



**ANNUAL
REPORT | 2015-16**



NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY

A Centrally Funded Technical Institute Under MHRD (Govt. of India)

Hatia, Ranchi - 834003 (Jharkhand), India

GLIMPSE OF GOLDEN MOMENTS



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VISION & MISSION

VISION

"Accomplishing Excellence in the Technical Education and act as repository and leader for disseminating state-of-the art knowledge and expertise in the field of Materials Technology and other Relevant / Emerging Branches of Engineering and Technology Concomitant with industrial growth of the nation; at the same time maintaining and further strengthening its position as a leader in the areas of Foundry Technology and Forge Technology"

MISSION

Commensurate with the vision to meet the challenges of Rapidly Changing Economic and Technological Scenario in the field in India And Abroad Vis-À-Vis Providing/Adopting :-

- Augmented Intellectual and Physical Infrastructure
- Highly Flexible and Updated Academic Curricula for undergraduate, post graduate and doctoral programmes
- Continuing Education with latest technical know-how
- Consultancy and Technical Services
- R&D Packages and Indigenization of Technology
- Documentation, Information Retrieval Services and Computer Networking
- Collaboration with National and International Industries/Universities/Institutions
- Human Resource Development
- Internal Resource Generation Towards Self Sufficiency





EXECUTIVE SUMMARY

National Institute of Foundry and Forge Technology (NIFFT) was established in 1966 to meet the demand of trained manpower in the capital goods manufacturing sectors. The forward looking academic endeavor, pursued over the years, has evolved a four tier framework in NIFFT involving Advanced Diploma, B Tech, M Tech and Doctoral program with a balanced emphasis on training, education and research.

In recent times, the Institute has continued to build on and expand its academic activities in the allied domains of Manufacturing Technology with a particular focus on Foundry and Forge Technology.

During 2015-16, the institute has continued all the regular activities. The meetings of the regulatory bodies have been held at normal intervals. The academic activities like organizing classes, conducting admissions, examinations etc., have been taken place following the respective schedules.

As the metal capital goods manufacturing sector fits best in the 'Make in India' endeavor, NIFFT is poised to evolve the pathway of Manpower And Knowledge Enhancement (MAKE) with a synergy of computational science and manufacturing technology. The efforts of the Institute has been immensely encouraged by the initiative of Ministry of Human Resource Development (MHRD), Government of India towards the upgrade of the existing capacity of the Institute to the level of the Centre of Excellence in Advanced Manufacturing Technology of international standard. MHRD has constituted a committee under the Chairmanship of Shri Baba Kalyani, Chairman and Managing Director of Bharat Forge Limited, to review the functioning of NIFFT. In pursuance to the advice of committee, the Institute has conducted extensive interaction with various Technical Institutes of Repute in India and Abroad to augment the understanding in the areas of contemporary and futuristic manufacturing and material education in the global scenario. The faculty members of NIFFT have visited the following reputed institutions in Germany and UK during 2015-16:

- School of Metallurgy and Materials, University of Birmingham, UK
- Warwick Manufacturing Group, Warwick University, UK
- Department of Materials Science and Engineering, University of Sheffield, UK
- Institute of Metal Forming and Foundry Institute, Freiberg, Germany
- Institute of Metal Forming and Foundry Institute, University of Aachen, Germany

The members have identified the following common areas of emphasis in education and research, pursued by the aforesaid institutes :

- Design and development of novel/hybrid materials and process
- Design for reduced materials and energy consumption
- Disruptive and non-conventional processes.
- Optimization of materials and process variables
- Net shape manufacturing
- Accelerated metallurgy



- First time right products
- Development of state of the art facilities in additive manufacturing
- Adopting rapid convergence of computer and manufacturing engineering
- Development of modeling, simulation and experimental facilities at reliable scale ratio to the industrial practice
- Development of centers for seamless partnership with industries in creation and sharing of knowledge and facilities
- Clean and green laboratory and workshop practice
- In view of the interactions with the experts engaged in academic institutes and industry in India and abroad, the following initiatives have been launched and are being pursued rigorously:
- Manufacturing technology and Metallurgical and Materials Engineering, with particular focus on Foundry and Forge technology, have been identified as the academic interest of the Institute
- B Tech course on Mechanical Engineering will commence from the session of 2017-18.
- Process for obtaining AICTE approval and NBA accreditation of courses in the session 2016-17 is in progress.
- Identification of the non-functioning and obsolete equipments by the expert committee has been completed. Removal of such equipments in adherence with the stipulated regulation is in progress.
- A Comprehensive renovation project of academic and residential infrastructure is in progress.
- Architectural design and budget of new constructions (*laboratory, workshop, library, auditorium and guest house*) with estimated cost of ~Rs. 110crore have been completed.
- Specifications for equipments to create modern workshop and laboratories have already been finalized by the committees comprising eminent experts from academia, industries and research organizations.

At this momentous juncture of its Golden Jubilee year, NIFFT reaffirms its commitment to the development of skill and knowledge for the paradigm shift in manufacturing sector envisioned by our nation.



NIFFT – AN OVERVIEW

National Institute of Foundry and Forge Technology (NIFFT), Ranchi, was established in 1966 by the government of India in collaboration with UNDP-UNESCO. It is registered as a society under the societies registration Act of 1860. The management of the Institute is vested with board of governors with chairman as its apex and members drawn from All India Council of Technical Education (AICTE), Ministry of Human Resource and Development (MHRD), private and public Enterprises, technical and R & D institutions.

Since its inception, NIFFT has been looked upon by the public sector and industry to provide qualified engineers and well trained specialists in the field of foundry technology, forge technology and other allied manufacturing areas. The institute has earned reputation as a leading institute for imparting technical education and organizing teaching and training programmes in these engineering disciplines. The Institute has also been tenaciously and meticulously conducting, Industrial research, design and development work in the relevant areas and providing consultancy and documentation services to the industries all over the country and abroad.

ACADEMIC PROGRAMMES :

NIFFT has five academic departments namely :

- Department of Foundry Technology
- Department of Forge Technology
- Department of Manufacturing Engineering
- Department of Materials and Metallurgical Engineering
- Department of Applied Sciences and Humanities.

The Institute offers the following regular programmes :

RESEARCH LEVEL :

- Post Doctoral Programme
- Doctoral Programme

POST GRADUATION LEVEL (MASTER OF TECHNOLOGY (M.TECH.) :

- M.Tech in Foundry-Forge Technology
- M.Tech in Manufacturing Engineering
- M.Tech in Environmental Engineering
- M.Tech in Materials Science and Engineering

UNDERGRADUATE LEVEL (BACHELOR OF TECHNOLOGY (B.TECH.) :

- B.Tech in Manufacturing Engineering
- B.Tech course in Metallurgy and Materials Engineering



ADVANCE DIPLOMA LEVEL (ADVANCED DIPLOMA COURSE (ADC) :

- ADC in Foundry Technology
- ADC in Forge Technology

All the academic programmes have been accredited by the National Board of accreditation (NBA), AICTE, New Delhi. Students are selected for admission through All India Engineering Entrance Examination (conducted by CBSE all over India) for B.Tech. courses; through GATE score and interview for M.Tech courses; through written examination conducted by NIFFT for advanced diploma courses; and through written test/ interview for doctoral and post doctoral programmes.

The Institute is affiliated to Ranchi University for the award of research level, under graduate and post graduate degrees. Advanced Diploma is awarded by the Institute itself.

CONTINUING EDUCATION :

Continuing education at all levels such as part time research programmes, refresher and special courses in established and emerging practices for industry personal is one of the most important activities of the institute contributing towards the development of society.

The programmes are usually of 1-2 weeks duration offering a wide range of topics covering foundry and forge technology, pollution control, energy conservation and management, manufacturing processes, materials characterization and other fields of industrial importance.

The activities also include unit based programmes of short term duration on request from the industries or organizations as per their need either at their premises or at the institute.

The institute also has a privilege of imparting training to people from other developing countries of South-East Asia and Africa. Students from countries like Burma, Sri Lanka and Nigeria have undergone training at institute in the past. The institute has also conducted unit based programmes in Foundry Technology for Nepalese and Sri Lankan engineers.

RESEARCH ACTIVITIES :

One of the main objectives of the institute is to carry out industrial research and development work in foundry, forge and associated scientific and engineering fields. All infrastructural facilities exist in the institute for carrying out research activities. R&D programmes cover areas like pattern design and manufacture, sand system design, melting, methoding of castings, forging process simulation, die life estimation, evaluation of lubricants, CAD & CAM of casting and forging, failure analysis, environment & pollution control, metal matrix composites and powder metallurgy forging. Most of the faculty members are holding Ph.D. The faculty members continuously participate in various seminars/symposia/conferences to present their research works. Many research papers are also published in different national and international journals of repute.

CONSULTANCY SERVICES :

The institute provides consultancy services to the industries in the field of foundry, forge and allied fields. Consultancy services are extended in the form of preparation of feasibility



reports, preparation and execution of technical projects, selection and evaluation of equipment and machinery, testing of raw materials and quality control of products.

EXPERIMENTAL AND TESTING FACILITIES :

The institute has well equipped laboratories and workshop for carrying out practical study work by the students and for extending testing facilities pertaining to foundry, forge, metallurgical analysis and materials characterization to the outside organizations on payment basis. Some of the important facilities are listed as follows:

Department	Facilities
Foundry Technology	Cupola furnace (1.5 tonnes per hour), Crucible furnace (2 nos., 50 Kg each), Electric arc furnace (20 Kg), Skelener furnace (15Kg Aluminum), Induction furnace (100Kg), Electric pit furnace (5Kg Al), Pressure die casting machine (60 tonne), Online carbon silicon analyzer & Thermal analysis system, Complete sand plant (Pioneer), Sand mullers, Jolt and squeeze moulding machine, Shell moulding machine, permeability meter, compressive strength tester, mould hardness tester
Forge Technology	Friction hammer (750Kg), Hydraulic press (150 tonnes), Pneumatic power hammer (50Kg, 150Kg, & 250Kg), 120 tone trimming press, 1" multi forge upsetter, laboratory rolling mill, carbolite furnace, oil fired billet heating furnace, Tensometer, Forging screw press, Ball mill
Materials and Metallurgical Engineering	Servo hydraulic dynamic testing machine, Thermal analyzer, Scanning electron microscope, X-ray diffractometer, Impact testing machine, In situ metallographic equipment, Universal testing machine, Metallography image analyzer, Portable X-ray fluorescence FIM, Magnetic crack detector, Induction heating machine, High temperature muffle furnace, Ultrasonic flow detector, Fluorescent penetration inspection equipment.
Manufacturing Engineering	Well equipped Pattern and Machine shops, Profile projector, Laser micrometer, Layout measuring cum marking machine, Auto collimator, Surface roughness testing machine and form tester, Shielded metal arc welding machine, TIG welding attachment, MIG welding machine, Submerged arc welding machine, Spot welding machine, Plasma arc cutting machine, Oxy acetylene cutting machine, Spray coating unit, CAD/CAM and FMS laboratory having 4-axis CNC machine, CNC lathe, Robot (Linear slide base)
Applied Sciences and Humanities	Classical chemical analysis, Optical emission spectrometer, Orion iron meter, Atomic absorption spectrometer, Photovac air analyzer, Nano pure water system, Automatic particulate matter detector, Vacuum coating unit with electron beam evaporation, Scanning potentiostat/Galvanostat, Electrical & Electronics Laboratory, Modern Language Laboratory & Communication centre.



ACADEMIC ACHIEVEMENTS BY THE STUDENTS :

Following students have been awarded Gold Medal by Ranchi University during the 30th convocation of the University:-

Name of the students	Course	Branch	Batch
Mr.Koylaudi Kiran Babu	B.Tech	Manufacturing Engineering	2010-2014
Ms. Malireddi Sameera	B.Tech	Metallurgy and Materials Engineering	2011-2015
Mr. Jyotibratha Das	M.Tech	Foundry and Forge Technology	2012-14
Mr. Rakesh PS	M.Tech	Foundry and Forge Technology	2013-15

Four students of Metallurgical and Materials Engineering Department have ranked within 100 (viz., 3rd, 7th, 15th and 95th) in GATE 2016.

SEMINAR/CONFERENCES ORGANISED/PROPOSED :

- Seminar on Human Resource for Metal component Manufacturing (HRMCM'16) was held on 10th & 11th March, 2016 at NIFFT, Ranchi.
- National Conference on "Emerging Technologies in Foundry and Forge" during November 25th – 26th, 2016, at NIFFT (Proposed).
- National Conference on Advances in Structural Materials (NCASM 2016) during 16th to 17th December, 2016 (Proposed).
- International Conference on Advances in Materials and Manufacturing (ICAMM'17) during January 19-21, 2017 (Proposed).

PROPOSED ACADEMIC ACTIVITIES :

The Institute has kept its objective broadening and courses expanding with time for adapting to the dynamics of the industries and needs of the society. In this respect some new courses namely B.Tech in Mechanical Engineering will be started in academic session 2017-18 and B.Tech in Computer Science and Engineering will be started in 2018-19

To take care of present and future strength of students faculty requirement is continuous process and in this respect 2 Assistant Professor and 1 professor is appointed in Forge department, 4 Assistant Professor in Materials & Metallurgical Engineering department are appointed, 1 Associate Professor and 1 Professor in Foundry department, 1 Associate professor in Manufacturing Engineering department are appointed. In addition to this 1 Professor each in Foundry and Manufacturing Engineering are permoted.



REGULATORY BODIES

Board of Governors

Shri Sandeep Gupta

Chairman, Board of Governors
48, Morar Enclave Colony
Gola Ka Mandir, Gwalior (M.P)

Representatives of Ministry of Human Resource Development, Govt. of India :-

Shri Shashi Prakash Goyal

Members

Joint Secretary (TEL)
Ministry of Human Resource Development
Department of Higher Education
Shastri Bhawan, New Delhi 110 115

Director (Finance)

Members

Ministry of Human Resource Development
Department of Higher Education,
Government of India, New Delhi-110115

Representative of Ministry of Industry, Govt. of India :-

Shri K.K. Sinha

Member

Industrial Advisor
Ministry of Commerce & Industries
Department of Industry Policy & Promotion
Udyog Bhawan, New Delhi - 110011

Alternate Nominee :-

Shri M. Khan

Sr. Development Officer
Ministry of Commerce & Industries
Department of Industry Policy & Promotion
Udyog Bhawan, New Delhi - 110011

Representative of All India Council for Technical Education :-

Prof. B.B. Ahuja

Member

Deputy Director
Professor & Head
Production Engineering Department
College of Engineering, Shivaji Nagar, Pune 411005

Representative of Industries including Public Enterprises :- (Nominated by Government of India)

Shri Avijit Ghosh

Member

Chairman cum Managing Director
Heavy Engineering Corporation, Dhurwa, Ranchi - 834004



Shri Sanjeev Paul Member
Managing Director
Tata Metaliks
Tata Centre, 10th Floor
43, Jawahar Lal Nehru Road
Kolkata - 71 (W.B.)

Shri A. Mitra Member
Chief Executive Officer
Bokaro Steel Plant
Bokaro - 827001, Jharkhand

Director (Mining) Member
Hindustan Copper Ltd.
"Tamra Bhavan", 1 Ashutosh Choudhary Avenue
Kolkata - 700019

Shri S.S. Mohapatra Member
Director (Production),
NALCO, Angul, Bhubneshwar
Odisha - 759145

**Representative of Technical Institutes / Engineering Profession :-
(Nominated by Government of India)**

Prof. I. K. Bhatt Member
Director
National Institute of Technology Jaipur
Rajasthan - 302017

Prof. S. N. Ojha
Department of Metallurgical Engineering
Institute of Technology, Banaras Hindu University
Varanasi - 221005

Co-opted members by the Board :-

Prof. O.N. Mohanty Member
Former Professor, IIT Kharagpur & Ex-VC BPUT Orisa
Director Technology and Academic Initiative
RSB Metaltech, RSB Group, Plot No. 200, Unit -3
Kharavela Nagar, Bhubneshwar - 751001, Orissa.

Nomination Awaited

Co-opted members from Faculty :-

Dr. B.K. Chakrabarti Member
Professor Department of MME, NIFFT, Ranchi

Dr. P. Talukdar Member
Professor Department of Forge Technology, NIFFT, Ranchi



Professor P. P. Chattopadhyay

Director
National Institute of Foundry and Forge Technology
Ranchi - 834003

Secretary

Administrative and Finance Committee

Shri Sandeep Gupta

Chairman, Board of Governors,
48, Morar Enclave Colony,
Gola Ka Mandir, Gwalior (M.P)

Chairman

Representatives from Government of India :-

Shri Shashi Prakash Goyal

Joint Secretary (TEL)
Ministry of Human Resource Development,
Department of Higher Education,
Shastri Bhawan, New Delhi- 110115

Member

Director (Finance)

Ministry of Human Resource Development,
Department of Higher Education, Govt. of India,
New Delhi-110115

Member

Co-opted members from Faculty :-

Dr. B. K. Chakrabarti

Professor, (MME Dept.)
NIFFT, Ranchi

Member

Prof. Partha Protim Chattopadhyay

Director
NIFFT, Hatia, Ranchi

Secretary

Standing Building Committee

Prof. Partha Protim Chattopadhyay

Director
NIFFT, Hatia, Ranchi

Chairman

Dr. Raghunadhan T

(Upto Dec. 2016)

Registrar,
NIFFT, Hatia, Ranchi

Member and Secretary

Mr. Dalip Kapur

Deputy Secretary
M.H.R.D., Department of Higher Education
Technical Section –VII, Govt. of India,
Shastri Bhavan, New Delhi – 110115

Member



Dr. B. K. Chakrabarti

Board Member
NIFFT, Hatia, Ranchi-834003

Member

Mr. Dharendra Chaudhary

Executive Engineer (Elect.)
RCED, CPWD, Doranda, Ranchi – 03

Member

Mr. Manoj Kumar

Executive Engineer (Civil)
RCD, CPWD, Doranda, Ranchi – 03

Member

Prof. Sanjay Kumar

Dean (P&D), Chairman (CMC)
NIFFT, Hatia, Ranchi

Member

INVITED MEMBERS :-

Prof. N. K. Singh

Dept of Forge Technology, Associate Dean P&D
NIFFT, Hatia, Ranchi

Prof. Binod Kumar

Dept of MME, Associate Dean P&D
NIFFT, Hatia, Ranchi.

Mr. Rajneesh Kumar Mishra

Asst. Registrar (Admin)
NIFFT, Hatia, Ranchi

Mr. Avinash Varma

Assistant Registrar (Accounts)
NIFFT, Hatia, Ranchi

Mr. Viond Kumar

Accounts Officer
NIFFT, Hatia, Ranchi

Mr. Sudhir Kumar

S.T.A., Civil
NIFFT, Hatia, Ranchi

Mr. S. N. Choudhary

Consultant (Elect.)
NIFFT, Hatia, Ranchi

Mr. B. N. Mistry

Jr Consultant (Civil)
NIFFT, Hatia, Ranchi



Academic Council

Prof. Partha Protim Chattopadhyay Chairman Director, NIFFT, Ranchi and Dean		Prof. P. Talukdar NIFFT	Member
Vice Chancellor Ranchi University, Ranchi	Member	Prof. B. Kumar NIFFT	Member
Dean Faculty of Science Ranchi University, Ranchi	Member	Prof. A. K. Singh NIFFT	Member
Controller of Examination Ranchi University, Ranchi	Member	Prof. A. Mandal NIFFT	Member
Dr. B.K. Jha General Manager (Products) RIDCIS, SAIL, Ranchi	Member	Prof. N. K. Singh NIFFT	Member
Shri G. K. yadav General Manager, FFP, HEC Ltd., Ranchi	Member	Prof. K. K. Singh NIFFT	Member
Prof. M.K. Agarwal Dept, of Metallurgical & Materials Engineering NIT, Jamshedpur	Member	Prof. R. K. Ohdar NIFFT	Member
Prof. S.K. Ray Dept. of Metallurgical & Materials Engineering NIT, Jamshedpur	Member	Prof. S. R. Kumar NIFFT	Member
Dr. T. Venugopalan Chief Technical Officer, Tata Steel, Jamshedpur	Member	Prof. A. K. Pathak NIFFT	Member
Dr. D. Mukherjee Steel Chair Professor, NIFFT	Member	Mr. B. Millik NIFFT	Member
Prof. Sanjay Kumar NIFFT	Member	Prof. Nandita Gupta NIFFT	Member
Prof. S.B. Kumar NIFFT	Member	Dr. Anil Kumar NIFFT	Member
		Prof. B.K. Chakrabarti Dean (Academic) NIFFT	Member Secretary

DEPARTMENT OF FOUNDRY TECHNOLOGY



FACULTY :

- Dr. Nandita Gupta** Professor & Head
B. E. (Mech.) Hons., Ph.D, MIIF, LMIIM, FIE
- Dr. A. K. Singh** Professor
B.E. (Mech.), L.L.B., M.Tech. (Foundry- Forge Tech), Ph. D , LMIIM, FIE
- Dr. K. K. Singh** Professor
B. Sc. Engg. (Met.), M. Tech. (Met. Engg.), Ph.D. MIIF, LMIIM, FIE
- Dr. Amitesh Kumar** Associate Professor
B. E. (Met. Engg.), M. Tech. (Foundry- Forge Tech.), Ph.D. LMIIM, MIIF, MSAE

ACADEMIC ACTIVITIES :

Courses offered by the department :

Name of Course	No. of Subjects Offered
B. Tech. Course	08
M. Tech. Course	08
A.D.C.	11

Ph.D Scholar (3) - Bagesh Bihari, Rajat Upadhyay, Ganesh vidyarthee

PUBLICATION :

- B.K. Jena, Nandita Gupta, Balbir Singh, Gadahar Sahoo, "Mechanical Properties of low alloy high Phosphorous weathering Steel" Journal of mining and metallurgy sec B Metallurgy, 51 (1) B (2015) 81-87 pp.
- Kumar Amitesh, Pawar, Kishor, Patel Sushil, Kumar Rahul (2015) Development of Aluminium-Based Nano- Composite by Casting Route, Indian Foundry Journal, Vol. 61, No. 4, April 2015, pp.32.
- Kishor Pawar, Amitesh Kumar(2016), Effect of Ultrasonic Mould Vibration on Microstructure & Mechanical Properties of Pure Aluminium Casting During Solidification, International Journal of Science and Research, Vol. 5, Issue 7, pp. 398-40.
- Ganesh Vidhyarthi and K. K. Singh: Effect of wall thickness and heat treatment variables on structure-properties of ADI; International Journal of Science and Engineering Research; Volume I, Feb., 2016.

SEMINAR/CONFERENCES :

- Nandita Gupta, S.K. Sen, Atul Garg, W. Arora, Tyagi "Effect of Carbon Content and Thermomechanical Processing on Spheroidization Studied by DTA/TGA" GUWI-2015 A Conference on Thermomechanical Processing of steels - August 06-07, 2015.



2. Nandita Gupta, et al "Effect of pouring Temperature on thermal conductivity of Moulding sands in production of SG Iron" 19-20 February 2016, National Seminar on "Convergence of Science and Technology 2016, National Seminar on "Convergence of Science and Technology (NSCST 2016)" Cambridge Institute of Technology, Tatisilwai, Ranchi, Jharkhand.
3. M. K. Jha, Sidharth and K. K. Singh; Sodium silicate based castings; Technika-2015, 18-20 Jan., 2015 at N. I. T. Jamshedpur
4. M. K. Jha, B. Dash, H. Agrawal and K. K. Singh; Mechanical properties of Bi-metals; Behind the teachers Desk- 2015, 9-10 April, 2015 at N. M. L. Jamshedpur (Got first prize in paper presentation).
5. Deliver the invited talk on "Ancient Indian Metal Casting and spirituality" in the 9th All India Students' conference on Science and Spiritual Quest, held on 30th Oct.-1st Nov., 2015 at IIT Kharagpur.
6. Dr. K. K. Singh, as Chairman. Jharkhand state Centre, Indian Foundry Organisation, organized the INDIAN FOUNDRY GROWTH & DEVELOPMENT MEET on 18th Janaury, 2016 at NIFFT, Ranchi.
7. Dr. K. K. Singh, as an Organising Secretary, involved in organising the Seminar on "Human Resource for Metal Component Manufacturing" held on 10-11th March, 2016 at NIFFT, Ranchi.

CONSULTANCY :

Two days (21-22nd June, 2015) constancy on Foundry Technology and Quality control for KSB Pumps, Ahmednagar was completed by Dr. Amitesh Kumar and Dr. K. K. Singh, co-ordinated by Dr. Amitesh Kumar. Total consultancy fee- 2.0 lakhs.

INDUSTRIAL SERVICE :

1. Dr. Nandita Gupta, Book review for Petroleum Conservation and Research Association (Ministry of Petroleum and Natural Gas) New Delhi.
2. Dr. K. K. Singh, is Council member of Jharkhand State Centre of CII.
3. Dr. K. K. Singh, is Member of Environment Panel of Jharkhand State Centre of CII.
4. Dr. K. K. Singh, is National Vice-President (Technical), Indian Foundry Organisation (IFO).

HONOR/AWARD :

1. Dr. K. K. Singh was honored for invaluable service to IIF on 26th June 2015 during Annual meeting of Eastern Region, IIF at Kolkata.
2. Dr. K. K. Singh became Professor in Foundry Technology Department, NIFFT on 25th August, 2015.
3. Dr. Amitesh Kumar became Associate Professor in Foundry Technology Department, NIFFT on 25th August, 2015.

4. Dr. Nandita Gupta became Professor in Foundry Technology Department, NIFFT on 25th August, 2015.

ADMINISTRATIVE ACTIVITIES :

Classes are regularly held following the schedule. Examinations are held with the participation of external/Internal examination of M.Tech, B.Tech, ADC as per the curriculum. Doctoral programs are held under the regulation. The following faculty members are engaged in the institute level administrative activities:

1. **Dr. A.K.Singh** – Chairman, NIFFT, Alumini Association, First appellate authority of NIFFT under RTI act-2005 w.e.f 15-4-2011
2. **Dr. K.K.Singh** – Chairman, students Gymkhana, NIFFT from 17th Dec 2013, Central public information officer (CPIO) of NIFFT under RTI act 2005, w.e.f 15-4-2011 to Oct 2012.
3. **Dr. N. Gupta** – HOD from 01-8-14, Member Antiragging Committee, Member of Students Gymkhana NIFFT from 17th Dec 2013, Chairman of Sexual Harassment Committee for women at work, Member Library Committee.
4. **Dr. Amitesh Kumar** – Member ILC, B.Tech tabulator, Hostel warden



DEPARTMENT OF FORGE TECHNOLOGY



FACULTY :

Dr. P. Talukdar B.E. (Met.), M.E. (Met. Engg.), Ph.D. (Jadavpur University)	Professor & Head
Dr. R. K. Ohdar B.E. (Ind. Engg.), M. Tech. (Foundry & Forge Tech.), Ph.D. (IIT Kharagpur)	Professor
Dr. N. K. Singh B.Sc. Engg. (Mech.), M. Tech. (Foundry & Forge Tech.), Ph.D. (Ranchi University)	Professor
Dr. Manoj Kumar B.Sc. Engg. (Mech.), M. Tech. (Foundry & Forge Tech.) Ph.D. (IIT Kanpur)	Associate Professor
Mr. Vineet Chak M.Tech (IIT Rorkee)	Assistant Professor
Mr. Ajit Kumar Pramanik M.Tech (IIT Rorkee)	Assistant Professor

ACADEMIC ACTIVITIES :

The courses offered by the department :

Name of Course	No. of Subjects Offered
B. Tech. Course (ME & MME)	8
M. Tech. Course (Foundry-Forge & Mfg. Engg.)	6
A.D.C. (Foundry Tech. & Forge Tech.)	9

DOCTORAL RESEARCH :

1. **Md Israr Equbal**, a regular Ph.D. Student of the Department of Forge Technology, NIFFT, Hatia, Ranchi is working in the area of "Studies on Parametric Optimization of Alloy Steel Forging" under the guidance of Dr. R. K. Ohdar, Professor, and Dr P. Talukdar, Professor, Forge Technology Department, NIFFT, Hatia, Ranchi-834003.
2. **Mr. M. Sivadasan**, a regular Ph.D. Student of the Department of Forge Technology, NIFFT, Hatia, Ranchi is working in the area of "Rapid Tooling for Precision Castings through Fused Deposition Modelling Process" under the guidance of Dr. N. K. Singh, Professor, Forge Technology Department, NIFFT, Hatia, Ranchi-834003.
3. **Md Asif Equbal**, a part-time Ph.D. Student of the Faculty of Engineering, Ranchi University, Ranchi is working in the area of "Study on Supply Chain Performance Measurement in Indian Context" under the guidance of Dr. R. K. Ohdar, Professor, Forge Technology Department, NIFFT, Hatia, Ranchi-834003.



4. **Mr Ashish Kumar**, a regular Ph.D. Student of the Department of Forge Technology, NIFFT, Hatia, Ranchi is working in the area of “Reverse Supply Chain” under the guidance of Dr. R. K. Ohdar, Professor, and Dr Manoj Kumar, Associate Professor, Forge Technology Department, NIFFT, Hatia, Ranchi-834003.
5. **Mr Sushant Rath**, Sr. Manager (FR), RDCIS, SAIL, Ranchi-834002 a part-time Ph.D. Student of the Faculty of Engineering, Ranchi University, Ranchi is working in the area of “Development of Mathematical-Artificial Neural Network hybrid auto-adaptive intelligent model for prediction of Roll force and mechanical properties during hot rolling of flat steel products” under the guidance of Dr. P. Talukdar, Professor, Forge Technology Department, NIFFT, Hatia, Ranchi-834003.
6. **Mr Amar Kumar**, Assistant Professor, BIT Mesra, Ext Centre- Lalpur, Ranchi-834002 a part-time Ph.D. Student of the Faculty of Engineering, Ranchi University, Ranchi is working in the area of “OPTIMIZATION OF PARAMETERS INFLUENCING ENERGY CONSERVATION IN POWER SECTOR USING SOFT COMPUTING TECHNIQUES” under the guidance of Dr. R. K. Ohdar, Professor, Forge Technology Department, NIFFT, Hatia, Ranchi-834003 and Dr Umesh Prasad, Assistant Professor, Department of Computer Science, BIT Mesra, Ext Centre- Lalpur, Ranchi-834002.
7. **Mr. Ajit Kumar Pramanick**, Assistant Professor is doing his PhD research on the field of Joining of metals in the Department of Metallurgy and Materials Engineering, Jadavpur University, Kolkata- 700032.

JOURNAL PUBLICATIONS :

1. Pinaki Talukdar, RajKumar Ohdar, Balbir Singh and Md Israr Eqbal “Optimization of process parameters in hot forging of medium carbon micro-alloyed steel” Applied Mechanics and Materials, Vols. 813-814 (2015) 563-568.
2. Md. Asif Eqbal, RajKumar Ohdar, Supply Chain Performance Measurement: A Review and Reflection, Applied Mechanics and Materials, Vols. 813-814 (2015).
3. R.K. Ohdar, P. Talukdar, Md. Israr Eqbal “Evaluation of friction coefficient of 38MnVS6 medium carbon micro-alloyed steel in hot forging process by using ring compression test” Technology Letters, Vol.2, No.3 (2015) 12-16.
4. Azhar Eqbal, Md. Israr Eqbal and R. K. Ohdar, “Isothermal forging of Ti-6Al-4V alloy-flow stress evaluation and optimization” International Journal of Scientific Research in Science, Engineering and Technology, Vol. 1, No. 5, 2015.
5. Tapan Sarkar, Ajit Kumar Pramanick and Tapan Kumar Pal, “Some Aspects on the Welding Characteristics and Formation of Microstructures in a Newly Developed Coated Electrode for Austempered Ductile Iron (ADI)” Indian Welding Journal, Vol. 48: No. 4, Oct., 2015, pp. 40 – 49.
6. Md. Israr Eqbal, RajKumar Ohdar, Azhar Eqbal and Anoop Kumar Sood, “Grey based Taguchi method for optimization of hot forging of connecting rod” International Journal of Manufacturing Research, Vol. 11, No. 1, 2016.



7. A.K. Pramanick, H. Das, G.M. Reddy, M. Ghosh, G. Das, S. Nandy, T.K. Pal, "Development and design of microstructure based coated electrode for ballistic performance of shielded metal arc welded armour steel joints" *Materials and Design* 103 (2016) 52–62.
8. A K Pramanick, H Das, S Nandy and T K Pal, "Characterization of Microstructure and Nonmetallic Inclusions of double V grooved Armour Steel Weld Metal through Developed Coated Electrode" *Transactions of the Indian Institute of Metals – under review*

CONFERENCE / SEMINAR PUBLICATIONS / PRESENTATIONS

1. Md. Israr Equbal, R.K. Ohdar, P. Talukdar and Vinod Kumar "Parametric Optimization of Hot Compression Process of Medium Carbon Steel by Using Taguchi Method" National Conference on Thermo-mechanical processing of Steels & 5th Gleeble User Workshop India (GUWI-2015), August 6-7, 2015.
2. Md. Israr Equbal, R.K. Ohdar, B. Singh, P. Talukdar, "Forgeability Study of Medium Carbon Micro-Alloyed Forging Steel" 17th International Conference on Mining, Material and Metallurgical Engineering (ICMMME 2015). 29-30, March 2015 at Singapore.
3. A. K. Pramanick, S. Nandy, G. M. Reddy and T. K. Pal, "Ballistic Performance of High Performance Armour Steel Weld Metal using Developed Coated Electrode" National Welding Seminar (NWS 2015), Dec., 9th – 11th, 2015.
4. Tapan Sarkar, Ajit Kumar Pramanick, Hrishikesh Das and Tapan Kumar Pal, "The influence of austempering temperature and time on the formation of ausferrite in the developed weld deposits on Austempered ductile Iron" National Welding Seminar (NWS 2015), Dec., 9th – 11th, 2015.
5. Md Israr Equbal, Md Talha, Balbir Singh, Rajkumar Ohdar, "Effect of cooling rate on the microstructure and mechanical properties of medium carbon steel". Accepted for 4TH International Conference on Thermo-mechanical Simulation & Processing of Steel February 10 - 12, 2016, RDCIS, SAIL, Ranchi.
6. Md Israr Equbal, RajKumar Ohdar, Balbir Singh and Pinaki Talukdar "Hot Forging Behavior of medium carbon and medium carbon vanadium microalloyed steels: A comparative study" Accepted for 4TH International Conference on Thermo-mechanical Simulation & Processing of Steel February 10 - 12, 2016, RDCIS, SAIL, Ranchi.
7. Md. Israr Equbal, R.K. Ohdar, P. Talukdar, "Improving mechanical properties of hot forged part using grey taguchi method" International Conference on Material Science & Technology (ICMTECH-16), 1-4, March, 2016, Delhi, India.
8. Md Israr Equbal, Md Talha, Balbir Singh, Rajkumar Ohdar, "Effect of cooling rate on the microstructure and mechanical properties of medium carbon steel", 4TH International Conference on Thermo-mechanical Simulation & Processing of Steel, (SimPro'16), 10-12, February 2016 at RDCIS, SAIL, Ranchi- 834002.



9. Md Israr Equbal, RajKumar Ohdar, Balbir Singh and Pinaki Talukdar "Hot Forging Behavior of medium carbon and medium carbon vanadium microalloyed steels: A comparative study" 4th International Conference on Thermo-mechanical Simulation & Processing of Steel, (SimPro'16), February 10 - 12, 2016, RDCIS, SAIL, Ranchi-834002.
10. Dr Manoj Kumar, Associate Professor, Dept of Forge Technology participated in the International Seminar on "Innovative Technologies for Clean, Green & Automated Steel Plants: A Better Tomorrow" which was held at Kolkata on 10th & 11th September 2015.

AWARDS/ACHIEVEMENTS

Abdul Kalam Gold medal Award to Prof. R. K. Ohdar

Dr. Rajkumar Ohdar, Professor, Forge Technology Department, National Institute of Foundry and Forge Technology (NIFFT), Ranchi has been honored with the prestigious "Dr Abdul Kalam Gold Medal" on his birthday October 15, by GEPR (Global Economic Progress & Research Association) a national level nonprofit voluntary research organization working in the field of global economic progress. Dr. Abdul Kalam Gold Medal Award, instituted by the Global Economic Progress and Research Association (GEPR), New Delhi is presented as a Lifetime Achievement Award to distinguish and meritorious Indian personalities who have contributed to the society in the fields of education, business, trade, commerce, industry and scientific research. The Award has been conferred on the occasion of 29th "National Unity Conference on Individual Achievements and National Developments" on Thursday 15th October 2015 at Chennai for his outstanding individual achievements, service to the Nation and distinguished contribution in the field of Education and Research.

The Award was presented to Dr. Rajkumar Ohdar on 15th October 2015 at Pratap Plaza Hotel, Chennai presided by Honorable Justice Sri S. Mohan, Supreme Court of India (Former Governor of Karnataka), Hon'ble Dr A. Kalanidhi, Former Anna University Vice-Chancellor, Hon'ble Sri K. Venkatapathy, Former Central Minister of Law and Justice, Government of India and other dignitaries. The award consists of a Memento, Certificate and Gold Medal.

ADMINISTRATIVE ACTIVITIES :

- | | |
|-----------------|---|
| Dr. P. Talukdar | <ul style="list-style-type: none">• Associate Dean (Research & CE)• Chairman, NIFFT NIWAS• Associated with different committees such as Chairman of Pre-selection committee for non teaching staff, member of scrutiny committee for faculty recruitment etc. |
| Dr. N. K. Singh | <ul style="list-style-type: none">• Professor I/C Administration (upto Jan 2015)• Chief Public Information Officer (upto Jan 2015)• Associated with various Institutional committees |
| Dr. R. K. Ohdar | <ul style="list-style-type: none">• Chairman, Central Computer Committee (CCC)• Associate Dean (UG) and Centre In-charge for Reporting |



- and Help Centre, NIFFT Hatia Ranchi for CSAB 2014 Counseling on B. Tech. Admission through JEE (Main)
- Associated with different committees like Counseling for M. Tech. admission in CCMT 2014
- Dr. Manoj Kumar
- Chairman, Industrial Liaison and Placement Cell
 - Chief Hostel Warden
 - Member in Purchase Committee & Library Committee
 - Associated with different committees like member of scrutiny committee for faculty recruitment, member of NIFFT Guest house etc.
- Mr. Vineet Chak
- Member Secretary of Time Table Committee
 - Member Secretary of Student's Gymkhana
 - Member Secretary of Central Computer Committee (CCC)
 - Tabulator (B. Tech.)
 - Faculty Advisor NIFFT SAE Club
- Mr. A. K. Pramanick
- Tabulator (M. Tech.)

MEMBERSHIP OF PROFESSIONAL BODIES :

- Dr. P. Talukdar
- Life Member, The Indian Institute of Metals (LMIM)
 - Life member of Indian Foundry Organization (IFO)
- Dr. N. K. Singh
- Life Member, The Indian Institute of Metals (LMIM)
 - Life member of Indian Foundry Organization (IFO)
 - Life Member, Institution of Engineers
 - Life Member, Indian Institute of Plant Engineers
- Dr. R. K. Ohdar
- Life Member, The Indian Institute of Metals (LMIM)
 - Life member of Indian Foundry Organization (IFO)
- Dr. Manoj Kumar
- Life Member, The Indian Institute of Metals (LMIM)
 - Member, The Institute of Indian Foundrymen (MIIF)
- Mr. Vineet Chak
- Life member of Indian Foundry Organization (IFO)

DEPARTMENT OF MANUFACTURING ENGINEERING



FACULTY :

Dr. Sanjay Kumar B.Tech. (Met.), M.E.(Mech.),Ph.D., MIIF	Professor
Dr. A. Mandal B.Tech. (Mech.), M.Tech.(Prod.),Ph.D., MIIF	Professor
Dr. A. K. Pathak B.Sc.Engg.(Mech.), M.Tech.(Mech.),Ph.D.,MIIF,MISTE ,MIIM	Professor & HoD
Mr. K. K. Verma M.Sc. (Maths.), M.Phil. (Applied Maths.), MIIF	Associate Professor
Dr. Vijay Toppo B.Sc.Engg.(Mech.), M.Tech.(Mfg.Engg.), PhD, MIIM, MIIF	Associate Professor
Dr. A. K. Sood B.E.(Mech.),M.E.(Design.), PhD.	Associate Professor
Dr. G. Rajamohan B.E.(Mech.),M.E.(Mfg.Tech.),PhD, MIE	Assistant Professor
Mr. V.M.S. Hussain B.E.(Mech.),M.E.(Prod.), MIIF	Assistant Professor

ACADEMIC ACTIVITIES :

Regular Courses offered by the Department :

- (i) B. Tech., Manufacturing Engineering
- (ii) M. Tech., Manufacturing Engineering

Sponsored Project in 2015-16 :

Ongoing sponsored projects in 2015-16:	Nil
Sponsored projects completed in 2015-16:	Nil

Publication in peer Reviewed Journal in 2015-16 :

1. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of ECM process for machining of EN-19 with multiquality characteristics via Grey Taguchi approach, Int J. Applied Engineering Research, vol 10, no 55, 2015, pp 3678-3682.
2. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of removal rate in electrochemical machining for EN19 using Fuzzy Logic, Int J Applied Engineering Research, vol 10, no 55, 2015, pp 3683-3687.
3. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of over cut and MRR in electrochemical machining for EN19 tool steel using Grey Taguchi approach, Int J Applied Engineering Research, vol 10, no 11, 2015, pp 10070-10074.
4. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of surface roughness in electrochemical machining for EN19 using artificial neural network, Int J Applied Engineering Research, vol 10, no 11, 2015, pp 10075-10079.



5. Ajai Kumar Pathak, Binod Kumar, Ashish Kumar Shukla, Md. Razaullah Khan, Study of Corrosion Behaviour of Ferritic Stainless Steel Welded Joint, International Journal of Engineering and Management Research, volume 5, issue-6, December-2015, p 289-293.
6. Md. Razaullah Khan, A. K. Pathak, Umasankar Das and Dharendra Tiwari, Study of Microstructure and Mechanical Properties of Ferritic Stainless Steel (AISI 430) Weldment using ER309L and ER430 Electrodes by MIG Welding Process, International Journal of Engineering Research & Technology (IJERT), Vol. 5, Issue 01, 2016, p 312 – 318.
7. Deepak Kumar and G. Rajamohan, Optimization of surface roughness an flatness in end milling of Aluminium alloy Al 6063-T6, International Journal of Advances in Engineering & Technology, Vol. 8, No. 6, pp. 937-949, 2015.
8. Rajamohan, G., An approach for the unified evaluation of orientation tolerances, International Journal of Engineering Research & Technology, Vol. 5, No. 1, pp. 169-173, 2016.

Publication in proceedings of conferences in 2015-16 :

1. A. K. Pathak, Razaullah Khan and Dharendra Tiwari, Study of Microstructure and Mechanical Properties of Ferritic Stainless Steel (AISI 430) Weldment using ER309L and ER430 electrodes, Proceeding of National Welding Seminar 9-11 Dec 2015, CIDCO, Vashi, Navi Mumbai, Organised by The Indian Institute of Welding.
2. Rajamohan, G. (2015), A random walk based algorithm for the assessment of perpendicularity, International Conference on Applied Research in Engineering and Technology (ICARET '15), Thamirabharani Engineering College, Tirunelveli.
3. Chandan Kumar and G. Rajamohan (2016), Selection of machining parameters for optimization of surface roughness in Turning of Stainless Steel SS304, International Conference on Technological innovations in Mechanical Engineering (TIME-2016), Chaitanya Bharathi Institute of Technology, Hyderabad.

Short-term Courses / Workshops / Conferences attended by faculty in 2015-16 :

Dr. G Rajamohan

Attended a two-week short-term training programme on “Recent advances in hydraulics, pneumatics and electronic control devices”, organized by Dept. of Mechanical Engineering, Mahatma Gandhi Institute of Technology, Hyderabad during May 4 - 16, 2015.

Ph. D. supervision by faculty members in 2015-16 :

Ongoing Ph. D. supervision in 2015-16

	<u>Name of the student</u>	<u>Name of the supervisor</u>
i.	Mr. Azhar Equbal	Dr. A. K. Sood
ii.	Mr. Md Razaullah Khan	Dr. A. K. Pathak
iii.	Mr. Umasankar Das	Dr. V. Toppo
iv.	Mr. K. K. Verma	Dr. G. Rajamohan & Dr. A Mandal
v.	Ms. Shamama Anwar	Dr. G. Rajamohan
vi.	Mr. Nanigopal Das	Dr. G. Rajamohan & Dr. A. K. Mahto (RU)

Reviews in 2015-16 :

Dr. G. Rajamohan: Reviewed technical papers for International Journal of Advanced Manufacturing Technology and Measurement.

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING



FACULTY

Dr. B. K. Chakrabarti M. Sc (Chemistry), Ph. D	Professor
Dr. S. B. Kumar B.Sc. Engg.(Met.), M. Sc. Engg.(Met), Ph. D	Professor
Dr. B. Kumar B. Sc. Engg. (Met), M. Tech (Met), Ph. D	Professor
Mr. Banshidhar Mallik B.Sc. Engg. (Mech.), M. Tech.(FFT) ,LM-IIM	Associate professor & Head
Dr. Ghanshyam Das B.Sc. Engg. (Met.), Ph. D	Assistant Professor
Dr. D. Roy M. Tech (Met.), Ph. D	Assistant Professor
Dr. D. Mukerjee PhD.(Met),University of Barmingham,UK	Ministry of Steel Chair Professor
Dr. Ratnesh Kumar Gupta [PhD (Brown University, USA); MS (Brown University, USA); M. Tech-B. Tech dual degree (IIT Bombay)]	Assistant Professor
Dr. Chinmoy Chattopadhyay [PhD (IIT Kanpur); M Tech (IIT Kanpur); B Tech (NIT Durgapur)]	Assistant Professor
Dr. RenuKumari [PhD (IIT Kharagpur); M Tech (IIT Kharagpur); B Tech (BIT Sindri)]	Assistant Professor
Mr. Kaushik Sikdar [M Tech (IIT Kanpur); B Tech (IEST Shibpur)]	Assistant Professor

The Department of Materials and Metallurgical Engineering, NIFFT Ranchi has been conducting UG and PG programmes and offering B Tech, M Tech and Ph D degrees. The Department is involved in conducting theoretical and practical courses for UG and PG students and research projects for final year UG and PG students regularly. Apart from these regular activities, the Department has experienced some remarkable achievements during the mentioned period. They are listed as follows:

RESEARCH ACTIVITIES :

Paper publications in National and International journals:

1. D Mukerjee, Atul Saxena and B K Jha, 'High End Niche Steel Products – Recent Innovations in India", JPC Bulletin on Iron and Steel, Vol. XV, Issue 7, July 2015, pp 12-27.
2. B.K.Chakrabarti, International Conference (TMS-2015) of the Minerals, Metals & Materials Society, USA held at Orlando, Florida, USA during 15th – 19th March,2015.



Oral presentation & publication entitled “ Modeling& Design of Experiment in Calcination of Magnesites”. The paper was published in the Proceedings being published by John Willey & Sons Publications.

3. B.K.Chakrabarti, attended International Seminar on “Innovative Technologies for Clean, Green & Automated Steel Plants: a better tomorrow”, held at Kolkata during 10-11th Sept, 2015.
4. G.S. Das, Anjani Kr. Singh, Microstructural Corrosion Study of Thermo-Mechanical Treated Steel in Simulated Concrete Pore Solution in Presence of Chloride Ion, International Journal of Scientific Research and Education, Vol- 3, Issue ,1pp 4747-4751, December - 2015.
5. G.S. Das, Anjani Kr. Singh, Performance of steel rebar in simulated concrete pore solution with addition of sodium chloride, International Journal of Scientific Research Engineering & Technology, Volume 4, Issue 12, pp 1204-1207, December 2015.
6. Ghanshyam Das, B.N.Roy, Rajiv Agulla, Study of pitting corrosion behavior of austenitic stainless steel, Open Journal of Engineering Research and Technology Volume 1, Issue 1 (2016), pp 50-58.
7. Ghanshyam Das, B.N.Roy, Rajiv Agulla, Study of influence of stressed corrosive environment on the austenitic stainless steel, International Journal of Development Research, Vol. 06, Issue 07 (2016), pp.8447-8450.
8. Anjani Kumar Singh, Ghanshyam Das, Presented technical paper titled Corrosion Study of Thermo-Mechanically-Treated (TMT) Steel Bar Used in Reinforcing in Concrete Structure in international conference on Advances in steel power and construction technology held on March 17-19. 2016 in OPJIT Raigarh, Chattishgarh.
9. G.S. Das, Anjani Kr. Singh, Presented technical paper titled Mechanism and kinetics of reinforced TMT bar corrosion in concrete in international conference NMD-ATM 2015 held on 13-16 Nov. 2015 at Coimbatore.
10. G. Das received Best technical paper award obtained by IIM Ranchi chapter held in the Annual General Meeting 31/10/2015 at Mecon community hall.
11. S.Kumar, S.R.Kumar, S.K.Sharma, D.Roy “Structure Composition and Optical properties of Non aqueous Deposited ZnCdS Nanocrystalline Film” Materials Today: Proceedings. 2(2015) 4563-4568.
12. A.Mishra, M.Gond, S.B.Kumar, D.Roy “Synthesis and characterization of Hydroxyapatite based Nanocomposites for structural applications” International Journal of Scientific & Engineering Research, Volume 6, Issue 8, August-2015
13. S.Chakraborty, D.Roy, “Synthesis and characterization of nano metal dispersed Cu-basenanano-composite” 4th International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2015), Dec08-11, 2015 .
14. C. Chattopadhyay and B.S. Murty. “Kinetic modification of the ‘Confusion principle’ for metallic glass formation” Scripta Materialia, 2016, 116 pp 7-10.

DOI -<http://dx.doi.org/10.1016/j.scriptamat.2016.01.022>

15. C. Chattopadhyay, K.S.N. Satish Idury, Jatin Bhatt, K. Mondal, B.S. Murty. “Critical evaluation of glass forming ability criteria”. Materials Science and Technology, 2016, 32 pp 380-400. (Accepted and came online in 2015)



DOI - <http://dx.doi.org/10.1179/1743284715Y.0000000104>

16. Renu Kumari, Blawert, Carsten and Majumdar, J. Dutta, 2016. "Microstructures and Properties of Plasma Electrolytic Oxidized Ti Alloy (Ti-6Al-4V) for Bio-implant Application." Metallurgical and Materials Transactions A 47(2):788-800.
17. Renu Kumari and J. Dutta Majumdar, 2016. "Microstructural Characterization of Multilayered Coating on Titanium Based Alloy (Ti-6Al-4V) Substrate for Bio-Implant Application" Adv. Sci. Lett. 22, 256-260 .
18. R. Kumari, International Conference, Thermo-mechanical Simulation and Processing of Steels, on February 10 - 12, 2016 RDCIS, SAIL, Ranchi
19. Avik Mahata, Koushik Sikdar "Molecular dynamics simulation of nanometer scale mechanical properties of hexagonal Mg—Li alloy", Journal of Magnesium and Alloys, 4 (2016) 36-43.
20. K. Sikdar, International Conference, Thermo-mechanical Simulation and Processing of Steels, on February 10 - 12, 2016 RDCIS, SAIL, Ranchi

BOOK CHAPTER :

Dr. Debdas Roy

29. Consolidation of Mechanically Alloyed Products/Powders
"Handbook of Mechanical Nanostructuring" - Wiley-VCH-2015

Published Online: 24 JUL 2015

DOI: 10.1002/9783527674947.ch29

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ACHIEVEMENTS/AWARDS/VISIT ABROAD

Prof. B.K.Chakrabarti visited USA to Present Research Paper in the International Conference of (TMS) The Minerals, Metals & Materials Society, USA held at Orlando, Florida, USA in March 2015. During the visit Prof. Chakrabarti had the opportunity to visit different departments & laboratories of Long Island University, Brooklyn, New York on 16.03.2015.

Three students of B.Tech of 2012-16 batch secured outstanding All India Rank in GATE - 2016 viz

- (i) **Danish Naseem** – AIR 3 (Three)
- (ii) **Samarjeet Kumar Singh** – AIR 7 (Seven)
- (iii) **Ravi Raj** – AIR 15 (Fifteen)

10 students, five from pre-final year B Tech and five from final year B Tech have been awarded the Ministry of steel scholarship of 1,20,000 INR PA each.

VISIT OF DISTINGUISHED PERSONS :

1. Professor Rahul Mitra, Professor, Department of Met. & Mat. Engg., IIT Kharagpur, visited the institute to advise on the development of Laboratories of the Department for Characterization of materials during 25-26 December, 2015.
2. Dr. P Shivaprasad, Sr. Scientist, NML Jamshedpur, visited the institute to advise on development of Laboratories for the Department for mechanical testing of materials in November-2015.

DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES



FACULTY :

Dr. Anil Kumar

M.Sc. (Chem.), M.Tech. (Surface Sc. and Engg.),
Ph.D (Engg.) in Metallurgy and Materials Engineering

Associate Professor and Head

Dr. S. R. Kumar

M.Sc. (Phys.), PhD (Science) in Materials Science

Professor

Ms. Sujata Gupta

M.A. (English)

Assistant Professor

Ms. Madhu Kumari

B.Sc. Engg. (E&C), M. Tech. (IT), PhD (Ongoing) registered at ISM, Dhanbad.

Assistant Professor

ACADEMIC ACTIVITIES :

The Department of Applied Science and Humanities (DASH) assists all the normal activities related to B. Tech., M. Tech. and A.D.C programs.

DASH offers M. Tech. in Environmental Engineering.

Also offers doctoral programs in Sciences (Physics, Chemistry & Environmental Engineering)

RESEARCH ACTIVITIES :

Post Doctoral :

Dr. Ajit Kumar, M.Sc. & Ph. D (Chemistry): Young Scientist & Project Investigator of Project entitled "Development of new optical probes for Bioimaging of stress Agents" Sponsored by DST, Govt. of India

Doctoral :

1. Mr. Suresh Kumar is carrying out his doctoral programme under the supervision of Dr.S.R.Kumar. He is working on the topic entitled "Development of ZnCdS Nanocrystalline .Thin Film using Chemical Bath Deposition"
2. Mr. Shashikant Rajpal is carrying out his doctoral programme under the supervision of Dr.S.R.Kumar. He is working on the topic entitled "Development of Nanocrystalline Semiconducting Thin Film for Device Applications"
3. Ms. Sudeshna Surbhi is carrying out her doctoral programme under the supervision of Dr. S. R. Kumar.
4. Mr. Altaf Ahmed is carrying out his doctoral programme under the supervision of Dr. Anil Kumar. He is working on the topic entitled "Studies of Corrosion behavior of Rebar Embedded in concrete and its prevention."
5. Mr. Deependra Kumar Sinha is carrying out his doctoral programme under the supervision of Dr.Anil Kumar. He is working on the topic entitled "Development of ecofriendly Geopolymer products based on steel industry Slag, Fly ash and Bottom ash."
6. Mr. Vijay Kumar Yadav is carrying out his doctoral programme under the supervision of Dr.Anil Kumar. He is working on the topic entitled "Studies on prediction of life of RCC Structure Under the Influence of Corrosive Environment".
7. Mrs. Madhu Kumari is carrying her Ph. D Programme from ISM Dhanbad in Department of Environmental Science & Engineering



MASTER PROJECTS GUIDANCE :

M. Tech .Project (Guided) :

M. Tech. in Environmental Engineering (2013-2015)

Student	Thesis topic	Thesis Supervisor(s)
Mr. Hitesh Kumar	Sustainable Development Framework for Mining Industry in India	Dr. S. R. Kumar
Mr. Joyal Joy	Environmental Issues Related to ship Recycling Activities	Dr. S. R. Kumar
Mr. Rakesh Kumar	Concrete based on fly ash geopolymer	Dr. Anil Kumar
Ms. Jyoshna Jerin	Surface Chemical Studies in Iron Ore Slime and Evolution for Value Addition	Dr. Anil Kumar
Mr. S. Lokesh	Strategies for Strengthening Environmental Carrying Capacity in Indian Mineral Sector	Mr. A.K. Khandelwal
Ms. Swati Thakur	Integrated Land Use Planning for an Industrial Zone	Mrs. Madhu Kumari
Mr. Vijay Kumar	Design of non conventional (solar energy) system for NIFFT and its Environmental Impact	Mrs. Madhu Kumari

M. TECH PROJECT (ONGOING) :

Project Topic for M. Tech. (Environmental Engineering, (2014-2016))

1. Mr.Abhimanyu K.Paswan has completed his project entitled "Tailing Pond Management Issues and Challenges" under Dr. S. R. Kumar.
2. Mr.Prabhat Kumar Ranjan has completed his project entitled "Municipal Solid Waste in Shyamli Township Doranda,Ranchi" under Dr. S. R. Kumar.
3. Mr. D.K.G.Ravi Teja has completed his project entitled "Removal of Hexavalent Chromium from Aqueous Solution by using Agro Based Products as Adsorbents" under Dr. S. R. Kumar.
4. Mr. Sujeet Kumar has completed his Project entitled "Use of colour/size fly ash in cement and geopolymer" under Dr. Anil Kumar.
5. Mr. Chinthala Rajesh has completed his Project entitled "Upgradation of iron values from iron ore slime with reagents and use of slime in civil engineering" under Dr. Anil Kumar.
6. Mr. Yenigandla Naga Mahesh has completed his Project entitled "Study on durability of flyash & GBFS Geopolymer products" under Dr. Anil Kumar.
7. Mr. Anant Vijay Kumar has completed his Project entitled "Study & analysis of various available processes for treatment of effluents from coke oven by product plant" under the supervision of Mrs. Madhu Kumari.
8. Mr. Shashi Bhusan has completed his Project entitled "Study of basics of sewage treatment plant processes and its comparison" under the supervision of Mrs. Madhu Kumari.
9. Mr. Suhas Kumar Srivastawa has completed his Project entitled "Analysis of availability of Non-Conventional Energy resources in Jharkhand, study area Netarhat Residential School" under the supervision of Mrs. Madhu Kumari.



MASTER (M. TECH) SEMINAR GUIDED :

Seminar Topic for M. Tech. (Environmental Engineering, - 2015-2017)

1. Mr. Deepesh Kumar has presented his Seminar entitled “Solid Waste Management” under the supervision of Dr. Anil Kumar.
2. Mr. Hemant Singh has presented his Seminar entitled “Green and Sustainable design of buildings” under the supervision of Dr. Anil Kumar.
3. Mr. Anshuman Jha has presented his Seminar entitled “Carbon Neutrality” under the supervision of Dr. Anil Kumar.
4. Mr. Shivraj has presented his Seminar entitled “Recycling & Reuse of e-waste in India” under the supervision of Dr. Anil Kumar.
5. Mr. Kamlesh Kumar Das has presented his Seminar entitled “Adsorption design of Waste Water treatment” under the supervision of Dr. Anil Kumar.
6. Mr. Shambhu Nath sharma has presented his Seminar entitled “Desalination of sewage water using graphene membrane through nanotechnology” under the supervision of Mrs. Madhu Kumari
7. Ms. Priyanka kumari has presented his Seminar entitled “Standard water quality in India” under the supervision of Mrs. Madhu Kumari
8. Mr. Siddarth has presented his Seminar entitled “.geopolymeric building materials by synergetic utilisation of industrial waste” under the supervision of Mrs. Madhu Kumari
9. Mr. Abhinav Kumar I (2015-17) is carrying out his seminar entitled “Making Salt Water Drinkable” under Dr.S.R.Kumar.
10. Mr. Abhinav Kumar II(2015-17) is carrying out his seminar entitled “Wind Energy Programme in India” under Dr.S.R.Kumar.
11. Mr. Bhargabnanda Dass (2015-17) is carrying out his seminar entitled “Biogas Production and Applications” under Dr.S.R.Kumar.
12. Ms. Banafsa Ahmed (2015-17) is carrying out his seminar entitled “Ultrafiltration nanofiltration and Reverse Osmosis” under Dr.S.R.Kumar.

PUBLICATIONS IN NATIONAL AND INTERNATIONAL JOURNALS:

1. “Partial replacement of sand & cement by Iron ore slime for concrete building material”, Jyolsna Jerin, R. K. Rath and Anil Kumar, Recent Trends in Civil Engineering & Technology (RTCET) vol. 6. issue 2 (2016) 1-6, ISSN: 2249-8753(online), ISSN: 2321-6476 (print)
2. “ Effect Of Climate Change On Water Resources “ Anil Kumar, Journal of Alternate Energy Sources and Technologies (JoAEST) vol. 7 No. 1 (2016) 44-48, ISSN: 2230-7982(online), ISSN: 2321-5186(print)
3. “Change detection in LULC of Sahibganj district, Jharkhand, India using Remote Sensing & GIS” D.P Mohabey, Neeraj Kumar Sharma & Anil Kumar, International Journal of Advancement in Remote Sensing, GIS and Geography (2015) Vol.3, No.2, 59-70
4. “An overview idea on carbon Sequestration” Anil Kumar, International Journal of interdisciplinary Research & Innovations, 3(4)100-105; 2015
5. “Land use/land cover analysis of Santhal Pargana using satellite Remote Sensing data”, D.P. Mohabey, J. B Lamay, N. J. Kullu, N. K. Sharma & Anil Kumar, Journal of Remote sensing & earth Science, 2015, Vol. 1, Issue 1, pp. 1-14.
6. “Land use/land cover exploration & change revealing in Devghar district part of Jharkhand using multi temporal satellite data” D.P Mohabey & Anil Kumar, Journal of Remote sensing & GIS, 2015, Vol. 6, Issue 1, pp. 1-12, ISSN: 2230-7990.



7. "Use of Solar Power in telecom tower to reduce environmental pollution", Suhas Kumar Srivastawa, Madhu Kumari, International Journal of Current Research, Volume 8, issue 6, 32342-32347.
8. "E-commerce & Supply chain management: the nexus unleashed, challenges & opportunities" Devesh Gaurav, Aadarsh Das & Sujata Smiti Gupta, Discovery, 52(246)1217-1221, 2016.
9. "Synthesis and Characterization of ZnO Nanoparticle Using Electrode Position Method", Shashikant Rajpal, S.R. Kumar, Anand Kumar M., International Journal of Development Research, 5 Issue 6, pp 4670-4672, June-2015.
10. "Synthesis and Characterisation of Non-Aqueous Electrodeposited ZnSe thin Film". S.R.Kumar, Shashikant Rajpal, Published in International J. of Chemical, Nuclear, Materials and Metallurgical Engineering Vol:9 No.3, 2015.
11. "Structural, Compositional, Morphological and Optical Properties of Electrodeposited Nanocrystalline ZnO Thin Film", Shashikant Rajpal, S.R Kumar Published in International Journal for Innovative Research in Science and Technology, 1 issue 12, May 2015.
12. "Structure, Composition and Optical Properties of Non aqueous Deposited ZnCdS Nanocrystalline Film", S.R Kumar, Suresh Kumar, S.K Sharma and D.Roy, Published in Materials Today, Proceedings (Elsevier) 2 4563-4568, (2015).
13. Madhu Kumari, Prasoon Kumar Singh and Suhas Kumar Srivastava, "Smart cities and solar energy applications", Biospectra, 2(2016)169-172.
14. Suhas Srivastava, Madhu Kumari and Prasoon Kr. Singh, "Predictive mathematic modeling to analyze the feasibility of infiltrating solar hybrid vehicles in smart cities of India", Imperial Journal of Interdisciplinary Research, 2(2016)999-1006.

PAPER PRESENTED/ATTENDED IN SEMINARS, SYMPOSIA, CONFERENCE, SHORT TERM COURSES:

1. Development of building material from fly ash and bottom ash by geopolymerisation, (Deependra Kumar Sinha, Anil Kumar), conference paper, National Seminar on sustainable solutions to water, waste water and solid waste, organized by department of Environmental sciences, A.N. College Patna and CSIR- NEERI held in Patna on May 8-9, 2015.
2. Development of building material with the utilization of Steel industry waste materials, (Deependra Kumar Sinha, Anil Kumar) National seminar Environmental Pollutant safety Majors & Management, Organized by Magadh Mahila College, Patna University, Patna, held in Patna December 5-6, 2015.
3. Development of Geopolymer building bricks with steel industry waste materials, (Deependra Kumar Sinha, Anil Kumar), National conference on "Recent Advances in Civil and Environmental Engineering" (RACEE-2016), organized by BIT Mesra, Ranchi, held in Ranchi February 25-26, 2016.
4. Development of building material from steel industry by products, (Deependra Kumar Sinha, Anil Kumar), 2nd international conference on Advances in steel, power and construction technology (ICASPCT-2016), organized by O.P. Jindal University, Raigarh, Chattisgarh 17-19 march 2016.
5. "Effect of Annealing on Nanocrystalline ZnO Thin Film Developed by Electrodeposition Method", Shashikant Rajpal, S.R Kumar, 5th International Conference on Material Processing and Characterization (ICMPC-2016), March 12-13, 2016, GRIET, Hyderabad, Telengana, India.
6. "Synthesis and Characterization of CdTe Thin Film in Non Aqueous Medium", Sudeshna Surabhi, S.R. Kumar, National Seminar on Convergence of Science and Technology (NSCST 2016), February 19-20, 2016, CIT, Ranchi, Jharkhand, India.



7. Dr. S.R. Kumar was invited speaker in the short term course on “Next Generation Electronics” was held at CIT, Ranchi during 14-18 October, 2015.
8. Dr.S.R. Kumar had delivered Plenary Talk in the National Conference on Recent Trends in Computational and Mathematical Analysis in Engineering & Science-2015(CRCMAS2015) held on 20-21 November, 2015 at Govt. Polytechnic Silli,Ranchi

M TECH/ADC PROGRAMME COORDINATION

1. Dr. S. R. Kumar was Centre- In charge of NIFFT centre for M. Tech. on line admission through CCMT-2015.
2. Ms. Madhu Kumari served as centre superintendent of NIFFT-RANCHI centre in admission process of students in 44th ADC programme in Forge and Foundry Technology (84 students admitted).

REVIEWER OF JOURNALS :

1. Anil Kumar is reviewer of Journal of Engineering and Technology
2. Anil Kumar is reviewer of paper of Journal Advances in Water Resource and Protection (AWRP)

Administrative Activities :

- | | |
|------------------|--|
| Dr. Anil Kumar | <ul style="list-style-type: none">• Head of Department• In charge of Chemistry Laboratory.• In charge of Instrumental Laboratory.• In charge of Environmental Laboratory. |
| Dr. S. R. Kumar | <ul style="list-style-type: none">• Served as Head of the Department (DASH up to November 2015.• Associate Dean(PG)• In charge of Physics Laboratory.• In charge of Thin Film Laboratory• In charge of Mat. Grow. & Charac. Lab. |
| Ms. Sujata Gupta | <ul style="list-style-type: none">• In charge of Language Laboratory. |
| Ms. Madhu Kumari | <ul style="list-style-type: none">• Associate Dean (ADC)• In charge of Electronic Laboratory.• In charge of PLC Laboratory.• In charge of Microprocessor Laboratory.• In charge of Electrical Engineering Laboratory. |

Members of Professional Bodies :

- | | |
|------------------|---|
| Dr. Anil Kumar | <ul style="list-style-type: none">• Life member of PSSI (LM 476)• Life member of MRSI (LM B047)• Life member of IMM (48625)• Member of IEI (M-148528-2) |
| Dr. S. R. Kumar | <ul style="list-style-type: none">• Life IIM - 48633 LM• Materials Research Society of India (MRSI) – L0949• Solar Energy Society of India – 0926/LM/2000• Indian Society for Technical Education – LM-41947 |
| Ms. Madhu Kumari | <ul style="list-style-type: none">• Annual member of IEEE (LM10000/5556)• Life member of ISTE-(LM44617) |



NATIONAL AND INTERNATIONAL PUBLICATIONS

DEPARTMENT OF FOUNDRY TECHNOLOGY

1. B.K. Jena, Nandita Gupta, Balbir Singh, Gadahar Sahoo, "Mechanical Properties of low alloy high Phosphorous weathering Steel" Journal of mining and metallurgy sec B Metallurgy, 51 (1) B (2015) 81-87 pp.
2. Kumar Amitesh, Pawar, Kishor, Patel Sushil, Kumar Rahul (2015) Development of Aluminium-Based Nano- Composite by Casting Route, Indian Foundry Journal, Vol. 61, No. 4, April 2015, pp.32.
3. Kishor Pawar, Amitesh Kumar(2016), Effect of Ultrasonic Mould Vibration on Microstructure & Mechanical Properties of Pure Aluminium Casting During Solidification, International Journal of Science and Research, Vol. 5, Issue 7, pp. 398-40.
4. Ganesh Vidhyarthi and K. K. Singh: Effect of wall thickness and heat treatment variables on structure-properties of ADI; International Journal of Science and Engineering Research; Volume I, Feb., 2016.

DEPARTMENT OF FORGE TECHNOLOGY

1. Pinaki Talukdar, RajKumar Ohdar, Balbir Singh and Md Israr Equbal "Optimization of process parameters in hot forging of medium carbon micro-alloyed steel" Applied Mechanics and Materials, Vols. 813-814 (2015) 563-568.
2. Md. Asif Equbal, RajKumar Ohdar, Supply Chain Performance Measurement: A Review and Reflection, Applied Mechanics and Materials, Vols. 813-814 (2015).
3. R.K. Ohdar, P. Talukdar, Md. Israr Equbal "Evaluation of friction coefficient of 38MnVS6 medium carbon micro-alloyed steel in hot forging process by using ring compression test" Technology Letters, Vol.2, No.3 (2015) 12-16.
4. Azhar Equbal, Md. Israr Equbal and R. K. Ohdar, "Isothermal forging of Ti-6Al-4V alloy-flow stress evaluation and optimization" International Journal of Scientific Research in Science, Engineering and Technology, Vol. 1, No. 5, 2015.
5. Tapan Sarkar, Ajit Kumar Pramanick and Tapan Kumar Pal, "Some Aspects on the Welding Characteristics and Formation of Microstructures in a Newly Developed Coated Electrode for Austempered Ductile Iron (ADI)" Indian Welding Journal, Vol. 48: No. 4, Oct., 2015, pp. 40 – 49.
6. Md. Israr Equbal, RajKumar Ohdar, Azhar Equbal and Anoop Kumar Sood, "Grey based Taguchi method for optimization of hot forging of connecting rod" International Journal of Manufacturing Research, Vol. 11, No. 1, 2016.
7. A.K. Pramanick, H. Das, G.M. Reddy, M. Ghosh, G. Das, S. Nandy, T.K. Pal, "Development and design of microstructure based coated electrode for ballistic

performance of shielded metal arc welded armour steel joints” Materials and Design 103 (2016) 52–62.

8. A K Pramanick, H Das, S Nandy and T K Pal, “Characterization of Microstructure and Nonmetallic Inclusions of double V grooved Armour Steel Weld Metal through Developed Coated Electrode” Transactions of the Indian Institute of Metals – under review

DEPARTMENT OF MANUFACTURING ENGINEERING

1. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of ECM process for machining of EN-19 with multiquality characteristics via Grey Taguchi approach, Int J. Applied Engineering Research, vol 10, no 55, 2015, pp 3678-3682.
2. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of removal rate in electrochemical machining for EN19 using Fuzzy Logic, Int J Applied Engineering Research, vol 10, no 55, 2015, pp 3683-3687.
3. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of over cut and MRR in electrochemical machining for EN19 tool steel using Grey Taguchi approach, Int J Applied Engineering Research, vol 10, no 11, 2015, pp 10070-10074.
4. Abhishek Tiwari, Amitava Mandal, Kaushik Kumar, Optimization of surface roughness in electrochemical machining for EN19 using artificial neural network, Int J Applied Engineering Research, vol 10, no 11, 2015, pp 10075-10079.
5. Ajai Kumar Pathak, Binod Kumar, Ashish Kumar Shukla, Md. Razaullah Khan, Study of Corrosion Behaviour of Ferritic Stainless Steel Welded Joint, International Journal of Engineering and Management Research, volume 5, issue-6, December-2015, p 289-293.
6. Md. Razaullah Khan, A. K. Pathak, Umasankar Das and Dharendra Tiwari, Study of Microstructure and Mechanical Properties of Ferritic Stainless Steel (AISI 430) Weldment using ER309L and ER430 Electrodes by MIG Welding Process, International Journal of Engineering Research & Technology (IJERT), Vol. 5, Issue 01, 2016, p 312 – 318.
7. Deepak Kumar and G. Rajamohan, Optimization of surface roughness an flatness in end milling of Aluminium alloy Al 6063-T6, International Journal of Advances in Engineering & Technology, Vol. 8, No. 6, pp. 937-949, 2015.
8. Rajamohan, G., An approach for the unified evaluation of orientation tolerances, International Journal of Engineering Research & Technology, Vol. 5, No. 1, pp. 169-173, 2016.

Publication in proceedings of conferences in 2015-16 :

1. A. K. Pathak, Razaullah Khan and Dharendra Tiwari, Study of Microstructure and Mechanical Properties of Feritic Stainless Steel (AISI 430) Weldment using ER309L and ER430 electrodes, Proceeding of National Welding Seminar 9-11 Dec 2015, CIDCO, Vashi, Navi Mumbai, Organised by The Indian Institute of Welding.
2. Rajamohan, G. (2015), A random walk based algorithm for the assessment of perpendicularity, International Conference on Applied Research in Engineering and Technology (ICARET '15), Thamirabharani Engineering College, Tirunelveli.





3. Chandan Kumar and G. Rajamohan (2016), Selection of machining parameters for optimization of surface roughness in Turning of Stainless Steel SS304, International Conference on Technological innovations in Mechanical Engineering (TIME-2016), Chaitanya Bharathi Institute of Technology, Hyderabad.

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

1. D Mukerjee, Atul Saxena and B K Jha, 'High End Niche Steel Products – Recent Innovations in India', JPC Bulletin on Iron and Steel, Vol. XV, Issue 7, July 2015, pp 12-27.
2. B.K.Chakrabarti, International Conference (TMS-2015) of the Minerals, Metals & Materials Society, USA held at Orlando, Florida, USA during 15th – 19th March, 2015. Oral presentation & publication entitled " Modeling & Design of Experiment in Calcination of Magnesites". The paper was published in the Proceedings being published by John Willey & Sons Publications.
3. B.K.Chakrabarti, attended International Seminar on "Innovative Technologies for Clean, Green & Automated Steel Plants: a better tomorrow", held at Kolkata during 10-11th Sept, 2015.
4. G.S. Das, Anjani Kr. Singh, Microstructural Corrosion Study of Thermo-Mechanical Treated Steel in Simulated Concrete Pore Solution in Presence of Chloride Ion, International Journal of Scientific Research and Education, Vol- 3, Issue ,1pp 4747-4751, December - 2015.
5. G.S. Das, Anjani Kr. Singh, Performance of steel rebar in simulated concrete pore solution with addition of sodium chloride, International Journal of Scientific Research Engineering & Technology, Volume 4, Issue 12, pp 1204-1207, December 2015.
6. Ghanshyam Das, B.N.Roy, Rajiv Agulla, Study of pitting corrosion behavior of austenitic stainless steel, Open Journal of Engineering Research and Technology Volume 1, Issue 1 (2016), pp 50-58.
7. Ghanshyam Das, B.N.Roy, Rajiv Agulla, Study of influence of stressed corrosive environment on the austenitic stainless steel, International Journal of Development Research, Vol. 06, Issue 07 (2016), pp.8447-8450.
8. Anjani Kumar Singh, Ghanshyam Das, Presented technical paper titled Corrosion Study of Thermo-Mechanically-Treated (TMT) Steel Bar Used in Reinforcing in Concrete Structure in international conference on Advances in steel power and construction technology held on March 17-19. 2016 in OPJIT Raigarh, Chattishgarh.
9. G.S. Das, Anjani Kr. Singh, Presented technical paper titled Mechanism and kinetics of reinforced TMT bar corrosion in concrete in international conference NMD-ATM 2015 held on 13-16 Nov. 2015 at Coimbatore.
10. G. Das received Best technical paper award obtained by IIM Ranchi chapter held in the Annual General Meeting 31/10/2015 at Mecon community hall.
11. S.Kumar, S.R.Kumar, S.K.Sharma, D.Roy "Structure Composition and Optical properties of Non aqueous Deposited ZnCdS Nanocrystalline Film" Materials Today: Proceedings. 2(2015) 4563-4568.
12. A.Mishra, M.Gond, S.B.Kumar, D.Roy "Synthesis and characterization of Hydroxyapatite based Nanocomposites for structural applications" International Journal of Scientific & Engineering Research, Volume 6, Issue 8, August-2015



13. S.Chakraborty, D.Roy, "Synthesis and characterization of nano metal dispersed Cu-basenanano-composite"4th InternationalConference on Advanced Nanomaterials and Nanotechnology (ICANN-2015), Dec08-11, 2015 .
14. C. Chattopadhyay and B.S. Murty. "Kinetic modification of the 'Confusion principle' for metallic glass formation" Scriptamaterialia, 2016, 116 pp 7-10.

DOI -<http://dx.doi.org/10.1016/j.scriptamat.2016.01.022>

15. C. Chattopadhyay, K.S.N. Satish Idury, Jatin Bhatt, K. Mondal, B.S. Murty. "Critical evaluation of glass forming ability criteria". Materials Science and Technology, 2016, 32 pp 380-400. (Accepted and came online in 2015)

DOI - <http://dx.doi.org/10.1179/1743284715Y.0000000104>

16. Renu Kumari, Blawert, Carsten and Majumdar, J. Dutta, 2016. "Microstructures and Properties of Plasma Electrolytic Oxidized Ti Alloy (Ti-6Al-4V) for Bio-implant Application." Metallurgical and Materials Transactions A 47(2):788-800.
17. Renu Kumari and J. Dutta Majumdar,2016." Microstructural Characterization of Multilayered Coating on Titanium Based Alloy (Ti-6Al-4V) Substrate for Bio-Implant Application" Adv. Sci. Lett. 22, 256-260 .
18. R. Kumari, International Conference, Thermo-mechanical Simulation and Processing of Steels, on February 10 - 12, 2016 RDCIS, SAIL, Ranchi
19. AvikMahata, KoushikSikdar"Molecular dynamics simulation of nanometer scale mechanical properties of hexagonal Mg—Li alloy", Journal of Magnesium and Alloys, 4 (2016) 36-43.
20. K. Sikdar, International Conference, Thermo-mechanical Simulation and Processing of Steels, on February 10 - 12, 2016 RDCIS, SAIL, Ranchi

DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES

1. "Partial replacement of sand & cement by Iron ore slime for concrete building material", Jyolsna Jerin, R. K. Rath and Anil Kumar, Recent Trends in Civil Engineering & Technology (RTCET) vol. 6. issue 2 (2016) 1-6, ISSN: 2249-8753(online), ISSN: 2321-6476 (print)
2. " Effect Of Climate Change On Water Resources " Anil Kumar, Journal of Alternate Energy Sources and Technologies (JoAEST) vol. 7 No. 1 (2016) 44-48, ISSN: 2230-7982(online), ISSN: 2321-5186(print)
3. "Change detection in LULC of Sahibganj district, Jharkhand, India using Remote Sensing & GIS" D.P Mohabey, Neeraj Kumar Sharma & Anil Kumar, International Journal of Advancement in Remote Sensing, GIS and Geography (2015) Vol.3, No.2, 59-70
4. "An overview idea on carbon Sequestration" Anil Kumar, International Journal of interdisciplinary Research & Innovations, 3(4)100-105; 2015
5. "Land use/land cover analysis of Santhal Pargana using satellite Remote Sensing data", D.P. Mohabey, J. B Lamay, N. J. Kullu, N. K. Sharma & Anil Kumar, Journal of Remote sensing & earth Science, 2015, Vol. 1, Issue 1, pp. 1-14.



6. "Land use/land cover exploration & change revealing in Devghar district part of Jharkhand using multi temporal satellite data" D.P Mohabey & Anil Kumar, Journal of Remote sensing & GIS, 2015, Vol. 6, Issue 1, pp. 1-12, ISSN: 2230-7990.
7. "Use of Solar Power in telecom tower to reduce environmental pollution", Suhas Kumar Srivastawa, Madhu Kumari, International Journal of Current Research, Volume 8, issue 6, 32342-32347.
8. " E-commece & Supply chain management: the nexus unleashed, challenges & oppotuanites" Devesh Gaurav, Aadarsh Das & Sujata Smiti Gupta, Discovery, 52(246)1217-1221, 2016.
9. "Synthesis and Characterization of ZnO Nanoparticle Using Electrode Position Method", Shashikant Rajpal, S.R. Kumar, Anand Kumar M., International Journal of Development Research, 5 Issue 6, pp 4670-4672, June-2015.
10. "Synthesis and Characterisation of Non-Aqueous Electrodeposited ZnSe thin Film". S.R.Kumar, Shashikant Rajpal, Published in International J. of Chemical,Nuclear,Materials and Metallurgical Engineering Vol:9 No.3,2015.
11. "Structural, Compositional, Morphological and Optical Properties of Electrodeposited Nanocrystalline ZnO Thin Film", Shashikant Rajpal, S.R Kumar Published in International Journal for Innovative Research in Science and Technology, 1 issue 12, May 2015.
12. "Structure, Composition and Optical Properties of Non aqueous Deposited ZnCdS Nanocrystalline Film", S.R Kumar, Suresh Kumar,S.K Sharma and D.Roy, Published in Materials Today, Proceedings (Elsevier) 2 4563-4568, (2015).
13. Madhu Kumari, Prasoon Kumar Singh and Suhas Kumar Srivastava,"Smart cities and solar energy applications", Biospectra, 2(2016)169-172.
14. Suhas Srivastava, Madhu Kumari and Prasoon Kr. Singh,"Predictive mathematic modeling to analyze the feasibility of infiltrating solar hybrid vehicles in smart cities of India", Imperial Journal of Interdisciplinary Research, 2(2016)999-1006.

ACADEMIC ACTIVITIES



Academic activities carried out during the academic year 2015-16.

Regular Activities of Academic Section.

All the regular activities of Academic Section such as publishing of results, conducting supplementary and semester examinations have been carried out as per schedule. Classes of First semester M.Tech,2015,B.Tech 2015 and ADC 2015 had been started on 28th July,2015,27th July,2015, and 28th July,2015 respectively.

ADMISSION 2015

1. PhD. Programme

Admission of Ph.D students were undertaken through written test & interview, conducted by respective department.

Department	No. of seats	No. of seats filled
Forge Technology	1	1

2. M.Tech

Admission through CCMT-2015

Branch	No. of seats	No. of seats filled
Manufacturing Engineering	28	23
Foundry-Forge Technology	28	23
Environmental Engineering	28	18
Material Science &Engineering	28	16

3. B.Tech

Admission through JoSSA-2015

Branch	No. of seats	No. of seats filled
Manufacturing Engineering	77	64
Metallurgy and Materials Engineering	62	60

4. ADC

Admission through written test conducted by NIFFT

Branch	No. of seats	No. of seats filled
Foundry Technology	46	44
Forge Technology	46	29



Students Passed out in 2015

1. M.Tech (2013-15)

Branch	No. of students passed out
Manufacturing Engineering	19
Foundry-Forge Technology	20
Environmental Engineering	07
Material Science & Engineering	06

2. B.Tech (2011-15)

Branch	No. of students passed out
Manufacturing Engineering	56
Metallurgy and Materials Engineering	46

3. 41st ADC

Branch	No. of students passed out
Foundry Technology	40
Forge Technology	30

List of Seminar/Projects conducted during 2015-16



M.Tech. FFT (Seminar) 2014-16 :

SN.	Roll No.	Name of the Student	Title	Name of the Guide
1	FF14M01	Siddhartha Shankar Das	DEVELOPMENTS IN SYNTHESIS AND APPLICATION OF METAL MATRIX NANOCOMPOSITES	Dr.K.K.Singh
2	FF14M02	Dogare A. Madhukar	STUDY OF PROCESS PARAMETERS AND APPLICATION OF SPRAY CASTING	Dr.K.K.Singh
3	FF14M04	Srijan Prabhakar	LOST FOAM CASTING PROCESS	Dr. A.K. Singh
4	FF14M05	Md.Rashid Hasnain	ENERGY & ENVIRONMENT MANAGEMENT IN FOUNDRY INDUSTRIES	Dr. A.K. Singh
5	FF14M06	Siyaram Kumar	FRICITION & LUBRICATION IN HOT FORGING	DR.P. Talukdar
6	FF14M07	Bonumaddi Raghu Ram	HOT FORGING OF LOW ALLOY CHROME-MOLY STEEL	DR.P. Talukdar
7	FF14M08	Sanjeet Kumar	CARBON FIBRE AND ITS APPLICATIONS	Dr. Amitesh Kumar
8	FF14M10	Anurag Deo	NANO COMPOSITES AND ITS APPLICATIONS	Dr. Amitesh Kumar
9	FF14M11	Mathala Prithvi Raj	CONTROL OF METALLURGICAL AND MECHANICAL PARAMETERS FOR FORGED RAILWAY WHEELS	Dr.Manoj Kumar
10	FF14M12	Atal Bihari	GRAPHINE MOULD PARTICULARLY USED IN MAKING RAIL WHEEL	Dr. Nandita Gupta
11	FF14M13	Gautam Malakar	SELECTION OF DIE MATERIALS FOR HOT FORGING	Dr.R.K.Ohdar
12	FF14M14	Vishwajeet Kumar	FORGABILITY OF TITANIUM ALLOYS	Dr. N.K. Singh
13	FF14M15	Md. Shahwaj	TYPES OF MOULD MATERIAL AND CASTING DEFECTS	Dr. Nandita Gupta
14	FF14M16	Ritesh Kumar	FORGING PROCESS DESIGN	Dr.R.K.Ohdar
15	FF14M17	Bora Vijaya Chandra Sekhar	RECENT DEVELOPMENT IN LUBRICANTS FOR CLOSED DIE FORGING OF STEEL	Dr.Manoj Kumar
16	FF14M18	Ajay Kumar Dixit	ISOTHERMAL FORGING	Dr. N.K. Singh



M. Tech FFT (Project) 2014-16 :

SN	Roll No.	Name of the Student	Title	Name of the Guide
1	FF14M01	Siddhartha Shankar Das	RECRYSTALLISATION BEHAVIOUR OF ADVANCED LINEPIPE STEELS	Dr.K.K.Singh
2	FF14M02	Dogare A. Madhukar	EFFECT OF QUENCHING AND PARTITIONING IN MEDIUM MAGANESE STEELS	Dr.K.K.Singh
3	FF14M04	Srijan Prabhakar	STUDY ON CORROSION BEHAVIOUR OF AI ALLOY METAL MATRIX COMPOSITE	Dr. A.K. Singh
4	FF14M05	Md.Rashid Hasnain	STUDIES ON WEAR CHARACTERISTICS OF ALUMINIUM ALLOY METAL MATRIX COMPOSITE- A HYBRID SYSTEM	Dr. A.K. Singh
5	FF14M06	Siyaram Kumar	FORGING AND STUDY OF MECHANICAL PROPERTY OF MEDIUM CARBON STEEL	Dr. P Talukdar
6	FF14M07	B. Raghu Ram	THE EFFECT OF HOT FORGING ON SA336 F11 LOW ALLOY STEEL	Dr. P Talukdar
7	FF14M08	Sanjeet Kumar	COMPARATIVE STUDY OF SOLIDIFICATION OF LEAD AND ITS ALLOYS	Dr. Amitesh Kumar
8	FF14M10	Anurag Deo	OPTINIZATION OF PROCESS PARAMETERS FOR THE SYNTHESIS OF ALUMINIUM-BASED NANO COMPOSITES	Dr. Amitesh Kumar
9	FF14M11	M. Prithvi Raj	OPTIMIZATION OF FORGING PROCESS PARAMETERS FOR CLOSED DIE FORGING OF SOME AUTOMOTIVE COMPONENTS	Dr.Manoj Kumar
10	FF14M12	Atal Bihari	A QUALITY PRODUCTION OF AI-SI ALLOY WITH CHANGE IN COMPOSITION	Dr. Nandita Gupta
11	FF14M13	Gautam Malakar	OPTIMISATION OF FORGING PARAMETERS OF ROCKER ARM	Dr.R.K.Ohdar
12	FF14M14	Vishwajeet Kumar	OPTIMISATION OF DESIGN PARAMETER & DIE STRESS ANALYSIS OF FORGING OF DRIVE SHAFT	Dr. N.K. Singh
13	FF14M15	Md. Shahwaj	FATIGUE PROPERTY ASSESSMENT OF RAIL STEEL	Dr. Nandita Gupta
14	FF14M16	Ritesh Kumar	OPTIMISATION OF MATERIAL UTILIZATION IN FORGING OF CRANKSHAFT USING PROCESS SIMULATION	Dr.R.K.Ohdar



15	FF14M17	B. Vijay Chandra Sekhar	STUDY OF FORGING BEHAVIOUR OF ALUMINIUM ALLOYS	Dr. Manoj Kumar
16	FF14M18	Ajay Kumar Dixit	OPTIMIZATION OF MATERIAL UTILIZATION OF FORGING OF PITMAN ARM	Dr. N.K. Singh

M.Tech. ME (Seminar) 2014-16

SN	Roll No.	Name of the Student	Title	Name of the Guide
1	ME14M01	Jince P. Mathew	STUDY OF NON-CONVENTIONAL HYBRID MACHINING USM ASSISTED EDM ON HARD MATERIALS, ALLOYS, COMPOSITES etc	Dr. A.K. Pathak
2	ME14M02	K. Sreenivasa Reddy	CNC MACHINING OF FREE FORM/ SCULPTURED SURFACES	Dr. A. Mandal
3	ME14M03	Saroj Kumar Rout	RECENT TRENDS IN UNCONVENTIONAL MICRO-MACHINING	Dr. G. Rajamohan
4	ME14M04	Shashant Singh	FUTURE ADVANCEMENTS IN MICROMACHINING	Shri V.M.S. Hussain Dr. Manoj Kumar
5	ME14M05	Shivam Varma	ADDITIVE MANUFACTURING IN NANOTECHNOLOGY	Dr. A.K. Sood
6	ME14M06	Nishant Navin	SMOOTHING OF CURVED SURFACE OF OPTIC LENS USING ELASTIC EMISSION MACHINING (EEM)	Dr. A.K. Pathak
7	ME14M07	Md. Ali Zeeshan	MAGNETIC PULSE WELDING	Dr. A.K. Pathak
8	ME14M08	Ankush Kalia	ADDITIVE MANUFACTURING: ITS STATUS AND FUTURE	Dr. A.K. Sood
9	ME14M09	Priyabrata Nath	MAGNETO RHEOLOGICAL FINISHING	Dr. Sanjay Kumar
10	ME14M10	Abhishek Kumar	TRENDS IN NANO METROLOGY	Dr. G. Rajamohan
11	ME14M11	C. Amit Vijay Kumar	STUDY OF INTERNAL MAGNETIC ABRASIVE FINISHING FOR NON-MAGNETIC MATERIALS	Dr. Vijay Toppo
12	ME14M12	Gappu Kumar	COMPARISON BETWEEN FRICTION WELDING AND FRICTION STIR WELDING	Shri V.M.S. Hussain Dr. Vijay Toppo
13	ME14M14	Piyush	ATOMIC FORCE MICROSCOPY	Dr. Sanjay Kumar
14	ME14M15	Rahul Ganguly	ULTRASONIC MICROMACHINING	Dr. Vijay Toppo



15	ME14M16	B. Karthik Kumar	RELIABILITY CENTRED MAINTENANCE	Shri V.M.S. Hussain
16	ME14M18	Ms. Sunita Nayak	LASER INDUCED PLASMA MICROMACHINING	Dr. A.K.Sood
17	ME14M19	Ankit Kumar Gangwar	MICRO ELECTRIC DISCHARGE MACHINE	Dr. Sanjay Kumar

M.Tech. ME (Project) 2014-16 :

SN	Roll No.	Name of the Student	Title	Name of the Guide
1	ME14M01	Jince P. Mathew	STUDY OF CORROSION BEHAVIOUR OF TIG AND MIG WELDED JOINTS OF FERRITIC STAINLESSSTEEL (FSS) (AISI-430) IN DIFFERENT ENVIRONMENTS	Dr. A.K. Pathak &
				Dr. Binod Kumar
2	ME14M02	K. Sreenivasa Reddy	PARAMETERIZATION OF RANDOMLY MEASURED DATA POINTS	Dr. A. Mandal
3	ME14M03	Saroj Kumar Rout	MICROMACHINING OF FIBER REINFORCED COMPOSITES	Dr. G. Rajamohan
				Dr. Joyjeet Ghose
4	ME14M04	Shashant Singh	PROCESS RELIABILITY ESTIMATION OF FORGING DIE DESIGN	Shri V.M.S. Hussain
				Dr. Manoj Kumar
5	ME14M05	Shivam Varma	OPTIMIZATION OF PROCESS PARAMETERS FOR MACHINING MILD STEEL USING WEDM	Dr. A.K. Sood
6	ME14M06	Nishant Navin	THERMAL ANALYSIS OF FSS (AISI-430) WELDMENT USING ANSYS	Dr. A.K. Pathak
7	ME14M07	Md. Ali Zeeshan	STUDY OF TIG AND MIG WELDED JOINTS OF FSS USING FERRITIC AND AUSTENITIC FILLER METAL AND ARGON +2% O ₂ AS SHIELDING GAS	Dr. A.K. Pathak
8	ME14M08	Ankush Kalia	MULTI-OBJECTIVE OPTIMIZATION OF EDM PROCESS PARAMETERS	Dr. A.K. Sood
9	ME14M09	Priyabrata Nath	OPTIMIZATION OF SPRUE DESIGN USING PRO-CAST	Dr. Sanjay Kumar
10	ME14M10	Abhishek Kumar	SELECTION OF OPTIMUM SAMPLE SIZE FOR FLATNESS MEASUREMENT IN MILLED COMPONENTS USING CMM	Dr. G. Rajamohan
11	ME14M11	C. Amit Vijay Kumar	INVESTIGATION OF WEAR BEHAVIOUR FOR FRICTION STIR WELDING OF SIMILAR AND DISSIMILAR ALUMINIUM ALLOYS USING CONVENTIONAL WEAR TESTING MACHINE	Dr. Vijay Toppo
12	ME14M12	Gappu Kumar	FRICTION STIR WELDING OF DISSIMILAR AI ALLOY: MECHANICAL EVALUATION AND RELIABILITY ANALYSIS	Shri V.M.S. Hussain
				Dr. Vijay Toppo



13	ME14M14	Piyush	MODELING, SIMULATION AND ANALYSIS OF FLYWHEEL CASTING	Dr. Sanjay Kumar
14	ME14M15	Rahul Ganguly	NON CONVENTIONAL WEAR TEST FOR FRICTION STIR WELDING OF SIMILAR AND DIS-SIMILAR ALUMINIUM ALLOYS	Dr. Vijay Toppo
15	ME14M16	B. Karthik Kumar	RELIABILITY MODELLING OF ROTOR SYSTEMS WITH COMPETING FAULTS	Shri V.M.S. Hussain
16	ME14M18	Ms. Sunita Nayak	MULTI-OBJECTIVES GENETIC ALGORITHM FOR FLEXIBLE JOB SHOP SCHEDULING	Dr. A.K. Sood
17	ME14M19	Ankit Kumar Gangwar	DESIGNING AND SIMULATION OF STEEL CASTING OF JOURNAL BEARING USING PRO-CAST	Dr. Sanjay Kumar
18	ME12M05	Md. Shabir Ansari	RELIABILITY ESTIMATION OF FLEXIBLE COUPLING USED IN ROTOR SYSTEM	Shri V.M.S. Hussain

M.Tech. MSE (Seminar) 2014-16 :

S.N	Roll No.	Name of the Student	Title	Name of the Guide
1	MM14M01	Rajan Kumar	MAGNESIUM AND ITS ALLOYS	Dr.D.Roy
2	MM14M02	Chandra Shekhar Kumar	STUDY OF WELD DECAY IN STAINLESS STEELS	Dr. Binod Kumar
3	MM14M03	Arjit Singh	NANOTECHNOLOGY AND ITS APPLICATIONS IN ELECTRONIC DEVICES	Dr. G.Das
4	MM14M04	Ankur Tiwari	NANOTECHNOLOGY IN ENERGY SECTORS	Dr. G.Das
5	MM14M05	Amit Kumar	ROTARY ULTRASONIC MACHINING	Dr. S.B. Kumar
6	MM14M06	Ms. Tabassum Bano	ORBITAL TUBE WELDING AN OVERVIEW	Dr. S.B. Kumar
7	MM14M07	Ankit Meena	A REVIEW ON ALTERNATIVE SOURCE OF ENERGY	Dr. S.B. Kumar
8	MM14M08	Kuldeep Mishra	GRAPHINE	Mr. B.Mallik
9	MM14M09	Aarjoo Jaimin	AUSTEMPERED DUCTILE IRON (ADI)	Dr. D. Roy
10	MM14M10	Subhendu Kumar Das	DUPLEX STAINLESS STEEL	Dr. Binod Kumar
11	MM14M11	Abhishek Raj	POWDER FORGING	Mr. B.Mallik
12	MM14M13	Vivek Soni	ADDITIVE MANUFACTURING IN NANOTECHNOLOGY	Mr. B.Mallik
13	MM14M14	Rahul Kumar	MICRO-ELECTRO MECHANICAL SYSTEM (MEMS)	Dr. G.Das
14	MM14M16	E. Ajay Kumar	ATOMIC FORCE MICROSCOPY	Dr. Binod Kumar



15	MM14M17	Rakesh Kumar	COMPOSITE MATERIALS AND ITS APPLICATIONS	Dr. D.Roy
16	MM14M19	Ms. Nalini Kumari	STUDIES ON A356 ALLOY USING FORGING TECHNIQUES IN AUTOMOBILES PARTS	Dr. D.Roy

M.Tech. EE (Seminar) 2014-16 :

SN	Roll No.	Name of the Student	Title	Name of the Guide
1	AS14M01	Abhimanyu Kumar Paswan	CONTAMINATED LAND MANAGEMENT AND SITE REMEDIATION	Dr.S.R.Kumar
2	AS14M02	Prabhat Kumar Ranjan	STUDY OF RECYCLING OF PAPER WASTE	Dr.S.R.Kumar
3	AS14M03	D. K. G. Ravi Teja	NANO FILTRATION IN WATER SUPPLY SYSTEMS	Dr.S.R.Kumar
4	AS14M04	Yenigandla Naga Mahesh	NOISE CONTROL OF BUILDINGS	Dr. Anil Kumar
5	AS14M05	Sujeet Kumar	SMART CITY-A GREEN TECH APPROACH	Dr. Anil Kumar
6	AS14M06	Shashi Bhusan	CARBON ABATEMENT TECHNOLOGY (CAT)	Mrs. Madhu Kumari
7	AS14M08	Chinthala Rajesh	CARBON SEQUESTRATION	Dr. Anil Kumar
8	AS14M09	Suhas Srivastava	WATER TREATMENT METHODS	Mrs. Madhu Kumari
9	AS14M10	Anant Vijay Kumar	CLIMATE CHANGES AND IT'S IMPACT	Mrs. Madhu Kumari

M.Tech. EE (Project) 2014-16 :

S.N	Roll No.	Name of the Student	Title	Name of the Guide
1	AS14M01	Abhimanyu Kumar Paswan	Tailing Pond management-Issues and Challenges.	Dr.S.R.Kumar
2	AS14M02	Prabhat Kumar Ranjan	MUNICIPAL SOLID WASTE IN SHYAMALI TOWNSHIP, DORANDA, RANCHI	Dr.S.R.Kumar
3	AS14M03	D. K. G. Ravi Teja	REMOTION OF HEXAVALENT CHROMIUM FROM AQUEOUS SOLUTIONS BY USING AGRO BASED PRODUCTS AS ADSORBENTS	Dr.S.R.Kumar
4	AS14M04	Yenigandla Naga Mahesh	STUDY OF DURABILITY OF AOD AND GBFS BASED GEOPOLYMER PRODUCTS	Dr. Anil Kumar
5	AS14M05	Sujeet Kumar	USE OF COLOUR/ SIZE SEGREGATED FLY ASH IN CEMENT AND GEOPOLYMER	Dr. Anil Kumar



6	AS14M06	Shashi Bhusan	STUDY OF BASICS OF SEWAGE TREATMENT PLANT PROCESS AND ITS COMPARISON	Mrs. Madhu Kumari
7	AS14M08	Chinthala Rajesh	BENEFICIATION OF LOW GRADE IRON ORE TAILINGS.	Dr. Anil Kumar
8	AS14M09	Suhas Srivastava	ANALYSIS OF AVAILABILITY OF NON CONVENTIONAL ENERGY RESOURCES IN JHARKHAND	Mrs. Madhu Kumari
9	AS14M10	Anant Vijay Kumar	STUDY AND ANALYSIS OF COKE OVEN BY PRODUCT PLANT AND VARIOUS AVAILABLE PROCESS FOR ITS EFFLUENT TREATMENT.	Mrs. Madhu Kumari

B. TECH

B. Tech. Manufacturing Engineering (2012-2016 batch) :

SN	Roll No	Name of Student	CGPA	Title of the Project	Guide Name
1	57/12 64/12	P. Dharani Chandra Kakara Rahul	6.37 6.1	Energy Management in Automotive Industry	Mrs. Madhu Kumari
2	06/12 19/12	Prakant Kumar Singh Gaurav	6.97 7.17	Study of Impact of Foundry Industries on Environment	Mrs. Madhu Kumari
3	14/12 12/12	Rajat Vishnoi Anuj Kumar Singh	7.27 6.85	Energy Management in Manufacturing Industry	Mrs. Madhu Kumari
4	36/11 18/12	Rajesh Kumar Ravi Ranjan	7.13 7.29	Energy Conservation Measures In Foundry Industry	Mrs. Madhu Kumari
5	58/12	Geddada Sandeep	6.65	Energy Conservation and simulation in Iron	Mrs. Madhu Kumari
	124/12	Koppala Lokesh	6.67	Casting Industry	
6	39/12 50/12	P. Ram Sandeep K.V. Revanth	7.54 7.48	Metal Flow Analysis during Deformation using DEFORM	Dr. Sanjay Kumar
7	13/12	Shubhanshu Pandey	6.94	Analysis of supply chain management in mfg Industry & Its competitive solutions	Dr. Sanjay Kumar
8	09/12 28/12	Akhil M. Nair A.S. Nishnath	7.80 7.52	Management Information Systems in Manufacturing	Dr. Sanjay Kumar
9	40/12 25/12	Vishwas Kumar Singh Anshul Chauhan	7.89 7.35	Rotor Dynamic Analysis (Broad Area of Research)	Mr. V.M.S. Hussain
10	63/12	Kamatam Mounika	7.67	Fault Tree Analysis (Broad Area of Research Work)	Mr. V.M.S. Hussain



11	35/12 67/12	N. Bhargava B. Saibaba	6.90 6.72	Establishing Reliability Centered Maintenance Procedure for Forging Machine	Mr. V.M.S. Hussain
12	66/12 55/12	Shubham Wankhede Madhusudan Yadav	6.6 7.13	Supply Chain Management (Broad Area)	Mr. V.M.S. Hussain
13	52/11 61/11	Sumit Bachan Cherukuri Durgacharan	6.87 6.47	Numerical Simulation of Aluminum Silicon Casting by Green Sand Process	Dr. Nandita Gupta
14	42/11 70/11	Raj Kumar Meena Pushpendra Meena	6.58 6.10	Effect of Water Clay Ratio on Green Sand Mould and its Effect on Quality of Casting	Dr. Nandita Gupta
15	72/11 75/11	Ved Prakash Meena Kumar Atyantika Anand	6.54 6.7	Supply Chain Management Applicable to Foundry Process based on Industry Data	Dr. Nandita Gupta
16	07/12 27/12	Sashi Ranjan Aman Sagar	8.33 7.56	Influence of Forging Variables on Upsetting of Cylindrical billet	Dr. Manoj Kumar
17	4/12 2/11	Shashwat Pandey Vishal Pandey	7.23 7.00	Powder Forging of Fe-Cu Carbon alloy	Dr. Manoj Kumar
18	68/12 69/12	Vimlesh Kumar Mahto Manoj Kumar Meena	7.10 6.73	Effect of Forging Parameters on Upsetting of Billet	Dr. Manoj Kumar
19	60/12 32/12	Akash Kumar Ramakant	8.54 8.23	Optimization of Die Design Parameters & Die Life Improvement by using Deform	Dr. R.K. Ohdar
20	16/12 02/12	Saurabh Garg Chirumamilla Ramakrishna	8.23 7.63	Modeling and Simulation of Reverse Supply Chain in Manufacturing Industries	Dr. R.K. Ohdar
21	20/12 23/12	Vivek Rakt Patel Rohan Kumar	8.69 8.26	ComputerAided Methoding of a Steel Casting	Dr. A.K. Singh
22	61/12 47/12	Ashu Singh Sumit Kumar Jha	7.4 6.15	To Study Common Casting Defects in Al-Alloys Cast	Dr. A.K. Singh
23	41/12 49/12	Balkrishna Siddhant Sudhirgh	8.54 6.48	Die Design Optimization of Connecting Rod using Simulation Software	Dr. N.K. Singh
24	37/12 71/12	N. Devender Goud Payam Sandeep	6.5 6.5	Stress Analysis of Forging Die for a bevel gear and design Optimization	Dr. N.K. Singh
25	38/12 53/12	Praveen Kumar Singh Kumar Abhishek	7.02 6.13	Effect of Ultrasonic Vibration on Al-Mg Alloy Casting	Dr. Amitesh Kumar
26	03/12 31/12	Simant Kumar Amit Kumar	8.02 6.83	Synthesis and Charecterisation of Metal Matrix-Composites by Ultrasonic casting	Dr. Amitesh Kumar
27	68/11 27/11	Rishi Kishore Jay Krishna Yadav	7.06 6.81	Heat Treatment of Forged Steel Component	Dr. P. Talukdar



28	08/12 29/12	Keshav Gupta Aditya M. Vihayvargiya	7.56 6.88	A Study on Heat Treatment of duration by Forging	Dr. P. Talukdar
29	34/12 36/12	Ashish Kumar Amit Yadav	8.00 7.10	Application of Quering Theory in Multistage Production Line	Mr. K.K. Vema
30	30/12 17/12	Bhupendra Kumar Maurya Amit Kumar	7.17 7.10	Application of Six-Sigma Technique in Manufacturing	Mr. K.K. Verma
31	53/11 109/12	K.C. Akshay Kumar Lakshman Praveen Parimi	6.12 7.21	6 Sigma Introduction & Implementation in Automobile Industries	Mrs. S.S. Gupta
32	45/12 54/12	Shashi Ranjan Kumar Anant Kumar	6.63 6.42	Preperation of Alumunium based alloy metal matrix composite	Mr. B. Mallick
33	62/12 69/11	Akash Kumar Ritesh Ranjan	7.13 6.21	Thermal Analysis of EDM Process Clearing Finite Element Method	Dr. A.K. Sood
34	33/12 15/12	Gopal Jee Dhraw Kumar Jha	7.08 8.65	Processing Map as a Tool to Assess Hot Workability	Dr. S.B. Kumar
35	74/11 74/10	Ashok Kumar Manjhi Pradeep Kumar	6.75 6.51	XRD Analysis of Friction Stir Welding Joints of Similar and Disimilar Al-alloys	Dr. Vijay Toppo
36	10/12 48/12	Harsh Tyagi Divyanshu Goel		Application of Optimiza-tion Technique in Manu-facturing	Dr. K.K. Verma

B. Tech. Metallurgy & Materials Engineering (2011-2015 batch)

SN	Roll No	Name of Student	CGPA	Title of the Project	Guide Name
1	106/12 93/12	Bishnu Prasad Dash Himanshu Agarwal	8.02 7.73	Optimisation of Feeding Design for Different Casting Shapes	Dr. K.K. Singh
2	85/12 107/11	Manish Kumar Jha Vipul Kumar Singh	7.70 6.47	Correlation between microstructure and Mechanical properties of S-G cast iron	Dr. K.K. Singh
3	79/12 92/12	Ranjan Kumar Ashish Kumar Sinha	7.20 8.53	Effect of Powing Temp. and Section Thickness on Structure Properties of S-G Iron	Dr. K.K. Singh
4	87/12 125/12	Siddharth Nikhil K. Kanoujia		Study on Heat Treatment Behaviour of Defence Grade Steel	Dr. B. Kumar
5	76/12 86/12	Samarjeet Kumar Singh Ayush Srivastava		Study on Sensitization Behaviour of 304 Austentic Stainless Steel	Dr. B. Kumar
6	119/12 111/12	Guduguntla Ashok Yasapu Rakesh	9.02 8.25	Study on Heat Treatment Behaviour of Cold Rolled low Carbon Steel	Dr. B. Kumar



7	89/12 112/12	Kumar Vardhan Md. Faisal Khan	6.8 7.00	Study of Microstructure and Mechanical Properties of age hardened Al/Al203 Composites	Dr. Amitesh Kumar
8	100/12 110/12	Ranjeet Kumar Sidhanta Biswal	7.56	Effect of Mechanical Vibration on Microstructure of Al-Cu Alloy Casting	Dr. Amitesh Kumar
9	97/12 99/12	Nikesh Kumar Vivek Kumar Bharti	7.63 8.13	Comparative Study of Dispersion of Al2O3 Particle in Al-Cu-Mg Alloy Matrix Contact and Non Contact Ultrasonic Cavitation Technique	Dr. Amitesh Kumar
10	117/12 96/12	Prem Mahato Danish Naseem	6.43 7.93	Comparative Study of Microstructure & Mechanical Properties of Ultrasonic & Mechanically Vibration Casting of Al-Cu Alloy	Dr. Amitesh Kumar
11	122/12 129/12	Kothapally Thirupathi Kalvala Mahender	6.88 6.52	Ultrasonic Flow Detection and Thickness Measurement of a Steel Sample	Mr. B. Mallick
12	102/12	Manohar Prasad	7.74	Study of Properties of Al based Composites	Dr. B. Mallick
13	131/12 135/12	T.V. Madhu Prakash B. Sravan Kumar Reddy	7.02 7.06	Microstructure Characterization of Al-alloy	Dr. B. Mallick
14	103/12 88/12	Ashish Kumar Gupta Rambabu	7.98 6.92	Study of Mechanical Properties of Microstructure of Grey Cast Iron in Different Cooling rate during solidification.	Dr. A.K.. Singh
15	90/12 120/12	Shashank Priya Animesh Kumar	6.98 9.35	Study on Effect of Baron Addition on SG-Iron	Dr. Debdas Roy
16	126/12 104/12	Mrunali Dongare Punam Pragya	8.5 8.08	Assessment of effect of component heat treatment on Performance of beatear head used in crusher assembly	Dr. Debdas Roy Dr. J. Bhattacharya
17	127/12 114/12	Pawan Kumar Prashant Kumar	6.71 7.33	Al-Containing High Entropy Alloy for Light Weight Application	Dr. Debdas Roy Dr. C. Chattopadhyay
18	83/12 82/12	Saket Ranjan Sameer Tiwari	8.48 7.48	Finite Element Modelling of Thermomechanical behaviour of Steel during hot Deformation Process	Dr. P.P. Chattopadhyay
19	94/12 98/12	V. Ramesh Naidu U.L. Krishna Mohan Varma	8.44 8.35	Six Sigma Implimentation in Manufacturing Industry	Dr. R.K. Ohdar
20	130/12 132/12	Albert Linda Ramashish Kumar	7.71 7.16	Analysis of Friction stir welding of disimilar aluminium alloys	Dr. Vijay Toppo



21	77/12 81/12	Vishal Jha Anuvart Dutta	7.42 6.19	Unified Structured Inven- tive Thinking	Mrs. S.S. Gupta
22	94/11 136/11	Rajesh Ranjan Ravi Kumar	6.79 6.42	Effect of Forging Param- eters on the Micro-sturc- ture of Low alloy steel	Dr. P. Talukdar
23	91/12 101/12	Ankit Kumar Gaurav Mohan	7.17 7.98	A Study on Heat Treat- ment of Low Alloy Steel by Forging	Dr. P. Talukdar
24	84/12 80/12	Ravi Raj Rishabh Keshri	8.73	Effect of Inoculation on Microstructure and Mechanical Properties of Gray Iron	Dr. R.K. Gupta
25	75/12 133/12	Dheeraj Pandey J. Ravi Kumar	7.96 6.81	Microstructure Properties Correlation of SG Iron Alloyed with Manganese (Mu)	Dr. S.B. Kumar
26	121/12 123/12	E. Ramaraju B. Naveen Kumar	8.50 7.83	Microstructure Properties Correlation of Gary Cast Iron Alloyed with Copper (Cu)	Dr. S.B. Kumar
27	81/11	Praveer Singh	7.6	Effect of Heat Treatment on Microstructure and Mechanical Properties HSLs Steel	Dr. R.K. Gupta



LIBRARY AND DOCUMENTATION CENTRE

EXISTING FACILITIES :

The Library and Documentation Centre of NIFFT rendering valuable services to the Institute and Users it has 50880 reading materials (Books, Journals, Standards, Transparencies, Slides, Video Cassettes and Microfilms etc.)

The Library is kept open from 09:00 AM to 10:00 PM on all Monday to Saturday & Sunday 09:00 A.M. to 05:30 P.M. The Centre provides Reading Facilities, Borrowing Facilities, References Services, Reprography Services, Inter Library Loan, Binding and Audio-Visual Facilities to its users. The Library has the following users viz, faculties, students and staff of the Institute and provides sitting space to about 100 people at a time.

SERVICE TOWARDS REFRESHER COURSE :

Documentation bulletins were provided on following topics for Refresher Course

1. Aluminum Alloy Casting.
2. Technology of Heat Treatment.
3. Technology of Grey & S.G. Iron Casting.
4. Cupola Melting.

NEW SERVICES :

1. Library has started new services to the users for online access to e-resources through e-Shodh Sindhu, Inlibnet Centre, Infocity, Gondhinagar, Gujrat for the following package.
 - ASME Journals Online
 - Economic and Political Weekly
 - Institute for Studies in Industrial Development (ISID) Database
 - JGate Plus (JCCC)
 - JSTOR
 - Nature
 - Oxford University Press
 - Springer Link
 - Web of Science Lease Access
2. Library had conducted a Book exhibition at NIFFT from 11.01.2016 to 13.01.2016, various faculty members were recommended important books related to their field.

INDUSTRIAL LIAISON CELL

(Training and Placement)



TRAINING :

As a part of the curriculum, arrangements are made for the students to undergo practical training during summer vacation in Multinational/Private/Public Sector undertaking/ Govt Dept. Some of the prominent industries in which NIFFT students have completed internships this year are listed below.

Programme (Duration of training)	Organizations (where undergone training)
B Tech 3rd Year (1 Month)	1.Tata Motor Jamshedpur 2. Tata Steel Jamshedpur 3.Tata Hitachi Jamshedpur 4.RINL Vizag 5.Caterpillar 6.Rail Wheel Plant Bela 7.BHEL Hyderabad 8.SAIL Durgapur 9.Chitranjan Locomotive 10. HEC Ranchi 11.BDL Hyderabad 12.HINDALCO
M Tech (1 Month)	1.HEC Ranchi 2. Hinduja Foundry 3.SAIL RSP 4.Usha Martin
ADC (3 Months :45 days in each industry)	1.Tata Motor Jamshedpur 2.HEC Ranchi

Placement: (Students passing out in 2016) :

Course	No of students appeared for campus	% Placed
B Tech(ME +MME)	105	88.0
ADC(Foundry Tech+ Forge Tech)	78	96.0
M Tech(FFT +ME)	21	75.0

Company Name	Program		
	B Tech	ADC	M Tech
Tata Motor Mumbai	04		
Mahindra & Mahindra Mumbai	01		
Maruti Udyog Ltd Gurgaon	02		



Tata Metalliks Ltd Kolkata	01		
Mu-Sigma Bengaluru	02		
KPMG Bengaluru	06		
Amtek Auto Bhiwadi	10	08	
DCM Engg Ropar	10		
Electrosteel Casting kolkata	05		
Good Luck Engg Company Ghaziabad	06		
MPM Foundry Solution Nagpur	06		
Talbro Automotive Comp. Gurgaon	04	02	
Uma Shakti steel Pvt Ltd Uttarakhand	05		
Shivalik Casting Pvt Ltd Raipur	08		
Continental Engines Ltd Bhiwadi	04	02	
KEMS Forging Bengaluru	06		
Knorr Bremse India Ltd Palwal	02		
Rajasthan Udyog Ltd	04	03	02
Jyvagro Company Pvt Ltd Kolkata	02		
Birla Precision Technologies Aurangabad	05		
PITI Casting Hyderabad		05	01
Himgiri Casting Pvt Ltd Halol Gujrat		07	
Neosym Industries Pune		04	
Texmaco rail and Engg Ltd Kolkata		02	
Ayush Metal Jamshedpur		02	
Sudisa Foundry Jamshedpur		05	
Natraj iron and Casting Pvt Ltd Dhanbad		03	
ISGEC Heavy Engg Ltd Haryana		02	
Ghaziabad Presicion Product Utrrakhand		02	
Echjay Industries Ltd Mumbai		03	
Aarti Steel Ltd Ludhiana		03	
Pradeep Metal Ltd Navi Mumbai		03	
Ace Forge Pvt Ltd Bengaluru		06	
Kalaria Forge Pvt Ltd Rajkot		04	
Ganga Forging Pvt Ltd Rajkot		02	
Sunstar Precision Forge ltd G. Noida		02	
Anoop Forging Pvt Ltd Mumbai		02	
ASL Industries Ltd Jamshedpur		03	
3D Foundry Pvt Ltd Mumbai			01
R K Forging Jamshedpur			09
Crescent Foundry Kolkata			02
TOTAL	93	75	15

STUDENTS GYMKHANA



Constitution of Committee

Designation	Name
Core Committee	
Patron	Prof. P.P. Chhatopadhyay Director NIFFT
Chairman	Dr. K.K. Singh, Professor
Member	Dr. Nandita Gupta, Professor
Member	Dr. Ganshayam Das, Associate Professor
Member	Ms. Renu Kumari, Assistant Professor
Member	Mr. Vineet Chak, Assistant Professor
Member	Mr. Avinash Kumar Verma, Assistant Registrar
Member	Mr. Rajneesh Mishra, Assistant Registrar
student's committee	
President	Siddhartha Vikram
Vice-President	Aakarsh Singh
General Secretary	Shashank Jha
Treasurer	Nasir Khalique
Jt. Secretary	PujitaGuna
Sports Secretary	Shrinu Bhanot

EVENTS ORGANIZED BY STUDENTS' GYMKHANA :

Cultural Events :

- **QUIZ** : A quiz competition on the theme of 'Seven Decades of Independence' was organised by students' Gymkhana on September 26, 2015. The quiz had two rounds- Preliminary Round and Main Round. There were two members in every team. Teams were given set of 15 questions in preliminary round to answer. Six teams qualified for the main round based on the results of preliminary round. Main round had questions from History, Polity, Geography, Science & Technology, and also had an audio visual round. At the end, three teams, who displayed the best analytical abilities emerged as winner. Winner teams were awarded by chief guest of event, Dr. K K Singh, Chairman, Students Gymkhana. Winners of the events were: Satish Kumar and Devraj; Avantika Gupta and Sarojini Kumari; Adarsh Das and Aman Jha, who bagged 1st, 2nd, and 3rd prizes respectively.
- **ALLEGATION & CLARIFICATION** : Allegation & Clarification was organised by Students Gymkhana in NIFFT Auditorium on November 1, 2015. The participants had to defend the famous personalities against the allegations leveled by judges of the event. Participants displayed the eloquence, assertiveness, and wit to defend the personalities against the allegations. Honourable director, Prof. P. P. Chatopaddhya, was the chief guest of the event who also asked various questions to the participants. Manoj Kumar, Rishabh Kumar, and Avantika Gupta won the first, second, and third prize respectively.



- **DUMB CHARADES** : A funny yet entertaining event called dumb charades was held on 2nd of November 2015. Groups of two students were made. One of them acted in accordance to the name of the movies they were given and the other had to guess the name. Winner were Apeksha Modi and Abhimanyu Chauhan.
- **UMEED (CLOTH DONATION DRIVE)** : Umeed aimed to help adolescent boys and girls and old aged people by providing them cloths. The events was organised on 29th November 2015. The condition of people living in orphanage and old age home is very pity. More than 900 new and old cloths were distributed. i bought some happiness and comfort warmth in the biting cold. The tag line of the event was “ No one has become ever poor by giving.”. The event was brought in association with 92.7 big fm.
- **CARTOON DRAWING COMPETITION** : A cartoon drawing competition on various themes was organised by Students’ Gymkhana on January 17, 2016. The participants had been given different themes to make the cartoon and showcase their creativity..ApurvAnandKrishna(B.Tech 2nd year), MuditaPateriya(B.Tech 3rd year) and Ashwin Kumar(B.Tech 2nd year) secured first, second, and third position respectively.
- **SPELL BEE COMPETITION** : A spell bee competition was organised by Students Gymkhana on January 24, 2016. Spell bee is about showing the precision and holding the nerves to spell the alphabets in words correctly, and participants left no stone unturned in this endeavour. The winners of this event were- Ashutosh Tiwari, Rajeev Shankar & Mayank Kumar; Anuvrat Dutta, Satishkumar & Mano Lingam; Surbhi Khatri and Avinanda Rudra. These teams secured first, second, and third position respectively.
- **GENERAL QUIZ ON REPUBLIC DAY** : A general quiz competition was organised by Students’ Gymkhana on January 26, 2016 on the topic of Indian freedom struggle and British India in NIFFT Auditorium. The quiz consisted of two rounds- Preliminary round and main round. The winners of this quiz were: Satish Kumar and Dev Raj; Anuvrat Dutta and Sidhant Biswal and Adarsh Das & Aman Jha, who bagged first, second and third prize respectively.
- **CRAFT CREATION FROM WASTE MATERIAL** : A craft creation competition out of waste material was organised by Students’ Gymkhana on January 31, 2016 in Room No. 2 of Red Building. Participants were asked to create crafts from the waste material which can be used in daily life. The winners of this competition were Harshit Agrawal, ApurvAnand Krishna, and Shivam Kumar.
- **JINKS-Pranav 2016** : The all India cultural cum Techno-management fest of NIFFT, Ranchi JINKS-Pranav 2016, a three days extravaganza was organised from 26th to 28th February 2016. Mr. Abhjeet Ghosh (CMD, HEC), Mr. Kaushal Kishore (City SP, Ranchi), Mr. Atul Saxena (General Manager, RDCIS, SAIL), Dr. P.P. Chattopadhyay (Director NIFFT), Prof. K.K. Singh (Chairman Gymkhana), faculty members and participants from various colleges were present in the inauguration ceremony. The flagship events of the fest were Metasymposium, Autonomous and Mechanical Robotics, Informalz, Biz-quiz, B-plan, Gaming Zone, and Inquisitive. The main attractions of the fest were Fashion Walk, Thirkan, DJ-Night, by India’s No. 1 DJ-NYK and Celebrity Night in which Bollywood playback singer Gajendra Verma gave a wonderful performance. The main sponsors of the festival were- Canara Bank, Tata Metaliks, Depart-

ment of Arts and Culture, Department of IT and e-governance, Tourism Department , Government of Jharkhand , and CCL. Overall the fest was a grand success.



Technical Events :

- **ROBOTICS WORKSHOP** : A two days (17th-18th December) robotics workshop was organised by Students' Gymkhana in which construction of different autonomous robots like line follower, light detector, obstacle detector was taught. Students from NIFFT as well as other technical institutions got benefited by this workshop.
- **FOUNDRY DEVELOPMENT MEET** : A Foundry development meet was organised by Ranchi chapter of Indian Foundry Organization on January 25, 2016 to discuss the challenges and future of foundry industry. The distinguished speakers of this event were Dr. H SundarMurthi(President, Indian Foundry Organization), Mr. A K Das (FFT General Manager of HEC Ranchi), Mr. DP Singh(Retired Senior DGM of HEC), Dr. P. P. Chattopadhyay (Director, NIFFT Ranchi) and Dr. K K Singh(Chairman, IFO Jharkhand Chapter).
- **SUPRA SAE INDIA SAFETY WORKSHOP** : A one day car safety workshop was organised by SAE INDIA at New Delhi on 9th of May. Ayush Sinha and Harsit Agarwal from B.tech 3rd Year participated in the workshop.

Sports Events :

- **MERI KOLKATA** : The cricket club of NIFFT triumphed the tournament in CHAKRAVYUH, the sports fest of MERI, Kolkata, in the month of December, 2016 . The Volleyball team managed to get the title of Runner up. Football team put great efforts but could not reach the finals. Overall it was successful trip.
- **CHETAN DEVRAJ MEMORIAL TOURNAMENT** : The Cricket Team of NIFFT managed to reach the finals of ChetanDevraj Memorial tournament held at BIT, Mesra in the month of February 2016.



NIFFT HOSTEL

1	Dr. Manoj Kumar Associate Professor Department of Forge Technology	Chief Hostel Warden
2	Dr. D. Roy Assistant Professor Department of Materials and Metallurgical Engineering	Hostel Warden Nirala Chatrawas
3	Dr. A. K. Sood Assistant Professor Department of Manufacturing Engineering	Hostel Warden J.C. Bose Chatrawas
4	Dr. Amitesh Kumar Assistant Professor Department of Foundry Technology	Hostel Warden Homi J.Bhaba Chatrawas
5.	Mr. V.M.S.Hussain Assistant Professor, Department of Manufacturing Engineering	Hostel Warden M. Vishweshwaraiah Cha- trawas
6.	Dr. Renu Kumari Assistant Professor Department of Materials and Metallurgical Engineering	Hostel Warden Kalpana Chawla Chatrawas

At present the institute is having six hostels (five for boys and one for girls) for accommodating students of regular course. Recently Board of Governors has approved the name of the different hostels of the institute. The following are the details of the different hostels:

Previous Name	Changed Name	Available accommodation
ADC Hostel	Nirala Chatrawas	162
M.Tech. Hostel	Vikram Ambalal Sarabhai chatrawas	30
B.Tech Hostel (New)	Homi. J. Bhaba Chatrawas	162
B.Tech. Hostel (Old)	M. Vishweshwaraiah Chatrawas	176
Girls Hostel	Kalpana Chawla Chatrawas	100
New Hostel	J.C. Bose Chatrawas	400

GENERAL ADMINISTRATION



Retirement :

Sl. No.	Name	Designation	Date of Retirement
1.	Shri Rameshwar Singh	Technician Gr. "A"	31.07.2015
2.	Smt. S. Das	Stenographer	31.12.2015
3.	Shri Justin Lakra	Mazdoor	28.02.2016
4.	Shri T.P. Singh	Assistant	31.03.2016

Death :

Sl. No.	Name	Designation	Date of Death
1.	Shri Somnath Oraon	Technician Gr. "B"	03.04.2015
2.	Shri G. Kerketta	Cook	15.04.2015

Repatriation :

Sl. No.	Name	Designation	Date of Repatriation
1.	Dr. Raghunadhan T.	Registrar	29.12.2015

Appointments :

Sl. No.	Name	Designation	Date of Appointment
1.	Shri Vineet Chak	Assistant Professor	05.11.2015
2.	Shri Koushik Sikdar	Assistant Professor	26.11.2015
3.	Dr.(Ms.) Renu Kumari	Assistant Professor	27.11.2015
4.	Dr. Chinmoy Chattopadhyay	Assistant Professor	30.11.2015
5.	Dr. Ratnesh Kumar Gupta	Assistant Professor	30.11.2015
6.	Shri Ajit Kumar Pramanick	Assistant Professor	30.11.2015
7.	Dr. (Lt. Col.) M. G. Danish	Sr. Medical Officer	12.01.2016



Promotion :

Sl. No.	Name	Designation	Date of Promotion
1.	Dr. K. K. Singh	Professor	25.08.2015
2.	Dr. R. K. Ohdar	Professor	25.08.2015
3.	Dr. Amitesh Kumar	Associate Professor	25.08.2015
4.	Dr. A. K. Sood	Associate Professor	25.08.2015

Promotion (Under CAS)

Sl. No.	Name	Designation	Date of Promotion
1.	Dr. S.R. Kumar	Professor	25.08.2015
2.	Dr. Nandita Gupta	Professor	25.08.2015
3.	Dr. A.K. Pathak	Professor	25.08.2015

Staff Strength as on 31.03.2016

Director	01
Professor	13
Associate Professor	07
Assistant Professor	13
Sr. Medical Officer	01
Assistant Registrar	03
Assistant Superintendent Workshop	01
Librarian Sr.	01
Hindi Officer	01
Sr. Technical Assistant	04
Stenographer	02
Assistant	01
Upper Division Clerk	08
LDC/Typist	01
Technician Gr. "B"	06
Driver	01
Peon	04
Mali	01
Laboratory Attendant	05
Sweeper	01
Mazdoor	01
Cook	02
Total :	78

ERECTION & MAINTENANCE



Following Civil renovation and maintenance work carried out during the year :

Sn.	Project Name	Project Cost in Rs.
1	Revovation of D-1-Type (2 blocks-8 qtrs.)	5,563,674
2	Renovation of A- Type 5 blocks (30 qtrs)	8,809,330
3	Renovation of B-Type quarter 4 blocks (32 qtrs.)	9,418,400
4	Renovation of E-Type quarter 3 blocks (6 qtrs.)	4,502,369
5	Renovation of D-Type quarter 2 blocks (8 qtrs.)	4,440,077
6	Renovation of 3 block C-I Type quarters (12 Nos qtrs.)	4,433,839
7	Renovation and upgradation of Interiors of Institute Auditorium	5,041,571
8	Renovation of Post Graduate Hostel,(V A Sarabhai Hostel)	6,518,965
9	Renovation of old Administrative building	12,678,217
10	Renovation of 4 block C-Type quarter (16 nos. qtrs)	5,535,309
11	Renovation of and finishing etc. of P type quarters	1,914,437
12	Providing M.S stair with hand rail and renovation of flooring of "P" type quarter (4 Nos.)	1,104,698
13	Water proofing roof treatment of Library building	1,415,892
14	Replacement of CGI sheet roof and water proofing treatment of workshop building	2,752,995
15	External & Internal finishing of Old B.Tech (B. Vishwasariya) Chatrawas	2,684,990
16	Renovation of North side Laboratory 3 Nos.	2,595,579
17	Repairing of fixed chairs of Institute Auditorium	535,450
18	Providing Misc. Civil works including furnishing, Accoustical treatment Etc.,	43,401,159
	Total:	123,346,951.00



HINDI CELL

Hindi cell is mainly associated with the work of implementation of official language policy of the government of India. During the reported year following work was undertaken by the cell

1. Translation of official documents as per the requirement
2. Hindi Workshops organized for employees
3. Several programmes were organized for employees and students as a part of Hindi Day Celebrations
4. Prepration of hindi version of website
5. Compilation of words to prepare english –hindi word dictionary
6. Active participation in meetings of Town official language implementation committee(TOLIC)

Hindi officer contributed in following committees

1. Printing committee
2. Annual report committee
3. Committee on sexual harassment aganst women
4. Screening committee for selection of gender champion
5. Worked as assistant public information officer

NATIONAL INSTITUTE OF FOUNDRY AND FORE TECHNOLOGY

A Centrally Funded Technical Institute under MHRD (Govt. of India)

HATIA, RANCHI 834003 JHARKHAND



ANNUAL ACCOUNTS

FOR THE FINANCIAL YEAR 2015-16

(As per Revised Formats of Accounts of Central Educational Institutions)

Audited by

M/s Manmohan Singh & Co.

(Chartered Accountants)

Ranchi

NATIONAL INSTITUTE OF FOUNDRY AND FORGE TECHNOLOGY

HATIA, RANCHI - 834003

BALANCE SHEET AS AT 31'ST MARCH, 2016

Amount in ₹			
SOURCES OF FUNDS	Schedule	Current Year 2015-16	Previous Year 2014-15
CORPUS/CAPITAL FUND	1	936,532,018.96	1,064,848,732.73
CURRENT LIABILITIES	2	29,048,208.70	34,415,549.20
TOTAL		965,580,227.66	1,099,264,281.93

APPLICATION OF FUNDS	Schedule	Current Year 2015-16	Previous Year 2014-15
FIXED ASSETS	3		
a) Tangible Assets		145,012,316.00	148,352,125.00
b) Capital work-In-Progress		41,115,650.00	-
c) Intangible Assets		2,538,779.00	-
INVESTMENTS	4	114,573,536.00	303,547,890.00
CURRENT ASSETS	5	39,773,649.13	43,508,536.28
LOANS, ADVANCES & DEPOSITS	6	622,566,297.53	603,855,730.65
TOTAL		965,580,227.66	1,099,264,281.93

SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS- Schedule 18

AS PER OUR REPORTS ON EVEN DATE

FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)

MEMBERSHIP NO.:402655

PLACE : RANCHI

DATE: 28.07.2016



ANNUAL REPORT 2015-16





SCHEDULE - 1 - CORPUS/CAPITAL FUND

Particulars	Current Year	Previous Year
Balance at the beginning of the year	1,064,848,732.73	1,078,329,896.91
Add: Contributions towards Corpus/Capital fund	-	-
Add: Grants from UGC, Govt. of India, state Government to the extent utilised for capital expenditure	-	-
Add: Assets Purchased out of Earmarked Funds	-	-
Add: Assets Purchased out of Sponsored Projects, where ownership vests in the institution	-	-
Add: Capital Grants Receivable from Ministry	-	20,000,000.00
Add: Assets Donated / Gifts Received	-	-
Add: Others Additions	19,107,060.00	-
Add: Excess of Income over Expenditure transferred from the Income & Expenditure Account	-	-
TOTAL	1,083,955,792.73	1,098,329,896.91
Deduct: Deficit transferred from Income & Expenditure Account	(147,423,773.77)	(33,481,164.18)
	936,532,018.96	1,064,848,732.73

SCHEDULE - 2 - CURRENT LIABILITIES

CURRENT LIABILITIES		Current Year	Previous Years
1	Deposit From Staff	70,839.00	-
2	Deposit From Student		
a	Caution Money	7,537,103.50	3,443,903.50
b	Unclaimed fees	253,550.00	-
3	Deposit-Others		
a	Earnest Money	377,981.00	417,981.00
b	Security Deposit	353,412.30	217,753.30
4	Statutory Liabilities		
a	GIS Premium	-	123,089.00
b	LIC Premium	6,698.40	6,698.40
c	TDS U/s 192A	71,890.00	1,890.00
d	TDS U/s 194C	37,467.00	5,364.00
e	TDS U/s 194J	12,000.00	640.00
f	GPF Deduction from Salary	7,500.00	-
g	Employees Loan Repayment	19,607.00	19,607.00
5	Other Current Liability		
a	Receipt against Sopsponsored Projects (Schedule 2(a))	4,826,817.00	4,440,784.00
b	Receipt against Sopsponsored Fellowsipr & Scholarship (Schedule 2(b))	7,581,608.00	521,468.00
c	Other Liabilities		
a	Account Payable/ Receivable	223,441.00	250,486.00
b	AICTE	140,000.00	140,000.00
c	Consultancy Charges	730,598.00	1,333,598.00
d	Grant From CBSE Board	50,000.00	50,000.00
e	M/s Total Library Solution	92,784.00	92,784.00
f	NIFFT Alumni Association	168,000.00	171,800.00



g	Online Fee Deposit	4,556,819.50	-
h	Expenses Payable	1,930,093.00	2,047,089.00
i	CBSE Board	-	20,954,625.00
j	Consultancy Charges-Staff Share	-	14,097.00
k	Current Liability for Expenses	-	8,003.00
l	Outstanding Expenses(OB)	-	100,000.00
m	Scholar Fund	-	23,378.00
n	Testing Charges	-	15,600.00
o	Testing Charges(Fact/Tech. Staff)	-	7,365.00
p	Testing Charges(General Staff)	-	7,546.00
		29,048,208.70	34,415,549.20

SCHEDULE - 2 (a) - SPONSORED PROJECTS

Sr. No.	Name of the Project	Opening Balance		Receipts	Total	Expenditure	Closing Balance	
		Credit	Debit				Credit	Debit
1	2	3	4	5	6	7	8	9
1	Chair Professor-Ministry of Steel	1,632,745	-	2,020,305	3,653,050	3,207,185	445,865	-
2	Consultancy-I R I M E E - Jamalpur	-	-	560,000	560,000	305,898	254,102	-
3	Consultancy-KSB Pump	-	-	180,000	180,000	180,000	-	-
4	Consultancy-Tata Steel Ltd.	-	-	300,000	300,000	-	300,000	-
5	Consultancy-Tayo Rolls Limited	22,500	-	-	22,500	22,500	-	-
6	Direct Admission of Students Abroad(DASA)	300,000	-	-	300,000	-	300,000	-
7	Project-Board of Research in Nuclear Science(BRNS)	1,875,565	-	-	1,875,565	236,202	1,639,363	-
8	Project-Science and Engineering Research Board(Old)	180,450	-	-	180,450	-	180,450	-
9	Project-Science & Engineering Research Board(New)	-	-	1,688,333	1,688,333	-	1,688,333	-
10	Technical Education Quality Improvement Programme	18,704	-	-	18,704	-	18,704	-
11	United Nations Industrial Development Organization	410,820	-	-	410,820	410,820	-	-
	Total	4,440,784	-	4,748,638	9,189,422	4,362,605	4,826,817	-





SCHEDULE - 2 (b) - SPONSORED FELLOWSHIP AND SCHOLARSHIPS

Sr. No.	Name of the Project	Opening Balance		Receipts	Total	Expenditure	Closing Balance	
		Credit	Debit				Credit	Debit
1	2	3	4	5	6	7	8	9
1	Govt. of India SC/ST Scholarship	-	-	6,044,300	6,044,300	381,100	5,663,200	-
2	Ministry of Steel Scholarship	-	-	1,200,000	1,200,000	-	1,200,000	-
3	Scholarship-Ministry of Tribal Affairs	60	-	-	60	60	-	-
4	Shivam Autotech Ltd.Scholarship	-	-	192,000	192,000	-	192,000	-
5	S N Sinha Memorial Scholarship	-	-	5,000	5,000	-	5,000	-
6	State Scholarship for Students	521,408	-	385,810	907,218	385,810	521,408	-
Total		521,468	-	7,827,110	8,348,578	766,970	7,581,608	-

SCHEDULE - 3 FIXED ASSETS (O.B)

S.N	Assets Heads	Gross Block				Depreciation for the Year				Net Block	
		Opening Balance 01.04.2015	Additions	Deduc- tions	Closing Bal- ance	Depreciation Opening Bal- ance	Depreciation for the Year	Deducti- ons / Adjustm- ents	Total Depreci- ation	31.03.2016	31.03.2015
					(3+4+5)		(12+4-5) X (Rate%)			(12+4-5-8)	
1	2	3	4	5	6	7	8	9	10	11	12
1	Land	-	-	-	-	-	-	-	-	-	-
2	Site Development	-	-	-	-	-	-	-	-	-	-
3	Buildings	166,543,001.73	-	-	166,543,001.73	77,866,985.17	1,773,520.00	-	79,640,505.17	86,902,496.56	88,676,016.56
4	Roads & Bridges	-	-	-	-	-	-	-	-	-	-
5	Tubewells & Water Supply	-	-	-	-	-	-	-	-	-	-
6	Sevraage & Drainage	-	-	-	-	-	-	-	-	-	-
7	Electrical installation and Equipment	122,528,261.97	-	-	122,528,261.97	89,033,039.43	1,673,646.00	-	90,706,685.43	31,799,281.81	33,472,927.81
8	Plant & Machinery	-	-	-	-	-	-	-	-	-	-
9	Scientific & Laboratory Equipment	-	-	-	-	-	-	-	-	-	-
10	Office Equipment	1,541,790.36	-	-	1,541,790.36	1,541,790.36	-	-	1,541,790.36	-	-
11	Audio Visual Equipment	-	-	-	-	-	-	-	-	-	-
12	Computers & Peripherals	-	-	-	-	-	-	-	-	-	-
13	Furniture, Fixtures & Fittings	22,407,743.89	-	-	22,407,743.89	11,119,721.10	846,148.00	-	11,965,869.10	10,435,827.44	11,281,975.44
14	Vehicles	1,835,719.00	-	-	1,835,719.00	1,835,719.00	-	-	1,835,719.00	-	-
15	Lib. Books & Scientific Journals	100,524,632.58	-	-	100,524,632.58	84,781,791.29	1,492,121.00	-	86,273,912.29	13,429,084.19	14,921,205.19
16	Small Value Assets	-	-	-	-	-	-	-	-	-	-
17	Equipment UNESCO AID	2,497,217.00	-	-	2,497,217.00	2,497,217.00	-	-	2,497,217.00	-	-
Total (A)		417,878,366.53	-	-	417,878,366.53	268,676,263.35	5,785,435.00	-	274,461,698.35	142,566,690.00	148,352,125.00





SCHEDULE - 3A - PLAN FIXED ASSETS

S.No	Assets Heads	Gross Block				Depreciation for the Year				Net Block	
		Opening Balance 01.04.2015	Additions	Deductions	Closing Bal- ance	Depreciation Opening Balance	Depreciation for the Year (12+4-5) X (Rate%)	Deductions / Adjustments	Total Depre- ciation	31.03.2016	31.03.2015
					(3+4+5)					(6-8)	
1	2	3	4	5	6	7	8	9	10	11	12
1	Land	-	-	-	-	-	-	-	-	-	-
2	Site Development	-	-	-	-	-	-	-	-	-	-
3	Buildings	-	-	-	-	-	-	-	-	-	-
4	Roads & Bridges	-	-	-	-	-	-	-	-	-	-
5	Tubewells & Water Supply	-	-	-	-	-	-	-	-	-	-
6	Sevrage & Drainage	-	-	-	-	-	-	-	-	-	-
7	Electrical installation and Equip- ment	-	-	-	-	-	-	-	-	-	-
8	Plant & Machinery	-	227,020.00	-	227,020.00	-	11,351.00	-	11,351.00	215,669.00	-
9	Scientific & Laboratory Equipment	-	75,075.00	-	75,075.00	-	6,006.00	-	6,006.00	69,069.00	-
10	Office Equipment	-	51,525.00	-	51,525.00	-	3,865.00	-	3,865.00	47,660.00	-
11	Audio Visual Equipment	-	98,060.00	-	98,060.00	-	7,355.00	-	7,355.00	90,705.00	-
12	Computers & Peripherals	-	37,500.00	-	37,500.00	-	7,500.00	-	7,500.00	30,000.00	-
13	Furniture, Fixtures & Fittings	-	136,503.00	-	136,503.00	-	10,238.00	-	10,238.00	126,265.00	-
14	Vehicles	-	750,289.00	-	750,289.00	-	75,029.00	-	75,029.00	675,260.00	-
15	Lib. Books & Scientific Journals	-	533,672.00	169,311.00	364,361.00	-	36,436.00	-	36,436.00	327,925.00	-
16	Small Value Assets	-	-	-	-	-	-	-	-	-	-
17	Equipment UNESCO AID	-	-	-	-	-	-	-	-	-	-
Total (A)		-	1,909,644.00	169,311.00	1,740,333.00	-	157,780.00	-	157,780.00	1,582,553.00	-
17	Capital work in Progress (B)	-	41,115,650.00	-	41,115,650.00	-	-	-	-	-	-

S.No	Intangible Assets	Gross Block				Depreciation for the Year				Net Block	
		Opening Balance 01.04.2015	Additions	Deducti- ons	Closing Balance	Depreciation Opening Balance	Depreciation for the Year	Deductions / Adjustments	Total Depre- cia- tion	31.03.2016	31.03.2015
18	Computer Software	-	-	-	-	-	-	-	-	-	-
19	E-Journals	-	4,231,298.00	-	4,231,298.00	-	1,692,519.00	-	1,692,519.00	2,538,779.00	-
20	Patents	-	-	-	-	-	-	-	-	-	-
Total (C)		-	4,231,298.00	-	4,231,298.00	-	1,692,519.00	-	1,692,519.00	2,538,779.00	-
Grand Total (A+B+C)		-	47,256,592.00	169,311.00	47,087,281.00	-	1,850,299.00	-	1,850,299.00	4,121,332.00	-

S.No	Intangible Assets	Gross Block				Depreciation for the Year				Net Block	
		Opening Balance 01.04.2015	Additions	Deduct- ions	Closing Balance	Depreciation Opening Balance	Depreciation for the Year	Deductions / Adjustments	Total De- preci-ation	31.03.2016	31.03.2015
18	Computer Software	-	-	-	-	-	-	-	-	-	-
19	E-Journals	-	-	-	-	-	-	-	-	-	-
20	Patents	-	-	-	-	-	-	-	-	-	-
Total (C)		-	-	-	-	-	-	-	-	-	-
Grand Total (A+B+C)		-	988,656.00	-	988,656.00	-	125,583.00	-	125,583.00	863,073.00	-





SCHEDULE - 4 - INVESTMENTS

	Current Year	Previous Year	
Term Deposits With Nationalized Bank- (Canara Bank NIFFT Branch)	114,573,536.00		303,547,890.00
1. PLAN	93,765,569.00	54,556,922.00	
2. NON PLAN	20,807,967.00	248,990,968.00	
	114,573,536.00		303,547,890.00

DETAILS OF TERM DEPOSITS WITH CANARA BANK -NIFFT BRANCH- AS ON 31.03.2016

Account Number	Investment Head	Principle Balance as on 31.03.2016	Date of Opening/ Reinvestment	Rate of Interest(%)	Due Date	Accrued Interest as on 31.03.2016
2730401002254/2	Plan	20,807,967	20.12.2015	6.75	20.06.2016	351,134.00
2730301000123/4	Non Plan	35,262,609	22.01.2016	6.5	22.04.2016	244,906.00
2730307000035/11	Non Plan	36,787,066	27.01.2016	6.5	06.05.2016	222,738.00
2730401002000/2	Non Plan	21,715,894	01.10.2015	7.5	01.10.2016	683,711.00
		114,573,536				1,502,489.00

SCHEDULE - 5 - CURRENT ASSETS

PARTICULAR		Current Year	Previous Year
1	Sundry Debtors:		
a	Debts outstanding for a period exceeding six months	514,152.68	514,152.67
2	Cash and Bank Balances		
a	In Saving Accounts		
i	Canara Bank SB A/c No. 2730101006939 (Non-Plan)	34,275,442.25	10,006,594.41
ii	Canara Bank SB A/c No. 2730101007913 (Plan)	4,828,821.10	32,950,380.10
iii	Canara Bank SB A/c No. 273010109959 (IDF)	1,000.00	-
iv	SBI Hatia SB A/c (O.B.)	3,344.10	3,344.10
3	Cash		
a	Cash in hand	150,889.00	34,065.00
TOTAL		39,773,649.13	43,508,536.28





SCHEDULE - 6 - LOANS, ADVANCES & DEPOSITS

		Current Year	Previous Years
1	Advances to Employees: (Non Interest Bearing)		
a	Expenses Advance	110,571.00	523,686.00
b	Festival Advance	46,800.00	37,500.00
c	Leave Travel Concession Advance	8,000.00	767,894.00
d	Medical Advance	12,079.00	25,079.00
e	Travelling Advance	75,167.00	133,637.00
f	Rolling Advance	314,970.00	276,788.00
2	Advances to Employees: (Interest Bearing)		
a	House Building Advances	85,000.00	116,000.00
b	Computer Advance	253,105.00	281,923.00
c	Car/Motorcycle/Scooter Advance	592,206.00	891,600.00
3	Advances & Other amounts Recoverable in Cash/kind		
a	on Capital Account		
a	NIFFT-Golden Jubilee Celebration	1,500,000.00	-
b	Contribution to Annual Feast-JIINKS	750,000.00	-
c	Advance for E- Ticketing Account	50,000.00	-
d	SAE India Collegiate Club-NIFFT	250,000.00	-
b	to Suppliers		
a	Advance to Suppliers(O.B)		
a	M/s Ed.CIL (India) Ltd.	4,853,195.00	4,853,195.00
b	M/s Mecon Ltd.	500,000.00	500,000.00
c	M/s National Informatic Centre	1,562,002.00	1,562,002.00
d	M/s Patents Info	15,000.00	15,000.00
e	M/s Sreeleathers	27,306.00	27,306.00
b	Deposits Against Foreign Letter of Credit(O.B.)	6,521,899.53	6,521,899.53

c	Advance to Central Public Works Department	599,216,904.00	599,216,904.00
4	Prepaid Expense		
a	Pre Paid Internet Expenses	1,145,000.00	-
5	Deposits		
a	Telephone		
a	Security Deposit With P&T Department	29,550.00	29,550.00
b	Electricity		
a	Security Deposit With Jharkhand Electricity Board	1,215,000.00	1,215,000.00
c	AICTE	188,047.00	188,047.00
d	Others		
a	CBI Attachment	554,613.00	554,613.00
b	Security Deposit & Earnest Money (O.B.)	216,707.00	216,707.00
c	SBI (FDR) Scholar Fund	23,378.00	23,378.00
d	Security Deposit With Jayant Gas Co.	32,501.00	32,501.00
e	Security Deposit With Ranchi University	250,000.00	250,000.00
f	Student Welfare Fund	21,563.00	21,563.00
6	Income Accrued:		
a	On Advance to Employees	14,143.00	14,143.00
b	On Investment	1,502,489.00	4,930,713.12
7	Claims Receivable		
a	Amount Receivable from Pensioners	110,473.00	110,473.00
b	Income Tax (TDS) Refundable-Unrealized	496,476.00	496,476.00
c	Plan Grant Receivable	-	20,000,000.00
d	Rent Receivable from BSNL	21,000.00	21,000.00
e	TDS - Unrealized	1,153.00	1,153.00
		622,566,297.53	603,855,730.65



INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31'ST MARCH, 2016

Amount in ₹

INCOME	Schedule	Current Year	Previous Year
ACADEMIC RECEIPTS	7	34,191,548.00	29,915,649.00
GRANTS	8	-	90,000,000.00
INCOME FROM INVESTMENT	9	16,060,758.88	32,735,573.67
INTREST EARNED	10	2,060,659.00	1,096,843.00
OTHER INCOME	11	703,928.00	1,579,238.00
TOTAL (A)		53,016,893.88	155,327,303.67
EXPENDITURE	Schedule	Current Year	Previous Year
STAFF PAYMENT & BENEFITS (Establishment Expenses)	12	117,576,001.00	117,826,180.00
ACADEMIC EXPENSES	13	33,884,150.00	17,326,324.94
ADMINISTRATIVE AND GENERAL EXPENSES	14	24,571,230.65	19,895,408.08
TRANSPORTATION EXPENSES	15	750,782.00	551,030.00
REPAIR & MAINTENANCE EXPENSES	16	7,229,500.00	1,320,317.00
PRIOR PERIOD EXPENSES	17	8,667,687.00	-
DEPRECIATION	3	7,761,317.00	31,886,207.84
TOTAL (B)		200,440,667.65	188,805,467.86
Balance Being Deficit Carried to Capital Fund		(147,423,773.77)	(33,478,164.19)

SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS- Schedule 18

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016

SCHEDULE - 7 - ACADEMIC RECEIPTS

PARTICULAR		Current Year	Previous year
FEES FROM STUDENTS			
1	Academic		
a	Admission Fee	54,800.00	31,400.00
b	Application Fee	144,650.00	1,204,100.00
c	Computer Fee	1,160,000.00	1,011,500.00
d	Grade Card Fee	41,100.00	23,550.00
e	Liabrary Access Fee	1,166,640.00	1,041,620.00
f	Registration/Enrolment Fee	269,800.00	251,400.00
g	Seat Rent	2,023,100.00	2,094,600.00
h	Tution Fees	20,584,713.00	18,523,300.00
	Total (A)	25,444,803.00	24,181,470.00
2	Examinations		
a	Examination Fee	657,120.00	622,950.00
b	Examination Fee-Ranchi University	2,216,200.00	-
	Total (B)	2,873,320.00	622,950.00
3	Other Fees		
a	Fines & Penalties	82,835.00	212,954.00
b	Gymkhana Fee	353,400.00	333,570.00
c	Hostel Fee	1,014,800.00	3,415,160.00
d	Hostel Maintenance Fee	3,364,530.00	-
e	Identity Card Fee	300.00	850.00
f	Internet Acess Fee	375,000.00	454,050.00
g	Medical Fee	666,750.00	602,650.00



h	Placement Fee	4,200.00	24,500.00
i	Poor Boy Fee	60.00	120.00
j	Practical Fee	8,400.00	49,000.00
k	Sports Fee	3,150.00	18,375.00
	Total (C)	5,873,425.00	5,111,229.00
	GRAND TOTAL (A+B+C)	34,191,548.00	29,915,649.00

SCHEDULE - 8 GRANTS

PARTICULAR	Govt. of India(MHRD)		Current Year Total	Previous Year Total
	Plan	Non Plan		
	-	-	-	-
Receipts during the Year	-	-	-	90,000,000.00
Less: Refund	-	-	-	-
	-	-	-	90,000,000.00

SCHEDULE - 9 - INCOME FROM INVESTMENTS

PARTICULARS	Plan	Non Plan	Current Year	Previous Year
1 Interest on Term Deposit with Nationalized Bank	4,085,394.59	10,472,875.29	14,558,269.88	27,804,860.55
2 Income accrued but not due on Term Deposits	351,134.00	1,151,355.00	1,502,489.00	4,930,713.12
			16,060,758.88	32,735,573.67

SCHEDULE - 10 - INTEREST EARNED

PARTICULARS	Plan	Non Plan	Current Year Total	Previous Year Total
1 Interest on Saving Account with scheduled banks	860,069.00	1,098,062.00	1,958,131.00	985,714.00
2 Interest on Loans/Advances to Employees			102,528.00	111,129.00
			2,060,659.00	1,096,843.00





SCHEDULE - 11 - OTHER INCOME

PARTICULAR	Current Year	Previous Year
A. Income from Land & Buildings		
1. Electricity Charges Recovered	276,212.00	365,591.00
2. Rent Recovered	98,090.00	138,600.00
3. License Fee	232,530.00	248,907.00
4. Water Charges Recovery	2,728.00	16,336.00
Total (A)	609,560.00	769,434.00
B. Others		
1. Others Incomes		791,486.00
a) Bus Charges Recovery	25,645.00	-
b) Certificate Verification & Transcript Fee	14,050.00	-
c) Mess Fee	6,000.00	-
d) Others Income	4,260.00	-
e) Photocopy Charges	578.00	-
f) Rechecking Charges	1,250.00	-
2. Income From Consultancy	36,000.00	-
3. Misc. Receipts (Sale of Tender Form ,Etc)	6,000.00	18,020.00
4. RTI Fees	585.00	298.00
Total (B)	94,368.00	809,804.00
Grand Total (A+B)	703,928.00	1,579,238.00

SCHEDULE - 12 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Salaries and Wages			-	-	74,650,621.00	74,650,621.00
a) Salaries and Wages(Teaching & Non Teaching)	-	62,429,078.00	62,429,078.00	-	-	-
b) Salary Arrear	-	1,308,519.00	1,308,519.00	-	-	-
2. Allowance and Bonus	-	127,222.00	127,222.00	-	-	-
3. Retirement and Terminal Benefits					37,021,686.00	37,021,686.00
a) Composit Transfer/TA Grant	-	36,092.00	36,092.00	-	-	-
b) Encashment of Leave	-	2,106,169.00	2,106,169.00	-	-	-
c) Leave Salary & Pension Contribution	-	410,179.00	410,179.00	-	-	-
d) Medical Allowance Arrear to Pensioner	-	239,560.00	239,560.00	-	-	-
e) Other Retirement Benefit	-	1,629,126.00	1,629,126.00	-	-	-
f) Payment of Gratuity	-	3,313,999.00	3,313,999.00	-	-	-
g) Pension	-	36,325,850.00	36,325,850.00	-	-	-
4. LTC Facility	-	1,020,249.00	1,020,249.00	-	1,522,901.00	1,522,901.00
5. Medical Facility	-	582,242.00	582,242.00	-	1,163,991.00	1,163,991.00
6. Children Education Allowance	-	902,136.00	902,136.00	-	812,647.00	812,647.00
7. Honorarium	-	48,860.00	48,860.00	-	47,340.00	47,340.00
8. Payment to Adhoc Staff					2,606,994.00	2,606,994.00
a) Consultants & Contractual Staff	-	524,146.00	524,146.00	-	-	-
b) Medical Attendent	-	88,060.00	88,060.00	-	-	-
c) M/s Raj Traders-Manpower Supply	-	3,993,377.00	3,993,377.00	-	-	-
e) M/s Service Master Clean Ltd.-Manpower Supply	-	2,491,137.00	2,491,137.00	-	-	-
TOTAL	-	117,576,001.00	117,576,001.00	-	117,826,180.00	117,826,180.00





SCHEDULE - 13 - ACADEMIC EXPENSES

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Examination Expenses	-	2,394,931.00	2,394,931.00	-	-	-
2. Payment to Visiting Faculty	-	2,582,350.00	2,582,350.00	-	1,000,098.00	1,000,098.00
3. Stipend /Merit Cum Means Scholarship						
a) Merit-Cum-Means Scholarship	-	1,038,000.00	1,038,000.00	-	-	-
b) Scholarship to M.Tech Students	-	18,683,750.00	18,683,750.00	-	9,613,716.00	9,613,716.00
c) Stipend to Advanced Diploma Course Students	-	3,808,253.00	3,808,253.00	-	1,758,421.00	1,758,421.00
c) Stipend to PhD Scholars	4,253,705.00	-	4,253,705.00	3,111,950.00	10,000.00	3,121,950.00
4. Student Welfare Expenses					119,512.94	119,512.94
a) NIFFT Student Gymkhana	-	126,793.00	126,793.00	-	-	-
b) Student Medical Reimbursement	-	65,208.00	65,208.00	-	-	-
c) Students Receration Activities	-	44,182.00	44,182.00	-	-	-
5. Labratory & Workshop Expenses	-	530,705.00	530,705.00	-	1,627,671.00	1,627,671.00
6. Participartion in Semiar & Conferences	-	82,980.00	82,980.00	-	-	-
7. Seminar/Workshop/Conference Expenses	-	214,189.00	214,189.00	-	84,956.00	84,956.00
8. Subscription/Membership Expenses	-	59,104.00	59,104.00	-	-	-
TOTAL	4,253,705.00	29,630,445.00	33,884,150.00	3,111,950.00	14,214,374.94	17,326,324.94

SCHEDULE - 14 - ADMINISTRATIVE AND GENERAL EXPENSES

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
A) Infrastructure						-
a) Electricity & Power			-	-	8,721,150.08	8,721,150.08
a) D.G. Set Fuel Expenses	-	444,103.00	444,103.00	-	-	-
b) Jharkhand Bijli Vitran Nigam Ltd.	-	7,593,426.00	7,593,426.00	-	-	-
b) Rent, Rates and Taxes			-			-
a) Lease Rent to M/s HEC Ltd.	-	51,804.00	51,804.00	-	-	-
b) Muncpal Tax	-	400,000.00	400,000.00	-	503,608.00	503,608.00
B) Communication						-
a) Telephone, Fax and Internet Charges					2,127,362.00	2,127,362.00
a) M/s BSNL	-	366,468.00	366,468.00	-	-	-
b) M/s Ernet	-	132,559.00	132,559.00	-	-	-
c) M/s Software Technology Parks of India	-	277,464.00	277,464.00	-	-	-
e) Other Mobile & Landline	-	19,551.00	19,551.00	-	-	-
b) Postage & Stationery Expenses	-	92,747.00	92,747.00	-	43,483.00	43,483.00
C) Others Expenditure						-
a) Advertisement & Publicity				-	4,444,692.00	4,444,692.00
a) M/s ABP Pvt. Ltd.	-	336,283.00	336,283.00	-	-	-
b) M/s Bennett,Coleman & Co.Ltd.	-	599,200.00	599,200.00	-	-	-
c) M/s Employment News	-	32,375.00	32,375.00	-	-	-





e) M/s Hindustan Media Ventures Ltd.	-	159,598.00	159,598.00	-	-	-
f) M/s HT Media Ltd.	-	1,758,021.00	1,758,021.00	-	-	-
g) M/s Neutral Publishig House Ltd.	-	92,400.00	92,400.00	-	-	-
b) Hospitality Expenses	-	1,052,315.65	1,052,315.65	-	286,128.00	286,128.00
c) Internal & CAG Auditor Remuneration	-	282,813.00	282,813.00	-	251,971.00	251,971.00
d) Magazine/Journals/News Paper/Subscriptions	-	27,125.00	27,125.00	-	3,136.00	3,136.00
e) Printing & Stationary (Consumption)	-	570,842.00	570,842.00	-	648,692.00	648,692.00
f) Rajbhasha Activities Expenses	-	75,810.00	75,810.00	-	5,000.00	5,000.00
h) Security Expenses				-	-	-
a) <i>Jharkahand Home Guards</i>		4,916,260.00	4,916,260.00		-	-
i) Sitting Charges for Meetings	-	367,000.00	367,000.00	-	164,000.00	164,000.00
j) Travelling & Conveyance	-	4,581,733.00	4,581,733.00	-	2,393,873.00	2,393,873.00
k) Website Development Expenses	-	165,971.00	165,971.00	-	3,371.00	3,371.00
l) Legal Expenses	-	164,850.00	164,850.00	-	252,085.00	252,085.00
b) Bank Charges	-	4,546.00	4,546.00	-	14,797.00	14,797.00
m) Miscellaneous Expenditure	-	5,966.00	5,966.00	-	32,060.00	32,060.00
TOTAL	-	24,571,230.65	24,571,230.65	-	19,895,408.08	19,895,408.08

SCHEDULE- 15 - TRANSPORTATION EXPENSES

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Vehicles (Owned by Institutions)						
a) Insurance Expenses	-	79,203.00	79,203.00	-	155,595.00	155,595.00
B) Running Expenses (Fuel)	-	466,469.00	466,469.00	-	-	-
C) Vehicles Repairs & Maintenance	-	105,181.00	105,181.00	-	333,317.00	333,317.00
2. Vehicles Hiring Expenses	-	99,929.00	99,929.00	-	62,118.00	62,118.00
Total	-	750,782.00	750,782.00	-	551,030.00	551,030.00

SCHEDULE- 16 - REPAIRS & MAINTENANCE

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Annual Maintenance Cost				-	-	-
a) AMC of DG Set	-	40,320.00	40,320.00	-	-	-
b) AMC of Photocopier	-	49,834.00	49,834.00	-	-	-
c) AMC of Water Purifiers	-	101,700.00	101,700.00	-	-	-
2. Building Maintenance	-	1,942,178.00	1,942,178.00	-	237,276.00	237,276.00
3. Cleaning Material & Services	-	3,962,684.00	3,962,684.00	-	-	-
4. Book Binding Charges	-	56,680.00	56,680.00	-	-	-
5. Computer Maintenance	-	118,076.00	118,076.00	-	-	-
6. Electrical Maintenance	-	574,220.00	574,220.00	-	819,851.00	819,851.00
7. Furniture & Fixtures Maintenance	-	223,059.00	223,059.00	-	36,022.00	36,022.00
8. Gardening	-	84,023.00	84,023.00	-	-	-
9. Office Equipments Maintenance	-	76,726.00	76,726.00	-	227,168.00	227,168.00
Total	-	7,229,500.00	7,229,500.00	-	1,320,317.00	1,320,317.00





SCHEDULE- 17 - PRIOR PERIOD EXPENSES

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Academic Expenses	-	172144.00	172,144.00	-	-	-
2. Administrative Expenses	-	874238.00	874,238.00	-	-	-
3. Establishment Expenses	-	6457325.00	6,457,325.00	-	-	-
4. Repair & Maintenance	-	1163980.00	1,163,980.00	-	-	-
Total	-	8,667,687.00	8,667,687.00	-	-	-

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31.03.2016

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous year
I. Opening Balances			I. Expenses		
A) Cash Balances	34,065.00	10,659.00	1. Non Plan Expenses		
B) Bank Balances			1. Staff Payments & Benefits (Est. Expenses)	116,533,759.00	120,427,773.00
In Savings Accounts			2. Academic Expenses	29,174,083.00	
SB A/c No. 2730101007115 (GPF)	-	1,237,547.29	3. Administrative and General Expenses	20,289,940.00	30,602,518.59
SB A/c No. 2730101006939 (Non-Plan)	10,006,594.41	80,457,982.00	4. Transportation Expenses	696,817.00	
SB A/c No. 2730101007913 (Plan)	32,950,380.10	27,564,362.10	5. Repair & Maintenance	6,924,420.00	
SBI Hatia (O.B)	3,344.10	3,344.10	7. Prior Period Expenses	8,822,406.00	
			2. Plan Expenses		3,711,950.00
II. Grants Received			Academic Expenses Plan	4,253,705.00	
From Government of India (MHRD)	-	90,000,000.00			
			II. Current Liabilities		31,083,593.00
III. Academic Receipts	28,329,548.00	22,806,099.00	1. Deposits From Students	328,950.00	
			2. Deposits- Other	290,000.00	
VI. Term Deposits Encashed	224,878,372.00	206,448,687.00	3. Statutory Liabilities	20,666,460.00	
			4. Other Current Liabilities		
VI. Current Liabilities		36,202,374.00	A) Receipts Against Sponsored Projects	1,101,606.00	
1. Deposits From Staff	70,839.00		B) Receipt Against Sponsored Fellowship	766,910.00	
2. Deposits From Students	335,500.00		C) Other Liabilities	8,174,923.00	
3. Deposits- Other	385,659.00				
4. Statutory Liabilities	20,440,860.00		III. Expenditure on Fixed Assets		4,512,661.00
5. Other Current Liabilities	27,314,302.49		1. Plan Fixed Assets	47,256,592.00	





			2. Non Plan Fixed Assets	494,228.00	
VII. Interest Received on					
On SB Accounts	1,958,131.00	985,714.00	IV. Term Deposit With Scheduled Bank	20,000,000.00	246,230,991.00
On Loans to Employees	93,664.00	138,399.00			
Interest on Term Deposits	3,289,203.95	8,935,253.00	V. Loans, Advances and Deposits	49,372,269.00	7,935,914.00
IX. Loans, Advances and Deposits	23,360,042.40	7,526,545.00	VI. Others	1,196,476.00	4,133,643.00
X. Other Incomes	1,788,004.00				
			VII. Closing Balances		
			A) Cash Balances	150,889.00	34,065.00
XI. Indirect Expenses	195,220.00		B) Bank Balances		
			In Savings Accounts	-	
XII. Other Receipts	169,311.00	12,822,431.00	SB A/c No. 2730101006939 (Non-Plan)	34,275,442.25	10,006,594.41
			SB A/c No. 2730101007115 (GPF)		3,505,969.29
			SB A/c No. 2730101007913 (Plan)	4,828,821.10	32,950,380.10
			SB A/c No. 2730101009959 (IDF)	1,000.00	-
			SBI Hatia (O.B)	3,344.10	3,344.10
	375,603,040.45	495,139,396.49		375,603,040.45	495,139,396.49

AS PER OUR REPORTS ON EVEN DATE

FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)
CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016

BANK RECONCILIATION STATEMENT AS ON 31.03.2016

1) CANARA BANK SB A/C NO. 2730101006939 (NON PLAN)

Particulars		Amount
	Balance as per Ledger as on 31.03.2016	34,275,442.25
Add:	Cheques issued but not presented for payment (Annexure-I)	10,602,471.00
	Total	44,877,913.25
	Balance as per Bank Statement as on 31.03.2016	44,877,913.25
	Difference	-

2) CANARA BANK SB A/C NO. 2730101007913 (NIFFT PLAN A/C)

Particulars		Amount												
	Balance as per Ledger as on 31.03.2016	4,828,821.10												
Add:	Cheques issued but not presented for payment	41,190,725.00												
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Date</u></th> <th style="text-align: left;"><u>Cheque No.</u></th> <th style="text-align: left;"><u>Amount</u></th> </tr> </thead> <tbody> <tr> <td>30.03.2016</td> <td>822374</td> <td>75,075.00</td> </tr> <tr> <td>31.03.2016</td> <td>822772</td> <td>4,11,15,650.00</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total</td> <td style="text-align: right;">46,019,546.10</td> </tr> </tbody> </table>	<u>Date</u>	<u>Cheque No.</u>	<u>Amount</u>	30.03.2016	822374	75,075.00	31.03.2016	822772	4,11,15,650.00	Total		46,019,546.10	
<u>Date</u>	<u>Cheque No.</u>	<u>Amount</u>												
30.03.2016	822374	75,075.00												
31.03.2016	822772	4,11,15,650.00												
Total		46,019,546.10												
	Balance as per Bank Statement as on 31.03.2016	46,019,546.10												
	Difference	-												



Annexures Forming Part of BRS

ANNEXURE - I : Cheques/DD issued but not presented for payment

Date	Particulars	Chq. No.	Vr. No.	Amount
03/02/2016	TRAVELLING	823881	1006	920
18/03/2016	TRAVELLING & CONVEYANCE EXPENSES	825287	1151	1,500
23/03/2016	TRUNKS & PHONES	825293	1158	30,120
23/03/2016	ELECTRIC CHARGES TO J.S.E.B.	825295	1160	700,096
28/03/2016	ADVERTISEMENT	825297	1163	380,318
30/03/2016	STATIONARY	825301	1166	3,450
30/03/2016	PENSION	825303	1168	275,063
30/03/2016	MUNICIPAL TAX	825305	1170	400,000
31/03/2016	PENSION	825306	1171	365,584
31/03/2016	SCHOLARSHIP TO M.TECH. STUDENT	825307	1172	1,758,372
31/03/2016	SCHOLARSHIP TO M.TECH. STUDENT	825308	1173	1,301,200
31/03/2016	HIRE CHARGES OF VEHICLE	825309	1174	4,198
31/03/2016	REPAIRS & MAINTENANCE	825311	1175	32,332
31/03/2016	SEMI CONSUMABLE TOOLS	825312	1176	29,120
31/03/2016	REIMBURSEMENT OF L.T.C.	825313	1177	39,617
31/03/2016	Various	825314	1178	52,286
31/03/2016	Pay & Allowance	825315	1179	1,103,666
31/03/2016	Gratuity	825316	1180	953,601
31/03/2016	Various	825317	1181	713,140
31/03/2016	Scholarship	825318	1187	381,100
31/03/2016	Various	825319	1188	25,971
31/03/2016	Various	825320	1189	25,633
31/03/2016	Gratuity	825881	1190	637,559
31/03/2016	CPDA	825882	1191	75,990
31/03/2016	BSNL	825883	1192	1,145,000
31/03/2016	STPI	825884	1193	139,385
31/03/2016	Stationery	825885	1194	5,550
31/03/2016	CPDA	825886	1195	6,000
31/03/2016	CPDA	825887	1196	6,000
31/03/2016	CPDA	825888	1197	9,700
				10,602,471

SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS – Schedule 18

A - SIGNIFICANT ACCOUNTING POLICIES



A) GENERAL

The Financial Statement are prepared in three parts i.e. (i) Receipts and Payments Account, (ii) Income and Expenditure Account and (iii) Balance sheet along with other two subsidiary accounts of the Institute viz. NIFFT- General Provident Account and Technical Education Quality Improvement Programme-NIFFT. The Annual Accounts of the Institute for FY 2015-16 are prepared on the revised “Formats of Financial Statements for Central Higher Education Institutions” which is suggested by the Ministry of Human Resource Development, Department of Higher Education, Government of India, Shastri Bhawan, New Delhi vide No. 29-4/2012-IFD dated 17th April, 2015.

SIGNIFICANT ACCOUNTING POLICIES

1. Accounting Convention:

The Annual Accounts are prepared under the historic cost convention and ongoing concern concept, unless otherwise stated, and on Accrual Method of Accounting.

2. Revenue Recognition :

- (i) The Institute is funded by the Ministry of Human Resource & Development (MHRD), Govt, of India. The government releases the Grant-in-Aid under two major heads i.e. PLAN and NON-PLAN. Grant-in-aid from Government of India is accounted for in the same financial year for which it is sanctioned by the MHRD, Government of India.
- (ii) The Institute, by way of its own nature/character, generates internal income. The major sources are various fees realized from students, interest earned on investments, consultancy and testing fees and other miscellaneous income. Fee from Students, Sale of Admission forms and realization against discarded/written off assets are accounted for on Cash Basis.
- (iii) Interest on Savings Bank Accounts is accounted for on Cash Basis.
- (iv) Interest on interest bearing advances to staff for house building, vehicles and computers are accounted for on accrual basis in the year of advance even, though the actual recovery of interest in case of house building advances starts after full repayment of principal amount.

3. Fixed Asset & Depreciation :

- (i) Fixed assets in case of assets belonging to Account are stated at cost of acquisition less accumulated depreciation thereon & impairment loss, if any. The cost includes inward freight, customs duty, installation charges and other directly attributable expenses related to their acquisition, installation and commissioning as per Rule 292 (1) (a) of GFR.



- (ii) The assets which are unserviceable condemned or out of use are written-off as per the provision given in Rule-124 of General Financial Rules (GFR). Such written-off is given effect in the Balance Sheet only after the issue of final order by the competent authority of the Institute.
- (iii) Patents and copy rights ,E Journals and computer software are grouped under Intangible assets
- (iv) Fixed assets are valued at cost less accumulated depreciation. Depreciation on fixed assets is provided on wdv method at the following rates. Depreciation is provided for the whole year on net additions during the year.

Land	0%	Office Equipment	7.5%
Site Development	0%	Audio Visual Equipment	7.5%
Buildings	2%	Computers & Peripherals	20%
Roads & Bridges	2%	Furniture, Fixtures & Fittings	7.5%
Tube wells & Water Supply	2%	Vehicles	10%
Sevrage & Drainage	2%	Lib. Books & Scientific Journals	10%
Electrical installation and Equipment	5%	Computer Software	40%
Plant & Machinery	5%	E-Journals	40%
Scientific & Laboratory Equipment	8%	Patents	9 Years

4. Capital Work-in-Progress:

Deposit works are accounted for as Capital Work-in-Progress on the basis of inputs provided from Central Public Works Department. These are valued at cost. Running bills of contractors are also accounted for as Capital Work-in-Progress till completion. No depreciation is charged on capital work in progress. Secured advances and mobilization advances being in the nature of advances are disclosed separately under the head Loans & Advances.

5. Investments:

Investments represent amount held in the form of fixed deposit/Term Deposit with banks as per the guidelines issued by Government of India / Reserve Bank of India. No investments are made by the Institute in tradable securities. The investments are valued at cost.

6. Corpus/Capital Fund :

The excess of Income over Expenditure over income is added to the Corpus / Capital Fund and the excess of expenditure over income is deducted from Corpus/Capital Fund.

7. Foreign Currency Transactions:

Foreign Currency Transactions are accounted for at the rate of exchange prevailing on the dates of such transactions.



8. Provisions :

Known liabilities recognized up to the date of finalization of accounts are provided for.

9. Income Tax :

The Institute is exempt from Income Tax as per the Provisions of Section 10(23C)(iii) (ab) of the Income Tax Act 1961. Therefore, no provision for Income Tax is made.

10. Purchase procedure through Institute's Stores & Purchase Unit:

Payments made/cheques issued for purchase of consumable and non-consumable stocks against the confirmed Purchase Orders released by Institute's Stores and Purchase Unit are treated as final expenditure.

AS PER OUR REPORTS ON EVEN DATE

FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)

MEMBERSHIP NO. : 402655

PLACE : RANCHI

DATE : 28.07.2016



B - NOTES ON THE ACCOUNTS

1. As the General Provident Fund Accounts are owned by members of those Funds and not by the Institution, These Accounts were separated from the Institute Accounts from 01.04.2015. Amount pertaining to GPF Account Interest Reserve ` 1,17,27,576.94 Cr., which was earlier clubbed with Institute Capital/Corpus Fund has been separated and accounted . Corresponding PY Figures have been reclassified accordingly. A Receipt & Payments Account, an Income & Expenditure Account (on Accrual Basis) and a Balance Sheet of the General Provident Account have been attached to the Institute Accounts.
2. Ledgers bearing revenue nomenclature and Ledgers pertaining to Unclaimed Liabilities, having an aggregate balance of ₹ 1,91,07,060.00 have been adjusted. Adjustments on account of observations relating to previous years in following accounts are routed through Reserve & Surplus to Institutes Corpus/Capital Fund Account.

SN	Particulars	Amount in ₹
1	Tayo Rolls Consultancy	22,500
2	GIS Premium	1,23,089
3	UNIDO Consultancy	4,10,820
4	Scholarship-Tribal	60
5	CBSE Board-CSAB JEE Mains	1,83,74,125
6	Consultancy Share	14,097
7	Current Liab. For Exp.	8,003
8	Outstanding Expenses	1,00,000
9	Scholar Fund	23,378
10	Testing Charges	30,511
11	Emp. Expense Advance	477

3. In the Balance sheet as on 31.03.2015 and the Balance Sheet of earlier years , Fixed Assets Created out of Plan Funds and Non Plan Funds were not exhibited distinctly . The Additions during the Year from 01.04.2015 from Plan and Non Plan Funds and the depreciation on those additions respectively have been exhibited distinctly in Sub Schedules A & B to the main schedule of Fixed Assets (Schedule -3).
4. Expenditure In Foreign Currency
For Procurement of E Journals US \$ 63,442.70 i.e ₹ 4,231,298/- US\$
5. In the opinion of the management, the current assets, loans, Advances and Deposits have a value on realization in the ordinary course, equal at least to the aggregate amount shown in the Balance Sheet.



6. Based on the cardinal principal that all profits and losses belong to owners, Institute has clubbed its credit balance in Reserve & Surplus with the institute Corpus/Capital Fund in FY 2015-16.
7. Previous year's Figures have been regrouped /rearranged wherever found necessary.
8. schedule 1 to 18 are annexed to and form an integral part of Balance Sheet as at 31st March 2016 and Income and Expenditure account for the year ended on that date.

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016

NATIONAL INSTITUTE OF FOUNDRY AND FORE TECHNOLOGY

A Centrally Funded Technical Institute under MHRD (Govt. of India)

HATIA, RANCHI 834003 JHARKHAND



**GENERAL PROVIDENT FUND ACCOUNT
FOR THE FINANCIAL YEAR 2015-16**

GENERAL PROVIDENT FUND ACCOUNT

BALANCE SHEET AS AT 31ST MARCH, 2016

Previous Year	Liabilities	Current Year	Previous Year	Assets	Current Year
50,869,064.00	<u>GPF</u> Opening Balance 50,869,064.00 Add: Subscription 8,968,459.00 Add: Advances Recovered 249,070.00 Less: Advances 96,250.00 Less: Withdrawals 4,499,600.00 Less: GPF Final settlements 3,947,643.00 Add: Interest Credited 4,290,139.00 Closing Balance 55,833,239.00 <u>Interest Reserve</u> Opening Balance 11,727,576.94 Add: Excess of Income over Exp. 829,840.10 11,727,576.94 Closing Balance 12,557,417.04	55,833,239.00	55,962,211.75	Investment in Term Deposit 2030401002217/1 7,605,063.00 270302000004/2 5,000,000.00 2730401001627/1 11,715,682.75 2730401001848/3 5,918,392.00 2730401002218/1 7,605,062.00 2730401007442/3 13,858,868.00 SBI30155723633 8,789,173.00 Accrued Interest Cash at Bank Canara Bank SB A/c No. 2730101007115	60,492,240.75
62,596,640.94	Total	68,390,656.04	62,596,640.94	Total	68,390,656.04

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016





GENERAL PROVIDENT FUND ACCOUNT

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2016

EXPENDITURE	Current Year	INCOME	Current Year
Interest credited to GPF Account	4,290,139.00	Interest Earned on Investment Interest received on FDR	4,883,688.10
Bank Charges	274.00	Add : Interest accrued on 31.03.2016	4,674,244.00
Excess of Income over Expenditure transferred to GPF Interest Reserve	829,840.10	Less : Interest Accrued on 31.03.2015	3,337,904.00
			<u>3,128,459.90</u>
		Interest on Saving Bank Account	236,565.00
Total	5,120,253.10	Total	5,120,253.10

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016

GENERAL PROVIDENT FUND ACCOUNT

RECEIPT AND PAYMENT ACCOUNT FOR FINANCIAL YEAR ENDED 31ST MARCH 2016

RECEIPTS	Current Year	PAYMENTS	Current Year
Opening Balance Canara Bank SB A/c No. 2730101007115	3,505,969.29	GPF Advance	96,250.00
GPF Subscription	8,968,459.00	GPF Final Settlement	3,947,643.00
GPF Advance recovery	249,070.00	GPF Withdrawal	4,499,600.00
Interest on Fixed Deposit	144,215.00	Bank Charges	274.00
Interest on Saving Bank Account	236,565.00	Opening Balance Canara Bank SB A/c No. 2730101007115	4,560,511.29
Total	13,104,278.29	Total	13,104,278.29

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016





DETAILS OF GPF TERM DEPOSITS AS ON 31.03.2016

Sl.	Account Number	Bank	Principle	Date of Opening	Rate of Interest(%)	Due Date	Interest Accrued
1	2730302000004/2	Canara	5,000,000.00	13.12.2011	9	13.12.2016	424,307.00
2	2730401001442/3	Canara	13,858,868.00	26.02.2016	7.25	26.01.2018	13,955.00
3	2730401001627/1	Canara	11,715,682.75	16.01.2015	8.5	31.12.2016	954,377.00
4	2730401001848/3	Canara	5,918,392.00	12.02.2016	7.75	12.02.2017	24,207.00
5	30155723633	S.B.I	8,789,173.00	22.04.2015	8.5	21.03.2018	876,160.00
6	2730401002218/1	Canara	7,605,063.00	20.05.2015	8.6	20.05.2016	522,449.00
7	2730401002217/1	Canara	7,605,062.00	20.05.2015	8.6	20.05.2016	522,449.00
			60,492,240.75				3,337,904.00

Bank Reconciliation Statement as on 31.03.2016

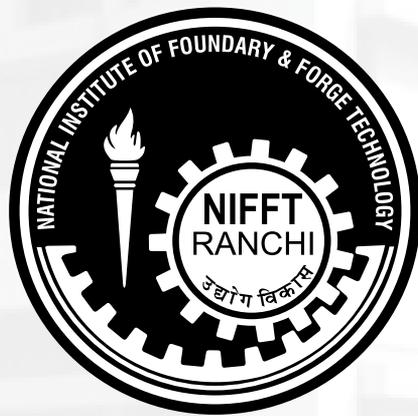
1) **CANARA BANK SB A/C NO. 2730101007115 (NIFFT GPF A/C)**

Particulars	Amount						
Balance as per Ledger as on 31.03.2016							
Add : Cheques issued but not presented for payment	4,560,511.29						
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Date</u></th> <th style="text-align: left;"><u>Cheque No.</u></th> <th style="text-align: left;"><u>Amount</u></th> </tr> </thead> <tbody> <tr> <td>18.03.2016</td> <td>817699</td> <td>6,30,409</td> </tr> </tbody> </table>	<u>Date</u>	<u>Cheque No.</u>	<u>Amount</u>	18.03.2016	817699	6,30,409	630,409.00
<u>Date</u>	<u>Cheque No.</u>	<u>Amount</u>					
18.03.2016	817699	6,30,409					
Total	5,190,920.29						
Balance as per Bank Statement as on 31.03.2016	5,190,920.29						
Difference	-						

NATIONAL INSTITUTE OF FOUNDRY AND FORE TECHNOLOGY

A Centrally Funded Technical Institute under MHRD (Govt. of India)

HATIA, RANCHI 834003 JHARKHAND



**TECHNICAL EDUCATION QUALITY
IMPROVEMENT PROGRAMME ACCOUNT
FOR THE FINANCIAL YEAR 2015-16**

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

BALANCE SHEET AS AT 31ST MARCH, 2016

SOURCES OF FUNDS	Schedule	Current Year 2015-16	Previous Year 2014-15
CORPUS/CAPITAL FUND	1	50,940,395.93	55,390,800.56
TOTAL		50,940,395.93	55,390,800.56

APPLICATION OF FUNDS	Schedule	Current Year 2015-16	Previous Year 2014-15
FIXED ASSETS	2	49,080,157.82	53,530,562.45
CURRENT ASSETS	3	705,484.11	705,484.11
LOANS, ADVANCES & DEPOSITS	4	1,154,754.00	1,154,754.00
TOTAL		50,940,395.93	55,390,800.56

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO.(CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.:402655
PLACE : RANCHI
DATE: 28.07.2016





TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31'ST MARCH,2016

INCOME	Schedule	Current Year	Previous Year
GRANTS	-	-	-
OTHER INCOME	-	-	-
TOTAL(A)		-	-
EXPENDITURE	Schedule	Current Year	Previous Year
OTHER EXPENSES	-	-	-
DEPRECIATION	2	4,450,404.63	2,696,365.92
TOTAL(B)		4,450,404.63	2,696,365.92
Balance Being Deficit Carried to Capital Fund		(4,450,404.63)	(2,696,365.92)

SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS - Schedule 18

AS PER OUR REPORTS ON EVEN DATE
FOR MANMOHAN SINGH & CO. (CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)
 MEMBERSHIP NO.:402655
 PLACE : RANCHI
 DATE: 28.07.2016

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31.03.2016

Amount in ₹

RECEIPTS	Current Year	PAYMENTS	Current Year
Opening Balances		Expenses	
A) Cash Balances	1,255.00		
B) Bank Balances	704,229.11	Closing Balances	
	-	A) Cash Balances	1,255.00
Receipts		B) Bank Balances	704,229.11
	705,484.11		705,484.11




SCHEDULE - 1 - CORPUS/CAPITAL FUND

	Current Year	Previous Year
Balance at the beginning of the year	55,390,800.56	58,087,166.48
Add : Contributions towards Corpus/Capital fund	-	-
Add : Grants Received	-	-
Add : Excess of Income over Expenditure transferred from the Income & Expenditure Account	-	-
TOTAL	55,390,800.56	58,087,166.48
Deduct : Deficit transferred from Income & Expenditure Account	(4,450,404.63)	(2,696,365.92)
Balance at the year end	50,940,395.93	55,390,800.56

SCHEDULE - 2 - TEQIP FIXED ASSETS (O.B)

S.No	Assets Heads	Opening Balance	Additions	Deductions	Total	Depreciation for the Year	Closing Balance
1	2	3	4	5	6	7	8
1	Scientific & Laboratory Equipment	44,355,026.96	-	-	44,355,026.96	3,548,402.16	40,806,624.80
2	Furniture, Fixtures & Fittings	622,043.03	-	-	622,043.03	46,653.23	575,389.80
3	Vehicles	287,587.57	-	-	287,587.57	28,758.76	258,828.81
4	Lib. Books & Scientific Journals	8,265,904.89	-	-	8,265,904.89	826,590.49	7,439,314.40
	Total (C)	53,530,562.45	-	-	53,530,562.45	4,450,404.63	49,080,157.82

SCHEDULE- 3 - CURRENT ASSETS

Particulars	Current Year	Previous Year
1. cash in Hand	1,255.00	1,255.00
2. Cash at Bank	704,229.11	704,229.11
Total	705,484.11	705,484.11

SCHEDULE- 4 - LOANS & ADVANCES

Particulars	Current Year	Previous Year
1. M/s Ed.CIL (India) Ltd.	1,123,225.00	1,123,225.00
2. M/s NIFFT	31,529.00	31,529.00
Total	1,154,754.00	1,154,754.00





No PDAC/LKD/SAR-NIPFT/2015-16/ 2017

Dated: January 27, 2017

To,

The Director,
National Institute of Foundry and Forge Technology,
Hatia,
Ranchi -834003.

Sub: Separate Audit Report on the accounts of National Institute of Foundry and Forge Technology, Hatia, Ranchi for the year 2015-16.

Sir,

I enclose a copy of the Audit Report and Audit Certificate along with audited Annual Accounts of National Institute of Foundry and Forge Technology, Hatia, Ranchi for the year 2015-16 for information and necessary action.

1. A copy of each of the documents has been sent to the Secretary to the Government of India, Ministry of Human Resource Development, New Delhi for information and necessary action.

2. The audited Annual Accounts, Audit Report should be duly considered and adopted by the Governing Body (BOG) of the NIPFT, Hatia, Ranchi in the Annual General meeting before these are laid in the House of parliament.

3. A copy of (i) Resolution of Governing Body adopting the Audit Report and Audit Certificate with audited Annual Accounts, (ii) Date of its presentation before the House of Parliament and (iii) Annual Report of the Institute may be furnished to this office in due course for our records and onward transmission to the Comptroller and Auditor General of India, New Delhi.

4. The Hindi version of this SAR may kindly be furnished to this office within one week.

5. The receipt of this letter with enclosures may please be acknowledged.

Yours faithfully,

Principal Director of Audit (Central)

Encl: - As above.

Top Registrar 26.01.17



Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of National Institute of Foundry and Forge Technology, Hatia, Ranchi for the year ended 31 March 2016

We have audited the Balance Sheet of National Institute of Foundry and Forge Technology, Hatia, Ranchi as at 31 March 2016 and the Income & Expenditure Account and Receipts & Payments Account for the year ended on that date under Section 20(1) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 20 (i) to (j) of the Memorandum of Association of National Institutes of Foundry and Forge Technology Society. The audit has been entrusted for the period up to 2016-17. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This separate Audit Report contains the comments of the Comptroller & 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-compliance performance aspect, etc., if any are reported through Inspection Report/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 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 except mentioned in Comment No.E-2 and E-6 which to the best of our knowledge and belief were necessary for the purpose of our audit.

ii. The Balance Sheet and Income & Expenditure Account and Receipts & Payments Account dealt with by this report have been drawn up in the format approved by the Government of India, Ministry of Human Resources Development.

In our opinion, proper books of accounts and other relevant records except mentioned in comment No.C have been maintained by the National Institute of Foundry and Forge Technology (Institute), Hata, Ranchi as required under Section 20 (i) to (iv) of the Memorandum of Association of National Institutes of Foundry and Forge Technology Society in so far as it appears from our examination of such books.

iii. We further report that;

A. BALANCE SHEET

A.1. Liabilities

A.1.1 Current Liabilities (Schedule-2) - ₹ 250.48 lakh

No liability of ₹18.55 lakh towards Service Master Clean Ltd was provided for the expenditure of 2015-16 under sub head- h expenses payable. This resulted in understatement of Current Liabilities and Overstatement of Assets by ₹18.55 lakh.

A.2 Assets

A.2.1 Advance and Deposits (Schedule-6) - ₹225.88 lakh

A.2.1.1 The works entrusted to CPWD amounting to ₹5,184.35 lakh were completed and handed over to the Institute but these works were not capitalised under the head building.

This resulted in overstatement of CPWD Deposits and understatement of assets by ₹5,184.35 lakh and Depreciation by ₹116.29 lakh.

A.2.1.2 Assets of TEQUIP ₹309.40 lakh

Although TEQUIP project had been completed and closed on 31 March 2006, loans and advances amounting to ₹11.55 lakh were lying unadjusted (₹11, 21,225 advance



to EDCI Ltd. (2008-09) and ₹31,529 advance to NIFT (2009-10) no corrective action has been taken by the Institute despite the issue being raised in previous Audit Report.

B. Income and Expenditure

B.1 The grant received from CISE Institute of ₹50,000 was shown by the Institute in the Current Liabilities instead of Income. This resulted in overstatement of Current Liabilities by ₹0.50 lakh and understatement of Income by the same extent.

B.2 The Institute had shown short accrued interest amounting to ₹5.53lakh on FDR/KDR (Sch-4) in the annual accounts. This resulted in understatement of current assets under the head "Accrued Interest" on investment and understatement of income by ₹5.53 lakh.

C. Receipt and Payment Account

The Institute prepared the Receipt and Payment Account for the Year 2015-16. But the Institute did not prepare the schedules of Receipt and Payment accounts. In the absence of Schedules, actual existence of Receipts and Payments could not be ascertained in Audit.

D. Accounting Policy and Notes to Accounts

D.1 Non-renewal of lease of Land & Building (Schedule-3) ₹1450.12 lakh

The Institute was situated on land leased by M/s HEC and the lease agreement expired in June 1998, but it was not renewed by M/s HEC till August 30 16. This was not shown in even in the Notes on accounts.

D.2 The Institute had not made provisions for retirement benefit on actuarial valuation.

D.3 The ledgers were not authenticated by the authorized signatories.

E. General

E.1 Advance to Suppliers: ₹48.95 lakh

The advances of ₹48.95 lakh were outstanding for more than five years. As recovery of these advances is doubtful, suitable provision should be made in accounts for long' old outstanding.



E.2 FLC (Schedule-6)- ₹65.22 lakh

A sum of ₹65.22 was shown in the loans, Advances and deposit (FLC) since 2008. Records regarding FLC were not produced to audit by the Institute. As the recovery of these advances is doubtful, Suitable provision should be made for old outstanding.

E.3 Non-adherence to uniform format of account prescribed by the Ministry

The Institute did not completely follow the formats prescribed by the Ministry in preparing the Receipts and Payments Account. There were partial variation in Receipt and Payment accounts prepared by the Institute from the standard format of accounts as given below:

1. Amount received under sponsored project/schemes was shown under head "Other Current Liabilities" in place of the prescribed head "Receipt against Sponsored Project/Scheme.
2. There is head prescribed as "Other Income" and "Indirect Expenses" as has been noticed in the annual account of the Institute.

E.4 According to para 3.4 under Schedule 23 of uniform format of Financial Statement for Central Higher Education Institution (CHEI) depreciation on fixed assets should be provided under Straight line method at the rate prescribed. The Institute provided depreciation on asset by adopting Written Down Method. This was in violation to the provision made in the guideline mentioned above. This resulted in overstatement of the assets of the Institution.

E.5 Non remittance of LIC premium

As per Schedule-2, Current Liabilities consisted ₹6000 as liability for LIC premium. It was noticed that the amount was deducted from the Salary of employees as premium for insurance but could not be remitted to LIC. The amount was lying in the accounts since long period. This resulted in employees not getting the benefit of the insurance.

E.6 Non-production of records

Following records/documents were not made available to audit. In absence of these records audit could not scrutiny the genuineness of advances and assets.



1. Fixed asset register;
2. Valuable register;
3. Central Stock Register;
4. Advance Register
5. Payment vouchers related to payment to Service Master Clean for the months February and March 2016.

F. Grants-in-Aid

The internal income of the Institute was ₹530.17 lakh (Plan ₹51.96 lakh and Non plan ₹477.21) and the plan grant of previous year was received during the year ₹200.00 lakh. The unspent balance of previous year was ₹1465.05 (Plan ₹875.07 and Non Plan ₹589.98 lakh) and no grant was sanctioned by the Government during the year. Thus, the Institute had total fund of ₹4195.22 lakh (Plan ₹1128.05 lakh and Non plan ₹3067.15). Out of which the Institute utilized a sum of ₹1407.56 lakh (Plan ₹513.41 lakh and Non Plan ₹894.15 lakh) and leaving of balance of ₹1787.66 lakh (Plan ₹614.62 lakh and Non Plan ₹1173.04 lakh) as unutilized amount as on 31.03.2016. The Institute has actual unspent balance amounting to ₹214.62 under Plan head as ₹400.00 lakh was advance given to CPWD for construction work.

G. Management letter

Deficiencies which have not been included in the Audit Report have been brought to the notice of the Institute through a management letter issued separately for remedial/corrective action.

(v) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and Income & Expenditure Account and 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 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 Foundry and Forge Technology, Hatia, Ranchi as at 31st March 2016, and

(b) in so far as it relates to Income and Expenditure Account of the deficit for the year ended on that date.

Place: Lucknow

Date: 23/3/17

For and on behalf of the
Comptroller and Auditor General of India

Principal Director of Audit (Central), Lucknow



Annexure-F to Audit Report

1. Adequacy of Internal Audit system:

The Institute does not have an Internal Audit Wing. Besides, no Internal Audit Manual has been prepared. Internal audit is conducted by a CA Firm.

2. Adequacy of Internal Control System:

The internal control system in the Institute reflected deficiencies in the following areas:

- The Institute has not prepared Internal Audit and Office Procedure Manual. Besides, definition and job description of the officers and staff and procedure for maintaining accounts and records and has not been put in place.
- No procedure for rotating duties of the employees dealing with cash, valuables, stores and stock has been put in place.
- Physical progress of the work-in-progress of buildings was not monitored by the concerned authority, resulting in delays in completion of these buildings.
- No Management Reporting system exists in the Institute.
- There is no Investment Committee in the Institute for investment of GPF and other surplus funds.
- Register of valuables has not been maintained.
- No proper procedures for checking, reconciliation and authentication of ledgers have been designed.
- Fixed Assets Register has not been completed.
- Advance was pending for more than 05 years for settlement.
- Purchases of goods up to ₹15,000 without the requisition certificate by the competent authority, in contravention of provision of Rule 145&146 of GFR.
- No physical verification was done of Fixed Assets and inventory during the year.
- Institute is not regular in payment to statutory dues.

3. System of physical verification of Fixed Assets and Inventory

The Institute did not carry out physical verification of fixed assets as well as consumable and non consumable items during the year. In absence of physical verification, actual existence of assets could not be ascertained in Audit.



4. Regularity in Payment of Statutory dues.

The Institute is not regular in payment of statutory dues. During 2015-16, the Institute had paid penalty of ₹1250 to the Income Tax Department.



राज कुमार
IAAS
RAJ KUMAR
IAAS



सत्यमेव जयते

प्रधान निदेशक लेखापरीक्षा (केन्द्रीय)
लखनऊ
PRINCIPAL DIRECTOR OF AUDIT (CENTRAL)
Lucknow-226010

राष्ट्रीय ताल, ऑडिट भवन,
टी०सी०-३५-४/१, विभूति खण्ड, गोमती नगर
लखनऊ-२२६०१० (उ०प्र०)

D.O. No PDAC/Lko/SAR-NIFT/ 2015-16/ 224
Dated: January 27, 2017

Dear Sh. Chattopadhyay

The Annual Accounts of the National Institute of Foundry and Forge Technology, Hatia, Ranchi for period 2015-16 have been audited and the Audit Report thereon have been issued vide letter No PDAC/Lko/DSAR-NFFT-2015-16/ dated 27.01.2017.

During the course of audit, certain deficiencies have been noticed which are of relatively minor nature and therefore not included in the Audit Report. These are being brought to your notice for corrective and remedial action.

With regards

Yours sincerely,

Encl. As above.

Prof. P.P. Chattopadhyay,
Director,
National Institute of Foundry and Forge
Technology, Hatia,
Ranchi- 834003.

By, Registrar
06.02.17



1. Overstatement of accrued interest of GPF Investment amounting to ₹ 0.20 lakh.

The Institute had shown excess accrued interest amounting to ₹0.20 lakh on FDR/KDR (GPF) in the annual accounts. This resulted in overstatement of assets under the head "Accrued interest" on investment of GPF Balance and overstatement of income by ₹0.20 lakh (Appendix-3) under GPF Income & Expenditure Account.

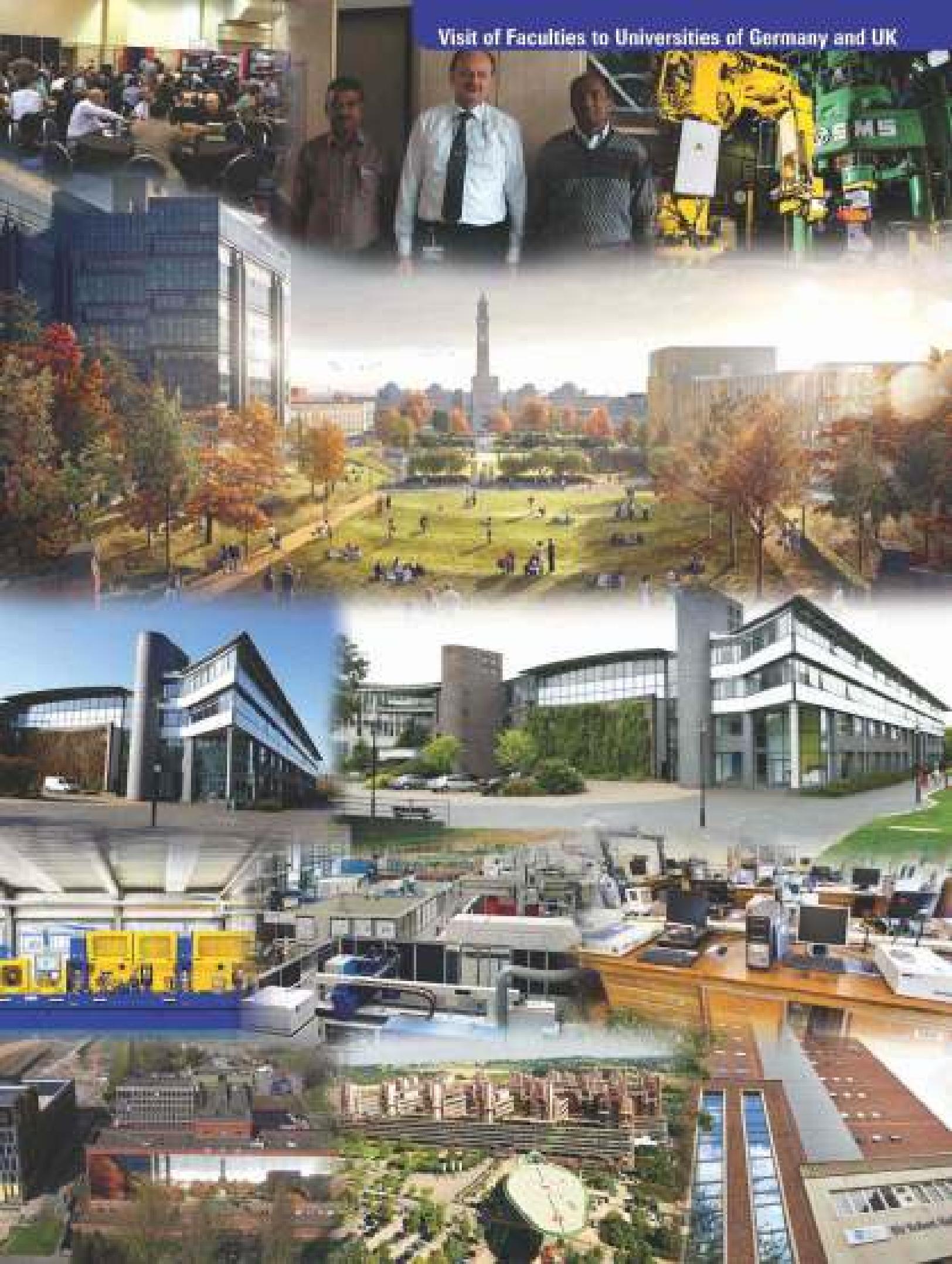
2. Non-holding of meeting of BOG

According to Rule 14 (i) of the Rules and Regulations of Memorandum of Association (MOA) of RIFFT "The Board shall ordinarily meet once in every three months provided that the Chairman may, whenever he thinks fit on a written requisition of not less than four members call for special meeting."

Scrutiny of minutes of meeting of BOG revealed that during the year 2015-16 three meetings of BOG were held.

However, during 3rd quarter i.e. October-December 2015 meeting of BOG was not held, no action was taken to hold the meeting during the said quarter. This was in contravention of the provision of the MOA.

Visit of Faculties to Universities of Germany and UK



GLIMPSE OF CAMPUS

