assistant Professor | M.Tech. |
| Mrs. Mridu Sahu | Assistant Professor | M.Tech. |
| Shri Tirath Prasad Sahu | Assistant Professor | M.Tech. |
| Shri Rajesh Doriya | Assistant Professor | M.Tech. |

M. Tech Thesis Completed

Name of the Supervisor : **Dr.Sudhakar Pandey**

Name of the Scholar : Pankaj Pal

Title of the thesis : "Intelligent Route Formation Technique Ad-

hoc

Network using Node Mobility Behavior"

Name of the Supervisor : **Mr. Rakesh Tripathi**Name of the Scholar : Prashant Mishra

Title of the thesis : "Optimum Energy Path (OEP) Protocol for

Wireless Sensor Network"

Name of the Scholar : Kanchan Sahgal

Title of the thesis : "Performance Analysis of AQM Algorithm

under

Buffer Bloat"

Seminar/ Workshop/Conferences/Short term courses:

Dr. Sudhakar Pandey

- **1.** IITD UNO Joint "*Cyber Security*" Workshop at Bharti School of Teclecom, IIT Delhi (7-8 Feb. 2014).
- 2. Management Capacity Development Training for Middle Level Faculty-Future Leaders in conference Hall of "The Hotel Royce" New Friends Colony, New Delhi organized by Effective Quality Upgradation Assistance for Technical Education (EQUATE) New Delhi (under TEQIP –II) (30 Jan.-1 Feb. 2014).
- **3.** A short term course on "Faculty Induction Training Programme" at NIT Raipur (02-13 June 2014).

Mr. Sanjay Kumar

1. STTP on Network Simulator-2 Organized at MANIT Bhopal (19-23 Aug. 2013).

Mr. Pawan Kumar Mishra

- 1. International conference on "Recent Trends in Computer Science & Engineering" at Central University of Bihar, Patna (08-09 Feb. 2014).
- 2. Workshop on "Academic Ethics & IPR" held at NIT Raipur (04-05 April, 2014).
- **3.** Workshop on "Fundamental of Labview" conducted by ET&TC Dept. NIT Raipur (07 Nov. 2014).

Mr. Rajesh Doriya

- International Conference: Rajesh Doriya , Neelanshi Wadhwa , K. Suraj , Pavan Chakraborty and G. C. Nandi," Dynamic Vehicle Traffic Routing Problem: Study, Implementation and Analysis using ACO and GA" in 2014 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), Kumarcoil, pg.no. 1302-09 (10-11 July 2014)
- **2.** Workshop on "Intellectual Property Rights" (under TEQIP –II) at NIT Raipur (14-15 Feb. 2014).
- 3. Workshop on "E-Books in Libraries" at NIT Raipur (15-16 Nov. 2013).

Mrs. Mridu Sahu

- **1.** International workshop on "Machine Learning & Text Analysis" at SAU New Delhi (15-23 Nov. 2014).
- **2.** Workshop on "Faculty Induction Programme" by NITTTR Bhopal at NIT Raipur (02-13 June 2014).
- **3.** Workshop on "Intellectual Property Rights" (under TEQIP –II) at NIT Raipur (14-15 Feb. 2014).

Mr. Tirath Prasad Sahu

- **1.** International workshop on "Machine Learning & Text Analysis" at SAU New Delhi (15-23 Nov. 2014).
- **2.** Workshop on "Faculty Induction Programme" by NITTTR Bhopal at NIT Raipur (02-13 June 2014).
- **3.** Workshop on "Intellectual Property Rights" (under TEQIP –II) at NIT Raipur (14-15 Feb 2014).
- **4.** Workshop on "E-Books in Libraries" at NIT Raipur (15-16 Nov 2013).

Publications:

Dr.Sudhakar Pandey

 "Spin-MI: Energy Saving Routing Algorithm Based on SPIN Protocol in WSN" Volume 37 Number 4, National Academy Science Letters, ISSN 0250-541X. Natl. Acad. Sci. Lett. (2014) 37:335-339 DOI 0.1007/s40009-014-0232-9.

DEPARTMENT OF MATHEMATICS

Faculty

| Dr. Arvind Kumar Sinha | Assistant Professor & Head | Ph. D |
|-------------------------|----------------------------|-------|
| Dr. R. P. Pathak | Professor | Ph. D |
| Dr. Debasisha Mishra | Assistant Professor | Ph. D |
| Dr. Sujit Kumar Samanta | Assistant Professor | Ph. D |
| Dr. Nilish Kumar Thakur | Assistant Professor | Ph. D |
| Dr. M. Krishna Prasad | Assistant Professor | Ph. D |
| Dr. Deepmala Sharma | Assistant Professor | Ph. D |
| Dr. Sharada Nandan Raw | Assistant Professor | Ph. D |

Seminar/ Workshop/Conferences/Short term courses:

Dr. Arvind Kumar Sinha

- **1.** Participated in the National Workshop on "*Mathematical modeling of Stochastic and Fuzzy System*" organized by the Dept. of Mathematics, Govt. Nagarjuan P. G. College of Science, Raipur (06 07 Sept. 2013)
- 2. Participated in the One day Workshop on "Fundamentals of Lab-view" organized by the Dept. of Electronics & Telecommunication, NIT Raipur (07 Nov. 2013)
- **3.** Participated in the Workshop on "*E- Books in Libraries*" organized by Central Library, NIT Raipur (15 -16 Nov. 2013).
- **4.** Participated in the one day State Level Workshop on "*Mathematics Teachers*" organized by the Department of Mathematics, Govt. J. Y. Chhattisgarh College, Raipur (25 Nov. 2013).
- **5.** Participated in the Two days workshop on "*Intellectual Property Rights*" under TEQIP- II organized by Industry Institute Interaction Cell NIT Raipur (14 15 Feb. 2014).
- **6.** Conducted the 5 Days National Level Short Term Training Program (STTP) as a Principal Coordinator on "A Glimpse of Differential Equations in Science and Engineering" organized by Dept. of Mathematics, NIT Raipur (10-14 March, 20014).

Dr. R. P. Pathak

- Participated in the National Workshop on "Mathematical modeling of Stochastic and Fuzzy System" organized by the Dept. of Mathematics, Govt. Nagarjuan P. G. College of Science, Raipur (06 - 07 Sept. 2013).
- 2. Participated in the ICQM 2014 (22-23 March, 2014).

Dr. Debasisha Mishra

1. Participated in the Two days workshop on "Intellectual Property Rights" under TEQIP- II organized by Industry Institute Interaction Cell NIT Raipur. (14 - 15 Feb. 2014).

Dr. Sujit Kumar Samanta

1. Participated in the Two days workshop on "Intellectual Property Rights" under TEQIP- II organized by Industry Institute Interaction Cell, NIT Raipur (14 - 15 Feb. 2014).

Dr.Sharada Nandan Raw

1. Conducted the 5 Days National Level Short Term Training Program (STTP) as a Coordinator on "A Glimpse of Differential Equations in Science and Engineering" organized by Department of Mathematics, at NIT Raipur (10 -14 March 20014).

Publications:

Dr. Arvind Kumar Sinha

 "Application of module structure of Algebra in coding theory in different branches of Engineering", International Journal of Scientific Engineering and Technology (IJSET), issue no. 4 (April 2013) Vol. 2 (2013), Page 295-297. [ISSN: 2277-1581]

- **2.** "Isomorphism Theorems for Fuzzy Submodules of G-Modules", International Journal of Engineering Research and Applications (IJERA), Vol. 3, Issue 4, July-Aug 2013, Page 852-854. [ISSN: 2248-9622]
- **3.** "Intuitionistic (a, β)- Fuzzy Hv-Subgroups", INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY(IJESRT), vol 3(2): February, 2014, page 914-918, [ISSN: 2277-9655
- **4.** "Some Results On Intuitionistic FuzzyHv-subgroups", International Journal of Research in Advent Technology, Vol.2, No.2, February 2014, page 308-312[E-ISSN: 2321-9637]

Research Projects:

Dr. Arvind Kumar Sinha

1. One research project is ongoing from CGCOST Raipur of rupees five lacks, (Principal Investigator: Dr. Arvind Kumar Sinha, Assistant Professor, Dept. of Mathematics, NIT Raipur).

DEPARTMENT OF M. C. A.

Faculty

| Shri Harendra Bikrol | Associate Professor & Head | B.E. |
|-----------------------------|----------------------------|---------------|
| Shri Mithilesh Atulkar | Associate Professor | B.E. |
| 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. |
| Dr. Mou Dasgupta | Assistant Professor | MCA, Ph.D |
| Dr. Shyam Sundar | Assistant Professor | MCA, Ph.D |

Seminar/ Workshop/Conferences/Short term courses:

Mr. Harendra Bikrol

- 1. Workshop on "E-books in Library" at NIT Raipur (15 16 Nov. 2013).
- **2.** Workshop on "Special Invited Lecture on "Introduction to Central Laboratory Facility & IPR" at NIT Raipur (15 Jan. 2014).
- **3.** Workshop on "Intellectual Property Rights" at NIT Raipur from 14 –15 Feb. 2014).
- **4.** Workshop on "Accounts and Administration" at NIT Raipur (07 09 March 2014).
- 5. Workshop on "Cloud Computing" at NIT Raipur (20 21 July, 2013).
- **6.** Short Term Course on "MATLAB Programming and its Engineering Applications" at NIT Raipur (26 30 Dec. 2013).

Mr. Mithilesh Atulkar

- **1.** Workshop on Special Invited Lecture on "Introduction to Central Laboratory Facility & IPR" at NIT Raipur (15 Jan. 2014).
- 2. Workshop on "Intellectual Property Rights" at NIT Raipur (14 15 Feb. 2014).
- 3. Workshop on "Cloud Computing" at NIT Raipur (20 21 July 2013).

Dr. (Mrs.) Kesari Verma

- 1. Workshop: "Bibliometric and Scientometric" at Pt. RSU Raipur (22–24 Sept. 2013).
- **2.** Workshop on "E-books in Library" at NIT Raipur (15 16 Nov. 2013).
- 3. Workshop on "Text Mining" at ISI Kolkata (6 8 Jan. 2014).
- **4.** Workshop on "SVM in pattern recognition and its applications in Biological Sciences" at NIT Raipur (23 27 Jan. 2014).
- 5. Workshop on "Intellectual Property Rights" at NIT Raipur (14 15 Feb. 2014).
- **6.** Workshop on "Cloud Computing" at NIT Raipur (20 21 July 2013).
- **7.** Short Term Course on "MATLAB Programming and its Engineering Applications" at NIT Raipur (26 30 Dec. 2013).

Mrs. Manju Pandey

1. Workshop on "Intellectual Property Rights" at NIT Raipur (14 – 15 Feb. 2014).

Dr. Mou Dasgupta

1. Workshop on "Intellectual Property Rights" at NIT Raipur (14 – 15 Feb.2014).

Publications:

Dr. (Mrs.) Kesri Verma

- **1.** Kesari Verma, Ligendra Verma, Priyanka Tripathi. Facial Expression Recognition using Data mining. International Conference on "Computer and Business Management", IACSIT, Paris, France. (01 02 June 2013).
- **2.** Kesari Verma, Ligendra Verma, Priyanka Tripathi. "*HEp2 Classification using Data Mining. International Conference on Computer and Business Management*", IACSIT, June 1-2,2013, Paris, France (01 02 June 2013).
- **3.** Kesari Verma, Bikesh Singh, A.S.Thoke. "Speckle Noise Reduction in Ultrasound Images using Fuzzy Shrinking Techniques", Elsevier Banglore India. (19 20 Sept. 2013).

Research Projects:

Dr. (Mrs.) Kesari Verma, Dr. N. K. Nagwani & Dr. Shrish Verma

1. Predictive and Visual Analysis of the Price Distribution Information of Rice and Wheat across India (27 March, 2014).

Awards/Any other Achievements:

Dr. (Mrs.) Kesari Verma

1. Best Paper Award in ICCES 2013 (01 -02 June 2013).

DEPARTMENT OF MECHANICAL ENGINEERING Faculty

| Dr.R.Salhotra | Professor & Head | Ph.D |
|---------------|------------------|---------------|
| Dr.A.M.Rawani | Professor | M.Tech. Ph.D. |
| Dr.S.Sanyal | Professor | Ph.D |
| Dr.S.L.Sinha | Professor | ME, Ph.D |
| Dr.S.D.Patle | Professor | Ph.D |

Dr.S.P.S.Matharu Professor Ph.D

Dr.A.K.Tiwari Professor Ph.D

Shri R.K.Yadav Associate Professor M.Tech

Shri G.K.Sahu Assistant professor M.Tech

Shri S .K.Dewangan Assistant professor M. Tech, PhD

Dr.N.K.Jain Assistant Professor Ph.D

Shri S.K.Mukti Assistant Professor ME, PhD

Shri V.K.Gaba Assistant Professor ME

Dr. S.Bhawmick Assistant Professor Ph.D

Dr. A.R.Singh Assistant Professor Ph.D

Dr.G.Srinivashu Assistant Professor Ph.D

Dr.H.K.Narang Assistant Professor Ph.D

Ms. N.Netam Assistant Professor M.Tech

Dr.S.Bhattacharya Assistant Professor Ph.D

Shri R.K.Sahu Assistant Professor M.Tech

M. Tech Thesis Completed

Name of the Supervisor : **Dr.R.Salhotra**Name of the Scholar : Rahul Dewangan

Title of the thesis : CFD Analysis of Enhancement in Heat

Transfer by using Nanofluid in a Pipe flow

Name of the Scholar : Ragvendra Singh Kashyap

Title of the thesis : Analysis of Enhancment of Heat Transfer in

Heat Exchanger Pipe with twisted tape in

serts

Name of the Supervisor : **Dr.S.D.Patle**

Name of the Scholar : Y.Venkat Ramanna

Title of the thesis : "Computational Modeling for cooling to the

integrated circuit Ä chipset "Through

 $various\ configuration\ using\ fluent.$

Name of the Scholar : Rupendra Kumar Marre

Title of the thesis : Numerical simulation & optimization of

Regenerator geometry in a pulse tube cry

cooler.

Name of the Scholar : Abhishek Gupta

Title of the thesis : Numerical modelling of fluid flow in gas

turbine combustion chamber using CFD

Name of the Supervisor : **Dr.A.K.Tiwari**Name of the Scholar : Rakesh Sharma

Title of the thesis : Techno-Economic Analysis of Ventilation

through Solar Metallic

Name of the Scholar : Nitin Shukla

136

Title of the thesis : Wall: For Indoor Stadium of Raipur

Name of the Scholar : Dheeraj Kumar Sahu

Title of the thesis : Prediction of Condensate from AHU and its

economic analysis for different cities of India

Name of the Supervisor : Satish Kumar Dewangan

Name of the Scholar : Miss Yogita Weikey

Title of the thesis : CFD modeling of Centrifugal slurry pump

casing.

Name of the Scholar : Mrs. Sapna Solanki

Title of the thesis : Three Dimensional Computational

Prediction of Slurry Flow through Bend in

Square Ducts.

Name of the Supervisor : **Prof. Vivek Kumar Gaba & Dr.S.**

Bhowmick

Name of the Scholar : Atish Meshram

Title of the thesis : Designing of Thermal Compressor Chamber

for an Adsorption cooling system using AC

and Methanol pair

Name of the Scholar : Harpreet Kuar Aasi

Title of the thesis : A Parametric study of orthotropic annular

fin with contact resistance

Seminar/ Workshop/Conferences/Short term courses:

Dr,A.M.Rawani

1. Attended & Delivered Keynote speech in international Conference at Kuala-Lumpur (Malaysia) (19-20 Feb. 2014).

2. Chaired International Conference on "*Quality Management*" at Hotel Babylon lnn Raipur (22-23 March, 2014).

Dr. G.S.Bedi and S.Sanyal

1. "Loop Based Algorithm for Automatic Sketching of Planar Kinermatic Chains", internaional Conference on Machines and Mechanism- iNaCoMM 2013, IIT Roorkee (18-20 Dec. 2013).

Dr.S.Sanyal, A.R.Singh and Tej Kumar

1. Experiments in Engineering Curriculum- A Revisit through Approaches of Design of Experiments, ISTE Delhi Section Convention, DTU, Delhi (5-6 Sep, 2013).

Moon Banerjee, Dr.S.Sanyal & Dr.N.K.Jain

- 1. Evalutaion of stress concentration for a simply supported laminated composite plate with a center circular hole under uniform transverse loading. International Conference on "Structural Engineering and Mechanics (ICSM-2013)", NIT Rourkela (20-22 Dec.2013).
- **2.** Stress concentration analysis of generally isotropic materials in simply supported rectangular plate with a central circular hole under transverse loading. "The 2nd International Conference on Intelligent Robotics, Automation and Manufacturing IRAM 2013", IIT Indore (16 -18 Dec. 2013).

Dr. S. L. Sinha

- **1.** Workshop on "Advanced Computational Fluid Dynamics" at Indian Institute of Technology Madras, Chennai (22-24 Dec, 2013).
- 2. Workshop on "E-books in libraries" at NIT, Raipur (15-16 Nov, 2013).
- **3.** "Recent Advances in Statistics & Applications", School of Studies in Statistics, Pt Ravishankar Shukla University, Raipur, CG (15-17 Nov. 2013).
- **4.** Special invited lecture on "*Introduction to central laboratory facility &IPR*", at NIT Raipur organized by Sub-Dic on Bioinformatics (15 Jan. 2014).
- **5.** Workshop on "Cloud Computing" (20-21 July, 2013).

Dr. Anil Kumar Tiwari

- **1.** International Conference on "*Quality Management (ICQM 2014)*" at NIT Raipur contributed 3 Papers in the cofference (22-23 March, 2014).
 - **Title of the papers: 1.** "Estimation of blockage in Thermal siphon Flat Plate Solar water Heater: Feasibility in Chhattisgarh", International Proceeding of Economics Development and Research", Volume 75, Page 57-61/62-67/68-72
 - **2.** "Analysis of Evaporative Cooling System and Recovery of Potable water as by Product.", International Proceeding of Economics Development and Research, Volume 75, Page 57-61/62-67/68-72
 - **3.** "Evaluation of Passive Solar Strategies by finding Solar Zone: For quality Life in Rural Areas", International Proceeding of Economics Development and Research, Volume 75, Page 57-61/62-67/68-72

Prof. S.K.Dewangan

1. International Conference on "Advances in Chemical Engineering (ICACE – 2013)", Dept. of Chemical Engineering – NIT Raipur (5 – 6 April, 2014).

Prof. S.K.Mukti

- "An Intelligent Technique to Predict the Weldment Characteristics of Single Pass Double Side SAW Square Butt Joints.", International Conference on Mechanical, Civil and Architectural Engineering (ICMCAE- 2014), at Kuala Lumpur, Malaysia (Feb 19-20, 2014).
- **2.** Two Days Workshop on "Intellectual Property Rights" at NIT Raipur & TEQUIP-II & Industry Institute Interaction Cell (Feb. 14th -15th, 2014).
- **3.** Two Days Workshop on "Enterprise Resource Planning (ERP)", NITTTR Bhopal (Jan. 28 29, 2014).
- **4.** "A framework for investigating the ERP system quality from users point of view in Indian Industries." "Int. Association of CS and IT (IACSIT),", 2013, Paris (France) (June 1-2, 2013).
- **5.** Short term course on "Water Treatment and Cleaner Technologies" NIT Raipur (May 28, 2013 June 1, 2013).
- **6.** International Conference on Quality management NIT Raipur & South Asia Institute of Science and Engineering (March 22-23, 2014).

Prof. V.K.Gaba

- 1. Cloud Computing, NIT Raipur on July 20-21,2013.
- **2.** International Conference on Quality management, NIT Raipur & South Asia Institute of Science and Engineering on March 22-23 2014.

Dr.A.R.Singh

1. Four Day TEQIP National Workshop "Pravartana" on Applied Mechanics, IIT Kanpur (Oct.4-7, 2013).

Prof.N.Netam

1. Workshop Conbustion on 2-4 jan,2014 & Seminar Environmental Energy (Sep 19-21, 2013).

Prof.R.K.Sahu

- 1. Conference, Sandiego California, USA (March 9-13, 2014).
- 2. National (Intellection property Right, NIT Raipur (Feb. 14-15, 2014)

Publications:

Dr.A.M.Rawani

- 1. A framework for investigation the ERP system quality from user's point of view in Indian Industries. Journal of Economics, Business and management Volume 1, No.4, (Nov.2013)
- **2.** Criteria for Evaluating Innovative Fly Ash Applications, "Thirteenth Global Conference on Flexible Systems Management at IIT Delhi (Dec. 13-15, 2013).
- **3.** Motivatiors for implementing Environment Management in Thermal Power Plants: An Empirical Study in India. International Journal of Innovative Research in Science, Engineering and Techology Vol. 3, issue 3, (March 2014).

S B Thool and S L Sinha

 Numerical Simulation and Comparison of Two Conventional Ventilation Systems of Operating Room in the View of Contamination Control, International Journal of Computer Applications (ISSN 0975-8887) Volume 85, No 5, pp 31-35, (Jan, 2014).

D K Sakhare, Shobha Lata Sinha & Kripal Singh

 The Perspectives of Diesel Exhaust Emissions: Effect & Control of NOx Emission, International Journal of Advanced Mechanical Engineering (Jan 2014).

Tikendra Nath Verma & Shobha Lata Sinha

 Numerical Simulation of Contaminant Control in Intensive Care Unit, TEQUIP Sponsored 3rd International Conference on Biomedical Engineering, Organized by University Institute of Engineering and Technology, Punjab University, Chandigarh, India. (Nov. 14-15, 2014).

Abhinav Sinha, S.L. Sinha & H Bikrol

 Practical Applications of Operations Research in Indian Healthcare Units, Golden Jubilee National Conference on "Recent Advances in Statistics and Applications organized by School of Studies in Statistics, Pt Ravishankar Shukla University, Raipur, CG. (Nov 15-17, 2013).

Dr.S.D.Patle and R.L.Choudhary

1. Estimation of effective thermal connectivity of two phase materials, ICACE-2013.April 5th – 6th 2013 Department of Chemical Engg.NIT Raipur.

Satish Kumar Dewangan & Yogita Weikey

1. CFD modeling of Centrifugal slurry pump casing, International Conference on Advances in Chemical Engineering (ICACE – 2013); (5 – 6 April, 2014).

Satish Kumar Dewangan & S. L. Sinha

- 1. Prediction of Flow through an eccentric annulus with inner cylinder in rotation using k- Ω turbulence model, International Conference on Advances in Chemical Engineering (ICACE 2013); (5 6 April, 2014)
- 2. 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.

Moon Benerjee, S.Sanyal & N.K.Jain

1. Three dimensional analysis of rectangular plate with hole under in plane loading conditions for both isotropic and orthotropic material under varying parametric conditions Journal of Manufacturing Engineering, September, 2013, Vol. 8, Issue. 3, pp 169-174

Shubrata Nagpal, N.K.Jain & S.Sanyal

 Analysis and Mitigation Of Stress Concentration Factor of a Rectangular Isotropic and Orthotropic Plate with central circular hole subjected to In-Plane Static Loading by Design Optimization",, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 2, Issue 7, July 2013,pg 2903-2913,ISSN-2319-8753.

Prof.S.K.Mukti

- **1.** International Journal of Economics, Business and Management, "A framework for investigating the ERP system quality from users point of view in indian Industries, Issn: 2301-3567 Vol.1, No. 4, Nov. 2013.
- **2.** Int. Journal"International Proceeding of Economics Development and Research(IPEDR)"

 Ädentification of Factors and Indications for success Measurement of ERP System, ISSN: 2010-4626: Vol.75, page 117, April 2014.

Dr.A.R.Singh

- 1. International journal of Advanced Manufacturing Technology (Impact Factor: 1.21) Capacities- Capacities- based supply chain network design considering demand uncertainty using two-stage stochastic programming (May-13).
- **2.** AHO and QFD Methodology for Supplier Selection, IPEDR Volume 75 on Mar-13.
- **3.** Exploration of Distribution Network for Indian Automobile Industries: AHP Approach IPEDR Volume 75 (Mar-13).
- **4.** A Heuristic for Cost Oriented Assembly Line Balancing Problems IPEDR Volume 75 (Mar-13).

5. Experiments in Engineering Curriculum- A revisit through Experiments, ISTE Delhi section Convection at DTU Delhi (5-6 September 2013).

Srinivasu Gangi Setti

 Srinivasu Gangi Setti, R.N. Rao, "The prediction of stress-strain curve of near beta titanuim alloy using ANN technique" International Journal of Conceptions on Mechanical and Civil Engineering Vol. 1, Issue. 1, Dec' 2013, pp. 79-83, 2013.

Research Projects:

Dr. A.M. Rawani

1. Title – "Strategies for Effective Environmental Management in Thermal Power Plants in Chhttisgarh" organized by CCOST, Raipur Financial Outlay – 05.00 Lacs, Continuing

Awards / Any other Achievements:

Dr. A. M. Rawani

- **1.** Nominated for "*Rashtriya Vidya Ratan*" award by foundation for accelerated community empowerment.
- 2. "Pride of Asia International" award by economi smooth society of India.

Dr. S. L.Sinha

- **1.** Presented keynote lecture on "Computational Fluid Dynamics & its applications" in Seminar "Technologia 2013" organized by CCET, Bhilai, CG (Nov 15-16, 2013).
- **2.** Secured first position in Poem Competition organized by Vigilance officer during Vigilance Week in NIT, Raipur, CG (Nov 11-15, 2013).
- **3.** Secured third position in English Essay Competition organized by Vigilance officer during Vigilance Week in NIT, Raipur, CG. (Nov 11-15, 2013)

DEPARTMENT OF METALLURGICAL ENGINEERING

Faculty

| Dr. Manoj K Chopkar | Assistant Professor & Head | 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 |
| Dr. Manoranjan K. Manoj | Assistant Professor | PhD |
| Dr. Akhilesh K. Swarnakar | Assistant Professor | PhD |

M. Tech Thesis Completed

Name of the Supervisor : Dr. Manoj Kumar Chopkar

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:

Mr. M. K. Tripathi

1. "*Titanium matrix and composites*" workshop organized by Dept. of Metallurgical and Materials Engg. IIT Madras (Aug. 30, 2013).

Dr. M. K. Manoj

- **1.** Technical Launching on Environmental Issue, NIT Raipur (June 26-30, 2013).
- 2. Cloud Computing, NIT Raipur (July 20-21, 2013).
- 3. Mat. Sc II Raipur (Delivered Expert Lecture) (Sep. 30 Oct. 04, 2013).
- 4. PMAI-1, ARCI, Hyderabad (Nov. 18-21, 2013).
- **5.** NRC-M Winter Workshop on "*Integrated Computational Materials Engineering (ICME)*", at Indian Institute of Science, Bangalore, India (Dec. 23-27, 2013).
- 6. "Intellectual Property Right", NIT Raipur (Feb. 14-15, 2014).

Dr. Akhilesh K. Swarnakar

- **1.** "*Titanium matrix and composites*" workshop organized by Dept. of Metallurgical and Materials Engg. IIT Madras (Aug. 30, 2013).
- **2.** NRC-M Winter Workshop on "Integrated Computational Materials Engineering (ICME)", at Indian Institute of Science (IISc) Bangalore, India (Dec. 23-27, 2013).

Publications:

Dr. Manoj K. Chopkar

1. A.K. Mishra, C. Srinath, P.K. Jain, B. Padya, M. Chopkar, "Characterization of Intermediates in the Synthesis of Reduced Graphene-oxide Through Sequential De-oxygenation", Nano Trends: A Journal of Nanotechnology and Its Applications, 14 (2) 2013, ISSN: 0973-418X,2014.

Dr. Akhilesh K. Swarnakar

- 1. Determination of the single crystal Ge Young's modulus between room temperature and melting temperature using the impulse excitation technique, Akhilesh K. Swarnakar, Omer Van der Biest, Jan Van Humbeeck and Jan Vanhellemont, *Phys. Status Solidi A*, (*Accepted*)
- **2.** Determination of the Si Young's modulus between room and melt temperature using the impulse excitation technique, Akhilesh K. Swarnakar, Omer Van der Biest, Jan Vanhellemont, *Phys. Status Solidi C*, 11(1), (2014) pp. 150–155
- 3. Eutectoid decomposition of aluminum titanate (Al₂TiO₅) ceramics under Spark Plasma (SPS) and Conventional (CRH) thermal treatments, R. Papitha, M. Buchi Suresh, D. Chakravarty, A. Swarnakar, Dibakar Das, Roy Johnson, Ceramics International, 40 (1) 2014 pp. 659-666

Research Projects:

Dr. Manoj K. Chopkar

1. High Strain Rate Deformation Behavior and Texture Study of Magnesium and Titanium Based Alloys, Prof. Satyam Suwas, Materials Engg., IISc Bangalor under NRC-M Program sponsored by UGC.

Awards/Any other Achievements:

Dr. Manoj Kumar Chopkar

 Sir Dorabji Tata- TR Ananthraman faculty Fellowship (STD-TRA-FF) 2013, Visiting Center for Materials Processing and Tribology, Purdue University, USA in Fall 2014 (August- December 2014) under mentorship of Prof. S. Chandrasekar.

Dr. M. K. Manoj

1. Ph. D. Degree awarded 23 Aug 2013 (Viva-Voce examination) 21 Sep 2013 (Degree Award).

Dr. Akhilesh K. Swarnakar

1. IWT Fellowship from Agency for Innovation by Science and Technology (IWT), Belgium (2013-2014).

DEPARTMENT OF MINING ENGINEERING

Faculty

| Shri M.D.Patel | Associate Professor & Head | M.Tech |
|-----------------------|----------------------------|--------|
| Dr. M. Pradhan | Professor | Ph.D |
| Shri P.Y.Dhekne | Associate Professor | M.Tech |
| Shri B.R. Parate | Associate Professor | M.Tech |
| Shri P. Dewangan | Associate Professor | M.Tech |
| Dr. N. Kishore | Assistant Professor | Ph.D. |
| Dr. R. K. Jade | Assistant Professor | Ph.D. |
| Dr. Ritesh D Lokhande | Assistant Professor | Ph.D. |
| | | |

Seminar/ Workshop/Conferences/Short term courses:

Prof. M. D. Patel

1. "Intellectual Property Rights", under TEQIP-II, NIT Raipur (Feb. 14 & 15, 2014).

Dr. M. Pradhan

1. "Mine Planning and Equipment Selection", 22nd MPES Conference, Dresden, Germany, (Oct. 14 – 19, 2013).

Prof P.Y.Dhekne

1. "Mine Planning and Equipment Selection", 22nd MPES Conference, Dresden, Germany, (Oct. 14 – 19, 2013).

Prof. B. R. Parate

1. "Intellectual Property Rights", under TEQIP-II, NIT Raipur (Feb. 14 & 15, 2014)

Dr. N. Kishore

1. Workshop on "Ebooks in Libraries", NIT Raipur (Nov. 15-16, 2013).

Dr. R. K. Jade

- 1. Workshop on "Cloud Computing", Dept of MCA & Computer Science, NIT Raipur (July 20-21, 2013).
- 2. Workshop on "Ebooks in Libraries", NIT Raipur (Nov. 15-16, 2013).
- **3.** "Measuring Research Output using Scientometrics and Bibliometrics", Pt Ravi Shankar Shukla University Raipur, (Sept. 22-24, 2013).

Dr. Ritesh D Lokhande

1. Workshop on "Ebooks in Libraries", NIT Raipur from 15-16 Nov 2013.

Publications:

Dr. M. Pradhan

 "Highwall Mining in India", International Symposium on Mine Planning and Equipment Selection, (Oct.14-19, 2013), Germany, DOI: 10.1007/978-3-319-02678-7_18, Springer International Publishing Switzerland, p.175-187, 2014 **2.** Pankaj Dewangan, M. Pradhan and Nawal Kishore, "Slope stability Radar System for monitoring open pit slopes" The Indian Mining and Engineering Journal, Vol. 52, No.-4 ,April 2013.

Prof P.Y.Dhekne

 Artificial Intelligence and Prediction of Rock Fragmentation, P.Y. Dhekne, Manoj Pradhan, R. K. Jade, International Symposium on Mine Planning and Equipment Selection, 14-19 October 2013, Germany, DOI: 10.1007/978-3-319-02678-7_86, Springer International Publishing Switzerland, p.891-898, 2014

Prof. P. Dewangan

1. Pankaj Dewangan, M. Pradhan and Nawal Kishore, "Slope stability Radar System for monitoring open pit slopes" The Indian Mining and Engineering Journal, Vol. 52, No. -4, April 2013.

Dr. R. K. Jade

 Artificial Intelligence and Prediction of Rock Fragmentation, P.Y. Dhekne, Manoj Pradhan, R. K. Jade, International Symposium on Mine Planning and Equipment Selection, 14-19 October 2013, Germany, DOI: 10.1007/978-3-319-02678-7_86, Springer International Publishing Switzerland, p.891-898, 2014

Dr. Nawal Kishore

- 1. Nawal Kishor, Ratnesh Trivedi and Divya Mishra. "A Study of Cost analysis of Closure of an opencast lime-stone mine." Indian Journal of Environmental Protection, Vol33, No. 8, August 2013, PP 617-628.
- **2.** Mine Slopes: An Overview, MINETECH '13' Workshop on clean Mining Technologies Extraction, Beneficiation & Use organised by the Indian Mining & Engineering Journal, May 03-04-2013, Bhubaneswar.
- **3.** National Seminar on "Problems of Mining Industry and Technological Advancements", organised by MEAI, Rajasthan Chapter, Udaipur (Mar. 7-8, 2014).
- **4.** Pankaj Dewangan, M. Pradhan and Nawal Kishore, "Slope stability Radar System for monitoring open pit slopes" The Indian Mining and Engineering Journal, Vol. 52, No. -4, April 2013.

Dr. Ritesh D Lokhande

- 1 Lokhande R D & Venkateswarlu V, "Strata behaviour Investigations in Continuous Miner Panels" at Venkatesh Khani No.7 Incline" Minetech, Vol. no.34, No.2, pp 39-44, June, 2013.
- **2** Lokhande R D, Murthy V M S R and Singh K B, "Predicting the Pot-hole Depth in Underground Coal Mines An Approach" Minetech, Accepted, March, 2014.
- 3 Lokhande R D, Vema S and Malpani A, " *An investigation of horizontal stress presents in underground coal mine working and its control measures*" Innovative Practices in Rock Mechanics (IPRM-2014), Organized by NIRM, Bangalore, pp-103-110, (Feb. 6-7, 2014)
- **4** Lokhande R D, Murthy V M S R and Singh K B, "Predictive models for pothole depth in underground coal mining- Some Indian Experiences" Arabian Journal of Geosciences (Springer), First online, (Sept. 19, 2013).

DEPARTMENT OF PHYSICS

Faculty

| Dr. Sadhana Agrawal | Professor & Head | Ph.D |
|---------------------|---------------------|------|
| Dr. A K Shrivastav | Professor | Ph.D |
| Dr. A Khare | Assistant Professor | Ph.D |
| Dr. B K Sahoo | Assistant Professor | Ph.D |
| Dr. S M Saini | Assistant Professor | Ph.D |

Seminar/ Workshop/Conferences/Short term courses:

Dr. Sadhana Agrawal

1. Presented research paper titled Photoluminescence & Thermo luminescence-Behaviour of $Zn_2SiO_4:Mn^{2+},Eu^{2+}$ Phosphor from 05-02-2014 to 07-02-2014. National Conference on "Luminescence and its applications" at R D University Jabalpur

Dr. Ayush Khare

- 1. Presented research paper International Conference on "Sructural and Physical Properties of Solids (SPPS-2013)" organized by Dept. of Physics, ISM Dhanbad (Nov. 18-20, 2013).
- **2.** Workshop on "*Modern Spectroscopic Techniques II*" organized by Sophisticated Instrumentation Centre, IIT Indore (July 6-7, 2013).
- **3.** National Conference on "*Recent Trends in Photonics (NCRTP-2014)*" organized by School of Studies in Electronics and Photonics, Pt. R.S. University, Raipur (March 12 14, 2014).
- **4.** Shrort Term Course on "*Recent Trends in Material Science II*" organized By Dept. of Physics (Sept. 30 to Oct. 04, 2013).

Dr. B.K. Sahoo

- **1.** International conference on "Condensed matter physics" at Singapore (June 30, July 05, 2013).
- 2. National seminar at ITER, SOA University Bhubaneswar (Feb. 08 09, 2014).

Dr. S.M. Saini

- **1.** International conference on "Condensed matter physics" at Singapore (June 30 July 05, 2013)
- **2.** International conference on "Optoelectronics (ICOL-2014)" (March 05-08, 2014)
- **3.** Two days Workshop on "Intellectual property rights". (Feb.14-15, 2014).

Publications:

Dr. Ayush Khare

- **1.** Thermo luminescence studies of SrAl₂O₄:Eu Phosphors at different Dy concentration, Chalcogenide Letters, July 2013.
- **2.** Effect of Dy concentration on luminescent properties of SrAl₂O_{4:}Eu Phosphors, Dec.2013.
- **3.** Comparison of Optical and Structural Characteristics of $Cd_xZn_{1-x}S$: Na, Sm/Pr Films, Journal of Optoelectronics and Advanced Materials, May 2014.

Research Projects:

Dr. Sadhana Agrawal

 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

 Macroscopic polarization effect on thermal properties of binary nitrides, Principal Investigator: Dr. B. K. Sahoo, Funding Agency: CCOST, Raipur, Chattisgarh, (1st 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:2014.

Awards / Any other Achievements:

Dr. Ayush Khare

 Best Paper Award in National Conference on Recent Trends in Photonics (NCRTP-2014) organized by School of Studies in Electronics and Photonics, Pt. R.S. University, Raipur (March 12- 14, 2014).

DEPARTMENT OF SUB-DIC BIOINFORMATICS

Faculty

Dr. M. K. Verma Coordinator/PI PhD
Shri Ashish Patel Information Officer M.Sc.

M. Tech Thesis Completed

Name of the Supervisor : **Dr.M.K.Verma**Name of the Scholar : Shimul Shukla

Title of the thesis : GIDB: Gene Database of Gastro Intestinal

System Cancer

Seminar/ Workshop/Conferences/Short term courses:

Dr. M. K. Verma, Mr. Ashish Patel Mrs. Jyotsna Choubey, Mr. Kunal waldekar

- 1. Guest Lecture on 'Introduction of Lab Facility" in CGCOST Raipur and IPR' $(15^{th} \text{ January } 2014)$.
- **2.** Guest Lecture on "India Data Portal A Government of India Initiative and Status" (22nd July 2013)
- **3.** Workshop on 'Support Vector Machine in Pattern Recognition and its applications in Biological Sciences' (Jan. 23 -27, 2014).

Awards / Any other Achievements:

Dr. M. K. Verma, Mr. Ashish Patel, Mrs. Jyotsna Choubey Mr. Jyotikant Choudhary

- 1. Developed SVM Based Tool for diagnosis of Asthma (February 2014).
- 2. Developed GCDB: Gynaecological Cancer Gene Database on March 2014.
- 3. Developed GIDB: Gastrointestinal Cancer Gene Database on March 2014.
- 4. Developed RIDB: Respiratory Cancer Gene Database on March 2014.

6 CENTRAL FACILITIES

6.1 LABORATORIES

Departments wise details of Laboratories

| Name of Department | Name of Laboratories and other facilities available |
|--------------------------|---|
| Applied Geology | Optical Lab, Geological Museum, Remote Sensing & GIS Lab, ROCK/ORE Cutting Polishing Lab, Field Geology Lab, Hydrogeology Lab |
| Architecture | Climatology, Model Making Workshop, Building Material Museum, Computer, Architecture |
| Biomedical Engineering / | Computer Lab, Anatomy & Physiology Lab, Bio Chemistry |
| Biotech | Lab |
| Chemical Engineering | 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 |
| Chemistry | UG Lab, PG Lab, Research Lab |
| Civil Engineering | Computer Centre, Concrete Technology, Environmental Engineering, Geotech Engineering, Hydraulics, Structural Engineering, Survey Laboratory, Transportation Engineering, Water Resources Engineering |
| Computer Science and | Advanced Software Engg. Lab, Computer Programming |
| Engineering | Lab, Advanced Computer Network, Linux Unix Lab |
| Electrical Engineering | High Voltage, Research Lab, Workshop, Instrumentation, Electronics Lab, M.Tech Lab Electronics Devices and Electronic Workshop, |
| Electronics & | Instrumentation, Microwave and Optical Communication, |
| Telecommunication | Computer Programming, Digital Signal Processing, |
| Engineering | Microprocessor, Electronic and Tele Communication, Digital Electronics, Analog Electronics |

Information Technology Computer Networking, Data Base Management, Electronic

and Tele Communication, Operating System (Unix/Linux),

Graphics, Image & Multimedia

Mechanical Engineering 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

Metallurgical Engineering 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

Mining Engineering Mine Environment Lab, Rock Mech. Lab, General Mining

Lab, Computer Lab, Mine Survey Lab, Mineral Dressing

Lab

Physics General Lab, Laser and Fiber Optics Lab, Research Lab

6.2 CENTRAL LIBRARY

Dr Sunil Kumar Satpathy

Dy. Librarian

MLIS, Ph.D(LIS),M.A(Pol sc)

DCA,PGDLAN

Mrs. Mridula Mahant Asst. Librarian MLIS

Shri Ajay Kumar Sharma Asst. Librarian M.A,MLIS

Mrs. Neelam Soni Asst. Librarian M.A,MLIS

Shri Vipin sahu Asst.Librainan MLIS,NET

Seminar/ Workshop/Conferences/Short term courses:

Dr Sunil Ku Satpathy

- National Seminar on "Library Initiatives in Digital Era" organized by Pt RS University & Govt. Nagarjuna PG College of Science, Raipur as Resource person (Oct. 26-27, 2013).
- 2. Workshop on "E-books in Libraries" (Nov. 15-16, 2013)

Mr.s M. Mahant

1. Workshop on "E-books in Libraries" (Nov. 15-16, 2013).

Mr Ajay Kumar Sharma

1. Workshop on "E-books in Libraries" (Nov. 15-16, 2013).

Mrs . Neelam Soni

- 1. National Seminar on "Library Initiatives in Digital Era" organized by Pt RS University & Govt. Nagarjuna PG College of Science, Raipur (Oct. 26-27, 2013).
- 2. UGC sponsored short term course "Measuring Research outrput with Scientometric and Bibliometrics" held at ASC, Pt.R.S.University, Raipur (Nov. 22-24, 2013).
- 3. National Seminar on "Engineering" of Academic Libraries ", organized by Pt RS University, Raipur (Feb. 12 14 2014).

Mr Vipin sahu

1. Workshop on "E-books in Libraries" (Nov. 15-16, 2013).

Award/Any other achievement:

Dr Sunil Ku. Satpathy

- 1. Nominated as Honorary Member, Library Technical Advisory Committee, Govt Nagarjuna P.G.College of Science, Raipur, Chhattisgarh (Aug. 16, 2013)
- **2.** Nominated as Expert in Library Development Committee of Kushabhao Thakre University of Journalism and Mass Communication, Raipur (June, 7, 2013).

6.3 DISPENSARY

The Institute has a dispensary with following staff:

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

Dr. Subha Koshley Lady Medical Officer M.B.B.S. & (DOMS)

Dr. Sameer Sonkar 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 2013-14 7441 (Allopathic) & 2310 (Homeophy)
- **2.** Centre for PPI (Pulse Polio Immunisation) Programme 2013-14 (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 SAS Officer MPh., Ph.D

INTER NITS BOSET BALL, CRICKET, CHESS, KABADDI TOURNAMENT

1. Inter NIT Basket Ball, Cricket, Chess, Kabaddi, Hand Ball and Athletics competitions were organized by NIT Trichi from March 01-05, 2014. The students of NIT Raipur participated and performed well in Cricket, Basket Ball and Hand ball and reached semifinals. MCA student Ku. Munni won the bronze medal in Javelin throw.

2. Annual Sports Festival "Samar-2013"

Annual Sports Festival "Samar 2013" organized successfully from Jan 22 to 26, 2014. Students participated with zeal and enthusiasm in games like Football, Cricket, Kabaddi, Kho-Kho, Handball, Basket Ball, Volley Ball, Table Tenis, Badminton and Chess. The Closing ceremony was graced by former women Hockey team captain and Arjuna Award recipient Mrs. Saba Anjum and Dr. Sudarshan Tiwari, Director, NIT, Raipur as the special guest for the occasion.

6.5 Hostels & Staff Quarters

The Institute has 5 No's of boys' Hostels (A, B, C, D & F.). Each hostel has housing capacity of 100 students. There are facilities for residing UG as well as PG students. There are three girls' hostels (E, G and PG Girl's hostel), Hostel E has housing

capacity of 100 students, Hostel G has housing capacity of 200 students & PG Girls Hostel has housing capacity of 40 students. Each hostel is well equipped, with Sports facilities 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 for the students. Maintenance of hostel is done by the Estate Office.

There are sufficient numbers of quarters for the staff members.

FINANCIAL STATEMENT AS ON 31st MARCH ,2014 NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

| BALANCE SHEET AS ON 31.03.2013 | | | |
|------------------------------------|----------|------------------|------------------|
| SOURCES OF FUNDS | Schedule | As on 31.03.2014 | As on 31.03.2013 |
| | | (Amount in Rs) | (Amount in Rs) |
| CORPUS/CAPITAL FUND AND LIABILITY | | | |
| - | | | |
| CAPITAL/CORPUS FUND | 1 | 225,000,000.00 | 225,000,000.00 |
| RESERVE AND SURPLUS | 2 | 91,932,624.01 | 75,014,433.02 |
| PROVIDENT/EARMARKED/ENDOWMENT | | | |
| FUND | 3 | 1,151,986,808.00 | 933,086,586.00 |
| SECURED LOANS AND BORROWINGS | | 0.00 | 0.00 |
| | | 0.00 | 0.00 |
| UNSECURED LOANS AND BORROWINGS | | 0.00 | 0.00 |
| DEFFERED CREDIT LIABILITIES | | 0.00 | 0.00 |
| CURRENT LIABILITIES AND PROVISION | 4 | 239,221,548.79 | 143,404,481.89 |
| _ TOTAL | | 1 700 140 000 00 | 1 976 505 500 01 |
| | | 1,708,140,980.80 | 1,376,505,500.91 |
| APPLICATION OF FUNDS | | | |
| FIXED ASSETS | 5 | 1,068,509,453.20 | 752,759,068.13 |
| INVESTMENT- FROM | | | |
| EARMARKED/ENDOWMENT FUND | 6 | 340,995,977.50 | 329,988,558.50 |
| INVESTMENT(OTHERS) | 6 | 225,000,000.00 | 225,000,000.00 |
| CURRENT ASSETS, LOANS ADVANCES ETC | 7 | 73,635,550.10 | 68,757,874.28 |
| MISC EXPENDITURE | | 0.00 | 0.00 |
| (To the extent not written off) | | 2.00 | |
| TOTAL | | 1,708,140,980.80 | 1,376,505,500.91 |

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,2014 | For the period ended on 31st |
|---|----------|--|------------------------------|
| INCOME | | | |
| INCOME FROM SALE AND SERVICES | 8 | 10,121,815.00 | 9,886,256.00 |
| GRANTS/SUBSIDIES | | 125,000,000.00 | 60,000,000.00 |
| FEES/SUBSCRIPTION | 9 | 153,011,430.00 | 143,947,793.00 |
| INCOME FROM INVESTMENTS | | 0.00 | 0.00 |
| INCOME FROM ROYALTY PUBLICATIONS | | | 0.00 |
| INTEREST EARNED | 10 | 55,486,676.00 | 46,311,750.05 |
| OTHER FEES | 11 | 7,683,535.00 | 5,590,067.00 |
| OTHER INCOME | 12 | 39,621,694.00 | 23,993,377.00 |
| HOSTEL FEES | 13 | 6,190,775.00 | 4,785,650.00 |
| INCREASE/DECREASE IN STOCK OF FINISHED | | 0.00 | 0.00 |
| GOODS AND WORK IN PROGRESS TOTAL(A) | - | 397,115,925.00 | 294,514,893.05 |
| EXPENDITURE | | | |
| ESTABLISHMENT EXPENSES | 14 | 270,158,113.00 | 230,167,142.00 |
| EXAM/SCHOLORSHIP EXPENSES | 15 | 18,013,479.00 | 4,137,672.00 |
| OTHER ADMINISTRATIVE EXPENSES | 16 | 41,325,517.01 | 36,550,030.00 |
| EXPENDITURE ON GRANT/SUBSIDIES ETC | | 0.00 | 0.00 |
| DEPARTMENTAL OPERATING EXPENSES | 17 | 4,745,222.00 | 4,515,560.00 |
| HOSTEL EXPENSES | 18 | 1,386,062.00 | 1,249,296.00 |
| ESTATE OFFICE EXPENSES | 19 | 7,653,965.00 | 4,479,110.00 |
| DEPRICIATION | 5 | 36,915,376.00 | 22,590,360.00 |
| TOTAL(B) | | 380,197,734.01 | 303,689,170.00 |
| BALANCE BEING EXCESS OF INCOME OVER EXPENDITURE(A-B) | | 16,918,190.99 | -9,174,276.95 |
| TRANSFER TO SPECIAL RESERVE | | | |
| TRANSFER TO GENERAL RESERVE | | 16,918,190.99 | -9,174,276.95 |
| BALANCE BEING SURPLUS/DEFICIT CARRIED TO CORPUS/CAPITAL FUND | | | 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

| | | As on 31.03.2014 | | As on 31.03.2013 |
|--------------------------|----------------|------------------|----------------|------------------|
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Balance at the | | | | |
| beginning of the year | 225,000,000.00 | | 150,000,000.00 | |
| Add Contribution | | | | |
| towards | | | | |
| Corpus/Capital Fund | 0.00 | | 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 | | | | |
| CLOSING BALANCE | | 225,000,000.00 | | 225,000,000.00 |

SCHEDULE- 2 RESERVE AND SURPLUS

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|----------------------|---------------|---------------|----------------|---------------|
| 1. Capital Reserve | | 0.00 | | 0.00 |
| 2. General Reserve | - | = | - | = |
| As per last Accounts | 75,014,433.02 | | 84,188,709.97 | |
| Addition/Deduction | | | | |
| during the year | 16,918,190.99 | | (9,174,276.95) | |
| Trf to Corpus Fund | 0.00 | 91,932,624.01 | 0.00 | 75,014,433.02 |
| TOTAL | | 91,932,624.01 | | 75,014,433.02 |

SCHEDULE- 3 PROVIDENT/EARMARKED/ENDOWMENT FUND

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|-------------------------|------------------|------------------|----------------|----------------|
| (i) Opening Balance of | | | | |
| Provident Funds | 55,514,191.00 | | 56,791,613.00 | |
| Addition/Deduction to | | | | |
| funds | 5,815,598.00 | 61,329,789.00 | (1,277,422.00) | 55,514,191.00 |
| (ii) Opening Balance of | | | | |
| Plan | | | | |
| (General+OSC)Funds | 124,813,326.87 | | 106,102,018.87 | |
| Add:Grant | | | | |
| received/Receivable | 250,000,000.00 | | 149,995,000.00 | |
| Less:Utilisation of | | | | |
| grant towards Objective | | | | |
| of Funds | 352,665,761.07 | 22,147,565.80 | 131,283,692.00 | 124,813,326.87 |
| Deffered Government | | | | |
| Grant | 1,068,509,453.20 | 1,068,509,453.20 | | 752,759,068.13 |
| CLOSING BALANCE | | 1,151,986,808.00 | | 933,086,586.00 |

SCHEDULE- 4 CURRENT LIABILITIES AND PROVISION

| A CURRENT LIBILITIES | | As on 31.03.2014 | T | As on 31.03.2013 |
|---|-----------------------|------------------|---|------------------|
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Funds | | , , | | |
| Fund from erstwhile govt. college | 5,341,016.89 | - | 5,341,016.89 | _ |
| Poor student fund | 950,195.00 | | 950,195.00 | |
| Amalgamated fund | 36,750.00 | | 36,750.00 | |
| Alumini Fund | 809,250.00 | | 534,750.00 | |
| Project Fund(Unutilised) | 59,716,584.40 | | 6,340,344.00 | |
| Other Fund | 790,446.00 | | 0.00 | |
| Student aid fund | 706,100.00 | | 511,400.00 | |
| Virtual class room Training Programme CG govt | 0.00 | 68.350.342.29 | 1,314,694.00 | 15.029.149.89 |
| Other liabilities | 0.00 | 06,330,342.29 | 0.00 | 15,029,149.69 |
| Net Caution money | 9,573,500.00 | | 7,760,000.00 | |
| Admission fess refundable | 938,777.00 | | 1,410,747.00 | |
| TDS payable | 1,329,371.00 | | 709,500.00 | |
| Earnest money Deposit with NIT | 3,898,115.00 | | 5,003,556.00 | |
| Security Deposit(Employee) | 3,033,738.00 | | 1,104,165.00 | |
| Sundry Creditors | 3,910,748.00 | | 278,494.00 | |
| Sundry Creditors(Capital goods) | 12,387,229.00 | | 11,404,540.00 | |
| Scholarships to Students(Other state) | 5,970,674.00 | | 6,959,206.00 | |
| Bridge loan | 14,400.00 | | 14,400.00 | |
| Performance bank Guarantee | 282,546.00 | | 428,941.00 | |
| Interest(GPF) | 249,995.00 | 41,589,093.00 | 231,296.00 | 35,304,845.00 |
| TOTAL A | | 109,939,435.29 | | 50,333,994.89 |
| B PROVISIONS | | | | |
| Salary Regular staff Payable | 11,538,209.00 | | 7,892,094.00 | |
| PF Payable | 222,500.00 | | 207,700.00 | |
| GPF Contribution Payable DPF Contribution payable | 30,000.00 | | 30,000.00 | |
| GIS/FBF contribution payable | 4,050.00 14,590.00 | | 4,050.00 14,680.00 | |
| NPS Contribution of NITRR | 14,550.00 | | 14,000.00 | |
| payable | 744,253.00 | | 294,952.00 | |
| NPS Contribution of Employees | | | | |
| payable | 744,253.00 | | 294,952.00 | |
| Salary Contract Staff payable | 4,105,233.00 | | 4,079,180.00 | |
| Salary Daily wages payable | 1,944,821.00 | | 1,269,263.00 | |
| Faculty Association payable GLIS payable | 7,200.00 30,100.00 | | 7,700.00 | |
| Advertisement exp payable | 133,384.00 | | 21,013.00 | |
| Department consumable payable | 221,482.00 | | 230,281.00 | |
| Department misc payable | 0.00 | | 32,138.00 | |
| Hostel electricity payable | 0.00 | | 75,920.00 | |
| Hostel maintanance payable | 0.00 | | 63,683.00 | |
| Testing and Con remuneration | | | | |
| payable Telephone Charges payable | 9,521,402.50 | | 7,746,675.00 | |
| Travelling & Hotel Expenses | 25,010.00 | | 21,072.00 | |
| payable | 43,698.00 | | 118,582.00 | |
| Printing & Stationery payable | 342,382.00 | | 74,042.00 | |
| Electricity Expenses payable | 1,152,950.00 | | 878,880.00 | |
| Consultency and Legal charges | 1 | | | |
| payable | 90,000.00 | | 90,000.00 | |
| Function and other activity | 00 500 00 | | EC 000 00 | |
| payable Meeting and conference exp | 86,522.00 | | 56,820.00 | |
| payable | 93,995.00 | | 0.00 | |
| CPDA Expenses payable | 663,961.00 | | 665,926.00 | |
| Fuel Charges payable | 40,013.00 | | 18,157.00 | |
| Repairs & Maintenance to Collage | | | | |
| Building payable | 325,418.00 | | 17,472.00 | |
| Repairs & Maintenance to | 0.00 | | 2 22 | |
| Electrical payable Children Education payable | 0.00 54,375.00 | | 0.00 42,269.00 | |
| Medical Grant and Expenses | 34,375.00 | | 42,209.00 | |
| payable | 101,944.00 | | 50,068.00 | |
| Exam Expenses and | 22,221.00 | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| remuneration payable | 46,575.00 | | 142,224.00 | |
| Training & Placement payable | 4,743.00 | | 6,949.00 | <u> </u> |
| Internet and Website | 007 500 60 | | 007 500 00 | |
| maintanance payable | 327,500.00 | | 327,500.00 | |

| Repair Maint Hostel payable | 0.00 | | 0.00 | |
|--------------------------------|---------------|----------------|---------------|----------------|
| Computer Consumable & | | | | |
| Repairing payable | 25,011.00 | | 562,401.00 | |
| Gardening expenses payable | 11,472.00 | | 0.00 | |
| Indian coffee house expenses | | | | |
| payable | 0.00 | | 0.00 | |
| News paper exp payable | 3,605.00 | | 11,058.00 | |
| Office expenses payable | 950.00 | | 0.00 | |
| Scholorship to M tech/phd | | | | |
| Payable | 1,257,780.00 | | 1,015,519.00 | |
| Leave salary payable | 0.00 | | 8,250.00 | |
| Pension Director payable | 0.00 | | 15,484.00 | |
| DA arrear payable | 1,908,538.00 | | 0.00 | |
| Recruitment expenses payable | 0.00 | | 981,591.00 | |
| Leave encashment payable | 51,040.00 | | 0.00 | |
| Provision for Gratuity | 46,091,235.00 | | 34,255,222.00 | |
| Provision for leave Encashment | 47,251,709.00 | 129,282,113.50 | 31,434,320.00 | 93,070,487.00 |
| TOTAL B | | 129,282,113.50 | | 93,070,487.00 |
| TOTAL (A+B) | | 239,221,548.79 | | 143,404,481.89 |

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

Schedule- 5: (A)Fixed Assets:

| S.No | Description of | Rate of | GROSS BLOCK | | | | ACCUMULATED DEPRICIATION | | | NET BLOCK | | |
|------|--------------------------------------|---------|------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|---------------------------------|---------------------------------|---------------------------|---|-------------------------|-------------------------|
| | assets | Dep | Cost of Assets as on 01.04.2013 | Addition During the year 2013-14 | Disposa 1 / Transfe r of ASsets | Closing Balance as on 31.03.2014 | Depriciation upto 31.03.2013 | Depre ciation for 2013-14 | Dispo sal/tr ansfer | Closing Depriciation as on 31.03.2014 | WDV as on 31.03.2013 | WDV as on 31.03.2014 |
| 1 | Air Conditioners | 12.77% | 2,459,506.00 | 2,549,094.00 | - | 5,008,600.00 | 1,554,733.00 | 639,599.00 | - | 2,194,332.00 | 904,773.00 | 2,814,268.00 |
| 2 | Campus development | 3.02% | 1,878,190.00 | 1,349,920.00 | - | 3,228,110.00 | 281,455.00 | 97,488.00 | - | 378,943.00 | 1,596,735.00 | 2,849,167.00 |
| 3 | Computer & Networking | 12.77% | 61,760,280.00 | 27,624,419.00 | - | 89,384,699.00 | 37,135,749.00 | 11,414,427.00 | - | 48,550,176.00 | 24,624,531.00 | 40,834,523.00 |
| 4 | Cooler Purchase | 12.77% | 423,611.00 | 251,757.00 | = | 675,368.00 | 176,553.50 | 86,245.00 | = | 262,798.50 | 247,057.50 | 412,569.50 |
| 5 | Washing machine | 12.77% | 10,000.00 | - | - | 10,000.00 | 5,108.00 | 1,277.00 | - | 6,385.00 | 4,892.00 | 3,615.00 |
| 6 | Education and other Software | 12.77% | 23,111,845.00 | 3,756,931.00 | = | 26,868,776.00 | 6,187,134.50 | 3,431,144.00 | = | 9,618,278.50 | 16,924,710.50 | 17,250,497.50 |
| 7 | Eletrical & Light fitting | 12.77% | 3,137,898.00 | - | - | 3,137,898.00 | 2,318,448.00 | 400,710.00 | - | 2,719,158.00 | 819,450.00 | 418,740.00 |
| 8 | Equipment & Instruments | 12.77% | 47,415,624.00 | 49,588,761.07 | - | 97,004,385.07 | 15,737,043.00 | 12,387,456.00 | - | 28,124,499.00 | 31,678,581.00 | 68,879,886.07 |
| 9 | Fans | 12.77% | 346,488.00 | 52,700.00 | - | 399,188.00 | 91,663.00 | 50,977.00 | - | 142,640.00 | 254,825.00 | 256,548.00 |
| 10 | Fax Machine | 12.77% | 78,160.00 | 10,000.00 | - | 88,160.00 | 43,324.00 | 11,258.00 | - | 54,582.00 | 34,836.00 | 33,578.00 |
| 11 | Furniture & Fixtures | 12.77% | 19,336,856.00 | 601,854.00 | - | 19,938,710.00 | 8,431,329.00 | 2,546,177.00 | - | 10,977,506.00 | 10,905,527.00 | 8,961,204.00 |
| 12 | Gas Pipeline Installation | 12.77% | 86,569.00 | - | - | 86,569.00 | 60,802.00 | 11,055.00 | _ | 71,857.00 | 25,767.00 | 14,712.00 |
| 13 | Gyser | 12.77% | 184,313.00 | - | - | 184,313.00 | 39,208.00 | 23,537.00 | _ | 62,745.00 | 145,105.00 | 121,568.00 |
| 14 | Gym and Sports equipment | 12.77% | 849,115.00 | 95,760.00 | - | 944,875.00 | 425,460.00 | 120,661.00 | - | 546,121.00 | 423,655.00 | 398,754.00 |
| 15 | Infra. for traning and placement | 12.77% | 695,000.00 | - | - | 695,000.00 | 665,640.00 | 88,752.00 | _ | 754,392.00 | 29,360.00 | (59,392.00) |
| 16 | Hostel equipment | 12.77% | 0.00 | 1,816,195.00 | - | 1,816,195.00 | = | 231,928.00 | | 231,928.00 | = | 1,584,267.00 |
| 17 | Laboratory development | 3.02% | 2,892,373.00 | - | - | 2,892,373.00 | 342,200.00 | 87,350.00 | - | 429,550.00 | 2,550,173.00 | 2,462,823.00 |
| 18 | Library Books/Journals | 7.69% | 23,583,505.00 | 9,648,425.00 | - | 33,231,930.00 | 4,882,869.00 | 3,045,677.00 | _ | 7,928,546.00 | 18,700,636.00 | 25,303,384.00 |
| 19 | Motor Cars | 7.69% | 3,761,834.13 | - | - | 3,761,834.13 | 1,427,411.00 | 289,285.00 | - | 1,716,696.00 | 2,334,423.13 | 2,045,138.13 |
| 20 | Musical Instrument | 12.77% | 281,638.00 | - | - | 281,638.00 | 55,587.00 | 35,965.00 | _ | 91,552.00 | 226,051.00 | 190,086.00 |
| 21 | Office equipment | 12.77% | 158,507.00 | 79,975.00 | - | 238,482.00 | 57,303.00 | 30,454.00 | - | 87,757.00 | 101,204.00 | 150,725.00 |
| 22 | Oscilloscopes monochrome model | 12.77% | 306,665.00 | 794,384.00 | - | 1,101,049.00 | 293,708.00 | 140,604.00 | - | 434,312.00 | 12,957.00 | 666,737.00 |
| 23 | Photocopier Machine | 12.77% | 2,681,800.00 | 699,296.00 | - | 3,381,096.00 | 1,480,452.50 | 431,767.00 | - | 1,912,219.50 | 1,201,347.50 | 1,468,876.50 |
| 24 | Projector Purchase | 12.77% | 5,107,685.00 | 282,704.00 | - | 5,390,389.00 | 2,017,735.50 | 688,353.00 | - | 2,706,088.50 | 3,089,949.50 | 2,684,300.50 |
| 25 | Refridgerator | 12.77% | 176,300.00 | - | - | 176,300.00 | 89,856.00 | 22,514.00 | - | 112,370.00 | 86,444.00 | 63,930.00 |
| 26 | Misc assets | 7.69% | 431,992.00 | 313,740.00 | - | 745,732.00 | 105,343.00 | 57,347.00 | - | 162,690.00 | 326.649.00 | 583.042.00 |

| 27 | | | | | | | | | | | | |
|---------|--|--------|----------------|----------------|------|------------------|---------------|---------------|------|----------------|----------------|------------------|
| | T.V. Purchase | 12.77% | 284,110.00 | - | = | 284,110.00 | 98,206.00 | 36,281.00 | - | 134,487.00 | 185,904.00 | 149,623.00 |
| 28 | UPS | 12.77% | 1,290,217.00 | 506,056.00 | - | 1,796,273.00 | 589,117.50 | 229,384.00 | - | 818,501.50 | 701,099.50 | 977,771.50 |
| 29 | Voltage Stablizer | 12.77% | 97,480.00 | 55,300.00 | - | 152,780.00 | 42,033.00 | 19,510.00 | - | 61,543.00 | 55,447.00 | 91,237.00 |
| 30 | Water Cooler,purifier and filter | 7.69% | 1,754,679.00 | 272,471.00 | - | 2,027,150.00 | 1,151,352.50 | 155,889.00 | - | 1,307,241.50 | 603,326.50 | 719,908.50 |
| 31 | Writing and other boards | 7.69% | 1,330,368.00 | = | ı | 1,330,368.00 | 710,781.00 | 102,305.00 | - | 813,086.00 | 619,587.00 | 517,282.00 |
| | TOTAL | | 205,912,608.13 | 100,349,742.07 | 0.00 | 306,262,350.20 | 86,497,605.00 | 36,915,376.00 | 0.00 | 123,412,981.00 | 119,415,003.13 | 182,849,369.20 |
| (B) Cap | ital Work in Progress | | 633,344,065.00 | 252,316,019.00 | 0.00 | 885,660,084.00 | 0.00 | 0.00 | _ | - | 633,344,065.00 | 885,660,084.00 |
| TOTAL | (A+B) | | • | | | | | | | | | |
| | | | 839,256,673.13 | 352,665,761.07 | 0.00 | 1,191,922,434.20 | 86,497,605.00 | 0.00 | 0.00 | 123,412,981.00 | 752,759,068.13 | 1,068,509,453.20 |

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

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|--------------------|----------------|----------------|----------------|----------------|
| FDR/Flexi(GPF) | 51,655,199.00 | | 49,816,970.00 | |
| FDR/Flexi With SBI | | | | |
| GCET Branch | 72,801,244.50 | | 76,081,990.50 | |
| FDR with PNB | 100,000,000.00 | | 0.00 | |
| FDR/Flexi with | | | | |
| Canara Bank | 116,539,534.00 | 340,995,977.50 | 204,089,598.00 | 329,988,558.50 |
| TOTAL(A) | | 340,995,977.50 | | 329,988,558.50 |

B. INVESTMENT(OTHERS)

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|-----------------|----------------|----------------|----------------|----------------|
| FDR with Canara | | | | |
| Bank | 225,000,000.00 | 225,000,000.00 | 225,000,000.00 | 225,000,000.00 |
| TOTAL(B) | | 225,000,000.00 | | 225,000,000.00 |
| TOTAL(A+B) | | 565,995,977.50 | | 554,988,558.50 |

SCHEDULE- 7 LOANS,ADVANCES AND OTHER CURRENT ASSETS

A CASH AND BANK

| | | As on | | |
|-------------------------------|---------------------|---------------|---------------|------------------|
| | | 31.03.2014 | | As on 31.03.2013 |
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| CASH BALANCE | 81,140.00 | 81,140.00 | 117,750.00 | 117,750.00 |
| BANK BALANCE | | | | |
| Canera Bank A/C No. 20996 | 15,232,319.42 | | 705,633.00 | |
| Non-Plan (saving) 30054181310 | 77,920.00 | | 23,821,238.00 | |
| SBI Bank A/c 30042955244 | 1,234,561.28 | | 2,882,966.28 | |
| SBI Bank A/c 31794300805 | 64,029.00 | | 2,686,630.00 | |
| GPF Bank A/c 31255750394 | 340,064.00 | | 644,192.00 | |
| SBI Bank A/c 30007211525 | <u>2,045,549.40</u> | 18,994,443.10 | 662,689.00 | 31,403,348.28 |
| TOTAL (A) | | 19,075,583.10 | | 31,521,098.28 |

B) LOANS ADVANCES AND OTHER ASSETS

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|----------------------------|---------------|---------------|---------------|---------------|
| Earnest money deposited | | | | |
| by NIT | 1,353,455.00 | | 655,855.00 | |
| Festival Advances | 83,734.00 | | 48,109.00 | |
| Advance to Staff | 1,121,171.00 | | 1,523,901.00 | |
| T A Adnances | 25,000.00 | | 25,000.00 | |
| LTC Advances | 198,972.00 | | 866,016.00 | |
| GPF Advances | 494,163.00 | 3,276,495.00 | 490,733.00 | 3,609,614.00 |
| OTHER CURRENT | | | | |
| <u>ASSETS</u> | | _ | | _ |
| FDR received from party | 2,594,909.00 | | 222,962.00 | |
| TDS Receivable | 306,221.00 | | 45.00 | |
| Service Tax(Cenvat Credit) | 36,670.00 | | 843,794.00 | |
| Rent receivable | 20,922.00 | | 66,000.00 | |
| Electricity and water ch | | | | |
| receivable | 6,185.00 | | 10,845.00 | |
| Employees outstanding | 0.00 | | 0.00 | |
| Testing Fees receivable | 37,650.00 | | 412,924.00 | |
| Misc amount receivable | 0.00 | | 0.00 | |
| Interest Accrued | 40,282,135.00 | | 22,953,041.00 | |
| Admission Fees Receivable | 620.00 | | 1,840,545.00 | |
| CCB Fund receivable | 0.00 | | 0.00 | |
| Deffered Library expenses | 7,998,160.00 | | 7,277,006.00 | |
| MHRD Grant receivable | 0.00 | 51,283,472.00 | 0.00 | 33,627,162.00 |
| TOTAL (B) | | 54,559,967.00 | | 37,236,776.00 |
| TOTAL(A+B) | | 73,635,550.10 | | 68,757,874.28 |

SCHEDULE- 8
INCOME FROM SALE & SERVICES

| | | As on 31.03.2014 | | As on 31.03.2013 |
|------------------|--------------|------------------|--------------|------------------|
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Tendor Form Sale | 153,500.00 | | 70,500.00 | |
| Consultency Fee | 8,143,038.00 | | 8,914,720.50 | |
| Testing Fee | 1,825,277.00 | 10,121,815.00 | 901,035.50 | 9,886,256.00 |
| TOTAL | | 10,121,815.00 | | 9,886,256.00 |

SCHEDULE- 9 FEES/SUBSCRIPTION

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|---------------------------|----------------|----------------|----------------|----------------|
| | | | | |
| Tuition Fees | 137,423,980.00 | | 128,822,660.00 | |
| Identity card Fee | 109,800.00 | | 368,800.00 | |
| Magazine fees | 389,400.00 | | 368,800.00 | |
| Registration Fee | 973,500.00 | | 922,000.00 | |
| Sports fees | 973,500.00 | | 922,000.00 | |
| LibraryFees | 1,947,000.00 | | 1,844,000.00 | |
| Main Exam Fees(Acadamic | | | | |
| year) | 7,300,700.00 | | 6,863,300.00 | |
| Internet Fee | 1,168,200.00 | | 1,106,400.00 | |
| Insurance Fee | 1,751,850.00 | | 1,807,833.00 | |
| Training & placement fees | 973,500.00 | 153,011,430.00 | 922,000.00 | 143,947,793.00 |
| TOTAL | | 153,011,430.00 | | 143,947,793.00 |

SCHEDULE- 10

INTEREST EARNED

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|------------------|---------------|---------------|---------------|---------------|
| Interest on FDR | 51,113,843.00 | | 44,195,186.00 | |
| Interest on | | | | |
| Savings | 777,838.00 | | 2,116,564.05 | |
| TDS on Fixed | | | | |
| deposit refunded | 1,655.00 | | 0.00 | |
| TOTAL | 3,593,340.00 | 55,486,676.00 | 0.00 | 46,311,750.05 |
| | | 55,486,676.00 | | 46,311,750.05 |

SCHEDULE- 11 OTHER FEES

| | | As on 31.03.2014 | | As on 31.03.2013 |
|--------------------------|--------------|------------------|--------------|------------------|
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Exam fees | 3,523,350.00 | | 1,174,240.00 | |
| Misc and other late Fees | 627,174.00 | | 720,942.00 | |
| Recruitment Fees | 0.00 | | 1,145,095.00 | |
| Application and | | | | |
| Registration Fee | 923,900.00 | | 376,975.00 | |
| Phd fees | 1,166,100.00 | | 438,900.00 | |
| Fine | 54,055.00 | | 49,875.00 | |
| Admission Fees | | | | |
| Refund(Cancellation) | 222,350.00 | | 1,068,790.00 | |
| Convocation Fee | 1,166,606.00 | 7,683,535.00 | 615,250.00 | 5,590,067.00 |
| TOTAL | | 7,683,535.00 | | 5,590,067.00 |

SCHEDULE- 12

OTHER INCOME

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|--------------------------|----------------------|---------------|---------------|---------------|
| Electric & water charges | | | | |
| received | 420,771.00 | | 414,868.00 | |
| House and other rent | 298,593.00 | | 269,886.00 | |
| Information rights | 2,052.00 | | 1,996.00 | |
| Misc received | 509,323.00 | | 83,153.00 | |
| Sponsorship | 302,473.00 | | 439,000.00 | |
| Guest house charges | 41,900.00 | | 3,150.00 | |
| Expenses reimbursed from | | | | |
| Testing/Consultency | 52,169.00 | | 33,135.00 | |
| Project account | 8,748.00 | | 157,829.00 | |
| Other amount credited by | | | | |
| bank | 0.00 | | 0.00 | |
| Consultancy charges | | | | |
| reversed | 1,070,289.00 | | 0.00 | |
| Deferred Income charged | | | | |
| on account of | | | | |
| Depriciation | <u>36,915,376.00</u> | 39,621,694.00 | 22,590,360.00 | 23,993,377.00 |
| TOTAL | | 39,621,694.00 | | 23,993,377.00 |

SCHEDULE- 13

HOSTEL FEES

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|-----------------------------|--------------|---------------|--------------|---------------|
| Hostel Rent and Electricity | | | | |
| Charges received | 6,190,775.00 | | 4,785,650.00 | |
| Hostel room Rent | 0.00 | 6,190,775.00 | 0.00 | 4,785,650.00 |
| TOTAL | | 6,190,775.00 | | 4,785,650.00 |

$\underline{\textbf{SCHEDULES FORMING PART OF THE BALANCE SHEET}}$

SCHEDULE- 14

ESTABLISHMENT EXPENSES

| | | | | As on |
|-----------------------------|----------------|------------------|---------------|---------------|
| | | As on 31.03.2014 | | 31.03.2013 |
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Contract Salary and Daily | | | | |
| wages | 65,252,405.00 | | 54,480,243.00 | |
| Salary-regular staff | 137,345,159.00 | | 97,528,771.00 | |
| DA Arrears | 4,311,880.00 | | 2,002,249.00 | |
| Pay Arrears | 3,477,128.00 | | 6,038,700.00 | |
| Children education | | | | |
| Reimbursement | 1,276,847.00 | | 1,206,612.00 | |
| GPF/GIS Director salary | 360,000.00 | | 326,836.00 | |
| Director Leave salary | | | | |
| remittance | 90,750.00 | | 67,863.00 | |
| Director Pension remittance | 170,324.00 | | 127,368.00 | |
| PF | 2,674,151.00 | | 2,613,717.00 | |
| LTC expenses | 2,920,674.00 | | 2,765,231.00 | |
| DPF | 74,999.00 | | 55,085.00 | |
| Faculty association raipur | 87,900.00 | | 96,600.00 | |
| Bonus | 680,109.00 | | 0.00 | |
| FBF and GIS | 175,620.00 | | 181,240.00 | |
| Pension | 5,517,324.00 | | 4,021,787.00 | |
| NPS Contribution by NIT | 6,227,988.00 | | 3,339,052.00 | |
| NPS Contribution of | | | | |
| Employee | 6,227,988.00 | | 3,339,052.00 | |
| Leave Encashment | 846,943.00 | | 226,512.00 | |
| CPDA expenses | 4,155,489.00 | | 3,700,733.00 | |

| CPF | 25,160.00 | | 26,360.00 | |
|------------------------|---------------|----------------|---------------|----------------|
| GLIS | 277,200.00 | | 0.00 | |
| Gratuity for employees | 12,164,686.00 | | 23,156,122.00 | |
| Leave for employee | 15,817,389.00 | 270,158,113.00 | 24,867,009.00 | 230,167,142.00 |
| TOTAL | | 270,158,113.00 | | 230,167,142.00 |

SCHEDULE- 15 EXAM/SCHOLORSHIP EXPENSES

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|--------------------------|---------------|---------------|--------------|---------------|
| AICTE and other exam | | | | |
| remuneration to staff | 2,184,584.00 | | 1,420,648.00 | |
| Exam department Expenses | 1,179,182.00 | | 1,112,617.00 | |
| Phd Scholorship | 14,649,713.00 | 18,013,479.00 | 1,604,407.00 | 4,137,672.00 |
| TOTAL | | 18,013,479.00 | | 4,137,672.00 |

SCHEDULE- 16 OTHER ADMINISTRATIVE EXPENSES

| | | | | As on |
|----------------------------------|---------------|------------------|--------------|---------------|
| | | As on 31.03.2014 | | 31.03.2013 |
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Testing and Consultancy | | | | |
| Remuneration & expenses | 700.00 | | 954,352.00 | |
| Conveyence expenses | 4,025.00 | | 1,765.00 | |
| Bank Charges | 92,186.01 | | 36,373.00 | |
| NIT Transit house contribution | 250,000.00 | | 150,000.00 | |
| Honorarium expenses | 64,250.00 | | 0.00 | |
| Prize Money | 54,400.00 | | 8,000.00 | |
| Training & placement expenses | 526,885.00 | | 332,472.00 | |
| Transfer Grant | 0.00 | | 93,820.00 | |
| BOG/Finance/HODs/Deans/ etc | | | · | |
| meeting expenses | 812,773.00 | | 208,473.00 | |
| Functions & activities expenses | 4,179,458.00 | | 3,040,914.00 | |
| Advertisement | 1,271,875.00 | | 1,115,058.00 | |
| Audit expenses | 79,955.00 | | 0.00 | |
| Internet charges and Web | | | | |
| maintainance | 1,456,922.00 | | 1,467,866.00 | |
| Consultency and Legal Expenses | 683,500.00 | | 2,085,678.00 | |
| Miscellaneous expenses | 8,480.00 | | 0.00 | |
| Postage & stamp Expenses | 160,000.00 | | 150,040.00 | |
| Printing & Stationery charges | 1,105,241.00 | | 595,050.00 | |
| Travelling and Hotel expenses | 674,217.00 | | 1,030,109.00 | |
| Recruitment expenses | 1,004,138.00 | | 2,335,241.00 | |
| Library Expenses | 10,091,096.00 | | 6,365,490.00 | |
| Medical grant & expenses | 1,018,380.00 | | 1,313,707.00 | |
| Indian Coffee house expenses | 0.00 | | 179,166.00 | |
| Water, Electricity & Telephone | | | · | |
| charges | 11,851,983.00 | | 9,822,359.00 | |
| Convocation expenses | 2,186,407.00 | | 2,013,284.00 | |
| Fuel charges | 298,710.00 | | 200,941.00 | |
| Vehicle Repairs and Maintainance | 88,317.00 | | 62,039.00 | |
| Insurance charges | 105,712.00 | | 103,630.00 | |
| Sports, Yoga and other activity | 492,822.00 | | 647,539.00 | |
| Office upkeep expenses | 106,953.00 | | 109,683.00 | |
| Statutory expenses | 35,002.00 | | 80,973.00 | |
| Student safety insurance | 1,751,850.00 | | 1,807,833.00 | |
| Virtual classroom expenses | 451,180.00 | | 0.00 | |
| Computer consumable expenses | 418,100.00 | 41,325,517.01 | 238,175.00 | 36,550,030.00 |
| TOTAL | | 41,325,517.01 | | 36,550,030.00 |

SCHEDULE- 17
DEPARTMENTAL OPERATING EXPENSES

| | | As on | | |
|--------------------------------|-------------------|---------------|--------------|------------------|
| | | 31.03.2013 | | As on 31.03.2012 |
| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
| Computer consumable expenses | 683,371.00 | | 1,487,226.00 | |
| Department/lab consumable | | | | |
| expenses | 3,033,880.00 | | 1,702,455.00 | |
| Workshop expenses | 333,980.00 | | 62,817.00 | |
| Repair and maintainance | | | | |
| instrument/equipments | 298,000.00 | | 219,821.00 | |
| Department stationary expenses | <u>395,991.00</u> | 4,745,222.00 | 1,043,241.00 | 4,515,560.00 |
| Total | | 4,745,222.00 | | 4,515,560.00 |

SCHEDULE- 18

HOSTEL EXPENSES

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|--------------------|--------------|---------------|------------|---------------|
| Hostel electricity | 1,141,300.00 | | 957,550.00 | |
| Hostel Maintanance | 244,762.00 | 1,386,062.00 | 291,746.00 | 1,249,296.00 |
| TOTAL | | 1,386,062.00 | | 1,249,296.00 |

SCHEDULE- 19
ESTATE OFFICE EXPENSES (Maintenance Expenses)

| PARTICULAR | | Amount (In ₹) | | Amount (In ₹) |
|---------------------------------|--------------|---------------|--------------|---------------|
| Guest house expenses | 947,546.00 | | 0.00 | |
| Gardning & Horticulture | 17,572.00 | | 78,350.00 | |
| Electrical maintainance | 906,762.00 | | 520,483.00 | |
| Repair & Maintenance to College | | | | |
| Building | 5,073,854.00 | | 3,000,442.00 | |
| Repair & Maintenance to Hostel | | | | |
| Building | 182,794.00 | | 346,697.00 | |
| Repair & Maintenance to Staff | | | | |
| Quarters | 475,987.00 | | 346,323.00 | |
| Sanitary/cleaning Expenses | 49,450.00 | 7,653,965.00 | 186,815.00 | 4,479,110.00 |
| TOTAL | | 7,653,965.00 | | 4,479,110.00 |

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 Acadamic 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 deffered 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 2013-14:

Depreciation on Fixed Assets purchased in 2013-14 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.

| PARTICULARS | DEPRICIATION 31.03.2014 | FROM | 01.04.2013 | то |
|--------------|-------------------------|------|------------|------|
| DEPRICIATION | | | 36,915,37 | 6.00 |
| TOTAL | | | 36,915,37 | 6.00 |

The value of Fixed Assets decreased by Rs 36,915,376.00 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 2013-14.
- 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

| PARTICULARS | As on 31.03.2014 | As on 31.03.2014 |
|------------------------------|------------------|------------------|
| Employers Contribution to No | 6,227,988.00 | 3,339,052.00 |
| Pension Scheme | | |

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 1070289 included consultency and legal charges in 2012-13.As per Audit observation the same is transferred in capital work in progress in 2013-14.

- **8.** Corresponding figures for the previous year have been regrouped/rearranged, wherever necessary.
- **9** 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.
- Schedules 1 to 20 are annexed to and form an integral part of the Balance Sheet as at 31.03.2014 and the Income and Expenditure account for the year ended on that date.

National Institute of Technology Raipur

| | NIT 2013-14 | |
|---------------------------------|---------------------------|---------------|
| Receipts | 1-Apr-2013 to 31-Mar-2014 | |
| Opening Balance | | 31521098.28 |
| Bank Accounts | 31403348.28 | |
| Cash-in-hand | 117750.00 | |
| PROVODENT/OTHER FUND | | 250939351.00 |
| Corpus Fund (Provident Fund) | 939351.00 | |
| Grant in Aid(PLAN) Received | 250000000.00 | |
| Current Liabilities | | 82248073.33 |
| Duties & Taxes | 6018586.00 | |
| Provisions | 504252.00 | |
| Sundry Creditors | 18953.00 | |
| OTHER CURRENT LIABILITIES | 72848694.40 | |
| SUNDRY CREDITORS(CAPITAL GOODS) | 2857587.93 | |
| Fixed Assets | | 145176.00 |
| Equipment & Instruments | 145176.00 | |
| Current Assets | | 565957798.00 |
| Deposits (Asset) | 545182487.00 | |
| Loans & Advances (Asset) | 5069121.00 | |
| Sundry Debtors | 1196738.00 | |
| Other Current Assets | 14509452.00 | |
| Direct Expenses | | 94640.00 |
| EXAM/SCHOLARSHIP EXPENSES | 94640.00 | |
| Indirect Incomes | | 153118339.00 |
| BANK INTEREST AND CREDITS | 14969596.00 | |
| FINE | 54055.00 | |
| HOSTEL FEES | 4706000.00 | |
| NON PLAN GRANT RECEIVED | 125000000.00 | |
| OTHER FEES | 5927401.00 | |
| OTHER RECEIPT | 1219067.00 | |
| PROJECT ACCOUNT | 1099676.00 | |
| RENT | 142544.00 | |
| Indirect Expenses | | 431908.49 |
| DEPARTMENTAL OPERATING EXPENSES | 2740.00 | |
| ESTABLISHMENT EXPENSES | 163955.00 | |
| OTHER ADMINISTRATIVE EXP | 265213.49 | |
| Direct Income | | 179520800.00 |
| ADMISSION FEES | 159708969.00 | |
| INCOME FROM SALE AND SERVICES | 19811831.00 | |
| Total | | 1263977184.10 |

National Institute of Technology Raipur

| National Institute of | NIT 2013-14 | |
|--|---------------------------|---------------|
| Payments | 1-Apr-2013 to 31-Mar-2014 | |
| PROVODENT/OTHER FUND | | 2534594.00 |
| Corpus Fund (Provident Fund) | 2534594.00 | |
| Current Liabilities | 255 155 1.55 | 652975766.00 |
| Duties & Taxes | 22860764.00 | 002070700.00 |
| Provisions | 214415882.00 | |
| | | |
| Sundry Creditors | 140690007.00 | |
| OTHER CURRENT LIABILITIES | 22678210.00 | |
| SUNDRY CREDITORS(CAPITAL GOODS) | 252330903.00 | |
| Fixed Assets | | 1596268.00 |
| Computers / Softwares & Networking | 33400.00 | |
| Coolers | 29950.00 | |
| Equipment & Instruments | 1387754.00 | |
| Furniture & Fixtures | 20628.00 | |
| Library Books/ Journals | 84100.00 | |
| UPS | 14450.00 | |
| Water Cooler Purifier & Filter | 25986.00 | |
| Current Assets | | 550292765.00 |
| Deposits (Asset) | 541099197.00 | |
| Loans & Advances (Asset) | 8781396.00 | |
| Sundry Debtors | 407642.00 | |
| Other Current Assets | 4530.00 | |
| Direct Expenses | 1000.00 | 15679058.00 |
| Scholarship for PHD & M Tech(Exp) | 13391933.00 | |
| EXAM/SCHOLARSHIP EXPENSES | 2287125.00 | |
| Indirect Incomes | | 1508696.00 |
| HOSTEL FEES | 80125.00 | |
| OTHER FEES | 457770.00 | |
| OTHER RECEIPT | 27219.00 | |
| PROJECT ACCOUNT | 943582.00 | |
| Indirect Expenses | | 19924294.00 |
| DEPARTMENTAL OPERATING EXPENSES | 2416087.00 | |
| ESTABLISHMENT EXPENSES | 11621464.00 | |
| ESTATE OFFICE EXPENSES (MAINTENANCE EXP) | 131112.00 | |
| HOSTEL EXPENSES | 9988.00 | |
| OTHER ADMINISTRATIVE EXP | 5745643.00 | |
| Direct Income | 2.72070.00 | 390160.00 |
| ADMISSION FEES | 300160.00 | |
| INCOME FROM SALE AND SERVICES | 90000.00 | |
| Closing Balance | 90000.00 | 19075583.10 |
| Bank Accounts | 18994443.10 | |
| Cash-in-hand | 81140.00 | |
| Total | | 1263977184.10 |