ANNUAL REPORT

(Including Audited Accounts)

2015-2016

(April 01, 2015 – March 31, 2016)



NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR,

G.E. ROAD, RAIPUR 492 010

CHHATTISGARH, INDIA.

An Institute of National Importance Under

Ministry of Human Resource Development,

Government of India

PAPERS TO BE LAID ON THE TABLE OF LOK/RAJYA SABHA

ANNUAL REPORT & ANNUAL ACCOUNTS

2015-2016

(AUTHENTICATED)

(SHRI Prakash Javadekar)

HON'BLE MINISTER OF HUMAN RESOURCE DEVELOPMENT

New Delhi

DATED:



NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR,

RAIPUR

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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)	(upto 07 June 2015)
2	Dr. Sudarshan Tiwari	Member
	Director, NIT Raipur	(from 08-06-2015)
		Director, Acting Chairman (As per
		Statute No. 17(15) read with Section 16
		of NITSER Act 2012)
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	Shri Kamal Sarda	Member
	CMD, Sarda Energy & Minerals Ltd.	Nominee of Govt. of Chhattisgarh.
	IndustrialGrowthCenter, Phase-I Siltara, Raipur	
6	Dr. Neelesh Kumar Jain	Member
	Professor, Department of Mechanical Engineering	(from 19/06/2015)
	IIT Indore	
7	Dr. Naresh Kumar Nagwani	Member
	Head, Department of Computer Science &	(upto 05/09/2015)
	Engineering, NIT Raipur	
	Shri A. P. Rajimwale	
	Dean (Student Welfare) and Associate Professor,	Member
	Department of Metallurgical Engineering NIT Raipur NIT Raipur	(from 07/09/2015)

8	Dr. A.S. Thoke	Member
	Professor& Head, Department of Electrical	(from 06/09/2013 to 05/07/2015)
	Engineering, NIT Raipur	
	Dr. M. K. Verma Professor, Department of Civil Engineering NIT Raipur	Member (from 06/07/2015 to 28/09/2015)
	Dr. (Mrs.) A. B. Soni	Member
	Professor	(from 28/09/2015)
	Department of Chemical Engineering, NIT Raipur	
9	Dr. P. Y. Dhekne	Secretary
	Registrar (I/c), NIT Raipur	

2.2 <u>Finance Committee</u>

1	Shri Sudhir Vasudeva	Chairman
	CMD, Oil and Natural Gas Corporation	(upto June 2015)
	Ltd (ONGC)	
2	Dr. Sudarshan Tiwari	Member
	Director, NIT Raipur	Director, Acting Chairman (As per Statute No.
		17(15) read with Section 16 of NITSER Act 2012)
3	Joint Secretary	Member
	Ministry of Human Resource	
	Development, Department of Higher	
	Education, New Delhi	
4	Financial Adviser	Member
	Ministry of Human Resource	
	Development, Department of Higher	
	Education, New Delhi	
5	Dr. A.S. Thoke	Member
	Professor& Head, Department of Electrical Engineering, NIT Raipur	(from 06/09/2013 to 05/07/2015)
		Member
	Dr. M. K. Verma	(from 06/07/2015 to 28/09/2015)
	Professor, Department of Civil	
	Engineering	Member
	NIT Raipur	(from 28/09/2015))
	Dr. (Mrs.) A. B. Soni	
	Professor	

	Department of Chemical Engineering, NIT Raipur	
<u>6</u>	Dr. P. Y. Dhekne	Member Secretary
	Registrar (I/c), 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. A M Rawani	Dean (Academics)	Member
6	Shri A. P Rajimwale	Dean (Students Welfare)	Member
7	Dr. Shrish Verma	Dean (Faculty Welfare) , Head, Deptt of E&TC from 04.08.2015	Member
8	Dr. G D Ramtekkar	Dean (Planning & Development)	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	Dr. R. K. Tripathi	Head, Deptt of Civil Engineering	Member upto 09.02.2016
13	Dr. U. K. Dewangan	Professor, Deptt of Civil Engineering	Member from 10.02.2016
14	Dr. M K Verma	Professor, Deptt of Civil Engineering	Member

15	Dr. S P S Matharu	Professor, HOD Humanities Department	Member upto 10.09.2015
16	Dr. Samir Bajpai	Professor, HOD Humanities Department	Member from 11.09.2015
17	Dr. (Mrs) A.B. Soni	Head, Deptt. of Chemical Engineering	Member
18	Dr. (Mrs.) F. Khan	Head, Deptt of Chemistry	Member
19	Dr. N K Nagwani	Head, Deptt of Computer Science and Engineering	Member
20	Dr. Subhojit Ghosh	Head, Deptt. Of Electrical Engg.	Member
21	Dr. (Ms.) Lata B. Upadhyaya	Head, Deptt. Of Bio- Technology	member
22	Dr. Sudhakar Pandey	Sudhakar Pandey Head, Deptt of Information Technology	
23	Shri B.K. Singh	Head, Deptt. Of Bio-Medical	Member
24	Dr. Rahul Salhotra	Head, Deptt of Mechanical Engineering	Member
25	Shri B. Acharya Head, Deptt. Of Electronics & Telecommunication		Member up to 03.08.2015
26	Dr. S. L. Sinha	Sinha Professor, Deptt of Mechanical Engineering	
27	Dr. Anil Kumar Tiwari	Ail Kumar Tiwari Professor, Deptt of Mechanical Engineering	
28	Dr. S. D. Patle	Dr. S. D. Patle Professor, Deptt of Mechanical Engineering	
29	Dr. M. K. Manoj	Head, Deptt of Metallurgical Engineering	Member (upto 16/08/2015)
30	Dr. Manoj Chopkar	Head, Deptt of Metallurgical Engineering	Member (from 17/08/2015)

31	Shri M.D.Patel	Head, Deptt of Mining Engineering	Member
32	Shri H Bikrol	Head, Deptt of Computer Applications	Member
33	Dr. Arvind Kumar Sinha	Head, Deptt. of Mathematics	Member
34	Dr. R. P Pathak	Professor, Deptt. of Mathematics	Member
35	Dr. (Mrs.) S. Agrawal	Head, Deptt. of Physics	Member
36	Dr. A. K. Shrivastav	Professor, Deptt of Physics	Member
37	Dr. Manoj Pradhan	Professor, Deptt of Mining	Member
38	Dr. (Mrs) S Gupta	Professor, Deptt of Electrical	Member
39	Shri Mithlesh Atulkar	Professor (I/c) Examination	Special-Invitee
40	Dr. P. Y. Dhekne	Registrar(I/c)	Secretary

2.4 Building & Works Committee

	Dr. Sudarshan Tiwari	
1	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 IndiaRaipur(C.G)	Member
5	Dr. G.D.Ramtekkar Dean P&D NIT Raipur	Member
7	Dr. L.K.Mishra Associate Professor Dept. of Civil Engg. Motilal Nehru National Institute of Technology, Allahabad – 211 004	Member

	Dr. P. Y. Dhekne	
8	Registrar (I/c), 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. P. Y. Dhekne	B.E., M.Tech, Ph.D.	Registrar (I/c)
3	Dr. A M Rawani	M.Tech , Ph.D	Dean (Academic Affairs)
4	Dr. ShrishVerma	B.E,M Tech., Ph.D	Dean (Faculty Welfare)
5	Dr. S. Sanyal	B.E, M.Tech& Ph.D.	Dean (Research & Consultancy)
6	Dr. G. D. Ramtekkar	B.E., M.Tech., Ph.D.	Dean (Planning & Development)
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 Sunil Pandey	B.E., M.Tech	Senior Technical Officer (IT)
10	Shri Mani Shankar Singh	PGDFM, MBA	Assistant Registrar (F&A) & Deputy Registrar (I/c) (F&A)
11	Shri Shailesh Vaidya	M.E. (IE&M)	Senior Technical Officer (Workshop)
12	Shri Vijay Singh	M.Com, MBA	Assistant Registrar (S&P)
13	Shri Liju Mathew	MBA, MA	Assistant Registrar (Establishment)
14	Shri Sudarshan Bhadra	MBA	Assistant Registrar (Student Section)
15	Shri Jitendra Dimri	M.Phil	Assistant Registrar (TEQIP)
16	Shri Ravindra Chouhan	B.Sc., MCA	Technical Officer
17	Shri Suraj Pratap Shrivastav	B.E.	Executive Engineer

18	Shri Astik Kumar	B.E.	Junior Engineer
19	Shri BalramNayak	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 (Thermal, Machine Design, Indst Engg & Mgmt)
 - 4. Civil Engineering (Structural, Water Resource Develop. & Irrigtion Engg)
 - 5. Electrical Engineering (Power System & Control)
 - **6.** Information Technology

(b) Master of Computer Applications

4.2 Admission Procedure

B.Tech. :

The admission to 1st year of B.Tech. Programme is made through the Joint Entrance Examination (JEE) conducted by JoSAA/CSAB 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 sixty three 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) (15-16)

Departments	Sanctioned Intake	Admissions
Architecture	62	59
Bio. Medical Engineering	62	48
Bio. Technology	62	52
Chemical Engineering	62	57
Civil Engineering	78	75+1DASA
Computer Science & Engineering	92	87
Electrical Engineering	92	88
Electronics& Telecommunication Engineering	92	87+ 1DASA
Information Technology	92	81
Mechanical Engineering	92	89
Metallurgical Engineering	92	85
Mining Engineering	77	75
Total	955	885

Post Graduate (M.Tech)

Departments	Sanctioned Intake	Admissions
Applied Geology	15	15
Master of Computer Applications	92	92
Civil Engineering	30	26
Chemical Engineering	25	07
Mechanical Engineering	43	35
Electrical Engineering	25	19
Information Technology	25	19

Total	255	213

4.4 Scholarship Details

Sr.N o	Name of Scholarship	Sponsored by	UG / PG	No of Students	Amount Involved
1	Post Metric Scholarship for SC	Tribal Welfare Dept. of C.G.	UG/PG	128	8202300
2	Post Metric Scholarship for ST	Tribal Welfare Dept. of C.G.	UG/PG	80	5093250
3	Post Metric Scholarship for OBC	Tribal Welfare Dept. of C.G.	UG/PG	243	14042295
4	ONGC Scholarship	Oil And Natural Gas Corpo. Ltd. ONGC Academy Kaulagarh Road, Dehradun 248195	UG/PG	3	220000
5	Other State Scholarship for SC/ST/OBC/Gen	Other State	UG/PG	67	3954532
6	IOCL Scholarship	Indion Oil Education Scholarship-B7, Sector 132 Gautam Budh Nagar Greater Noida Ex. Noida U.P.	UG/PG	4	90000
8	Central Scholarship for SC Students		UG	13	624750
9	M.Tech	NIT Raipur	PG	172	23151082
10	Ph.D	NIT Raipur		81	26189920
	1	Total	1	791	81568129

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.

	FIRST SEMESTER								
S. NO.	COURSE	BRANCH	APPEARED	PASSED	FAIL	PASS %			
1	B. ARCH	ARCHITECTURE	61	39	22	63.93			
2	B. TECH	BIO MEDICAL ENGINEERING	74	40	34	54.05			
3	B. TECH	BIO TECHNOLOGY	76	38	38	50.00			
4	B. TECH	CHEMICAL ENGINEERING	61	46	15	75.41			
5	B. TECH	CIVIL ENGINEERING	90	70	20	77.78			
6	B. TECH	COMP. SC. & ENGINEERING	96	78	18	81.25			
7	B. TECH	ELECTRICAL ENGINEERING	96	83	13	86.46			
8	B. TECH	ELEX. & TELE. ENGINEERING	96	75	21	78.13			
9	B. TECH	INFORMATION TECHNOLOGY	91	56	35	61.54			
10	B. TECH	MECHANICAL ENGINEERING	93	81	12	87.10			
11	B. TECH	METALLURGICAL ENGINEERING	106	77	29	72.64			
12	B. TECH	MINING ENGINEERING	88	61	27	69.32			
		TOTAL	1028	744	284	72.37			

4.6 UNDER GRADUATE PROGRAMME

FIRST SEMESTER

SECOND SEMESTER

-						
1	B. ARCH	ARCHITECTURE	57	44	13	77.19
2	B. TECH	BIO MEDICAL ENGINEERING	71	39	32	54.93
3	B. TECH	BIO TECHNOLOGY	74	31	43	41.89
4	B. TECH	CHEMICAL ENGINEERING	72	55	17	76.39
5	B. TECH	CIVIL ENGINEERING	95	81	14	85.26
6	B. TECH	COMP. SC. & ENGINEERING	111	82	29	73.87
7	B. TECH	ELECTRICAL ENGINEERING	95	80	15	84.21
8	B. TECH	ELEX. & TELE. ENGINEERING	96	83	13	86.46
9	B. TECH	INFORMATION TECHNOLOGY	106	75	31	70.75
10	B. TECH	MECHANICAL ENGINEERING	106	87	19	82.08
11	B. TECH	METALLURGICAL ENGINEERING	115	80	35	69.57
12	B. TECH	MINING ENGINEERING	95	68	27	71.58
		TOTAL	1093	805	288	73.65

THIRD SEMESTER

1	B. ARCH	ARCHITECTURE	60	50	10	83.33		
2	B. TECH	BIO MEDICAL ENGINEERING	69	19	50	27.54		
3	B. TECH	BIO TECHNOLOGY	66	26	40	39.39		
4	B. TECH	CHEMICAL ENGINEERING	65	48	17	73.85		
5	B. TECH	CIVIL ENGINEERING	91	72	19	79.12		
6	B. TECH	COMP. SC. & ENGINEERING	108	83	25	76.85		
7	B. TECH	ELECTRICAL ENGINEERING	100	69	31	69.00		
8	B. TECH	ELEX. & TELE. ENGINEERING	100	79	21	79.00		
9	B. TECH	INFORMATION TECHNOLOGY	109	79	30	72.48		
10	B. TECH	MECHANICAL ENGINEERING	105	78	27	74.29		
11	B. TECH	METALLURGICAL ENGINEERING	102	74	28	72.55		
12	B. TECH	MINING ENGINEERING	92	69	23	75.00		
		TOTAL	1067	746	321	69.92		

FOURTH SEMESTER

1	B. ARCH	ARCHITECTURE	67	49	18	73.13		
2	B. TECH	BIO MEDICAL ENGINEERING	58	28	30	48.28		
3	B. TECH	BIO TECHNOLOGY	67	33	34	49.25		
4	B. TECH	CHEMICAL ENGINEERING	54	40	14	74.07		
5	B. TECH	CIVIL ENGINEERING	86	72	14	83.72		
6	B. TECH	COMP. SC. & ENGINEERING	110	79	31	71.82		
7	B. TECH	ELECTRICAL ENGINEERING	103	73	30	70.87		
8	B. TECH	ELEX. & TELE. ENGINEERING	112	88	24	78.57		
9	B. TECH	INFORMATION TECHNOLOGY	88	59	29	67.05		
10	B. TECH	MECHANICAL ENGINEERING	105	91	14	86.67		
11	B. TECH	METALLURGICAL ENGINEERING	95	80	15	84.21		
12	B. TECH	MINING ENGINEERING	90	64	26	71.11		
		TOTAL	1035	756	279	73.04		

FIFTH SEMESTER

1	B. ARCH	ARCHITECTURE	68	58	10	85.29
2	B. TECH	BIO MEDICAL ENGINEERING	51	27	24	52.94
3	B. TECH	BIO TECHNOLOGY	54	35	19	64.81
4	B. TECH	CHEMICAL ENGINEERING	59	41	18	69.49
5	B. TECH	CIVIL ENGINEERING	88	72	16	81.82
6	B. TECH	COMP. SC. & ENGINEERING	107	71	36	66.36
7	B. TECH	ELECTRICAL ENGINEERING	104	72	32	69.23
8	B. TECH	ELEX. & TELE. ENGINEERING	103	78	25	75.73
9	B. TECH	INFORMATION TECHNOLOGY	84	65	19	77.38
10	B. TECH	MECHANICAL ENGINEERING	99	84	15	84.85
11	B. TECH	METALLURGICAL ENGINEERING	96	81	15	84.38
12	B. TECH	MINING ENGINEERING	89	64	25	71.91

TOTAL 1002 748 254 74.65

SIXTH SEMESTER

1	B. ARCH	ARCHITECTURE	50	36	14	72.00
2	B. TECH	BIO MEDICAL ENGINEERING	40	22	18	55.00
3	B. TECH	BIO TECHNOLOGY	44	35	9	79.55
4	B. TECH	CHEMICAL ENGINEERING	67	56	11	83.58
5	B. TECH	CIVIL ENGINEERING	87	75	12	86.21
6	B. TECH	COMP. SC. & ENGINEERING	97	69	28	71.13
7	B. TECH	ELECTRICAL ENGINEERING	105	75	30	71.43
8	B. TECH	ELEX. & TELE. ENGINEERING	98	62	36	63.27
9	B. TECH	INFORMATION TECHNOLOGY	84	70	14	83.33
10	B. TECH	MECHANICAL ENGINEERING	97	82	15	84.54
11	B. TECH	METALLURGICAL ENGINEERING	89	78	11	87.64
12	B. TECH	MINING ENGINEERING	82	56	26	68.29
		TOTAL	940	716	224	76.17

SEVENTH SEMESTER

1	B. ARCH	ARCHITECTURE	49	36	13	73.47
2	B. TECH	BIO MEDICAL ENGINEERING	30	23	7	76.67
3	B. TECH	BIO TECHNOLOGY	38	25	13	65.79
4	B. TECH	CHEMICAL ENGINEERING	65	49	16	75.38
5	B. TECH	CIVIL ENGINEERING	80	73	7	91.25
6	B. TECH	COMP. SC. & ENGINEERING	92	76	16	82.61
7	B. TECH	ELECTRICAL ENGINEERING	96	71	25	73.96
8	B. TECH	ELEX. & TELE. ENGINEERING	94	81	13	86.17
9	B. TECH	INFORMATION TECHNOLOGY	79	72	7	91.14
10	B. TECH	MECHANICAL ENGINEERING	92	76	16	82.61
11	B. TECH	METALLURGICAL ENGINEERING	88	84	4	95.45
12	B. TECH	MINING ENGINEERING	79	66	13	83.54
		TOTAL	882	732	150	82.99

EIGHT SEMESTER

1	B. ARCH	ARCHITECTURE	64	60	4	93.75
2	B. TECH	BIO MEDICAL ENGINEERING	26	25	1	96.15
3	B. TECH	BIO TECHNOLOGY	28	22	6	78.57
4	B. TECH	CHEMICAL ENGINEERING	59	58	1	98.31
5	B. TECH	CIVIL ENGINEERING	79	76	3	96.20
6	B. TECH	COMP. SC. & ENGINEERING	89	78	11	87.64
7	B. TECH	ELECTRICAL ENGINEERING	94	85	9	90.43

8	B. TECH	ELEX. & TELE. ENGINEERING	97	88	9	90.72
9	B. TECH	INFORMATION TECHNOLOGY	75	70	5	93.33
10	B. TECH	MECHANICAL ENGINEERING	83	80	3	96.39
11	B. TECH	METALLURGICAL ENGINEERING	91	89	2	97.80
12	B. TECH	MINING ENGINEERING	62	54	8	87.10
		TOTAL	847	785	62	92.68

TENTH SEMESTER

1	B. ARCH	ARCHITECTURE	45	45	0	100.00

POST GRADUATE PROGRAMME MASTER OF COMPUTER APPLICATION

S. NO. (क्र.)	COURSE (पाठ्यक्रम)	BRANCH/SPECIALIZATION (विभाग / विशेषज्ञता)	SEM (सेमेस्टर)	APPEARED (परीक्षार्थी)	PASSED (उत्तीर्ण)	FAIL (अनुत्तीर्ण)	PASS % (उत्तीर्ण प्रतिशत)
1	MCA	MCA	Ι	98	52	46	53.06
2	MCA	MCA	II	85	62	23	72.94
3	MCA	MCA	III	84	66	18	78.57
4	MCA	MCA	IV	83	72	11	86.75
5	MCA	MCA	V	82	75	7	91.46
6	MCA	MCA	VI	86	86	0	100.00
		TOTAL		518	413	105	79.73

MASTER OF TECHNOLOGY IN APPLIED GEOLOGY

3	M. TECH	APPLIED GEOLOGY TOTAL	VI	15 85	5 75	10 10	33.33 88.24
3	M. TECH	APPLIED GEOLOGY	V	14	14	0	100.00
2	M. TECH	APPLIED GEOLOGY	IV	14	14	0	100.00
2	M. TECH	APPLIED GEOLOGY	III	14	14	0	100.00
1	M. TECH	APPLIED GEOLOGY	II	14	14	0	100.00
1	M. TECH	APPLIED GEOLOGY	Ι	14	14	0	100.00

MASTER OF TECHNOLOGY IN CHEMICAL ENGINEERING

1	M. TECH	CHEMICAL PROCESS DESIGN	Ι	6	6	0	100.00
2	M. TECH	CHEMICAL PROCESS DESIGN	II	14	14	0	100.00
3	M. TECH	CHEMICAL PROCESS DESIGN	III	14	12	2	85.71

	4	M. TECH	CHEMICAL PROCESS DESIGN	IV	14	14	0	100.00
ſ			TOTAL		48	46	2	95.83

MASTER OF TECHNOLOGY IN CIVIL ENGINEERING

1	M. TECH	STRUCTURAL ENGG.	Ι	13	8	5	61.54
2	M. TECH	WATER RES. DEV. & IRR. ENGG.	Ι	13	12	1	92.31
3	M. TECH	WATER RES. DEV. & IRR. ENGG.	II	11	11	0	100.00
4	M. TECH	STRUCTURAL ENGG.	II	9	8	1	88.89
5	M. TECH	STRUCTURAL ENGG.	III	8	8	0	100.00
6	M. TECH	WATER RES. DEV. & IRR. ENGG.	III	11	11	0	100.00
7	7 M. TECH WATER RES. DEV. & IRR. ENGG.		IV	7	7	0	100.00
		TOTAL		72	65	7	90.28

MASTER OF TECHNOLOGY IN ELECTRICAL ENGINEERING

1	M. TECH	POWER SYSTEM & CONTROL	Ι	19	13	6	68.42
2	M. TECH	POWER SYSTEM & CONTROL	II	21	17	4	80.95
3	M. TECH	POWER SYSTEM & CONTROL	III	20	20	0	100.00
4	M. TECH	COMPUTER TECHNOLOGY	IV	19	19	0	100.00
		TOTAL		79	69	10	87.34

MASTER OF TECHNOLOGY IN MECHANICAL ENGINEERING

1	M. TECH	THERMAL ENGINEERING	Ι	13	12	1	92.31
2	M. TECH	INDUSTRIAL ENGG. & MGT.	Ι	11	9	2	81.82
3	M. TECH	MACHINE DESIGN	Ι	11	11	0	100.00
4	M. TECH	THERMAL ENGINEERING	II	11	11	0	100.00
5	M. TECH	MACHINE DESIGN	II	11	9	2	81.82
6	M. TECH	INDUSTRIAL ENGG. & MGT.	II	10	9	1	90.00
7	M. TECH	THERMAL ENGINEERING	III	10	10	0	100.00
8	M. TECH	INDUSTRIAL ENGG. & MGT.	III	10	10	0	100.00
9	M. TECH	MACHINE DESIGN	III	11	10	1	90.91
10	M. TECH	THERMAL ENGINEERING	IV	13	13	0	100.00
		TOTAL		111	104	7	93.69

4.7 TRAINING & PLACEMENT

The Department of Training & Placement endeavours to prepare the students for various career opportunities after completion of their academic programs. The goal of Training & Placement Department is to provide good career opportunities to the students. It facilitates an effective industry-institute interaction for the benefit of the students.

The department organises various training programs, workshops, expert lectures and seminars for the benefit of students. The department keeps close contact with potential employers and organises the campus placements for the students based on mutual requirements.

The department is headed by Prof. Samir Bajpai. A Students' Placement Cell, consisting of Student Placement Conveners (representatives of final year students) and Coordinators (representatives of pre final year students) from each department, helps the Head, Training & Placement in various activities of the department.

<u>Placement Statistics</u>.

The overall placement for the 2015-16 batch was 66.42 % for B.Tech. and 33.83% for PG (M.Tech. and MCA) courses. The placement percentage has been calculated based on number of students eligible for placement and number of offers received by them. The eligibility criteria for placement by majority of the companies was set to be CPI \geq 6.00 and no standing backlogs / ATKT. The various placement statistics for the institute are depicted below.



Eligible Students & Placement Offers – B.Tech.







Sector-wise Company Visited (%)



Sector-wise Students Placed (%)



Year-wise Placement Percentage – B.Tech.



Average and Maximum CTC in Lakh Per Annum (LPA)

Prime Recruiters



Analytics Quotient	KEC INTERNATIONAL LIMITED	BARCLAYS	MARUTI SUZUKI	vedanta
INDIAN ARMY	INDIAN NAVY	Mu Sigma	YOLEE	FIAT
UnitedHealth Group	HEIDELBERGCEMENT GROUP	SAMSUNG	Shapoorji Pallonji	L&T Construction
Eharat Petroleum		P <u>RISM</u> CEMENT	A Joint Venture of Geometric & Dassault Systèmes	LAFARGE
radix®	PERSISTENT	HINDALCO ADITYA BIRLA GROUP	6 1/ 1/0 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/ 1/0 0/ 1/	
ORACLE [®]	Reliance Jio Infocomm	TATA		EEZABASISTIWAE
		info edge	• DRISHTI	SapientNitro

Placement Details of 2015-16 Batch.

S. No.	Name of the Company	D	I	S	С	I	Р	L	I	N	Е		Total Offer	CTC (LPA)	
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		Bio-Technology	Bio-Medical	Chemical	Civil	CSE	Electrical	E & TC	IT	Mechanical	Metallurgical	Mining	MCA	M.Tech. Chem.	M.Tech. Mech.	M Tech Elect.		
1	MU-SIGMA BUSINESS SOLUTIONS	1	3	3	-	2	-	3	4	1	4	-	-	-	-	-	21	4.50
2	DRISHTI SOFT PVT. LTD.	-	-	-	-	1	-	-	-	-		-	-	-	-	-	1	16.80
3	INCTURE TECHNOLOGY PVT. LTD.	-	-	-	-	1	-	1	1	-		-	-	-	-	-	3	5.00
4	3DPLM SOFTWARE PVT. LTD.	-	-	-	-	1	-	-		-	1	-	-	-	-	-	2	5.00
5	INFOEDGE PVT. LTD.	-	-	-	-	4	-	-	1	-	-	-	-	-	-	-	5	7.30
6	ANALYTICS QUOTIENT PVT. LTD.	-	-	-	1	1	1		3	-	-	1	1	-	-	-	8	5.50
7	POLARIS SOFTWARE PVT. LTD.	-	-	-	-	9	-	2	4	-	-		16	-	-	-	31	5.00
8	YODLEE INFOTECH PVT. LTD.	-	-	-	-	2	-		1	-	-	-	-	-	-	-	3	8.75
9	HELLA INDIA AUTOMOTIVE PVT. LTD.	-	-	-	-		-	1	-	-	-	-	-	-	-	-	1	3.75
10	MARUTI SUZUKI PVT. LTD.	-	-	-	-		-	-	-	4	-	-	-	-	-	-	4	5.40
11	POWER 2 SME PVT. LTD.	-	-	-	-	1	-	-	1		-	-	-	-	-	-	2	7.00
12	TATA MOTORS PVT. LTD.	-	-	-	-		-	-	-	8	-	-	-	-	-	-	8	6.15
13	COGNIZANT TECHNOLOGY SOLUTIONS	1	6	4	1	4	1	7	5		4	2	14	2	1	-	52	3.35
14	INFOSYS PVT. LTD.	2	6	4	1	18	4	12	11	2	9	5	8	-	-	1	83	3.28
15	L&T CONSTRUCTION PVT. LTD.	-	-	-	14		17	-	-	8	1	4	-	-	-	-	44	5.00
16	ORACLE INDIA PVT. LTD.	-	-	2	2	4	1	3	5	4	-	-	-	-	-	-	21	7.50
17	PERSISTENT SYSTEM PVT. LTD.	-	-	-	-	1	-	-	1	-	-	-	2	-	-	-	4	3.58
18	BELZABAR SOFTWARE DESIGN PVT. LTD.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	9.36
19	SAPIENT NITRO PVT. LTD.	-	-	-	-	5		1	3	-	-	-	-	-	-	-	9	4.55
20	SHAPOORJI PALLONJI & CO. LTD.	-	-	-	4		3	-	-	3	-	-	-	-	-	-	10	3.50
21	HEIDELBERG CEMENT PVT. LTD.	-	-	1	-	-	1	2	-	-	-	3	-	-	-	-	7	5.00
22	GREYB RESEARCH PVT. LTD.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	4.36
23	RADIX ELECTROSYSTE M PVT. LTD.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	3.50

				D	I	S	С	I	Р	· 1	L	I	N	Е				
S. No.	Name of the Company	Bio-Technology	Bio-Medical	Chemical	Civil	CSE	Electrical	E & TC	IT	Mechanical	Metallurgical	Mining	MCA	M.Tech. Chem.	M.Tech. Mech.	M Tech Elect.	Total Offer	CTC (LPA)
24	VEDANTA RESOURCES PLC	-	-	2	-	-	2	-	-	3	6	-	-	-	-	-	13	7.55
25	OXIGEN PVT. LTD.	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	4	7.00
26	TRINCON INFOTECH PVT. LTD.	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2	6.50
27	CAPGEMINI PVT. LTD.	1	-	-	-	-	1	6	-	-	-	-	-	-	-	-	8	4.50
28	UNITEDHEALTH GROUP	-	-	-	-	1	3	2	1	-	-	-	-	-	-	-	7	9.88
29	HINDALCO INDUSTRIES LTD	-	-	-	-	-	2	-	-	2	2	2	-	-	-	-	8	4.50
30	DS GROUP	-	-	-	-	-	3	-	-	2	-	-	-	-	-	-	5	4.08
31	PRISM CEMENT LTD.	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	3	3.52
32	VEDANTA RESOURCES PLC./ HZL	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	4	7.54
33	KEC INTERNATIONAL	-	-	-	3	-	1	-	-	1	-	-	-	-	-	-	5	4.75
34	RAMCO SYSTEMS	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	2	5.00
35	RELIANCE JIO INFOCOMM	-	-	-	-	1	-	3	3	-	-	-	-	-	-	-	7	5.31
36	UNITEDHEALTH GROUP (AQ)	-	-	-	-	-	-	2	-	-	1	-	-	-	-	-	3	7.18
37	LAFARGE CEMENT	-	-	1	-	-	2	-	-	1	-	2	-	-	-	-	6	6.30
38	BARCLAYS	-	-	-	-	1	-	-	2	-	-	-	-	-	-	-	3	8.00
39	SAMSUNG R&D	-	-	-	-	3	-	-	4	-	-	-	-	-	-	-	7	8.22
40	WIPRO TECHNOLOGIES	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	3	3.50
41	FIAT AUTOMOBILES	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	3	5.75
42	PRADAN	2	1	1	-	-	-	3	-	-	-	-	-	-	-	-	7	5.00
43	ADANI POWER	-	-	-	2	-	4	-	-	-	-	-	-	-	-	-	6	4.40
44	RESONANCE	-	-	1	-	-	1	-	1	1	1	-	-	-	-	-	5	5.00
45	BPCL	-	-	-	3	2	-	-	-	-	-	-	-	-	-	-	5	11.50
46	BUILDKRAFTT	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2	3.60
47	SK SAMANTA & CO PVT. LTD.	-	-	-	3	-	3	-	-	3	-	-	-	-	-	-	9	3.50
48	COAL INDIA LTD	-	-	-	-	12	17	-	-	-	-	5	-	-	-	-	34	11.00
49	HPCL	-	-	-	2	-	1	-	-	4	-	-	-	-	-	-	7	11.83
50	PT EDUCATION	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	3.00

				D	I	S	С	I	Р	•]	L	I	N	E				
S. No.	Name of the Company	Bio-Technology	Bio-Medical	Chemical	Civil	CSE	Electrical	E & TC	IT	Mechanical	Metallurgical	Mining	MCA	M.Tech. Chem.	M.Tech. Mech.	M Tech Elect.	Total Offer	CTC (LPA)
51	HPCL - MITTAL ENERGY LTD.	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	3	5.00
	Total	7	16	19	38	75	71	51	60	51	30	31	41	2	1	1	494	6.01
		Bio-Technology	Bio-Medical	Chemical	Civil	CSE	Electrical	E & TC	Ш	Mechanical	Metallurgical	Mining	MCA	M.Tech. Chemical	M.Tech. Mechanical	M Tech Electrical	Total Offer	Average CTC (LPA)

Steps to Enhance Placement Opportunities

The department takes feedbacks from the recruiters about the strength and weakness of the students with respect to the current demand in the industry and corporate world. On the basis of these feedbacks and inputs from the students, the department organises various training programs, workshops, expert lectures and seminars to assist the students overcome their weakness and get success in the placement drive.

In this connection, to improve the performance of students in campus recruitment process and enhance their chances of selection in campus recruitment, the department hired the services of a professional firm to provide training of aptitude test, personal interview (PI) and group discussion (GD) to those students who are not able to secure success in the placement drive.

Workshop & Seminars.

In order to make the students industry ready and enhance their chances of success in the corporate world, the department organises several workshops and seminars in coordination with the industry leaders and experts in the fields. Some of the workshop and seminars organised for the students during the academic year 2015-16 are as follows:-

S. No.	Торіс	Delivered by	Date
1.	Personal interviews of software companies	Mr. Sandeep Maheshwari, An Alumnus of NIT Raipur and a Senior Member - Marketing, TCS	July 14, 2015

2.	Career Building, Understanding of CAT & MBA Entrance Exams and How to Crack CAT Exam	Mr. Akash Gautam, motivator and speaker and Career Launcher, Raipur	July 17, 2015
3.	Training for Successful Campus Placement	Mr. Biswa Bhushan (Talent Acquisition) and Mr. Yaman Baghel (Senior member and an alumnus of NIT Raipur) Senior Executives from Infosys	August 03, 2015
4.	Hacking and Cracking Interviews	Mr. Sumit Jha, Soft Skills Trainer (Ex faculty, NIT Raipur)	August 08, 2015
5.	Engineering Ethics" (Topics: Relevance of Ethics in Engineering, Values in Engineering, Can Ethical Engineering practice be successful? the five P's of Ethical power, Indian Perspectives in Engineering Ethics	Dr. Mukunda Madhava Das, Director CHOICE	August 11, 2015
6.	Higher Studies opportunities in USA". The seminar very explicitly addressed the Why, how, when – queries of pre final and final year students regarding studies in USA universities	in association with USA Consulate, Mumbai	August 20, 2015
7.	Helping Others to Help Self	Mr. Deepak Kamble (Program Director – Avanti Fellow)	September 04, 2015

8.	Smart Quant Cracker	Mr. Niraj Prasad (an Alumnus of FMS)	September 06, 2015
9.	Opportunities available for Higher Studies Abroad	Meridian Studies, Raipur	September 24, 2015
10.	Campus Corporate Connect Program on "Air Separation Methodologies - Cryogenic Distillation & VPSA"	Mr. Chandan Dey, Regional Director (Ops), Praxair India Private Limited.	October 13, 2015
11.	Campus to Corporate	IBS Business School, Raipur	November 2, 2015
12.	Digital Five Forces in context of future campus recruitment in software industry	Mr. Gaurav Gandhi, TCS Mumbai	February 5, 2016
13.	Preparation for Successful Campus Placement	M/s. Personality Mantraa, Raipur	February 13, 2016
14.	Industry Readiness - an insight of real life industry	Mr. Arunesh Hyde (having 40 years of experience in leading management role in Tata group of companies)	May 13, 2016

<u> Training / Internship</u>

The department in coordination with various engineering departments of the institute arranges industrial training / internship in various leading industries/companies for the students of 4th semester and 6th semester. The training/internship which is an important part of the curriculum of the students, not only supplements the academic knowledge with practical experience but also provides an employment opportunity for the students. Many of these host companies / industries offer pre placement offer (PPO) to the interning students of 6th semester.

4.8 SIXTH CONVOCATION PROGRAM OF NIT RAIPUR

The Institute has successfully organised and celebrated its Sixth Convocation Program which was held on 5th January, 2016. Total 1003 degrees for various disciplines were awarded on the occasion and 18 gold and silver medals were awarded to the meritorious students of 2014 batch. The ceremony was blessed with the benign presence of Mr. Sudhir Vasudeva (former CMD, ONGC and Chairman, Board of Governors, NIT Raipur) has kindly consented to deliver the Convocation address as Chief Guest. 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 MEDAL RECIPIENTS, YEAR 2015 (OVERALL TOPPER, B. TECH CIVIL ENGINEERING)

S. NO.	NAME OF THE STUDENTS	ROLL NO.	OBT. MARKS	OUT OF MARKS	PERCENT	DIVISION	MEDAL
1	POOJA AGRAWAL	11114902	5785	6340	91.25	HONOURS	GOLD

UNDER GRADUATE PROGRAM

BACHELOR OF ARCHITECTURE

S. NO.	NAME OF THE STUDENTS	ROLL NO.	OBT. MARKS	OUT OF MARKS	PERCENT	DIVISION	MEDAL
1	ABHILAASH N	10122003	6252	8000	78.15	HONOURS	GOLD
2	AAKANKSHA	10122001	6003	8000	75.04	HONOURS	SILVER

B. TECH, BIO MEDICAL ENGINEERING

1	CHANDAN KUMAR JHA	11111016	4814	6340	75.93	HONOURS	GOLD
2	ADARSH KUMAR	11111003	4764	6340	75.14	HONOURS	SILVER

B. TECH, BIO TECHNOLOGY

1	AKANSHA AGARWAL	11112002	5499	6340	86.74	HONOURS	GOLD
2	PARUL THAKUR	11112033	5293	6340	83.49	HONOURS	SILVER

B. TECH, CHEMICAL ENGINEERING

1	AYOUSHI JAIN	11113011	5389	6340	85.00	HONOURS	GOLD
2	VIKASH KUMAR	11113905	5187	6340	81.81	HONOURS	SILVER

		D. I	ECH, CIVIL ENG	JINEEKING			
1	POOJA AGRAWAL	11114902	5785	6340	91.25	HONOURS	GOLD
2	D. PRAKASH	11114019	5283	6340	83.33	HONOURS	SILVER

FIRDOUS BANO 85.52 1 11115903 5422 6340 HONOURS GOLD 2 SUYASH KANDELE 11115085 5284 6340 83.34 HONOURS SILVER

D TECH CIVIL ENCINEEDING

B. TECH, COMPUTER SCIENCE & ENGINEERING

B. TECH, ELECTRICAL ENGINEERING

1	KARTIKEYA SINGH	11117033	5537	6340	87.33	HONOURS	GOLD
2	RAJAT SINHA	11117060	5512	6340	86.94	HONOURS	SILVER

B. TECH, ELECTRONICS & TELECOMMUNICATION ENGINEERING

1	LAKKAKULA GOWTHAM	11116040	5300	6340	83.60	HONOURS	GOLD
2	B.V.L. SUDHEERA	11116019	5272	6340	83.15	HONOURS	SILVER
		B. TECH,	INFORMATION	N TECHNOLOGY			
1 P. POOJA 11118047 5098 6340 80.41 HONOURS GOLD							GOLD
2	MANSI MISRA	11118903	5094	6340	80.35	HONOURS	SILVER

B. TECH, MECHANICAL ENGINEERING

	PRABHAT KUMAR SINGH	11119048	5383	6340	84.91	HONOURS	GOLD
2	CHITRASEN PATEL	11119020	5283	6340	83.33	HONOURS	SILVER

B. TECH, METALLURGICAL ENGINEERING

1	VINAY MOHAN SINGH	11120087	5555	6340	87.62	HONOURS	GOLD
2	DILPREET DHANJAL	11120024	5505	6340	86.83	HONOURS	SILVER

B. TECH, MINING	ENGINEERING
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		VINEETH						
1	1	BALAKRISHNAN	11121070	5319	6340	83.90	HONOURS	GOLD
2	2	VAIBHAV DUBEY	11121067	5173	6340	81.59	HONOURS	SILVER

POST GRADUATE PROGRAM

MASTER OF COMPUTER APPLICATIONS

S. NO.	NAME OF THE STUDENTS	ROLL NO.	OBT. MARKS	OUT OF MARKS	PERCENT	DIVISION	MEDAL
1	RUPINDER KAUR	12223050	3886	4500	86.36	HONOURS	GOLD
2	PRIYANSHI SETH	12223044	3882	4500	86.27	HONOURS	SILVER

M. TECH (APPLIED GEOLOGY)

S.	NAME OF THE				
NO.	STUDENTS	ROLL NO.	CPI	DIVISION	MEDAL
1	RANAJIT KUMAR SAHOO	12225010	8.35	HONOURS	GOLD
2	ADITYA PRATAP SINGH	12225001	8.33	HONOURS	SILVER

M. TECH, CHEMICAL ENGINEERING (CHEMICAL PROCESS DESIGN)

1	SRUTHI L	13245014	8.96	HONOURS	GOLD
2	ZEENAT ARIF	13245016	8.77	HONOURS	SILVER

M. TECH, CIVIL ENGINEERING (WATER RES. DEV. & IRRI. ENGG.)

1	ELAMUHIL S	13244003	9.78	HONOURS	GOLD
2	SANDEEP SONI	13244007	8.89	HONOURS	SILVER

M.TECH, ELECTRICAL ENGINEERING (COMPUTER TECHNOLOGY)

1	AARTI GOYAL	13224001	8.69	HONOURS	GOLD
2	KHUSHABOO VERMA	13224012	8.55	HONOURS	SILVER

M.TECH, MECHANICAL ENGINEERING (THERMAL ENGINEERING)

1	DEV KUMAR NAIK	13229004	9.03	HONOURS	GOLD
2	ABHINAV SAHU	13229001	8.42	HONOURS	SILVER

5.0 DETAILS OF DEPARTMENTS & OTHER ACTIVITIES

5.1 Departments

DEPARTMENT APPLIED GEOLOGY

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. P. Diwan	Head, Associate Professor	M.Tech., Ph.D.
2.	Dr. N. Vishwakarma	Assistant Professor	M.Tech., Ph.D.
3.	Dr. D.C. Jhariya	Assistant Professor	M.Tech., Ph.D.
4.	Dr. H. Govil	Assistant Professor	M.Sc., PGD, Ph.D.
5.	Dr. Vikal K. Singh	Lecturer (Temporary)	M.Sc., PGD, Ph.D.
6.	Mr. Gaurav Jangade	Teaching Assistant (Temporary)	M. Tech.
7.	Mr. Subranshu Pani	Teaching Assistant (Temporary)	M. Tech

M.Tech Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. P. Diwan	Chandan Singh	Geology Exploration, ore reserve estimation and mining at 11-c deposit, BIOM, MNDC Ltd. Kirandul Complex, Kirandul Dist. Dantewada (C.G.)
2.	Dr. P. Diwan	Md. Waseem Sheikh	Geology Exploration, ore reserve estimation and mining at 11-c deposit, BIOM, MNDC Ltd. Kirandul Complex, Kirandul Dist. Dantewada (C.G.)
3.	Dr. P. Diwan	Ranjit Kumar Sahoo	Geology Exploration, ore reserve estimation and mining at 11-c deposit, BIOM, MNDC Ltd. Kirandul Complex, Kirandul Dist. Dantewada (C.G.)

4.	Dr. P. Diwan	Uttam Kumar	Geology Exploration, ore reserve estimation and mining at 11-c deposit, BIOM, MNDC Ltd. Kirandul Complex, Kirandul Dist. Dantewada (C.G.)
5.	Dr. P. Diwan	Gaurav Jangde	Ore Geology, exploration, mining and ore beneficiation and environmental control at Malanjkhand copper project Dist – Balaghat (M.P.)
6.	Dr. P. Diwan	Kamni Jain	Ore Geology, exploration, mining and ore beneficiation and environmental control at Malanjkhand copper project Dist – Balaghat (M.P.)
7.	Dr. P. Diwan	Rekhalal Rajput	Ore Geology, exploration, mining and ore beneficiation and environmental control at Malanjkhand copper project Dist – Balaghat (M.P.)
8.	Dr. P. Diwan	Tuleshwari	Ore Geology, exploration, mining and ore beneficiation and environmental control at Malanjkhand copper project Dist – Balaghat (M.P.)
9.	Dr. N. Vishwakarma	Tushar Chandra Patel	Techniques employed for exploration of Diamond and Kimberlite at project Diamond JSPL, Jashpur Nagar (C.G.)
10.	Dr. N. Vishwakarma	Nitish Seth	Techniques employed for exploration of Diamond and Kimberlite at project Diamond JSPL, Jashpur Nagar (C.G.)
11.	Dr. N. Vishwakarma	Aditya Pratap Singh	Techniques employed for exploration of Diamond and Kimberlite at project Diamond JSPL, Jashpur Nagar (C.G.)
12.	Dr. D. C. Jhariya	Bhoopendra Bhakt	A Dissertation of Manganese deposits of Chikla Mine, Bhandara district (M.H.) with special reference on Geology, Exploration and mining.
13.	Dr. D. C. Jhariya	Rajesh Kumar Bisen	A Dissertation of Manganese deposits of Chikla Mine, Bhandara district (M.H.) with special reference on Geology, Exploration and mining.
14.	Dr. D. C. Jhariya	Ramesh Kumar Sen	A Dissertation of Manganese deposits of Chikla Mine, Bhandara district (M.H.) with special reference on Geology, Exploration and

			mining.
15.	Dr. D. C. Jhariya	Umesh Dixit	A Dissertation of Manganese deposits of Chikla Mine, Bhandara district (M.H.) with special reference on Geology, Exploration and mining.

Achievement of outgoing students (PG) (From 01-04-2015 to 31-03-2016) [Only for Degree awarding Departments]

Sr. No.	Name of the Student (Roll No.)	Placed in (Designation in Job/Higher Education with details)
1.	Debajyoti Nayak (13225007)	Ph.D. ISM , DHANBAD
2.	Abhinash Sahu (130138)	Ph.D. NIT Raipur/CSIR NET
3.	Chandrashekhar Sable (13225006)	Qualified NET/GATE
4.	Ashish Kuldeep (130111)	Qualified GATE

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Mainkar D, Patel S.C & Diwan P	Diamond Resources of Berahdih Kimberlite of Mainpur Kimberlite Feild (MKF), Bastar Craton in Central India	Presented at 6 th National Symp. On "Gems & Gemstones" on November 28 th 2015 Gwalior (M.P)
2.	Dr. Vikal Kumar Singh	National workshop on "Modern Tools and Techniques for E- Resource Management in Libraries" as Participant, organized by Central Library, NIT, Raipur	Dr. Vikal Kumar Singh
3.	Dr. Vikal Kumar Singh	Participated and presented a paper;	Dr. Vikal Kumar Singh

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr.	Author(s)	Title of Paper	Name of the	DOI/Web link
No.			Journal Vol.	

			No., Issue No. (if any)/Pg. No. , Year	
1.	Deshmukh SD, Hari K.R & Diwan,P	"Fluid Inclusion Studies of Auriferous Quartz Veins from Sonakhan Greenstone Belt, Central India"	Bulletran of Society of Geoscientists & Allied Technologists Vol. 16, No.2 Dec 2015, pp 33-38 (ISSN: 0972-2173)	
2.	Dr. Vikal Kumar Singh	National workshop on "Modern Tools and Techniques for E-Resource Management in Libraries" as Participant, organized by Central Library, NIT, Raipur	Dr. Vikal Kumar Singh	National workshop on "Modern Tools and Techniques for E-Resource Management in Libraries" as Participant, organized by Central Library, NIT, Raipur
3.	Dr. Vikal Kumar Singh	Participated and presented a paper; Title of oral presentation: "Comparison of Indo- Japanese Recent benthic foraminifera and their utility in interpreting the palaeo-climatic conditions of the petroliferous rocks of the two regions" in the conference on "Quaternary Climate: Recent Findings and Future Challenges", organized at the CSIR – National Institute of Oceanography, Goa	Dr. Vikal Kumar Singh	Participated and presented a paper; Title of oral presentation: "Comparison of Indo-Japanese Recent benthic foraminifera and their utility in interpreting the palaeo-climatic conditions of the petroliferous rocks of the two regions" in the conference on "Quaternary Climate: Recent Findings and Future Challenges", organized at the CSIR – National Institute of
		Oceanography,		
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		Goa		

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Mishra S., Mohanta A.K., Diwan P. & Vishwakarma N.	"Zonation of the Eastern Ghats Mobile Belt- A Review"	International Journal of Geology and Earth Science (IJGES), Vol. I, No. 3 Dec 2015 pp 46- 54 (ISSN: 2395-647)	www.ijges.co m
2.	Tarun Kumar, Amar Kant Gautam and D. C. Jhariya	Multi-criteria decision analysis for planning and management of groundwater resources in Balod District, India	Environmental Earth Science (2016) 75:649	DOI 10.1007/s12 665-016- 5462-3
3.	D. C. Jhariya, Swati Shrivastava, S. K. Nage and R. S. Chatterjee	Integrated Remote Sensing And GIS Approach to Groundwater Potential Delineation in the Doon Valley, Uttarakhand, India	SSARSC International Journal of Geo Science and Geo Informatics Volume 2 Issue 1, (2015) pp.1-12	ISSN 2348- 6198 http://www.s sarsc.org/vol umes/jharia_ revised_1.pdf
4.	Govil. H	Identification and Mapping of Hydrothermally Altered Minerals in and around Askot Basemetal Mineralization of Kumoan Himalaya, India using EO-1 Hyperion Data	International Journal of Advancement in Remote sensing, GIS and Geography, Volume 3, No.1, 1-8	ISSN: 2321 8355
5.	Govil. H.	Spectral Reflectance of the Hydrothermally Altered Minerals in the Visible and Near Infrared Portion (4000-	International Journal of Advancement in Earth and Environmental Sciences, Volume 3,	ISSN: 2321 9149

2500nm): A Case	No.1, 1-7	
Study in and around		
Askot Basemetal		
Mineralization of		
Kumaon Himalaya,		
India,		

Books, monograms, chapters authored/co-authored (From 01-04-2015 to 31-03-2016)

Sr.	Name of Faculty	Title (Mention	Publisher	Author/Co-
No.	Member	Book/monogram/chapter)		author
1.	H. Govil	Book Title: Hyperspectral remote sensing application for mineral exploration in Kumaon Himalaya, India	Lambert Academic Publisher, Germany	NA

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in laks of Rs.)	Investigators (PI/Co-PI)
1.	Petrographic Examination of rock sample	22/09/2015	M/s M.K.S. Minerals & Marbles Azad Ward, MANDLA (M.P.)	0.03	Dr. N. Vishwakarma
2.	Petrographic Examination of rock samples	29/10/2015	Mr. P. M. Purkar Geologist, Bhilai C/o Kangaroo Minerals Ltd. TANZANIA	0.12	Dr. N. Vishwakarma
3.	Petrographic Examination of rock samples	20/10/2015	Director Mahendra Sponge & Power Ltd. A Block, 2 nd	0.09	Dr. N. Vishwakarma

			Floor, Maruti Business Park, Near Dhuppar, Pump, RAIPUR (C.G.)		
4.	Identification of Potential Groundwater Artificial Recharge Zones for Rainwater Harvesting in Raipur Municipal Corporation and Naya Raipur area Chhattisgarh	2016-2019	Chhattisgarh Council of Science and	05.00	Dr.D.C.Jhariya (PI)
5.	Preparation of drainage pattern of industries linked to Ganga River basin and reporting the status of pollution from the industries	2014-2016	Chhattisgarh Environment Conservation Board	24.72	Dr.D.C.Jhariya (Co-PI)

Awards/Any Other Achievements (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Faculty Member	Details of the Award/Achievement	Date
1.	Dr. P. Diwan	Awarded as " Distinguished Teacher" on Teacher's Day (By Institution of Engineers India (Chhattisgarh)	05-09-2015

Institute-Industry Collaboration Ongoing/New (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Faculty Member(s)	Collaborating Institute / Organization	Area of Collaboration	Collaboration Activities
1.	Dr. D. C. Jhariya	Chhattisgarh Counsel of Science and Technology	Research Collaboration	Research
2.	Dr. H. Govil	Indian Institute of Remote Sensing,	Training	Organizing training

	Indian Space	collaboration	
	Research		
	Organization		

Brief Details of Important Lab with Photographs

S. No.	Lab. details
1.	Petrology Lab Equipped with Carl Zeiss make Research Microscope with photographic facility for microscopic study of Minerals, Rocks and Ores.
2.	Optical Lab Equipped with 07 nos. of Binocular Polarizing Microscopes and 07 nos. of Binocular Ore Microscopes for microscopic study of Minerals, Rocks and Ores for M. Tech. Applied Geology students.
3.	Remote Sensing and GIS Lab Equipped with advanced software like Erdas Imagine and Arc GIS for geological, geomorphological studies.
4.	Hydrogeology Lab Equipped with Resistivity meters with accessories for ground water development and management studies.
5.	Photogeology Lab Equipped with mirror and Pocket stereoscopes for study of aerial photographs.
6.	Field Geology Lab equipped with all necessary equipments required for geological field work.
7.	Museum – Museum have ample collections of rocks, minerals, ores, structural specimens, fossils etc.

8. Institute-Industry Collaboration (2014-2015):-

S.	Collaborating	Area of Collaboration	Collaboration
No.	Institute/Organization		Activities
1.	Bacheli – Kirandul Complex (Deposit 11C), NMDC Ltd. Dist. – Dantewara, South Bastar	Geology, Mineral Exploration and Mining	Industrial training to M. Tech. VI Sem Students of Applied Geology

	(C.G.)				
	(0.0.)				
2.	Malanjhkhand Copper Project, Hindustan Copper Limited, Malanjhkhand, Dist Balaghat (M.P.)	Geology, Mineral Exploration and Mining	Industrial training to M. Tech. VI Sem Students of Applied Geology		
3.	Kandri Mine, MOIL Ltd. Nagpur district (M.H.)	Geology, Mineral Exploration and Mining	Industrial training to M. Tech. VI Sem Students of Applied Geology		
4.	Rampur - Agucha Mine, Vedanta Ltd. Dist Bhilwara (Rajasthan)	Geology, Mineral Exploration and Mining	Industrial training to M. Tech. VI Sem Students of Applied Geology		
5.	Indian Rare Earth Elements, Orissa Sands Complex, Mathikal (P.O), Chatrapur (Ganjam).	Geology, Mineral Exploration and Mining	Industrial training to M. Tech. VI Sem Students of Applied Geology		
	DEPARTMENT OF ARCHITECTURE				

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. Abir Bandyopadhyay	Professor & Head	B.Arch, M.Urban Planning, Ph.D
2.	Debashis Sanyal	Associate Professor	M. ARCH. (By Research), P.G. Diploma (English Language)
3.	Swasti Sthapak	Associate Professor	B. Arch, AIIA
4.	Himanshu Poptani	Associate Professor	B. Arch., M. Arch., Professional Certificate in Environmental Planning & Management

Achievement of outgoing students (UG) (From 01-04-2015 to 31-03-2016) [Only for Degree awarding Departments]

Sr. No.	Name of the Student (Roll No.)	Placed in (Designation in Job/Higher Education with details)
1.	Krishna Kumar (11122025)	Dept. of Conservation SPA Delhi.
2.	Kanchan Sen Sharma (11122021)	Dept. of ARP, IIT Kgp.

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. Abir Bandyopadhyay	Chaired a session in "Smart Cities" at two-days National Seminar on Smart Habitat: Cities, Buildings, Products & Services" Chaired a Session at 64th National Town and Country Planners' Congress, Organized by Institute of Town Planners India	9 th and 10 th October 2015 at Jadavpur University Kolkata 8 th -10 th January 2016., Raipur (C.G.)
2.	Debashis Sanyal	NEED OF MAJOR ARCHITECTURAL STRATEGIES FOR SMART CITIES IN INDIAN CONTEXT, National Seminar on Making of Smart City in Chhattisgarh, Indian Building Congress.	16.01.2016, Raipur.
		GREEN BUILDING CONCEPT, Training of Dy. Engineers of Chhattisgarh Housing Board, Chhattisgarh Administrative Academy.	22.05.2015, Raipur.
		PREFABRICATION OF HOUSING COMPONENTS, Ambuja Knowledge Centre.	24.07.2015. Raipur
		INNOVATION IN CURRENT ARCHITECTURAL PRACTICES AND NET ZERO BUILDINGS, Conference on Green Buildings and Building Rating Systems, PHD Chamber of Commerce.	23.09.2015. Raipur
		One Day Workshop on SMART BUILDINGS	15.10.2015.Department of Architecture, Gautam Buddha University, Greater NOIDA.
		SMART BUILDINGS	17.10.2015, Apeejay School of Architecture and Planning, Greater NOIDA.
		One Day Workshop on SMART BUILDINGS	19.10.2015. G. L. Bajaj School of

			Architecture, Mathura.
		NEED FOR DEVELOPING GREEN BUILDING CONCEPT IN THE COUNTRY & BASICS OF SUN PATH ANALYSIS AND SHADING DESIGN, Training Course on Energy Efficiency & Green Building. INTRODUCTION TO SMART	16.12.2015. Raipur. 06.02.2016. Raipur.
		BUILDINGS AND ENERGY MANAGEMENT SYSTEM, Urjavaran 2016, ISHRAE.	
3.	Himanshu Poptani	Participated in the "Concrete Mix Design Workshop"	31 st July, 2015 at Ambuja Knowledge Centre, Raipur organized by Ambuja Cements Limited
		Participated in "Research Summit on Digital India and Smart Cities",	organized by National Institute of Technology Kurukshetra on September 22, 2015.
		Attended "2-Days Advance Level Training Programme on Energy Conservation Building Code (ECBC)"	organized by CREDA and BEE (Bureau of Energy Efficiency, Govt. of India) on 13.10.15 and 14.10.15 at Raipur
		Participated in "A Day Workshop on COA Minimum Standards & Online Institution Management System (IMS)- 2015"	organized by Council of Architecture, India (COA) in collaboration with Apeejay School of Architecture and Planning on 16 th October 2015 at Greater Noida
		Participated in five days' workshop "A Demonstration on Applications of LabVIEW Software and Associated Hardwares"	26.10.15 till 30.10.15, conducted by the Department of Electronics & Telecommunications Engineering, National Institute of Technology Raipur.
		Attended One Week Short Term Hands-On Training Programme On "Testing methods in Civil Engineering Construction"	16 th November to 20 th November 2015 under TEQIP-II, held at Department of Civil Engineering, National Institute of Technology Raipur
		Participated in "Production of Cement" workshop	13.2.2016 organized by JK Lakshmi Cement at Durg, Chhattisgarh
		"SKANI101x: Basic 3D animation using Blender", an online course of	An online learning initiative (MOOC-

	study	offered	by	IITBombayX	Massive	Open	Online
	(CDEEF	2)			Course)	of	Indian
					Institute	of Tecl	hnology
					Bombay,	cor	nducted
					between	18 Feb	ruary –
					14 April	2016	5

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	Dr. Abir Bandhyapadhyay	A STUDY OF INCORPORATION OF HINDU THEOLOGY AND VEDIC PHILOSOPHY IN HINDU TEMPLES' ARCHITECTURE OF INDIA	01.06.2015 to 05.06.2015 4 th International Conference on Ecological Theology and Environmental Ethics 2015 at Chania 04.06.2015.
			Department of Architecture, Technical University of Crete
2.	Debashis Sanyal	SELF SUFFICIENT HOUSING AS SUSTAINABLE HUMAN HABITATS	04.06.2015. Department of Architecture, Technical University of Crete
		DEVELOPING MAJOR SUSTAINABLE STRATEGIES FOR ECO- CITIES IN DEVELOPING COUNTRIES,	01.06.2015to05.06.2015.4thInternationalConferenceonEcologicalTheologyandEnvironmentalEthics2015atChania

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	D. Sanyal,	Identifying Various	ABACUS	http://
		Building Materials	(Monsoon	
	Dr. R.K. Bhargava	suitable for	2014) Vol.9, 2,	
		Industrialised Mass	ISSN 0973-	
		Housing in India	8339, pp12-	
			19.	

		A Comparison	
2.	D. Samuel	between various	Journal of the
	D. Sanyal,	Prefabricated systems	Indian
	Dr. R.K. Bhargava,	for affordable LIG	Institute of
		Housing in India	Architects,
	Dr. Alok Ranjan,		2016
			February-
			March,
			Vol.81,02-03,
			ISSN-0019-
			4913, pp35-39

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	D. Sanyal, Dr. R.K. Bhargava	A Study Of Suitability Of Prefabrication For Affordable Urban Mass Housing In India	International Journal of Housing and Human Settlement Planning, JournalsPub Vol.1, 2, ISSN: 2455- 8516 (online), pp1-11, 2015.	http://
	D. Sanyal	Development of Sustainable City In Developing Counties: An Architect's Perspective,	International Journal of Biological, Ecological and Environmental Sciences (IJBEES) Vol. 5, No. 1, ISSN 2277 – 4394, pp34-38, 2016,	
2.	D. Sanyal , Dr. R.K. Bhargava	Need of Modular Coordination and Standardization in Design and Construction of Urban Mass Housing In India,	International Journal of Housing and Human Settlement Planning, JournalsPub Vol.2, 1, ISSN: 2455-8516 (online), pp1-7, 2016.	

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in laks of Rs.)	Investigators (PI/Co-PI)
1.	Optimal Use of AAI Land and Densification of Residential Area at SV Airport, Raipur	June.2015	Airport Authority of India	0.0435	Dr. Abir Bandyopadhyay & Debashis Sanyal

Socially relevant activities

Sr. No.	Name of Faculty Member(s)	Activity
1.	Debashis Sanyal	Participated in blood donation camp

Brief Details of Important Lab with Photographs

The Department is equipped with the following laboratories-

BUILDING MATERIAL LABORATORY-

The building material laboratory houses a collection of material samples and models that help the students to understand identify and experience the properties of the materials, their applications and fixing details through practical, hands-on, experience. The laboratory consists of- Catalogue and samples of Laminates, Sanitary Fitting and Appliances, Metal Grill, Glasses, Water supply fixtures with their fittings, Roofing materials like Mangalore tiles, Asbestos sheet, Fiber sheet etc.

COMPUTER LABORATORY-

The computer laboratory, introduces the students to the modern methods of developing 3d models and drawings, with the help of modern software such as AutoCad, 3Ds Max etc. List of Equipment's available are- Computer, UPS, LCD Projector, LED Projector, Book Projector, A0-A4 Colored Plotter. Facility of broadband internet is available for the students.

SURVEY LABORATORY-

The laboratory has the equipment's to give the practical exposure of field survey and leveling to the students. This helps the students to gain knowledge of fieldwork, layout of buildings and preparation of measured drawings. Instruments in the Laboratory are- Digital Theodolite, Magnetic Compass, Measuring Tapes, Measuring Chain, Drawing Board, Plain Table Survey Set, Dumpy Level, Tripod Sand, Leveling Staff, Circular, Square Ranging Rods, Hand held GPS, Laser distance finder etc.

ENVIRONMENTAL LABORATORY-

With the help of instruments and equipment available in this laboratory, the students get a chance to practically use them, conduct experiments and come to conclusions regarding various climatic data. As compared to using standardized data, they can actually study the method of deriving them.

The Instruments in the laboratory are- Hygrometer (Digital and Analogue), Anemometer (cup type, digital, dial type), Wind wane, Inflatable Globe, Sunshine Recorder, Rain Gauge, Whirling Psychrometer, Stevenson's Screen, Lux meter, Non contract IR Thermometer, Velocity stick Anemometer.

MODEL MAKING WORKSHOP

Students are encouraged to make scaled models of their projects, using various materials like wood, Plaster of Paris, acrylic sheets, etc., which help them in understanding the structural and aesthetic values of their designs. The model making materials are supplied to the students by the department.

The instruments in the Laboratory are- Light duty drill machine, Portable circular sand machine, Circular saw machine, Electric Spray gun, Fret Saw machine, Model making kit, Orbital Sander, Electric wood planer, Pistol grip power drill Machine, Portable Nibbler, Bench Grinder, Angle grinder, Blower, Rotary Hammer, Electric zig saw, Air

Compressor painting Machine, Wood turning Lathe, Router and Multi Functional Cutting machine.

ART STUDIO-

The Art Studio of the Department provides an opportunity to develop the artistic acumen of the student by use of forms and colors, thereby developing their Basic Design skills.

Various models are being made by the students to showcase their artistic creativity. It also has a good amount of archives of the students' works. The Studio has an Electric Potters Wheel

DEPARTMENTAL LIBRARY

The library of the Department houses a variety of books, journals and magazines related to Architecture and topics associated with it to keep the students updated with the world of architecture. It also has a good amount of archives of the students' thesis works done so far. The library currently holds the following-

No. of Volumes – 5199, Journals- National/International – 19 (subscription), Magazines – 12 (subscription), News Paper – 3(subscription), E- Journals- 360, Student Thesis-574.

The students can also access the E Journals/ Books subscribed by the Institute, from the computer laboratory of the department.

E LABORATORY

The E Laboratory is exclusively for internet access, with a dedicated broadband link. The laboratory also has other electronic devices such as Interactive board, Book projector, Cameras, LCD Projector, LED Projector, A0-A4 Colored Plotter.

EXHIBITION SPACE

There is a permanent Exhibition space in the Department where student's works are exhibited. The works showcased primarily consist of B. Arch. Thesis works, NASA & ZONASA works and exemplary works of students. This acts like a source of inspiration to the students in pursuit of their creative endeavor.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Bikesh Kumar Singh	Assistant Professor	M. Tech., Ph.D.
2.	Dr. Arindam Bit	Assistant Professor	Ph.D.
3.	Dr.R.Periyasamy	Assistant Professor	B.E(ECE),M.Tech- Biomedical Engg, IITM),Ph.D(Biomedical Engg, IITD)
4.	Neelamshobha Nirala	Assistant professor	M.Tech
5.	Dr. Saurabh Gupta	Assistant Professor	PhD

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. A. S. Thoke & Dr.Kesari Verma	Bikesh Kumar Singh	Application of Soft Computing Techniques on Diagnostic Images for Classification of Breast Tumors

Doctoral Thesis Completed Only(PhD) (From 01-04-2015 to 31-03-2016)

M.Tech Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. Arindam Bit	Ms. Gore Sonali S.	Investigation of Rheology of non-Newtonian Fluid in Microchannels at Different Degree of Inclinations

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr.R Periysamy	"Fluorescence based molecular imaging instruments and their impact on drugs" as keynote speaker in National workshop on "PRACTICAL APPLICATION AND VALIDATION OF ANALYTICAL INSTRUMENT" sponsored by CCOST	18 th Feb 2016 at SSTC Bhilai
2.	Dr.R Periysamy	Workshop on "Designing Medical Implants & Fixtures" at IIT Delhi	CEP, New Delhi, 9th - 10th May 2015
3.	Dr.R Periysamy	Attended Workshop on "Book Publishing" at NIT Raipur	Raipur, 19th August, 2015

4.	Dr.R Periysamy		National
7.	DIA Fellysally		
			Instruments(NI),Raipur,
		Attended Workshop on "A	26th – 30th October
		Demonstration on	2015
		Application of LabView Software and Associated	
		Hardwares" at NIT Raipur	
5.	Dr.R Periysamy	nardwares at Mir Raipur	Raipur, 4th Feb,2016
0.	Dincrenystany	Attended Workshop on	Raipur, fuires,2010
		"Learning & writing in	
		Hindi"at NIT Raipur	
6.	Dr.R Periysamy		TEQIP –II,New Delhi,
			25th – 27th March
		Attended Workshop on	2016
		"Medical Imaging:	
		Techniques & Image	
-		processing" at IITDelhi	
7.	Dr.R Periysamy		TEQIP –II,Raipur
			7th – 11th March
			2016
		Attended short term	2010
		training program on	
		"Digital Image Processing,	
		Pattern Recognition and	
		Application" at NIT Raipur	
8.	Dr. Saurabh Gupta	Statistical Methods in	9 – 11 Jul' 15,
		Medical Research and	NIMHANS Bangalore
		Introduction to Statistical	
		Package for the Social	
		Sciences (SPSS),	
		NIMHANS	
9.	Dr. Saurabh Gupta	Quantitative Research	24 - 26 Sept' 15, TISS
		Methodology, TISS	Mumbai

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1	Dr.Bikesh Kumar Singh	International Winter School and Hands-on Training Programme on Nano-biotechniques (I WiSHNanoBio: 2016)	9/2/2016- 14/2/2016
2	Dr. Arindam Bit	The inhibition of bio-film formation by graphene-modified stainless steel and titanium alloy for the	22 nd - 23 rd March 2016

		treatment of periprosthetic infection: A comparative study	
		32 nd Southern Biomedical Engineering Conference, USA	
3.	Neelamshobha Nirala	BITERM-2016, International Confrence on Biomaterials,Biodiagnostic,Tissue Engineering,Drug Delivery and Regenerative Medicine.	15-17 April 2016, CBME, IIT Delhi

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/Internatio nal)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Se lf Sponsored
1.	ISWT Program on Thermofluid Science and its application in Bioengineering and Energy	Dr. Arindam Bit	Dr. Kunal Mitra, Florida Institute of Technology, USA	27 th May - 1 st June 2016	MHRD
2.	National workshop on "Statistical Data Analysis in healthcare"	Dr.R.Periyasamy Dr.Saurabh Gupta		30th Oct 15 to 31st Oct 2015	TEQIP- II,NIT Raipur

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Mrithunjay	Electromyograp	Indian Journal of	https://www.innov
	Ratthore, R.	hical Analysis of	Clinical Anatomy and	ativepublication.co
	Periyasamy, D. K.	the Effect of	Physiology, April –	m/abstract.php?art

Sharma, Manisha	Yoga Posture on	June 2015;2(2):74-80	icle_id=581&jid=3&i
Sinha, Sachin	the Trunk		ssue_id=97&volume
Pandey et al.	Muscle		<u>id=43</u>
	Activities and its		
	significance		

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Bikesh Kumar Singh, KesariVerma, A. S. Thoke.	Investigations on edge preservation and smoothening of frequency domain filters for speckle removal in breast ultrasound images	Journal of Biomedical Engineering and Technology, 20, 2, 2016	http:// <u>dx.doi.org/1</u> 0.1504/IJBET.2016 .074197
2.	Arindam Bit <i>et</i> al.	Recent Advances And Future Direction In Lyophilisation And Desiccation Of Mesenchymal Ste m Cells	Stem Cells International (in press)	

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (inlaks of Rs.)	Investigators (PI/Co-PI)
1.	Computer aided technique for diseases diagnosis: A non invaisve approach of disease detection using IRIS image	Sep 2015- Sep 2018	CCOST	2.87	KesariVerma/Bikesh Kumar Singh

Sr. No.	Name of Faculty Member	Details of the Award/Achievement	Date
1.	Dr.R.Periyasamy	Young faculty award from Venus International foundation, Chennai	July 5, 2015

Awards/Any Other Achievements (From 01-04-2015 to 31-03-2016)

Brief Details of Important Lab with Photographs

Brief Details of Important Lab with Photographs

UG

• Biomedical Instrumentation and Equipment Laboratory

- Tread Mill Test machine(TMT)
- Ultrasound sonography machine
- Four Channel Biosignal (EEG, EMG, ECG, PPG) Data Acquisition system
- o 16 channel Biosignal (EEG, EMG, ECG, PPG, EGG) data acquisition system
- Electro-surgical unit
- Hemodialysis trainer
- Patient monitoring unit
- o Computerized Tomography trainer
- Ophthalmoscope
- o Audiometer
- Blood viscometer

• Bio-Signal, Medical Image processing and Bioinformatics Laboratory

- MATLAB, LABVIEW
- Statistical and data mining software (SPSS)
- National Instrument Multisim Software
- NI LabView Hardware Platform for Design & Prototyping
- Biochemistry and Microbiology Laboratory
 - Auto Semi Biochemistry Analyser
 - Microscopes
 - Blood cell counter
- Anatomy and Physiology Laboratory
 - o Haemometer
 - o Haemocytometer
 - Anatomical models
 - o Skeletal system models
- Optical Fibre and laser in medicine Laboratory
- Fiber Optics trainer kit
- Microprocessor & Microcontroller Laboratory

- o Microprocessor Trainer Kit
- Microcontroller Trainer Board

DEPARTMENT OF BIOTECHNOLOGY

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr Lata S B Upadhyay	Assistant Professor & HOD	PhD
2.	Dr Pratima Gupta	Assistant Professor	PhD
3.	Dr Awanish Kumar	Assistant Professor	PhD
4.	Dr J Satyaeswari	Assistant Professor	PhD
5.	Dr D Vasanth	Assistant Professor	PhD
6.	Dr Seenivasan A	Assistant Professor	PhD
7.	Dr Nishant Verma	Temporary Faculty	PhD
8.	Dr Santosh Karn	Temporary Faculty	PhD
9.	Ms Neha Pandey	Temporary Faculty	MSc
10.	Vipul Udapure	Temporary Faculty	M.Tech

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr Pratima Gupta	Piyush Parkhey	Biological Production
			of hydrogen:
			Development of a
			two step process for
			conversion of rice
			straw into hydrogen
2.	Dr Lata S B Upadhyay	Nishant Verma	Development of an
			electrochemical
			biosensor for
			phosphate
			estimation in water
			samples and
			biological samples

Achievement of outgoing students (UG) (From 01-04-2015 to 31-03-2016) [Only for Degree awarding Departments]

Sr. No.	Name of the Student (Roll No.)	Placed in (Designation in Job/Higher Education with details)
1.	Gantedi Narahari, 12112019	M.Tech, IIT Gauhwati
2.	Raghvendra Chauhan, 12112038	M.Tech, IIT Gauhwati
3.	Jai Trivedi, 12112021	M.Tech, NIT Rourkela
4.	Anadika, 12112003	Mu-Sigma Business Solutions
5.	Jaydeep Singh, 12112023	Cognizant Technology Solutions
6.	Shrey Mishra, 12112049	Infosys Pvt. Ltd.

7.	Malay Vaishnav, 12112029	Infosys Pvt. Ltd.
8.	Anuja Jain, 12112007	Capgemini Pvt. Ltd.
9.	Siddhanth Singh, 12112053	Pradhan
10.	Jaydeep Singh Bhardwaj, 12112022	Pradhan
11.	Shabda Gajbhiye 12112047	MS, Unviversity of Wisconsin-Madison,
		USA

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr Lata S B Upadhyay	Hands on training workshop on: nano drug delivery system	ICT Mumbai, 26-30 Oct 2015
2.	Dr Lata S B Upadhyay	I Wish Nanobio: 2016	IIT Roorkee, 9-14 Feb 2016
3.	Awanish Kumar	Workshop on Microscopy at MG University, Kottayam, Kerala, India	October 6-8, 2015
4.	Awanish Kumar	Delivered Lecture on Contemporary & novel therapeutics and targets in Alzheimer's Disease at Pt. JNM Medical College, Raipur	January 30, 2016
5.	Awanish Kumar	Workshop on Nano- Biotechnology at IIT, Roorkee	February 9-14, 2016

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	A. Seenivasan , M. Muthuraj, T. Panda.	Nanoparticles: hazard assessment based on physico-chemical Characterization. Indian International Conference on Air Quality Management	15th -16th February 2016 IIT Madras
		(IICAQM-2016) IIT Madras	

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	Awanish Kumar , Archana Vimal, Jujjavarapu Satya Eswari,	Multiple Linear regression and Artificial Neural Network Analysis for Predicting L- Asparaginase Activity in Solid State Fermentation,	International Journal of pharmacy and pharmaceutica l research. Accepted.	In Press
2.	J.Satya eswari & Shadab ahmad	Triple objective optimization of cytotoxic potency of human carcinoma cell lines of <i>Ulva</i> <i>Fasciata Delile</i> (a marine macro alga) using non-sorting genetic algorithm	International Journal of pharmacy and pharmaceutica l research. Accepted.	In Press

Publications (National) (From 01-04-2015 to 31-03-2016)

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	Lata Sheo Bachan Upadhyay and Nishant Verma	Recent Developments and Applications in <u>Plant-Extract</u> <u>Mediated Synthesis of</u> Silver Nanoparticles	Analytical Letters 2015	DOI:10.108 0/0003271 9.2015.104 8350
2.	Pratima Gupta and Kush Kumar Nayak	Optimization of keratin/alginate scaffold using RSM and its characterization for tissue engineering	<u>International</u> <u>Journal of</u> <u>Biological</u> <u>Macromolecules</u> <u>Volume 85</u> , April 2016, Pages 141– 149.	/ <u>doi:10.101</u> <u>6/j.ijbiomac</u> <u>.2015.07.02</u> <u>5</u>
3.	Kush Kumar Nayak and Pratima Gupta	In vitro biocompatibility study of keratin/agar scaffold for tissue engineering	<u>International</u> <u>Journal of</u> <u>Biological</u> <u>Macromolecule</u> <u>s</u> Volumes <u>81</u> ,	<u>doi:10.101</u> <u>6/j.ijbioma</u> <u>c.2015.07.</u> <u>025</u>

			Nov 2015, Pages 1–10.	
4.	Kush Kumar Nayak and Pratima Gupta	Compatibility study of alginate/keratin blend for biopolymer development	Journal of Applied Biomaterials & Functional Materials Volumes <u>81</u> , Dec 2015, Pages e332– e339.	DOI:10.530 1/jabfm.50 00242
5.	Pratima Gupta and Suresh Chandra Phulara	Metabolic engineering for isoprenoid-based biofuel production	Journal of Applied Microbiology Volumes 119, Sep 2015, Pages 605-619	DOI: 10.111 1/jam.1287 1
6.	Nisha CM, Kumar A, Vimal A, Bai BM, Pal D, <u>Kumar A</u> *	Docking and ADMET prediction of few GSK-3 inhibitors divulges 6- bromoindirubin-3- oxime as a potential inhibitor;	J of Mol Graphics & Modelling; 65; 100–107. Mar/2016	10.1016/j.j mgm.2016. 03.001
7.	Bharti SK, Krishnan S, <u>Kumar A</u> *	Phytotherapy for diabetes mellitus: Back to nature;	Minerva Endocrinol; 41(1):143-146	
8.	Pal D, Thakre N, <u>Kumar</u> <u>A</u> , & Keshav A	Reactive Extraction of Pyruvic acid Using Mixed Extractants;	Separation Science & Tech; 51(7): 1141-1150 Feb/2016	10.1080/01 496395.201 6.1143508
9.	Kumar A, Nisha CM, Silakari C, Sharma I, Gupta N, Nair P, <u>Kumar</u> <u>A</u> *	Current and Novel Therapeutic Molecules and Targets in 10Alzheimer's Disease;	J Formos Med Assoc ; 115(1):3-10. Jan/2016	10.1111/pi m.12189
10.	Chaturvedi AD, Pal D, Penta S, Kumar A *	Ecotoxic heavy metals transformation by bacteria and fungi in aquatic ecosystem;	World J Microbiol Biotechnol; 31(10):1595- 1603 Oct/2015 Cot/2015	10.1007/s1 1274-015- 1911-5
11.	Karn SK and Kumar A * Bharti SK, Krishnan S, NK	Hydrolytic enzyme protease in sludge: Recovery and its application;	Biotechnology Bioprocess Engg; 20(4):652-661 Sept/2015	10.1007/s1 2257-015- 0161-6
	I DUALL SK KUSUNAT S NK	In vivo and in silico	Current	10.2174/15

13.	Sharma, Kumar A, Prakash O, Gupta AK, Kumar A * Kumar A , Samant M, Misra P, Khare P, Sundar S, Garg R, Dube A	Investigation of Antidiabetic Activity of Fruit of Withania coagulans Dunal Immunostimulatory potential and proteome profiling of Leishmania donovani acluble	Hypertension Rev; 11(2):143- 158. Aug/2015 Parasite Immu nol; 37(7):368-375 July/2015	734021110 215073112 0254 10.1111/pi m.12189
14.	Chhetri G, Pandey T, Chinta R, <u>Kumar A</u> * <u>,</u> Tripathi T	soluble exogenous antigens An improved method for high-level soluble expression and purification of recombinant amyloid- beta peptide for in	ProteinExpress&Purification114:71-76June/2015	10.1016/j.p ep.2015.05. 015
15.	Kumar A, Nayak BP, Kumar A *.	vitro studies; Obesity: single house for many evils;	Minerva Endocrinol;5: 17-23 May/2015	ncbi.nlm.ni h.gov/pub med/26006 699
16.	JS Eswari , M Anand, Chimmiri Venkateswarlu,	Optimum culture medium composition for Lipopeptide <u>production by</u> <u>Bacillus subtilis</u> using response surface model-based ant colony optimization, in press,2015. 0973- 7677	Sadhana - Academy Proceedings in Engineering Science,	In Press
17.	J. Satya Eswari	Estimation of kinetic parameters by a hybrid algorithm of nonlinear model based differential evolution for lactic acid production,	Chemical products and process modelling, Accepted,2015	In Press
18.	J.Satya Eswari and Neha Chandrakar,	Artificial neural network analysis of DNA-microarray based lymph node negative breast cancer,	Korean journal of chemical engineering, April 2016,Volume 33, Issue 4, pp 1318-1324 eISSN: 1975- 7220.	DOI: 10.1007/s1 1814-015- 0255-z
19.	SA Ravichandran, VP Rajan, PV Aravind, A. Seenivasan, DG Prakash <i>et al.</i>	Characterization of Terephthalic Acid Monomer Recycled from Post-Consumer PET Polymer Bottles	Macromolecula r Symposia 361 (1), 30-33, 2016.	http://onli nelibrary.wi ley.com/doi /10.1002/ masy.20140 0269/abstr act

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in laks of Rs.)	Investigator s (PI/Co-PI)
1.	Enzymatic hydrolysis of rice husk and straw and its conversion into biohydrogen by dark fermentation.	2013-2015	Chhattisgar h Council of Science and Technology	Rs.4,72,00 0 Lakh	PI, Pratima Gupta
2.	Design of Microbial Electrolytic Cell for economic and energy efficient biohydrogen production from leafy biomass by electrohydrogenesis	2015-2018	Ministry of New and Renewable Energy, Govt. of India	Rs.37, 6 1,460/- Lakh	PI, Pratima Gupta
3.	<i>In vitro</i> screening of Chhattisgarh based herbs for countering diarrhea with special emphasis on cholera	Sept 14-Aug 17	CCOST	4.49.Lakh	PI, Awanish Kumar
4.	Computer aided drug design of Peptide based drugs: lipopeptides	2 years	CCCOST	4 laks	PI, J Satyaeswari
5.	Chemical and enzymatic modification of NSAID to overcome their side effect	2012-2015	CCOST	2.0	Lata S B Upadhyay (PI)
6.	Lipase catalyzed biodiesel production from nonedible oil by lipolytic bacteria	2012-2015	SERB (DST)	19.0	Lata S B Upadhyay (PI)

DEPARTMENT OF CHEMICAL ENGINEERING

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. (Mrs.) A.B. Soni	Professor	Ph.D.
2.	Dr. P.K. Chaudhari	Associate Professor	Ph.D.
3.	Mr. B. Mazumdar	Associate Professor	Ph.D.
4.	Mr. A.K. Poonia	Associate Professor	Ph.D. NIT Raipur (Pursuing since 2010)
5.	Mr. V.K. Singh	Assistant Professor	Ph.D. NIT Raipur (Pursuing since July 2012)
6.	Dr. Amit Keshav	Assistant Professor	Ph.D.
7.	Mr. Dharm Pal	Assistant Professor	Ph.D.
8.	Dr. Prabir Ghosh	Assistant Professor	Ph.D.
9.	Dr. R. Manivannan	Assistant Professor	Ph.D.
10.	Dr. J. Anandkumar	Assistant Professor	Ph.D.
11.	Dr. C. Thakur	Assistant Professor	Ph.D.
12.	Dr. N. Victoria	Assistant Professor	Ph.D.

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. P.K. Chaudhari	Om Prakash Sahu	Treatment of sugar industry wastewater
2.	Dr. Amit Keshav	Dharm Pal	Process intensification of recovery of pyruvic acid using reactive extraction

M.Tech Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Mr. A.K. Poonia	Alex Koshy	Numerical Study of Thermal

			Performance of Pin Fin Morphologies
2.	Dr. R. Manivannan	Ankur Pandey	Solar Energy Assisted Chemical Reduction Technique For The Synthesis of Nickel Nanoparticles
3.	Dr. J. Anand Kumar	Aparna Yadu	Studies on 4- Bromophenol Degradation using Anaerobic, Anoxic and Aerobic Reactor
4.	Mr. V.K. Singh	Arti Mourya	Removal of Auromine 'O' Dye From aqueous Solution Using Corncob Biochar as adsorbent
5.	Dr. Amit Keshav	Bharti Sinha	Study on Thermal Degradation of Marsilea Vestita Leaves
6.	Dr. P. Ghosh	Damodhar Madhukarrao Ghime	Degradation of Oxalic Acid By Using Immobilized Solid Catalyst Prepared From Raw Rice Husk
7.	Dr. P.K. Chaudhari	Debashri Paul	Simulation of Fluid Catalytic Cracking Riser Reactor Using Lumping Strategy
8.	Dr. P. Ghosh	Joshna Mahajan	Degradation of The Aqueous Azo Dye (Orange-G) By Using Heterogeneous Fenton Process Catalyzed By Mineral Hematite.
9.	Mr. Dharm Pal	Niraj Thakre	Modeling & optimization of citric acid recovery from aqueous solutions

10.	Mr. V.K. Singh	Sachin Kuriachan E	Malachite Green Dye Removal From Aqueous Solution by Tamarind Seed Biochar
11.	Dr. J. Anand Kumar	Santosh Gurunath Doddamani	Synthesis and Application of Ceramic Microfiltration Membrane from Coal Fly Ash
12.	Dr. B. Mazumdar	Sruthi L	Modelling and Simulation of A Solar Adsorption Refrigeration System
13.	Dr. Amit Keshav	Sushma Kumari	Study on The Esterification of Mono-Carboxylic Acid Using Hydrochloric Acid As Catalyst
14.	Dr. (Mrs.) A.B. Soni Dr. R. Manivannan	Zeenat Arif	One Pot Synthesis of Copper Nanoparaticle Via Chemical Reduction Technique

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. B. Mazumdar	Lecture delivered in STC on Advanced Wastewater Treatment Technologies	17/2/2016,NIT Raipur
2.	Prof. V.K. Singh	Lecture delivered in STC on Advanced Wastewater Treatment Technologies	17/2/2016,NIT Raipur
3.	Dr. J. Anand Kumar	Lecture delivered in STC on Advanced Wastewater	19/2/2016,NIT Raipur

		Treatment Technologies	
4.	Dr. P. Ghosh	Lecture delivered in STC on Advanced Wastewater Treatment Technologies	16/2/2016,NIT Raipur
5.	Dr. Dharm Pal	Lecture delivered in STC on Advanced Wastewater Treatment Technologies	19/2/2016,NIT Raipur
6.	Dr. Amit Keshav	Lecture delivered in STC on Advanced Wastewater Treatment Technologies	17/2/2016,NIT Raipur
7.	Dr. P.K. Chaudhari	Lecture delivered in STC on Advanced Wastewater Treatment Technologies	15/2/2016,NIT Raipur
8.	Dr. J. Anand Kumar	Lecture delivered in STC on Environmental Challenges and Remedies	25-29 May, 2015, NIT Raipur

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	STC on Environmental Challenges and Remedies (ECR-15)	Dr. P.K. Chaudhari and Dr B. Mazumdar	Dr. Bodke, NEERI	May 25- 29, 2015	Self sponsored
2.	STC on Advanced Waste Water Treatment Technologies	Dr. B. Mazumdar Dr. C. Thakur Mr. V.K. Singh Dr. P. Ghosh	Prof. Vimal Chandra Srivasatava, IIT Roorkee	February 15-19, 2016	TEQIP II

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr.	Author(s)	Title of Paper	Name of the	DOI/Web
No.			Journal Vol.	link
			No., Issue No.	
			(if any)/Pg.	

			No., Year
1.	A. Yadu, B.P. Sahariah,	Studies on Biological	Journal of
	and J . Anandkumar	Degradation of 4-	Modern
		Bromophenol Using	Chemistry and
		Anaerobic, Anoxic	Chemical
		and Aerobic	Technology, 7,
		Bioreactors	1, 37–41, 2016

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	G. Jyoti, A. Keshav and J. Anandkumar	Experimental and Kinetic Study of Esterification of Acrylic Acid with Ethanol Using Homogeneous Catalyst	International Journal of Chemical Reactor Engineering, 14, 2, 571–578, 2016	
2.	B.P. Sahariah, J. Anandkumar and S . Chakraborty,	Treatment of Coke Oven Wastewater in an Anaerobic- Anoxic-Aerobic Moving Bed Bioreactor System	Desalination and Water Treatment , 57, 31, 2016	
3.	G. Jyoti, A. Keshav, and J. Anandkumar	Review on Pervaporation: Theory, Membrane Performance and Application in Intensification of Esterification Reaction	Journal of Engineering, 1-24, 2015	
4.	A. K. Prajapati, P. K. Chaudhari	Physicochemical treatment of distillery wastewater- A Review	Chemical Engineering Communications, 202, 1098-1117, 2015	
5.	O. P. Sahu, V. Gupta, P. K.	Electrochemical treatment of actual	International Journal of	DOI 10.1007/s13762-

	Chaudhani V V	all con in deset-	Former ant-1	015 0774 F
	Chaudhari , V. K. Srivastava	sugar industry wastewater using aluminum electrode	Environmental Science and Technology, 2015	015-0774-5
6.	O. P. Sahu, P. K. Chaudhari	Electrochemical treatment of sugar industry wastewater: COD and color removal	Journal of Electroanalytical Chemistry, 739, 122-129, 2015	
7.	A. K. Prajapati, P. K. Chaudhari , B. Mazumdar , Rumi Choudhary	Catalytic thermal treatment (catalytic thermolysis) of a rice grain based biodigester effluent of an alcohol distillery plant	Environmental Technology, 2015	DOI:10.1080/095 93330.2015.1036 787
8.	B. Mazumdar , P. K. Chaudhari	Electrochemical treatment of biodigester effluent of maize-based starch industry: COD and color removal	Desalination and Water Treatment, 55, 7, 1972-1980, 2015	
9.	A. K. Prajapati, R. Choudhary, K. Verma, P. K. Chaudhari , A. Dubey	Decolorization and removal of chemical oxygen demand (COD) of rice grain- based biodigester distillery effluent (BDE) using inorganic coagulants	Desalination and Water Treatment , 53, 2204-2215, 2015	
10.	D. Pal, A. Keshav	Reactive Extraction of Pyruvic Acid Using Mixed Extractants	Separation science & Technology, 51, 7, 1141–1150, 2016	
11.	C. M. Nisha, A. Kumar, A. Vimal, B. M. Bai, D. Pal , A. Kumar	Docking and ADMET prediction of few GSK-3 inhibitors divulges 6- bromoindirubin-3- oxime as a potential inhibitor	Journal of Molecular Graphics and Modelling,65, 100- 107, 2016	
12.	D. Singh, G.L. Devnani and D. Pal	Biomethane: An Efficient Source for the Production of CNG and Formaldehyde	International Journal of Scientific Engineering and Applied Science, 2, 1, January 2016	

13. 14.	A. K. Prajapatia, P. K. Chaudhari, D. Pal , A. Chandrakar, R. Choudhary D. Pal, A. Keshav	Electrocoagulation treatment of rice grain based distillery effluentusing copper electrode Kinetics of Reactive Extraction of Pyruvic Acid Using	Journal of Water Process Engineering, 11, 1–7, 2016 International Journal of	DOI: 10.1515/ijcre-
		Acid Using Tributylamine Dissolved in n-Butyl Acetate	Chemical reactor Engineering,13,63- 69, 2015	2014-0117
15.	D. Pal , A. Tripathi, A. Shukla, K. R. Gupta, and A. Keshav	Reactive Extraction of Pyruvic Acid Using Tri-n- octylamine Diluted in Decanol /Kerosene: Equilibrium and Effect of Temperature	Journal of Chemical & Engineering Data, 60, 860-869, 2015,	DOI:10.1021je 500964e
16.	D. Pal, A. Keshav	Separation of Pyruvic Acid Using Reactive Extraction: Back Extraction and Effect of PH	International Journal of Chem Tech Research, 7, 1889-1894, 2015	
17.	A. D. Chaturvedi, D. Pal , S. Penta, A. Kumar	Ecotoxic heavy metals transformation by bacteria and fungi in aquatic ecosystem	World Journal of Microbiology and Biotechnology,31, 10, 1595-603, Oct 2015	
18.	S. N. Victoria , R. Prasad, R. Manivannan	Psidium guajava leaf extract as green corrosion inhibitor for mild steel in phosphoric acid	International Journal of Electrochemical Science, 10, 2220- 2238, 2015	ISSN 1452-3981
19.	A. Singh, R. Manivannan, S. N. Victoria	Simple one-pot sonochemical synthesis of copper sulphide nanoparticles for solar cell applications	Arabian Journal of Chemistry, Article in Press 2015	http://dx.doi.org/ 10.1016/j.arabjc. 2015.03.013
20.	B. Sakthi Swaroop, S. N. Victoria, R. Manivannan	Azadirachta indica leaves extract as inhibitor for microbial corrosion of copper by Arthrobacter sulfureus in neutral pH conditions—A	Journal of the Taiwan Institute of Chemical Engineers, Article in Press, 2016	ISSN: 1876-1070

21.	A.K. Poonia, A.B. Soni , S. Khanam	remedy to blue green water problem Development of Empirical Relationships Between Input and Output Parameters of Sponge Iron Process Using Neural Network	International Journal of Renewable Energy & Its Commercialization, 1, 2, 6-19, 2016	
22.	A. K. Poonia, A. B. Soni and S. Khanam	Optimization of Operating Parameters for Sponge Iron Production Process using Neural Network	International Journal of ChemTech Research CODEN (USA): IJCRGG, 9, 20-34, 2016	ISSN: 0974-4290

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in laks of Rs.)	Investigators (PI/Co-PI)
1.	Removal of dye and reduction of COD from dye bearing effluent	2015	CGCOST	4.0	Dr. J. Anandkumar and Dr. P. K. Chaudhari
2.	Interactive mechanism of green corrosion inhibitor and mild steal in alkaline medium containing chloride ion	2015	CGCOST	4.28	Dr. R. Manivanan and Dr. (Mrs.) A. B. Soni
3.	Combined novel biophysical treatment for heterogeneous wastewater pollutants	2016	SERB	48.65879	Dr. J. Anadkumar
4	Practically viable heterogeneous Fenton catalyst and reuse of same catalyst in synthetic or industrial wastewater treatment	2016	SERB	25.89	Dr. P. Ghosh

Brief Details of Important Lab

PG, PhD and Consultancy

1. Atomic Absorption Spectrophotometer

- 2. UV Spectrophotometer
- 3. Gas Chromatography
- 4. Rheometer
- 5. FTIR
- 6. pH meter
- 7. HPLC
- 8. Refractrometer
- 9. Contact angle analyser

10. MilliQ – Ultra Pure Facility

DEPARTMENT OF CHEMISTRY

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	DR.(MRS.) FAHMIDA KHAN	Professor	M.Sc., Ph.D.
2.	DR.(MRS.) KAVITA TAPADIA	Assistant Professor	M.Sc., Ph.D.
3.	DR. SHYAMA PRASAD MAHAPATRA	Assistant Professor	M. Sc., Ph. D.
4.	DR.(MRS.) TUNGABIDYA MAHARANA	Assistant Professor	M.Sc., M.Phil., Ph.D.
5.	Dr. SANTHOSH PENTA	Assistant Professor	M. Sc., Ph. D.
6.	Dr. KAFEEL AHMAD SIDDIQUI	Assistant Professor	M. Sc., Ph. D.

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1	Dr.(Mrs.) Fahmida Khan	Amarpreet Kaur Bhatia	Removal of Heavy
			Metal from water

			using Nanoadsorbent and bioadsorbent
2.	Dr. S. P. Mahapatra	Janita Saji	Preparation and Characterizations of Silicon Elastomer Nanocomposites: Effects of Multiwalled Carbon Nanotube and Nano- Graphite Loadings.

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1	Dr. (Mrs) Tungbidya Maharana	Science Academy Lecture Workshop Ravenshaw University Odisha as Invited Lecture	22-23 Jan, 2016
2	Dr.(Mrs.) Fahmida Khan	Chemistry Teachers Training Workshop, SOS in Chemistry, Pt. R.S.S.University, Raipur, Royal Society of Chemistry	06-08 October 2015
		Workshop on Hindi Computing and Rajbhasha Neetiyo ka Anupalan, National Institute of Technology, Raipur	04 February 2016
3	Dr. Santhosh Penta	Chemistry Teachers Training Workshop, SOS in Chemistry, Pt. R.S.S.University, Raipur, Royal Society of Chemistry	06-08 October 2015

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster	Dates and Venue
		Presentation Title, Name	

		of Event, Organizer	
1	Dr. (Mrs) Tungbidya Maharana	International Conference MG University,Kerala, India	10-12, April, 2015
2	Dr.(Mrs.) Fahmida Khan	9th International Conference on Researches in Engineering, Technology and Sciences (ICRETS), London (United Kingdom)	17-18 September, 2015.

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1	Short Term Training Program (STTP) on Advances in Analytical Techniques in Chemistry and Material Science (AATCMS-2016)		Dr Tara Shankar Pal; IIT KGP	February 08-12, 2016	
2	Short Term Training Programme (STTP) on "Environmental Challenges and Remedies" (ECR-15)		Dr A.N Vaidya NEERI – Nagpur	25th - 29th May 2015	
3	National Level Short Term Training Programme on Advances in Chemical Analysis (ACA-2015)		S. K. Malhotra, DAE, BARC, Mumbai	06 - 10 July, 2015.	
4	TEQIP Sponsered one week Short Term Training Programme on Advances in Analytical Techniques		Dr Tara Shankar Pal; IIT KGP	February 8-12, 2016.	

in Chemistry and Material		
Science (AATCMS-2016).		

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	Dr. Kavita Tapadia	Rubina Sahin, Kavita Tapadia and Ashima Sharma, Kinetic and isotherm studies on adsorption of fluoride by limonite with Batch technique, <i>J. of</i> <i>Env. And Bio</i> ,Vol. 37, 2016.	(Accepted in 2015)	

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/ Web link
1.	Kafeel Ahmad Siddiqui , Prem Lama, A. Bienko, D. Bienko;	Magneto-structural analysis of metal-orotato coordination complexes based on NH…O and OH…O supramolecular synthon;	Polyhedro n , Volume 111, 17 June 2016, Pages 53– 63	

2	Anita Routaray, Nibedita Nath, Somanath Mantri, Tungabidya Maharana *, Alekha Kumar Sutar,	Synthesis and structural studies of copper(II) complex supported by –ONNO– tetradentate ligand: Efficient catalyst for the ring opening polymerization of lactide,	Chinese Journal of Catalysis 36 (2015) 764–770.
3	Sasmita Pattanaik, Anita Routaray, Nibedita Nath, Tungabidya Maharana *, Alekha Kumar Sutar,	Synthesis and Characterization of Poly(lactic acid) based Graft Copolymers,	Reactive and Functional Polymers, 93 (2015) 47–67.
4	Nibedita Nath, Anita Routaray, Yasobanta Das, Tungabidya Maharana *, Alekha Kumar Sutar,	Synthesis and Structural Studies of Polymer Supported Transition Metal Complexes: Efficient Catalysts for Oxidation of Phenol,	<i>Kinetics</i> <i>and</i> <i>Catalysis</i> 56(6) (2015) 718-732.
5	Anita Routaray, Nibedita Nath, Tungabidya Maharana *, Alekha Kumar Sutar,	Ring-Opening Polymerization of Lactide by Aluminium Catalyst,	Catalysis Science and Technolog y, (2015) Accepted manuscrip t available online
6	Anita Routaray, Nibedita Nath, Tungabidya Maharana *, Pratap Kumar Sahoo, Jaya Prakash Das, Alekha Kumar Sutar	"Salicylaldimine Copper (II) Complex Catalyst: Pioneer for Ring Opening Polymerization of Lactide"	Journal of Chemical Sciences, 2016 (Accepted)
7	Rakesh K. Sahu, Dr. (Mrs.) F. Khan, Kush Nayak,	Synthesis, Characterization, DNA binding and Microbial Activity of Cobalt (III)	Chemistr y and Materials
8	Dakeshwar kumar verma and Fahmida khan	Complexes of Mixed Ligands, Hydroxamic Acid and 1,10- Phenanthroline, Corrosion Inhibition of Mild Steel by Extract of	Research, 7 (4), 2015, 40- 47. 47. <i>Chemistry</i> and <i>Materials</i> <i>Research</i> , 2015, 7, 69-76.
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9	Dakeshwar kumar verma	Bryophyllum Pinnatum Leaves in Acidic Solution,	Advance
	and Fahmida khan	Corrosion Inhibition of High Carbon Steel in Phosphoric Acid Solution by Extract of Black Tea,	
10	K. Sao, F. Khan , P. K. Pandey and M. Pandey.	Equilibrium Isotherm Study for Removal of Mn(II) from Aqueous Solutions by Using Novel Bioadsorbent	Tinospora cordifolia. Advances in Research. 6(4), 2016.
11	Dakeshwar K. Verma and Fahmida Khan	Green approach to corrosion inhibition of mild steel in hydrochloric acid medium using extract of spirogyra algae.	Green chemistry letters and reviews, 9(1), 52– 60, 2016.

12	K. Sao, F. Khan , P. K. Pandey and M. Pandey	A review of multiple use medicinal plant <i>Tinospora</i> <i>cordifolia</i> and its application,	Journal of Internatio nal Research in Medical and Pharmac eutical Sciences, 8(1), 40- 46, 2016.
13	Ashima Sharma, Kavita Tapadia ,	Simple and rapid quantitative determination of thiol containing toxicants by using silver nanoparticles as affinity probe"	J of A. Spectro, Vol, 83, No-6, 2016(Acce pted). (Accepted in January 2016)
14	Rubina Sahin, Kavita Tapadia	Comparison of linear and non-linear models for the adsorption of fluoride onto geo-material: limonite,	Water Science and Technolog y,72, 2015, 2262- 2269.(in press)

15	Ashima Sharma, Kavita Tapadia, Rubina Sahin,	Surfactant assisted nanodrop spectrophotometer determination of iron (III) in a single drop of food, biological and environmental samples	(August 2015) <i>J of A.</i> <i>Spectro</i> , Vol, 82, No-6, 2015,1064 -1071. (Nov-Dec 2015)	
16	Archi Sharma, Gudala Satish and Santhosh Penta	A Facile Synthesis of Aryl- Substituted Hydrazono- Pyrazolyl[1,2,4]triazolo[3,4- b][1,3,4][thiadiazol]-coumarin Derivatives	Journal of Heterocycl ic Chemistry Accepted June 2015	
17	Amiy Dutt Chaturvedi, D harm Pal, Santhosh Pent a, Awanish Kumar	Ecotoxic heavy metals transformation by bacteria and fungi in aquatic ecosystem	World Journal of Microbiolo gy and Biotechno logy October 2015, Vol ume 31, <u>Issue</u> <u>10</u> , pp 1595– 1603	
18	J. Saji, A. Khare and S. P. Mahapatra (Correspondin g Author)	Relaxation behavior of nano- graphite reinforced silicon elastomer nanocomposites,	High Performan ce Polymers Journal, (Published Online), 1- 11, 2016.	http:/ /hip.s agepu b.com /conte nt/ear ly/201 5/01/ 30/09 54008

				<u>31456</u> <u>8729.</u> <u>abstra</u> <u>ct</u>
19	J. Saji, A. Khare and S. P. Mahapatra (Correspondin g Author)	Impedance and dielectric spectroscopy of nano-graphite reinforced silicon elastomer nanocomposites,	Fibers and Polym ers, 16(4), 883-893, April 2015	
20	S. K. Tiwari, R. N. P. Choudhary, S. P. Mahapatra (Correspondin g Author),	Dynamic mechanical and dielectric relaxation studies of chlorobutyl elastomer nanocomposites: effect of nano-graphite loading and temperature,	High Performan ce Polymers Journal, (Published Online) 1- 14, 2015, DOI: 10.1177/0 95400831 4545137.	http:/ /hip.s agepu b.com /conte nt/ear ly/201 4/08/ 18/09 54008 31454 5137

Books, monograms, chapters authored/co-authored (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Faculty Member	Title (Mention Book/monogram/chapter)	Publisher	Author/Co- author
1.	Dr. (Mrs.) Fahmida Khan	Book Chapter published in Environmental Radiochemical Analysis V	Royal Society ofChemistry2015, publication no. 351. ISBN: 978- 1-78262-155-3.	
2.	DR (MRS) Kavita Tapadia	Book chapter "Silver Nanoparticles as Concentrating and Affinity Probe for the Determination of Cysteine pg 325-329, in Nanotechnology: Novel Perspectives and Prospects	Mc Graw-Hill (<i>ISBN- 13:978-</i> <i>93-392-2109-6).</i> "Published in 2015	
3.	Dr. Santhosh Penta	Advances in Structure and Activity Relationship of Coumarin Derivatives.	Elsevier , Electronic ISBN 9780- 1280-3873 August 2015	

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr.	Title of the Project	Period	Funding	Amount	Investigators
No.			Agency	(in lakhs of Rs.)	(PI/Co-PI)
1		2014 – 2017	1 DST sponsored project		Dr. (Mrs) Tungabidya Maharana
		2012 - 2015	1 CSIR sponsored project		
		2013 - 2016	1 CSIR sponsored project		
		2012 – 2015	1 UGC sponsored project		
		2016-2018	1 BRNS project		
2	Design and synthesis of novel potent heterocyclic compounds and their biological evaluation-	2014-2017	Sponsored by C Cost, CG		Dr. Santhosh Penta
3	Crystal Engineering and Supramolecular Synthon approach for the assembly of hydrogen bonded metal complexes;	2013- 2016	funded by SERB-DST, New Delhi, India	Rs. 17.88 lacs	Dr. Kafeel Ahmad Siddiqui
4	Oxalaohydroxamic acid as a partitioning agent in PUREX process of Nuclear fuel Reprocessing,	22/12/2012 To 21/12/2015 [Completed and Report Submitted]	Chhattisgarh Council of Science & Technology		Dr. (Mrs.) Fahmida Khan

5	 (a) Spatial distribution of Uranium and associated water quality parameters in ground water/drinking water of six districts(Narayanpur, Kondagaon, Bijapur, Dantewada, Bastar, Sukma) (b) Project entitled "Analytical studies of fluoride concentration and its removal from groundwater of Bastar region, INDIA" for a period of three years (2014-16) (c) Project entitled "Micro extraction analysis of toxicants in a single drop of environmental and biological sample. for a period of two years (2012-15), Funding by Chhattisgarh Council of Science and Technology (Rs. 1.84 Lacs), as Principle Investigator. 	(2016-2018) (2014-16) (2012-14)	Funding by WSSO,	(Rs.18.56 Lacs) as Principle Investigator.	Dr. (Mrs) Kavita Tapadia

Brief Details of Important Lab

Research Laboratory

<u> Major Equipments</u>

Millipore water purifier system

UV-Visible Spectrophotometer Atomic absorption spectroscopy Fluorescence Spectrophotometer FT-IR Spectrophotometer LCR Meter GelElectrophoresis

DEPARTMENT OF CIVIL ENGINEERING (NBA Accredited: 5 years)

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. U. K. Dewangan	Professorand Head	PhD
2.	Dr. M.K.Verma	Professor(On Deputation) Vice- Chancellor at CSVTU	PhD
3.	Dr. R. K. Tripathi	Professor	PhD
4.	Dr. Samir Bajpai	Professor	PhD
5.	Dr. Gangadhar Ramtekkar	Professor	PhD
6.	Prof. Ajay Vikram Ahirwar	Assistant Professor	PhD(Pursuing), M.Tech.
7.	Dr.Laxmikant Yadu	Assistant Professor (onLien)Associate Prof. at GCE Raipur	PhD
8.	Dr. Shirish V Deo	Assistant Professor	PhD
9.	Prof. Ishtiyaq Ahmad	Assistant Professor	PhD (Pursuing),M.Tech.
10.	Prof. Mani Kant Verma	Assistant Professor	PhD(Pursuing), M.E. (WREE)
11.	Prof. Mohit Jaiswal	Assistant Professor	Ph.D. (Pursuing), M.Tech.(IDD)
12.	Dr. MeenaMurmu	Assistant Professor	PhD

13.	Dr. Govardhan Bhatt	Assistant Professor	PhD
14.	Prof. Sunny Deol G.	Assistant Professor	PhD (Pursuing), M.Tech.
15.	Prof. Ansu Thomas	Assistant Professor	PhD (Pursuing), M.Tech.
16.	Dr. Sandeep Kumar Chouksey	Assistant Professor	PhD
17.	Dr. A. D. Prasad	Assistant Professor	PhD
18.	Dr.Alfia Bano	Assistant Professor	PhD

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. Gangadhar Ramtekkar	P.V.Joshi	Analytical Modelling for Vibration Analysis of Cracked Isotropic and Orthotropic plates

M.Tech Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. M. K. Verma (Supervisor) Prof.Ishtiyaq Ahmad (Co-Supervisor)	Alka Sahu	Development of Soil Erosion Model using RUSLE in GIS Environment for Dudhawa Reservoir Catchment of Mahanadi Reservoir Project Complex.
2.	Dr. M. K. Verma (Supervisor) Prof.Ishtiyaq Ahmad (Co-Supervisor)	Anju Jangde	Ground water flow modelling of upper Seonath basin of Chhattisgarh state using visual modflow.
3.	Dr. M. K. Verma (Supervisor) Prof.ManikantVerma (Co-Supervisor)	Ela Muhil S	Flood and storm frequency analysis for Hasdeo and Seonath basin.

4.	Dr. M. K. Verma (Supervisor) Prof.ManikantVerma (Co-Supervisor)	Sabyasachi Swain	Trend analysis of rainfall events and hydrological modeling using SWAT for Seonath basin.
5.	Dr. M. K. Verma (Supervisor) Prof.Ishtiyaq Ahmad (Co-Supervisor)	Sandeep Soni	A study on impact of LULC change on surface runoff using L-THIA model for Kharun river sub basin of Chhattisgarh state.
6.	Dr. M. K. Verma (Supervisor) Prof.Ishtiyaq Ahmad (Co-Supervisor)	Triambak Baghel	Flood mitigation measures using HEC model for un-gauge catchment of Hasdeo basin at Taga village of Chhattisgarh state.
7.	Dr. M. K. Verma (Supervisor) Prof. Manikant Verma (Co-Supervisor)	Yandrathi Sailjaa	Water quality assessment of various stagnant water bodies in Raipur city by WQI.

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr.	Name of Faculty	Title of Oral/Poster	Dates and Venue
No.		Presentation , Name of Event, Organizer	
1.	Dr. M.K. Verma	Attended Two day Workshop on "Water Resources in developing countries: Planning and management."	27-28 August 2015. NIT Raipur
		Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi.	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II	1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur.
2.	Dr. R. K. Tripathi	Lecture delivered on Guidelines to produce good concrete.	16 th November to 20 th November, 2015. Civil Engineering Department, NIT Raipur.
		Two day Workshop on "Water Resources in developing countries: Planning and management"	27-28 August 2015. NIT Raipur.
		One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal	14 th August 2015. Civil Engineering Department, National Institute of Technology

		Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi. One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II	Raipur. ^{1st} August 2015. Civil Engineering Department, National Institute of Technology Raipur
3.	Dr. U.K. Dewangan	Attended Two day Workshop on "Water Resources in developing countries: Planning and Management." Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II.	27-28 August 2015. NIT Raipur. 14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
			1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur.

4.	Dr. S. Bajpai	Lecture delivered on Testing of Water quality for drinking and construction Practices.	November, 2015. Civil Engineering Department, NIT Raipur.
		Two day Workshop on "Water Resources in developing countries: Planning and management" .	27-28 August 2015. NIT Raipur.
5.	Dr. G.D. Ramtekkar	Lecture delivered on Good concrete construction practices.	16 th November to 20 th November, 2015. Civil Engineering Department, NIT Raipur.
		Attended Two day Workshop on "Water Resources in developing countries: Planning and management".	27-28 August 2015. NIT Raipur
		Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi .	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II.	1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur.

6.	Dr. S. V. Deo	Lecture delivered on Tests on	16 th November to 20 th
		Cement and Concrete	November, 2015. Civil
			Engineering
			Department, NIT
			Raipur
		Attended Two day Workshop on	
		"Water Resources in developing	
		countries: Planning and	27-28 August 2015.
		management"	NIT Raipur
		Attended One day workshop	
		under research project	
		"Construction of Low Volume	
		Roads on Soft Subgrade Soil	
		Improved by Locally Available	14 th August 2015. Civil
		Marginal Materials" funded by	Engineering
		Human Settlement Management	Department, National
		Institute (HSMI), HUDCO New	Institute of Technology
		Delhi at in association with	Raipur.
		HSMI, HUDCO New Delhi	
		Attended One day workshop	
		"Research Schemes in DST &	
		Recent Advances in Civil &	
		Transportation Engineering"	
		under TEQIP-II.	
			1 st August 2015. Civil
			Engineering
			Department, National
			Institute of Technology
			Raipur.

7.	Prof. Ajay Vikram	Lecture delivered on Total Station	25th June, 2016 NIT
	Ahirwar	at "Training Programme on Remote Sensing, GIS and Total Station" for Engineers organized by CGRRDA	Raipur,
		Delivered keynote address at short term hands on training programme held entitled "Testing Methods in Civil Engineering Construction" on topic " Fundamental of Surveying, Conventional Survey techniques and Demonstration of Various Conventional Instruments"	16 th November to 20 th November, 2015. Civil Engineering Department, NIT Raipur.
		Two day Workshop on "Sustainable Construction Materials from Agricultural Waste" on, Organized by Visvesvaraya National Institute of Technology Nagpur held at Nagpur. Two day Workshop on "Water Resources in developing countries: Planning and	11 th and 12 th October 2015 Visvesvaraya National Institute of Technology Nagpur.
		management." One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II.	27-28 August 2015. NIT Raipur 14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
			1 st August 2015. Civil Engineering

	Department, National Institute of Technology
	Raipur.

8.	Prof. L.K. Yadu	Attended Two day Workshop on "Sustainable Construction Materials from Agricultural Waste" on, Organized by Visvesvaraya National Institute of Technology Nagpur held at Nagpur.	11 th and 12 th October 2015 Visvesvaraya National Institute of Technology Nagpur.
		Attended Two day Workshop on "Water Resources in developing countries: Planning and management."	27-28 August 2015. NIT Raipur
		Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi.	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II Delivered a lecture on "Geo- environmental Challenges and Solutions" on two weeks course "Modern Geotechnical Engineering" under Global Initiative for Global Network (GIAN) programme funded by Ministry of Human Resources Development, Government of India.	 1st August 2015. Civil Engineering Department, National Institute of Technology Raipur 21st Dec to 28th Dec 2015 at NIT Raipur on 27.12.2015.
		Delivered a lecture on "Geotechnical Investigations for various sites & Laboratory & field investigations for Construction of subgrade and granular layers using locally available material" Delivered an Expert Lecture on	

topic "New Trends in Geotechnical Engineering."	Civil Engineering Department, National Institute of Technology Raipur on 19.11.2015.
	O.P. Jindal Institute of Technology Raigarh, Chhattisgarh, India on 1 st April 2015.

9.	Prof. Ishtiyaq Ahmad	Attended Two day Workshop on "Water Resources in developing countries: Planning and management"	e e
		Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II Attended Testing Methods in Civil Engineering Construction, Short term hands-on Training Programme.	 1st August 2015. Civil Engineering Department, National Institute of Technology Raipur 16-20 Nov-2015, NIT Raipur
		Attended "National Workshop on Water Resources in Developing Countries: Planning and Management", GIS Applications	Aug 27-28, 2015NIT Raipur
10.	Prof. Mani Kant Verma	Delivered a lecture on Hydrological Modelling in GIS Environment: using ArcGIS, HECGeoHMS, HEC- HMS during the National Workshop on Water Resources in developing countries: Planning & Management.	27th, 28th August, 2015 at NIT Raipur
		Delivered a lecture on Measurement of Flow during the National Workshop on Testing Methods in Civil Engineering	16-20 November, 2015 at NIT Raipur.

Construction.	
Participated at the Edu- excursion camp organized as part of the project, "Inter-University Competition on Water Resources Management."	26-31 October 2015 at Gurgaon organized by TERI University.
Attended, One week on Advanced Data Analysis management.	
Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi.	IIT Delhi, 14-18 December 2015 14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II.	1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur.

11.	Prof. Mohit Jaiswal	Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi. Applied Finite Element: Theory And Practice, one week short term training programme at NIT Silchar.	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
		Introduction to Structural Engineering, short term training programme, National Mission on Education through ICT (MHRD, Govt. of India) Attended Two day Workshop on "Water Resources in developing countries: Planning and management."	3 rd -7 th August 2015, NIT Silchar. 4 th -9 th January 2016, Virtual Classroom, NIT Raipur.
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II. Attended on Testing Methods in Civil Engineering Construction, Short term hands-on Training Programme.	27 th -28 th August 2015, NIT Raipur. 1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur. 16 th -20 th November
		Short term hands-on Training	Engineering Department, Natio Institute of Technol

12.	Dr. Meena Murmu	Lecture delivered on Latest Concrete mix design code.	16-20 th Nov-2015, NIT Raipur.
		Attended, One week on Advanced Data Analysis management.	IIT Delhi, 14-18 December 2015.
		Introduction to Structural Engineering, short term training programme,National Mission on Education through ICT (MHRD, Govt. of India)	4 th -9 th January 2016, Virtual Classroom, NIT Raipur.
		Attended Two day Workshop on "Water Resources in developing countries: Planning and management." Testing Methods in Civil Engineering Construction, Short	27-28 August 2015. NIT Raipur
		term hands-on Training Programme.	16-20 th Nov-2015, NIT Raipur.
13.	Dr. Govardhan Bhatt	Attended Two day Workshop on "Water Resources in developing countries: Planning and management."	27-28 August 2015. NIT Raipur
		Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering"	1 st August 2015. Civil Engineering Department, National

		under TEQIP-II	Institute of Technology
		Attended Testing Methods in Civil Engineering Construction, Short term hands-on Training Programme.	,
14.	Prof. Sunny Deol	Lecture delivered on Tests on Bitumen and Mix design of Bituminous concrete, Performance Evaluation of Pavements using BBD & LWD.	16-20 th Nov-2015, NIT Raipur.
		Attended One week short term training program on "CONSTRUCTION AND ROAD SAFETY MANAGEMENT" under TEQIP-II.	October 26-30, 2015 at SVNIT, Surat.
		Attended Five days training programme on "VISSIM- Traffic Simulation software"	March 23-27, 2015 at SVNIT, Surat.
		Two day Workshop on "Water Resources in developing countries: Planning and management"	27-28 August 2015. NIT Raipur
		One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur
		One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II	1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur

Testing Methods in Civil Engineering Construction, Short term hands-on Training Programme.	16-20 th Nov-2015, NIT Raipur.

15.	Prof. Ansu Thomas	Attended Two day Workshop on "Water Resources in developing countries: Planning and management"	U
		Attended One day workshop under research project "Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur.
		Attended One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II Testing Methods in Civil Engineering Construction, Short term hands-on Training Programme.	 1st August 2015. Civil Engineering Department, National Institute of Technology Raipur 16-20th Nov-2015, NIT Raipur

16.	Dr. S.K.Chouksey	Lecture delivered on Ground improvement techniques with various materials	
		Lecture delivered on Geo environment on two weeks course "Modern Geotechnical Engineering" under Global Initiative for Global Network (GIAN) programme funded by Ministry of Human Resources Development, Government of India	21 st Dec to 28 th Dec 2015 at NIT Raipur on 27.12.2015.
		Two day Workshop on "Water Resources in developing countries: Planning and management" One day workshop under research project "Construction of	27-28 August 2015. NIT Raipur
		Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at in association with HSMI, HUDCO New Delhi	14 th August 2015. Civil Engineering Department, National Institute of Technology Raipur
		One day workshop "Research Schemes in DST & Recent Advances in Civil & Transportation Engineering" under TEQIP-II	
			1 st August 2015. Civil Engineering Department, National Institute of Technology Raipur

17. Dr. A. D. Prasad	Testing Methods in Civil Engineering Construction , Short term hands-on Training Programme, Total Station "National Workshop on Water Resources in Developing Countries: Planning and Management", GIS Applications	16-20th Nov-2015, NIT Raipur Aug 27-28, 2015 NIT Raipur
	Programme, Total Station "National Workshop on Water Resources in Developing Countries: Planning and	NIT Raipur
	Resources in Developing Countries: Planning and	-
	Countries: Planning and	0 + 10 14 0015
	Management" GIS Applications	Oct 13-14, 2015
	management, eno rippileationo	Raipur
	ECBC Training program on "Energy Conservation in Buildings", Organised by CREDA	
18. Dr Alfia Bano	"Research Schemes in DST &	1 st August 2015 at NIT
	Recent Advances in Civil & Transportation Engineering" under TEQIP-II.	Raipur
	"Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials" funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi	14th August 2015 at NIT Raipur
	"Testing Methods in Civil Engineering Construction"	16 th -20 th November 2015 at NIT Raipur
	"Two weeks ISTE STTP on Introduction to Structural Engineering",organized by Indian Institute of Technology Kharagpur.	4 th -9 th January 2016 at NIT Raipur
	"Water Resources in Developing Countries: Planning and Management"	27 th -28 th August 2015 at NIT Raipur
	"TEQIPWinter Internship and Visiting Researcher program2015"under TEQIP	December 2015 at IIT

	Kanpur

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1	Dr. A. D. Prasad	UNESCO Regional Capacity Development Workshop on Ensuring Water Security in Changing Environment scenario, Food and Energy	Nov 26-27, 2015 IIT-Bombay
2	Dr. A. D. Prasad	World Conference on Applied Sciences and Engineering Technology, Kumamoto University	Oct 24-26, 2015 Kumamoto University, Japan

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials"			14 th August 2015	Human Settlement Management Institute (HSMI), HUDCO New Delhi.

2.	Research Schemes in DST & Recent Advances in Civil & Transportation Engineering"	Dr. Laxmikant Yadu, Prof. Sunny Deol G	1 st August 2015	TEQIP-II
3.	Water resource in developing countries: planning and management, National Workshop	Dr.A.D.Prasad, Prof. Ishtiyaq Ahmad, Prof. Mani Kant Verma	27-28 Aug'15	Self- sponsored
4.	Testing methods in civil engineering construction	Dr. Laxmikant Yadu, Prof. Sunny Deol G.	16-20 nov'15	TEQIP II

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/ Web link
1	Manoj Kumar Tiwari a, Samir Bajpai a, U.K. Dewangan a, Raunak Kumar Tamrakar	Suitability of leaching test methods for fly ash and slag:	A review, Journal of Radiation Research and Applied Sciences, JRRAS170_pro of 2 July 2015 1/14 Science Direct	
2	Shalem Ernest and U. K. Dewangan	Identification of Structural System: Recent Trends and Challenges.	International Journal of Structural Engineering and Analysis,	Vol. 1: Issue 1, www.j ourna Ispub. com, P 1-8

3	Manoj Kumar Tiwari *, Dr. Samir Bajpai **, Dr. U. K. Dewangan **	An Analytical Study of Heavy Metal Concentration in Soil of an Industrial Region of Chhattisgarh, central, India	International Journal of Scientific and Research Publications, Volume 5, Issue 7, July 2015 1, ISSN 2250-3153	<u>www.i</u> jsrp.o rg
4	Shalem Ernest, U. K. Dewangan	Structural Damage Predictions Based on Eigen Frequency Evaluation Techniques	INTERNATION AL JOURNAL OF APPLIED ENGINEERING RESEARCHISS N 0973-4562.	(SCOP US INDE XED)
5	Mani Kant Verma, Sabyasachi Swain, M.K. Verma	STATISTICAL ANALYSIS OF PRECIPITATION OVER SEONATH RIVER BASIN, CHHATTISGARH.	International Journal of Applied Engineering Research (IJAER)	
6	Jyoti Kant Choudhari, Jyotsna Choubey, Dr.Ashish Patel, Dr. M.K.Verma	"Molecular Modeling and Simulation Analysis of Glaucoma Pathway"	CSVTU International Journal of Biotechnology, Biomedical and Bioinformatics , Volume 1: 1; 31-41, January 2016.	
7	Sabyasachi Swain, Mani Kant Verma, M.K. Verma	Statistical Trends Analysis of Monthly Rainfall for Raipur District, Chhattisgarh	International Journal of advance engineering research and studies, Vol. IV (II), 87-89, 2015.	
8	Sabyasachi Swain, Mani Kant Verma, M.K. Verma	"Analysis of Change in Annual Rainfall for Raipur District, Chhattisgarh"	International Journal of Engineering Research &	

9	Ishtiyaq Ahmad, M. K.	, Aplication RS and GIS in	Technology, 2015, PP- 74- 76. International
	Verma	estimation of sub basin runoff potential using HEC-HMS"	Journal of Applied Engineering Research, Vol 20, No15, 41243-41248.
10	Anju Jangade, Ishtiyaq Ahmad, M.K. Verma	Application of MODFLOW in Water Resource Management	Journal of Water Resource Engineering and Management, 2015; 2 (2), 1- 5p.11.
11	Ansu Thomas, R. K. Tripathi, L. K .Yadu	Effect of Enzymes on the Unconfined Compressive Strength of Soil.	International Journal of Applied Engineering Research, ISS N 0973-4562
12	Ansu Thomas, R. K. Tripathi, L. K .Yadu	Variation in shear modulus of enzyme treated soil under cyclic loading	Geotechnical Special Publica tion, GeoChina 2016 American Society
13	Ansu Thomas, R. K. Tripathi, L. K .Yadu	Soil Stabilisation using Terrasil	International Journal of Earth Sciences and Engineering- ISSN : 0974- 5904 of Civil Engineers (
14	Yadu L.K. and Tripathi R.K.	"Response of Circular Footing on New Key Engineering Material- Granulated Blast Furnace Slag asStructural Fill"	International Journal of Advanced Materials Research,

15	Ashish Patel, M. K.	Intelligent systems for diagnosis	Trans Tech Publications, Switzerland, Vol 1119, pp 726-730. CSVTU	
	Verma and Qamar Rahman,	of asthma severity using ANN	International Journal of Biotechnology, Biomedical and Bioinformatics , Volume 1: 1; 19-30, January 2016.	
16	Ishtiyaq Ahmad, V. Verma, M. K. Verma "	Application of curve number method for estimation of runoff potential in GIS environment",	IPBCEE, Vol 80, 16-20, 2015.	
17	P.V.Joshi, N.K.Jain, G.D.Ramtekkar	Analytical modeling for vibration analysis of partially cracked orthotropic rectangular plates	European Journal of Mechanics A/Solids	
18	P.V.Joshi, N.K.Jain, G.D.Ramtekkar,	Analytical modeling for vibration analysis of thin rectangular orthotropic/functionally graded plates with an internal crack-	<i>Elsevier</i> , Authors Name: - Vol. 50 (2015), pp. 100 – 111.	http:/ /dx.d oi.org /10.1 016/j .euro mech sol.20 14.11 .007
19	P.V.Joshi, N.K.Jain, G.D.Ramtekkar,	Effect of thermal environment on free vibration of cracked rectangular plate: An analytical approach-	Thin-Walled Structures Elsevier, Vol. 91 (2015), pp. 38 – 49.	<u>http://dx.d</u> oi.org /10.1 016/j .tws.2 015.0 2.004

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20	Gangadhar S. Ramtekkar,N.K. Jain, Prasad V. Joshi	Nonlinear Vibration Analysis of Isotropic plate with Perpendicular Surface Cracks	Advances in Structural Engineering, 2015, pp-77- 94.	
21	Patel, G. K. & Deo, S. V	Parametric Study of Natural Organic Materials as Admixture in Concrete"	International Journal of Applied Engineering Research, Volume 11, Number 9 (2016) pp 6271-6277. (SCOPUS)	http:/ /www .ripub licatio n.com /ijaer 16/ija erv11 n9_33 .pdf
22	M. Murmu, S. P. Singh	Effects of Curing Temperature Strength of Lime Activated Slag Cement	Internationl Journal of Civil Engineering (Accepted) · 1735-0552	
23	M. Murmu, S. P. Singh	Strength Characteristics of Lime Activated Slag Cement	Advances in Cement Research, 2015, 27(1), 268-77.	http:/ /dx.d oi.org /10.1 680/a dcr.13 .0009 7
24	V Shimpi and G. Bhatt	"Study of RC Framed Building in Different Seismic Zones for Economic Consideration"	(2015) International Journal of Construction Engineering and Planning 1 (1), 42-47.	
25	Deepesh Kumar Patel, AkshayBaxi, Govardhan Bhatt.(2015)	"Use of fly ash as partial replacement of sand in concrete",	Journal of Discovery, 39(179), 138- 144	
26	Fathian, F., A.D. Prasad., Dehghan, Z.	Influence of land use/land cover change on land surface	Int. J. Hydrology	http:/

	and Eslamian, S	temperature using RS and GIS techniques	Science and / Technology, / Vol. 5, No. 3, pp.195–207, 2015
27	P. Ganasala, V. Kumar, and A.D. Prasad	Performance Evaluation of Color Models in the Fusion of Functional and Anatomical Images	

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1	AkshayBaxi, Depeesh Kumar Patel, Mohit Jaiswal	Greywater reuse : a feasibility study for nit Raipur residential buildings	Science & Technology, 2015, 1(4), 201-207	http://www .indianjourn als.com/

Books, monograms, chapter's authored/co-authored (From 01-04-2015 to 31-03-2016)

Sr.	Name of Faculty	Title (Mention	Publisher	Author/Co-
No.	Member	Book/monogram/chapter)		author
1.		Non-linear vibration analysis of isotropic plate with perpendicular surface cracks, Book Chapter in Advances in Structural Engineering,	Springer 2015 pp.77 – 94. Print ISBN 978-81- 322-2189-0 Online ISBN 978-81-322- 2190-6 DOI 10.1007/978- 81-322-2190- 6_8	

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (inlaks of Rs.)	Investigators (PI/Co-PI)
1.	Performance evaluation of some selected PMGSY roads in the state of Chhattisgarh	2 Years	NRRDA, New Delhi, MORD, GOI.	41.89	Dr. R.K. Tripathi (PI) Prof. Laxmikant Yadu (Co- PI) Prof. S.Deol G.(Co.PI)
2.	"Design and Validation of existing bike based patient carrier transport system for remote areas of Chhattisgarh and proposing design of bike-trailer assembly"	One year six months	UNICEF	10	Dr.ShubhankarBhowmick and Dr. Govardhan
3.	Parametric Study of Eco-friendly Concrete/Composite by Partial Replacement of Sand and Cement with Locally Available Industrial By-products. Sponsoring Agency:- CGCOST.	2 Years	Chhattisgarh Council of Science and Technology, Raipur	4.02	PI- Dr. G. D. Ramtekkar Co-PI- S. V. Deo

Awards/Any Other Achievements (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Faculty Member	Details of the Award/Achievement	Date
1.	Dr. S.K. Chouksey	Nominated as Indian Young Geotechnical Engineer to attend the 6th iYGEC6, Seoul, Korea from 16th to 17 th March 2017	

Brief Details of Important Lab

Research Infrastructure

Major facilities:

- Concrete Rheology Meter (First in the region): For better understanding of fresh concrete properties.
- **Early Shrinkage Meter** (First in the region): For better understanding Shrinkage of various cementitious materials and concrete under local hot conditions.
- **Electrical resistivity Meter** (First in the region): For better understanding of concrete durability under various conditions.

Carbonation Chamber (First in the region): For understanding behavior of concrete in local industrial region.

ENVIRONMENTAL ENGINEERING LABORATORY

- Atomic Absorption
 Spectrophotometer
- **UV-VIS Spectrophotometer**
- Kjeldahl Digestion Unit
- ♣ Soxhelt Extraction Unit
- ♣ OC/EC Analyzer (RT-4)
- ♣ Aethalometer (AE-33-7)

FLUID MECHANICS ENGINEERING LABORATORY

4 GEOTECHNICAL ENGINEERING LABORATORY

SURVEYING LABORATORY

TRANSPORTATION ENGINEERING LABORATORY

Laboratory Equipment and Software Facilities

1. Water Resources Engineering Lab

S.No.	Item	Description			
		i) Visual MODFLOW Flex Pro 2012.1 classroom license (1 single user license dongle and one 10 user network license dongle)			
1	Software	 a) Intergraph ERDAS Edukit High End remote sensing software package ii) (5 user) 			
		b) Intergraph Geomedia Professional - High End GIS software (3			

2	Computer	 user) c) Intergraph Geomedia grid Anlalyst - Add on Module to Geomedia professional (01 user) d) IntergrpahGeomedia 3D Analyst - Add on module to geomedia professional (01 user) High End HP computer system (8 nos.) from central stores NIT Raipur 			
	Accessories	Dlink Cat patch cord (1 m length) 6 nos.			
		Atx SMPS (5 nos.)			
3		Canon Scanner USB power (1 no.)			
		Logitech wireless keyboard + mouse set (1 set)			
		External DVD writer (1 no.)			
		1 TB External HDD (1 no.)			
4	Equipment	DGPS (2 nos.)			

2. Concrete Lab

S.No.	Item	Descr	ription
		i)	Accelerated Curing Apparatus
		ii)	Rebound hammer
		iii)	Ultrasonic Testing Equipment
		iv)	Resonant Frequency tester
1	Equipments	v)	Flexural testing machine
		vi)	Carbonation Chamber
		vii)	Early shrinkage meter
		viii)	Rheology Meter
		ix)	Electrical resistivity meter

3. Geotechnical Engineering Lab

S.No.	Item		Description		
1	Software	PLAXIS	PLAXIS 2D		
2	Equipments	1	Brass Sieves		
		2	Motorised Sieve Shaker		
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	3	Direct Shear Test Apparatus			
	4	Universal Triaxial testing equipment			
	5	Repeated Triaxial Test			
	6	Load Frame			
	7	Integral proving rings of capacity (0.25, 0.5, 1 and 2 kN 2.5, 5 kN, 10kN, 20kN, 50kN, 100kN and 500kN)			
	8	Hydraulic Jack With Pump (50 kN and 500 kN capacity)			
	9	CBR Apparatus Field Type			
	10	Data Acquisition System			
	11	Humidity Control Oven Digital display			
	12	Procter Penetrometer			
	13	Thickness Gauge for Geotextiles/ Geosynthetic			
	14	Dry Sieve test Apparatus			
	15	Hydrodynamic Sieve Test Apparatus			
	16	Interface Friction Measurement Apparatus			
	17	Universal testing system for geotextiles, 10 ton			
	18	Cone drop test Apparatus			
	19	Cross permeability test apparatus			
	20	In-Plane permeability test apparatus			
	21	Long term Flow test apparatus			
	22	Gradient Ratio test Apparatus			
	23	Geotextiles permeameter			
	24	Weighing balance- a. 600 g x 0.01g ;			
		b. 10 kg x 0.5g			
	25	Laboratory Electric Oven			

4. Transportation Engineering Lab

S.No.	Item	Description		
		1 Automatic Sieve shaker		
		2 Universal Penetrometer with digital timer		
		3 Ring an Ball apparatus with electrical fitting		
		4 Flash and fire point apparatus electrically operated closed system		
		5 Bitumen centrifuge motorized extractor apparatus		
		6 Ductility testing machine with set of mould apparatus		
1	Equipment	 Digital water bath for bitumen ambient temperature to 100 degree Celsius apparatus with stainless steel chamber apparatus 		
		Digital hot air oven with stainless steel chamber with88888999		
		9 Electronic balance 600gm X 0.01 gm accuracy with backup battery system		
		Electronic balance 10 kg X 0.5 gm accuracy with back 10 up battery system apparatus		
		11 Marshall apparatus		
		12 Los Angeles abrasion testing machine		
		13 CBR Apparatus		

5. Structural Engineering Lab

S.No.	Item	Description			
		i)	STAAD Pro V8i classroom license		
1	Software	ii)	ANSYS		
		iii)	MATLAB		
2	Computer	High End HP computer system (17 nos.) from central stores NIT Raipur			

6. Environmental Engineering Lab

S.No.	Item	Description	
1	Equipments	i)	Atomic Absorption Spectrophotometer

ii)	Balance
iii)	Black Carbon Measuring Instrument
iv)	BOD Incubator
v)	Cod Reactor
vi)	High Volume Air Sampler
vii)	Oc/Ec Analyzer
viii)	Pm _{2.5} & Pm ₁₀ Sampler
ix)	Sound Level Meter
x)	U V Visible Spectrophotometer
	o v visible Spectrophotometer

7. Survey Lab

S.No.	Item		Description	
		i)	Digital Theodolite	
1	Equipments	ii)	Automatic Level	
-	Equipmente	iii)	Auto Level (Telescope)	
		iv)	Distance Meter	

8. Fluid Mechanics Lab

S.No.	Item		Description
		i)	Hydraulic Bench Apparatus
		ii)	Bernoulli's Theorem Apparatus
		iii)	Centrifugal Pump for variable speed
		iv)	Calibration of Pressure Gauge
1	Equipments	v)	Reciprocating Test Rig
		vi)	Series and Parallel Pump Test
		vii)	Free & Forced Vortex Apparatus
		viii)	Pitot Tube Apparatus
		ix)	Francis Turbine Test Rig with data logging facility

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Sr. No.	Name of Faculty Members	Designation	Qualifications
1.	Dr. Naresh Kumar Nagwani	Assistant Professor	Ph.D.
2.	Prof. Dilip Singh Sisodia	Assistant Professor	M. Tech., Ph.D. (pursuing)
3.	Dr. Pradeep Singh	Assistant Professor	Ph.D.
4.	Dr. Manu Vardhan	Assistant Professor	Ph.D.
5.	Dr. Sarsij Tripathi	Assistant Professor (On Contract)	Ph.D.
6.	Prof. Aakanksha Sharaff	Assistant Professor (On Contract)	M. Tech., Ph.D. (pursuing)
7.	Prof. Veena Anand	Assistant Professor (On Contract)	M. Tech., Ph.D. (pursuing)
8	Prof. Jasraj Meena	Assistant Professor (On Contract)	M. Tech., Ph.D. (pursuing)

M.Tech. Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. Manu Vardhan	Mr.Anukul Thawarey	Energy Aware Scheduling of Tasks in Cloud Infrastructure
2.	Dr. Naresh Kumar Nagwani	Mr. Debasish Sena	Applications of Arizona and Fuzzy Time Series Models for Forecasting Some Real World Datasets

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. Naresh Kumar Nagwani	Recent Trends in Artificial Intelligence for Big data	" NIT Goa Aug 7-Aug 9, 2015.
	Dilip Singh Sisodia	Recent Trends in Artificial Intelligence for Big data	" NIT Goa Aug 7-Aug 9, 2015.
2.	Dr.Pradeep Singh	Recent Trends in Artificial Intelligence for Big data	" NIT Goa Aug 7-Aug 9, 2015.
3.	Dr. Manu Vardhan	Workshop on Security Issues in Cloud and Machine to Machine Communication, NIT Shillong	27 th – 28 th Aug'15, Shillong, India
4.	Dr. Manu Vardhan	Workshop on Cloud Computing Tools, TCE Madurai	15 th – 18 th Oct'15, Madurai, India
5.	Jasraj Meena	Workshop on Latest Tools andTechniques to manage E-resources	31Oct to 01 Nov. 2015 NIT Raipur

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	Aakanksha Sharaff, Naresh Kumar Nagwani, Abhishek Dhadse	Comparative Study of Classification Algorithms for Email Spam Detection, Third International Conference on Emerging Research in Computing, Information, Communication Applications, Springer India 2015	30 th July 2015 to 1 st August 2015, NITEE Meenakshi Institute of Technology, Yelahanka Bangalore 560064 India
2.	Veena Anand, Sudhakar Pandey	An Energy efficient approach to extent network life time of wireless sensor network.	24-25 January 2016, IIMT, Bhubaneswar, Odisha
3.	Veena Anand, Sudhakar Pandey	Enhancement of wireless sensor network lifetime by clustering technique	15-18 December, 2015 ISI, Kolkata

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the	DOI/Web link
			Journal Vol. No.,	

			Issue No. (if any)/Pg. No. , Year	
1.	Debasish Sena, Naresh Kumar Nagwani	A NEURAL NETWORK AUTOREGRESSION MODEL TO FORECAST PER CAPITA DISPOSABLE INCOME	Malaysian Technical Universities Conference on Engineering and Technology 2015	
2.	Debasish Sena, Naresh Kumar Nagwani	Application of time series based prediction model to forecast per capita disposable income	pp. 454 – 457, Advance Computing Conference (IACC), 2015 IEEE International	
3.	Naresh Kumar Nagwani	A Comment on "A Similarity Measure for Text Classification and Clustering"	IEEE Transactions on Knowledge and Data Engineering, pp. 2589 – 2590, Vol. 27, Issue 9, 2015	
4	P. Singh; N. R. Pal; S. Verma; O. P. Vyas, ,"	"Fuzzy Rule-Based Approach for Software Fault Prediction	IEEE Transactions on Systems, Man, and Cybernetics: Systems, vol.PP, no.99, pp.1-12, 2016	http://ieeexplo re.ieee.org /stamp/stamp .jsp?arnumber =7414476
5	Manu Vardhan, M Kumar, J Meena, R Singh	Data outsourcing: A threat to confidentiality, integrity, and availability	IEEE International Conference onGreen Computing and Internet of Things (ICGCIoT), Pg# 1496-1501	10.1109/ICGC IoT.2015.7380 703
6.	Shilpi Varshney & Sarsij Tripathi, ,	"Study And Analysis Of Flow Shop Scheduling Problem With Heuristic Approach"	International Journal of Computer Science and Engineering (IJCSE) Vol. 4,	http://www.ia set.us/view_ar chives.php?yea r=2016&jtype= 2&id=14&detai

			Issue 3, , PP: 11- 14, Apr -May 2015 ISSN(P): 2278- 9960; ISSN(E): 2278-9979 © IASET	<u>ls=archives</u>
7.	Aakanksha Sharaff, Naresh Kumar Nagwani	Email Thread Identification using latent dirichlet allocation and non-negative matrix factorization	Journal of Information Science, 1, 1, 1-13, 2015	10.1177/0165 551515587854
8.	Naresh Kumar Nagwani, Aakanksha Sharaff	SMS Spam Filtering and Thread Identification using bi-level text classification and clustering techniques	Journal of Information Science, 1, 1, 1-13, 2015	

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (inlaks of Rs.)	Investigators (PI/Co-PI)
1.	Predictive and Visual Analysis of the Price Distribution Information of Rice and Wheat across India	3 Years	Chhattisgarh Council of Science & Technology Raipur	4.5	Naresh Kumar Nagwani, Dr. Shrish Verma, Dr. Kesari Verma
2.	Modeling of autonomous software agents' behaviour to defend HTTP request attacks	3 Year	Chhattisgarh Council of Science & Technology Raipur	4.9	Dilip Singh Sisodia
3.	Development of a comprehensive model for software fault prediction	2 Year	Chhattisgarh Council of Science & Technology Raipur	5	Dr. Pradeep Singh

Socially relevant activities

Sr. No.	Name of Faculty Member(s)	Activity		
1.	Dr. Manu Vardhan	Coordinator of SAMAR '16	Member of Eclectika'16	Member of Anti Raging Committee
				Member of Convocation Committee

Brief Details of Important Lab

Laboratories- UG and P.HD.

Name of Lab	Facilities	Major Equipment Available
Advanced Computer Networking Laboratory	LAN connection available Various advanced software's available MATLAB	
Data Base Management System Laboratory	MySQL 6.0 Oracle 8i/9i MS-Access	
Operating Systems (Unix/Linux) Laboratory	Windows xp Windows server 2003 Linux.	Dual Link Projector PCs equipped with Intel
Artificial Intelligence Laboratory	Windows xp Windows server 2003 B-Prolog 7.8	P4 Dual core Processors.
C Programming Laboratory	Windows 7 Professional Turbo c7 Linux.	Dual Link Projector PCs equipped with Intel (R) core (TM) i7
OOP's Programming Laboratory	Windows 7 Professional Turbo C++ 4.5 Java SE 7u40	Dual Link Projector PCs equipped with Intel (R) core (TM) i7
Network Programming	Windows 7 Professional	Dual Link Projector

Laboratory	JDK 7u40 & NetBeans 7.3.1	PCs equipped with Intel
		(R) core (TM) i7

DEPARTMENT OF ELECTRICAL ENGINEERING

Faculty

S. No.	Name of Faculty	Designation	Qualifications
1.	Prof. S Gupta	Professor	Ph.D
2.	Mr. P D Dewangan	Associate Professor	M.Tech
3.	Dr. Subhojit Ghosh	Assistant Professor	Ph.D
4.	Dr. Narendra D. Londhe	Assistant Professor	PhD
5.	Dr. Anamika Yadav	Assistant Professor	Ph.D.
6.	Dr. Swapnajit Pattnaik	Assistant Professor	Ph.D.
7.	Dr. Ebha Koley	Assistant Professor	Ph.D
8.	Dr. Binod Shaw	Assistant Professor	Ph.D
9.	Ms. Varsha Singh	Assistant professor	M.Tech
10.	Dr. Monalisa Biswal	Assistant Professor	Ph.D
11.	Dr. Vinay Pratap Singh	Assistant Professor	Ph.D.
12.	Dr. Lalit Kumar	Assistant Professor	PhD
13.	Dr. K Chandrasekaran	Assistant Professor	Ph.D.

M.Tech Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. Subhojit Ghosh	Mr. Sandeep Bhatt	Optimization Based Fractional Order Filter Design.
2.	Dr. Subhojit Ghosh	Mr. Nitesh Nishad	Particle Swarm Optimization Based THD Minimization
3.	Dr. Narendra D. Londhe	Pravesh Lodha	Machine Learning Paradigm for Speech Recognition of an Indian Dialect

4.	Dr. Narendra D. Londhe	Devarshi Shukla	A Novel Approach to Coronary Artery Disease Risk Stratification using Carotid B-mode Ultrasound and Coronary IVUS Videos
5.	Dr. Monalisa Biswal	Ritu Sori	Intrusion Detection System for Black hole Attack in Wireless Sensor Network using AODV Protocol
6.	Dr. Ebha Koley	Khushaboo Verma	Combined wavelet and ANN based fault locator and zone estimator for shunt faults in six phase transmission line.
7.	Dr. Anamika Yadav	Bhupendra Ingre	Performance Analysis and Comparative Study of Intrusion Detection System using ANN and DT
8.	Dr. Anamika Yadav	Aditi Verma	Artificial Neural Network based Directional Protection Scheme for Fixed Series-Compensated Transmission Lines
9.	Ms. Varsha Singh	Bokam Santosh	Analysis of a New Asymmetrical Hybrid Cascaded Multilevel Inverter Topology
10.	Ms. Varsha Singh, Prof .S.Gupta	Aarti Goel	A Novel Approach to Minimize Total Harmonic Distortion using various Soft Computing Methods in Multilevel Inverter
11.	Dr. Vinay Pratap Singh	Dola Kiran Kumar	Multilevel thresholding based on teacher-learner-based-optimization for image segmentation

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. Subhojit Ghosh	Application of Power Electronics and Electrical Drives in AC Locomotives and LHB Coaches(Lectures Delivered)	29/06/2015-11/07/2015, Electrical Loco Shed, Bhilai
2.	Dr. Subhojit Ghosh	Recent Trends in Power Electronic Converters and Real Time Control	14/12/2015-18/12/2015, NIT Raipur

		(Lectures Delivered)	
3.	Dr. Subhojit Ghosh	Logic Building using C and MATLAB (Lectures Delivered)	13/01/2016-17/01/2016, NIT Raipur
4.	Dr. Subhojit Ghosh	Advance Optimization and Applications (Lectures Delivered)	03/08/2016-07/08/2016, NIT Raipur
5.	Dr. Monalisa Biswal	Power System Analysis and Protection using MiPower (Attended)	NIT Raipur, 12-13 Feb. 2016
6.	Dr. B. Shaw	Entrepreneurship Development Program on "Solar Energy" (Attended)	05.09.2015 to 06.09.2015 (KVIC, Raipur)
7.	Dr. B. Shaw	Modern Tools and Techniques for E- resource Management in Libraries(Attended)	31.10.2015 to 01.11.2015 (NIT, Raipur)
8.	Dr. B. Shaw	Smart Grid Technologies(Attended)	02.11.2015 to 06.11.2015 (MNIT, Jaipur)
9.	Dr. Subhojit Ghosh	Advance Applications of RTDS in Power Engineering Research and Controller Validation(Attended)	20.11.2015 to 21.11.2015 (IIT-Kanpur)
10.	Dr. B. Shaw	Smart Grid(Attended)	01.02.2016 to 05.02.2016 (CPRI, Bangalore)
11.	Dr. Lalit Kumar	In Plant Training on dSPACE Real Time System(Attended)	August 5-6 2016 Bengaluru
12.	Dr. Lalit Kumar	National Workshop on Power Electronics(Attended)	November 6-7 2015
13.	Dr. Ebha Koley	Title of the paper: "Cost Effective Microcontroller based Protection Scheme for Single Circuit and Double Circuit Transmission Lines against Series Faults" during the 14th Chhattisgarh Young Scientists Congress organized by Chhattisgarh Council of science and Technology, Raipur and Bilaspur Vishwavidyalaya, Bilaspur.	February 28-29, 2016 Bilaspur Vishwavidyalaya, Bilaspur.
14.	Dr. Ebha Koley	Advanced Optimization and Applications (Attended)	03-07 Aug.2015, Department of Electrical Engineering, NIT Raipur

15.	Dr. Ebha Koley	Application of Power Electronics and	29/06/2015 to11/07/15
		Electrical Drives in AC Locomotives and LHB Coaches(Attended)	at Electrical Loco Shed, Bhilai.
16.	Dr. Ebha Koley	Applications Of Advanced Power Electronics And Electric Drives In Ac Locomotives(Attended)	16 th -21 st Feb. 2016 at Electrical Loco Shed, Bhilai.
17.	Dr. Ebha Koley	Soft Computing Techniques and its Applications(Attended)	22-26 June 2015 Department of Electrical Engineering, NIT Raipur
18.	Dr. Anamika Yadav	Recent trends in Power Electronic Converters and Real time Control(Attended)	Dec 14-18, 2015, Department of Electrical Engineering, NIT Raipur
19.	Dr. Swapnajit Pattnaik	Recent Advances in Power Electronics for Smart Grid and Electrical Drives(Attended)	3rd – 5th March, 2016, IIT PATNA
20.	Prof. S Gupta	Recent Advances in Power Electronics for Smart Grid and Electrical Drives(Attended)	3rd – 5th March, 2016, IIT PATNA
21.	Dr. K Chandrasekaran	Workshop on Accreditation quality Enhancement through outcome based Engineering Education (Attended)	06.11.2015-07.11.2015 GNIT, Hyderabad.
22.	Dr. K Chandrasekaran	Workshop on Modern tools and techniques for E-resource management in libraries(Attended)	31.10.2015, 01.11.2015 NIT-Raipur
23.	Dr. K Chandrasekaran	Workshop on Recent Trend in Power System Automation(Attended)	21.12.2015-22.12.2015 CPRI, Bangalore
24.	Dr. K Chandrasekaran	Workshop on Power System Analysis and Protection using MiPower(Attended)	12.02.2016-13.02.2016 NIT-Raipur
25.	Dr. K Chandrasekaran	Recent Trend and Applications of High voltage engineering 2016(Attended)	12.06.2016-18.06.2016 NIT-Calicut
26.	Ms. Varsha Singh	Soft computing techniques and its applications (Attended)	22-26 June2015, NIT Raipur
27.	Ms. Varsha Singh	Application of PE and electric drives in AC locomotives and LHB coaches (Delivered Lecture)	29 June to 11 July 2015, NIT Raipur

28.	Ms. Varsha Singh	Recent trends in power electronics	14-18 December2015, NIT
		converters and real time control (Attended)	Raipur
29.	Ms. Varsha Singh	Power system analysis and protection using Mi -Power(Attended)	12-13 February2016, NIT Raipur
30.	Dr. Vinay Pratap Singh	Unconstrained Optimization with Improved Differential Evolution Algorithm having Variable Dynamic Non-Linear Increased Crossover, IEEE Students' Conference on Engineering and Systems, 2015 MNNIT Allahabad	06-09 Nov, 2015 MNNIT Allahabad
31.	Dr. Vinay Pratap Singh	ISE based PID controller tuning for position control of DC servo-motor using LJ, IEEE International conference on Signal Processing, Computing and Control (2015 ISPCC)	24-26 Sept, 2015
32.	Dr. Vinay Pratap Singh	Tuning of PID controller for position control of DC servo motor using Luus- Jaakola optimization, IEEE International conference on Computer, Communication and Control (IC4-2015)	10-12 Sept, 2015.
33.	Dr. Vinay Pratap Singh	Optimization with improved differential evolution algorithm having variable tolerance, IEEE International conference on computational intelligence and communication technology, Ghaziabad	12-13 February, 2016. ABES Engg. College Ghaziabad
34.	Dr. Vinay Pratap Singh	Advanced Applications of MATLAB in Engineering (AAME 2015) held at Dept. of Chemical Engineering, NIT, Jaipur(Delivered Lecture).	23-27 Nov, 2015 NIT Jaipur
35.	Dr. Vinay Pratap Singh	Advanced Optimizations and Applications (AOA 2015) held at Dept. of Electrical Engineering, NIT, Raipur(Delivered Lecture).	03-07 Aug, 2015 NIT, Raipur
36.	Dr. Vinay Pratap Singh	Participated in Advanced Data Analysis in Management (ADAM 2015) held at Dept. of Management Studies, IIT, Delhi (Attended).	14-18 Dec, 2015 IIT Delhi

37.	Dr. Vinay Pratap	Logic Building using C and MATLAB	13-17 Jan, 2016
	Singh	(LBCM 2016) (Delivered Lecture).	NIT Raipur
38.	Dr. Vinay Pratap Singh	National Workshop on Modelling Simulation, and Optimization(Delivered Lecture)	12-17 Feb, 2016 KITE Raipur
39.	Dr. Vinay Pratap	Logic Building using C and MATLAB	26 Feb-01 Mar, 2016
	Singh	(LBCM 2016) (Delivered Lecture).	NIT Raipur

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	Dr. Lalit Kumar	A modified structure for symmetrical and asymmetrical configuration of multilevel inverter IECON 2015, IEEE Industrial Electronics Society (IES)	November 9-12, 2015 Yokohama, Japan

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	Application of Power Electronics and Electrical Drives in AC Locomotives and LHB Coaches	Dr. S Ghosh and Dr. L Kumar		29/06/2015- 11/07/2015,	Indian Railway
2.	Recent Trends in Power Electronic Converters	Dr. S Ghosh and Dr. L		14/12/2015-	TEQIP

	and Real Time Control	Kumar		18/12/2015,	
		mannar		10/12/2010,	
3.	Soft Computing Techniques and Its Applications	Dr. Mrs. A. Yadav Dr. Narendra D. Londhe		22/06/2015- 26/06/2015	Self Sponsored
4.	Self Financed two days workshop on "Power System Analysis and Protection using MiPower"	Dr. Ebha Koley Dr. Anamika Yadav	Dr. Shekhar Kelapure (General Manager- R&D, PRDC Bangalore)	12/02/2016 to 13/02/2016	Self- Sponsored
5.	Advanced Optimizations and Applications (AOA 2015)	Dr. Vinay Pratap Singh		One week (03-07 Aug, 2015)	Teqip II
6.	Logic Building using C and MATLAB (LBCM 2016)	Dr. Vinay Pratap Singh and Dr. Sudhakar Pandey		One week (13-17 Jan, 2016)	Self sponsored
7.	Logic Building using C and MATLAB (LBCM 2016)	Dr. Vinay Pratap Singh and Dr. Sudhakar Pandey		One week (26 Feb-01 Mar, 2016)	Self sponsored

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Atul Kumar	Low-Power FIR	Circuits, Systems	DOI: 10.1007/s00034-
	Dwivedi · Subhojit	Filter Design	& Signal	016-0297-4
	Ghosh · Narendra	Using Hybrid	Processing	
	D. Londhe	Artificial Bee		
		Colony Algorithm		
		with		

		Experimental Validation Over FPGA		
2.	Araki T, Ikeda N, Shukla D, Jain PK, Londhe ND, et al.	PCA-based Polling Strategy in Machine Learning Framework for Coronary Artery Disease Risk Assessment in Intravascular Ultrasound: A Link between Carotid and Coronary Grayscale Plaque Morphology	Computer Methods and Programs in Biomedicine Vol. 128:pp. 137-58, 2016	DOI: 10.1016/j.cmpb.2016. 02.004
3.	Araki T, Banchhor SK , Londhe ND , Ikeda N, Redeva P et al.	Reliable and Accurate Calcium Volume Measurement in Coronary Artery Using Intravascular Ultrasound Videos	Journal of Medical Systems, vol. 40(3), pp.51-71, 2015	DOI: 10.1007/s10916- 015-0407-z
4.	Vimal K. Shrivastava, Narendra D. Londhe , Rajendra S. Sonawane, Jasjit S. Suri	Computer-Aided Diagnosis of Psoriasis Skin Images with HOS, Texture and Color Features: A First Comparative Study of Its Kind	Computer Methods and Programs in Biomedicine, Vol. 126, pp. 98-109, 2016	DOI: 10.1016/j.cmpb.2015. 11.013
6.	Araki T, Ikeda N, Shukla D, Jain PK, Londhe ND, et al.	PCA-based Polling Strategy in Machine Learning Framework for Coronary Artery Disease Risk Assessment in Intravascular Ultrasound: A Link between	Computer Methods and Programs in Biomedicine Vol. 128:pp. 137-58, 2016	DOI: 10.1016/j.cmpb.2016. 02.004

7.	Araki T, Banchhor SK , Londhe ND , Ikeda N, Redeva P et al.	Carotid and Coronary Grayscale Plaque Morphology Reliable and Accurate Calcium Volume Measurement in Coronary Artery Using Intravascular Ultrasound Videos	Journal of Medical Systems, vol. 40(3), pp.51-71, 2015	DOI: 10.1007/s10916- 015-0407-z
9.	Vimal K. Shrivastava, Narendra D. Londhe , Rajendra S. Sonawane, Jasjit S. Suri	Computer-Aided Diagnosis of Psoriasis Skin Images with HOS, Texture and Color Features: A First Comparative Study of Its Kind	Computer Methods and Programs in Biomedicine, Vol. 126, pp. 98-109, 2016	DOI: 10.1016/j.cmpb.2015. 11.013
11.	Tadashi Araki, Nobutaka Ikeda, Devarshi shukla, Narendra Londhe , Vimal Shrivastava et al.	A New Method for IVUS-based Coronary Artery Disease Risk Stratification: A Link between Coronary & Carotid Ultrasound Plaque Burdens	Computer Methods and Programs in Biomedicine, Vol. 124, pp. 161-179, 2016	DOI: 10.1016/j.cmpb.2015. 10.022

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12	<u>Vimal K</u> <u>Shrivastava</u> · Narendra D <u>Londhe</u> · <u>Rajendra</u> <u>S Sonawane</u> · <u>Jasjit S Suri</u>	Exploring the color feature power for psoriasis risk stratification and classification: A data mining paradigm	Computers in Biology and Medicine, Volume 65, Pages 54-68, October 2015	DOI: 10.1016/j.compbiome d.2015.07.021
13	Vimal Kumar Shrivastava · Narendra D. Londhe	Measurement of Psoriasis Area and Severity Index Area Score of Indian Psoriasis Patients	Journal of Medical Imaging and Health Informatics Vol. 5(4), pp. 653-674, August 2015	DOI: 10.1166/jmihi.2015.1 440
14	Vimal K Shrivastava · Narendra D Londhe · Rajendra S Sonawane · Jasjit S Suri	First review on psoriasis severity risk stratification: An engineering perspective	Computers in Biology and Medicine, vol. 63, pp. 52-63, August 2015	DOI: 10.1016/j.compbiome d.2015.05.005
15	Vimal K. Shrivastava, Narendra D. Londhe , R.S. Sonawane, Jasjit S. Suri	Reliable and accurate psoriasis disease classification in dermatology images using comprehensive feature space in machine learning paradigm	Expert Systems with Applications, Volume 42, Issues 15–16, Pages 6184-6195, September 2015	DOI: 10.1016/j.eswa.2015. 03.014
16	Ebha Koley , Khushaboo Verma and Subhojit Ghosh	An improved fault detection classification and location scheme based on wavelet transform and artificial neural network for six phase transmission line using single end	SpringerPlus	10.1186/s40064-015- 1342-7

		data only		
17	K. K. Gupta, A. Ranjan, P. Bhatnagar, L. K. Sahu and S. Jain	Multilevel Inverter Topologies With Reduced Device Count: A Review	IEEE Transactions on Power Electronics Vo. 31, Page 135- 151	doi: 10.1109/TPEL. 2015.2405012
18	S. P. Gautam, L. Kumar and S. Gupta	Reduction in number of devices for symmetrical and asymmetrical multilevel inverters	IET Power Electronics Vo. 9 Page 698-709	doi: 10.1049/iet- pel.2015.0176
19	S. P. Gautam, L. Kumar and S. Gupta	Hybrid topology of symmetrical multilevel inverter using less number of devices	IET Power Electronics Vol. 8 Page 2125-2135	doi: 10.1049/iet- pel.2015.0176
20	S. P. Gautam, L. Kumar and S. Gupta	A modified structure for symmetrical and asymmetrical configuration of multilevel inverter	IECON 2015 Page 2030-2035	doi: 10.1109/IECON. 2015.7392301
21	Aleena Swetapadma and Anamika Yadav	Directional Relaying Using Support Vector Machine for Double Circuit Transmission Lines Including Cross-country and Inter-circuit Faults	International Journal of Electrical Power & Energy Systems, Elsevier , 81 (2016) 254–264	DOI:10.1016/j.ijepes.2 016.02.034
22	Aleena Swetapadma and Anamika Yadav	Data-Mining based Fault during Power Swing Identification in Power Transmission System	IET Science, Measurement & Technology, Vol.10, No. 2, 2016,	DOI: 10.1049/iet- smt.2015.0169

23	Anamika Yadav	A Finite State	Electric Power	DOI:10.1080/1532500
	and Aleena	Machine Based	Components and	8.2015.1091862
	Swetpadma,	Approach for	Systems, Vol 44,	
	• ·	Fault Detection	No. 1, 2016,	
		and Classification in Transmission		
		Lines		
24	Aleena	Fuzzy Inference	Computational	10.1155/2015/62036
	Swetapadma and	System Approach	Intelligence and	0
	Anamika Yadav	for Locating Series, Shunt,	Neuroscience, vol.	
		and	2015, Article ID	
		Simultaneous	620360, 12 pages,	
		Series-Shunt	2015.	
		Faults in Double Circuit		
		Transmission		
		Lines		
25	Aleena	Improved Fault	IET Generation,	DOI: 10.1049/iet-
	Swetapadma and	Location Algorithm for	Transmission &	gtd.2014.0981
	Anamika Yadav,	Multi-Location	Distribution,	
		Faults,	Volume 9, Issue 13, 01 October	
		Transforming	2015, p. 1597 –	
		Faults and Shunt Faults in TCSC	1607,	
		Compensated	,	
		Transmission		
		Line		
26	T.V. Dixit, A.	Optimization of	Sadhana -	10.1007/s12046-015-
	Yadav, S. Gupta,	PV Array Inclination in	Academy	0386-2
		Inclination in India using ANN	Proceedings in	
		Estimator:	Engineering	
		Method	Science, Vol. 40,	
		Comparison	No. 5, 2015 pp. 1- 15,	
		Study	10,	
27	Aleena	High Speed	IEEJ Transactions	DOI:
	Swetapadma and	Directional Balaving Using	on Electrical and	10.1002/tee.22132
	Anamika Yadav,	Relaying Using Adaptive Neuro-	Electronic	
		Fuzzy Inference	Engineering,	
		System and	Volume 10, Issue	
		Fundamental	6, pages 653–663,	
		Component of Currents	November 2015,	
28	Aleena	All Shunt Fault	Electric Power	DOI:10.1016/j.epsr.20
	Swetapadma and	Location	Systems Research,	15.01.014
	Anamika Yadav,	Including Cross-	Elsevier, Volume	
		Country and Evolving Faults in	123, June 2015,	
		Transmission	Pages 1-12,	
		Lines without		

29	Aleena Swetapadma and Anamika Yadav ,	FaultTypeClassificationTimeDomainCompleteProtectionSchemeforParallelTransmissionLines	Ain Shams Engineering Journal, Dec 2015 Elsevier,	DOI:10.1016/j.asej.20 15.11.010
30	Varsha Singh, Swapnajit Pattnaik, Shubhrata Gupta, and Bokam Santosh	A Single-Phase Cell-Based Asymmetrical Cascaded Multilevel Inverter	Journal of Power Electronics, March, 2016 (Vol. 16 No. 2),	DOI:10.6113/JPE.201 5.14.1.

Achievement of outgoing students (UG) (From 01-04-2015 to 31-03-2016) [Only for Degree awarding Departments]

Sr. No.	Name of the Student (Roll No.)	Placed in (Designation in Job/Higher Education with details)	
1.	Ms. Kamlesh Bhoorani (11117032)	GATE 2014 AIR 94	
2.	Ms. Kamlesh Bhoorani (11117032)	Executive Engineer	
		Powergrid Corporation Of India Limited	
3.	Mr. Anal Prakash Sharma(11117009)	Executive Engineer	
		Indian Oil Coorporation Limited	
4.	Mr. Siddharth Singh (11117079)	M.S. program in University of North	
		Carolina and Charlotte	
5.	Mr. P. Rajshekhar (11117079)	Fellow Program at IIM Raipur	

Books, monograms, chapters authored/co-authored (From 01-04-2015 to 31-03-2016)

Sr.	Name of Faculty	Title (Mention	Publisher	Author/Co-
No.	Member	Book/monogram/chapter)		author
1.	Dr. Anamika Yadav	Smart Innovation, Systems and Technologies : "Proceedings of First International Conference	Springer,	Ms. Jenifer Johnson

		on Information and Communication Technology for Intelligent Systems Volume 1":- Fault location estimation in HVDC transmission lines using ANN		
2.	Dr. Anamika Yadav	Information Systems Design and Intelligent Applications : Proceedings of Third International Conference INDIA 2016, Volume 2: Fuzzy based Fault Location Estimation during Unearthed Open Conductor Faults in Double Circuit Transmission line	Springer,	Ms. Aleena Swetapadma

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in laks of Rs.)	Investigators (PI/Co-PI)
1.	Hybrid Optimization Based Fractional Order Fuel Cell Modeling and Online Parameter Estimation with Design of Adaptive Controller for Integrated Power Converters	2015-2018	Naval Research Board, DRDO	34.79	Dr. Susovon Samanta (Co- PI)
2.	Development of efficient Devanagari Script Input Based P300 Speller system for Brain- Computer Interface	2016-19	DST	27.1	Dr. N. D. Londhe(PI) Mr. R. K. Chaurasia (Co-PI) Dr. M. K. Ahirwal (Co- PI)

3.	Advanced Protection to Prevent Zone-3	2016-2019	DST, SERB	5.96	Dr. S. Ghosh (Co-PI) Dr. Monalisa Biswal (PI)
	Maloperation during Stress System Condition				
4.	A Hybrid Artificial Neural Network and Fuzzy Logic Approach with Wavelet Transform based Multi Resolution Analysis for Fault Detection, Classification and Location in Six Phase Transmission Line	2015-2018 (3 Yrs)	Chhattisgarh Council of Science & Technology	4.96	Ebha Koley (PI)
5.	The energy efficient lighting project at Durg	Sanctioned on Feb 2015 (Ongoing)	CREDA, Raipur	2.8 Approx.	Dr. N.D. Londhe, Dr. Anamika Yadav and Mr. S.P. Shrivastava
6.	Studies to Improve the Performance of Fault Location Algorithm for Multi-Location Shunt Faults in Transmission Line: A Case study of Chhattisgarh State	Sanctioned on 22.03.2016 (ongoing)	CPRI, Bangalore	27.00	Dr. Anamika Yadav
7.	A single ended directional relaying algorithm based on ANN for fault classification and zone identification of double infeed transmission line	Sanctioned on Dec.2012 (ongoing)	CCOST	4.4	Dr. Anamika Yadav

Awards/Any Other Achievements (From 01-04-2015 to 31-03-2016)

I	Sr.	Name of Faculty	Details of the Award/Achievement	Date

No.	Member		
1.	Dr. Subhojit Ghosh	Excellence in Teaching by Institution of Engineers	05-09-2015
2.	Dr. Ebha Koley	Awarded a Certificate of merit and cash prize of Rs. 21,000.00 for her research paper presentation in the discipline of Engineering Sciences during the 14th Chhattisgarh Young Scientists Congress organized by Chhattisgarh Council of science and Technology, Raipur and Bilaspur Vishwavidyalaya, Bilaspur.	29-02-2016
3.	Dr. Anamika Yadav	IEI Young Engineers Award in Electrical Engineering Division for 2015-2016	17 Oct 2015
4.	Dr. Anamika Yadav	Venus International Foundation Faculty Awards: VIFFA 2015 Young Faculty Award.	July 2015
5.	Dr. Anamika Yadav	Venus International Foundation Research Awards: VIFRA 2015 Young Scientist Award	Dec 2015

Institute-Industry Collaboration Ongoing/New (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Faculty Member(s)	Collaborating Institute / Organization	Area of Collaboration	Collaboration Activities
1.	Prof. S . Gupta Dr. Subhojit Ghosh Dr. Narendra D. Londhe Dr. Anamika Yadav Dr. Lalit Kumar Dr. Ebha Koley	Indian Railways	Application of Power Electronics and Electrical Drives in AC Locomotives and LHB Coaches	Short Term Training Programme

Brief Details of Important Lab

PhD/ PG

1. Electrical Drives and Digital Control Laboratory

The laboratory possesses the start of the art digital controller, measuring instruments, data acquisition systems, advanced electrical drives and motors of widely varying ratings. The DSP

and FPGA based controllers allow real time implementation and validation of converter topologies and control algorithms on different drives.

2. Computer Laboratory

The laboratory offers high end computers and workstations which are configured with different modelling and simulation tools/softwares like MATLAB/Simulink, PSCAD, PSPICE, LabView, Multisim and PSCAD.

3. High Voltage Laboratory

The laboratory houses a 150 kV Impulse Generator with waveform recording mechanism. Recently transformer oil test set, tan delta tester, moisture content, flash point test and resistivity kit has been added for testing purposes.

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Prof. SudarshanTiwari	Professor and Director NIT Raipur	Ph.D. (IIT Roorkee)
2.	Prof. ShrishVerma	Professor and Dean (FW)	B.E. (Elec. & Tele. Engg.), M.Tech. (Comp.Engg.),Ph.D.
3.	Dr. Ajay Singh Raghuvanshi	Assistant Professor	Ph.D. (Electronics & Communication), MNNIT Allahabad
4.	Dr. B Acharya	Assistant Professor	B.E. (Elec. & Tele. Engg.), M.Tech. (Telematics & Signal Processing), Ph.D.
5.	Dr. T. Meenpal	Assistant Professor	Ph.D.
6.	Dr. Suman Kumar Saha	Assistant Professor	Ph.D. (Electronics & Communication) , NIT durgapur
7.	Dr. Ajay Singh (On Lien)	Assistant Professor	Ph.D. (IIT Delhi)
8.	Dr. Alok Naugarhiya	Assistant Professor	B.E., M.Tech. (MNNIT Allahabad), Ph.D. (IIIT Jabalpur)

9.	Mr. Saikat Majumder	Assistant Professor	B.Tech., M.Tech.
10.	Mr. Sujay Chakraborty	Assistant Professor	B.E., M.Tech.
11.	Mr. R. K. Chaurasiya	Assistant Professor	B Tech(MANIT Bhopal), M.E. (IISC Bangalore), Pursuing Ph.D. (NIT Raipur)
12.	Mr. Anshul Gupta	Assistant Professor	B.E., M.Tech., Pursuing Ph.D. (ISM Dhanbad)
13.	Mrs. Anjali Chandra	Temporary faculty	B.E., M.Tech.
14.	Mr. Mohammad Imroze Khan	Temporary faculty	B.E., M.Tech.
15.	Ms. Onika Parmar	Temporary faculty	B.E., M.Tech.
16.	Mr. Amit Kumar Shrivastava	Temporary faculty	B.E., M.Tech.
17.	Mr. K Abhimanyu Kumar Patro	Temporary faculty	B.E., M.Tech.
18.	Mr. Shashank Gavel	Temporary faculty	B.E., M.Tech.
19.	Mr. Hitesh Tekchandani	Temporary faculty	B.E., M.Tech.
20.	Mrs. Ankita Meenpal	Temporary faculty	B.E., M.Tech.
21.	Mr. Shubhankar Majumder	Temporary faculty (SMDP Project)	B.E., M.Tech., Pursuing Ph.D. (IIT Kharagpur)

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1	Dr. Ajay Singh Raghuvanshi	Global Wireless Summit, 2015	14-16 Dec. 2015 Hyderabad
2	Dr. Suman Kumar Saha	Linear phase FIR bandstop filter design using Colliding Bodies Optimization technique	15th-16th Jan. 2016 Hooghly

3	Mr. R. K. Chaurasiya	A modified approach to ensemble of SVM for P300 based brain computer interface, International Conference on Advances in Human Machine Interaction (HMI) 2016,	3-5 March 2016, Doddaballapur.
4	Mr. R. K. Chaurasiya	An efficient P300 speller system for Brain- Computer Interface, International Conference on Signal Processing, Computing and Control (ISPCC), 2015	24-26 Sept. 2015, Waknaghat.

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1	Dr. Bibhudendra Acharya	Instruction Enhancement Programme on "System Level Design on Platform FPGAs" (Under SMDP- C2SD Project)	07-12-2015 to 09- 12-2015 at IIT, Delhi.
2	Mr. R. K. Chaurasiya	STTP on Logic Building using C and Matlab	NIT Raipur (13-17 January, 2016).
3	Mr. R. K. Chaurasiya	STTP on Logic Building using C and Matlab	NIT Raipur (26 Feb- 01 March, 2016).
4	Mr. R. K. Chaurasiya	National Workshop on Modeling Simulation and Optimization	KITE, Raipur (12-17 Feb 2016).

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	Digital Image Processing, Pattern Recognition And	Dr. T. Meenpal & Mr. R. K.	_	7-3-16 to	STTP under

	Application	Chaurasiya		11-3-16	TEQIP
2.	A Demonstration on Applications of LabVIEW Software and Associated Hardwares	Prof. S. Verma & Dr. B. Acharya	-	26-10-15 to 30-10- 15	Self Sponsored (In co- operation with NI)
3.	Advanced Optimization and Applications	Mr.R.K.Chaurasiya	-	03-08-15 to 07-08- 15	STTP under TEQIP

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1	D S Sisodia, S Verma	Analysis of Spamming Threats and Some Possible Solutions for Online Social Networking Sites (OSNS).	World Academy of Science, Engineering and Technology, International Journal of Computer, Electrical, Automation, Control and Information Engineering. 2015 Mar 1;9(3):762-6.	scholar.waset.org/19 99.4/10000961
2	M Sahu, Sm Shirke, G Pathak, P Agarwal, S Verma et al.	Study and Analysis of Electrocardiography Signals for Computation of R Peak Value for Sleep Apnea Patient.	In Proceedings of the Second International Conference on Computer and Communication Technologies 2016 (pp. 35-44). Springer India.	10.1007/978-81- 322-2526-3_5
3	D S Sisodia, S Verma , O P Vyas.	Augmented intuitive dissimilarity metric for clustering of Web user sessions.	Journal of Information Science. 2016 May 17:01655515166482 59.	doi: 10.1177/016555 1516648259

4	D S Sisodia, S Verma , O P Vyas.	Performance Evaluation of an Augmented Session Dissimilarity Matrix of Web User Sessions Using Relational Fuzzy C-means clustering.	International Journal of Applied Engineering Research. 2016;11(9):6497- 503.	http://www.ripublic ation.com/ijaer16/ij aerv11n9_73.pdf
5	P Singh, S Verma.	Cross Project Software Fault Prediction at Design Phase.	World Academy of Science, Engineering and Technology, International Journal of Computer, Electrical, Automation, Control and Information Engineering. 2015 Jun 1;9(3):800-5.	scholar.waset.org/19 99.4/10001596
6	N K Nagwani , S Verma .	Generating Intelligent Summary Terms for Improving Knowledge Discovery in Software Bug Repositories.	International Journal of Software Engineering and Knowledge Engineering. 2016 Jun;26(05):827-44.	DOI:http://dx.doi.or g/10.1142/S021819 4016500273
7	T P Sahu, N K Nagwani, S Verma.	TagLDA based User Persona Model to Identify Topical Experts for Newly Posted Questions in Community Question Answering Sites.	International Journal of Applied Engineering Research. 2016;11(10):7072-8.	http://www.ripublic ation.com/ijaer16/ij aerv11n10_32.pdf
8	Deepshikha Agrawal, Nand Kishor, Ajay Singh Raghuvanshi	Flexible threshold selection and fault prediction method for health monitoring of offshore wind farm.	IET Wireless Sensor Systems 5, no. 4 (2015): 183-192.	doi: 10.1049/iet- wss.2014.0008 www.ietdl.org
9	Aditya Verma, Rajat Chandrashek har Shinde, Sejal Agrawal, A. S. Raghuvanshi	Information Table based Decision Approach for Broadcast Storm Suppression in Vehicular Ad-Hoc Networks	International Journal of Engineering Research & Technology, Volume. 5 - Issue. 04 , April – 2016	http://dx.doi.org/10. 17577/IJERTV5IS04 0769

10	Ajay Singh, Manav R. Bhatnagar ; Ranjan K. Mallik	Performance of an Improved Energy Detector in Multihop Cognitive Radio Networks	IEEE Transactions on Vehicular Technology, Vol:65 , no.: 2, 732 - 743	http://ieeexplore.iee e.org/xpls/abs_all.js p?arnumber=703814 8&tag=1
11	Dr. T. Meenpal , A. K. Bhattacharje e	Watermark Removal Attack Extended to Forgery Against Correlation-Based Watermarking Schemes (ICISS 2015, LNCS 9478, pp. 463–479, 2015.)	Lecture Notes in Computer Science	http://link.springer. com/content/pdf/10 .1007%2F978-3-319- 26961-0_27.pdf
12	Ankita Meenpal and Dr. T. Meenpal	A Novel Reversible Data Hiding Scheme using IWT with Reduced and Fixed Book keeping Information	International Journal of Advanced Research in Computer and Communication Engineering Vol. 5, Issue 3, March 2016.	http://www.ijarcce.c om/upload/2016/m arch- 16/IJARCCE%2067. pdf
13	S K Saha , R Kar, D Mandal, S P Ghoshal	Optimal IIR filter design using gravitational search algorithm with wavelet mutation.	Journal of King Saud University- Computer and Information Sciences. 2015 Jan 31;27(1):25-39.	doi:10.1016/j.jksuci. 2014.03.002
14	S Mahata, SK Saha , R Kar, D Mandal	Optimal design of Fractional Order Digital Integrators - An Evolutionary Approach	Frontiers of Information Technology & Electronic Engineering, (Taylor & Francis)	Ms. No. ZUSC-D- 16- 00012R1 (Accepted)
15	AlokNaugarh iya, Pravin N. Kondekar	High Permittivity Material Selection for Design of Optimum Hk VDMOS	Superlattices and Microstructures, Vol. 83, 310-321	http://www.scienced irect.com/science/ar ticle/pii/S07496036 15001573
16	AlokNaugarh iya,Shashan	Novel strained	Superlattices and Microstructures,	http://www.scienced irect.com/science/ar

	kDubey, Pravin N. Kondekar	superjunction VDMOS	Vol. 85, 461-468	ticle/pii/S07496036 15300045
17	S.Majumder and S. Verma	Improved Iterative Decoding of Network- Channel Codes for Multiple-Access Relay Channel	International Scholarly Research Notices, 1-10	http://www.hindawi. com/journals/isrn/2 015/493767/
18	S.Majumder and S. Verma	Iterative Channel Decoding of FEC-Based Multiple Descriptions using LDPC-RS Product Codes	International Journal of Applied Engineering Research, Vol. 11, No. 9, 6160-6167	http://www.ripublic ation.com/ijaer16/ij aerv11n9_14.pdf
19	R. K. Chaurasiya , N. D. Londhe & S.Ghosh	Binary DE-Based Channel Selection and Weighted-Ensemble of SVM Classification for Novel Brain–Computer Interface Using Devanagari Script- Based P300 Speller Paradigm	International Journal of Human- Computer Interaction(Taylor & Francis), Published online: 20 Jun 2016	http://www.tandfonl ine.com/doi/abs/10. 1080/10447318.201 6.1203047?journalC ode=hihc20
20	A. Gupta, Ravi Kumar Gangwar	Design, Fabrication and Measurement of Dual Segment Rectangular Dielectric Resonator Antenna Array Excited with Conformal Strip for S- band Application	Electromagnetics (Taylor & Francis), 36, 236-248	http://www.tandfonl ine.com/doi/abs/10. 1080/02726343.201 6.1158613?journalC ode=uemg20

Research and Consultancy

Sr. No.	Title of the Project	Period	Funding Agency	Amount (inlaks of Rs.)	Investigators (PI/Co-PI)
1.	Special Manpower	2015-	DeitY,	94.09	PI- Dr.ShrishVerma,
	Development Program	2020	Govt. of	Lakhs	Co PI-

	of VLSI C2SD project	(5 years)	India		Dr.BibhudendraAcharya
	Information Security Education and Awareness Project- Phase II	2015- 2020 (5 years)	DeitY, Govt. of India	36.06 Lakhs	PI - Dr.BibhudendraAcharya, Co PI - Dr. Ajay Singh Raghuvanshi
3.	Development of An Efficient Devanagari Script Input Based P300 Speller system for Brain-Computer Interface	2016- 2019 (3 years)	DST, Govt. of India.	35 Lakhs (approx)	PI - N. D. Londhe, Co. PI – R.K.Caurasiya, M. K. Ahirwar, S Ghosh

Sponsored Research Projects (OnGoing during (From 01-04-2015 to 31-03-2016)

Brief Details of Important Lab

PG/PhD

11. SMDP VLSI Lab

Hardware

- Five HP Z440 & two Z220 workstation, 25 DELL i5 PC have been installed
- FPGA boards for VLSI Architecture implementation on two Virtex6, five Spartan3AN, and ten Altium NB3000.

Software

• EDA tools are installed: Synopsys, Cadence, Mentor Graphics and Xilinx

UG

1. Analog Circuit Laboratory

Major equipments and software	Electronic Devices Training Kits, Training and Design Kits for					
	Analog circuits like Amplifiers, Oscillators, etc., Linear ICs					
	based circuit design and Test Kits, CROs, Function					
	Generators, Variable DC supplies, Multimeters, NI Elvis kits,					
	Labview and MultiSim software.					

2. Communication Laboratory

Major equipments and	Analog and Digital Communication trainer kits, R&S 3Ghz				
software	Spectrum analyzer, USRP software defined radio, DSOs &				
	MATLAB software with simulink tools.				

3. Computer Laboratory

Major equipments and	Desktop P	Cs having	corei5&i7	processor	with	MATLAB	l
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software	software,	Multisim	and	Ultiboard	11.0,	Exata
	Cyber/Qua	lnet.				

4. Digital Signal Processing Laboratory

Major equipments and software	Agilent Programmable arbitrary function generator (Dual channel, 25 MHz) Agilent 500 MHz Mixed Signal Oscilloscope Agilent DSO (60 MHz, 100 MHz, 200 MHz), TI C6713 DSK, Code composer studio, NI Speedy 33 kit, Virtex-4 XtremeDSP board, LabView.
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5. Digital Systems and Microprocessor Laboratory

	8085 Trainer kit, 8086 Trainer kit, E&E system trainer kit
Major equipments and	with multi utility bread board panel, Transtech TSP36N
software	multiprocessor board, Daytona software radio, DSO (100
	MHz).

6. Electronic Workshop and Project Laboratory

Major equipments	Basic Electronics Kits, Power Supply, Oscilloscope, Signal Generators, PCB making setup with dark room facility and
and software	Ultiboard software for designing PCBs.

7. Image Processing and Computer Vision Laboratory

	NIEVS 1464(WINDOWS 7) Computer vision system, Desktop						
Major equipments and	PCs(Core	i5/i7	Processors)	with	MATLAB	and	Labview
software	Software	havin	g different	Imag	ge Segm	entatio	n and
	Enhancen	nent too	ols.				

8. Microcontroller and Embedded system Laboratory

Major equipments and software TI MSP430 launchpad development tool, Sitara Arm Processor AM335x starter kit, Ultra low Power MSP430 Microcontroller kit, Anshuman 8051 trainer kit, Texas Instruments ASLKv2010 Starter kit, MSP5529/5438 Experimenter Boards, SCORBOT-ER 2U robotic arm.

9. Microwave and Antenna Laboratory

Major equipments and	Agilent 18Ghz vector network Analyzer, Microwave test
software	benches for X-bends with VSWR digital meter, Fiber optics
	trainer kit.

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES (HSS)

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. Samir Bajpai	Head & Professor	M.Tech, Ph.D.
2.	Dr. Jaya Dwivedi	Assistant Professor	M.A., Ph.D.
3.	Dr. Anoop Kumar Tiwari	Assistant Professor	M.A., Ph.D.
4.	Dr. Shashi Kanta Tarai	Assistant Professor	M.A., Ph.D.
5.	Dr. Sandip Sarkar	Assistant Professor	M.A., Ph.D.
6	Dr. Moksha Singh	Assistant Professor	M.A., Ph.D.
7.	Dr. Yeddu Vijaya Babu	Assistant Professor	M.A., Ph.D.
8.	Ms. Hina Chawda	Teaching Assistant	M.Com, M.A.
9.	Dr. Manju Shukla	Temporary Faculty	M.A., Ph.D.
10.	Shri Dhananjay Ku. Jain	Teaching Assistant	M.A., M.Phil
11.	Shri Umashankar Kaushik	Part-Time Faculty	M.Sc., M.Phil

	TI MSP430 launchpad development tool, Sitara Arm
Major equipments and	Processor AM335x starter kit, Ultra low Power MSP430
software	Microcontroller kit, Anshuman 8051 trainer kit, Texas
Software	Instruments ASLKv2010 Starter kit, MSP5529/5438
	Experimenter Boards, SCORBOT-ER 2U robotic arm.

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr.	Name of Faculty	Title of Oral/Poster	Dates and Venue
No.		Presentation , Name of	
		Event, Organizer	

	Dr. Yeddu Vijaya Babu	 a) Title of Oral & Paper Presentation: 'Reflections on Diaspora in Bharati Mukherjees's Jasmine' (One Day National Seminar) Prof.Preeti Kumar, Director, CLTS-PSTU. b) English Language Teaching Techniques (One Day Workshop) ELTAI Chapter Raipur (English Language Teachers' Association of India) Sponsored by Oxford University Press 	 28 November 2015 Centre for Languages and Translation Studies-PSTU- Hyderabad –Telangana 25 November 2015 Raj Kumar college-Raipur- Chhattisgarh
2.	Dr. Moksha Singh	Lecture – Sports & Personality Development; UGC-CPI	31 March 2016; Govt. D.B. Girls College
	Dr. Manju Shukla	1.One lecture – Importance of yoga.	14 July-2015; Swami Swrupanand College Bhilai
		2.Yoga therapy programme	June 7-14, 2015; Kaivalyadhama Lonavala

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	Dr. Sandip Sarkar	Poster Presentation on	NA	29-10- 15, NIT,	NIT Raipur

	Social Issues		Raipur	
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Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No , Year	
1.	Dr. Moksha Singh & Dr. Munmun Jha	International Humanitarian law and the Kashmir Crisis	Indian Journal of Human Rights and the Law Vol. 12, No.1, p no. 1- 11; 2015	
2.	Suparna Karkun, Dr. Anoop Kumar Tiwari	Grant as the archetypal outcast in Alice Munro's the bear came over the mountain	International Journal of English Language, Literature Volume III Issue IV June 2015	htthttp://ijellh.com/the- evolution-characters- from-being-living-life- centered-self- philanthropically-social- being-the-grapes-wrath- john-steinbeck/p://
3.	Anil Manjhi ** Dr. Anoop Kumar Tiwari	The evolution of characters from a being living a life centered in self to a philanthropically social being in The Grapes of Wrath of John Steinbeck	International Journal of English Language, Literature Volume III Issue IV June 2015	http://ijellh.com/grantas- the-archetypal-outcast- alice-munros-the-bear- came-over-the-mountain/
4.	Jitendra Dimri ** Dr. Anoop Kumar Tiwari ***Anil Manjhi	The Element of Life and Creation as it lurks in Doris Lessing's The Golden Notebook	International Journal of English Language, Literature Volume III Issue VIII October 2015	http://ijellh.com/the- element-life-and-creation- lurks-doris-lessings-the- golden-notebook/

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr.	Author(s)	Title of Paper	Name of the	DOI/Web link
			Journal Vol. No.,	
No.			Issue No. (if	
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			any)/Pg. No., Year	
			, , ,	
1.	Dr.Y.Vijaya Babu	Oral Presentation And Extempore Activity To Enhance Professional Communication Skills Among Engineering Students-A Research	IJAER(International Journal of Applied Engineering Research) Research India Publications Volume 10, Number 24 (2015) pp 44086- 44091 December 2015	www.ripublication.com/ ijaer .htm ISSN 0973-4562
2.	Dr. Shashi Kanta Tarai	Strategies of loanword adaptation and adoption across languages	International Journal of Dravidian Linguistics Vol. 45, 105-141, 2016	ISSN: 0378-2484
3.	Ms. Hina Chawda	Human values and education and sacraments in light of मध्यस्थ दर्शन सहअस्तित्ववाद के प्रकाश में मानवीय मूल्य एवं शिक्षा संस्कार व्यवस्था	International Journal of Golden Research Thoughts, Vol 5, 2015	ISSN: 2231-5063
4.	Dr. Manju Shukla	सामाजिक परिवर्तन में योग एवं मूल्य शिक्षा का योगदान तस्य वाचकः प्रणवः मूल्य चिंतन	Edu-research, International Research Journal Vol. 7, No. 7, 2015	ISSN: 2348-6015

DEPARTMENT OF INFORMATION TECHNOLOGY

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. Sudhakar Pandey	Assistant Professor	BE, M.Tech, PhD.
2.	Mr. Satya Prakash Sahu	Assistant Professor	BE, M.Tech, PhD.
	5		(Pursuing)
3.	Mr. Rakesh Tripathi	Assistant Professor	BE, M.Tech, PhD.
			(Pursuing)
4.	Mr. Sanjay Kumar	Assistant Professor	BE, M.Tech, PhD.
			(Pursuing)
5.	Mrs. Mridu Sahu	Assistant Professor (On	BE, M.Tech, PhD.
		Contract)	(Pursuing)
6.	Mr. Tirath Prasad Sahu	Assistant Professor (On	B.Tech, M.Tech,
		Contract)	PhD. (Pursuing)
7.	Mr. Pavan Kumar Mishra	Assistant Professor (On	B.Tech, M.Tech,
_		Contract)	PhD. (Pursuing)
5 5		Assistant Professor (On	BE, M.Tech, PhD.
_		Contract)	(Pursuing)
9.	Dr. Rekh Ram Janghel	Assistant Professor (On	BE, M.Tech, PhD.
		Contract)	(Pursuing)
10.	Dr. Govind Prasad Gupta	Assistant Professor (On	BE, M.Tech, PhD.
		Contract)	
11.	Dr. Dhirendra Kumar	Temporary Faculty	B.Tech, PhD.
10	Sharma		
12.	Mr. B Rama Chandra	Temporary Faculty	BE, M.Tech, PhD.
10	Reddy	(Pursuing)	
13.	Mrs. Parul Dewangan	Temporary Faculty	BE, M.Tech
14.	Mr. Amar Nath Patra	Temporary Faculty	BE, M.Tech
15.	Mr. Chandan Kumar	Temporary Faculty	BE, M.Tech
16.	Mr. Arun Kant Dwivedi	Temporary Faculty	BE, M.Tech
17.	Mr. Anuj Rai	Temporary Faculty	BE, M.Tech
18.	Mr. Prateek Vishnoi	Temporary Faculty	BE, M.Tech

Achievement of outgoing students (UG) (From 01-04-2015 to 31-03-2016) [Only for Degree awarding Departments]

Sr. No.	Name of the Student (Roll No.)	Placed in (Designation in Job/Higher Education with details)
1.	ABHAY KUMAR SINGH (12118003)	SAPIENTNITRO
2.	ABHISHEK SONKAR (12118005)	POLARIS

3.	AKSHAY AGARWAL (12118007)	INFOEDGE
4.	AMIT THARANI (12118010)	ANALYITCS QUOTIENT
5.	AMRISHA VERMA (12118011)	POLARIS
6.	ANAND KUMAR GUPTA (12118012)	OXIGEN
7.	ANKIT AGRAWAL (12118013)	OXIGEN
8.	ANUBHAV GARG (12118014)	COGNIZANT
9.	ANUBHAV SAHU (12118015)	INFOSYS
10.	ARNAB BANERJEE (12118016)	POLARIS, SAMSUNG R&D
11.	ASHISH KU PANDEY (12118017)	Reliance Jio Infocomm Limited
12.	BHUPENDRA VERMA (12118019)	INFOSYS
13.	CHITTURI BHAGYASRI RAMYA (12118022)	PORALIS
14.	DEEPAK KUMAR VERMA (12118023)	PERSISTENT
15.	ERRI RAJA SHEKAR REDDY	ANALYITCS QUOTIENT
	(12118024)	
16.	KRISHNA R MITHRA KRUTHIVENTI	MUSIGMA
	(12118026)	
17.	KUNUGUNTLA ANJALI (12118028)	Reliance Jio Infocomm Limited
18.	MAHESH KUMAR (12118029)	BELZABAR
19.	MALLA AKASH (12118030)	INFOSYS
20.	MANAV CHANDRAKAR (12118031)	OXIGEN
21.	MANISH KULARIYA (12118032)	INFOSYS
22.	MANSI RATHOD (12118033)	MUSIGMA
23.	MD ZAFAR EQUBAL (12118034)	INFOSYS
24.	MUNI VIJAY (12118036)	INCTURE
25.	NIKITA PATEL (12118040)	TRICON INFOTECH
26.	NITESH RANJAN (12118042)	COGNIZANT
27.	PIYUSH BHARDWAJ (12118048)	ANALYITCS QUOTIENT, UNITED HEALTH GROUP
28.	POOJA BHOI (12118049)	INFOSYS
29.	PRACHI SABLANI (12118051)	ORACLE APPLICATION
30.	PRATEEK GEDAM (12118051)	COGNIZANT
31.	PRAVEEN KUMAR SAHU (12118053)	INFOSYS
32.	PRERNAMAYEE TRIPATHY	ORACLE APPLICATION
	(12118054)	
33.	RAUSHAN RANJAN (12118061)	INFOSYS
34.	SAROJ KUMAR KANTE (12118068)	INFOSYS
35.	SAUMYA KRISHNENDU SHANDILYA (12118069)	INFOSYS
36.	SAURABH KUMAR GUPTA (12118070)	ORACLE FINANCE
37.	SAURABH KUMAR PRASAD (12118071)	SAPIENTNITRO, BARCLAYS
38.	SHIVAM ASATI (12118072)	COGNIZANT
39.	SHRAVAN KUMAR (12118073)	INFOSYS
40.	SHUBHAM SRIVASTAVA (12118074)	ORACLE FINANCE, SAMSUNG R&D
41.	SONIKA HABLANI (12118075)	MUSIGMA
42.	T HARSHAVARDHAN (12118077)	YODLEE
43.	TANAY MATHUR (12118078)	BARCLAYS
44.	TUSHAR AGRAWAL (12118079)	SAPIENTNITRO
45.	UTKARSH SINGH (12118081)	SAMSUNG R&D
46.	VIVEK KUMAR SAH (12118085)	MUSIGMA
<u>47.</u> 48.	VIVEK KUMAR SHUKLA (12118086)	OXIGEN

	(10110001)	
	(12118901)	
49 .	LOVELY KUMARI (12118902)	Reliance Jio Infocomm Limited
50.	PARAKH SINGHAL (12118903)	TRICON INFOTECH
51.	PRIYANKA SARAF (12118905)	COGNIZANT, SAMSUNG R&D
52.	U DIVYA (12118906)	ORACLE APPLICATION
53.	ANKIT AGRAWAL (5056994)	CAT
54.	PIYUSH BHARDWAZ (5122076)	CAT
55.	AMRISHA VERMA	CAT/GATE
	(5169118/CS16S66030179)	
56.	U.DIVYA (CS16S66028357)	GATE
57.	ARNAB BANERJEE (CS16S66028445)	GATE
58.	UTKARSH SINGH (CS16S66032061)	GATE
59.	SAURABH KUMAR PRASAD	GATE
	(CS16S66030181)	
60.	ANURAG PANDEY (CS16S66026039)	GATE
61.	POOJA SAHU (CS16S66030185)	GATE
62.	SHIVAM ASATI (CS16S56031062)	GATE
63.	PALLAV GUPTA (CS16S66031169)	GATE
64.	ANUBHAV GARG (CS16S56032044)	GATE

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. Govind P. Gupta	"STTP on Current Trends in Applied Mathematics: Application and Future Aspects" NIT, Raipur	July 06 to July 10, 2015; Dept. Of Mathematics, NIT, Raipur, NIT, Raipur
2.	Dr. Govind P. Gupta	9 th Faculty Development Program under TEQUIP-II on Achieving Academic Excellence, IIM Raipur,	7 th Sept. to 12 th September,2015; IIM Raipur,
3.	Dr. Govind P. Gupta	National workshop on Statistical Data Analysis in Healthcare; NIT, Raipur;	30 th Oct, to 31th Oct,2015; NIT, Raipur;
4.	Mr. Tirath Prasad Sahu	TEQIP II sponsored four days Hands-On Workshop on "Cloud Computing Tools"	October 15-18, 2015; Thiagarajar College of Engineering, Madurai
5.	Mr. Tirath Prasad Sahu	Modern Tools and Techniques for E- Resources Management in Libraries	October 31- November 01, 2015; NIT Raipur
6.	Mr. Rajesh Doriya	Workshop on Advance	15 - 19 March 2016,

		Robotics	IIT Kanpur
7.	Mr. Rajesh Doriya	Cloud Computing Tools	15 - 18 October 2015, TCE Madurai
8.	Mrs. Mridu Sahu	Springer Conference: "Study and Analysis of Electrocardiography Signal in Time Domain for Computation of R-peak Value for Sleep Apnea Patient"	IC3T,2015 24-26 th July,2015 Venue: CMR Technical University, Hyderabad
9.	Mrs. Mridu Sahu	IEEE Conference: "Impact of Discretization on Classification of Data using Divide and Conquer Paradigm"	ICEOT,2016 3-5 th March,2016 Venue: DMI college of Engg.,Chennai
10.	Mrs. Mridu Sahu	IEEE Conference: "Impact of Ranked Ordered Feature List (ROFL) on Classification with Visual Data Mining Techniques"	ICEOT,2016 3-5 th March,2016 Venue: DMI College of Engg.,Chennai
11.	Mrs. Mridu Sahu	Springer Conference: "Implementation of Hashing in Virtual Tour"	ICDECT 2016 10-11 March,2016 Venue: Aspire Research Foundation ,Lavasa Pune
12.	Mr. Sanjay Kumar	Attended STTP on STTP on "Recent Trends in Artificial Intelligence for Big Data "organized by National Institute of Technology Goa	7 August to 9 August 2015.
13.	Mr. Sanjay Kumar	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	13 Jan to 17 Feb 2016
14.	Mr. Sanjay Kumar	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	26 Feb to 1 March 2016
15.	Mr. Satya Prakash Sahu	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	13 Jan to 17 Feb 2016
16.	Mr. Satya Prakash Sahu	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	26 Feb to 1 March 2016
17.	Mr. Rajesh Doriya	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in	13 Jan to 17 Feb 2016

		NIT Raipur	
18.	Mr. Rajesh Doriya	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	26 Feb to 1 March 2016
19.	Dr. Sudhakar Pandey	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	13 Jan to 17 Feb 2016
20.	Dr. Sudhakar Pandey	Delivered expert lecture in STTP of Logic building using 'C' and Matlab in NIT Raipur	26 Feb to 1 March 2016
21.	Dr. Sudhakar Pandey	Performance Analysis of Routing Protocols for Delay Tolerant Networkspresented in Malaysian Technical universities Conference on Engineering and Technology (MUCET) 2015 Johor Bahru	Malaysia, 11-13 October 2015.
22.	Dr. Sudhakar Pandey	An energy efficient approach to extend network life time of wireless sensor networks", International Conference on Intelligent Computing, Communication & Convergence (ICCC-2016)	Bhubaneshwar, 2016
23.	Satya Prakash Sahu	Attended the workshop on Image & Speech Processing (WISP – 2015) organized at IIIT Hyderabad	December 12 th 2015, IIIT Hyderabad

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	Dr. Govind P. Gupta	"Efficient Coverage and Connectivity Aware Data gathering Protocol for Wireless Sensor Networks", 3 rd IEEE International Conference on Recent Advances in	3 rd March,2016 to 5 th March, 2016; Indian School of Mine, Dhanbad.

2.	Pavan Kumar Mishra	Information Technology (RAIT-2016) at Indian School of Mine, Dhanbad. "Automatic Detection of Leukemia using blood smear sample" international Conference on Computer Science, Software, Networking and Information Technology(ICCSNIT-16)	10 April , 2016 Venue: Shimla , HIMACHAL PRADESH , India
3.	Tirath Prasad Sahu	"Sentiment Analysis of Movie Reviews: A study on Feature Selection & Classification Algorithms", International Conference on Microelectronics, Computing and Communication (MicroCom 2016)	January 23-25, 2016; NIT Durgapur, India
4.	Sanjay Kumar , Kota Suraj, and Sudhakar Pandey	Performance Analysis of Routing Protocols for Delay Tolerant Networks	In International Conference MUCET- 2015 (Accepted)

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speake r (if any)	Period	Funding Agency/Self Sponsored
1.	STTP of Logic building using 'C' and Matlab in NIT Raipur (National)	Dr. Sudhakar Pandey, Dr. Vinay Pratap Singh		13 Jan to 17 Feb 2016	TEQIP II
2.	STTP of Logic building using 'C' and Matlab in NIT Raipur (National)	Dr. Sudhakar Pandey, Dr. Vinay Pratap Singh		26 Feb to 1 March 2016	Self financed

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	P K Mishra,	A Device Centric Scheme	Accepted in	NA

	0 11 1			
	Sudhakar	for Relay Selection in	IEEE Access	
	Pandey, Sanjay	Dynamic Network		
	Biswash	Scenario under the 5G		
-		communication		
2.	Janghel R.R et	Expert System for Breast	CSVTU	http://www.csvtujournal.in/inde
	al	Cancer Diagnosis using	International	x.php/ijbbb
		Ensemble Approach	Journal of	
			Biotechnology,	
			Biomedical	
			and	
			Bioinformatics	
			Volume 1: 1;	
			pp 42-55	
3.			International	
•••			Journal of	
	Rajesh Doriya,	A review on cloud	Advances in	
	Paresh Sao,	robotics based	Computer	
	VinitPayal,	frameworks to Solve	Science and	http://ijacscc.iraj.in/abstract.ph
	VibhavAnand,	simultaneous	Cloud	p?paper_id=2067
	Pavan	localization and mapping		
	Chakraborty	(slam) problem	Computing,	
	, j		Vol 3, Issue 1,	
			2015	
4.		A C2DM Based	Lecture Notes	
	Rajesh Doriya,	Framework for Detection	on Software	
	K. Suraj, Pavan	and Notification of	Engineering,	DOI: 10.7763/LNSE.2015.V3.213
	Chakraborty	Terrorist Activities on	Vol 3, Issue 4,	
		Android Platform	2015	
5.			International	
	Rajesh Doriya,	A Brief Survey and	Conference on	
	Siddharth	Analysis of Multi-robot	Computing,	DOI:
	Mishra, Swati	Communication and	Communicatio	10.1109/CCAA.2015.7148524
	Gupta	Coordination	n &	10.1109/00111.2010.1110021
	dupta	coordination	Automation	
			(ICCCA), 2015	
6.			Emerging	
			Research in	
	Rajesh Doriya,	An Architecture for	Computing,	
	Krishna Mohan	Detection of Land Mines	Information,	DOI: 10.1007/978-81-322-2553-
	Srivastava,	Using Swarm Robots	Communicatio	9_30
	Priyanka Buwe		n and	2_00
	i liyalika Duwe		Applications	
			(ERCICA),	
			2015	
7.	Monika singh,	Prediction of	IJAER/ (1087-	Accepted
	S.P Mahapatra,	Sulpherdioxide Pollution	1090)	
	S Nigam, Mridu	Component in Delhi		
	Sahu	Metropolitan City Using		
		Multi Layer Perceptron		
8.	Sudhakar	Cluster based - SPIN	Indian Journal	http://www.indjst.org/index.php
	Pandey, Naresh	Routing Protocol for	of Science and	/indjst/article/view/49800/5711
	Kumar	Wireless Sensors	Technology,	4
	Nagwani,	Networks	Vol 8(15), DOI:	
	Chandan		10.17485/ijst/	
	Kumar		2015/v8i15/4	
			9800, July	
			2015	
L		1	4010	

9.	Sanjay Kumar,	An improved routing	International	NA
	and Sudhakar	scheme for vehicular	Journal of	
	Pandey	delay tolerant network	Applied	
	-		Engineering	
			Research 11.8	
			(2016): 5975-	
			5977	

Books, monograms, chapters authored/co-authored (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Faculty Member	Title (Mention Book/monogram/chapter)	Publisher	Author/Co- author
1.	Mridu Sahu, Saransh Shirke,N.K. Nagwani, S.Verma, Garima Pathak	"Study and Analysis of Electrocardiography Signals for Computation of R Peak Value for Sleep Apnea Patient"	AISC Book Chapter Series Springer	September 2015 DOI: 10.1007/978- 81-322-2526- 3_5
2.	Mridu Sahu, Govind P. Gupta	"Implementation of Hashing in Virtual Tour"	AISC Book Chapter Series Springer	Accepted

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (inlaks of Rs.)	Investigators (PI/Co-PI)
1.	Development of Framework for web Based Intelligent Dictionary for Learning Chhattisgarhi Language	2014-2016	CGCOST	4,00,000	Dr. Sudhakar Pandey (PI), Dr. N. K. Nagwani, Mr. Pavan Kumar Mishra
2.	Design and Development of dynamically controlled walker system	Since 2012	DST	23.13 Lacs	Mr. Rakesh Tripathi (Deptt of IT) Dr. Shrish Verma (Deptt of ETC) Dr. Rakesh Kumar (NIT Surat) Dr. Vijayant Agarwal(NSIT- Delhi)

Brief Details of Important Lab with Photographs

1. Data Structure and Algorithm Lab

Students gain a good understanding of how several fundamental algorithms workin the area. They acquire a good understanding of the fundamental data structures used in computer science. They are able to analyze the space and time efficiency of the algorithms. They study various types of data structures, basic operations that could be performed on these data structures and the relevant applications. At the final stage, they are able to select the best possible data structure to solve a given problem. They also get equipped with the programming techniques and proficiency in various constructs and features of the language being used for implementing those data structures.

Functional areas & its capabilities: Academic support and R&D activities on designing algorithms, data structures and its implementation.

2. Programming Lab

The objective of the Programming Lab is to implement the fundamental principles of programming. We will use an object-oriented approach and the student will learn how objects "speak" and "cooperate" to solve a problem. We will teach how to solve problems with good programs. Hence not only how to write programs but also how to design and implement effective solutions. The learning will be based on examples, from very simple ones to more complex. We also use the advanced programming language using .NET, Netbeans, MATLAB, R software etc.

Functional areas & its capabilities:Academic support and R&D activities on logic building through programming languages and algorithms for various applications.

3. Computer Network Lab

This course provides a basic introduction to computer network design primitives such as network design methodology, art of modern network design approaches and discussion on different network protocols and its performance analysis. One goal of this course is to give some insight into the rationale of why networks are structured the way they are today and to understand the issues facing the designers of next-generation computer networks. Most of the class will focus on network algorithms and their performance in different scenarios.

Course Objectives: As a result of successfully completing this course, students will:

- 1. Become familiar with different network design model and approaches
- 2. Understand the client/server model and P2P network architecture. Learn sockets programming and how to implement client/server programs and P2P system
- 3. Understand the concepts of reliable data transfer, the principles of TCP congestion control and how TCP implements these concepts.
- 4. Learn the key protocols for multimedia networking including IntServ and DiffServ for IP.
- 5. Understand the current topics such as Peer to Peer Network, Data center Network, Software Defined Network & Open Flow

Functional areas & its capabilities: Academic support and R&D activities on computer networks, mobile computing, ad-hoc networks and wireless sensor networks.

4. Electronics and Communication Lab

Basic electronics lab covers experiment oriented electronic circuits that are very essential for the students to solidify their theoretical concepts. Experiment provides a communication bridge between the theory and practical world of the electronic circuits. The knowledge of these experiments is very essential for the engineering students. All of these experiments are arranged on the modern electronic trainer boards.

The communication systems laboratory experiments clear the theoretical aspects of communication system. This lab allows students to perform the experiment that demonstrate the theory of modulation techniques and their principles. The knowledge of these experiments is very essential for the engineering students. All of these experiments are arranged on the modern electronic trainer boards. Basic experiments cover the introduction to laboratory equipments like as DSBSC, QAM, ASK, FSK, QPSK.

Functional areas & its capabilities: Academic support and R&D activities on Channel coding, Communication, Chip design etc.

5. Software Technology Lab

Software Technology explores everything from data analysis to system support, to deliver the systems, including analysis, design, development, installation, hardware, training, and web hosting. Software Technology explores various phases of software engineering with the automation tools. Software requirement and design phases are implemented with different UML diagrams. Software testing can performed with both manual and automation testing. The automation testing can be done with various open source testing tools such JUnit, Selenuiem, etc.

Functional areas & its capabilities: Academic support and R&D activities on Software development, design and testing.

6. DBMS Lab

Students are able to formulate data retrieval queries in SQL. They enhance the database handling, data manipulation and data processing skills though SQL and PL/SQL and helps them to gain knowledge in designing database applications. Students learn how to describe data models and schema in DBMS. Students are able to understand the functional dependencies through which they normalize the data.. The concept of database has been expanded through data mining, OLAP to cater the research work on it.

MIS (Management Information System) is a system which is based on database and is evolved for the purpose of providing information to people in the organization. This lab facilitate the students to learn and develop an MIS which has user friendly interface and database to store large amount of data. This lab provides various tools like PHP, ASP, Java, Netbeans, Dreamweaver, which are used in developement of user interfaces of MIS and MySQL and SQL Server, which are in turn used in creating databases. Using all these tools, students are able to develope an MIS for any educational institution or any other organization on which information is most valuable resource.

Functional areas & its capabilities: Academic support and R&D activities on databases, data mining,text mining and time series analysis.

7. Computer Graphics Lab

Computer graphics provide basic concepts related to it such as drawing line, circle, ellipse using DDA, Bresenhams algorithm, 2-Dimensional transformations like Translation, Rotation, Scaling, Reflection, Shear. Overall goal is to clarify the basic concepts related to computer graphics.

Functional areas & its capabilities:Academic support and R&D activities on computer graphics and CAD.

8. AI and Computational Lab

Artificial intelligence (AI) is a research field that studies how to realize the intelligent human behaviours on a computer. The ultimate goal of AI is to make a computer that can learn, plan and solve problems autonomously. We will study the basic issues of knowledge representation and blind and heuristic search, as well as an understanding of other topics such as mini-max, resolution, etc. that plays an important role in AI programs. Areas of application such as knowledge representation, natural language processing, expert systems, vision and robotics will be explored. Understand the strengths and limitations of various statespace search algorithms, and choose the appropriate algorithm for a problem. The LISP programming language will also be introduced

Functional areas & its capabilities:Academic support and R&D activities on Artificial intelligence, ANN, Fuzzy logic, image processing and computer vision.

9. Project Lab

The student will able to do the project in different areas as specified above. The department also provides the environment to use latest IT technologies for the research project. **Functional areas & its capabilities:**Academic support, R&D activities and project

works

DEPARTMENT OF MATHEMATICS

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr.Arvid kumar Sinha	Head &Assistant Professor	Ph.D
2	Dr.R.P Pathak	Professor	Ph.D
3	Dr.Debasisha Mishra	Assistant Professor	Ph.D
4	Dr. Sujit Kumar Samanta	Assistant Professor	Ph.D
5	Dr. Sharada Nandan Raw	Assistant Professor	Ph. D
6	Dr. M. Krishna Prasad	Assistant Professor	Ph.D
7	Dr.Nilesh Kumar Thakur	Assistant Professor	Ph.D

8	Dr.Deepmala Sharma	Assistant Professor	Ph.D

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. Sharada Nandan Raw	Basic Concepts of Mathematical Modeling and its Applications.	March 14-18, 2016, Department of Mathematics, NIT Raipur
		One Week National level Short Term Training Programme (STTP) on " MATHEMATICAL MODELING AND COMPUTATION TECHNIQUES IN SCIENCE AND ENGINEERING " organized by the Department of Mathematics, NIT Raipur	
	Dr. Arvind Kumar Sinha	Basic Concepts of Optimization Techniques. One Week National level Short Term Training Programme (STTP) on "MATHEMATICAL MODELING AND COMPUTATION TECHNIQUES IN SCIENCE AND ENGINEERING" organized by the Department of Mathematics, NIT Raipur	March 14-18, 2016, Department of Mathematics, NIT Raipur
	Dr.Debasisha Mishra	Workshop attended Name of event: IST on Analysis and Differential equation Organiser: NCM, India & TIFR	7-19 Dec, 2015 AND TIFR, Bangalore

	Dr.Debasisha Mishra	Lectures Delivered	6-10 July 2015
		Name of event: CURRENT TRENDS IN APPLIED	And
		MATHEMATICS: APPLICATIONS AND FUTURE ASPECTS	NIT RAIPUR
		Organiser: Dept. Of Mathematics	
2.	Dr.Debasisha Mishra	Lectures Delivered	04-08 Jan 2016
		Name of event: Nonlinear	And
		Systems: Mathematical Modelling and Computer Simulations	NIT RAIPUR
		Organiser: Dept. Of Mathematics	
3.	Dr. Sujit Kumar Samanta	Nil	Nil
4.	Dr. M. Krishna Prasad	Introduction to HAM and its applications, Current Trends in Applied Mathematics : Applications and Future Aspects, Department of Mathematics, NIT Raipur	July 06-10, 2015 Department of Mathematics, NIT Raipur
5.	Dr. M. Krishna Prasad	Introduction to Matlab and its applications, Nonlinear Systems : Mathematical Modelling and Computer Simulations,	January 04-08, 2016 Department of Mathematics, NIT Raipur
		Department of Mathematics, NIT Raipur	
6.	Dr. M. Krishna Prasad	Department of Mathematics,	March 14-18, 2016 Department of

		Computational Techniques in Science and Engineering, Department of Mathematics, NIT Raipur	Mathematics, NIT Raipur
7.	Dr. Nilesh Kumar Thakur	Introduction to Mathematical Modelling, Short term training programme on "Nonlinear systems: Mathematical modelling and computer simulation", Department of Mathematics, NIT Raipur.	January 4-8, 2016, NIT Raipur
8.	Dr. Nilesh Kumar Thakur	An Introduction to Population Dynamics, Short term training programme on "Mathematical modelling and computational techniques in science and engineering", Department of Mathematics, NIT Raipur.	March 14-18, 2016, NIT Raipur
9.	Dr. Deepmala Sharma	 (1) Introduction to LaTeX/ STTP on Nonlinear Systens: Modelling and Computer Simulations (2) Basic Concepts of Latex/STTP on Mathematical Modeling and Computational Techniques in Science and Engineering 	January 04-08, 2016 March 14-18, 2016

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	MATHEMATICAL MOEDLING AND COMPUTATION	Dr. A. K. Sinha,		March 14-18,	TEQIP

	TECHNIQUES IN	Dr. S. N. Raw,		2016	
	SCIECNE AND ENGINEERING	Dr. S. K. Samanta			
2.	CURRENT TRENDS IN APPLIED MATHEMATICS: APPLICATIONS AND FUTURE ASPECTS	Dr.Debasisha Mishra Dr.Deepmala Sharma	Dr. K. C. Sivakumar Prof, IITM Dr. R. K. Sharma Prof, IITD	6-10 July 2015	TEQIP-II
3.	NonlinearSystems:MathematicalModellingandComputerSimulation	Dr. Nilesh Kumar Thakur and Dr. M. Krishna Prasad	Dr. R. C. Mittal	January 04-08, 2016.	TEQIP-II
4.	Short Term Training Programme on "Current Trends in Applied Mathematics: Applications and Future Aspects (National)	Dr. Deepmala Sharma, Dr. Debasisha Mishra		July 06- 10, 2015	TEQIP
5.	Dr. Sujit Kumar Samanta, Dr. Arvind Kumar Sinha, Dr. Sharada Nandan Raw	National level short term training programme on "Mathematical Modeling and Coputational Techniques in Science and Engineering	March 14- 18, 2016 TEQIP Dr. S. Sundar (IIT Madras), Dr. R. K. Jana (IISWBM, Kolkata), Dr. PVSN Murthy (IIT Kharagpur), Dr. B. C. Giri (Jadavpur University),	March 14-18, 2016	TEQIP

Dr. G. Naga Raju (VNIT	
Nagpur)	

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Dr. Sujit Kumar Samanta	Nil	Nil	
2.	Dr.Nilesh kumar Thakur	Nil	Nil	
3.	M. Krishna Prasad, G. Manpreet Kaur.	Steady rotation of micropolar fluid sphere in concentric spherical container	Procedia Engineering, Vol. 127, Pg. 469-475, 2015	Doi:10.1016/j.proeng.2 015.11.400
4.	M. Krishna Prasad, G. Manpreet Kaur.	Slow Steady Rotation of an Approximate Sphere in an Approximate Spherical Container with Slip Surfaces	Int. J. Appl. Comput. Math.	Doi: 10.1007/s40819- 016-0151-1

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if	DOI/Web link
NO.			any)/Pg. No., Year	
1.	A. K. Sinha, Anand Prakash	Rough Projective module	International Journal of Material Science and Engineering (IJMSE) Vol. 2, Issue 1, April 2015, Page 35-38,	
2.	A. K. Sinha, Manoj Kumar Dewangan	Fuzzy Hv- submodules in Γ-Hv-modules	International Journal of Engineering Research & Science (IJOER), Vol.1, Issue 1, April 2015, Page 34-40	
3.	A. K. Sinha, Manoj Kumar Dewangan	Some Results on Interval Valued Intuitionistic (S , T)-Fuzzy Hv - Submodules	International Journal of Engineering Research-Online (IJOER-Online), Vol. 3, Issue 3, June 2015, Page 622-631	
4.	A. K. Sinha,	Some Results on Weak Co- Multiplication Modules	International Journal of Advanced Technology in Engineering and Science (IJATES), Vol. 3, Issue 06, June 2015, Page 282-284	
5.	A. K. Sinha, Anand Prakash	Injective module based on rough set theory	Cogent Mathematics, Taylor & Francis Group, Vol. 1, Issue 2, July 2015, Page 1-7	DOI 10.1080/ 2331183 5.2015.1 069481
6.	A. K. Sinha, Manoj Kumar Dewangan	On Interval Valued Intuitionistic (alpha, beta)- Fuzzy Hv- Submodules	International Journal of Engineering Sciences & Research Technology (IJESRT), Vol. 4, Issue 7, July 2015, Page 333-341	
7.	A. K. Sinha,	On Prime Submodules in Weak Multiplication Modules	International Journal of Engineering Sciences & Research Technology (IJESRT), Vol. 4, Issue 9, September 2015, Page 256-259	

8.	A. K. Sinha, Manoj Kumar Dewangan	On Interval Valued Intuitionistic (α, β)-Fuzzy Hv- Subgroups	International Journal of Research in Advent Technology (IJRAT), Vol.3, Issue 10, October 2015, Page 54- 59	
9.	A. K. Sinha, Manoj Kumar Dewangan	On Interval Valued Intuitionistic (S, T)- Fuzzy Hv – subgroups	International Journal of Applied Engineering Research (IJAER), Vol. 10, Issue 16, 2015, Pg 36474-36478	
10.	A. K. Sinha, Manoj Kumar Dewangan	Interval Valued Intuitionistic (alpha, beta)- Fuzzy Hv- Ideals	Global Journal of Pure and Applied Mathematics (GJPAM) , Vol. 11, Issue 5, 2015, Page 3361-3370	
11.	A. K. Sinha, Anand Prakash	On Rough Projective and Injective Modules	Global Journal of Pure and Applied Mathematics (GJPAM), Vol. 11, Issue 5, 2015, Page 3655-3664	
12.	A. K. Sinha,	Some Remarks on Prime Submodules in Weak Co- Multiplication Modules	International Journal of Engineering Research and Applications (IJERA), Vol. 06, Issue 2, February 2016, Page	
13	A. K. Sinha, Anand Prakash	Rough Exact Sequences of Modules,	International Journal of Applied Engineering Research (IJAER), Vol. 11, Issue 4, 2016, Pg 2513-2517	http://innovar eacademics.in/ journals/index .php/ijpps/arti cle/view/1102 7
14.	S. Thakur , S. N. Raw and R. Sharma	Design Of A Fuzzy Model For Thalassemia Disease Diagnosis: Using Mamdani Type Fuzzy Inference System (Fis)	International Journal of Pharmacy and Pharmaceutical Sciences. 2016, Vol. 8, pp. 356-361.	http://innovareacademi cs.in/journals/index.ph p/ijpps/article/view/11 027

15.	S. Thakur , S. N. Raw and R. Sharma	A Mathematical Model to Control the Transmission of Thalassemia Disease using Pure Fractions	Indian Journal of Science and Technology. 2016, Vol 9(4), pp. 1-5.	DOI : <u>10.17485/ijst/201</u> <u>6/v9i4/78206</u>
16.	B. Dubey, J. Hussain, S. N. Raw and R. K. Upadhyay	Modeling the effect of pollution on biological species: A socioecological problem	Computational Ecology and Software. 2015, Vo. 5, pp. 152- 174.	http://www.iaees. org/publications/j ournals/ces/articl es/2015- 5(2)/2015-5(2).asp
17.	S. Thakur , S. N. Raw and R. Sharma	Study the level of awareness among sindhi families of durg, chhattisgarh (India): a questionnaire based statistical study	International Journal of Pharmacy and Pharmaceutical Sciences. 2015, Vol. 07, pp. 341- 346.	http://innovareacademi cs.in/journals/index.ph p/ijpps/article/view/57 89
18.	N. K. Thakur, S. K. Tiwari and R. K. Upadhyay	Harmful algal blooms in fresh and marine water systems: The role of toxin producing phytoplankton	International Journal of Biomathematics, Vol. 9, No. 3, 1-20, 2016.	http://dx.doi.org/10.11 42/S179352451650043 1

19.	M. Krishna Prasad, G. Manpreet Kaur.	Steady rotation of micropolar	Procedia Engineering, Vol. 127, Pg. 469-475,	Doi:10.1016/j.proeng.20 15.11.400
	s. manproot naur.	fluid sphere in	2015	
		concentric spherical container		
20.	M. Krishna Prasad,	Slow Steady	Int. J. Appl. Comput.	Doi: 10.1007/s40819-
	G. Manpreet Kaur.	Rotation of an Approximate Sphere in an Approximate Spherical Container with Slip Surfaces	Math.	016-0151-1
21.	K. Sikdar, S. K.	Analysis of a	OPSEARCH (Accepted:	DOI: 10.1007/s12597-
	Samanta	finite buffer variable batch service queue with batch Markovian	15 December 2015)	015-0244-3
		arrival process and server's vacation		
22.	S. K. Samanta	Waiting-time analysis of <i>D</i> - <i>BMAP</i> / <i>G</i> /1 queueing system	Annals of Operations Research (Accepted: 18 August 2015)	DOI: 10.1007/s10479- 015-1974-6
23.	S. Pradhan, U.C. Gupta,	Queue-length distribution of a batch service	OPSEARCH 53(2), 329- 343, 2016	DOI: 10.1007/s12597- 015-0231-8
	S.K. Samanta	queue with random capacity and batch size dependent service: $M/G^{Y}r/1$		
24.	S. Pradhan, U.C. Gupta,	Analyzing an infinite buffer batch arrival	Journal of the Korean Statistical Society	DOI:10.1016/j.jkss.2015 .08.004
	S.K. Samanta	and batch service queue under batch- size-dependent service policy	45(1), 137–148, 2016	
25.	K. Sikdar, S . K. Samanta	The GI/Geo/1/K queue with N threshold policy	IEEE International Advance Computing Conference (IACC), 2015. Page(s): 268 - 271	DOI:10.1109/IADCC.201 5.7154711

26.	Manmohit Kalia,	Effect of	PLOS ONE, pages 1-18,	DOI:10.1371/journal.po
	Vivek Kumar Yadav,	Cinnamon Oil	August 11, 2015	ne
	Pradeep Kumar	on Quorum		
	Singh, Deepmala	Sensing-		.0135495
	Sharma, Himanshu	Controlled		
	Pandey <i>et al.</i>	Virulence		
		Factors and		
		Biofilm		
		Formation in		
		Pseudomonas		
		aeruginosa		
27.	Debasisha Mishra	Matrix Group	Numerical Algebra,	http://aimsciences.org/j
		Monotonicity	Control and	ournals/pdfs.jsp?paperI
		Using a	Optimization, 5, 3,	D=11491&mode=full
		Dominance	267-274, 2015	
		Notion		

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)NIL

Sr. No.	Title of the Project	Period	Funding Agency	Amount (inlaks of Rs.)	Investigators (PI/Co-PI)
1.	A STUDY OF DUAL CONCEPTS IN MODULES IN ALGEBRA	3 Years	CCOST, Raipur	5 Lakhs	Dr A.K. Sinha
2.	Complete Survey of approximation process by positive liner operators and their integral modification in real and complex domain.	3 Years	CCOST, Raipur	5 Lakhs	Dr R. P. Pathak
3.	Analysis of matrix splittings and its application in context of alternating iteration scheme for rectangular linear systems	Jan 16- Jan 19	SERB	Rs14,84,600/-	PI: Dr.Debasisha Mishra

4.	Matrix splitting of rectangular/singular matrices and its application linear system of linear equations	Dec 15-Dec 18	CCOST	Rs1,40,000/-	PI: Dr.Debasisha Mishra
5.	Modelling pattern formation in spatial aquatic system: mathematical model and applications	3 years	Chhattisgarh Council of Science & Technology	1 lakh	Dr. Nilesh Kumar Thakur
6.	Cell models for micropolar fluid past porous particles	Dec 2015- Nov 2018	CCOST, Raipur, Chhattisgarh- 492001	1.4	Dr. M. Krishna Prasad

DEPARTMENT OF COMPUTER APPLICATIONS (MCA)

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Mr.Harendra Bikrol	Associate Professor	B.E., M.Tech.
2.	Mr.Mithilesh Atulkar	Associate Professor	B.E., M.Tech.
3.	Dr.(Mrs.).Kesari Verma	Assistant Professor	Ph.D. (C.S.)
4.	Dr.Manju Pandey	Assistant Professor	Ph.D. (C.S.)
5.	Dr.Mou Dasgupta	Assistant Professor	Ph.D. (C.S.)
6.	Dr.Shyam Sundar	Assistant Professor	Ph.D. (C.S.)
7.	Dr.Tanmoy Kanti Das	Assistant Professor	MCA, PhD
8.	Dr.Mitul Kumar Ahirwal	Assistant Professor	Ph.D.(C.S.E.)
9.	Mr.Giridhar Urkude	Temporary Faculty	MCA, M.Tech.
10.	Mr.Arun Kumar Nagdeve	Temporary Faculty	B.E., M.Tech.
11.	Mrs.Deepa Rungta	Teaching Assistant	МСА

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr.(Mrs.).Kesari Verma + Prof. A.S. Thoke	Bikesh Kumar Singh	Soft Computing Techniques for Breast Cancer Ultrasound Image
2.	Dr.(Mrs.).Kesari Verma	Sanjivani Shantaiya	Development of multiple object Detection, tracking and classification For smart video

		surveillance
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Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster	Dates and Venue
		Presentation , Name of	
		Event, Organizer	
1.	Mr. Harendra Bikrol	National Seminar on	Chandigarh on 06-
		"Hindi main Takniki &	07 September 2015.
		Vvshayik Siksha –	
		Chunotiya & Samadhan"	
		organized by National	
		Institute of Technical	
		Teachers Training and	
		Research (NITTTR),	
		(Workshop Attended)	
		Workshop on "Official	Raipur on 11-13
		Procedure & Functional	September 2015.
		Management" organized by	
		Integrated Training &	
		Policy Research Institute	
		New Delhi at NIT,	
		(Workshop Attended)	
2.	Mr. Mithilesh Atulkar	All India Rajabhasha	14-15 May 2015 at
		Workshop (Workshop	SVNIT Surat
		Attended)	00.00.1
		Two days meet Dean /	08-09 August 2015
•		Directors	at VNIT Nagpur
3.	Dr.(Mrs.). Kesari Verma	NIT Raipur	25-29, May 2015
		Environmental Chalanges	
		and. Remadies(Lectures Delivered)	
		Role of science and	12-13, August, 2015
		modern technology in	12-13, August, 2013
		performance of business	
		activities.(Lectures	
		Delivered)	
		Workshop	December 20-
		Android application	25,2015
		development for fun and	,
		Profit.(Attended)	
4.	Dr. Tanmoy Kanti Das	Title: Image Compression	07-11 March 2016

Event: Digital Image	Department of
Processing, Pattern	Electronics and
Recognition and	Telecommunication,
Applications (Lectures	NIT Raipur.
Delivered)	
Title: Multimedia Security:	07-11 March 2016
An Introduction	Department of
Event: Digital Image	Electronics and
Processing, Pattern	Telecommunication,
Recognition and	NIT Raipur.
Applications (Lectures	
Delivered)	

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	Manju Pandey , R. K. Jade, Tamrakar S.	Decision Support System In Sustainability Assessment Of Mining	National Seminar on Recent Practices and Innovations in Mining Industry RPIMI 2016,19- 20 Feb 2016, p 209	

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Sanjivani Shantaiya,	Multiple object	Int. J.	
	Kesari Verma,	clustering using FCM	Computational	
	Kamal Mehta	and K-means Vision and		
		algorithms	Robotics, Vol. 6,	

			No. 4, 2016	
2.	Sanjivani Shantaiya, Kesari Verma , Kamal Mehta	Multiple Object Tracking using Kalman Filter and Optical Flow	European Journal of Advances in Engineering and Technology, 2015, 2(2): 34- 39	
3.	BK Singh, Kesari Verma , AS Thoke	Investigations on edge preservation and smoothening of frequency domain filters for speckle removal in breast ultrasound images	International Journal of Biomedical Engineering and Technology 20 (2), 97- 115,2016.	
4.	BK Singh, Kesari Verma , AS Thoke	. Investigations on Impact of Feature Normalization Techniques on Classifier's Performance in Breast Tumor Classification	International Journal of Computer Applications 116 (19),2015.	
5.	BK Singh, Kesari Verma, AS Thoke	A dual feature selection approach for classification of breast tumors in ultrasound images using ANN and SVM	Artificial Intelligent Systems and Machine Learning 7 (3), 78-84,2015	
6.	BK Singh, Kesari Verma , AS Thoke	Objective and optical evaluation of despeckle filters in breast ultrasound images	IETE Technical Review 32 (5), 384-398,2015	
7.	Sachchidanand Chaurasia, Shyam Sundar and Alok Singh	Hybrid metaheuristic approaches for the single machine total stepwise tardiness problem with release dates	Operational Research: An International Journal, Springer-Verlag (Accepted) (2016)	10.1007/s12351- 016-0225-1
8.	Mitul Kumar Ahirwal, Anil Kumar and Girish Kumar Singh	Subband Adaptive Filtering Method for EEG/ERP Signals using Nature Inspired Optimization Techniques	IET Science, Measurement & Technology, Vol. No. 09, Issue No. 08, Pg. No. 987-997, Nov. 2015	10.1049/iet- smt.2015.0048

Sr. No.	Name of Faculty Member	Title (Mention Book/monogram/chapter)	Publisher	Author/Co- author
1.	Kesari Verma	Review of Feature Selection	Springer	Bikesh
		Algorithms for Breast		Singh,
		Cancer Ultrasound Image,		Priyanka
		New Trends in Intelligent		Tripathi
		Information and Database		
		Systems,		

Books, monograms, chapters authored/co-authored (From 01-04-2015 to 31-03-2016)

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in lakh of Rs.)	Investigators (PI/Co-PI)
1.	Computer Aided Technique for Disease Diagnosis A non invasive approach of disease detection using Iris Image	2016-2018	CGCOST	2,87,000	Kesari Verma (PI) , Bikesh K. Singh
2.	Computer Aided Analysis and Interpretation of Mammographic Images for Early Diagnosis of Breast Cancer in Chhattisgarh.	2016-2018	CGCOST	3,60,000	Bikesh K. Singh, Kesari Verma(Co-PI)
3.	Metaheuristic Techniques for NP- Hard Spanning Tree Problems	15-01-2016 to 15-01- 2019	SERB (DST)	15,06,000	Shyam Sundar(PI)
4.	Development of efficient Devanagari Script Input Based P300 Speller system for Brain- Computer Interface	2016-2019	CSRI (DST)	27,00,000	Narendra D. Londhe, Rahul Kumar Caurasiya, Mitul Kumar Ahirwar (Co- PI), Subhojit Ghosh

Sr. No.	Name of Faculty Member	Details of the Award/Achievement	Date
1.	Dr. Shyam Sundar	Start Up Research Grant (Young Scientist) awarded under SERB-DST	21-12-2015

Brief Details of Important Lab with Photographs

PG

- 1. Computer Lab 1: Computer Programming as per MCA Curriculum (Computers of Latest Configuration, Software as per MCA Curriculum, With Printers, High, Speed Internet Facility, Multimedia Projection Systems, Suitable for conduction of online examination during campus placement).
- 2. Computer Lab 2: Computer Programming as per MCA Curriculum (Computers of Latest Configuration, Software as per MCA Curriculum, With Printers, High, Speed Internet Facility, Multimedia Projection Systems, Suitable for conduction of online examination during campus placement).

DEPARTMENT OF MECHANICAL ENGINEERING

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. A. M. Rawani	Professor	PhD
2.	Dr. S. Sanyal	Professor	PhD
3.	Dr.(Miss) S. L. Sinha	Professor	PhD
4.	Dr. R. Salhotra	Professor	PhD
5.	Dr. S. D. Patle	Professor	PhD
6.	Dr. S. P. S. Matharu	Professor	PhD
7.	Dr. A. K. Tiwari	Professor	PhD
8.	Dr. R. K. Yadav	Associate Professor	PhD
9.	Prof. G. K. Sahu	Assistant Professor	M.Tech
10.	Prof. S.K. Dewangan	Assistant Professor	M.Tech
11.	Dr. Nitin Jain	Assistant Professor	PhD
12.	Dr. S. K. Mukti	Assistant Professor	PhD

13.	Dr. V. K. Gaba	Assistant Professor	PhD
14.	Dr. S. Bhowmick	Assistant Professor	PhD
15.	Dr. Amit Raj Singh	Assistant Professor	PhD
16.	Dr. G. Srinivasu	Assistant Professor	PhD
17.	Dr. H. K. Narang	Assistant Professor	PhD
18.	Prof. Nisha Netam	Assistant Professor	M.Tech
19.	Dr. S. Bhattacharya	Assistant Professor	PhD
20.	Dr.R.K.Sahu	Assistant Professor	PhD
21.	Dr.Mridul Singh Rajput	Assistant Professor	PhD
22.	Dr.Rajana Suresh Kumar	Assistant Professor	PhD

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. A.M. Rawani	M. Idris Memon Loya	Study of Fly Ash Utilization and Adoption of its Innovations.
2.	Dr. A.M. Rawani	Mr. Suraj Kumar Mukti	Success of ERP System Implementations: Case of Indian Steel Sector.
3.	Dr. S. Sanyal Dr. N.K. Jain	Mr. Shubhrata Nagpal	Analytical and experimental investigation of mitigation of stress concentration factor in isotropic and orthotropic plates with different discontinuities subjected to various loading conditions.
4.	Dr. Miss. S.L. Sinha	Mr. Sanjeev Thool Bhagwan	Numerical Simulation of control in Surgical site of Hospital.
5.	Dr. Miss. S.L. Sinha	Mr. Tikendra Nath Verma	Numerical Simulation of contaminated control of contaminated control in intensive care unit (ICU) of hospital.
6.	Dr. N.K. Jain Dr. S. Sanyal	Mr. Moon Banerjee	Three Dimensional Analysis of stress concentration Factor in ISO tropic, Orthotropic and Laminated Composite plate with Central Circular Hole Under Various Loading.

7.	Dr. N.K. Jain	Mr. P. V. Joshi	Analytical Modelling for Vibration Analysis
			of Cracked Isotropic and Orthotropic Plates

M.Tech Thesis Completed Only (From 01-04-2015 to 31-03-2016)

Sr.	Name of	Name of Co-	Name of the	Title of the Thesis
No.	Supervisor	Supervisor	Scholar	
1.	Dr.R.K.Sahu	Dr.R.Salhotra	Vinay Kumar Soni	Influence Of Heating Rate On 3003 Al Alloy & Its Properties During Microwave Sintering
2.	Prof.S.K. Dewangan	Dr.S.L.Sinha	Sridhar Sahu	CFD Modelling Of Slurry Flow Through Vertical Pipe Bends
3.	Prof.S.K. Dewangan	Dr.S.L.Sinha	Soujanya Sharma	Numerical Prediction Of 2-Phase Liquid-Gas Flow Through Horizontal Pipe Line
4.	Prof.S.K. Dewangan	Dr.S.L.Sinha	Shyam Sunder Dewangan	Experimental Prediction Of Wear Characteristics Of Various Minerals Sliurries
5.	Prof.S.K. Dewangan	Dr.S.L.Sinha	Himanshu Gupta	Experimental Study Of Fluid And Flow Properties Of Water Bentonite Slurries
6.	Dr.S.Bhattacharya	Dr.S.L.Sinha	Hemant Kumar Dewangan	An Assessment Of Performance Of Helical Coil Heat Exchanger And The Effect Of Fouling In It
7.	Dr.G.Srinivasu	Prof. Nisha Netam	G.Nagender	Analysis Of Effect Of Knudsen Number And Convection On The Effective Thermal Conductivity Of 2-Phase Materials
8.	Dr.Anil Tiwari	Prof. Nisha Netam	Abhinav Sahu	Radioactive cooling potential for buildings in Indian climatic conditions
9.	Dr.Anil Tiwari	Prof. Nisha Netam	Dev Kumar	Techno-economic analysis of roof solar collector:

			Naik	creating heating and ventilation for cold climatic conditions in India
10.	Dr.Anil Tiwari	Prof. Nisha Netam	Hitesh Kumar Sahu	Analysis of ground water heat exchanger in building cooling for central Indian climatic condition
11.	Prof.V.K.Gaba	Dr.S.Bhowmick	Ankit Kumar Verma	An approximate solution of stretching/shriking rectangular plate fin
12.	Prof.V.K.Gaba	Dr.S.Bhowmick	Anuj Kumar Vikal	Performance analysis of solar air heater with different types of fins profiles attached to the absorber plate under recirculation
13.	Prof.V.K.Gaba	Dr.S.Bhowmick	Vinay Kumar Verma	Experimental study of performance of Bunkie turbine

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/Interna tional)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Sel f Sponsored
1.	Multi Criteria Decision Making and Optimization	 Dr. A. M. Rawani Dr. A. R. Singh Dr. R. Salhotra Dr. N. K. Jain Dr. V. K. Gaba 		May 25- 29,2015	Self Sponsored

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in lakhs of Rs.)	Investigators (PI/Co-PI)
1.	Strategies for Effective Environmental Management in Thermal Power Plants in Chhattisgarh	Ongoing	CGCOST	5 Lacs	Dr. A. M . Rawani
2.	Determination of Operating Conditions for hydro-transport of mineral slurry based on wall shear stress and head loss measurement for mineral industries of Chhattisgarh State	Ongoing	CGCOST	5 Lacs	Dr. S. L. Sinha Prof. S. Dewangan
3.	Design and vaildation of existing bike- based patient carrier transport system for remote areas of chhattisgarh and proposing design of bike - trailer assembly	Ongoing	UNICEF	10 Lacs	Dr. S. Bhowmick
4.	Development Characterization of Functionally Graded Material with Self Lubrication Property for Cutting Tool Applications	Ongoing	CGCOST	3.5 Lacs	Dr. Rajkumar Sahu Dr. Srinivasu Gangi Setti

Socially relevant activities

Sr. No.	Name of Faculty Member(s)	Activity		
1.	Dr. S. Sanyal	1. Click Club	2. Tree Plantations	3. Raaga Club

DEPARTMENT OF METALLURGICAL ENGINEERING

Faculty

Sr. No.	Name of the Faculty	Designation	Qualification
1.	Prof. A. P. Rajimwale	Associate Professor	M.Tech.
2.	Dr. Manoj Kumar Chopkar, HOD	Assistant Professor	Ph.D.
3.	Dr. Manoranjan Kumar Manoj	Assistant Professor	Ph.D.
4.	Prof. Manvendra Kumar Tripathi	Assistant Professor	M.Tech.
5.	Dr. Subhas Ganguly	Assistant Professor	Ph.D.
6.	Dr. Sudip Kumar Sinha	Assistant Professor	Ph.D.
7.	Dr. Sanjeev Das	Assistant Professor	Ph.D.

Seminar/Workshops/Conferences/Short term Courses (National)

Sr. No.	Faculty	Title of oral/Poster Presentation, Name of Event, Organizer	Dates and Venue
1.	Dr. Manoranjan Kumar Manoj	Materials and Metallurgy Curriculum discussion	October 08-09, 2015. NIT Srinagar
2.	Dr. Subhas Ganguly	Workshop on Design and Analysis of Experiments (DOEWS - 2015) Organized by Indian statistical Institute, Kolkata	November 30- December 05, 2015, at Indian statistical Institute, Kolkata

3.	Dr. Subhas Ganguly	workshop on "Materials and Metallurgy Curriculum Discussion" Organized by IIT Kanpur and NIT Srinagar	October 8-9, 2015, at NIT Srinagar

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Faculty	Title of oral/Poster Presentation, Name of Event, Organizer	Dates and Venue
1.	Dr. M K Manoj and Dr. Manoj Chopkar	Metallurgy and Materials Curriculum Discussion.	26 th February 2016. Department of Metallurgical & Materials Engg., VNIT Nagpur
2.	Arindam Bit, Akalabya Bissoyi, <u>Sudip Kumar Sinha</u> , P.K. Patra, Subrata Saha	The inhibition of bio- film formation by graphene-modified stainless steel and titanium alloy for the treatment of periprosthetic infection: a comparative study	March 11-March 13 th , 2016 Shreveport, LA, USA

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	Workshop on Industrial	Dr. Subhash		4-5	TEQIP-II
		Ganguly and Dr.		September	

	Experimentation	M K Manoj	2015	
2.	Advanced Techniques in Materials Characterization	Dr. Sudip K Sinha and Dr. Manoj Chopkar	22-23 January 2016	TEQIP-II

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	S. Das et al.	The impact of melt conditioning on microstructure, texture and ductility of twin roll cast aluminium alloy strips	Materials Science and Engineering: A Volume 650, 5 January 2016, Pages 365–373	http://www.science direct.com/science/ article/pii/ S0921509315305384
2.	S. Das et al.	Twin-roll Casting after Intensive Melt Shearing and Subsequent Rolling of an AM30 Magnesium Alloy with Addition of CaO and SiC.	Materials Science Forum . 2015, Vol. 828-829, p35-40. 6p	S. Das et al.
3.	Sanjeev Das et. al.	Influence of intensive melt shearing on subsequent hot rolling and the mechanical properties of twin roll cast AZ31 strips	Materials Letters Volume 144, 1 April 2015, Pages 54–57	http://www.science direct.com/science/ article/pii/S0167577 X15000208
4.	Sanjeev Das	Effect of melt	Materials Science	http://www.science
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	et. al.	conditioning on heat treatment and mechanical properties of AZ31 alloy strips produced by twin roll casting	and Engineering: A Volume 620, 3 January 2015, Pages 223–232	direct.com/science/ article/pii/S092150 9314012623

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Pragya Nandan Banjare, V. Gadpale, M. K. Manoj,	A review on evolution of tools, process and optimization of process parameters of friction stir spot welds in Al-based alloys	2nd International Conference on advances in Steel, Power and Construction Technology () 17-19 March, 2016, Raigarh, India.	ICASPCT-2016
2.	Abhijit Patra, Subhas Ganguly , Partha Protim Chattopadh yay,	Computational design and development of novel Al-Mg-Sc-Cr alloy	Multidiscipline Modeling in Materials and Structures 11 (3), 401-412, 2015	http://dx.doi.org/10.11 08/MMMS-12-2014- 0061 web link: http://www.emeraldins ight.com/doi/pdfplus/ 10.1108/MMMS-12-

	Shubhabrat			2014 0061
	a Datta			<u>2014-0061</u>
3.	Manwendra K Tripathi, PP Chattopadh yay, Subhas Ganguly	Multivariate analysis and classification of bulk metallic glasses using principal component analysis	Computational Materials Science 107, 79-87, 2015	doi:10.1016/j.commatsci .2015.05.010 web link: http://www.sciencedirec t.com/science/article/pii /S0927025615003110
4.	Sudip K. Sinha	Tunable structural, optical and electrical properties of annealed ZnO-SnO ₂ composite thin films deposited by pulsed laser deposition	Advanced Materials letters, 7, 4, 2016, 319-324	DOI: 10.5185/amlett.2016.6 155
5.	Sudip K. Sinha	Synthesis of 1D Sn- doped ZnO hierarchical nanorods with enhanced gas sensing characteristics	Ceramic International, 41, 2015, 13676–13684	DOI:10.1016/j.ceramin t.2015.07.166

6.	S. Das et al.	The impact of melt conditioning on microstructure, texture and ductility of twin roll cast aluminium alloy strips	Materials Science and Engineering: A Volume 650, 5 January 2016, Pages 365–373	http://www.science direct.com/science/ article/pii/ S0921509315305384
7.	S. Das et al.	Twin-roll Casting after Intensive Melt Shearing and Subsequent Rolling of an AM30 Magnesium Alloy with Addition of CaO and SiC.	Materials Science Forum . 2015, Vol. 828-829, p35-40. 6p	S. Das et al.
8.	Sanjeev Das et. al.	Influence of intensive melt shearing on subsequent hot rolling and the mechanical properties of twin roll cast AZ31 strips	Materials Letters Volume 144, 1 April 2015, Pages 54–57	http://www.science direct.com/science/ article/pii/S0167577 X15000208
	Anil Kumar, M Chopkar, A K Swarnakar	Effect of milling time and milling media on the formation of CrSi2from their constituent elements for thermoelectric materials	InternationalJournalofMetallurgical&MaterialsScienceandEngineering2278-2524, Vol. 5,Issue 6, Dec 2015, 1-8	
9.	Sanjeev Das et. al.	Effect of melt conditioning on heat treatment and mechanical properties of AZ31 alloy strips produced by twin roll casting	Materials Science and Engineering: A Volume 620, 3 January 2015, Pages 223–232	http://www.science direct.com/science/ article/pii/S092150 9314012623

Socially relevant activities

Sr. No.	Name of Faculty Member(s)	Activity
1.	Dr. S.K. Sinha	Member of Anti-ragging committee, NIT Raipur August 2015- Till date
2.	Dr. S.K. Sinha	Departmental Faculty Co-ordinator of "Aavartan", a national level Techno-Management Fest at NIT Raipur.

Brief Details of Important Lab

- a) Testing of Materials Lab ((IV semester Lab)
 Faculty In-charge
 Prepared Lab Manual
- b) Metal Forming Processes Lab (VI semester Lab)

Faculty In-charge Prepared Lab Manual

c) Fracture and Failure Analysis Lab (VIII semester Lab)

DEPARTMENT OF MINING ENGINEERING

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Shri M.D.Patel	Associate Professor & Head	M.Tech
2.	Dr. M. Pradhan	Professor	Ph.D
3.	Dr. P.Y.Dhekne	Associate Professor	M.Tech
4.	Shri B.R. Parate	Associate Professor	M.Tech
5.	Shri P. Dewangan	Associate Professor	M.Tech
6.	Dr. N. Kishore	Assistant Professor	Ph.D.
7.	Dr. R. K. Jade	Assistant Professor	Ph.D.

8.	Dr. Ritesh D Lokhande	Assistant Professor	Ph.D.

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. Manoj Pradhan	Dr. P. Y. Dhekne	DEVELOPMENT OF AN ANN MODEL FOR PREDICTION OF BOULDER COUNT IN LIMESTONE QUARRY BLASTING

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Prof. Pankaj Kumar Dewangan	Workshop on Advanced Techniques in Material Characterization	Jan 22-23, 2016
2.	Prof. Pankaj Kumar Dewangan	Short term course on stability and design of slope and dump in opencast mines	September 15- 17, 2015
3.	Dr. R. K. Jade	Hyperspectral Remote Sensing, National Remote Sensing Centre, Hyderabad	27 April – 31 April 2015

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	Dr. R. D. Lokhande Dr. R. K. Jade	International Conference on "Global Challenges and Policy	17-18 pril, 2015

	Framework for Mining of Mineral and Fossil Energy	
	Resources (GCPF: 2015-20)	

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	National Seminar on Recent Practices and Innocvations in Mining Industry, Raipur, 19-20 Feb 2016	-		19-20 Feb, 2016	

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	Prof. M.D. Patel, Prof. B. R. Parate	"Recent trends in prevention and control of acid mine drainage", National Seminar on Recent Practices and Innovations in Mining Industry, Raipur	19-20 Feb, 2016	
2.	Prof. M.D. Patel, Prof. B. R. Parate	Application of UAVs in mining industry - An Overview, National Seminar on Recent Practices and Innovations in Mining Industry, Raipur	19-20 Feb, 2016	
3.	PankajKumarDewangan,ManojPradhan, G.D. Ramtekkar,	Shear strength characterization of fly ash mixed coal mine	19-20 Feb 2016	

		overburden dump		
		material. National Seminar on Recent		
		Practices and Innovations in Mining		
		Industry, Raipur		
4.	PankajKumarDewangan,SubhenduMishra,D.Tiwari,Goswami,Subhendu	Recent advancements in slope monitoring instrumentation, National Seminar on Recent Practices and Innovations in Mining Industry, Raipur	19-20 Feb 2016	
5.	PankajKumarDewangan,ManojPradhan, G.D. Ramtekkar,	Effect of gradation, gravel content and fragment size on the compaction and shear strength behavior of coal mine overburden dump material,	SSIOMCE, NIT Rourkela , July 25-26, 2015	
6.	Manju Pandey, R. K. Jade, Tamrakar S.,	Decision Support System In Sustainability Assessment Of Mining, National Seminar on Recent Practices and Innovations in Mining Industry -	RPIMI 2016, p. 209. 19-20 Feb 2016,	
7.	Sunita, R. K. Jade, Manoj Pradhan	Monitoring Land Use Dynamics Of Opencast Mines Through Remote Sensing, National Seminar on Recent Practices and Innovations in Mining Industry	RPIMI 2016, p. 204 19-20 Feb 2016,	
8.	R. K. Jade, Gaurav Pandey, Shashi Prakash	Advanced Communication System for Underground Mines,	19-20 Feb 2016,	

9.	Poonam Sahu, Ritesh D Lokhande, Satyabadi Kumar Jena, Ravi K Jade,	National Seminar on Recent Practices and Innovations in Mining Industry - RPIMI 2016 Geological & Geo- mining Investigations in Relation to Sinkhole Subsidence in Underground Coal Mining, A Case study at SECL, National Seminar on Recent Practices and Innovations in Mining Industry -	RPIMI 2016, 338,19-20 Feb 2016,	
10.	Satyabadi Kumar Jena, Lokhande Ritesh D, and Thakur R P	"Strata Control Monitoring with convergence, trend analysis in conventional bord & pillar Extraction, A Case Study of Underground Coal Mining at SECL" Recent Practices and Innovations in Mining Industry	(RPIMI 2016) 19-20 Feb 2016,	
11.	Wadhwani Himanshu, Tripurana Rahul and Lokhande Ritesh D	"Role of Green Issues of Mining supply chain on sustainable development" Recent Practices and Innovations in Mining Industry	(RPIMI 2016) 19-20 Feb 2016,	
12.	Pankaj Kumar Dewangan, Manoj Pradhan, G.D. Ramtekkar,	Shear strength characterization of fly ash mixed coal mine overburden dump	RPIMI 2016, 19-20 Feb 2016,	

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Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No., Year	DOI/Web link
1.	Dewangan P. K., Pradhan M. and Ramtekkar G. D.	Shear strength behaviour of fly ash mixed coal mine overburden dump material and stability assessment using numerical modelling	ARPN Journal of Engineering and Applied Science, VOL. 11, NO. 1, JANUARY 2016 (ISSN 1819-6608)	
2.	Dewangan P. K., Pradhan M. and Ramtekkar G. D.	Effect of fragment size and moisture content on compaction and shear strength behaviour of coal mine overburden dump material	European Journal of Advances in Engineering and Technology (EJAET) Dec. 2015, 2(12) (ISSN 2394- 658X)	
3.	Pankaj Kumar Dewangan, Manoj Pradhan,	Fly ash utilization in India vis-à-vis technological advancement and barriers ahead	MiCTM, Dubai, March 25-26, 2015	

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

le of the Project	Period	Funding	Amount	Investigators
		Agency	(in laks of Rs.)	(PI/Co-PI)
	tle of the Project	tle of the Project Period		Agency (in laks of

1.	A Report On Scientific Study For SME Trial Blasts And Ground Vibration Monitoring at Jamul Cement Works Limestone Mine, A.C.C. Ltd.	2015-16		Dr. P. Y. Dhekne, Prof. P. Dewangan, Dr. R. K. Jade, Dr. Nawal Kishore
2.	Optimization of blast design parameters at Kirari Limestone mine and ground vibration monitoring, Lafarge India Pvt. Ltd., Arasmeta Cement Plant, Gopalnagar, C.G.	2015-16		Dr. P. Y. Dhekne, Prof. P. Dewangan, Dr. R. K. Jade
3.	Study To Validate And Suggest Measures On Existing Safe Operating Procedures (Sop) During Backfilling Operations Near Water Logged Area (Block Iii), 2015-16, Jamul Cement Works Limestone Mine, A.C.C. Ltd.,	2015-2016		Prof. P. Dewangan, Dr. L. K. Yadu
4.	Preparation of drainage pattern of Ganga River basin for Chhattisgarh State, Chhattisgarh Environment Conservation Board (CECB), Chhattisgarh	2015-2016	Chhattisgarh Environment Conservation Board (CECB), Chhattisgarh	Dr. M. Pradhan, Dr. S. Bajpai, Dr. R. K. Jade, Dr. A. V. Ahirwar, Dr. D. Jhariya
5.	Geo-Mining situations for assessing vulnerability of pot-hole subsidence in SECL mines	2015-2016		Prof. M. D. Patel Dr. R. D. Lokhande

DEPARTMENT OF PHYSICS

Faculty

Sr. No.	Name of Faculty	Designation	Qualifications
1.	Dr. Sadhana Agrawal	Professor & Head	Ph.D
2.	Dr. Ashok Kumar	Professor	PhD
	Shrivastav		
3.	Dr. Ayush Khare	Assistant Professor	PhD
4.	Dr. Bijaya Kumar Sahoo	Assistant Professor	PhD
5.	Dr. Sapan Mohan Saini	Assistant Professor	PhD
6.	Dr. Somnath Nag	Assistant Professor	PhD

Doctoral Thesis Completed Only (PhD) (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of Supervisor	Name of the Scholar	Title of the Thesis
1.	Dr. Sadhana Agrawal	Vikas Dubey	Synthesis and
			Characterization of
			Eu ³⁺ doped
			phosphors for
			display devices
			applications
2.	Dr. Ayush Khare	Mrs. Janita Saji	Preparation and
			characterization of
			silicon elastomer
			nanocomposites:
			Effects of
			multiwalled carbon
			nanotube and nano-
			graphite loadings

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [National]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation , Name of Event, Organizer	Dates and Venue
1.	Dr. Sadhana Agrawal	Modern Tools and Techniques for Resource Management in libraries	NIT Raipur Oct 31-Nov 1, 2015
2.	डॉ. साधनाअग्रवाल	अखिल भारतीय राजभाषा संगोष्ठी	ukbVj paMhx< 6&7 flrEcj 2015
3.	Dr. Sadhana Agrawal	APMS-2015	Aug 7-8, 2015 Vasavi College of Engineering, Hyderabad
4.	डॉ. साधनाअग्रवाल	अखिल भारतीय राजभाषा संगोष्ठी	,u vkbZ Vh lqjr] ekuo lalk/ku fodkl ea=ky; 14&15 ebZ 2015
5.	Dr. Ayush Khare	ZnS -CdS films for solar cell applications, National Seminar on Energy Harvesting Materials and Techniques for sustainable Development	Dec. 2-3, 2015 Department of Physics, Govt. V.Y.T. PG Autonomous College, Durg
6.	Dr. B. K. Sahoo	Workshop Coordinators	10-09-2015, IIT, Bombay
7.	Dr. S. M. Saini	Two Week Short Term Course on Structural Engg	30th Nov 2015 - 3rd Jan 2016 NIT, Raipur
8.	Dr. Somnath Nag	Structural evolution from low to high-spin states in 130Xe, DAE Symp. On Nuclear Physics 2016	7 – 11 Dec 2015 SSSIHL – Prashanti Nilayam A.P.

Seminar/Workshops/Conferences/Short term Courses/Special Lectures Delivered-Attended (From 01-04-2015 to 31-03-2016) [International]

Sr. No.	Name of Faculty	Title of Oral/Poster Presentation Title, Name of Event, Organizer	Dates and Venue
1.	Dr. Sadhana Agrawal	Thermoluminescence analysis of UV irradiated Y_2O_3 :Sm ⁺³ phosphors, ICEMS-2016	JNU Jaipur, March 17-19 2016

2.	Dr. Sadhana Agrawal	Synthesis and Photo	JNU Jaipur,
		luminescent properties of	March 17-19 2016
		Dy ³⁺ doped y ₂ O ₃ phosphor,	
		ICEMS-2016	

Seminar/Workshops/Conferences/Short term Courses Organized (From 01-04-2015 to 31-03-2016)

Sr. No.	Name of the Programme (National/International)	Coordinator(s)	Key Note Speaker (if any)	Period	Funding Agency/Self Sponsored
1.	हिन्दी कम्प्यूटिंग एवं राजभाषा नीतियों का अनुपालन एक दिवसीय कार्यशाला	डॉ. साधनाअग्रवाल	-	04.02.2016	Under TEQIP NIT Raipur
2.	Two Week Short Term Course on Structural Engg.	Dr. S. M. Saini & G. D. Ramtekkar		30th Nov 2015 - 3rd Jan 2016	IIT Kharagpur
3.	Two Expert Lectures	Organized by Department	(i)Dr. P.D. Sahare , Delhi Univ. (ii)Dr. V. Natrajan, BARC Mumbai	27/07/2015	TEQIP NIT Raipur
4.	One Expert Lecture	Organized by Department	Prof. S. Auluck IIT Delhi	25/02/2016	TEQIP NIT Raipur

Publications (National) (From 01-04-2015 to 31-03-2016)

Sr.	Author(s)	Title of Paper	Name of the	DOI/Web link
No.			Journal Vol.	
			No., Issue	
			No. (if	
			any)/Pg. No.	
			, Year	

1.	G. Gedam, A.	Polarization effect on	Ind. J.	DOI
	Pansari, B. K.	phonon relaxation	Physics	10.1007/s12648-
	Sahoo	time in InGaN/GaN	(2015)	016-0836-7
		Heterstructures		
2.	Dinesh Maurya and	Structural,	Journal of	DOI
	Sapan Mohan Saini	electronic and	Material	10.1007/s10853-
		optical	Science 51,	015-9411-4
		properties of YNi4Si-	868-875,	
		type RNi4Si	2016	
		compounds (R = La		
		andGd):		
		a new orthorhombic		
		derivative		
		of CaCu5 structure		
3.	Dinesh Maurya and	Effect of Si	Journal of	
	Sapan Mohan Saini	substitution on	Magnetism	
		Structural,	and Magnetic	
		Electronic and	Materials 416	
		Optical properties of	(2016)89–97	
		YNi4Si -type DyNi5-		
		xSix (x = 0, 1, 2)		
		Compounds		

Publications (International) (From 01-04-2015 to 31-03-2016)

Sr. No.	Author(s)	Title of Paper	Name of the Journal Vol. No., Issue No. (if any)/Pg. No. , Year	DOI/Web link
1.	Tarkeshwari Verma, S. Agrawal, Vikas Dubey	Synthesis and Characterization of Rare Earth Doped Phosphor Y ₂ O ₃ : Dy ³⁺ with Different Concentrations of Dy ³	International journal of Engineering Research	3,S3 (2015) ISSN: 2321- 7758
2.	Tarkeshwari Verma, S. Agrawal	Thermoluminescence studies of UV- irradiated Y2O3:Dy+3 doped Phosphor	International Journal of Advance Research in Science and Engineering	4, S1 (2015) ISSN:2319- 8354
3.	K. S. Ojha, S. Agrawal	Structural and dielectric study of Zirconium modified bismuth sodium	Elsevier, Materials Today: Proceedings	2(2015)

		titanate thin film		
4.	S. Agrawal , K. S. Ojha, Dilip Sahu	Structural and dielectric study of MWCNT reinforced microcellular silicone elastomer nanocomposite	Elsevier, Materials Today: Proceedings	2(2015)
5.	Vikas Dubey, Jagjeet Kaur, Sadhana Agrawal	Thermoluminescence behavior of UV, beta and gamma induced Eu ⁺³ Doped different host matrix	Radiation Physics Chemistry	2(2015)
6.	Janita Saji, Ayush Khare , R. N. P. Chaudhary and S.P. Mahapatra	Relaxation behavior of nano-graphite reinforced silicon elastomer nanocomposites	High Performance Polymers 2, 0954008314 568729, 2015.	http://hip.sage pub.com/conte nt/28/1/3.abst ract
7.	S. K. Sahoo, B. K. Sahoo	Built-in-polarization effect on relaxation time and mean free path of phonons in AlxGa1-xN/GaN heterostructure	Mod. Phy. Lett B Vol. 30, No. 8 (2016) 1650097	DOI: 10.1142/S0217 984916500974
8.	G. Mohanty, B. K. Sahoo	III-V nitrides and performance of graphene on copper plasmonic biosensor	Superlattices and Microstructur es 93 (2016) 226-233	http://dx.doi.or g/10.1016/j.sp mi.2016.03.040
9.	G. Mohanty, B. K. Sahoo	Effect of Semiconductor on Sensitivity of a Graphene-Based Surface Plasmon Resonance Biosensor	Plasmonics 11 (2016) 189–196	DOI 10.1007/s1146 8-015-0033-0

Research and Consultancy

Sponsored Research Projects (Completed during (From 01-04-2015 to 31-03-2016)/ Ongoing/New)

Sr. No.	Title of the Project	Period	Funding Agency	Amount (in lakhs of Rs.)	Investigators (PI/Co-PI)
1.	Electronic, optical and MO properties of rare earth compounds	2013-2016	CGCOST, Raipur	5 Lakhs	PI : Dr. S.M. Saini

Socially relevant activities

Sr. No.	Name of Faculty Member(s)	Activity		
1.	Dr. Sadhana Agrawal	International Mother Tongue Day Celebration	Feb 4 ,2016	NIT Raipur
2.	Dr. Sadhana Agrawal	Hindi Pakhwara	Sept. 14 – 30, 2015	NIT Raipur

Brief Details of Important Lab with Photographs

Research Lab

1. Furnace facility

2) Model ALPHA T from Bruker Optics, Germany, that work on the principle of infrared spectroscopy. The FTIR Spectrometers are used to study the functional group of various samples. In the field of polymer science, petrochemical engineering, pharmaceutical industry, food analysis, commercial labs, etc. FT-IR stands for Fourier Transform InfraRed, the preferred method of infrared spectroscopy. In infrared spectroscopy, IR radiation is passed through a sample. Some of the infrared radiation is absorbed by the sample and some of it is passed through (transmitted). The resulting spectrum represents the molecular absorption and transmission, creating a molecular fingerprint of the sample. Like a fingerprint no two unique molecular structures produce the same infrared spectrum. This makes infrared spectroscopy useful for several types of analysis.

3) Hioki LCR Meters and Impedance Analyzers range from 1mHz to 1.3GHz devices to suit a wide range of applications in the testing of electronic components. The IM3533 series are Hioki's first LCR meters to offer turn ratio, mutual inductance and inductance difference measurements of transformers and coils, and are integrated with an internal DC bias to facilitate HDMI compliance testing. Transformer measurement : Turn ratio N, mutual inductance M, and inductance difference Δ L canbe measured on the transformer measurement screen. Frequency sweep : Measurements can be performed automatically at up to 801 frequency points by specifying the frequency range or in the frequency list mode. The measurement results can be saved to a USB flash drive or to a computer via an interface, which then can be used to perform frequency analysis of Samples.

The UV-1800 is an advanced high-resolution spectrophotometer utilizing a precision 4) Czerny-Turner optical system. Operation can be either as a stand-alone instrument or as a PCcontrolled instrument with the included UV Probe software. USB memory can be connected directly to the UV-1800 for simple data transfer and printing is possible with the optional printer support codes. screen-copy or printers that PCL control **Photometric Mode** measures the absorbance or transmittance at a single wavelength or at multiple (up to eight) wavelengths. In multiple-wavelength measurement, calculations can be

performed on the data obtained for up to four wavelengths, including the calculation of the difference between, or ratio of, the measurements obtained for two wavelengths.

5) Evaluating the Luminous Efficiency of Solid-State Semiconductor Materials

A 100 mm diameter Spectralon integrating sphere unit was used to measure the fluorescence quantum efficiency of the light-emitting layer of a solid-state semiconductor material (tris(8-hydroxyquinolinato)aluminum) used in an organic EL device. Using the quantum efficiency measurement application of LabSolutions RF software allows determining the fluorescence quantum efficiency easily using intuitive software commands.

6) TL or more specifically Thermally Stimulated Luminescence (TSL) is stimulated thermally after initial irradiation given to a phosphor by some other means (α - rays, β -rays, γ - rays, UV rays and X-rays). Thermally stimulated luminescence (TSL) is the phenomenon of emission of light from a solid which has been previously exposed to ionizing radiation under conditions of increasing temperature.

PC controlled TLD reader systems: PC controlled TLD reader systems is designed in the following paragraphs by referring to the block diagram given below.

LV power supply circuit board, HV power supply circuit, Temperature controller circuit PCB, Micro controller PCB including, ADC, DAC & RS22 circuits, I to F connecter for auto ranging, PMT, heater transformer, kanthal strip & drawer assembly to load supplies, PC system.

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 / Biotech	Computer Lab, Anatomy & Physiology Lab, Bio Chemistry 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 Engineering	Advanced Software Engg. Lab, Computer Programming Lab, Advanced Computer Network, Linux Unix Lab
Electrical Engineering	High Voltage, Research Lab, Workshop, Instrumentation, Electronics Lab, M.Tech Lab
Electronics & Telecommunication Engineering	Electronics Devices and Electronic Workshop, Instrumentation, Microwave and Optical Communication, Computer Programming, Digital Signal Processing, 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

Resources added to Central Library Collection:

In 2015-16 ,1441 numbers of print books amounting Rs 23,91,142/ were added to the library collection .The e-books collection was also enriched by the purchase of 3518 e-books amounting nearly 1 Crore rupees and access to more than 1 lakhs of e-books on yearly subscription basis. 15 online databases of journals (e-journals) were subscribed during the period. The Online Journal Archive collections of Elsevier's Material Science and Springer's Earth & Environmental Science and Engineering collections were added to the OJA collections of the Central library. Also 82 journals 25 magazines and 17 numbers of news papers were subscribed during the period.

Faculty members Details:

S. N	Name of faculty	Designation	Qualification
1	Dr. Sunil Kumar Satpathy	Dy.Librarian	MLIS,M.A,Ph.D(LIS),DCA, PGDLAN
2	Mr Ajay Kumar Sharma	Asst.Librarian	M.A,MLIS
3	Smt. Neelam Soni	Asst.Librarian	MLIS,M.A,MS Office
4	Mr 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

 Nominated as Honorary Member, Library Technical Advisory Committee, Govt Nagarjuna P.G.College of Science, Raipur, Chhattisgarh (Aug. 16, 2013)

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 working physician.

Dr.Sanjeevpandey	Sr.Medical Officer	M.B.B.S.
Dr.Subhakoshley	Lady Medical Officer	M.B.B.S.& (D.O.M.S.)
Dr.SameerSonkar	Medical Officer	M.B.B.S.
5	Homeopathy Physicia	an D.H.B.
(Contract)	

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 2015-16 13005(Allopathic) & 2502 (Homeopathy)
- 2. Centre for PPI (Pulse polio immunisation) programme 2015-16 (100% Target achievement within the campus)
- 3. Centre for National Filariasis programme. (100% Target achievement within the campus)

Referral cases of Ramakrishna care hospital total during the year

2014-15(206)

2015-16 (322)

(528)

6.4 GAMES & SPORTS

Dr. Alok Kumar Dubey SAS Officer MPh., Ph.D

ALL INDIA INTER NIT TABLE TENNIS AND CHESS COMPETITION, SILCHAR 16 - 18 OCTOBER 2015

 Students from NIT Raipur took part in the above mentioned sports. Male students of NIT Raipur achieved 5th position in table tennis whereas it stood at 4th position in chess. On the other hand girls of the institute achieved 4th position in table tennis and 3rd in chess. On winning all the matches in chess competition one of the students was awarded with Over All Chess Board Prize. Apart from this girl participants were awarded with shield and medals.

2. Inter College Volleyball Competition 3-5th November 2015

Students of our institute reached the semifinal where they lost to BIT Durg by a margin of two points after a magnificient performance.

3. ALL INDIA INTER NIT ATHLETICS MEET 2016

All India Inter NIT Athletics Meet was held from 26.02.2016 to 28.02.2016 in Jaipur (Rajasthan). Students of the institute not only took part in the events rather they came up with a brilliant performance in each event. Mr. Surya Anurag Duari from Dept of Electrical Engineering was conferred with bronze medal in long jump whereas Ms. Sandhya Kumar from Dept. of Architecture got one bronze each in long jump and triple jump events. Ms. Sujata Dhar from Dept. of Civil Engineering obtained one bronze medal in 1500 metre race and silver medals each in 3000 m and 5000 m race.

4. ALL INDIA INTER NIT VOLLEYBALL, HANDBALL, BANDMINTON, LAWN TENNIS, SPORTS SURAT (GUJRAT) 2016

The event was held from 11.03.2016 to 13.03.2016 in Surat (Gujrat). NIT Raipur participated in boys' Volleyball, Lawn Tennis, Bandminton, and Handball and girls'

Volleyball, Lawn Tennis, and Bandminton. Boys of the institute played brilliantly in handball and reached the final where they achieved the second position. On the other hand the institute could reach quarterfinal of boys' Volleyball, Lawn Tennis, Bandminton also. Girls of the institute achieved third position in the semifinal of Lawn Tennis.

5. ALL INDIA INTER NIT FOOTBALL, KABADDI, KHO-KHO TOURNAMENT ROURKELA ODISSA 2016

The institute participated in football matches from 12.02.2016 to 14.02.16 and played the league matches whereas the team for Kabaddi reached the quarter final of the event. In Kho Kho the institute stood at third position.

6. ALL INDIA INTER NIT HOCKEY TOURNAMENT SURATKAL KERALA 18.03.16 TO 20.03.16

Hockey team of the institute achieved third position and Mr. Abhishek was declared the best player of the tournament.

7. ALL INDIA INTER NIT CRICKET, BASKETBALL 26.03.16 TO 29.03.16

In cricket the institute qualified for quarter final whereas basketfall team reached the pre quarterfinal of the event.

8. "SAMAR "- 2016

The contribution from the students for "Samar 16", the annual sports meet of the institute, is praiseworthy. The sports committee organized the event for the second time this year where different sports like cricket, volleyball, football, basketball etc. were organized on inter college and inter institute basis. The event was organized during 23-26 Janurary 2016 where the participation from other colleges and institutes was very appreciable. Mr. Sai Ram Jakhad, the sports personality from Chhattisgarh and internation coach and Prof. Sudarshan Tiwary, the director the institute gave away prizes during closing ceremony of the event.

The training program for different events in All India Inter NIT sports meet is being organized in the campus al throughout the year since 2012. This helps the participants to keep themselves physically and mentally fit. The players take part in this program al throughout the year during morning and evening sessions where new players keep on joining each year. During 2012-2016, training has been organized for most of the sports like volleyball, basketball, cricket, swimming, football, hockey, kabaddi, kho-kho, table tennis, chess etc. The training is also important in a sense that here players are educated regarding rules for different sports and tips are given to keep the players fit. The outcome of this training is reflected in the recent brilliant performance of the participants from NIT Raipur.

The institute also hosts a gymnasium which is well equipped which provides facilities to all the officers, staffs and students. Flood lights have been installed in basketball, volleyball, bandminton and table tennis courts. The institute also provides facilities for football, cricket and other outdoor games. The institute is equipped with vast play ground which different events are organized during academic breaks of the students.

Apart from the above mentioned facilities, other infrastructural facilities are also provided thought the head of physical education department. It is to be noted that earlier the institute was a state government body which was upgraded to NIT in 2005. Since then a lot of changes have taken place. For example the number of students have incread by four times and hence the sports facilities are also needed to be enhanced.

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.

6.6 WORKSHOP

WORKSHOP INCHARGE - SHAILESH VAIDYA {PhD (pursuing), M.E(IE&M), DIM}

PAPER PUBLISHED

1.Identification and Analysis of the Barriers for Autonomous Car: An Interpretive Structural Modeling Approach.International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) Vol. 3, Issue 5, May 2016

Workshop Facilities availed by:

I & II SEMESTER STUDENTS(ALL BRANCH),

IV SEMESTER MECHANICAL STUDENTS,

M. TECH MECHANICAL,

PhD SCHOLARS OF DIFFERENT DEPARTMENTS

Apart from the academic duties of the above mentioned, WORKSHOP also extends research and fabrication related support to students and faculties. Cheifly, WORKSHOP has facilitated, over the past few years, in fabrication of Vehicles for events like, <u>SAE BAJA 2015-2016</u>, <u>Quad</u> <u>TORC 2016</u> and encouraged the students with active participation from the staff and W/S Incharge.

Further, the safe-keeping and fabrication of a **<u>Bike-ambulance</u>** under <u>**UNICEF**</u> Project Grant awarded to Mechanical Engineering Department, is also been carried out in WORKSHOP under the supervsion of Project PI, Co-PI and W/S Incharge.

STAFF 1. Mr.Avinash Sendur T.A.(WELDER)

2. Mr. J.R.Mandavi T.A.(WELDER)

3. Mr. Ripusudanlal Sahu T.A.(Contract.)

4. Mr. Inderjeet Bancchor L.A.(Contract.)

5.Mr. Santosh Dewangan L.A.(Contract.)

6.Mr.P.Rama Rao L.A.(Contract.)

7.Mr. Meghraj Dewangan A.G.IV(Contract.)

8.Mr. Satrughanlal Devdas A.G.IV(Contract.)

LABS -CNC LAB - 1.TRAINNER LATHE-CLT10 S-HYTECH

2.LATHE-MTAB **MAXTURN PLUS**

3. MILLING-MTAB **FLEXMILL**

B. WELDING LAB- MODERN WELDING ARC AND GAS BOOTH WITH FUMES EXTRACTION SYSTEM.

1. **ZUPER INVERTER MAXIM** WELDING MACHINE

2. ZUPER MIG 500 I

C. TURNING LAB -	1. CONVENTIONAL LATHE MACHINES
	2. CAPSTAN LATHE
	3. BENCH GRINDER
D. MACHINE LAB -	1. SHAPER MACHINE
	2. MILLING MACHINE
	3. POWER SAW
E.CARPENTARY LAB-	1.CIRULAR SAW
	2. POWER TOOLS-PLANNER, JIG SAW
F. FITTING LAB	1. GENERAL BENCH WORKING PRACTICES
G. MOULDING LAB PRE	PARATION OF TWO MOULDS WITH THE HELP OF

G. MOULDING LAB PREPARATION OF TWO MOULDS WITH THE HELP OF GREEN SAND.

Office of the Director General of Audit (Central Receipt) New Delhi, Branch Gwalior, IV Floor, Audit Bhavan, Jhansi Road, Gwalior-474002 (M.P.)

Confidential

No./AMG-II/SAR/MSRVVPU/2015-16/D- 146

Dated : 09.01.2017

То

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

Sub: SAR on the accounts of National Institute of Technology, Raipur for the year 2015-16.

Sir,

Please find enclosed herewith the Separate Audit Report on the accounts of **National Institute of Technology, Raipur for the year 2015-16.** You are requested to ensure that the SAR and the audited accounts are adopted by the Board of Governors before placing the same before the Parliament.

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

Kindly acknowledge receipt.

Encl.: 1. Separate Audit Report with annexure

Yours faithfully,

Dy. Director (Central)

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

We have audited the attached Balance sheet of the National Institute of Technology (NIT), Raipur as at 31 March 2016, the Income & Expenditure Account and the Receipt & Payment Account for the year ended on that date under Section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with section 22(2) of the National Institutes of Technology, Science Education and Research Act, 2007. These financial statements are the responsibility of NIT's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

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

- 4. Based on our audit, we report that:
- (i) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.
- (ii) The Balance Sheet, Income & Expenditure Account and the Receipt & Payment Account dealt with by this report have been drawn up in the format approved by the Ministry of Human Resource Development, Government of India vide order no. 29-4/2012-IFD dated 17 April 2015.

- (iii) In our opinion proper books of accounts and other relevant records have been maintained by the NIT, Raipur as required under Section 22(1) of the National Institute of Technology, Science Education and Research Act, 2007 in so far as it appears from our examination of such books.
- (iv) We further report that:

A. Balance Sheet

Sources of Funds

A.1 Current Liabilities & Provision (Schedule-3)-₹27.03 crore

A.1.1 This includes ₹ 2.23 crore of unutilized project fund instead of ₹ 2.25 crore as per credit closing balance of Schedule-3A. As per the revised format of accounts issued by the MHRD, the total credit balance of Schedule 3(a) will appear on the liabilities side of the Balance Sheet (Schedule-3) and the total debit balance of Schedule 3(a) will appear as Receivables in Schedule-8, Loan, Advances, on the Assets side of the Balance Sheet. However contrary to the instructions, NIT took the net figures in Schedule 3. This resulted in understatement of current liability and provision as well as loan, advances & deposits by ₹ 0.02 crore.

Application of Funds

A.2 Loan Advances & Deposits (Schedule-8)- ₹ 3.06 crore

A.2.1 This does not include an amount of ₹ 10.72 lakh of security deposit with Chhattisgarh State Power Distribution Co. Ltd. (CSPDCL). This resulted in understatement of earnest money deposited by NIT as well as Capital/Corpus Fund by ₹ 10.72 lakh.

B Income & Expenditure Account

Expenditure

B.1 Depreciation ₹ 7.55 crore.

B.1.1 This includes \gtrless 2.36 lakh being depreciation charged on un-installed items (equipments, instrument, computer, software etc.) worth \gtrless 14.82 lakh. This resulted in overstatement of Expenditure by \gtrless 2.36 lakh and understatement of fixed assets by the same extent.

C General

1 Provision for retirement benefits has not been made on actuarial valuation basis as required under the AS-15 as well as per instructions issued by MHRD. This was pointed out in previous SAR also.

Effect of audit comments

The net effect the above comments is that the Liabilities and Assets were understated by ₹ 12.72 lakh and ₹ 15.08 lakh respectively and Expenditure overstated by ₹ 2.36 lakh.

D Grant-In-Aid

1. During the year 2015-16, the NIT received grant-in-aid ₹ 61.00 crore. In addition, it had unspent balance of ₹ 1.80 crore of the previous year and internal revenue of ₹ 29.70 crore. Thus out of the total available fund of ₹ 92.50 crore, the NIT utilized an amount of ₹ 82.99 crore leaving an unutilized balance of ₹ 9.51 crore

2. Further, the NIT also received project grant of ₹ 2.71 crore. In addition it had unspent balance of ₹ 1.87 crore of the previous year projects. Thus out of the total available fund of ₹ 4.58 crore, the NIT utilized an amount of ₹ 2.35 crore leaving an unutilized balance of ₹ 2.23 crore.

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

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

- a. In so far as it relates to the Balance Sheet, of the state of affairs of the National Institute of Technology, Raipur as at 31st March 2016; and
- b. In so far as it relates to the Income & Expenditure Account of the surplus for year ended on that date.

For and on behalf of the C&AG of India

Place: New Delhi

Date: 09.01.2017

mission

Director General of Audit

1. Adequacy of Internal Audit System:

Internal audit was conducted for the year 2015-16 by a chartered accountant firm and found to be adequate.

2. Adequacy of Internal Control System:

The Internal Control System was found inadequate due to:

- (i) There is no internal audit manual.
- (ii) Sanction register & Dead Stock Register have not been maintained.
- (iii) There is no investment policy in currency.
- (iv) 2 BoG meeting conducted out of four during the year.
- (v) There is no rotation policy of staff dealing with cash.
- (vi) The item wise highest & lowest levels of consumables stock have not been fixed and maintained by management.
- (vii) Out of 62 sponsored projects, 17 not completed in due time and were delayed by 01 to 30 months.
- (viii) Utilization certificates of 52 sponsored projects out of 62 have not been submitted/prepared for the financial year 2015-16.

3. System of Physical verification of fixed assets:

Physical verification of assets was conducted during the year.

4. System of physical verification of inventory:

Physical verification of inventories conducted during the year.

5. Statutory dues:

No irregularity was noticed in the payment of statutory dues.

Punp_ Sr. Audit Officer/AMG-II

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR (C.G.)



FINANCIAL STATEMENTS FOR THE FINANCIAL YEAR 2015-16

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR (C.G.)



BALANCE SHEET AS ON 31.03.2016

FINANCIAL STATEMENT AS ON 31ST MARCH, 2016

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

			(Amount in Rs.)
SOURCES OF FUNDS	Schedule	As on 31.03.2016	As on 31.03.2015
CORPUS/CAPITAL FUND AND LIABILITY			
CAPITAL/CORPUS FUND	1	1,888,909,678.92	1,503,664,862.34
PROVIDENT FUND	2	70,148,348.00	67,748,247.00
CURRENT LIABILITIES AND PROVISION	3	270,273,062.24	252,809,285.83
TOTAL		2,229,331,089.16	1,824,222,395.17
APPLICATION OF FUNDS			
FIXED ASSETS	4		
TANGIBLE ASSETS		262,804,550.16	251,845,303.21
INTANGIBLE ASSETS		14,850,651.00	9,341,467.50
CAPITAL WORK IN PROGRESS		1,336,205,902.00	1,015,361,532.00
INVESTMENT- FROM EARMARKED/ENDOWMENT	5	326,315,165.00	354,769,613.90
FUND			
INVESTMENT(OTHERS)	6	140,256,338.72	16,579,754.00
CURRENT ASSETS	7	118,290,956.50	35,128,802.61
LOANS, ADVANCES & DEPOSITS	8	30,607,525.78	141,195,921.95

BALANCE SHEET AS ON 31.03.2016

TOTAL		2,229,331,089.16	1,824,222,395.17
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	23		

Registrar, NIT Raipur

Director, NIT Raipur

Chairman, BOG

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR (C.G.)



INCOME & EXPENDITURE ACCOUNT FINANCIAL YEAR 2015-16
FINANCIAL STATEMENT AS ON 31ST MARCH, 2016

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

Particulars	Schedule	For the period ended on 31st March,2016	For the period ended on 31st March,2015
INCOME			
ACADEMIC RECEIPTS	9	251,277,061.55	207,627,300.91
GRANTS/SUBSIDIES	10	240,000,000.00	40,000,000.00
INCOME FROM INVESTMENTS	11	32,372,730.40	33,867,811.49
INTEREST EARNED	12	1,320,980.00	670,156.00
OTHER INCOME	13	87,495,743.00	79,593,656.25
PRIOR PERIOD INCOME	14	0.00	0.00
TOTAL(A)		612,466,514.95	361,758,924.65
EXPENDITURE			
STAFF & PAYMENTS (ESTABLISHMENT EXPENSES)	15	324,630,655.00	291,633,742.00
ACADEMIC EXPENSES	16	75,438,303.79	56,010,447.26
ADMINISTRATIVE EXPENSES	17	47,620,660.50	34,131,894.64
TRANSPORTATION EXPENSES	18	2,996,521.54	1,651,247.52
REPAIR & MAINTENANCE	19	2,110,785.58	3,192,341.61
FINANCE COSTS	20	53,254.91	48,378.00
DEPRICIATION		75,468,057.50	62,830,784.00
OTHER EXPENSES	21	0.00	0.00
PRIOR PERIOD EXPENSES	22	0.00	0.00
TOTAL(B)		528,318,238.82	449,498,835.03
BALANCE BEING EXCESS OF INCOME OVER EXPENDITURE(A-B)		84,148,276.13	(87,739,910.38)
TRANSFER TO/FROM DESIGNATED FUND		0.00	0.00
BUILDING FUND			
OTHERS			
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CAPITAL FUND		84,148,276.13	(87,739,910.38)

BALANCE SHEET AS ON 31.03.2016

CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS 23

SCHEDULES FORMING PART OF THE BALANCE SHEET SCHEDULE- 1

CORPUS/CAPITAL FUND				(Amount in Rs.)
	As on 31	.03.2016	As on 31	.03.2015
PARTICULAR	Curren	it Year	Previo	us Year
Balance at the beginning of the year	1,502,044,202.71		1,293,509,453.20	
Add: Contribution towards	(, , ,	
Corpus/Capital Fund	0.00		0.00	
Add: Grants from UGC, CG, SG to the				
extent utilized towards				
Capital Expenditure	376,997,171.95		271,302,207.51	
Add: Assets purchased out of Earmaked				
Funds	0.00		0.00	
Add: Assets purchased out of Sponsored				
Projects, where				
Ownership vests with the institute	0.00		0.00	
Add: Assets Donated/ Received as Gifts	0.00		0.00	
Add: Other Additions	0.00		63,326.00	
Less: Trf to Deffered Income	-75,468,057.50		-62,830,784.00	
Less: Trf to fund Unutilised	-432574.00	1,803,140,743.16	0.00	1,502,044,202.71
Corpus Fund created out of				
Capitalization of old Assets	72.00	72.00	72.00	72.00
Opening Balance	1,620,587.63		91,932,624.01	
Less: Transfer to KK Sugandhi Memorial				
Award Fund	0.00		153,044.00	
Less: Transfer to KK Sugandhi Memorial				
Scholarship Fund	0.00		144,082.00	
Less: Transfer to Project Fund Teqip	0.00		2,275,000.00	
Add/deduct Balance of Net Income				
transferred	84,148,276.13	85,768,863.76	-87,739,910.38	1,620,587.63
from Income & Expenditure Account				
(As Per Schedule 10)				
CLOSING BALANCE		1,888,909,678.92		1,503,664,862.34
CORPUS/CAPITAL FUND				
Opening	225,000,000.00		225,000,000.00	
Add: Additon	0.00		0.00	
Less: Deduction	0.00		0.00	
Closing	225,000,000.00	225,000,000.00	225,000,000.00	225,000,000.00
DEFFERED GOVERNMENT GRANT				
Opening	1277044202.71		1,068,509,453.20	
Add: utilisation of Grant	376,997,171.95		271,302,207.51	
Less: transfer to Deffered Income	75,900,631.50		62,894,110.00	
Closing	1,578,140,743.16	1,578,140,743.16	1,276,917,550.71	1,276,917,550.71

SCHEDULES FORMING PART OF THE BALANCE SHEET **SCHEDULE-2**

PROVIDENT/EARMARKED/ENDOWM	PROVIDENT/EARMARKED/ENDOWMENT FUND (Amount in Rs.)											
PARTICULAR	K K Sughandhi Memorial Scholarship Fund	K K Sughandhi Memorial Award Fund	POOR BOY FUND	PROVIDENT FUND	As on 31.03.2016 Current Year	As on 31.03.2015 Previous Year						
(i) Opening Balance of Funds	157,650.00	171,190.00	1,007,966.00	66,411,441.00	67,748,247.00	62,279,984.00						
Addition During the Year	0.00	0.00	6,000.00	3,124,200.00	3,130,200.00	3,190,049.00						
Income from investments made of the funds	14,504.00	6,573.00	68,800.00	0.00	89,877.00	0.00						
Accrued Income from the Investments/Advances	1,228.00	7,781.00	14,425.00	0.00	23,434.00	45,154.00						
Interest on Saving Banks A/c	0.00	0.00	0.00	0.00	0.00	0.00						
Other Additions - Interest	0.00	0.00	0.00	5,561,222.00	5,561,222.00	5,349,932.00						
TOTAL (A)	173,382.00	185,544.00	1,097,191.00	75,096,863.00	76,552,980.00	70,865,119.00						
Utilisation / Expenditure towards objective of Funds	0.00	0.00	0.00	0.00	0.00	0.00						
Capital Expenditure	0.00	0.00	0.00	0.00	0.00	0.00						
Revenue Expenditure	17,760.00	0.00	0.00	0.00	17,760.00	0.00						
Other – Withdrawls	0.00	0.00	0.00	6,386,872.00	6,386,872.00	3,116,872.00						
TOTAL (B)	17,760.00	0.00	0.00	6,386,872.00	6,404,632.00	3,116,872.00						
Closing Balance at the Year End (A-B)	155,622.00	185,544.00	1,097,191.00	68,709,991.00	70,148,348.00	67,748,247.00						

SCHEDULE- 3 CURRENT LIABILITIES AND PRO	VISION			(Amount in Rs.)		
A CURRENT LIBILITIES	As on 31.	03.2016	As on 31.03.2015			
PARTICULAR	Current	t Year	Previous	s Year		
Deposit from Staff	_	_				
Security Deposit(Employee)	3,279,740.00	3,279,740.00	3,679,640.00	3,679,640.00		
Deposit from Students						
Net Caution money	12,766,000.00		11,259,000.00			
Admission fees refundable	892,276.00	13,658,276.00	892,276.00	12,151,276.00		
Sundry Creditors						
Sundry Creditors	14,853,454.00		20,942,591.00			
Sundry Creditors(Capital goods)	35,686,883.60	50,540,337.60	22,795,180.60	43,737,771.60		
Deposits – Others						
Earnest money Deposit with NIT	2,660,756.76		2,821,234.90			
Performance bank Guarantee	679,493.00	3,340,249.76	531,468.00	3,352,702.90		
Statutory Liabilities						
Overdue :	0.00	0.00	0.00	0.00		
Others :						
TDS payable	1,564,239.00		1,391,224.00			
DPF Contribution payable	0.00		4,050.00			
GIS/FBF contribution payable	14,530.00		14,350.00			
GLIS payable	34,900.00		33,400.00			
GPF Contribution Payable	30,000.00		30,000.00			
NPS Contribution of Employees						
payable	1,051,100.00		881,127.00			
NPS Contribution of NITRR payable	1,051,100.00		881,127.00			
PF Payable	264,750.00	4,010,619.00	251,200.00	3,486,478.00		
Other Current Liabilities						
Unutilized Grant (Schedule 3C)	6,780,760.34		13,345,358.29			
Scholarships to Students(Other state) Schedule 3B	8,656,525.00		6,526,805.00			
Bridge loan	14,400.00		14,400.00			
Fund from erstwhile govt. college	5,341,016.89		5,341,016.89			
Amalgamated fund	36,750.00		36,750.00			
Alumini Fund	1,353,500.00		1,083,250.00			
Project Development Fund	861,772.00		10,000.00			
Project Fund(Unutilised) Schedule			,			
3A	22,320,116.40		18,661,754.40			

Other Fund	1,101,608.00		1,206,696.00	
Other Payable	10,000.00		0.00	
Student aid fund	1,232,400.00		904,750.00	
M Tech Counselling	27,870.00		0.00	
CSAB Remuneration Payable	19,552.00		0.00	
Student Loan Refundable	477,885.00		385,610.00	
Interest(GPF)	0.00	48,234,155.63	282,342.00	47,798,732.58
TOTAL (A)		123,063,377.99	<u></u>	114,206,601.08
(B) PROVISIONS	L		L. L	, ,
Gratuity	_	_		
Provision for Gratuity	50,184,085.00		48,449,187.00	
Leave encashment				
Provision for leave Encashment	62,598,512.00		53,501,692.00	
Leave encashment payable	51,040.00		338,086.00	
Others				
Children Education payable	0.00		30,438.00	
CPDA Expenses payable	119,428.00		850,231.00	
DA arrear payable	1,285,288.00		840,993.00	
Exam Expenses and remuneration	0.00			
payable	0.00		8,898.00	
Faculty Association payable	6,600.00		6,900.00	
Function and other activity payable Internet and Website maintanance	0.00		44,400.00	
payable	656,638.00		327,500.00	
Meeting and conference exp payable	0.00		30,882.00	
Printing & Stationery payable	172,797.00		172,797.00	
Repairs & Maintenance to Collage			,	
Building payable	6,730.00		6,730.00	
Salary Daily wages payable	1,824,873.00		1,602,791.00	
Salary Contract Staff payable	4,229,694.00		4,768,026.00	
Salary Regular staff Payable	15,431,118.00		12,969,792.00	
Scholorship to M tech/phd Payable	3,852,592.00		4,575,600.00	
Telephone Charges payable	25,000.00		20,000.00	
Testing and Consultancy remuneration payable	6,700,189.25		9,998,443.75	
Testing and Consultancy reimbursed	38,202.00		0.00	
Travelling & Hotel Expenses	50,202.00		0.00	
payable	26,898.00	147,209,684.25	59,298.00	138,602,684.75
TOTAL B		147,209,684.25		138,602,684.75
TOTAL (A+B)		270,273,062.24		252,809,285.83

SCHEDULES FORMING PART OF THE BALANCE SHEET SCHEDULE- 3A SDONSODED DDO IECTS

SPONS	ORED PROJECTS	1					(Amount in Rs.)			
Sr.No	Name of the Project	Oper	ning Balance	Receipts During the	Total	Expenditure	Closing	Closing Balance		
		Dr	Cr	Year			Dr	Cr		
1	Project CEERI Pilani (Special Manpower Dev. Prog.)	0.00	0.00	1,698,595.00	1,698,595.00	31,935.00	0.00	1,666,660.00		
2	Project Found C Cost - D.S.Sisodia	0.00	0.00	132,474.00	132,474.00	22,903.00	0.00	109,571.00		
3	Project Fund - CCOST (A.K.Sinha)	0.00	67,147.00	112,873.00	180,020.00	129,212.00	0.00	50,808.00		
4	Project Fund- CCOST (Amit Keshav)	0.00	4,533.00	301.00	4,834.00	709.00	0.00	4,125.00		
5	Project Fund - CCOST (A.M. Rawani)	0.00	213,182.00	15,963.00	229,145.00	91,035.00	0.00	138,110.00		
6	Project Fund CCOST - Awanish Kumar	0.00	74,304.00	2,028.00	76,332.00	257,141.00	180,809.00	0.00		
7	Project Fund- C Cost (Ayush Khare)	0.00	164,527.00	6,305.00	170,832.00	84,772.00	0.00	86,060.00		
8	Project Fund- CCOST (B.K. Sahoo)	0.00	34,736.00	159,911.00	194,647.00	109,950.00	0.00	84,697.00		
9	Project Fund - CCOST (B.Majumdar)	0.00	46,231.00	152,454.00	198,685.00	186,768.00	0.00	11,917.00		
10	Project Fund- CCOST (Dharm Pal)	0.00	238,107.00	11,235.00	249,342.00	234,855.00	0.00	14,487.00		
11	Project Fund - CCOST (Dr.Anamika Yadav)	0.00	73,598.00	127,473.00	201,071.00	166,464.00	0.00	34,607.00		
12	Project Fund- CCOST (Dr. R.K. Tripathi)	0.00	35,739.00	5,719.00	41,458.00	15,829.00	0.00	25,629.00		
13	Project Fund - C Cost (Fahmida Khan)	0.00	85,314.00	92,715.00	178,029.00	166,812.00	0.00	11,217.00		
14	Project Fund - CCOST (J.Anand Kumar)	0.00	0.00	105,954.00	105,954.00	40,166.00	0.00	65,788.00		
15	Project Fund - C Cost (Kavita Thapadia)	0.00	53,400.00	4,467.00	57,867.00	11,172.00	0.00	46,695.00		
16	Project Fund - CCOST (Kesari Verma)	0.00	0.00	22,155.00	22,155.00	0.00	0.00	22,155.00		
17	Project Fund CCOST (M.K.Verma Travel Grant)	0.00	0.00	50,177.00	50,177.00	0.00	0.00	50,177.00		
18	Project Fund- CCOST (N.D.Londhe)	0.00	74,221.00	173,172.00	247,393.00	124,637.00	0.00	122,756.00		
19	Project Fund - CCOST (N.K.Nagwani)	0.00	152,422.00	8,878.00	161,300.00	133,944.00	0.00	27,356.00		

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		0.00				001 (11 00	0.00	
20	Project Fund - CCOST (Pradeep Singh)	0.00	271,804.00	92,269.00	364,073.00	321,611.00	0.00	42,462.00
21	Project Fund- CCOST (Pratima Gupta)	0.00	54,092.00	162,735.00	216,827.00	185,129.00	0.00	31,698.00
22	Project Fund - CCOST (R.Manivannan)	0.00	0.00	188,944.00	188,944.00	138,896.00	0.00	50,048.00
23	Project Fund - CCOST (R.P.Pathak)	0.00	152,801.00	6,486.00	159,287.00	141,866.00	0.00	17,421.00
24	Project Fund - CCOST (Santosh Penta)	0.00	195,111.00	105,851.00	300,962.00	178,599.00	0.00	122,363.00
25	Project Fund- CCOST (SB Upadhyay)	0.00	35,452.00	19,749.00	55,201.00	55,201.00	0.00	0.00
26	Project Fund - CCOST (Shobha Lata Sinha)	0.00	99,012.00	266,243.00	365,255.00	252,505.00	0.00	112,750.00
27	Project Fund - CCOST (S.M. Saini)	0.00	36,329.00	160,274.00	196,603.00	113,722.00	0.00	82,881.00
28	Project Fund C-Cost (Subhojit Ghosh)	0.00	0.00	153,518.00	153,518.00	0.00	0.00	153,518.00
29	Project Fund - CCOST (Sudhakar Pandey)	0.00	0.00	180,686.00	180,686.00	46,882.00	0.00	133,804.00
30	Project Fund C-DAC (B.Acharya)	0.00	0.00	3,624,203.00	3,624,203.00	2,451,949.00	0.00	1,172,254.00
31	Project Fund-C.G.Water & Sanitation (K.Tapadia)	0.00	461,724.00	634,207.00	1,095,931.00	740,750.00	0.00	355,181.00
32	Project Fund-DST-SERI (S.Noyel Victoria)	0.00	0.00	298,071.00	298,071.00	134,760.00	0.00	163,311.00
33	Project Fund-DST (Shrish Verma)	0.00	1,415,954.00	94,060.00	1,510,014.00	285,015.00	0.00	1,224,999.00
34	Project Fund - Flood Damage Mitigation(M.K. Verma)	0.00	391,496.00	28,347.00	419,843.00	161,312.00	0.00	258,531.00
35	Project Fund-GIAN(Manoj Chopkar)	0.00	0.00	1,442,709.00	1,442,709.00	833,208.00	0.00	609,501.00
36	Project Fund - HUDCO (M.K.VermaGreen City Index)	0.00	597,996.00	51,131.00	649,127.00	552,278.00	0.00	96,849.00
37	Project Fund Hudco (Rajesh Tripathi Low Volume Roa)	0.00	643,297.00	557,234.00	1,200,531.00	805,013.00	0.00	395,518.00
38	Project Fund - IEI,R&D (M.K.Chopkar)	0.00	57,953.00	2,680.00	60,633.00	60,633.00	0.00	0.00
39	Project Fund NRB (Subhojit Ghosh)	0.00	0.00	1,359,815.00	1,359,815.00	957,565.00	0.00	402,250.00
40	Project Fund NRRDA (R.K.Tripathi)	0.00	0.00	1,686,301.00	1,686,301.00	27,637.00	0.00	1,658,664.00
41	Project Fund- PMGSY	0.00	323,029.00	921,377.00	1,244,406.00	400,102.00	0.00	844,304.00
42	Project Fund Remote Center (S.M.Saini)	0.00	0.00	282,162.00	282,162.00	0.00	0.00	282,162.00
43	Project Fund SERB (Akalabya Bissoyi)	0.00	0.00	1,104,284.00	1,104,284.00	55,000.00	0.00	1,049,284.00
44	Project Fund SERB-Debasis Mishra	0.00	0.00	300,964.00	300,964.00	0.00	0.00	300,964.00

45	Project Fund SERB (J.Anand Kumar)	0.00	0.00	3,065,695.00	3,065,695.00	0.00	0.00	3,065,695.00
46	Project Fund SERB (Kafeel Ahmad Siddiqui)	0.00	0.00	422,702.00	422,702.00	392,447.00	0.00	30,255.00
47	Project Fund - SERB Kinetics Thermal(Amit Kesay)	0.00	19,490.00	2,552.00	22,042.00	19,490.00	0.00	2,552.00
48	Project Fund - SERB Membrane Reactor(Amit Kesay)	0.00	1,187,443.00	76,027.00	1,263,470.00	1,170,788.00	0.00	92,682.00
49	Project Fund - SERB (M.K.Chopkar)	0.00	1,815,428.00	108,524.00	1,923,952.00	354,895.00	0.00	1,569,057.00
50	Project Fund SERB (Monalisa Biswal)	0.00	0.00	467,842.00	467,842.00	0.00	0.00	467,842.00
51	Project Fund SERB-Prabir Ghosh	0.00	0.00	1,443,196.00	1,443,196.00	0.00	0.00	1,443,196.00
52	Project Fund SERB - Raj Kumar Sahu	0.00	175,803.00	6,982.00	182,785.00	13,143.00	0.00	169,642.00
53	Project Fund - SERB (R. Manivannan)	0.00	1,233,335.00	414,797.00	1,648,132.00	1,253,783.00	0.00	394,349.00
54	Project Fund SERB (Shivam Prakash Gautam)	0.00	0.00	109,784.00	109,784.00	109,784.00	0.00	0.00
55	Project Fund SERB-Shyam Sundar	0.00	0.00	364,167.00	364,167.00	0.00	0.00	364,167.00
56	Project Fund (SERB) S.Noyel Victoria	0.00	0.00	679,079.00	679,079.00	262,706.00	0.00	416,373.00
57	Project Fund SERB (Subhojit Ghosh)	0.00	0.00	296,158.00	296,158.00	0.00	0.00	296,158.00
58	Project Fund - SERB (T.Maharana)	0.00	1,640,561.00	587,392.00	2,227,953.00	1,533,232.00	0.00	694,721.00
59	Project Fund- SERBT (SB Upadhyay)	0.00	71,372.00	457,937.00	529,309.00	529,309.00	0.00	0.00
60	Project Fund-SUB DIC	0.00	353,010.40	1,765,265.00	2,118,275.40	1,550,692.00	0.00	567,583.40
61	Project Fund Unicef (S.Bhowmik)	0.00	0.00	251,962.00	251,962.00	217,430.00	0.00	34,532.00
62	Project MNRES - Pratima Gupta	0.00	1,117,889.00	20,745.00	1,138,634.00	380,045.00	0.00	758,589.00
	Grand Total	0.00	13,667,842.40	27,147,955.00	40,815,797.40	18,495,681.00	180,809.00	22,500,925.40

SCHE	SCHEDULES FORMING PART OF THE BALANCE SHEET SCHEDULE- 3B SPONSORED FELLOWSHIP & SCHOLARSHIP Sr.No. Name of the Project Opening Balance Transaction During the Year Closing Balance											
Sr.No.	Name of the Project	Opening Ba	lance	Closing Balance								
		Cr	Dr	Cr	Dr	Cr	Dr					
1	Scholarships to Students(Other state)	6,526,805.00	0.00	6,670,818.00	4,541,098.00	8,656,525.00	0.00					
	Grand Total	6,526,805.00	0.00	6,670,818.00	4,541,098.00	8,656,525.00	0.00					

SCHEDULES FORMING PART OF THE BALANCE SH	IEET	
SCHEDULE- 3C UNUTILZED GRANT FROM UGC, CG, SG		(Amount in Rs.)
PARTICULAR	As on 31.03.2016	As on 31.03.2015
	Current Year	Previous Year
A.Plan Grants: MHRD, GOI		
(i) Opening Balance	13,345,358.29	22,147,565.80
Addition During the Year	370,000,000.00	262,500,000.00
Income from investments made of the funds	0.00	0.00
Accrued Income from the Investments/Advances	0.00	0.00
Interest on Saving Banks A/c	0.00	0.00
Other Additions - transfer from Deffered government grant	432,574.00	0.00
TOTAL (A)	383,777,932.29	284,647,565.80
Utilisation / Expenditure towards objective of Funds	_	
Capital Expenditure	376,997,171.95	271,302,207.51
Revenue Expenditure	0.00	0.00
Other Deductions	0.00	0.00
TOTAL (B)	376,997,171.95	271,302,207.51
Closing Balance at the Year End (A-B)	6,780,760.34	13,345,358.29
B.Non-Plan Grants: MHRD, GOI		
(i) Opening Balance	0.00	0.00
Addition During the Year	240,000,000.00	40,000,000.00
Income from investments made of the funds	0.00	0.00
Accrued Income from the Investments/Advances	0.00	0.00
Interest on Saving Banks A/c	0.00	0.00
Other Additions - Interest Provided by institute	0.00	0.00
TOTAL (A)	240,000,000.00	40,000,000.00
Utilisation / Expenditure towards objective of Funds		
Capital Expenditure	0.00	0.00
Revenue Expenditure	240,000,000.00	40,000,000.00
Other Deductions	0.00	0.00
TOTAL (B)	240,000,000.00	40,000,000.00
Closing Balance at the Year End (A-B)	0.00	0.00
Grand Total(A+B)	6,780,760.34	13,345,358.29

SCHEDULES FORMING PART OF THE BALANCE SHEET

Schedule-4:

	Fixed Assets:										(4)	mount in Rs.)
(A)	FIACU ASSEES.			GROSS B	LOCK		Δ	CCUMULATED	DEPRICIATI	ION	NET B	
S. No	Description of assets	Rate of Dep	Cost of Assets as on 01.04.2015	Addition During the year 2015-16	Disposal / Transfer of Assets	Closing Balance as on 31.03.2016	Depriciation upto 31.03.2015	Depreciation for 2015-16	Deductio ns/Adjust ments	Depriciation as on 31.03.2016	As on 31.03.2015	As on 31.03.2016
1	Land	0.00%	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00
2	Site Development	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Building	2.00%	9,812,332.00	8,733,618.75	0.00	18,545,950.75	1,315,681.00	357,018.00	0.00	1,672,699.00	8,496,651.00	16,873,251.75
4	Roads & Bridges	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Tubewells & Water Supply	2.00%	0.00	79,955.00	0.00	79,955.00	0.00	1,599.00	0.00	1,599.00	0.00	78,356.00
6	Sewrage & Drainage	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Electrical Installation & Equipments	5.00%	4,177,405.00	49,800.00	0.00	4,227,205.00	3,070,668.00	211,360.00	0.00	3,282,028.00	1,106,737.00	945,177.00
8	Plant & Machinery	5.00%	11,540,688.00	2,738,866.00	0.00	14,279,554.00	5,050,924.00	713,978.00	0.00	5,764,902.00	6,489,764.00	8,514,652.00
9	Scientific & Laboratry Equipment	8.00%	164,269,348.58	28,665,997.98	0.00	192,935,346.56	42,129,909.0 0	15,434,828.00	0.00	57,564,737.00	122,139,439.58	135,370,609.56
10	Office Equipment	7.50%	4,091,284.00	128,917.00	6,250.00	4,213,951.00	2,361,404.50	316,046.00	0.00	2,677,450.50	1,729,879.50	1,536,500.50
11	Audio Visual Equipment	7.50%	7,133,611.00	424,733.00	0.00	7,558,344.00	3,467,149.50	566,876.00	0.00	4,034,025.50	3,666,461.50	3,524,318.50
12	Computer & Pheripharals	20.00%	144,391,435.00	21,900,589.34	0.00	166,292,024.34	78,246,964.5 0	33,258,405.00	0.00	111,505,369.50	66,144,470.50	54,786,654.84
13	Furniture Fixtures & Fittings	7.50%	25,329,589.00	905,229.30	0.00	26,234,818.30	13,690,311.0 0	1,967,612.00	0.00	15,657,923.00	11,639,278.00	10,576,895.30
14	Vehicles	10.00%	3,761,835.13	0.00	0.00	3,761,835.13	2,092,879.00	376,183.00	0.00	2,469,062.00	1,668,956.13	1,292,773.13
15	Library Books & Journals	10.00%	40,378,555.00	5,200,555.58	59,673.00	45,519,437.58	11,966,401.0 0	4,551,943.00	0.00	16,518,344.00	28,412,154.00	29,001,093.58
16	Sports Equipments	5.00%	944,876.00	0.00	0.00	944,876.00	593,365.00	47,244.00	0.00	640,609.00	351,511.00	304,267.00
	TOTAL (A)		415,830,959.71	68,828,261.95	65,923.00	484,593,298.66	163,985,656.50	57,803,092.00	0.00	221,788,748.50	251,845,303.21	262,804,550.16
Prog			1,015,361,532.00	320,844,370.00	0.00	1,336,205,902.00	0.00	0.00	0.00	0.00	1,015,361,532.00	1,336,205,902.00
(C) I	Intengible Assets:			GROSS B	LOCK			CCUMULATED	DEDDICIATI	ION	NET D	LOCK
			G					CCUMULATED			NET B	
S. No	Description of assets	Rate of Dep	Cost of Assets as on 01.04.2015	Addition During the vear 2015-16	Disposal / Transfer of Assets	Closing Balance as on 31.03.2016	Depriciation upto 31.03.2015	Depreciation for 2015-16	Deductio ns/Adjust ments	Depriciation as on 31.03.2016	As on 31.03.2015	As on 31.03.2016
1	Computer Softwares	40.00%	27.020.153.00	2,244,728.81	0.00	29,264,881.81	20,426,339.50	7,461,428.50	0.00	27,887,768.00	6.593.813.50	1,377,113.81
2	E-Journals	40.00%	4,579,423.00	20,929,420.19	-	25,508,843.19	1,831,769.00	10,203,537.00	-	12,035,306.00	2,747,654.00	13,473,537.19
3	Patents	11.11%	0.00	-	-	-	-	-	-	-	-	
	TOTAL ('C)		31,599,576.00	23,174,149.00	0.00	54,773,725.00	22,258,108.50	17,664,965.50	0.00	39,923,074.00	9,341,467.50	14,850,651.00
GRA	ND TOTAL (A+B+C)		1,462,792,067.71	412,846,780.95	65,923.00	1,875,572,925.66	186,243,765.00	75,468,057.50	0.00	261,711,822.50	1,276,548,302.71	1,613,861,103.16

SCHEDULES FORMING PART OF THE BALANCE SHEET Schedule- 4 A : PLAN (A)Fixed Assets:

	IC-4A; FLAIN										()	
(A)Fixe	d Assets:										(mount in Rs)
				GROSS B				CCUMULATED	-	-		BLOCK
C N		Rate of	Cost of Assets	Addition	Disposal /	Closing	Depriciation	Depreciation	Deductio	Depriciation as	As on	As on
S.No.	Description of assets	Dep	as on 01.04.2015	During the	Transfer	Balance as on 31.03.2016	upto 31.03.2015	for 2015-16	ns/Adjust	on 31.03.2016	31.03.2015	31.03.2016
1	Land	0.00%	01.04.2015	year 2015-16 0.00	of Assets 0.00	1.00	0.00	0.00	ments 0.00	0.00	1.00	1.00
2		0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Site Development	2.00%					1,315,681.00	0.00		1,672,699.00		
3	Building	2.00%	9,812,332.00	8,733,618.75	0.00	18,545,950.75	1,315,681.00	357,018.00	0.00	1,672,699.00	8,496,651.00	16,873,251.75
4	Roads & Bridges	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
5	Tubewells & Water	2 000/	0.00	79,955.00	0.00	79,955.00	0.00	1,599.00	0.00	1,599.00	0.00	78,356.00
(Supply	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Sewrage & Drainage	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Electrical Installation	5 000/	4,177,405.00	49,800.00	0.00	4,227,205.00	3,070,668.00	211,360.00	0.00	3,282,028.00	1,106,737.00	945,177.00
0	& Equipments	5.00%	11 840 600 00	2 520 044 00	0.00			513 050 00	0.00		(100 E (100	0 =14 (=0 00
8	Plant & Machinery	5.00%	11,540,688.00	2,738,866.00	0.00	14,279,554.00	5,050,924.00	713,978.00	0.00	5,764,902.00	6,489,764.00	8,514,652.00
9	Scientific & Laboratry		164,269,348.58	28,665,997.98	0.00	192,935,346.56	42,129,909.0	15,434,828.00	0.00	57,564,737.00	122,139,439.58	135,370,609.56
	Equipment	8.00%					0					
10	Office Equipment	7.50%	4,091,284.00	128,917.00	6,250.00	4,213,951.00	2,361,404.50	316,046.00	0.00	2,677,450.50	1,729,879.50	1,536,500.50
11	Audio Visual		7,133,611.00	424,733.00	0.00	7,558,344.00	3,467,149.50	566,876.00	0.00	4,034,025.50	3,666,461.50	3,524,318.50
	Equipment	7.50%										
12	Computer &		144,391,435.00	21,900,589.34	0.00	166,292,024.34	78,246,964.5	33,258,405.00	0.00	111,505,369.50	66,144,470.50	54,786,654.84
	Pheripharals	20.00%					0					
13	Furniture Fixtures &		25,329,589.00	905,229.30	0.00	26,234,818.30	13,690,311.0	1,967,612.00	0.00	15,657,923.00	11,639,278.00	10,576,895.30
	Fittings	7.50%					0					
14	Vehicles	10.00%	3,761,835.13	0.00	0.00	3,761,835.13	2,092,879.00	376,183.00	0.00	2,469,062.00	1,668,956.13	1,292,773.13
15	Library Books &		40,378,555.00	5,200,555.58	59,673.00	45,519,437.58	11,966,401.0	4,551,943.00	0.00	16,518,344.00	28,412,154.00	29,001,093.58
	Journals	10.00%					0					
16	Sports Equipments	5.00%	944,876.00	0.00	0.00	944,876.00	593,365.00	47,244.00	0.00	640,609.00	351,511.00	304,267.00
	TOTAL (A)		415,830,959.71	68,828,261.95	65,923.00	484,593,298.66	163,985,656.50	57,803,092.00	0.00	221,788,748.50	251,845,303.21	262,804,550.16
(B) Capita	al Work in Progress		1,015,361,532.00	320,844,370.00	0.00	1,336,205,902.00	0.00	0.00	0.00	0.00	1,015,361,532.00	1,336,205,902.00
(C)Inteng	ible Assets:											
				GROSS B	LOCK		A	CCUMULATED	DEPRICIAT	ION	NET I	BLOCK
		Rate of	Cost of Assets	Addition	Disposal /	Closing	Depriciation	Depreciation	Deductio	Depriciation as	As on	As on
S.No.	Description of assets	Dep	as on	During the	Transfer	Balance as on	upto	for 2015-16	ns/Adjust	on 31.03.2016	31.03.2015	31.03.2016
			01.04.2015	year 2015-16	of Assets	31.03.2016	31.03.2015		ments			
1	Computer Softwares	40.00%	27020153.00	2244728.81	0.00	29264881.81	20426339.50	7461428.50	0.00	27887768.00	6593813.50	1377113.81
2	E-Journals	40.00%	4579423.00	20929420.19	0.00	25508843.19	1831769.00	10203537.00	0.00	12035306.00	2747654.00	13473537.19
3	Patents	11.11%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL ('C)		31,599,576.00	23,174,149.00	0.00	54,773,725.00	22,258,108.50	17,664,965.50	0.00	39,923,074.00	9,341,467.50	14,850,651.00
GRAND T	FOTAL (A+B+C)		1,462,792,067.71	412,846,780.95	65,923.00	1,875,572,925.66	186,243,765.00	75,468,057.50	0.00	261,711,822.50	1,276,548,302.71	1,613,861,103.16

SCHEDULES FORMING PART OF THE BALANCE SHEET Schedule- 4 B : NON PLAN

	ed Assets:										(Am	ount in Rs.)
				GROSS B	LOCK		А	CCUMULATED	DEPRICIAT	ION	NET B	LOCK
S.No.	Description of assets	Rate of Dep	Cost of Assets as on 01.04.2015	Addition During the year 2015-16	Disposal / Transfer of Assets	Closing Balance as on 31.03.2016	Depriciation upto 31.03.2015	Depreciation for 2015-16	Deductio ns/Adjust ments	Depriciation as on 31.03.2016	As on 31.03.2015	As on 31.03.2016
1	Land	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Site Development	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Building	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Roads & Bridges	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Tubewells & Water Supply	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Sewrage & Drainage	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Electrical Installation & Equipments	5.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Plant & Machinery	5.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Scientific & Laboratry Equipment	8.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Office Equipment	7.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Audio Visual Equipment	7.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Computer & Pheripharals	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Furniture Fixtures & Fittings	7.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Vehicles	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Library Books & Journals	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Sports Equipments	5.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL (A)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) Capit	al Work in Progress		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(C)Inteng	gible Assets:											
				GROSS B				CCUMULATED			NET B	
S.No.	Description of assets	Rate of Dep	Cost of Assets as on 01.04.2015	Addition During the vear 2015-16	Disposal / Transfer of Assets	Closing Balance as on 31.03.2016	Depriciation upto 31.03.2015	Depreciation for 2015-16	Deductio ns/Adjust ments	Depriciation as on 31.03.2016	As on 31.03.2015	As on 31.03.2016
1	Computer Softwares	40.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	E-Journals	40.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Patents	11.11%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL ('C)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRAND	TOTAL (A+B+C)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SCHEI	SCHEDULES FORMING PART OF THE BALANCE SHEET											
Schedu	Schedule- 4 C : INTENGIBLE ASSETS (Amount in Rs.)											
S.No.	Description of assets	Rate of	Cost of Assets	Addition	Disposal /	Closing	Depriciation	Depreciation	Deductio	Depriciation as	As on	As on
		Dep	as on	During the	Transfer	Balance as on	upto	for 2015-16	ns/Adjust	on 31.03.2016	31.03.2015	31.03.2016
			01.04.2015	year 2015-16	of Assets	31.03.2016	31.03.2015		ments			
1	Computer Softwares	40.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	E-Journals	40.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Patents	11.11%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SCHEI	DULES FORMING PART OF THE BALANCE SHEET									
Schedu	Schedule- 4 C (i) : PATIENTS & COPYRIGHTS (Amount in Rs.)									
S.No.	Particulars	Opening Balance	Addition	Gross		Amortization	NET BLOCK as on 31.03.2014	NET BLOCK as on 31.03.2015		
Α	Patients Granted									
1	Balance as on 31.03.2014 of Patients	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	Patents Granted during the year	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	TOTAL (A)	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
В	Patients Pending in respect of Patients Applied for									
1	Expenditure incurred during 2013-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	Expenditure incurred during 2014-15	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	TOTAL (B)	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	GRAND TOTAL (A+B)	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

SCHEDULES FORMING PART OF THE BALANCE SHEET Schedule- 4 D : OTHERS (A)Fixed Assets:

	ed Assets:										(An	ount in Rs.)
				GROSS B	LOCK		А	CCUMULATED	DEPRICIAT	ION	NET B	LOCK
S.No.	Description of assets	Rate of Dep	Cost of Assets as on 01.04.2015	Addition During the year 2015-16	Disposal / Transfer of Assets	Closing Balance as on 31.03.2016	Depriciation upto 31.03.2015	Depreciation for 2015-16	Deductio ns/Adjust ments	Depriciation as on 31.03.2016	As on 31.03.2015	As on 31.03.2016
1	Land	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Site Development	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Building	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Roads & Bridges	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Tubewells & Water Supply	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Sewrage & Drainage	2.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Electrical Installation & Equipments	5.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Plant & Machinery	5.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Scientific & Laboratry Equipment	8.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Office Equipment	7.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Audio Visual Equipment	7.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Computer & Pheripharals	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Furniture Fixtures & Fittings	7.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Vehicles	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Library Books & Journals	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Sports Equipments	5.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) Capit	al Work in Progress		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRAND	TOTAL (A+B)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SCHEDULES FORMING PART OF SCHEDULE- 5	F THE BALANCE S	SHEET				
INVESTMENT(FROM EARMARK	ED/ENDOWNMEN	,	(Amount in Rs.) As on 31.03.2015			
PARTICULAR	Curren		Previou			
FDR/Flexi(GPF)	64,525,229.00		57,202,705.00			
FDR/Flexi With SBI GCET Branch	7,803,644.00		71,581,963.90			
FDR with SBI (Poor Boys Fund)	1,082,766.00		984,945.00			
FDR with Canara Bank	163,318,203.00		225,000,000.00			
Flexi Deposit with Canara Bank	89,585,323.00	326,315,165.00	0.00	354,769,613.90		
TOTAL		326,315,165.00		354,769,613.90		
SCHEDULE- 6 INVESTMENT(OTHERS)				(Amount in Rs.)		
	As on 31.	03.2016	As on 31.	· /		
PARTICULAR	Curren	t Year	Previou			
FDR/Flexi Others	140,256,338.72	140,256,338.72	16,579,754.00	16,579,754.00		
TOTAL		140,256,338.72		16,579,754.00		
SCHEDULE- 7 CURRENT ASSETS				(Amount in Rs.)		
	As on 31.	03.2016	As on 31.			
PARTICULAR	Curren	t Year	Previou	s Year		
CASH BALANCE	<u>0.00</u>	0.00	134,025.00	134,025.00		
BANK BALANCE						
Canera Bank A/C No. 20996	782,040.02		2,102,353.02			
Non-Plan (saving) 30054181310	110,963,158.34		30,764,796.00			
SBI Bank A/c 30042955244	8,263,994.28		1,055,473.28			
SBI Bank A/c 31794300805	1,010,995.46		579,936.91			
GPF Banl A/c 31255750394	6,354.00		-301,649.00			
SBI Bank A/c 34930938504	50,595.00		0.00			
SBI Bank A/c 30007211525	-2,786,180.60	118,290,956.50	793,867.40	34,994,777.61		
TOTAL		118,290,956.50		35,128,802.61		
SCHEDULE- 8 LOANS, DEPOSITS, ADVANCES A	AND OTHER ASSF	TS		(Amount in Rs.)		
	As on 31.		As on 31.	(
PARTICULAR	Curren	t Year	Previous Year			
Advances to Employees		_				
Festival Advances	91,309.00		66,859.00			
Advance to Staff	1,477,729.00		799,582.00			
T A Advances	25,000.00		25,000.00			
LTC Advances	119,169.00		287,202.00			

GPF Advances	401,764.00		340,589.00	
Akhilesh Swarnkar	<u>0.00</u>	2,114,971.00	6040.00	1,525,272.00
Prepaid Expenses	_		_	
Deffered Library expenses	<u>1,861,938.00</u>	1,861,938.00	9,232,357.00	9,232,357.00
Deposits	_		_	
Earnest money deposited by NIT	3,159,079.00		1,354,835.00	1,354,835.00
Advanceds Others	42,000.00	3,201,079.00	_	
Income Accrued	_		_	
Interest Accrued	10,666,752.25		22,260,744.85	
Rent receivable	73,515.00		75,513.00	
Electricity and water ch receivable	5,125.00		5,125.00	
Testing Fees receivable	37,650.00		37,650.00	
Admission Fees Receivable	<u>6,267,920.00</u>	17,050,962.25	<u>620.00</u>	22,379,652.85
Other Current Assets		-	-	
MHRD Grant receivable	<u>0.00</u>	0.00	<u>100,000,000.00</u>	100,000,000.00
<u>Claims Receivables</u>				
TDS Receivable	475,992.00		363,069.00	
FDR received from party	5,359,434.00		5,044,967.00	
Service Tax(Cenvat Credit) Including Cess	540,703.53		1,254,949.10	
Service Tax(Cenvat Credit on Capital Goods) Including Cess	<u>2,446.00</u>	6,378,575.53	<u>40,820.00</u>	6,703,805.10
TOTAL		30,607,525.78		141,195,921.95

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS SCHEDULE- 9 FEES/SUBSCRIPTION FROM STUDENTS

(Amount in Rs.) As on 31.03.2016 As on 31.03.2015 PARTICULAR **Current Year Previous Year** ACADEMICS **Tuition Fees** 220,802,876.55 174,902,801.00 Library Fees 2,127,500.00 1,986,500.00 **Registration Fee** 1,032,250.00 223,962,626.55 993,250.00 177,882,551.00 **EXAMINATIONS** Annual Exam Fees 2,109,100.00 7,352,900.00 7,503,900.00 2,371,983.00 Exam fees 9,613,000.00 9,724,883.00 **OTHER FEES** Identity card Fee 112,200.00 109,600.00 Misc and other late Fees 2,680,677.00 3,380,784.91 Hostel Fees 7,228,945.00 7,699,055.00 Fine 81,113.00 10,102,935.00 119,392.00 11,308,831.91 SALE OF PUBLICATIONS Magazine fees 400,300.00 400,300.00 397,300.00 397,300.00 **OTHER ACADEMICS RECEIPTS** Sports fees 1,000,750.00 993,250.00 Internet Fee 1,200,900.00 1,191,900.00 1,787,850.00 Insurance Fee 1,848,150.00 Application and Registration Fee 547,350.00 678,850.00 Phd fees 0.00 1,547,400.00 **Registration Fees for** Workshop & Programmes 235,000.00 0.00 Souvneir 127,500.00 0.00 1,237,800.00 1,121,235.00 **Convocation Fee** Training & placement fees 1,000,750.00 7,198,200.00 993,250.00 8,313,735.00 251,277,061.55 207,627,300.91 TOTAL

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS
SCHEDULE- 10

GRANT/ SUBSIDIES (IRRECOVABLE GRANTS RECEIVED)

		Plar	1	Total	Non Plan	As on 31.03.2016	As on 31.03.2015
PARTICULAR	Govt.		UGC	Plan	MHRD, GOI		
	Of India	Plan	Specific Schemes			Current Year	Previous Year
Balance B/F	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add: Receipt during the year	0.00	0.00	0.00	0.00	240,000,000.00	240,000,000.00	40,000,000.00
TOTAL	0.00	0.00	0.00	0.00	240,000,000.00	240,000,000.00	40,000,000.00
Less: Refund to UGC	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balance	0.00	0.00	0.00	0.00	240,000,000.00	240,000,000.00	40,000,000.00
Less: Utilised for Capital Expenditure	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balance	0.00	0.00	0.00	0.00	240,000,000.00	240,000,000.00	40,000,000.00
Less: Utilised for Revenue Expenditure	0.00	0.00	0.00	0.00	240,000,000.00	240,000,000.00	40,000,000.00
Balance C/F	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS SCHEDULE- 11

INCOME FROM INVESTMEN		DOWMENT FUND		Amount in Rs.) /ESTMENTS	
PARTICULARS	As on 31.03.2016	As on 31.03.2015	As on 31.03.2016	As on 31.03.2015	
	Current Year	Previous Year	Current Year	Previous Year	
INTEREST					
On Government Securities	0.00	0.00	0.00	0.00	
Other Bonds/Debentures	0.00	0.00	0.00	0.00	
INTEREST ON TERM DEPOSITS					
Interest on FDR	0.00	0.00	19,834,432.40	29,429,145.85	
Interest on flexi deposit	0.00	0.00	12,427,896.00	4,361,045.00	
INTEREST ACCRUED BUT NOT DUE ON TERM DEPOSITS/					
INTEREST BEARINGS ADVANCES TO EMPLOYEES	0.00	0.00	0.00	0.00	
INTEREST ON SAVING BANK ACCOUNT					
Interest on Savings	0.00	0.00	0.00	0.00	
OTHER INCOME					
Interest on Security deposit	0.00	0.00	71,611.00	73,057.64	
Other Recd from Bank	0.00	0.00	38,791.00	4,563.00	
TOTAL	0.00	0.00	32,372,730.40	33,867,811.49	

INTEREST EARNED

PARTICULAR	As on 31.	03.2016	As on 31.03.2015 Previous Year			
TANTICULAR	Curren	t Year				
Interest on Savings	1,320,980.00	1,320,980.00	670,156.00	670,156.00		
ON LOANS						
Employees/Staff	0.00		0.00			
Others	0.00	0.00	0.00	0.00		
ON DEBTORS	0.00	0.00	0.00	0.00		
TOTAL		1,320,980.00		670,156.00		

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS SCHEDULE- 13

OTHER INCOME

	As on 31.	03.2016	As on 31.	03.2015
PARTICULAR	Current	t Year	Previous	s Year
Income From Land & Building	_	_		
Electric & water charges received	1,160,820.00		649,340.00	
House and other rent	522,951.00		486,618.00	
Guest house charges	55,500.00	1,739,271.00	30,500.00	1,166,458.00
Other Charges				
Tendor Form Sale	95,000.00		147,500.00	
Consultency Fee	4,964,902.00		9,269,021.75	
Testing Fee	2,067,809.50		3,184,388.50	
RTI Fees	4,871.00		1,483.00	
Misc received	608,507.00		439,130.00	
Recruitment Fees	433,350.00		663,656.00	
Interest on Income Tax Refund	0.00		63.00	
Donation/Sponsorship	1,494,600.00		1,861,804.00	
Project account-CEC	618,358.00		0.00	
Penalty Charges	1,017.00		29,368.00	
Deferred Income charged on account of Depriciation	75,468,057.50	85,756,472.00	<u>62,830,784.00</u>	78,427,198.25
TOTAL		87,495,743.00		79,593,656.25

PRIOR PERIOD INCOME

	(Amou						
	As on 31	.03.2016	As on 3	As on 31.03.2015			
PARTICULAR	Curren	nt Year	Previo	us Year			
Academic Receipts	0.00		0.00				
Income from Investments	0.00		0.00				
Interest Earned	0.00		0.00				
Other Income	<u>0.00</u>	0.00	<u>0.00</u>	0.00			
TOTAL		0.00		0.00			

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS

SCHEDULE-15

STAFF & PAYMENTS (ESTABLISHMENT EXPENSES)

(Amount in Rs.) As on 31.03.2015 As on 31.03.2016 Non Plan Total Non Plan Total PARTICULAR Plan Plan 0.00 70,751,463.00 70,751,463.00 71,960,036.00 71,960,036.00 Contract Salary and Daily wages 0.00 0.00 191,292,188.00 191,292,188.00 0.00 162,457,279.00 162,457,279.00 Salary-regular staff DA Arrears 1,777,713.00 0.00 2,580,149.00 2,580,149.00 0.00 1,777,713.00 0.00 1,100,590.00 0.00 Pay Arrears 1,100,590.00 577,441.00 577,441.00 Children education Reimbursement 2,004,989.00 1,952,078.00 0.00 2,004,989.00 0.00 1,952,078.00 Director Leave salary remittance 0.00 99,000.00 99,000.00 0.00 99,000.00 99,000.00 **Director Pension remittance** 0.00 185,808.00 185,808.00 0.00 185,808.00 185,808.00 PF 0.00 2,836,292.00 2,836,292.00 3,115,550.00 3,115,550.00 0.00 3,651,287.00 LTC expenses 0.00 3,651,287.00 0.00 2,468,108.00 2,468,108.00 DPF 0.00 0.00 48,600.00 4.050.00 4,050.00 48.600.00 Interest on GPF 0.00 12,741.00 12,741.00 0.00 0.00 0.00 0.00 0.00 Interest on Gratuity 0.00 2,643.00 2,643.00 0.00 0.00 81,500.00 0.00 85,700.00 85,700.00 Faculty association Raipur 81,500.00 Medical Reimbursement/Expenses/ Dispensary 0.00 2,051,327.00 2,051,327.00 0.00 2,177,575.00 2,177,575.00 Family Planning Allowance 0.00 9.310.00 9,310.00 0.00 0.00 0.00 0.00 0.00 753,094.00 753,094.00 Bonus 720,262.00 720,262.00 FBF and GIS 165,750.00 174,840.00 0.00 165,750.00 0.00 174,840.00 8,057,863.00 8,057,863.00 6,197,356.00 6,197,356.00 Pension 0.00 0.00 **Commuted Pension** 470,401.00 470,401.00 0.00 0.00 0.00 0.00

NPS Contribution of Employee	0.00	10,227,663.00	10,227,663.00	0.00	7,637,354.00	7,637,354.00
Overtime Allowance/ Pay	0.00	35,250.00	35,250.00	0.00	0.00	0.00
Leave Encashment	0.00	535,773.00	535,773.00	0.00	840,169.00	840,169.00
CPDA expenses	0.00	3,596,890.00	3,596,890.00	0.00	11,406,110.00	11,406,110.00
GLIS	0.00	418,200.00	418,200.00	0.00	393,900.00	393,900.00
Retirement Benefits (Schedule 15A)	0.00	23,460,008.00	23,460,008.00	0.00	17,605,289.00	17,605,289.00
NPS Contribution by NIT						
GPF/GIS Director salary						
Gratuity for employees						
Leave for employee						
TOTAL	0.00	324,630,655.00	324,630,655.00	0.00	291,633,742.00	291,633,742.00

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS SCHEDULE- 15 A EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

EWIPLOYEES RETIREVIENT AND TERVITNAL BENEFITS (Amount in Rs.)					
PARTICULAR	GRATUITY	LEAVE ENCASHMENT	TOTAL		
Opening Balance as on 01.04.2014	48,449,187.00	53,501,692.00	101,950,879.00		
Add: Capitalize value of Contributions received from other organizations	0.00	0.00	0.00		
Total (A	48,449,187.00	53,501,692.00	101,950,879.00		
Less: Actual Payment During the Year (B)	1,713,328.00	327,299.00	2,040,627.00		
Balance Available of 31.03.2015 (C=A-B)	46,735,859.00	53,174,393.00	99,910,252.00		
Provision Required on 31.03.2015(D)	50,184,085.00	62,598,512.00	112,782,597.00		
1. Provision to be made in Current Year(D-C)	3,448,226.00	9,424,119.00	12,872,345.00		
2. Contribution to NPS			10,227,663.00		
3. Medical Reimbursemsnt to Retired Employees			0.00		
4. Travel to Home Town on Retirement			0.00		
5. Deposit linked Insurance Payment			360,000.00		
TOTAL (1+2+3+4+5)		23,460,008.00		

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS SCHEDULE- 16

ACADEMIC EXPENSES

PARTICULAR		As on 31.03.20	16	As on 31.03.2015			
TARTICULAR	Plan Non Plan		Total	Plan	Non Plan	Total	
AICTE and other exam remuneration to							
staff	0.00	1,776,604.00	1,776,604.00	0.00	2,474,341.00	2,474,341.00	
Exam department Expenses	0.00	1,394,045.13	1,394,045.13	0.00	1,472,264.00	1,472,264.00	
Scholorship expenses	0.00	41,904,234.00	41,904,234.00	0.00	23,907,622.00	23,907,622.00	
Hostel electricity	0.00	209,170.00	209,170.00	0.00	661,340.00	661,340.00	
Convocation expenses	0.00	2,100,522.34	2,100,522.34	0.00	2,053,118.00	2,053,118.00	
Functions & activities expenses	0.00	5,547,786.83	5,547,786.83	0.00	3,749,375.26	3,749,375.26	
Library Expenses	0.00	9,981,118.01	9,981,118.01	0.00	11,080,502.00	11,080,502.00	
Newspaper & Periodicals	0.00	92,158.00	92,158.00	0.00	30,777.00	30,777.00	
Hostel Maintenance	0.00	0.00	0.00	0.00	29,768.00	29,768.00	
Computer consumable expenses	0.00	2,398,719.08	2,398,719.08	0.00	1,150,444.00	1,150,444.00	
Department/lab consumable expenses	0.00	2,977,216.69	2,977,216.69	0.00	3,592,377.00	3,592,377.00	
Sports, Yoga and other activity	0.00	953,623.00	953,623.00	0.00	854,651.00	854,651.00	
Student safety insurance	0.00	1,850,850.00	1,850,850.00	0.00	1,827,900.00	1,827,900.00	
Training & placement expenses	0.00	549,434.50	549,434.50	0.00	438,816.00	438,816.00	
Virtual classroom expenses	0.00	5,868.00	5,868.00	0.00	711.00	711.00	
Collage Magzine	0.00	478,000.00	478,000.00	0.00	240,136.00	240,136.00	
Other Exp. for							
Seminar/Conference/Workshop	0.00	450,471.00	450,471.00	0.00	0.00	0.00	
Departmental Academic Audit Expenses	0.00	79,658.57	79,658.57	0.00	780,124.00	780,124.00	
CEC Expenditure	0.00	612,248.00	612,248.00	0.00	239,943.00	239,943.00	
Repair and maintainance							
instrument/equipments	0.00	819,871.64	819,871.64	0.00	677,428.00	677,428.00	
Departmental Misc. Exps.	0.00	754,415.00	754,415.00	0.00	33,674.00	33,674.00	
Department stationary expenses	0.00	502,290.00	502,290.00	0.00	715,136.00	715,136.00	
	0.00	75,438,303.79	75,438,303.79	0.00	56,010,447.26	56,010,447.26	

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS

SCHEDULE- 17

ADMINISTRATIVE EXPENSES

		As on 31.03.20	16	As on 31.03.2015		
PARTICULAR	Plan	Non Plan	Total	Plan	Non Plan	Total
INFRASTRUCTURE						
Water, Electricity & Telephone charges	0.00	18,803,256.93	18,803,256.93	0.00	15,717,638.64	15,717,638.64
COMMUNICATION						
Postage & stamp Expenses	0.00	120,000.00	120,000.00	0.00	210,000.00	210,000.00
OTHERS						
Advertisement	0.00	1,005,916.09	1,005,916.09	0.00	501,910.00	501,910.00
Audit expenses	0.00	557,067.00	557,067.00	0.00	62,930.00	62,930.00
BOG/Finance/HODs/Deans/ etc meeting						
expenses	0.00	266,229.60	266,229.60	0.00	1,097,877.00	1,097,877.00
Computer consumable expenses	0.00	67,748.00	67,748.00	0.00	280,665.00	280,665.00
Consultency and Legal Expenses	0.00	528,500.00	528,500.00	0.00	582,500.00	582,500.00
Conveyence expenses	0.00	4,815.00	4,815.00	0.00	5,885.00	5,885.00
Honorarium expenses	0.00	296,301.00	296,301.00	0.00	262,986.00	262,986.00
Internet charges and Web maintainance	0.00	1,573,104.65	1,573,104.65	0.00	1,310,000.00	1,310,000.00
Miscellaneous expenses	0.00	111,683.50	111,683.50	0.00	67,558.00	67,558.00
NIT Transit house contribution	0.00	250,000.00	250,000.00	0.00	250,000.00	250,000.00
Office upkeep expenses	0.00	912,779.00	912,779.00	0.00	201,263.00	201,263.00
Printing & Stationery charges	0.00	130,970.00	130,970.00	0.00	1,176,022.00	1,176,022.00
Prize Money	0.00	0.00	0.00	0.00	13,000.00	13,000.00
Recruitment expenses	0.00	1,079,472.20	1,079,472.20	0.00	1,277,036.00	1,277,036.00
Registration Charges	0.00	0.00	0.00	0.00	15,000.00	15,000.00
Refreshment, Food & Tea Expenses	0.00	10,402.24	10,402.24	0.00	0.00	0.00
Security Charges	0.00	21,861,297.00	21,861,297.00	0.00	10,905,373.00	10,905,373.00
Statutory expenses	0.00	41,118.29	41,118.29	0.00	30,620.00	30,620.00
TDS 0809	0.00	0.00	0.00	0.00	54,850.00	54,850.00
Testing and Consultancy Remuneration &						
expenses	0.00	0.00	0.00	0.00	108,781.00	108,781.00
TOTAL	0.00	47,620,660.50	47,620,660.50	0.00	34,131,894.64	34,131,894.64

SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNTS SCHEDULE- 18

TRANSPORTATION EXPENSES

As on 31.03.2016 As on 31.03.2015 PARTICULAR Plan Non Plan Total Plan Non Plan Total **VEHICLE OWNED BY INSTITUIONS** Vehicle Repairs and Maintainance 0.00 157,475.62 157,475.62 0.00 157.826.00 157,826.00 0.00 97,493.56 97,493.56 0.00 94,117.00 Insurance charges 94,117.00 Fuel charges 0.00 295,372.00 295,372.00 0.00 341,732.00 341,732.00 **VEHICLE TAKEN ON RENT/LEASE Rent/Lease** Expenses 0.00 0.00 0.00 0.00 0.00 0.00 **VEHICLE (TAXI) HIRING EXPENSES** Travelling and Hotel expenses 0.00 2.446.180.36 2,446,180,36 0.00 1.057.572.52 1,057,572.52 TOTAL 0.00 2.996.521.54 2.996.521.54 0.00 1.651.247.52 1,651,247.52 SCHEDULE- 19 **REPAIR & MAINTENANCE** (Amount in Rs.) As on 31.03.2015 As on 31.03.2016 PARTICULAR Plan Non Plan Total Plan Non Plan Total 454,283.34 454,283.34 157,258.00 157,258.00 0.00 Guest house expenses 0.00 Gardning & Horticulture 0.00 3.335.00 3.335.00 44.292.00 44,292,00 0.00 Electrical maintainance 0.00 553.412.00 553.412.00 0.00 916.612.00 916.612.00 Repair & Maintenance to College Building 275,442.00 275,442.00 0.00 1,108,201.00 1,108,201.00 0.00 Repair & Maintenance to Furniture 24,300.00 0.00 217.648.00 217.648.00 0.00 24.300.00 0.00 6,000.00 6,000.00 0.00 0.00 0.00 Labour Charges Repair & Maintenance to Hostel Building 0.00 321,104.00 396,475.00 396,475.00 321.104.00 0.00 333,320.00 Repair & Maintenance to Staff Ouarters 0.00 117.688.00 117.688.00 0.00 333.320.00 0.00 Sanitary/cleaning Expenses 161,873.24 161,873.24 0.00 211,883.61 211,883.61 TOTAL 0.00 2.110.785.58 2.110.785.58 0.00 3.192.341.61 3.192.341.61

SCHEDULE- 20 FINANCE COSTS						(Amount in Rs.)	
PARTICULAR		As on 31.03.20	16		As on 31.03	.2015	
FARIICULAR	Plan	Non Plan	Total	Plan	Non Plan	Total	
Bank Charges	0.00	53,254.91	53,254.91	0.00	48,378.00	48,378.00	
Others	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	0.00	53,254.91	53,254.91	0.00	48,378.00	48,378.00	
SCHEDULES FORMING PART OF I SCHEDULE- 21 OTHER EXPENSES		ENDITURE ACCO	<u>JUNIS</u>			(Amount in Rs.)	
PARTICULAR		As on 31.03.20	16		As on 31.03	.2015	
TAKIICULAK	Plan	Non Plan	Total	Plan	Non Plan	Total	
Provision for Bad & Doubtful							
Debts/Advances	0.00	0.00	0.00	0.00	0.00	0.00	
Irrecoverable Balance Write off	0.00	0.00	0.00	0.00	0.00	0.00	
Grants/Subsidies to Other Institutes	0.00	0.00	0.00	0.00	0.00	0.00	
Others	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	
SCHEDULE- 22 PRIOR PERIOD EXPENSES		As on 31.03.20	16		As on 31.03	(Amount in Rs.)	
PARTICULAR	Plan	Non Plan	Total	Plan	Non Plan	Total	
Establishment Expenses	0.00	0.00	0.00	0.00	0.00	0.00	
Academic Expenses	0.00	0.00	0.00	0.00	0.00	0.00	
Administrative Expenses	0.00	0.00	0.00	0.00	0.00	0.00	
Transportation Expenses	0.00	0.00	0.00	0.00	0.00	0.00	
Repair & Maintances	0.00	0.00	0.00	0.00	0.00	0.00	
Others Expenses	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	

SCHEDULE - "23" SIGNIFICANT ACCOUNTING POLICIES AND NOTES TO ACCOUNTS :

A. INSTITUTE OVERVIEW :

The National institute of Technology, Raipur was established by an Act of Parliament called "The National Institute of Technology Act 2007", now known as "The National Institute of Technology, Science, Education & Research Act 2007" as an 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 "The National Institute of Technology, Science, Education & Research Act 2007". As per MHRD, GOI Letter No. 29-4/2012-IFD DT 17.04.2015 the accounts of the Institute is prepared in Revised formats of accounts of Central Educational Institutions.

The accounts of the Institute are prepared under Historical Cost convention and in accordance with applicable accounting standards, except where otherwise stated.

2. <u>REVENUE RECOGNITION :</u>

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.

3. FIXED ASSETS & DEPRECIATION

- 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 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.
- v. The MHRD, GOI has directed that the Annual Accounts shall be presented in the modified format applicable to Central Educational Institutions. As per this format depreciation is

required to be charged on fixed assets on SLM(Straight line method) method as prescribed in the said format (Letter No. 29-4/2012-IFD DT 17.04.2015). The Prescribed Rate of Depreciation are as under:

S.No.	Particulars	Rate of Depreciation
1	Land	0.00%
2	Site Development	0.00%
3	Building	2.00%
4	Roads & Bridges	2.00%
5	Tubewells & Water Supply	2.00%
6	Sewrage & Drainage	2.00%
7	Electrical Installation & Equipments	5.00%
8	Plant & Machinery	5.00%
9	Scientific & Laboratry Equipment	8.00%
10	Office Equipment	7.50%
11	Audio Visual Equipment	7.50%
12	Computer & Pheripharals	20.00%
13	Furniture Fixtures & Fittings	7.50%
14	Vehicles	10.00%
15	Library Books & Journals	10.00%
16	Sports Equipments	5.00%
17	Computer Softwares	40.00%
18	E-Journals	40.00%
19	Patents	9 Years

vi. Full cost of all small and low value assets, each costing Rs.5000/- or less under Fixed assets are taken as assets and fully depreciated in the year in which the assets are put to use.

4. INTANGIBLE ASSETS

E Journals & Computer softwares are grouped under Intangible assets.

- i. Electronic Journals (E-Journals) are separated from Library Books in view of the limited benefit that could be derived from the on-line access provided. E-Journals are not in tangible form, but temporarily capatilized and in view of the magnitude of expenditure and the benfit derived in terms of perpetual knowledge acquired by the academic & research staff.
- ii. Expenditure on acquisition of saoftware has been separated from computers & peripherals, as part from being intangible assets.

5. <u>INVENTORY</u>

Cost of Consumables are charged to income and expenditure account as and when purchased, as the total expenditure on Consumables comprises of very minor share. 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.

6. <u>EMPLOYEES RETIREMENT BENEFIT</u>

- 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.

7. <u>INVESTMENTS</u>

- 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.
- iii. Current Investments are stated at lower of cost and fair value.

8. 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 depriciable 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 depriciation 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 depriciable Assets are treated as "capital reserve".
- v. Grants from MHRD, GOI are accounted on realisation basis. However, where a sanction for release of grants pertaining to the F.Y. is received before 31st March & the grant is actually received in the next F.Y., the grant is accoounted on accrual basis & equal amount is shown as MHRD Grant Recevable.

9. <u>INCOME TAX</u>

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

10. 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.

11. 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.

12. CASH AND CASH EQUIVALENT

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

13. <u>USE OF ESTIMATES:</u>

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.

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. 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 "3" CURRENT LIABILITIES AND PROVISION amounted to Rs. 53,41,016.89.

2. <u>DEPRICIATION ON FIXED ASSETS IN 2014-15:</u>

Depreciation on Fixed Assets purchased in 2015-16 has been calculated as prescribed in common format of Accounting and charged to Income and Expenditure account by Rs. 7,54,68,057.50. The same amount is recognized in Income and expenditure account in Schedule 13 under the head "Other Income" by corresponding debit to Deffered Government Grant.

3. <u>GPF (CORPUS) - SCHEDULE C</u>

- i. The Institute has provided interest on GPF fund balance for the year 2015-16.
- ii. The GPF corpus fund is invested in fixed deposits till the statutory formalities are not completed.

4. <u>RETIREMENT BENEFITS</u>

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

1. Defined Contribution Plans

Following amount has been recognized in Profit & Loss Account

(Amount in

KS.)		
PARTICULARS	As on 31.03.2016	As on 31.03.2015
Employers Contribution to New	10,227,663.00	7,637,354.00
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.

5. 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.

- 6. The shortfall of Interest on GPF amounting to Rs.12,741.00 during the reported period due to difference in statutory rate on GPF declared by Government of India and Interest earned on invested fund of GPF has been recouped by the institute.
- 7. Corresponding figures for the previous year have been regrouped/rearranged.
- **8.** 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.

9. Schedules 1 to 22 are annexed to and form an integral part of the Balance Sheet as at 31.03.2016 and the Income and Expenditure account for the year ended on that date.

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR (C.G.)



RECEIPTS & PAYMENTS ACCOUNT FINANCIAL YEAR 2015-16

FINANCIAL STATEMENT AS ON 31ST MARCH, 2016

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR RECEIPTS & PAYMENTS A/C FOR THE YEAR ENDING 31.03.2016

				(Amount in `)			
Receipts	Current Year	Previous Year	Payments	Current Year	Previous Year		
Opening Balance	_		Expenses	428,794,733.62	350,746,374.87		
CASH BALANCE	134,025.00	81,140.00	Establishment expenses	323,089,871.00	266,881,951.00		
BANK BALANCE	34,994,777.61	18,994,443.10	Academic expenses	64,552,060.50	25,778,125.00		
Canara Bank A/C No. 20996	2,102,353.02	15,232,319.42	Administrative expenses	36,665,390.00	53,676,851.26		
Non-Plan (Saving) 30054181310	30,764,796.00	77,920.00	Transportation expenses	2,516,521.54	1,366,342.00		
SBI Bank A/c. No. 30042955244	1,055,473.28	1,234,561.28	Repairs & Maintainence expenses	1,970,890.58	3,043,105.61		
SBI Bank A/c. No. 31794300805	579,936.91	64,029.00	Prior Period expenses	0.00	0.00		
GPF Banl A/c. No. 31255750394	-301,649.00	340,064.00					
SBI Bank A/c. No. 30007211525	793,867.40	2,045,549.40	Payments against Earmarked/Endowment Fund	6,862,205.00	7,501,817.00		
Grant Received	610,000,000.00	202,500,000.00	Payments Against Sponsored Projects/ Schemes	12,042,153.00	50,584,043.00		
Non Plan From MHRD, GOI	240,000,000.00	40,000,000.00			, ,		
Plan From MHRD, GOI	370,000,000.00	162,500,000.00					
			Payments Against Sponsered Fellowship & Scholorships	47,280,690.00	6,265,224.00		
Academics Receipts	245,009,141.55	207,081,936.91					
			Investments & Deposits made	882,167,659.59	426,970,000.00		
Receipts against Earmarked/Endowment Fund	39,109.00	56,242.00					
			Term Deposits with Scheduled Banks	163,318,203.00	150,000,000.00		
Receipts Against Sponsored Projects/ Schemes	27,664,902.00	12,059,293.00					
			Expenditure on Fixed Assets & Capital WIP	392,352,370.95	264,623,620.00		
Receipts Against Sponsered Fellowship & Scholorships	6,325,268.00	6,821,355.00	Fixed Assets	95,174,163.95	137,516,025.00		
			Capital WIP	297,178,207.00	127,107,595.00		
Income on Investments	2,247,385.00	2,430,797.00					
	0.047.005.00	2 420 707 00	Other Payments Including	10.055.005.00	26 000 544 12		
Earmarked/Endowment Funds	<u>2,247,385.00</u>	2,430,797.00	Statutory Payments	10,855,887.00	26,880,544.13		
Other Investments	<u>0.00</u>	<u>0.00</u>		0.00	0.00		
			Refund of Grants	0.00	0.00		
Interest Received	25,154,621.00	47,027,705.00		15 154 250 00	22 2 (5 02 4 00		
Bank Deposits	23,833,641.00	46,235,034.00	Deposits & Advances	17,154,279.00	23,265,824.00		
Saving Bank Accounts	<u>1,320,980.00</u>	792,671.00		1 405 200 00	2 025 212 00		
			Other Payments	1,497,380.00	2,927,313.00		
			<u>Closing Balances</u>				
Term Deposits with Scheduled Banks Encashed	156,530,240.00	354,237,514.00	CASH BALANCE	0.00	134,025.00		
Danky Encasited	100,000,210,000	201,207,017.00	BANK BALANCE	118,290,956,50	34,994,777.61		
Other Income	10,266,582.50	25,074,468.50	Canara Bank A/c. No. 20996	782.040.02	2,102,353.02		
Stati Intoint	10,200,002.00	_0,07 1,100.00	Non-Plan (Saving) 30054181310	110,963,158.34	30,764,796.00		
Deposits & Advances	15,812,982.00	13,337,044.90	SBI Bank A/c. No. 30042955244	8,263,994.28	1,055,473.28		
	10,011,701.00	10,007,011.90	SBI Bank A/c. No. 31794300805	1,010,995.46	579,936.91		
Misc. Receipts Including Statutory			222 2000 120 110 2177 100000	-,,	277,700.71		
Receipts	4,386,683.00	8,457,560.00	GPF Bank A/c. No. 31255750394	6,354.00	-301,649.00		
			SBI Bank A/c. No. 30007211525	-2,786,180.60	793,867.40		
Other Receipts	3,494,600.00	7,838,367.60	SBI Bank A/c. No. 34930938504	<u>50595.00</u>	<u>0.00</u>		
TOTAL	2,080,616,517.66	1,344,893,562.61	TOTAL	2,080,616,517.66	1,344,893,562.61		

Registrar, NIT Raipur BOG **Director, NIT Raipur**

Chairman,

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