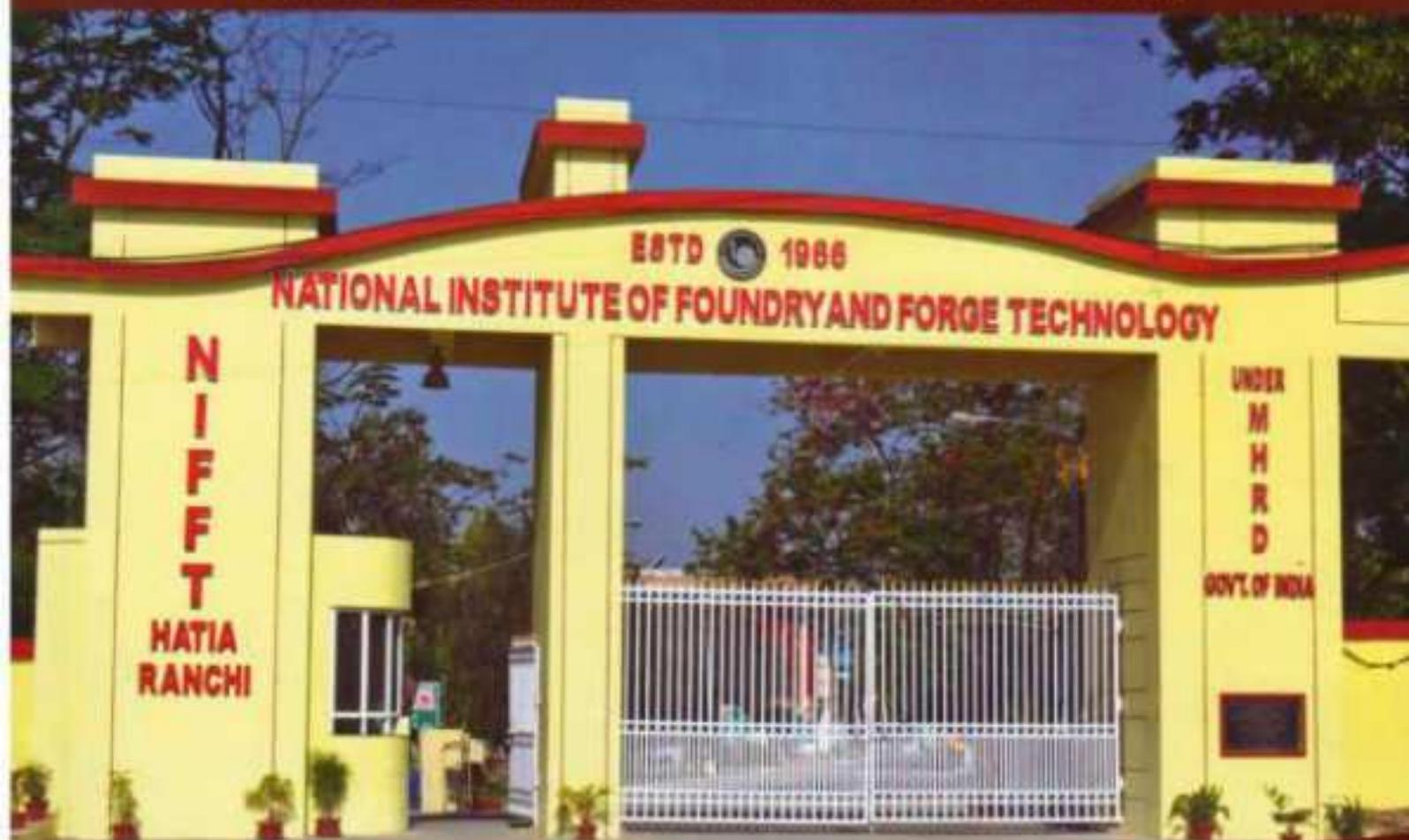


NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY

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



Annual Report : 2016-17



Hatia, Ranchi - 834003 (Jharkhand), India
www.nifft.ac.in



JINKS-2017

NATIONAL INSTITUTE OF FASHION TECHNOLOGY
GANCHI BAZAR
UNDER THE GOVT. OF INDIA

JINKS Pranav '17

ANNUAL REPORT 2016-17



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VISSION

“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 Technology Scenario in the field in India And Abroad Vis-A-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 by Government of India under the aegis of UNESCO to cater to the demand of trained manpower in the capital goods manufacturing sectors. The forward looking endeavour, pursued by the Institute during last 50 years, has evolved a unique four tier industry oriented academic framework constituted by Advanced Diploma, B Tech, M Tech and Doctoral programs 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.

The Institute has celebrated its Golden Jubilee by organising several National and International conferences where more than 100 eminent experts have deliberated on the prospects of manufacturing technology in the global scenario. This has provided the guidance for the Institute to evolve the academic roadmap of the Institute towards Manpower and Knowledge Enhancement (MAKE) in consonance with the 'Make in India' program, as envisioned by our Hon'ble Prime Minister. The motivation of the institute is immensely fostered 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 as recommended by the committee under the Chairmanship of Shri Baba Kalyani, Chairman and Managing Director of Bharat Forge Limited.

During 2016-17, apart from the regular activities, the institute has exerted intensive effort in renovation and augmentation of its physical and academic infrastructure. The regulatory bodies have met at normal intervals to steer the activities of the Institute. The academic activities encompassing admissions, academic activities, examinations etc., have been taken place following the academic calendar.

The departments have also devoted serious attention in pursuing the research activities which is manifested by the number of Doctoral theses awarded and submitted (nine), publication in National and International journals of repute (about sixty five), presentation in National and International conferences (about fifty) and major consultancy projects (five). Increase in faculty strength by about forty percent has further augmented the academic and research activities. It is also worth mentioning that Dr. K. K. Singh of Foundry Technology Department was elected as the National Vice-President (Technical) of Indian Foundry Organization and Dr. Chinmoy Chattopadhyay of Materials and Metallurgical Engineering Department has received the Young faculty training fellowship award by the Indian National Academy of Engineers (INAE).

Beside their academic pursuit the students have demonstrated encouraging activities in sports, music and social activities. For example, NIFFT SAE Collegiate Club participated in SUPRA SAE India 2016 and secured 52nd overall rank among the 170 participating teams. The NIFFT volleyball team has participated in 'Vajra' and 'Tempest' which was held at BIT Mesra and MERI Kolkata, respectively and secured 1st position in both the events. The group of students participated in the 'Momentum Jharkhand' event, where they have demonstrated functional 3D Printer and Calligraphy machines developed by them.

The students festival JINKS-PRANAV-17 was celebrated with high level of enthusiasm with the participation of students from different parts of the country like Innovation Cell IIT Bombay, Amity University, Taurian World School etc., organization like Indian Institute of Metals, B Factory and Career Launcher. Eminent personalities like Mr. Avijit Ghosh, CMD, HEC, Ranchi, Tejas-the DJ, Mrs. Tulsi Kumar-the celebrity singer have graced the occasion by

their presence and presentations.

The Students' Gymkhana of NIFFT has organized a cloth donation campaign named UMEED. The student's forum KARTAVYA further expanded their involvement in regular schooling program of children from backward localities and upgrade of life in their locality over the year.

The NIFFT fraternity has passionately observed Republic Day, Independence Day, Vigilance Awareness Week, Ekta Divas, Swachch Bharat Pakhvada, Hindi Divas, National Unity Day etc.,

In continuation to its past service towards the development of skill and talent for the manufacturing sector of the country, NIFFT further reaffirms the commitment to its role in fostering the position of India in global manufacturing competitiveness.





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.

Ever 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 departments of study namely:

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

The Institute offers the following regular programmes:

RESEARCH LEVEL :

- I. Post Doctoral Programme
- II. Doctoral Programme

POST GRADUATION LEVEL {MASTER OF TECHNOLOGY (M.TECH.)}

- I. M.Tech in Foundry-Forge Technology
- II. M.Tech in Manufacturing Engineering
- III. M.Tech in Environmental Engineering
- IV. M.Tech in Materials Science and Engineering

UNDERGRADUATE LEVEL {BACHELOR OF TECHNOLOGY (B.TECH.)}

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

ADVANCED DIPLOMA LEVEL {ADVANCED DIPLOMA COURSE (ADC)}

- I. ADC in Foundry Technology
- II. ADC in Forge Technology



From 2018 academic session, B.Tech programme in Mechanical Engineering has been proposed. Admission in M.Tech is based on GATE score through CCMT.

All the academic programmes have been approved by AICTE, New Delhi. Students are selected for admission through All India Engineering Entrance Examination (conducted by CBSE all over India) for B.Tech. Courses; GATE 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 objective 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 ton trimming press, 1" multi forge upsetter, laboratory rolling mill, carbolite furnace, oil fired billet heating furnace, Tensometer, Forging screw press, Ball mill
Materials & 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.

PLACEMENT

Institute enjoys almost 100% placement in all courses of B. Tech & ADC Level.

GOLDEN JUBILEE YEAR

In the year 2016 institute has completed its 50 years of service to the nation. Following National and International seminars/conferences were organized to commemorate the same.

- International Conference on Advances in Materials and Manufacturing (ICAMM)



- Seminar on Human Resource for Metal Component Manufacturing (HRMCM)
- National Conference on Emerging Technology in Foundry and Forge (ETFF)
- National Conference on Environmental Issues, Challenges and Solution (EICS)
- National Conference on Advances in Structural Materials.
- Workshop on Recent Trends in Welding Process

SOCIAL OUTLOOK

Institute encourages the participation of students and staffs in the celebration of National Importance days such as Swachta Divas, National Unity day, and National Constitution day, International Yoga day etc. Institute in line with the national spirit organizes SwachtaPakhwada, Vigilance Awareness week etc.



REGULATORY BODIES

BOARD OF GOVERNORS

1	Shri Sandeep Gupta 48, Morar Enclave Colony Gola Ka Mandir, Gwalior (M.P.)	Chairman
2	Joint Secretary Ministry of Human Resource Development, Department of Higher Education, Govt.of India, ShastriBhawan, New Delhi-110115	Member
3	Direction (Finance) Ministry of Human Resource Development Department of Higher Education Government of India, New Delhi 110 115	Member
4	Professor Amol A Gokhale Department of Mechanical Engineering (Manufacturing Group) Indian Institute of Technology, Bombay IIT Area, Powai, Mumbai, Maharashtra 400076	Member
5	Dr. D. Ravi Kumar Professor Department of Mechanical Engineering Indian Institute of Technology, Delhi HauzKhas New Delhi 110 016, India	Member
6	Prof. M.K. Tiwari Department of Industrial Engg.and Management Indian Institute of Technology (IIT) Kharagpur721302 (W.B)	Member
7	Prof. S.B. Kumar Dept.of MME, NIFFT, Hatia, Ranchi	Member
8	Prof. P. Talukdar Dept. of Forge Technology NIFFT, Hatia, Ranchi	Member
9	Prof. P PChattopadhyay Director NIFFT, Hatia, Ranchi	Member Secretary

ADMINISTRATIVE & FINANCE COMMITTEE

1	Shri Sandeep Gupta 48, Morar Enclave Colony Gola Ka Mandir, Gwalior (M.P.)	Chairman
2	Joint Secretary Ministry of Human Resource Development, Department of Higher Education, Govt.of India, ShastriBhawan, New Delhi-110115	Member



3	Direction (Finance) Ministry of Human Resource Development Department of Higher Education Government of India, New Delhi 110 115	Member
4	Dr. S.B.Kumar Dept.of MME, NIFFT, Hatia,Ranchi-3	Member
5	Prof. P. Talukdar Dept. of Forge Technology NIFFT, Hatia, Ranchi-3	Member
6	Prof. P P. Chattopadhyay Director NIFFT, Hatia, Ranchi-3	Secretary
STANDING BUILDING COMMITTEE		
1	Prof. P. P. Chattopadhyay Dirctor NIFFT, Hatia, Ranchi	Chairman
2	Mr. Pandey Pradeep Kumar M.H.R.D, Shashtri Bhawan, New Delhi	Member
3	Prof. Sanjay Kumar Dean P&D, NIFFT, Ranchi	Member
4	Mr. S. Pandey G. M MECON Ltd. Doranda, Ranchi	Member
5	Mr. S. Bandhupadhey H.E.C, Ranchi	Member
6	Prof. P. Talukdar Board Member, NIFFT, Ranchi	Member
7	Prof. N. K Singh NIFFT, Ranchi	Member Secretary
MEMBER PRESENT AS INVITEES		
1	Mr. M. K Pandey Executive Engineer (Electrical) C. P. W.D Doranda, Ranchi	
2	Manoj Kumar Executive Engineer (Civil) C. P. W. D Hinoo, Ranchi	
3	Mr. S. S. Akhtar Dy. Registrar, NIFFT, Ranchi	
4	Mr. Avinash Kumar Verma Assistant Registrar (A/Cs), NIFFT, Ranchi	
5	Mr. Sudhir Kumar I/C E & M, NIFFT, Ranchi	



ACADEMIC COUNCIL

1.	Dr. P.P. Chattopadhyay, Director, NIFFT, Ranchi	Chairman
2.	Vice Chancellor Ranchi University, or His Nominee	Member
3.	Dean, Faculty of Science, Ranchi University, Ranchi	Member
4.	Controller of Examination, Ranchi University, Ranchi	Member
5.	Dr. B.B. Agrawal, General Manager (Products), SAIL	Member
6.	Dr. G.K. Yadav, General Manager, FFP, HEC, Ltd., Ranchi	Member
7.	Professor M.K. Agrawal, Dept. of Metallurgical & Materials Engineering, NIT, Jamshedpur	Member
8.	Dr. T. Venugopalan, Chief Technical Officer, TATA Steel, Jamshedpur	Member
9.	Dr. D. Mukherjee, Steel Chair Professor	Member
10.	Professor Sanjay Kumar, NIFFT, Ranchi	Member
11.	Professor S.B. Kumar, NIFFT, Ranchi	Member
12.	Professor P. Talukdar, NIFFT, Ranchi	Member
13.	Professor B. Kumar, NIFFT, Ranchi	Member
14.	Professor A.K. Singh, NIFFT, Ranchi	Member
15.	Professor A. Mondal, NIFFT, Ranchi	Member
16.	Professor N.K. Singh, NIFFT, Ranchi	Member
17.	Professor K. K. Singh, NIFFT, Ranchi	Member
18.	Professor R.K. Ohdar, NIFFT, Ranchi	Member
19.	Professor A.K. Pathak, NIFFT, Ranchi	Member
20.	Professor Nandita Gupta, NIFFT, Ranchi	Member
21.	Professor S.R. Kumar, NIFFT, Ranchi	Member
22.	Professor B K Chakrabarti, NIFFT, Ranchi	Member Secretary

Glimpses of Conference

DEPARTMENT OF FOUNDRY TECHNOLOGY



Glimpses of Conference

DEPARTMENT OF FOUNDRY TECHNOLOGY



DEPARTMENT OF FOUNDRY TECHNOLOGY



1. FACULTY :

1	Dr. A. K. Singh B.E., M.Tech., PhD(Ranchi University)	Professor
2	Dr. K. K. Singh, B. Sc. Engg. (Met.), M. Tech. (Met. Engg.), Ph.D. (I. I. T. Kanpur), LMIFO, LMIIM, FM Institution of Engineer	Professor
3	Dr. Nandita Gupta B.E. Mechanical , PD. Engineering(Ranchi University) MIIF, LMIIM, FIEI	Professor and HoD
4	Dr. Amitesh Kumar B.E., M.Tech., PhD Ph.D. (I. I. T. Kharagpur), MIIF, LMIIM, LMIFO	Associate Professor

2. ACTIVITIES:

2.1 Academic Activities :

Number of subjects offered by the department of M.Tech. , B. Tech and ADC level are :

M.Tech.: 08

B. Tech :08

ADC : 11

Faculty members of the department were involved in guiding Seminars and Projects of M. Tech., B. Tech., and Advanced Diploma Course besides their normal classes for long term courses.

2.2 Research and Development/ Projects.

(i) Doctoral & Post Doctoral Programmes

5 Ph. D. scholars were in 2016-17

2.3 Seminar/ Conference/ Presentation.

1. Rajat Upadhyaya, **K.K. Singh** and Rajeev Kumar , Microstructure and Mechanical Properties of Thin Wall Ductile Iron presented in 3rd International conference on 'Advances in Steel, Power and Construction Technology 'March 22-23, Raipur 2017.
2. Rajat Upadhyaya and **K.K. Singh**, Effect of some inoculation on the structure-properties of thin wall ductile iron, presented in 7th International Conference Material Processing and Characterization ICMPC-2017(17-19 March 2017|HYD-TELANGANA).
3. Rajat Upadhyaya, **K. K. Singh**, Rajeev Kumar and M Chandran Sharan, Study on the effect of austempering temperature on the Structure- Properties of Thin Wall Austempered Ductile Iron, presented in International Conference on Materials, Manufacturing and Modeling ICMMM-2017(9-11 March 2017|VIT-Vellore).
4. Rajat Upadhyaya and **K.K. Singh**, Effect of section thickness on the structure-properties of thin wall ductile iron, presented in International Symposium NMD-ATM in IIT Kanpur, November, 2016.
5. **N. Gupta**, S.K. Sen, Vinod Kumar, A. K. Khandelwal "Statistical analysis of Thermomechanically processed and spheroidised steel of 1.15%C investigated by NDT Techniques" An International Conference on "Evolutions in manufacturing: Technologies and Business Strategies for HATI A, RAN CH I - 834 003 (JHAR KH AN D , I N DIA) Global Competitiveness" November 12-13, 2016



6. S.K.Sen, **N. Gupta**, S.K.Dua, A.K.Pramanic, A. Bhattacharya, D.Mukherjee and P.P.Chattopadhyay “Fatigue and Corrosion Property of TMT Bars, TOR Steel Bars and their concrete Specimen Produced in India” INTERNATIONAL CONFERENCE ON ADVANCES IN MATERIALS AND MANUFACTURING (ICAMM '17) JANUARY 19 - 21, 2017
7. Md. Salim Ansari, **Amitesh Kumar**, Hemant Kumar and B.S. Manjunath, Prediction and Experimental Validation of Shrinkage in Lead Castings, International Conference on Advances in Materials and Manufacturing (ICAMM '17), January 19-21, 2017, ISBN: 978-93-86256-36-2, January 19-21, 2017, pp- 100-102.
8. An invited talk on Theoretical and Experimental Study of Structure Formation in Binary Al-Cu eutectic at Different Cooling Rates, **Amitesh Kumar**, in The 4th International Conference on Advances in Materials & Materials Processing (ICAMMP - IV) at Deptt. of Met. & Mat. Engg., IIT Kharagpur during Nov. 5 - 7, 2016.
9. Amitesh Kumar, Rahul Kumar, (2016), A paper “Al-Based Nano-composites Developed by Ultrasonic Casting Route” was presented in National Conference on Emerging Technologies in Foundry and Forge at National Institute of Foundry and Forge Technology, Ranchi during Nov. 25-26, 2016.
10. Mukkollu Sambasiva Rao, **Amitesh Kumar**, (2016), A paper “Effect of Cooling Rate on Microstructure and Mechanical Properties of Thin-Walled Spheroidal Gray Iron Castings” was presented in National Conference on Emerging Technologies in Foundry and Forge at National Institute of Foundry and Forge Technology, Ranchi during Nov. 25-26, 2016.

International Journal Publications;

1. 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.

2.4 Industrial services and Consultancy:

Consultancy:

1. Consultancy on “Melting, moulding, heat treatment and quality control of various types of castings” (07/11/2016 to 11/11/2016); Taken by Dr. K. K. Singh and Dr. A. K. Singh; CASTAMET PVT. LTD., Kharwa, Ajmer, Rajasthan; consultancy charge of Rs. 4.0 Lacks.
2. Consultancy Project on “Development and Characterization of high phosphorous cast iron” is in progress from October, 2016. Taken by Dr. K. K. Singh. Consultancy Project funded by TATA STEEL JAMSHEDPUR, Consultancy Project cost of Rs. 7.5 Lacks.
3. Consultancy “Preparation of Detail Project Report for common Facility Center for Bauripur Surgical Cluster, Kolkata, W.B.; Taken by Dr. A. K. Singh, Dr. K. K. Singh and Dr. Amitesh Kumar. The consultancy charge of Rs. 10.0 Lacks.
4. Book Reviewed by Dr. Nandita Gupta and Dr. Amitesh Kumar for Petroleum Conservation and Research Association (PCRA) (Ministry of Petroleum and Natural Gas), New Delhi.

Industrial Tour/Training:

1. Dr. Amitesh Kumar coordinated technical tour of SCMAs of IRIMEE Jamalpur.
2. Dr. Amitesh Kumar deliver lectures to the participants of IRIMEE Jamalpur



2.5 Administrative Activities:

1.	Dr. K. K. Singh	<ul style="list-style-type: none">• Member Tender Committee• Chairman Students Gymkhana• Member Secretary of Golden Jubilee celebration committee of NIFFT
2.	Prof. A. K. Singh	<ul style="list-style-type: none">• Chairman NIFFT Alumni Association(NAA)• Chairman Purchase Committee• Chairman organising committee of National seminar on Human resource for metal component manufacturing• Chairman organising committee of International conference on Advanced Materials and Manufacturing
3.	Prof. Nandita Gupta	<ul style="list-style-type: none">• Member Gymkhana Committee NIFFT• Member M.Tech Course Coordination Committee• Member AICTE Accreditation Committee 2017-18• Member Antiragging Committee• Annual Report Preparation committee 2015-16• Chairmen of committee dealing with sexual harassment of women at workplace
4.	Dr. Amitesh Kumar	<ul style="list-style-type: none">• Hostel Warden• Member of Industrial Liaison cell• Member AICTE Accreditation Committee 2017-18• Member Anti-ragging Committee• Member of organizing technical committee of NCETFF 2016• Member of organizing committee of ICAMM 2017

5.5 Seminar conferences organized/attended

1. As a Panelist, participated in “Indian Foundry Technology and Innovation meet” held on 11th April, 2016 at Hotel TheLalit, Mumbai and organised by IFO.
2. As a moderator of the Inaugural session participated in “Indian Foundry Convention & Exhibition, IFCON, East 2017 on 3-4th February, 2017 at ITC Sonar, Kolkata and organised by IFO.
3. Chairman, Registration Committee of “ National Conference on Emerging Technologies in Foundry and Forge”, Nov., 25-26, 2016 at NIFFT, Ranchi

2.6 Achievements

Dr. K. K. Singh was nominated as National Vice-President (Technical) of Indian Foundry Organization from May 2015 and continuing.

Glimpses of Conference



DEPARTMENT OF FORGE TECHNOLOGY

Glimpses of Conference

DEPARTMENT OF FORGE TECHNOLOGY



DEPARTMENT OF FORGE TECHNOLOGY



FACULTY:

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

ACADEMIC ACTIVITIES

The courses offered by the department

Name of Courses	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

Publications:

JOURNAL PUBLICATIONS

1. **Md. Israr Eqbal**, RajKumarOhdar, AzharEqbal 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.
2. **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
3. **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/Book

- A review paper entitled, “Processing of wheel steels and their properties” authored by A. K. Pramanick, P. Talukdar et al has presented in the National Conference on Emerging



Technologies in Foundry and Forge (NCETFF- 2016) organized by Foundry Technology Department and Forge Technology Department of NIFFT, Ranchi on November 25-26, 2016.

- A paper titled “ Microstructure and Mechanical Properties of Multidirectional Forged Commercial Pure Aluminium” authored by Dr Manoj Kumar, Abhisek Kumar was presented in the National Conf on Emerging Technologies in Foundry and Forge (NCETFF-2016) organized by Foundry Tech and Forge Tech Department of NIFFT ,Ranchi on Nov 25-26, 2016.
- A paper titled “ Forging process optimisation: A Review and Reflection” authored by Anuj Kumar, R K Ohdar and N K Singh was presented in the National Conf on Emerging Technologies in Foundry and Forge (NCETFF-2016) organized by Foundry Tech and Forge Tech Department of NIFFT ,Ranchi on Nov 25-26, 2016.
- A paper titled “ Information Technology Application for Energy Management” authored by Amar Kumar, Dr Umesh Prasad and Dr R K Ohdar was presented in the National Conf on Emerging Technologies in Foundry and Forge (NCETFF-2016) organized by Foundry Tech and Forge Tech Department of NIFFT ,Ranchi on Nov 25-26, 2016.
- A paper titled “Die Design, Simulation and billet optimization of Forged Gear Blank” authored by Manoj Kumar, Naveen Singh, Nippu Tayeng and Tadi Siva Prasad was presented in the International Conference on Advances in Materials and manufacturing (ICAMM '17) at NIFFT Ranchi, Jharkhand on Jan 19-21, 2017.
- A paper titled “Flashless Forging of Coupling Flange” authored by Manoj Kumar, and M Prithviraj was presented in the International Conference on Advances in Materials and manufacturing (ICAMM '17) at NIFFT Ranchi, Jharkhand on Jan 19-21, 2017.
- A paper titled “Mechanical Milling of Dual Phase Iron Aluminide Powder” authored by Manoj Kumar was presented in the International Conference on Advances in Materials and manufacturing (ICAMM '17) at NIFFT Ranchi, Jharkhand on Jan 19-21, 2017.
- A paper titled “Multi objective optimization of Hot Forging Process using Genetic Algorithms with Finite Element Method” authored by Md Israr Equal, Md Sarfraz Alam and Raj Kumar Ohdar was presented in the International Conference on Advances in Materials and manufacturing (ICAMM '17) at NIFFT Ranchi, Jharkhand on Jan 19-21, 2017.
- A book titled “Proceedings of International Conference on Advances in Materials and Manufacturing (ICAMM'17)” was edited by Dr Manoj Kumar and Dr G Raja Mohan with ISBN: 978-93-86256-36-2 .

Others:

Dr. P. Talukdar has been invited and participated in the Technical & Purchase committee meeting as an external member for procurement of one Hot Forging Hydraulic Press in the month of November, 2016 to CSIR-CMERI, Durgapur- 713209 West Bengal

Dr. P. Talukdar has adjudicated two number of PhD Thesis, One from NIT Rourkela and the other from Jadavpur University, Kolkata as an external examiner during the period from September to October, 2016. He also examined after invited by NIT Rourkela for PhD Viva-voce examination for the Degree in PhD of the related student in the month of December, 2016

Mr. Vineet Chak, Assistant Professor was given the task of maintenance/modernization of the workshop EOT crane and the work has been carried out successfully.

Mr. Vineet Chak, Assistant Professor has been assigned with the task of taking HIP N14 (Hot Isostatic Press) machine of forge workshop in functional condition; For this supplier M/s. ASACO Pvt. Ltd. has been contacted and further process is going on.



Mr. Vineet Chak, Assistant Professor and Dr. R K Ohdar visited NIT Rourkela for understanding the networking infrastructure of NIT Rourkela and the preparation of tender documents in consultation with Prof. S K Patra, NIT Rourkela for the procurement of items/equipments required for the networking and wi-fi connectivity in the NIFFT campus

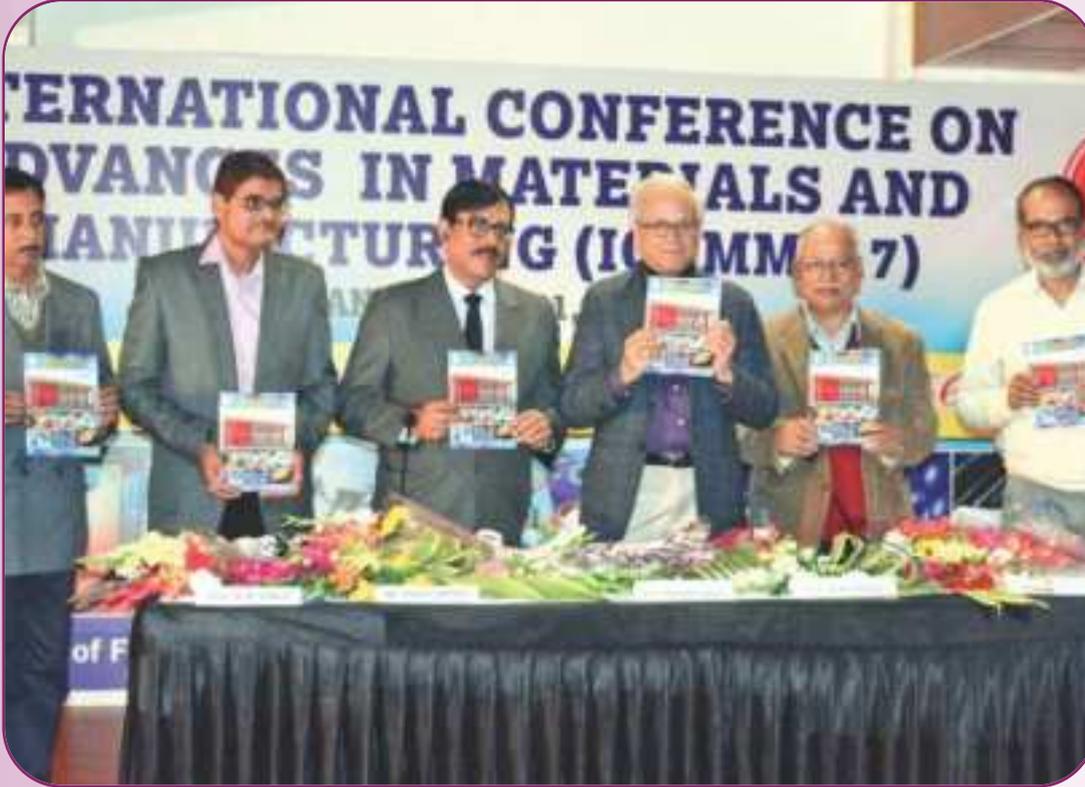
A National Conference on “Emerging Technologies in Foundry and Forge” (NCETFF-2016) was organized jointly by Department of Foundry Tech and Department of Forge Tech at NIFFT Ranchi on 25-26 Nov 2016. Thirty papers were presented in the conference. The conference was attended by experts from industries, research organizations and academia from all the corners of our country.

An International Conference on Advances in Materials and Manufacturing (ICAMM'17) was organized by NIFFT Ranchi from 19-21 Jan 2017. Dr. Manoj Kumar, Associate Professor, Department of Forge Technology was Organizing Secretary of the Conference.

Ph.D Completed/ Continuing in the Department

- **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.
- **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.
- **Mr Abhisek Kumar** a regular Ph.D student of the Department of Forge Tech is working in the area of Multidirectional Forging under the guidance of Dr. Manoj Kumar.
- **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.
- **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.
- **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.
- **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 DrUmesh Prasad, Assistant Professor, Department of Computer Science, BIT Mesra, Ext Centre- Lalpur, Ranchi-834002.

Glimpses of Conference



DEPARTMENT OF MANUFACTURING ENGINEERING

DEPARTMENT OF MANUFACTURING ENGINEERING



DEPARTMENT OF MANUFACTURING ENGINEERING



FACULTY:

1	Dr. Sanjay Kumar B.Tech. (Met.), M. E. (Mech.), Ph.D., MIIF	Professor
2	Dr. A. Mandal B.Tech. (Mech.), M.Tech. (Prod.), Ph.D., MIIW	Professor
3	Dr. A. K. Pathak B.Sc Engg.(Mech.), M. Tech. (Mech.), Ph.D., MIIW, MISTE, MIIM	Professor & HoD
4	Mr. K. K. Verma M.Sc. (Maths), M.Phil.(Applied Maths.), MIIF	Associate Professor
5	Mr. Vijay Toppo B.Sc. Engg. (Mech.), M.Tech. (Mfg.Engg.), Ph.D., MIIM, MIIF	Associate Professor
6	Dr. A. K. Sood B.E.(Mech.), M.E (Design.), Ph.D.	Associate Professor
7	Dr. G. Rajamohan B.E. (Mech.), M.E.(Mfg. Tech.), Ph.D., MIE	Associate Professor
8	Mr. V. M. S. Hussain B.E.(Mech.), M.E.(Prod.), MIIF	Assistant Professor
9	Dr. Ratnakar Das AMIE (Mech.), M.E. (Prod.), Ph.D. (M.E.)	Assistant Professor
10	Dr. Sambit Kumar Parida B.E. (Mech.), M.Tech.(M.E.), Ph.D.	Assistant Professor
11	Mr. Anand Mohan Murmu B.Tech. (Prod.), M.Tech. (Mfg.Sc. & Engg.)	Assistant Professor
12	Mr. Subrato Kumar Soren B.E. (Mech.), M.E. (Thermal Engg.)	Assistant Professor

ACADEMIC ACTIVITIES:

Regular Courses offered by the Department:

- (i) B.Tech., Manufacturing Engineering
- (ii) M.Tech., Manufacturing Engineering
- (iii) Ph.D. in different areas of Manufacturing Engineering.

RESEARCH

PhD Guidance

1. Ms. Shamama Anwar submitted her PhD Thesis on “Intelligent algorithms for vision-based human action recognition” to Ranchi University, Ranchi in February 2017. This



research was carried out under guidance of Dr. G. Rajamohan

2. Mr. Krishna Kumar Verma presented his PhD Pre-submission seminar on “Computer-aided design of freeform surfaces using sparse and dense measurement data” during October 2016. This research was jointly guided by Prof. Amitava Mandal, and Dr. G. Rajamohan

(A) International Journals Publications

- 1) Rajamohan, G. (2016), “An approach for the unified evaluation of orientation tolerances”, International Journal of Engineering Research & Technology, Vol. 5, No. 1, pp. 169-173.
- 2) Reddy, K. S., A. Mandal, K. K. Verma and G. Rajamohan (2016), “Fitting of Bezier curves using the Fireworks algorithm”, International Journal of Advances in Engineering & Technology, Vol. 9, No. 3, pp. 396-403.
- 3) Reddy, K. S., A. Mandal, K. K. Verma and G. Rajamohan (2016), “Fitting of Bezier surfaces using the Fireworks algorithm”, International Journal of Advances in Engineering & Technology, Vol. 9, No. 3, pp. 421-429.
- 4) Shamama Anwar and G. Rajamohan (2016), “An approach to human action recognition using the histogram of oriented gradients”, International Journal of Advanced Information Science and Technology, Vol. 52, No. 52, pp. 30-35.
- 5) Shamama Anwar and G. Rajamohan (2016), “Human action recognition using similarity score from action descriptors”, International Journal of Advanced Studies in Computer Science and Engineering, Vol. 5, No. 9, pp. 14-21.
- 6) Shivaprasad P.V., Amitava Mandal, Electrical Discharge Machining of SG Iron: Effect of Process Variables on Material removal Rate and Overcut with Multi-optimization, Int. J. Advances in Engineering & technology, vol.9, issue 6, 2016,618-629.
7. B. M. Jha and A.Mandal, Overcut and Profile of the Machined Features in Electrochemical Machining, IASET: IJMMCE, vol.1, Issue 1, 2016, 29-40.
8. B.M.Jha and A.Mandal, Neural Network based Models for Surface Roughness Obtained During Electrochemical Machining of SG Iron, Int. J. Mechanical Engineering, vol.5, issue 5, 2016,7-18.
9. B.M.Jha and A.Mandal, Electrochemical Machining of SG Iron using Mixed Electrolyte (Potassium Chloride and Sodium Nitrate), Int. J. Engineering Research & technology, vol.5, issue 07, 2016,165-172.
10. Kunal Kamal, B.M.Jha and A.Mandal, Effect of Electrolyte Concentration on Material Removal Rate and Overcut during Machining of SG Iron, Int. J. Scientific Progress and Research, Vol.22, no.3, 2016,127132.
11. Siddharta Karmakar and Amitava Mandal, Multicriteria Optimization of Surface Roughness Produced in Electrochemical Machining using Mixed Electrolyte NaNO₃ and NaCl, Int. J. Modern Engineering Research, vol.6, issue 7, 2016,41-49.
12. Shivprasad P.V., Amitava Mandal, Multicriteria Organization for Determining Low Wear of the Surface Production in Electrical Discharge Machining, Int. J. Research in Engineering and Technology, Vol.6, issue 2,2017, 14-19.
13. Umasankar Das, Vijay Toppo, Analysis of friction stir Welding of dissimilar Aluminium alloys, IRACST – Engineering Science and Technology: An International Journal (ESTIJ), ISSN: 2250-3498, Vol.6, No.3, May-June 2016. PP44-56.
14. Umasankar Das., Mohammad Hashir Hahsmi, Vijay Toppo"Experimental investigation of ferrofluid forces under different composition and the ratio of ferrofluid", International Journal of Engineering Trends and Technology (IJETT), V33 (6),314-319, 2016. ISSN:2231-5381.



15. Umasankar Das, Nitish Kumar, Vijay Toppo "Experimental Investigation of Ferro fluid Forces under Different Voltage", International Journal of Engineering Trends and Technology (IJETT), V32(6),294-300, 2016. ISSN: 2231-5381

(B) International Conferences / Seminars / Symposia

- 1) Shamama Anwar and G. Rajamohan (2016), "Action classification based on mutual difference score", 5th International Conference on Frontiers in Computing Theory and Applications (FICTA), KIIT University, Bhubaneswar.
- 2) Rout, S. K., G. Rajamohan, J. Ghose and V. Sharma (2016), "Estimation of delamination in micro-drilling of fiber reinforced composites using image analysis", International Conference on Evolutions in Manufacturing: Technologies and Business Strategies for Global Competitiveness (ICEM 2016), BIT Mesra, Ranchi.
- 3) Abhishek Kumar and G. Rajamohan (2016), "Sampling strategy for flatness error measurement in end-milled surfaces", International Conference on Evolutions in Manufacturing: Technologies and Business Strategies for Global Competitiveness (ICEM 2016), BIT Mesra, Ranchi.
- 4) Rajamohan, G. (2017), "Convex hull based algorithm for the evaluation of perpendicularity error using coordinate data", International Conference on Advances in Materials and Manufacturing (ICAMM '17), NIFFT, Ranchi.
- 5) Verma, K. K., G. Rajamohan and A. Mandal (2017), "Parameterization of B-Spline curves and surfaces", International Conference on Advances in Materials and Manufacturing (ICAMM '17), NIFFT, Ranchi.

Journal Papers Reviewed

- 1) Dr. G. Rajamohan reviewed one paper each for Measurement (published by IMEKO) and Advances in Mechanical Engineering (published by SAGE Publishers).
- 2) Dr. G. Rajamohan reviewed over 9 papers for International Journal of Advanced Manufacturing Technology (published by Springer).

Short-term Courses Attended

- 1) Dr. G. Rajamohan attended a short term course on "High Performance Computing" at Birla Institute of Technology, Mesra during May 2 - 6, 2016.

Seminar / Workshop Organized

- 1) Dr. G. Rajamohan was associated with the International Conference on Advances in Materials and Manufacturing (ICAMM 2017) as Treasurer and also edited the Proceedings of the Conference with Dr. Manoj Kumar, Dept. of Forge Technology. The conference was organized as part of the Golden Jubilee Celebrations of NIFFT during January 19 - 21, 2017.
- 2) Organized a two-days National Workshop on Advances in Manufacturing Engineering during March 17 - 18, 2017 as part of the Golden Jubilee Celebrations of NIFFT.

**DEPARTMENT OF MATERIALS AND
METALLURGICAL ENGINEERING**



Glimpses of Conference



DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING



The Department of Materials and Metallurgical Engineering has been dedicated in inculcating its students to make them world class engineers, creating outstanding research environment and giving the nation a direction for tomorrow in the materials and Metallurgical engineering sectors. The faculty members, students and staffs have been continuously annoying their best to incorporate their contribution in the mentioned activities. Some of the salient achievements are listed as follows;

FACULTY:

1	Dr. B. K. Chakrabarty PhD (IIT, Kharagpur)	Professor
2	Dr. S. B. Kumar PhD (IIT,BHU, Varanasi)	Professor
3	Dr. B. Kumar PhD (IIT, Kharagpur)	Professor
4	Dr. D. Mukherjee PhD (University of Barmingham,UK)	Steel Chair Professor
5	Mr. B. Mallik	Associate Professor& HoD
6	Dr. G. Das PhD (IIT,Mumbai)	Associate Professor
7	Dr. D. Roy PhD (IIT, Kharagpur)	Assistant Professor
8	Dr. Chinmoy Chattopadhyay PhD (IIT, Kanpur)	Assistant Professor
9	Dr. Ratnesh Kumar Gupta PhD (Brown University, USA)	Assistant Professor
10	Dr. Renu Kumari PhD(IIT Kharagpur)	Assistant Professor
11	Mr. K. Sikdar M.Tech.(IIT Kanpur)	Assistant Professor

International Journal Publications:

1. KoushikSikdar, SomrajChakravarty, Debdas Roy, Ronald O. Scattergood, Carl C. Koch, "Synthesis and characterization of an in situ consolidated nanocrystalline Cu88Al11.5Y0.5 alloy" Journal of Alloy and Compounds, 717 (2017) 219-225.
2. SomrajChakravarty,KoushikSikdar,, Debdas Roy, Carl.C.Koch " Grain Size Stabilization and Strengthening of Cryomilled Nanostructured Cu-12at. % Al alloy"Journal of Alloy and Compounds,Volume 716, Pages 197-203.



- SomrajChakravarty, KoushikSikdar, DebdasRoy “Stabilization of nanocrystalline Cu by Al addition” Materials Characterization 128(2017)189-194.

Seminar/ Conference/ Presentation.

- Dr. Ghanshyam Das has presented a technical paper entitled “internal corrosion of subsea multiphase pipelines under simulated operating conditions” in the International conference in advances in materials and manufacturing (ICAMM-2017) at NIFFT, Hatia, Ranchi held on Jan 19-21, 2017.
- Dr. Ghanshyam Das has attended and presented a technical paper entitled “failure analysis of oil and gas pipeline used in offshore” in the National conference NCAFMPM-2017 at CMERI Durgapur held on Feb 2-3, 2017.
- RenuKumari and J. DuttaMajumdar, Studies on Hydroxyapatite(HA)/TiO2 Composite Coating on Titanium Alloy (Ti-6Al-4V) The 4th International Conference on Advances in Materials and Materials Processing (ICAMMP-iv)’ during 5th to 7th Nov 2016.
- RenuKumari, and J. DuttaMajumdar, Wear Behavior of Hydroxyapatite (HA) based Composite Coating on Titanium Alloy (Ti-6Al-4V) Substrate by Plasma Spray Deposition and Post Spray Heat Treatment, Presented in IIM-NMD-ATM-2016,IIT Kanpur.
- C. Chattopadhyay and B.S. Murty.”A Kinetics Based Critical Study of ‘Confusion Principle’ for Metallic Glass Formation” (Contributory Talk, Oral Presentation). International Conference on Advances in Materials and Materials Processing (ICAMMP -IV), IIT Kharagpur, India. November 5-7, 2016.
- Dr. ChinmoyChattopadhyay attended International Workshop on High Entropy Materials (IWHM-2017) organised by IIT Hyderabad and University of Hyderabad held at University of Hyderabad during March 11-12, 2017.

Successful completion of Ph D from MME Dept.

Sl. No.	Name of student/ research scholar	Title of Thesis	Doctorate/ Master’s	Year of Completion	supervisor(s)
DOCTORATE					
1	Anumeha Mishra	Development of Nano-Ceramic Dispersed Hydroxyapatite based Nano-Composite for Structural application	Doctorate	Submitted 2016	Dr. D.Roy and Dr.S.B.Kumar
2	Somraj Chakravarty	Studies On Cu Based Nanocrystalline Alloys	Doctorate	Submitted Feb 2017	Dr. D.Roy



Achievements of MME Dept.

1. The Department of Materials and Metallurgical Engineering has successfully organised the National Conference on Advances in Structural Materials 2016 (NCASM 2016) during 16-17 December 2016. There were around 100 participants from all over the nation including eminent faculty members from different leading IITs and IISC.
2. Dr. Chinmoy Chattopadhyay got awarded the Young faculty training fellowship by the Indian National Academy of Engineers (INAE), Govt. of India, under the mentorship of renowned Professor B.S. Murty, the Head and Professor of the Department of Metallurgical and Materials Engineering, IIT Madras, India during May- July' 2016 (Summer Vacation). Research Topic - Light Weight High Entropy Alloys.

Glimpses of Conference



DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES

DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES



DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES (DASH)



FACULTY MEMBERS

1	Dr. S. R. Kumar M.Sc. (Phys.), Ph.D (Science) in Materials Science	Professor
2	Dr. Anil Kumar M.Sc. (Chem.), M.Tech. (Surface Sc. and Engg.), Ph.D (Engg.) in Metallurgy and Materials Engineering	Associate Professor and Head
3	Ms. Sujata Gupta M.A. (English)	Assistant Professor
4	Ms. Madhu Kumari B.Sc. Engg. (E&C), M. Tech. (IT), Ph.D (Ongoing) registered at ISM, Dhanbad.	Assistant Professor
5	Dr. Partha Sarathi Mondal M.Sc. (Physics), Ph. D (Physics)	Assistant Professor
6	Dr. Vikash Kumar Gupta B.Tech. (EEE), M. Tech. (Electrical Engg.) & Ph.D (Electrical Engineering)	Assistant Professor
7	Dr. Subhankar Basu M.Sc.(Applied Geology), M. Tech. (Environmental Engineering) Ph. D (Bioscience Engg.)	Assistant Professor

- Dr. Ajit Kumar (M.Sc. in Chemistry, Ph.D (Chemistry) is working as a Project Leader in Young Scientist (DST, India) Project.

ACTIVITIES

A. Academic Activities

- The Department of Applied Sciences and Humanities (DASH) assists all the normal activities related to B.Tech., M. Tech. and ADC programs.
- DASH offers M.Tech.Programme in Environmental Engineering.

B. Also offers doctoral programs in Sciences & Engineering

C. Research and Development activities

1. Doctoral research program

Sl. No.	Student	Thesis topic	Doctoral supervisor(s)
1	Mr. Shashikant Rajpal	Development of Nanocrystalline Semiconducting Thin films for Device Applications	Dr. S. R. Kumar
2	Mr. Suresh Kumar	Development of Zn CdS Nanocrystalline Thin Films using Chemical bath Depositions	Dr. S. R. Kumar
3	Ms. SudeshnaSurbhi	"Synthesis and Characterisation of CdTe Thin Film in Non Aqueous Medium".	Dr. S. R. Kumar



4	Mr. Altaf Ahmad	Studies of Corrosion Behavior of Rebar Embedded in Concrete and its Prevention	Dr. Anil Kumar
5	Mr. Deependra Kumar Sinha	Development of Eco-friendly Geopolymer Product Based of Steel Industry Slag, Fly-ash and Bottom Ash	Dr. Anil Kumar
6	Mr. Vijay Kumar Yadav	Studies on prediction of life of RCC Structure Under the Influence of Corrosive Environment.	Dr. Anil Kumar

II. MASTER PROJECTS GUIDANCE:

A. M.Tech .Project (Guided)

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

1. Mr. AbhimanyuK.Paswan has completed his project entitled "Tailing Pond Management Issues and Challenges" under Dr.S.R.Kumar.
2. Mr. Prabhat Kumar Ranjanhas completed his project entitled "Municipal Solid Waste in Shyamli Township Doranda,Ranchi"under Dr.S.R.Kumar.
3. Mr. D.K.G.RaviTeja 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. MadhuKumari.
8. Mr. ShashiBhusan has completed his Project entitled "Study of basics of sewage treatment plant processes and its comparison" under the supervision of Mrs. MadhuKumari.
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. MadhuKumari.

B. 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 buidings" under the supervision of Dr. Anil Kumar.
3. Mr. AnshumanJha 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. ShambhuNathsharmahas presented his Seminar entitled "Desalination of sewage water using graphene membrane through nanotechnology" under the supervision of Mrs. MadhuKumari
7. Ms. Priyankakumarihas presented his Seminar entitled "Standard water quality in India"under the supervision of Mrs. MadhuKumari



8. Mr. Siddarthhas presented his Seminar entitled ".geopolymeric building materials by synergetic utilisation of industrial waste"under the supervision of Mrs. MadhuKumari

Seminar Topic for M. Tech. (Environmental Engineering, (2016-2018)

1. Mr.Rakesh Kumar Nayak has completed his seminar entitled " Phytoremediation under Dr. Anil Kumar.
2. Mr. JitProsadGhosh has completed his seminar entitled " Carbon capture Technologies" under Dr. Anil Kumar.
3. Mr. S. Arumugam has completed his seminar entitled " E-waste" under Dr. Anil Kumar. completed his seminar entitled " Carbon capture Technologies" under Dr. Anil Kumar.
4. Mr. VinayYadav has completed his seminar entitled " Membrane bioreactor for sewage treatment" under Dr. S Basu
5. Mr. Abhishek Kumar has completed his seminar entitled " Struvite precipitation from sewage " under Dr. S Basu
6. Mr. Tushar Kumar has completed his seminar entitled " Zeolite preparation from coal-flyash " under Dr. S Basu

Paper publications in National and International journals

1. "Size fractionation of brown fly ash: Utilization of grey fraction as a pozzolanic material in blended cement" S. Kumar, J. N. Djobo, A. Kumar and S. Kumar, (Communicated in European Journal of Environmental and Civil Engineering; Manuscript ID: TECE-2016-0268).
2. "Size fractionation of brown fly ash: Utilization of fine brown fraction as a source material in geopolymer" S. Kumar, J. N. Djobo, A. Kumar and S. Kumar, (Communicated in Journal of Building Engineering; Manuscript No. - JOBE-D-16-00197).
3. "Comparative Behaviour of Nitrite and Nitrate for the Protection of Rebar Corrosion" Altaf Ahamad & Anil Kumar Communicated in Journal of The Institution of Engineers (India): Series D .
4. "Recovery Of Iron Values From Waste Iron Ore Slime" Jyolsna Jerin, R. K. Rath and Anil Kumar, communicated in Journal of Materials and Metallurgical Engineering, ISSN: 2231-3818 (2016)
5. Development of building material from steel industry by products, (Deependra Kumar Sinha, Anil Kumar), transactions of the Indian Ceramic Society, Communicated.
6. "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)
7. " 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)
8. " Effect of Mg Doped ZnO Thin Film Developed by Electrodeposition Method", Shashikant Rajpal, S. R. Kumar, International Journal of Scientific & Engineering Research, Volume 7, Issue 4, April-2016.
9. "Synthesis and Characterization of Nonaqueous Deposited Nanocrystalline CdS Film", Suresh Kumar,S.K Sharma, Shashikant Rajpal, S. R. Kumar, Srikant Sahu, D.Roy, International Journal of Advanced Engineering Research and Science,Vol-3,Issue-7, July-2016.
10. "Effect of Annealing on NanocrystallineZnO Thin Film Developed by Electrodeposition Method", ShashikantRajpal, S.R. Kumar, Materials Today: Proceeding, Elsevier Materials Today: Proceedings 4 (2017) 3754-3759 ,
11. 4. "Effect of Annealing on the Surface and Optical Properties of ZnCdSNanocrystalline Thin Films", S. Kumar, S. Rajpal, S. K. Sharma, D. Roy, S. R. Kumar, Chalcogenide Letters



Vol. 14, No. 1, January 2017, p. 17 – 23.

12. "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.
13. "E-commerce & Supply chain management: the nexus unleashed, challenges & opportunities" Devesh Gaurav, Aadarsh Das & Sujata Smiti Gupta, Discovery, 52(246)1217-1221, 2016
14. Basu*, S.; Mukherjee, S.; Balakrishnan, M.; Deepthi, M.; Sailaja, V. R. R. N. Polysulfone/nanocomposites mixed matrix ultrafiltration membrane for the recovery of Maillard reaction products. Membr. Water Treat. (accepted) (Impact factor: 0.679).
15. Kaushik, A.; Basu*, S., Singh, K.; Batra, V. S.; Balakrishnan, M. Activated carbon from sugarcane bagasse ash for melanoidins recovery. J Environ. Manage, 2017, 200, 29. (Impact factor: 4.01).
16. Basu*, S.; Balakrishnan, M. Polyamide thin film composite membranes containing ZIF-8 for the separation of pharmaceutical compounds from aqueous streams. Sep. Purif. Technol., 2017, 179, 118. (Impact factor: 3.359).
17. Korenak, J.; Basu, S.; Balakrishnan, M.; Hélix-Nielsen, C.; Petrinic, I. Forward osmosis in wastewater treatment processes. Acta Chim. Slov. 2017, 64, 83. (Impact factor: 0.983).
18. Basu*, S.; Kaushik, A.; Saranya, P.; Batra, V. S.; Balakrishnan M., High strength distillery wastewater treatment by a PAC-MBR with low PAC dosage, Water Sci. Technol., 2016, 73, 1104. (Impact factor: 1.197)
19. D. Pinelli, A.E. M. Bacca, A. Kaushik, S. Basu, M. Nocentini, L. Bertin, D. Frascari, Batch and continuous flow adsorption of phenolic compounds from olive mill wastewater: A comparison between nonionic and ion exchange resins, International Journal of Chemical Engineering, 2016, 2016, Article ID 9349627, 1-13 (Scopus indexed).

Seminar/Conference/Session Chair

1. Steel industrial waste is a sustainable & eco-friendly building material for future engineering, (Deependra Kumar Sinha, Anil Kumar), National seminar on "Smart cities and its Impact on Environment & Urban Ecosystem" (NSSCIEUE-2016), Organized by CIT, Ranchi, held in Ranchi June 24th-25th, 2016.
2. S Mourya, S. Basu, M Balakrishnan, Ceramic membrane filtration of sewage: resource recovery and reuse, National Conference On Environmental Issues, Challenges And Solutions (EICS-2016), February 23-24, 2017, Ranchi
3. N. Singh, S. Basu, M. Balakrishnan, J. Korenak, I. Petrinic, C Helix- Nielsen, Concentrating melanoidins and cleaning of aquaporin hollow fiber forward osmosis membrane, ICOM-2017, July 29-August 4, San Fransisco, CA, USA
4. Divya Prakash Mohabey, Neeraj Kumar Sharma & Anil Kumar "Exploration and revealing of Environmental Land use/ Land cover change dynamics in Dumka District Part of Jharkhand (India) using Geoinformation Technologies" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
5. Rachit Ghosh, Anil Kumar, Sunil Kumar Gupta and Sanjay Kumar " Study of thermal behaviour of fly ash based geopolymer concrete" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
6. Deependra Kumar Sinha, Anil Kumar " Reuse of by-products from Industries to form a eco-friendly suitable sustainable materials" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
7. R.K. Rath, Shivesh Kumar, R. Singh & Anil Kumar " Effect on air quality and treatment



- of solid waste generated during processing of iron ores for steel making" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
8. Gyanlata Deshmukh, A.K Singh & Anil Kumar " Ground water quality quantification of Jharia coalfield as per CPCB, new methodology of CEPI calculation, National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
 9. Altaf Ahmad & Anil Kumar " Effect of ground granulated blast furnace slag on the compressive strength of Portland cement concrete" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
 10. Sujeet kumar, Anil Kumar, Sanjay Kumar " Suitability of a brown color fly ash in making Portland pozzolana cement" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
 11. Y. N. Mahesh, Shivraj, Deependra Kumar Sinha & Anil kumar "Optimum utilization of waste material obtained from thermal power station" poster presentation" National Conference on Environmental issues, Challenges and solutions [EICS-2016] held on 23rd-24th Feb. 2017 Organized by DASH, NIFFT Ranchi-834003
 12. "Characterization of Nanocrystalline ZnCdS Film Developed by Chemical Bath Deposition", Suresh Kumar, S.K.Sharma, ShashikantRajpal, S.R. Kumar, D.Roy, Presented paper in National Conference on Nano science, Nanotechnology and Advanced Materials (NCNNAM-2016), September 26-27, 2016, Birla Institute of Technology, Mesra , Ranchi, Jharkhand INDIA
 13. "A New Non Aqueous Method for Deposition of CdTe Film", SudeshnaSurabhi, S.R Kumar, Presented paper in National conference on Nanoscience, Nanotechnology and Advanced Materials (NCNNAM-2016), September 26-27, 2016, Birla Institute of Technology, Mesra , Ranchi, Jharkhand INDIA.
 14. "Development of Electrodeposited ZnTe Thin Films in Non-aqueous Medium ",ShashikantRajpal, S.R.Kumar, Presented paper in Asian Conference on Solid State Ionics – 2016 (ACSSI-2016), 27th -30th November 2016, Indian Institute of Technology, Patna, Bihar, India.
 15. "Development of Electrodeposited ZnTe Thin Films by Electrodeposition Technique", ShashikantRajpal and S.R. Kumar,International Conference on Advances in Materials and Manufacturing (ICAMM'17), January-19-21,2017, National Institute of Foundry and Forge Technology, Ranchi, Jharkhand, India

Academic Assignment

1. Dr. S.R. Kumar is Associate Dean (PG) of M. Tech. Course.
2. CCMT - 2016 has made NIFFT as the Reporting Centre cum Help Centre for M. Tech. on line Counselling during the period June-July 2016. The online admission through CCMT 2016 was taken by NIFFT, Ranchi during the period 18th July to 25th July 2016. Institute has taken admission of 81 students. The Centre In charge was Dr. S. R. Kumar.
3. Dr. S.R.Kumar had completed the Data Auditing work of TEQIP Project Phase-II at Cambridge Institute of Technology, Ranchi during the period 18-20 August, 2016.

Administrative Assignment

1. Dr. Anil Kumar is HOD, DASH
2. Dr. S. R. Kumar is member Library Committee.



NATIONAL AND INTERNATIONAL PUBLICATIONS

1. 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.
2. Md. IsrarEqubal, RajKumarOhdar, AzharEqubal 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.
3. 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
4. Rajamohan, G. (2016), "An approach for the unified evaluation of orientation tolerances", International Journal of Engineering Research & Technology, Vol. 5, No. 1, pp. 169-173.
5. Reddy, K. S., A. Mandal, K. K. Verma and G. Rajamohan (2016), "Fitting of Bezier curves using the Fireworks algorithm", International Journal of Advances in Engineering & Technology, Vol. 9, No. 3, pp. 396-403.
6. Reddy, K. S., A. Mandal, K. K. Verma and G. Rajamohan (2016), "Fitting of Bezier surfaces using the Fireworks algorithm", International Journal of Advances in Engineering & Technology, Vol. 9, No. 3, pp. 421-429.
7. Shamama Anwar and G. Rajamohan (2016), "An approach to human action recognition using the histogram of oriented gradients", International Journal of Advanced Information Science and Technology, Vol. 52, No. 52, pp. 30-35.
8. Shamama Anwar and G. Rajamohan (2016), "Human action recognition using similarity score from action descriptors", International Journal of Advanced Studies in Computer Science and Engineering, Vol. 5, No. 9, pp. 14-21.
- 10 Shivaprasad P.V., Amitava Mandal, Electrical Discharge Machining of SG Iron: Effect of Process Variables on Material removal Rate and Overcut with Multi-optimization, Int. J. Advances in Engineering & technology, vol.9, issue 6, 2016,618-629.
- 11 B.M.Jha and A.Mandal, Overcut and Profile of the Machined Features in Electrochemical Machining, IASET: IJMMCE, vol.1, Issue 1, 2016,29-40.
- 12 B.M.Jha and A.Mandal, Neural Network based Models for Surface Roughness Obtained During Electrochemical Machining of SG Iron, Int. J. Mechanical Engineering, vol.5, issue 5, 2016,7-18.
- 13 B.M.Jha and A.Mandal, Electrochemical Machining of SG Iron using Mixed Electrolyte (Potassium Chloride and Sodium Nitrate), Int. J. Engineering Research & technology, vol.5, issue 07, 2016,165-172.
- 14 Kunal Kamal, B.M.Jha and A.Mandal, Effect of Electrolyte Concentration on Material Removal Rate and Overcut during Machining of SG Iron, Int. J. Scientific Progress and Research, Vol.22, no.3, 2016,127132.
- 15 Siddharta Karmakar and Amitava Mandal, Multicriteria Optimization of Surface Roughness Produced in Electrochemical Machining using Mixed Electrolyte NaNO₃ and NaCl, Int. J. Modern Engineering Research, vol.6, issue 7, 2016,41-49.
- 16 K.Srinivas Reddy, A.Mandal, K. K.Verma and G.Rajamohan, Fitting of Bezier Curves using Fireworks Algorithm, int. J. Advances in Engineering & technology, 2016, June, vol.9, Issue 3,396-403.



- 17 K.Srinivas Reddy, A.Mandal, K. K.Verma and G.Rajamohan, Fitting of Bezier Surfaces using Fireworks Algorithm, int. J. Advances in Engineering & technology, 2016, June ,vol.9, Issue 3,421-429.
- 18 Shivaprasad P.V., Amitava Mandal, Multicriteria Optimization for Determining Low Wear of the Surface Produced in Electrical Discharge Machining, Int. J. Research in Engineering and Technology, Vol.6, issue 2, 2017, 14-19.
- 19 Umasankar Das , Dr. Vijay Toppo', Analysis of friction stir Welding of dissimilar Aluminium alloys , IRACST – Engineering Science and Technology: An International Journal (ESTIJ), ISSN: 2250-3498 , Vol.6, No.3, May-June 2016. PP44-56.
- 20 Umasankar Das., Mohammad Hashir Hahsmi, Dr. Vijay Toppo"Experimental investigation of ferrofluid forces under different composition and the ratio of ferrofluid", International Journal of Engineering Trends and Technology (IJETT), V33 (6),314-319, 2016. ISSN:2231-5381.
- 21 Umasankar Das, Nitish Kumar, Dr. Vijay Toppo"Experimental Investigation of Ferro fluid Forces under Different Voltage", International Journal of Engineering Trends and Technology (IJETT), V32(6),294-300, 2016. ISSN: 2231-5381
- 22 KoushikSikdar, SomrajChakravarty, Debdas Roy, Ronald O. Scattergood, Carl C. Koch, "Synthesis and characterization of an in situ consolidated nanocrystalline Cu88Al11.5Y0.5 alloy" Journal of Alloy and Compounds, 717 (2017) 219-225.
- 23 SomrajChakravarty,KoushikSikdar,, Debdas Roy, Carl.C.Koch " Grain Size Stabilization and Strengthening of Cryomilled Nanostructured Cu-12at. % Al alloy"Journal of Alloy and Compounds,Volume 716, Pages 197-203.
- 24 SomrajChakravarty, KoushikSikdar, DebdasRoy "Stabilization of nanocrystalline Cu by Al addition" Materials Characterization 128(2017)189-194.
- 25 S. Kumar, S. Rajpal, S. K. Sharma, D. Roy, S. R. Kumar " Effect of Zn Concentration on the Structural, Morphological and Optical Properties of ternary ZnCdSNanocrystalline thin films" Digest Journal of Nanomaterials and Biostructures Vol. 12, No. 2, April – June 2017, p. 339 – 347.
- 26 "Size fractionation of brown fly ash: Utilization of grey fraction as a pozzolanic material in blended cement" S. Kumar, J. N. Djobo, A. Kumar and S. Kumar, (Communicated in European Journal of Environmental and Civil Engineering; Manuscript ID: TECE-2016-0268).
- 27 "Size fractionation of brown fly ash: Utilization of fine brown fraction as a source material in geopolymer" S. Kumar, J. N. Djobo, A. Kumar and S. Kumar, (Communicated in Journal of Building Engineering; Manuscript No. - JOBE-D-16-00197).
- 28 "Recovery Of Iron Values From Waste Iron Ore Slime" Jyolsna Jerin, R. K. Rath and Anil Kumar, communicated in Journal of Materials and Metallurgical Engineering, ISSN: 2231-3818 (2016)
- 29 "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)
- 30 " 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)
- 31 " Effect of Mg Doped ZnO Thin Film Develpoed by Electrodeposition Method", Shashikant Rajpal, S. R. Kumar, International Journal of Scientific & Engineering Research, Volume 7, Issue 4, April-2016.



- 32 "Synthesis and Characterization of Nonaqueous Deposited Nanocrystalline CdS Film", Suresh Kumar, S.K Sharma, Shashikant Rajpal, S. R. Kumar, Srikant Sahu, D.Roy, International Journal of Advanced Engineering Research and Science, Vol-3, Issue-7, July-2016.
- 33 "Effect of Annealing on Nanocrystalline ZnO Thin Film Developed by Electrodeposition Method", Shashikant Rajpal, S.R. Kumar, Materials Today: Proceeding, Elsevier Materials Today: Proceedings 4 (2017) 3754–3759 ,
- 34 4. "Effect of Annealing on the Surface and Optical Properties of ZnCdS Nanocrystalline Thin Films", S. Kumar, S. Rajpal, S. K. Sharma, D. Roy, S. R. Kumar, Chalcogenide Letters Vol. 14, No. 1, January 2017, p. 17 – 23.
- 35 "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.
- 36 " E-commerce & Supply chain management: the nexus unleashed, challenges & opportunities" Devesh Gaurav, Aadarsh Das & Sujata Smiti Gupta, Discovery, 52(246)1217-1221, 2016
- 37 Basu*, S.; Mukherjee, S.; Balakrishnan, M.; Deepthi, M.; Sailaja, V. R. R. N. Polysulfone/nanocomposites mixed matrix ultrafiltration membrane for the recovery of Maillard reaction products. Membr. Water Treat. (accepted) (Impact factor: 0.679).
- 38 Kaushik, A.; Basu*, S., Singh, K.; Batra, V. S.; Balakrishnan, M. Activated carbon from sugarcane bagasse ash for melanoidins recovery. J Environ. Manage, 2017, 200, 29. (Impact factor: 4.01).
- 39 Basu*, S.; Balakrishnan, M. Polyamide thin film composite membranes containing ZIF-8 for the separation of pharmaceutical compounds from aqueous streams. Sep. Purif. Technol., 2017, 179, 118. (Impact factor: 3.359).
- 40 Korenak, J.; Basu, S.; Balakrishnan, M.; Hélix-Nielsen, C.; Petrinic, I. Forward osmosis in wastewater treatment processes. Acta Chim. Slov. 2017, 64, 83. (Impact factor: 0.983).
- 41 Basu*, S.; Kaushik, A.; Saranya, P.; Batra, V. S.; Balakrishnan M., High strength distillery wastewater treatment by a PAC-MBR with low PAC dosage, Water Sci. Technol., 2016, 73, 1104. (Impact factor: 1.197)
- 42 D. Pinelli, A.E. M. Bacca, A. Kaushik, S. Basu, M. Nocentini, L. Bertin, D. Frascari, Batch and continuous flow adsorption of phenolic compounds from olive mill wastewater: A comparison between nonionic and ion exchange resins, International Journal of Chemical Engineering, 2016, 2016, Article ID 9349627, 1-13 (Scopus indexed).



ACADEMIC ACTIVITIES

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, 2016, B.Tech 2016 and ADC 2016 had been started on 26th July, 2016, 27th July, 2016, 27th July, 2016 respectively.

Students are excelling in academics in the institute. As a mark of the excellence following students have been nominated for Gold Medal award by Ranchi University.

SN	Name of the students	Course	Branch	Batch
1	Mr. Animesh Kumar	B.Tech	Metallurgy and Material Engineering	2012-2016
2	K.Sreenivasa Reddy	M.Tech	Manufacturing Engineering	2014-2016

Admission 2016

1. Ph.D. Programme

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

	Department	No. of seats	No. of seats filled
1	Forge Technology	1	1
2	Foundry Technology	1	1
3	Metallurgy and Materials Engineering	1	1

2. M.Tech

Admission through CCMT-2016

	Branch	No. of seats	No. of seats filled
1.	Manufacturing Engineering	28	22
2.	Foundry-Forge Technology	28	23
3.	Environmental Engineering	28	18
4.	Material Science &Engineering	28	18

3. B.Tech

Admission through JoSSA-2016

Branch	No. of seats	No. of seats filled
Manufacturing Engineering	77	40
Metallurgy and Materials Engineering	62	40

4. ADC

Admission through written test conducted by NIFFT

Branch	No. of seats	No. of seats filled
Foundry Technology	46	46
Forge Technology	46	38



Students Passed out in 2016

1.M.Tech(2014-16)

	Branch	No. of students passed out
1.	Manufacturing Engineering	18
2.	Foundry-Forge Technology	15
3.	Environmental Engineering	9
4.	Material Science &Engineering	14

2.B.Tech(2012-16)

	Branch	No. of students passed out
1.	Manufacturing Engineering	67
2.	Metallurgy and Materials Engineering	53

3. 42th ADC

	Branch	No. of students passed out
1.	Foundry Technology	41
2.	Forge Technology	39

Special workshop organized:-

One day workshop was organized on Recent Trends in Welding process on 26th of July,2016 at NIFFT, Ranchi

Project M. Tech.

M.Tech, FFT Project-2015-17

S.No.	Roll No.	Name of the Student	Title	Name of the Guide
1	FF15M01	Ajay Kumar Sahu	To study on Structure & Property of an Aluminium 6101Alloy	Dr. A. K. Singh
2	FF15M02	Anand Mohan Pandey	Effect of Various Inoculant on Structural Property of SG Iron	Dr. K. K. Singh
3	FF15M03	Annam Venkatesh Babu	Mould Design and Simulation of Bevel Gear	Dr. Nandita Gupta
4	FF15M04	Archish Kumar Pandey	Effect of Heat Treatment Variables on Structure Properties of SG Iron	Dr. K. K. Singh
5	FF15M06	Chinta Rishendra	Study of Texture on CRNO Electrical Steel	Dr. A. K. Singh
6	FF15M07	Mohit Joshi	Application of Electric Arc Furnace Slag in Brick Making	Mr. A. K. Pramanick
7	FF15M09	Mukesh Kumar Lanjhi	Optimization of Material Utilization of Forging of Crank Shaft	Dr. R. K. Ohdar
8	FF15M10	Mukkollu Sambasiva Rao	Effect of Slope Casting Technique on Ductile Iron	Dr. Amitesh Kumar
9	FF15M11	Md Ajaaz Ansari	Slope Casting Method of Grey Cast Iron	Dr. Amitesh Kumar



10	FF15M12	Naveen Singh	Design and Simulation of Automotive Component "Clutch Release Fork"	Dr. Manoj Kumar
11	FF15M13	Neeraj Kumar	Study of Mechanical Property of Forged Medium Carbon Steel	Dr. P. Talukdar
12	FF15M14	Nippu Tayeng	Die Design and Simulation of Flashless Forging of Automotive Component "Coupling Flange"	Dr. Manoj Kumar
13	FF15M15	Nitesh Kumar	Die Design Optimization and Stress Analysis of Front Axle Beam	Dr. N. K. Singh
14	FF15M16	Sandeep Yadav	Study the Effect of CaO, FeO, MgO, MnO, SiO ₂ and Al ₂ O ₃ Contents of Slag on Dephosphorisation of Steel	Dr. Nandita Gupta
15	FF15M17	Sanjeet Ray	Effect of Phosphorous on Structure Properties of Gray Cast Iron	Dr. K. K. Singh
16	FF15M18	Shailendra Kumar Gupta	Cost Reduction in Electric Arc Furnace	Dr. P. Talukdar
17	FF15M19	Shantanu Srivastava	Optimization of Design Parameters and Simulation of Rocker Arm Forging	Dr. R. K. Ohdar
18	FF15M20	Suraj Kumar	Effect of Minor Elements on the Fluidity of 6063-Type Cast Al-alloys.	Dr. Nandita Gupta
19	FF15M21	Sunny Kumar	Optimization of Design parameters and Die Stress Analysis of Forging of Clutch Fork	Dr. R. K. Ohdar
20	FF15M22	Tadi Siva Prasad	Design and Simulation of Automotive Component- "Shifter Fork"	Dr. Manoj Kumar
21	FF15M23	YadavVaibhav Suresh	Property Enhancement of Quenched and Tempered Steel	Dr. A.K. Singh

M.Tech,ME Project-2015-17

Sr. No	Roll No.	Name	Project Topic	Supervisor
1	ME15M01	Anjani Kumar	Solidification Simulation Of Aluminium Castings Using Procast	Dr. Sanjay Kumar
2	ME15M02	Aviskar Chauhan	Development Of Sampling Strategy For Verification Of Freeform Surfaces Using Continous Scanning Cmms	Prof. G. Rajamohan
3	ME15M03	Bindeshwer Parit	Toolpath Planning For Machining Of Freeform Surfaces	Prof. G. Raja Mohan



4	ME15M04	Dayanand Kumar	Reliability Estimation Of Shielded Metal Arc Welding Process	Prof. V.M.S. Hussain
5	ME15M06	Deepak Kumar	An Experimental Investigation On Mechanical Behavior Of Aa6101-T6	Dr. V. Toppo
6	ME15M07	M. Karmuhilan	Study On The Effect Of Welding Parameters On Bead Geometry For Waam Application	Dr. A. K. Sood
7	ME15M08	Mohd Zishan Ahamad	Machining Of Tool Steel Using Electro Chemical. Machining	Dr. A. K. Mondal
8	ME15M09	Mohite Rohit Sadashiv	Operational Enhancement And Optimization Infabrication Process Of Sheet Metal Components	Dr. A. K. Mondal
9	ME15M10	Pankaj	Solidification Simulation Of Steel Castings Using Procast	Dr. Sanjay Kumar
10	ME15M11	Payal Priya	Solidification Simulation Of Gray Cast Iron Castings Using Procast	Dr. Sanjay Kumar
11	ME15M13	Rakesh Kumar	Study Of Corrosion Behavior Of Tig (Using Argon & Argon+2% Oxygen Shielding Gas) Welded Joint Of Fss	Prof. A. K. Pathak (Co Guide-Prof Vinod Kumar)
12	ME15M14	Rishabh Tripathi	Dry Sliding Wear Behavior Of Modified Astm A532 Gr-iii A Cast Iron For Slurry Pipe Line Application	Dr. V. Toppo (Co Guide-Asst. Prof. Koushik Sikdar)
13	ME15M15	Sandeep Kumar	Thermal Analysis Of The Fss Weldment Using Ansys	Prof. A. K. Pathak
14	ME15M16	Shahid Hussain	Experimental Determination Of Longitudinal Tensile Strength Of Tig And Mig Welded Fss Weldment	Prof. A.K. Pathak
15	ME15M17	Shubham Kumar Jaiswal	Determination Of Optimum Part Orientation Of Part Build Through Rapid Prototyping	A. K. Sood
16	ME15M18	Sonali Acharya	Study Of The Effect Of Various Electrode Geometry And Material In Edm	A. K. Sood
17	ME15M19	Sukanta Das	Machining Of Tool Steel Using Electrical Discharge Machining	Dr. Amitava Mandal
18	ME15M20	Tere Rajesh Babu	Analysis Of Tolerance Stack Up In Mechanical Assembly	Prof. G. Rajamohan
19	ME15M21	Sunil Kumar	Impact Of Remanufacturing Concept In Close Loop Supply Chain Management	Prof. V.M.S. Hussain



20	ME15M22	Pranab Kumar Sahoo	Study On Mechanical And Tribological Characteristics Of Aluminium Alloy	Dr. V. Toppo
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M.Tech, MSE Project-2015-17

S.No.	Roll No.	Name of the Student	Title	Name of the Guide
1	MM15M01	Akshay Kumar	Thermodynamic & Kinetic Studies of Phase Transformation in Amorphous Alloys	Dr. C. Chattopadhyay
2	MM15M02	Amit Kumar	Amorphous Material Dispersed Al-Based Composites	Dr. Koushik Sikdar
3	MM15M03	Ashish Rai	Development of Cu Graphene nano composite by Spark Plasma Sintering	Dr. D. Roy Dr. C. Chattopadhyay
4	MM15M04	Deepak Kumar Sethi	Pearlitic Transformation and its role on Tribological Performance	Dr. S.B. Kumar Dr. Renu Kumari
5	MM15M05	Deepak Kumar Srivastava		
6	MM15M06	Gaurav Kumar Gautam	Tribological Performance of Tempered Martenitic Steel	Dr.S.B.Kumar Dr. Renu Kumari
7	MM15M07	Hrudaya Jyoti Biswal	Laser Welding of Dual Phase Steel	Dr. B. Kumar Mr. A. K. Pramanik
8	MM15M08	Manoj Verma	Laser Welding of CP Steel	Dr. B. Kumar Mr. A. K. Pramanik
9	MM15M09	Nitesh Kumar Sinha	Effect of Tempering Temperature on Corrosion Behaviour of Austenitic Stainless Steel	Dr. G. Das
10	MM15M10	Palkar Aman Manohar	Corrosion Behaviour of Al-7075 Alloy Under Different Annealing Conditions	Dr. G. Das
11	MM15M11	Pritam Kumar Keshari	Study of Manufacturing Process of Wire and Wire Ropes & Its Microstructure	Dr. S. B. Kumar
12	MM15M12	Rohit Kumar Mishra	Corrosion Comparison in Galvanized and Non Galvanized Steel	Dr. G. Das



13	MM15M13	Sandeep Kumar Gupta	Synthesis and Characterisation of Graphene Dispersed Duralumin (Al-4.5 Cu) Alloy processed by Mechanical Alloying	Dr. D. Roy Dr. C. Chattopadhyay
14	MM15M15	Subodh Kant	Aluminium Based Nano Composites	Dr. D. Roy
15	MM14M12 (2014-16)	Sunil Kumar Durgam	Impact of Mechanical Properties on Corrosion Behaviour of TMT Steel Bar	Dr. G.Das

M.Tech,EE Project-2015-17

S.No.	Roll No.	Name of the Student	Title	Name of the Guide
1	AS15M03	Banafsha Ahmed	Remediation of Degraded Soil using Vermicompost, Vermiwash & Waste	Dr. S.R.Kumar
2	AS15M04	Bhargabnanda Dass	Utilization of Biomass Ash in Development of Road Pavement Block	Dr. S.R.Kumar
3	AS15M06	Hemant Singh	Critical Review of Comprehensive Environmental Pollution Index (CEPI) as a Tool for Industrial Area Development	Dr. Anil Kumar
4	AS15M07	Kamlesh Kumar Das	Stabilization of LD Slag by Accelerated Curing & its Use in Cement Mortar	Dr. Anil Kumar
5	AS15M10	Nitin Ranjan	Utilization of Biomass Ash in Brick Making	Mrs. Madhu Kumari
6	AS15M11	Prateek Kumar Sharma	Pore Characterization of Fly Ash Based Geopolymer	Dr. Anil Kumar
7	AS15M12	Priyanka Kumari	Surface Water Quality Analysis in Ranchi	Mrs. Madhu Kumari
8	AS15M13	Rahul Gautam	Beneficiation of Chromite Tailing by the Method of Selective Flocculation	Dr. Anil Kumar
9	AS15M15	Rohit Panchal	Development of Guidelines /Framework of Cumulative Impact Assessment in India	Dr. Anil Kumar
10	AS15M17	Shivraj	Optimum Utilization of Waste Material from Thermal Power Station	Dr. Anil Kumar
11	AS15M18	Siddharth	An Overview of Societal Risk Due to Gas Pipeline	Mrs. Madhu Kumari

M.Tech FFT (Seminar) 2015-17



S.No.	Roll No.	Name of the Student	Title	Name of the Guide
1	FF15M01	Ajay Kumar Sahu	Powder Metallurgy: Manufacturing Technique	Dr. A. K. Singh
2	FF15M02	Anand Mohan Pandey	Quality Control and Benchmarking in Steel Casting	Dr. K. K. Singh
3	FF15M03	Annam Venkatesh Babu	Design of Material Handling Equipment Mechanisation and Modernisation of Sand Casting	Dr. Nandita Gupta
4	FF15M04	Archish Kumar Pandey	Heat Treatment of High Alloy Steels	Dr. K. K. Singh
5	FF15M06	ChintaRishendra	Continuous Casting Process	Dr. A. K. Singh
6	FF15M07	Mohit Joshi	Reuse of Electric Arc Furnace Slag	Mr. A. K. Pramanick
7	FF15M09	Mukesh Kumar Lanjhi	Forging Process Optimization- A Review	Dr. R. K. Ohdar
8	FF15M10	Mukkollu Sambasiva Rao	Effect of Cast Skin Thickney on Castings & Controlling Methods	
9	FF15M11	MdAjaaz Ansari	Influence of Pouring Temperature on the Microstructure and Properties of Grey Cast Iron	
10	FF15M12	Naveen Singh	Additive Manufacturing- Challenges Oppurtunities to Forging Industry	
11	FF15M13	Neeraj Kumar	Plasma Nitriding Heat Treatment	Dr. P. Talukdar
12	FF15M14	NippuTayeng		
13	FF15M15	Nitesh Kumar	Semi Solid Forging Process of Al Based Alloys- An Overview	Mr. N. K. Singh
14	FF15M16	SandeepYadav	Ablation Casting Process a New Method of Casting for Al & Mg Alloys	Dr. Nandita Gupta
15	FF15M17	Sanjeet Ray	Ladle Handling, Efficiency and Modern Developments	Dr. K. K. Singh
16	FF15M18	Shailendra Kumar Gupta	Electric Arc Furnace and it's Function	Dr. P. Talukdar Mr. A. K. Pramanick
17	FF15M19	ShantanuSrivastava	Near Net Shape Processes in Forging and its Reviews	Dr. R. K. Ohdar



18	FF15M20	Suraj Kumar	Common Defect in Steel Casting Their Causes and Remedies	Dr. Nandita Gupta
19	FF15M21	Sunny Kumar	Forging Defects and its Analysis	Dr. R. K. Ohdar
20	FF15M22	Tadi Siva Prasad	Composite Forging Dies	Dr. Manoj Kumar
21	FF15M23	YadavVaibhav Suresh	Relationship Between Tensile Properties and Matrix Microstructure of Austempered Gray Iron	Dr. A. K. Singh

Manufacturing Engineering Department M. Tech

Sr. No	Roll No.	Name	Seminar Topic	Supervisor
01	ME15M01	Anjani Kumar	Latest Trends In Sg Iron Production	Dr. Sanjay Kumar
02	ME15M02	Aviskar Chauhan	Laser Beam Machining Of Fibre Composites	Prof .G. Rajamohan
03	ME15M03	Bindeshwer Parit	Additive Layer Manufacturing Of Mettalic Parts	Prof. G. Raja Mohan
04	ME15M04	Dayanand Kumar	Recent Trends In Liquid Forging	Prof. V.m.s.hussain
05	ME15M06	Deepak Kumar	Reinforced Composite Material Machining By Edm	Dr. V. Toppo
06	ME15M07	M. Karmuhilan	Scanning Tunneling Microscopy	Dr. A. K. Sood
07	ME15M08	Mohd Zishan Ahamad	Pulsed Ecm	Dr. A.K. Mondal
08	ME15M09	Mohite Rohit Sadashiv	Ultrasonic Assisted Drilling Of Carbon Fibre Reinforced Composites	Dr. A. K. Mondal
09	ME15M10	Pankaj	Recent Trends In Die Manufacturing Processes	Dr. Sanjay Kumar
10	ME15M11	Payal Priya	Recent Trends In Additive Manufacturing	Dr. Sanjay Kumar
11	ME15M13	Rakesh Kumar	Ultrasonic Assisted Ecm	Prof. A.K. Pathak
12	ME15M14	Rishabh Tripathi	Laser Assisted Edm	Dr. V. Toppo
13	ME15M15	Sandeep Kumar	Study Of Nano Machining And Micro Machining	Prof. A. K. Pathak
14	ME15M16	Shahid Hussain	Underwater Welding – Present Status And Future Scope	Prof. A.K. Pathak
15	ME15M17	Shubham Kumar Jaiswal	Metal Based Additive Manufacturing	Dr. A.K. Sood
16	ME15M18	Sonali Acharya	Ultrasonic Assisted Edm	Dr. A.K. Sood



17	ME15M19	Sukanta Das	Electrical Discharge Machining With Powder Additives	Dr. A. K. Mondal
18	ME15M20	Tere Rajesh Babu	Ultra Precision Machining	Prof. G. Rajamohan
19	ME15M21	Sunil Kumar	Recent Trends In Powder Forging	Prof. V.M.S. Hussain
20	ME15M23	Pranab Kumar Sahoo	Machining Using Cavitation Process	Dr. V. Toppo

M.Tech EE (Seminar) 2015-17

S.No.	Roll No.	Name of the Student	Title	Name of the Guide
1	AS15M02	Abhinav Kumar	Environmental Impact Assessment- A Tool to Conserve Biodiversity	Dr. S.R.Kumar
2	AS15M03	Banafsha Ahmed	Vermicompost and Vermiwash, A Boon for the Environment	Dr. S.R.Kumar
3	AS15M04	BhargabnandaDass	Vehicular Exhausts Emissions & Control Technologies	Dr. S.R.Kumar
4	AS15M06	Hemant Singh	Particulate Matter Air Pollution and its Health Effects in Delhi	Dr. Anil Kumar
5	AS15M07	Kamlesh Kumar Das	Basics of X-Ray Diffraction & X-Ray Fluorescence	Dr. Anil Kumar
6	AS15M10	NitinRanjan	Mine Dewatering	Mrs. MadhuKumari
7	AS15M11	Prateek Kumar Sharma	Porosity Determination Techniques for Amorphous Solids	Dr. Anil Kumar
8	AS15M12	PriyankaKumari	Comparative Water Filtration used in India	Mrs. MadhuKumari
9	AS15M13	Rahul Gautam	Mineral Beneficiation	Dr. Anil Kumar
10	AS15M15	RohitPanchal	An Assessment of Environmental Impact Assessment System in India	Dr. Anil Kumar
11	AS15M16	ShambhuNath Sharma	Treatment of MSW Leachate by Anaerobic Process	Mrs. MadhuKumari
12	AS15M17	Shivraj	Utilization of Fly Ash as a By Product of Coal Industry	Dr. Anil Kumar
13	AS15M18	Siddharth	Risk Assesment& Disaster Management	Mrs. MadhuKumari



B. Tech Project:-

B. Tech. Manufacturing Engineering (2013-2017 batch)

List of Project Title and their Groups:-

SI No.	Roll No	Name of Student	CGPA	Title of the Project	Guide Name
1	54/13	Mr. Ashish Tiwari	6.46	Preperation of Alumunium alloy and its metal matrix composite	Mr. B. Mallick
	19/13	Mr. Sajid Qamar	6.48		
2	25//13	Mr. Avinash Kumar Vipul	6.03	Study of deformation and fracture behaviour	Mr. B. Mallick
	18/13	Mr. Santosh Kr. Chardiyar	5.9	of mild steel charpy specimen	
3	39/13	Mr. Prakash Kumar	6.98	Energy Management in Manufacturing Industry	Mrs. Madhu Kumari
	55/13	Mr. Avinash Kumar	7.67		
4	34/13	Mr. Ranjan Kuamr	7.19	Sand Process control for steel castings	Mrs. Madhu Kumari
	59/12	Mr. Jaikar Abhay Tulshiram	8.77		
5	38/13	Mr. Dheeraj Kumar	7.77	Austempered ductile iron	Mrs. Madhu Kumari
	62/11	Mr. Deepak Kumar Paswan	6.00		
6	15/13	Mr. Abhishek Priyadarshi	7.15	Energy Management in Casting (Foundry)	Mrs. Madhu Kumari
	16/13	Mr. Faiz Ahmad Faiz	7.14		
7	56/12	Mr. Saurabh Kumar	6.22	Economical Analysis of solar power in domestic appliances	Mrs. Madhu Kumari
	22/12	Mr. Sanjay Kumar	6.44		
8	33/13	Mr. D. Gowtham	6.46	Six sigma applications in service industry	Mrs. S.S. Gupta
	67/13	Mr. A. Saiteja	6.67		
9	62/13	Mr. Sandugalla Suman Kumar	6.5	Rotor Dynamic Analysis (Broad Area of Research)	Mrs. S.S. Gupta
	68/13	Mr. M. Chinna	6.35		
10	59/13	Mr. Kunal Sharma	6.39	Usability Engineering and its application	Mrs. S.S. Gupta
	47/13	Mr. Surya Vijay Singh	6.33		
11	37/13	Mr. K.L. Shiva Raj		Project cost and risk estimation	Mrs. S.S. Gupta
	69/13	Mr. Agepati Sai Balaji		(Total Quality Management)	
12	02/13	Ms. Geetanjali Kumari	6.89	Simulation study of the forging of automotive Component	Dr. R.K. Ohdar



13	46/13	Ms. Sujata Yadav	7.38	Study of forging behaviour of plane	Dr. R.K. Ohdar
	26/13	Ms. Neha Kumari	7.6	Carbon steel	
14	03/13	Mr. Akarsh Singh	7.22	Six sigma applications in forging process	Dr. R.K. Ohdar
	63/13	Mr. Vikash Chandra Jaiswal	7.29	Optimization	
15	17/13	Ms. Avinanda Rudra	8.08	Supply chain management in	Dr. R.K. Ohdar
	128/11	Ms. Sangita Rani	6.5	Manufacturing industry	
16	22/13	Mr. Siddharth Vikram	7.74	Application of six sigma in manufacturing	Dr. R.K. Ohdar
	20/13	Mr. Sumeet Kumar	7.54	Engineering	
17	50/13	Mr. Amit Singh	6.38	Effect of different type of gates on casting	Dr. Nandita Gupta
	51/13	Mr. Gaurav Tiwari	7.58	Quality	
18	52/12	Mr. Rahul Kumar	6.88	Numerical simulation of investment	Dr. Nandita Gupta
	74/12	Mr. Rahul Kumar Jha	5.9	casting process	
19	49/13	Mr. Suman Sourav	6.5	Casting defects in steel	Dr. Nandita Gupta
	26/12	Mr. Ravi Shankar Patel	5.69		
20	04/13	Mr. Amritesh Kumar Tiwari	8.65	Optimization of manufacturing process	Mr. K.K. Verma
	14/13	Mr. Abhishek Kumar	7.46	Parameters using design of experiments	
21	23/13	Ms. Smriti Singh	7.96	Application of taguchi method for optimization of process parameters in manufacturing	Mr. K.K. Verma
22	27/13	Ms. Surbhi Kumari	7.63	Development of 3-D printer	Dr. A. Mondal
	40/13	Mr. Gautam Gupta	7.37		
23	32/13	Ms. Mudita Pateriya	8.1	Die design optimization & stress analysis for	Dr. N.K. Singh
	31/13	Mr. Vivek Kumar	7.96	pitman arm using simulation software	
24	10/13	Mr. K. Sai Chandrashekhar Rao	7.92	Metal Solidification through simulation (PROCAST)	Dr. Sanjay Kumar
	30/13	Mr. Anjani Kumar Gupta	6.13		



25	29/13	Mr. Karan	6.54	Modelling of supply chain activities in	Dr. Sanjay Kumar
	48/13	Mr. Vipin Yadav	6.8	Process industry	
26	41/13	Mr. Pramod Baudhh	6.52	Semi solid casting of gray cast iron	Dr. Amitesh Kumar
	45/13	Mr. Janbandhu Chinmay Prashant	6.71		
27	52/13	Mr. Gaurav Mishra	7.42	Case study on total quality management	Dr. Amitesh Kumar
	64/13	Mr. Ajay Bhadauriya	7.17		
28	53/13	Mr. Banoth Bitchya		Study of micro structure & mechanical	Dr. Amitesh Kumar
	12/13	Mr. Kartik Panda		Properties of cast Al-alloy/Al2O3 composite	
29	01/12	Mr. A. Ravi Teja	6.00	Optimal selection of process parameters	Dr. G. Rajamohan
	72/13	Mr. Bharath Illa	6.60	CNC end milhing	
30	70/13	Mr. Bairi Saiteja	6	Optimal selection of process parameters	Dr. G. Rajamohan
	44/13	Mr. M. Vamsi Krishna	6.90	in wirecut EDM	
31	01/13	Mr. A. Sri Ram Manidileep	7.75	Verification of flatness using coordinate	Dr. G. Rajamohan
	07/13	Ms. Guna Pujitha	7.31	menouring machines	
32	71/13	Mr. V.M. Manogna	7.33	Synthesis and characterization of copper	Dr. D. Roy
	73/13	Mr. Paltya Mahesh	6.52	graphene composite by spark plasma sintering	
33	51/12	Mr. Utkarsh Gupta	6.87	The effect of load on during solidification of	Dr. K.K. Singh
	46/12	Mr. Kunal		casting	
34	21/13	Mr. Kota Prithvi		Heat treatment of mild steel	Dr. Renu Kumari
	61/13	Mr. Devendra H. Bagde			
35	13/13	Mr. Ponna Mallikarjuna	7.9	Design and simulation of flashless forging	Dr. Manoj Kumar
	57/13	Mr. Akshay Kanth Navgire	7.54	of bevel gear	
36	08/13	Mr. G. Pullaiah		Fault tree analysis of drop forging hammer	Mr. V.M.S. Hussain
	60/13	Mr. Mallapu Sreenivasulu			



37	11/13	Mr. Vinjamuri Kumar	7.88	Fault tree analysis of milling machine	Mr. V.M.S Hussain
	58/13	Mr. Pendela Pradeep	7.3		
38	09/13	Ms. Vangeti Deepika	7.5	Modelling of Manufacturing process using	Dr. A. Mondal
	06/13	Mr. Samresh Kumar	7.93	artificial dental network	

B. Tech. Metallurgy & Materials Engineering (2013-2017 batch)

List of Project Title and their Groups:-

SI No.	Roll No	Name of Student	CGPA	Title of the Project	Guide Name
1	118/13	Mr. Shashank Kumar Jha	7.94	Computer aided sampling technique	Dr. Sanjay Kumar
	124/13	Mr. Subham	8.12		
2	97/13	Mr. Sushmit Siddharth	8.52	Studies on aluminium base nano composite	Dr. D. Roy
	113/13	Ms. Purnima Kumari	7.27	processed by stirr casting	
3	77/13	Mr. Neelmani	8.56	Effect of thermo-mechanical treatment on micro	Dr. D. Roy
	98/13	Mr. Hemant Kumar	7.06	alloyed low carban nickel steel	
4	80/13	Md. Nasir Khalique	7.77	Effect of boron on the manufacturing process and	Dr. D. Roy
	88/13	Mr. Rahul Kumar	7.93	final properties of ductile iron pipes	
5	115/12	Mr. Sandeep	6.42	Effect of processing parameters on surface finish	Dr. Nandita Gupta
	118/12	Mr. Rashid Mumtaz	7.9		
6	108/13	Mr. Deepak Kumar	8.85	Characterization of Nibard type I cast iron	Dr. S. B. Kumar
	81/13	Mr. Dheeraj Kr. Sharma	6.5		
7	90/13	Ms. Chanchal Kumar	6.63	Study the structure & properties of nihard type IV	Dr. S. B. Kumar
	123/13	Ms. D. Sai Tejaswini	7.46	cast iron	
8	110/13	Mr. tiwari Vipin ratnesh	8.44	Cor - relation between structure & propertieo of	Dr. S. B. Kumar
	116/12	Mr. Rohit Prakash	6.05	cast orpn (FG200)	



9	95/13	Mr. N.S.S.G. Nirmal	6.8	Effect of pressure during solidification of	Dr. Anil Kr. Singh
	115/13	Mr. K. Vijaya Simha	6.5	aluminium alloy casting	
10	99/13	Mr. Y. Bhaskara Rao	7.35	Effect of silicon on graphitization in iron castings	Dr. Anil Kumar Singh
	112/13	Mr. Sathri Shyam Kumar	7.22		
11	92/13	Mr. E. Sai Kumar	7.29	Effect of inoculation on grey iron casting	Dr. Anil Kumar Singh
	130/13	Mr. M. Ravi Teja	8.7		
12	78/13	Mr. A. Shanmukha Rao	7.11	Effect of alloying elements on micro structure and properties of grey cast iron	Dr. Anil Kumar Singh
	101/13	Mr. M. Raju Babu	7.43		
13	121/13	Mr. Love Meghwal	8.56	Comparison of casting proper by evapor abm meld & green sand mold casting.	Dr. Amitesh Kumar
	35/13	Mr. Satyam Gupta	6.3		
14	117/13	Mr. Priyanshu Raj	6.75	Effect of inoclabon on nodnlanilty & nodule count of ductile iron	Dr. Amitesh Kumar
	76/13	Mr. Saurabh Kumar	8.17		
15	120/13	Mr. Amit Kumar Sarang	7.63	Comparation study of properties of Al-6wt% cu casting by utbasonic & die casting methode	Dr. Amitesh Kumar
	122/13	Mr. Shreshtha Ranjan	7.84		
16	116/13	Mr. Nilesh Kumar	8.1	Effect of Ultrasonic vibration on properties of Al- 6wt% cu casting	Dr. Amitesh Kumar
	119/13	Mr. Jayant Kumar	7.54		
17	128/13	Mr. P. Sainaresh	7.06	Prediction of gating ratio for a casting experimentelly	Dr. Amitesh Kumar
	129/13	Mr. P. Vamsi Mohan	7.27		
18	102/13	Mr. S. Vinay Kumar	8.59	Microstructural characterization of ferritic	Dr. Binod Kumar
	126/13	Mr. G. Nikhil		stainless steel MIG weld joints,	
19	103/13	Ms. Aishwarya Singh	8.27	Study of corrosion behaviour of ferritic stainless steel weld joints in different media	Dr. Binod Kumar
	109/13	Mr. Niraj Kumar			



20	74/13	Mr. Suraj		Microstructural characterization of ferritic	Dr. Binod Kumar
	107/13	Mr. Anand Singh		stainless steel TIC weld joint	
21	93/13	Mr. Prashant Jha	8.2	Study heat treatment behaviour of boiler quality	Dr. Binod Kumar
	83/13	Mr. Durgesh Shukla	8.4	Steel	
22	79/13	Mr. Prashant Raj	7.42	Influence of degree of para saturation on the	Dr. G. Das
	89/13	Mr. Marshal Hembram	6.6	resistinty of reinforcement steel	
23	87/13	Mr. Suraj Gagrai	6.81	Corrosion performance of steel sheets used in	Dr. G. Das
	104/13	Mr. Ashok Chandra	6.38	car body	
24	85/13	Mr. Raushan Kumar	6.98	Characterization of the early stage of pipeline	Dr. G. Das
	96/13	Mr. Subhajit Mondal	8.24	steel corrosion in bicarbonats solutions	
25	100/13	Mr. Partik Kumar	7.73	Effect of forging and heat treatment on corrosion	Dr. G. Das
	105/13	Mr. Kumar Priyank Vipal	7.69	behavuiar of mg-alloy	
26	111/13	Mr. B. Galeswara Rao	7.49	Corrosion behaviour of magnesum alloys in	Dr. G. Das
	106/13	Mr. V. Vinod Kumar	7.75	acidic Environment	
27	84/13	Mr. Roshan Kumar Gupta	7.31	Impact of deformation on the corrosion	Dr. G. Das
****	127/13	Mr. D Mahendar Naik	8.63	properties in austenitic stainless steel	
28	91/13	Mr. Banoth Srinu	6.34	Analysis of wear pproperty of Al- based nano	Dr. B. Mallik
	127/13	Mr. D Mahendar Naik		Compositive	
29	86/13	Mr. Ashutosh Pandey	7.75	Non - Conventional source of ensy and its	Dr. Madhu Kumari
	66/13	Mr. Deepak Kumar Kuril	6.46	potential in gndia	



B. Tech. Metallurgy & Materials Engineering (2013-2017 batch)

List of Seminar Title:-

SI No.	Roll No.	Name of Students	Title of the Seminar	Guide Name
1	74/13	Mr. Suraj	Duplex Stainless steel	Dr. Binod Kumar
2	76/13	Mr. Saurabh Kumar	Manufacturing and application of compacted gray iron	Dr. Amitesh Kumar
3	77/13	Mr. Neelmani	Studies on Mg-alloys used in Aerospace industry	Dr. D. Roy
4	78/13	Mr. Arasavilli Shanmukha Rao	Centrifugal casting	Dr. A. K. Singh
5	79/13	Mr. Prashant Raj	Study of scale formation during hot rolling	Dr. G. Das
6	80/13	Md. Nasir Khalique	Synthesis and application of noble material griffon	Dr. D. Roy
7	81/13	Mr. Dheeraj Kumar Sharma	Role of magnesium industry in protecting the environment	Dr. S.B. Kumar
8	83/13	Mr. Durgesh Shukla	Hydrogen storage alloys	Dr. Binod Kumar
9	84/13	Mr. Roshan Kumar Gupta	Nano Structured materials- an overview pipeline steel used in petroleum industries	Dr. G. Das
10	85/13	Mr. Raushan Kumar	Desulphurization of hot metal	Dr. G. Das
11	86/13	Mr. Ashutosh Pandey	Non conventional source of energy and its potential in India	Mrs. Madhu Kumari
12	87/13	Mr. Suraj Gagrai	Materials for automotive car bodies	Dr. G. Das
13	88/13	Mr. Rahul Kumar	Application of materials in MRI	Dr. D. Roy
14	89/13	Mr. Marshal Hembram	Development in manufacturing process of reinforced steel bar	Dr. G. Das
15	90/13	Ms. Chanchal Kumari	Recent development in Al alloys for the automotive industry	Dr. S.B. Kumar
16	91/13	Mr. Banoth Srinu	Analysis of casting defects by utilizing ultrasonic technique	Mr. B. Mallik
17	92/13	Mr. Eligoti Sai Kumar	Investment casting process	Dr. A. K. Singh
18	93/13	Mr. Prashant Jha	COREX process	Dr. Binod Kumar



19	95/13	Mr. N S S G Nirmal	Types of patterns and different pattern materials	Dr. A. K. Singh
20	96/13	Mr. Subhajit Mondal	Nanocoting for steel corrosion protection	Dr. G. Das
21	97/13	Mr. Sushmit Siddharth	Study of Biocomposite	Dr. D. Roy
22	98/13	Mr. Hemant Kumar	Studies of Al-based amorphous alloy	Dr. D. Roy
23	99/13	Mr. Y Bhaskara Rao	Non materials: manufacture and applications	Dr. A. K. Singh
24	100/13	Mr. Pratik Kumar	Uses of LD slag for hot metal production	Dr. G. Das
25	101/13	Mr. Mylapalli Raju Babu	Powder Metallurgy	Dr. A. K. Singh
26	102/13	Mr. Subba Vinaykumar	Fine X Process	Dr. Binod Kumar
27	103/13	Ms. Aishwarya Singh	Fanational gradient materials	Dr. Binod Kumar
28	104/13	Mr. Ashok Chandra	Basics of sheet metal forming	Dr. G. Das
29	105/13	Mr. Kumar Priyank Vipal	Study of Mg-alloy for automative applection	Dr. G. Das
30	106/13	Mr. Vanka Vinod Kumar	Magnesium alloy as promising degradable implant materials	Dr. G. Das
31	107/13	Mr. Anand Singh	CONARC process	Dr. Binod Kumar
32	108/13	Mr. Deepak Kumar	Magnesium and its alloys as orthopedic biomaterials: A review	Dr. S.B. Kumar
33	109/13	Mr. Niraj Kumar	Formed coke	Dr. Binod Kumar
34	110/13	Mr. Tiwari Vipin Ratnesh	The role of gases in the structure of cast iron	Dr. S.B. Kumar
35	111/13	Mr. Betham Galeswara Rao	Biomedical application of magnesium alloys	Dr. G. Das
36	112/13	Mr. Sathri Shyam Kumar	Continuous casting processes	Dr. A. K. Singh
37	113/13	Ms. Purnima Kumari	Nanocomposite and its application	Dr. D. Roy
38	115/13	Mr. Kagula Vijayasimha	Study of machine moulding	Dr. A. K. Singh
39	116/13	Mr. Nilesh Kumar	Bake hardening of steel	Dr. Amitesh Kumar
40	117/13	Mr. Priyanshu Raj	Manufacturing and application of austempered ductile iron	Dr. Amitesh Kumar



41	118/13	Mr. Shashank Kumar Jha	Study and development of advanced inventory control system	Dr. Sanjay Kumar
42	119/13	Mr. Jayant Kumar	Characteristics of I.F Steel (Interstitial free steel)	Dr. Amitesh Kumar
43	120/13	Mr. Amit Kumar Sarang	Study of polymer non composites	Dr. Amitesh Kumar
44	121/13	Mr. Love Meghwal	Heat treatment of casting & forging	Dr. Amitesh Kumar
45	122/13	Mr. Shreshtha Ranjan	study of metal matrix nanocomposites	Dr. Amitesh Kumar
46	123/13	Ms. Dharavath Sai Tejaswini	Sustainable metallurgical sector-some thoughts	Dr. S.B. Kumar
47	124/13	Mr. Subham	Development of modern Inventory control system	Dr. Sanjay Kumar
48	125/13	Mr. Shantanu Singh	Nano Structured materials- an overview pipeline steel used in petroleum industries	Dr. G. Das
49	126/13	Mr. Gadugu Nikhil	Thermal barrier coatings	Dr. Binod Kumar
50	127/13	Mr. D Mahendhar Naik	Aluminium die casting and defects	Mr. B. Mallik
51	128/13	Mr. P Sainaresh	Manufacturing and application of duplex stainless steel	Dr. Amitesh Kumar
52	129/13	Mr. Pillala Vamsi Mohan	Lithium ion battery	Dr. Amitesh Kumar
53	130/13	Mr. Mittireddi Raviteja	M.M.C Production & Applications	Dr. A. K. Singh
54	115/12	Mr. Sandeep	Effect of solidification mechanism of fluidity of Al-Si casting alloy	Dr. Nandita Gupta
55	116/12	Mr. Rohit Prakash	Castability of Aluminium alloys	Dr. S.B. Kumar
56	118/12	Mr. Rashid Mumtaz	Principles of manufacturing large ductile iron gears	Dr. Nandita Gupta
57	128/11	Ms. Sangita Rani	Graphenc Coating Introduction and its application	Dr. G. Das

43rd ADC FOUNDRY TECHNOLOGY**LIST OF PROJECT and SEMINAR**

S. No.	Roll No.	Students Name	Title of the project	Title of Seminar	Guide Name
1	43101	Kopesh Kr. Vats			
2	43102	Anand Kumar Singh	Effect of Inoculation on the structure properties of Grey Cast-Iron	Structure properties of High Mn Steel	Dr. Amitesh Kumar
3	43103	Abhishek Kumar Mahto			
4	43104	Ambuj Kumar	Effect of Inoculation on the structure properties of Grey Cast-Iron	Heat Treatment of Mn Steel	Dr. K.K. Singh
5	43105	Subhamoy Roy	Effect of Hot sand and its cure by use of a sand cooler	Micro separation of copper in cast Al-alloy	Dr. Nandita Gupta
6	43106	Anish Kumar Das	Semi-Solid casting of ductile Iron using slope casting method.	Austempered ductile Iron	Dr. Amitesh Kumar
7	43107	Himanshu Mahto	Effects of Alloying elements in Grey Cast Iron	High Strength Loy Alloy Steel	Dr. A.K. Singh
8	43108	Pawan Kumar Sah	Semi-solid casting of Grey cast iron using inclined slope	Production and Application of Grey Cast Iron	Dr. Amitesh Kumar
9	43109	Prakash Kumar Mahato	Effect of Ultra Sonic cavity in the production of ductile Iron.	Type of casting process of Pressure die casting	Dr. Amitesh Kumar
10	43110	Prashant Dutta	Effects of Alloying elements in Grey Cast Iron	Ductile iron & its application and Properties	Dr. A.K. Singh
11	43111	Sagar Raj	Effect of Inoculation on the structure properties of Grey Cast-Iron	Structure properties of High Cr Steel	Dr. K.K. Singh
12	43112	Amalendu Patra	Structure & Properties of Low Carbon Steel Casting	Austempered ductile Iron	Dr. A.K. Singh
13	43113	Deepak Kumar	Effect of Hot sand and its cure by use of a sand cooler	Recent developments in the high strength Al-cu casting alloy	Dr. Nandita Gupta



14	43114	Suraj Prakash	Fast Determination of moisture, volatile organic compounds and loss on ignition from a shell sand sample	Near Net Shape casting	Dr. Nandita Gupta
15	43115	Paramanand Kumar	Effects of Alloying elements in Grey Cast Iron	Alloyed Grey Iron	Dr. A.K. Singh
16	43116	Shashi Kant Prasad	Effect of Casting thickness of nodularity and nodul count of ductile iron	Investment Casting	Dr. Amitesh Kumar
17	43117	Gulab Kumar Mahto	Effect of Casting thickness of nodularity and nodul count of ductile iron	Electro Slay Rewelting	Dr. Amitesh Kumar
18	43118	Sandip Chandra	Semi-Solid casting of ductile Iron using slope casting method.	Study on Rheocasting	Dr. Amitesh Kumar
19	43119	Sidhant Bhartiya	Fast Determination of moisture, volatile organic compounds and loss on ignition from a shell sand sample	Software in Foundry	Dr. Nandita Gupta
20	43120	Purab Barat	Evaluation of Compression strength of Foundry sand grains	Inspection methods as a final testing of casting products	Dr. Nandita Gupta
21	43121	Debdeep Mahato	Evaluation of Compression strength of Foundry sand grains	Permanent mould casting	Dr. Nandita Gupta
22	43122	Anil Kumar Mahto	Effect of Ultra Sonic cavity in the production of ductile Iron.	Energy conservation in Foundry	Dr. Amitesh Kumar
23	43123	Susovan Garain	Semi-Solid casting of ductile Iron using slope casting method.	Safety requirements in Foundry	Dr. Amitesh Kumar
24	43124	Brajesh Bharti			
25	43125	Birendra Saw	Semi-solid casting of Grey cast iron using inclined slope	Production and Application of S.G. Iron	Dr. Amitesh Kumar
26	43126	Amit Kumar	Study of melting and properties of S.G. Iron	Application of magnetic particle for defect evaluation	Mr. B. Mallick



27	43127	Akshay Kumar	Study of melting and properties of S.G. Iron	Application of Ultra sonic technique for defect evaluation	Mr. B. Mallick
28	43128	Kishor Kumar Mahto	Effect of Ultra Sonic cavity in the production of ductile Iron.	Investment casting Process	Dr. Amitesh Kumar
29	43129	Kaushal Kishor	Effect of Casting thickness of nodularity and nodul count of ductile iron	Morden sand Reclamation	Dr. Amitesh Kumar
30	43130	Tarun Kumar	Semi-solid casting of Grey cast iron using inclined slope	Continuous Casting	Dr. Amitesh Kumar
31	43131	Ms. Sangeeta Kumari	Study on Structure and Properties of Grey Iron	Casting Defect	Dr. A.K. Singh
32	43132	Ganesh Kumar Gupta	Effect of mulling and sand used for making mould and cores with clay binder water sand change with time	The influence of getting design on fluidity and hence the effect on casting quantity	Dr. Nandita Gupta
33	43133	Jayant Kumar Himanshu	Study on Structure and Properties of Grey Iron	Appication of Grey Iron	Dr. A.K. Singh
34	43134	Chandan Kumar	Study on Structure and Properties of Grey Iron	Enoculation in the production of Iron Casting	Dr. A.K. Singh
35	43135	Shivram Krishnan	Study of Annealing, Normalizing and Hardening Behaviour of Gray CI	Development in Induction furnace melting practice	Dr. K.K. Singh
36	43136	Sushil Kumar Choudhari	Study the sturcture and Property of austempered gray cast iron.	Study of S.G. Iron	Dr. K.K. Singh
37	43137	Suman Bharti	Effect of Section thickness on structures properties of cast iron	Production & properties of compacted Gray Iron	Dr. Amitesh Kumar
38	43138	Abhilash Das	Study of Annealing, Normalizing and Hardening Behaviour of Gray CI	Development in ARC furaiace melting practice	Dr. K.K. Singh



39	43139	Bappaditya Bauri	Structure & Properties of Low Carbon Steel Casting	S.G. Iron & Its Application	Dr. A.K. Singh
40	43140	Amal Kumar Mandal	Structure & Properties of Low Carbon Steel Casting	Production of S.G. Iron Casting	Dr. A.K. Singh
41	43141	Chandan Kumar	Effect of Section thickness on structures properties of cast iron	Steel of Automotive applications	Dr. Amitesh Kumar
42	43142	Birendra Karmali	Effect of Section thickness on structures properties of cast iron	Effect of cooling rate on properties of casting	Dr. Amitesh Kumar
43	43143	Ms. Mona Kumari Toppo	Study of Annealing, Normalizing and Hardening Behaviour of Gray CI	Cupola design & melting practice	Dr. K.K. Singh
44	43144	Narsingh Majhi	Study of melting and properties of S.G. Iron	Application of Radiography technique for defect evaluation	Mr. B. Mallick
45	42115	Pradeep Kumar Gupta	Study the structure and Property of austempered gray cast iron.	Study of austempered ductile iron	Dr. K.K. Singh

43rd ADC FORGE TECHNOLOGY

LIST OF PROJECT AND SEMINAR



Sl No.	Roll No.	Student Name	Title of the project	Title of the Seminar	Guide Name
1	43201	Sumit Kumar Pramanik	Analysis of forgeability of Al-alloy	Recent forging development in automotive industry	Mr. Vinit Chack
2	43202	Arnab Das	Forging of Aluminium Alloy	Emerging technologies in forge industries	Mr. Vinit Chack
3	43203	Al Umar Afaque	Die design optimization of Gear blank	Isothermal Forging	Dr. N.K. Singh
4	43204	Aman Kumar	Evaluation of forging lubricant	Forging defects and its remedies	Dr. R.K. Ohdar
5	43205	Sanatan Barna	Simulation and analysis of forged automotive coupling flange	Multidirectional forging	Dr. Manoj Kumar
6	43206	Ankan Kumar Bala	Study of the forging behaviour of low carbon steel	Forging defects and its remedies	Dr. R.K. Ohdar
7	43207	Dipankar Bera	Die design optimization for pitman arm	Liquid forging	Dr. N.K. Singh
8	43208	Kunal Kumar Singh	Die design optimization for pitman arm	Study of H.E.R.F Machine	Dr. N.K. Singh
9	43209	Vikash Kumar Paswan	Forging of Mild Steel	Forging of Al alloys	Mr. Vinit Chack
10	43210	Kumar Sushant	Forging of Mild Steel	Forging of Stainless Steel	Mr. Vinit Chack
11	43211	Sushant Raj Singh	Forging of Mild Steel	Die life improvement in hot die forging	Mr. Vinit Chack
12	43212	Indrajeet Rai	Evaluation of forging lubricant	Liquid forging	Dr. R.K. Ohdar
13	43213	Anurag Raj	Analysis of forgeability of Al-alloy	Recent development in orbital forging	Mr. Vinit Chack
14	43214	Ashish Mishra	Evaluation of forging lubricant	Flashless forging	Dr. R.K. Ohdar
15	43215	Manik Pramanik	Study of the forging behaviour of low carbon steel	Flashless forging	Dr. R.K. Ohdar



16	43216	Kashinath Ghosh	Study of the forging behaviour of low carbon steel	Die life improvement	Dr. R.K. Ohdar
17	43217	Akash	Forging of Aluminium Alloy	Die defects and their remedies	Mr. Vinit Chack
18	43218	Ms. Baishali Rakshit	Analysis of forgeability of Al-alloy	Recent trends in forging technology	Mr. Vinit Chack
19	43219	Satyam Kumar	Study of the forging behaviour of medium carbon steel	Forging behaviour of Al	Dr. R.K. Ohdar
20	43220	Gongati Subbarami Reddy	Productivity improvement of front axle beam	Heat treatment process of low carbon steel & aluminum alloys	Dr. N.K. Singh
21	43221	Shyam Sundar Malgop	Simulation and analysis of forged automotive coupling flange	Orbital Forging	Dr. Manoj Kumar
22	43222	Upendar Kumar Das	Die-design optimization of pitman arm	Powder forging	Dr. N.K. Singh
23	43223	Somnath Gochhayat	Die design optimization of Gear blank	Forging defects	Dr. N.K. Singh
24	43224	Bilash Mohan Malik	Simulation and analysis of forged automotive coupling flange	High energy rate forging	Dr. Manoj Kumar
25	43225	Monotosh Mondal	Forging of Aluminium Alloy	Forging defects and their remedies	Mr. Vinit Chack
26	43226	Vishal Kumar Singh	Study of the forging behaviour of medium carbon steel	Forging fo Al alloys	Dr. R.K. Ohdar
27	43227	Chandra Shekhar Kumar	Rejection analysis of F.A.B and stub axle	Liquid forging	Dr. N.K. Singh
28	43228	Ramesh Kumar Mardi	Die design optimization of pitman arm	Rotary forging	Dr. N.K. Singh
29	43229	Dablu Karmali	Study of the forging behaviour of medium carbon steel	Improvement of die life	Dr. R.K. Ohdar
30	42212	Birju Kumar	Productivity improvement of front axle beam	Forging defects & its remedies	Dr. N.K. Singh

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.

NEW SERVICES:

1. Library is providing online access to e-resources through Elsevier B.V.

(i) Science Direct Two Subject:-

- Engineering
- Material Science

(ii) Online Access Through e-SodhSindhu:-

- ASME Journal online
- Economic and Political Weekly
- Institute for Studies in Industrial Development (ISID) Database
- JGate Plus (JCCC)
- JSTOR
- Nature
- OxfordUniversity Press
- Springer Link
- Web of Science Lease access



INDUSTRIAL LIAISON CELL

(Training and Placement Cell :)

Placement data for students passing out in 2017:

COURSE	No. of students appeared for placement	No. of students placed	% Placement
Advanced Diploma (Foundry Tech and Forge Tech)	72	72	100
B Tech(Manufacturing Engg and Materials & Metallurgical Engg)	112	106	94
M Tech (FFT and ME)	30	10	33

Placement data (company wise) for students passing out in 2017:

Name of Company	No. of students placed		
	B Tech	ADC	M Tech
1. Tata Motors Bombay/Pune	06	04	
2. KPMG	03		
3. Atlas Copco Pune	05		
4. Kirloshker Brothers Pune	06		
5. Morgan Advanced Materials Aurangabad	02		
6. Hinduja Foundry Chennai	04		
7. Hindalco Industries Ltd Mumbai	03		
8. Federal Mogul Power Train Gurgaon	04		
9. Laxmi Metal Works Coimbatore	04		03
10. Electrosteel Casting	03		
11. Shivam Auto Tech Haridwar	11	12	
12. DCM EnggRopar	10		
13. MPM solution Nagpur	05		
14. SSWL MehsanaGujrat	08	12	
15. RSB Global	03	04	
16. R N Metals Jaipur	07		
17. 3 D Foundry Mumbai			01
18. Ghaziabad Precision Products Ghaziabad	02		
19. MarutiUdyog Ltd		02	
20. ISGEC Heavy Engg Ltd Haryana		03	02
21. NeosymPvt Ltd Pune		05	
22. Eco Die casting Faridabad		04	
23. PITTI Casting Pvt Ltd Hyderabad		04	
24. Ramakrishna Forging Jamshedpur		02	
25. Kalaria Forging Rajkot		04	
26. Industrial Forge Jamshedpur		02	
27. Rajasthan Udyog Jodhpur		03	02
28. Uma Shakti steel Rudrapur U K	02		02
29. Sriram Pistons and Rings		06	
30. Tata Cummins Pvt Ltd (Pune)		01	
31.ASL Industries Jamshedpur		01	
32. Natraj Casting Dhanbad		01	
33. Shivalik Casting	01	02	
34. KEMS Forging	04		
34.Taural India Private Limited	01		
35. Vedanta	12		

STUDENTS' GYMKHANA



Patron:	Prof. P. P Chattopadhyay, Director, NIFFT
Chairman:	Prof. K. K Singh
Vice Chairman:	Prof. Ghanshyam Das
	Prof. Nandita Gupta, Member
	Prof. Vineet Chak, Member
	Prof. Renu Kumari, Member
President:	Ayush Sinha
General Secretary:	Abhimanyu Chauhan
Treasurer:	Arpit Tiwari
Vice President:	Gaurav Shivhare
Joint Secretary:	Mano Lingam & Apeksha Modi

NIFFT SAE COLLEGIATE CLUB

Team THRUSTERS from NIFFT SAE Collegiate Club participated in SUPRA SAE India 2016 which was held at Buddh International Circuit, Greater Noida (U.P) from 4th July 2016 to 9th July 2016. After the formation of the club it was the first time in a formula style event that a team from NIFFT cleared the Technical Inspection Round and after that went on to surpass Egress Test, Noise Test and Tilt Table Test. The team achieved a well deserved 52nd overall rank among the 170 participating teams.

NIFFT VOLLEYBALL CLUB

The NIFFT Volleyball Team participated in Vajra and Tempest which was held at BIT Mesra and MERI Kolkata respectively and secured 1st position in both the events. NIFFT Volleyball Club also organized an Intra Volleyball Tournament which saw participation from B.Tech, M.tech and PhD students of the institute.

NIFFT CRICKET & FOOTBALL

NIFFT Cricket Team and NIFFT Football teams participated in various Sports fests of the Eastern region in Marine Engineering and Research Institute, Kolkata and Birla Institute of Technology, Mesra. Apart from taking part in outside events the cricket and football clubs also organized NIFFT Cricket League and NIFFT Football League in which students of the institute participated. An Alumni vs NIFFT Cricket Team match was also organized in which our passout seniors who have played for the NIFFT team previously participated.

NIFFT MUSIC CLUB

The Music Club of NIFFT was quite an active participant in the Cultural fests of the eastern region. The took part in the Lakeside Dreams and was quite appreciated for their performance. Siddharth Chakraborty, member of the Music Club went on to the final rounds in the SF Idol event thus bringing in lots of name to our club.

PHOTOGRAPHY SOCIETY

The club was headed by Aditya Saurav Doraiburu. The members of the club were Akshay Kumar, Nitesh Sah, Aman Verma, Shanu Sinha, Krishna Kumar and Sneha Kumari. The team took responsibility of covering all the events that were held during the Gymkhana Session of 2016 - 17, The team also helped for the press releases of these events. The events covered



by the team were Janmaashtmi, Ganesh Puja, Swacch Bharat Pakhwada, UMEED, GIS, IFO and JINKS Pranav 17.

SWACCH BHARAT PAKHWADA

Swacch Bharat Pakhwada was observed in NIFFT from 1st to 15th September. The students, faculty members and the staffs took pledge of the keeping the campus and its surroundings clean. Various events were organized throughout these days like cleanest mess, cleanest hostel, cleanest room contest to promote cleanliness among students.

GOLDEN JUBILEE DIWALI CELEBRATION

On the occasion of Golden Jubilee the NIFFT family celebrated Diwali by decorating the campus with diyas and rangolis. The celebration was well covered in the media and was appreciated widely. Students also made colourful rangolis giving tribute to the Indian Army

VIGILANCE AWARENESS WEEK

Vigilance Awareness Week was observed in NIFFT from 31st October 2016 to 5th November 2016. The event started with the oath taking ceremony by the faculty members, staffs and students. In the days which followed various events like Essay writing competition on the theme "Public Participation in Promoting Integrity and Eradicating Corruption", speech competition and painting competition was organized in which saw participation from a large number of students.

EKTA DIWAS

EktaDiwas was observed in NIFFT from 31st October 2016 to 6th November 2016. The event started with the oath taking ceremony by the faculty members, staffs and students. In the days which followed various events like singing competition, cap painting and T-shirt painting. The students also participated in the Unity Run from the institute to Singh more, Hatia. The prize distribution ceremony was organized on 6th November where the Director distributed the prizes to the winners.

UMEED

The Students' Gymkhana of NIFFT organized a cloth donation campaign named UMEED in which warm clothes were collected from the students, faculty members and staffs of NIFFT. Along with that many collection centers were set up throughout the city. On 13th November the collected clothes were distributed in the slums of Ranchi and on 14th November our Chief Guest Mr. Ram TahalChoudhary, Member of Parliament from Ranchi distributed clothes to the students of the orphanages.

KARAOKE EVENING

On 8th January 2018 an open air Karaoke evening was organized in the New Lecture Hall Complex which saw large participation from the students of B.Tech 2nd and 3rd Year. The Winners of the event were : 1st Position - Anup Kumar 2nd Position - Soumya Sinha 3rd Position - Rajesh Yadav

TREASURE HUNT

On 29th January 2018 for the first time in NIFFT a Treasure Hunt was organized in which more than 50 students participated from all the disciplines. The first level was puzzle solving which was followed by clues of the next level hidden in the campus. The winners of the event were : 1st Position - Nikhil Suresh, Pargunan, Sashwat and Jitendra 2nd Position - Abhishek, Akshay, Saurabh and Ashwin 3rd Position - Abhishek Tomar, Shivam, Dinkar and Sonu

ONLINE EVENTS

Online events such as Surgasm, Cross-Quizzario and Shutterbug was organized on the official page of JINKS and Pranav on Facebook. Exciting prizes like free passes and direct entry to competitions was given to the winners.



AD MAD

On 30th January 2018 AD - MAD event was organized in which participants were given interesting props which they had to advertise through their skills. The winners of the event were : 1st Position - Amar Kumar Pandey and SonuPaswan 2nd Position - NishatAnjum and Saumya Sinha 3rd Position - Sahan Ahmed Khan and GautamTigga

NUKKAD

For promotion of our social theme “Human Trafficking” and digital theme “Cashless Transaction” the students of NIFFT performed NUKKAD at various spots of the city in the month of February. These nukkads were supported by Department of Women and Child Development and Social Welfare, Govt of Jharkhand and Bank of India.

MOMENTUM JHARKHAND

NIFFT Ranchi displayed its potential in the Momentum Jharkhand which was held at Khegaon on 16th and 17th of February 2017. The main attraction of the stall was 3D printer and Calligraphy machine. The students who represented the institute - Ayush Sinha, Devesh Gaurav, Aadarsh Das, Apurv, Satish, Gaurav, Nikhil, Abhay, Himanshu, SiddharthVikram, Gautam Gupta and AsharParvez.

JINKS 17

JINKS 17 - The annual cultural fest of NIFFT Ranchi was a huge success as it was the first time that we had pronights on all the three days. The inauguration took place in the Gymkhana building and our chief guest was Mr. Sunil Kumar Barnwal and Mr. Avijit Ghosh. The first night we had Lagori, on the second day we danced on the beats of DJ Tejas and the final day we hosted the beautiful voice of Mrs. Tulsi Kumar. In the day time various events in the informalz arena and in the gymkhana building were organized in which students from than 35 colleges participated. Main Stage events like Paridhan, Thirkan were organized on the first and second day which were also one of the highlights of the whole event.

PRANAV 17

Pranav 17 was a landmark for NIFFT because this was the first time that the events of Pranav was organized in collaboration with organizations like Indian Institute of Metals, B Factory and Career Launcher. A workshop was also organized on Self Balancing Robots by Innovation Cell IIT Bombay in which students from B.Tech 1st Year, ADC of NIFFT, students of Amity University and Taurian World School participated in huge numbers. During the three days during the fest various interesting events like Metasymposium, Mechstruct, Aquabot, Wild Race, Water Rocket were organized.



NIFT HOSTEL

1	Dr. Manoj Kumar Associate Professor Department of Forge technology	Chief Hostel warden
2	Dr. D. Roy Assistant professor Department of Materials & Metallurgical Engineering	Hostel warden
3	Dr. A.K. Sood Associate Professor Department of Manufacturing engineering	Hostel warden
4	Dr. Amitesh Kumar Assistant Professor Department of Foundry Technology	Hostel warden
5	Mr. V.M.S. Hussain Assistant Professor Department of Manufacturing Engineering	Hostel warden

At present the Institute is having six hostels (five for boys and one for girls) for accommodating students of regular course.

The following are the details of the different hostels

Hostel Name	Available Accommodation	Remarks
NiralaChatrawas	162	Double/Triple Seated
VikramAmbala Sarabhai Chatrawas	30	Single Seated
Homi. J. BhabaChatrawas	162	Double Seated
M. Vishweshwaraiah Chatrawas	176	Single Seated
Kalpana Chawla Chatrawas	100	Double/Triple Seated
J.C. Boss Chatrawas	400	Single Seated

GENERAL ADMINISTRATION



RETIREMENT

Sl. No.	Name	Designation	Date of Retirement
1.	Mr. Anil Kumar(K)	Assistant Professor	31.06.2016

APPOINTMENT

1.	Mr. Syed Saud Akhtar	Dy. Registrar	02/05/2016
2.	Dr. ParthaSarathiMondal	Asst. Professor	10/11/2016
3.	Dr. Ratnakar Das	Asst. Professor	10/11/2016
4.	Dr. Sambit Kumar Parida	Asst. Professor	15/11/2016
5.	Dr.SubhankarBasu	Asst. Professor	15/11/2016
6.	Mr.Anand Mohan Murmu	Asst. Professor	21/11/2016
7.	Dr. Vikash Kumar Gupta	Asst. Professor	01/12/2016
8.	Mr. Subrato Kumar Soren	Asst. Professor	11/01/2017

MACP

Sl. No	Name of the employee & Designation	Date of eligibility	Present Grade Pay	Upgraded Pay Scale
1.	Mr. Sudhir Kumar, STA	07/12/2016	Rs.4200/-	PB1-9300-34,800 +GP 4600/-
2.	Mr. Chandan Kumar, STA	07/12/2016	Rs.4200/-	PB1-9300-34,800 +GP 4600/-
3.	Mr. GaribMahato, STA	07/12/2016	Rs.4200/-	PB1-9300-34,800 +GP 4600/-
4.	Mr. Anil Kumar , UDC	26/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
5.	Mrs. Ganesh Oraon, UDC	26/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
6.	Mr. Nagendra Kumar, UDC	26/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
7.	Mr. MansoorBahadur, UDC	26/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
8.	Mr. B. M. Mahendra, Tech "B"	08/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
9.	Mr. Raju Ram, Tech "B"	08/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
10.	Mr. JittrayMunda, Tech "B"	08/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
11.	Mr. Rajendra Ram, Tech "B"	08/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
12.	Mr. Munna Prasad, Tech "B"	08/02/2017	Rs.2400/-	PB1-5200-20,200 +GP 2800/-
13.	Mr. Nakul Ram, LDC/Typist	11/10/2016	Rs.1900/-	PB1-5200-20,200 +GP 2000/-



14.	Mr. AmritKachhap, Driver-III	11/07/2016	Rs.2000/-	PB1-5200-20,200 +GP 2400/-
15	Mr. VinodOraon, Lab. Attendant	09/10/2016	Rs.1800/-	PB1-5200-20,200 +GP 1900/-
16	Mr. S. K. Ravi, Lab. Attendant	10/10/2016	Rs.1800/-	PB1-5200-20,200 +GP 1900/-

PROMOTION

Sl No	Name of the employee	Present Post	Promoted	
			On	As
1.	Mr. U.K. Ghosh	U.D.C.	06.02.2017	Assistant
2.	Mrs. Madhumati	U.D.C.	06.02.2017	Assistant
3.	Mr. LakhanRajak	U.D.C.	06.02.2017	Assistant
4.	Mr. BaijnathNayak	U.D.C.	06.02.2017	Assistant
5.	Mr. A.B. Prasad	Tech Gr. "B"	06.02.2017	Tech Gr. "A"

STAFF STRENGTH AS ON 31.03.2017

Director	01
Professor	13
Associate Professor	09
Assistant Professor	17
Dy. Registrar	01
Sr. Medical Officer	01
Librarian Sr.	01
Assistant Registrar	03
Assistant Superintendent Workshop	01
Hindi Officer	01
Sr. Technical Assistant	04
Stenographer	02
Assistant	04
Upper Division Clerk	04
LDC/Typist	01
Technician Gr. "A"	01
Technician Gr. "B"	05
Driver	01
Peon	04
Mali	01
Laboratory Attendant	05
Sweeper	01
Mazdoor	01
Cook	02
Total :	84

ERECTION AND MAINTENANCE



DETAILS OF ONGOING CIVIL AND ELECTRICAL RENOVATION WORK

	Amount paid till 2015-16	Amount paid During 2016-17	Total Amount paid till 2016-17
Civil Renovation			
External & Internal Finishing of Old B.Tech Hostel	894,997	435,356	1,330,353
Misc. Civil Works,Furniture,Electrical Work	14,467,052	7,037,248	21,504,300
Renovation and Finishing of P Type Qtrs	638,146	310,415	948,561
Renovation and Upgradation Auditorium	1,680,524	817,462	2,497,986
Renovation of 3 Block C-1 Type Qtr(3 Block-12 Qtrs)	1,477,946	718,922	2,196,868
Renovation of A-Type Quarter(5 Blocks-30 Quarters)	2,936,443	1,428,382	4,364,825
Renovation of B Type Quarter(4 Blocks-32 Quarters)	3,139,467	1,527,140	4,666,607
Renovation of C-Type Quarter(4 Block-16 Quarters)	1,845,103	897,519	2,742,622
Renovation of D-1-Type(2 Blocks-8 Quarters)	1,854,558	3,402,118	5,256,676
Renovation of D-Tpye Quarter(2 Blocks-8 Quarters)	1,480,026	719,933	2,199,959
Renovation of E-Type Quarter(3 Block-6 Quarters)	1,500,790	730,033	2,230,823
Renovation of Fixed Chair of Auditorium	178,483	86,820	265,303
Renovation of Flooring of P Type Qtrs(4 Nos.)	368,233	179,120	547,353
Renovation of North Side Labratory(3 Nos.)	865,193	420,858	1,286,051
Renovation of Old Administrative Block	4,226,072	6,771,795	10,997,867
Renovation of Post Graduate Hostel	2,172,988	1,057,013	3,230,001
Replacement CGI Sheet Roof of Workshop	917,665	446,382	1,364,047
Waterproofing of Library Building Roof	471,964	229,579	701,543
Total A	41,115,650	27,216,095	68,331,745

Electrical Renovation

Electrical Renovation of Auditorium Building	-	6,832,453	6,832,453
Providing Electrical Wiring for A/C at Old Admin Block	-	212,137	212,137
Renovation of EI & Fans in D-1 Type Quarter	-	601,803	601,803
Renovation of EI & Fans of A Type Quarters	-	1,283,036	1,283,036
Renovation of EI & Fans of B Type Quarters	-	1,943,121	1,943,121
Renovation of EI & Fans of C1/MRS Type Quartes	-	763,611	763,611
Renovation of EI & Fans of C Type Quarters	-	1,040,787	1,040,787
Renovation of EI & Fans of D Type Quarters	-	544,415	544,415
Renovation of EI & Fans of E Type Quarters	-	696,438	696,438
Renovation of EI & Fans of North Side Laboratory	-	1,752,519	1,752,519
Renovation of EI & Fans of Old Administrative Building	-	2,094,986	2,094,986
Renovation of EI & Pdg Fittings/Fans at V A Sarabhai Chatrawas	-	1,193,874	1,193,874
Renovation of Electrical Wiring/Fitting of Library Building	-	1,574,520	1,574,520
Renovation of IEI of Vishveshwarya Chhatrawas	-	2,021,126	2,021,126
Total B	-	22,554,826	22,554,826
Grand Total (A+B)	-	22,554,826	22,554,826



HINDI CELL

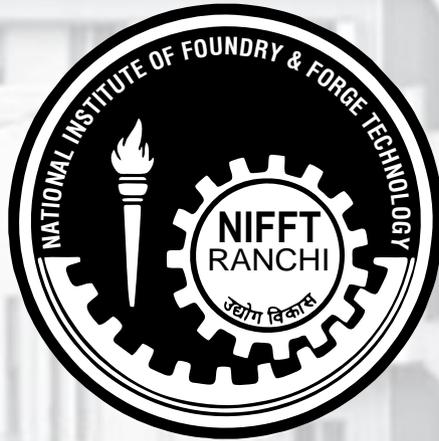
Hindi Cell of the Institute is working in accordance with official language policy of Govt. of India and annual programme issued there under.

The activities of Hindi Cell during the years were as follows:

- 1) Hindi workshop was organized on Unicode for employees.
- 2) Hindi Officer participated in Seminar organized by Rajbhasha Seva Sansthan from 1 – 3 June, 2016 in Kerla Exhibition.
- 3) One day book was organized on the occasion of Premchand Jaynti on 31st July, 2016.
- 4) The work of preparing English-Hindi Dictionary is under progress.
- 5) The work of preparing Hindi version of website of the Institute is under progress.
- 6) Day today translation work & other work related to O.L was performed by Hindi Cell.
- 7) The Institute has regular representation in the meetings of TOLIC
- 8) Hindi Officer contributed in the follows Committees.
 - Printing Committee
 - Annual Report Committee
 - Committee on sexual Harrasment against women
 - Committee for selection of Gender champion
 - Acting as Asstt. Public Information officer.

NATIONAL INSTITUTE OF FOUNDRY AND FORGE TECHNOLOGY

**A Centrally Funded Technical Institute under MHRD (Govt. of India)
HATIA, RANCHI - 834003 JHARKHAND**



ANNUAL ACCOUNTS

FOR THE FINANCIAL YEAR 2016-17

(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 31st MARCH, 2017

SOURCES OF FUNDS		Schedule	Current Year 2016-17	Previous Year 2015-16
CORPUS/CAPITAL FUND	1	911,287,931.66	936,532,018.96	
CURRENT LIABILITIES	2	21,772,036.20	29,048,208.70	
TOTAL		933,059,967.86	965,580,227.66	

APPLICATION OF FUNDS		Schedule	Current Year 2016-17	Previous Year 2015-16
FIXED ASSETS	1			
a) Tangible Assets		145,401,495.00	145,012,316.00	
b) Capital work-in-Progress		90,886,571.00	41,115,650.00	
c) Intangible Assets		1,523,267.00	2,538,779.00	
INVESTMENTS	4	48,390,969.00	114,573,536.00	
CURRENT ASSETS	5	24,331,530.33	39,773,649.13	
LOANS, ADVANCES & DEPOSITS	6	622,526,135.53	622,566,297.53	
TOTAL		933,059,967.86	965,580,227.66	

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. 402055

PLACE: RANCHI

DATE: 14.07.2017



(Signature)
Aayaz Registrar

(Signature)
By Registrar

(Signature)
Prabjit (Admin)

(Signature)
Director



ANNUAL REPORT 2016-17

SCHEDULE - 1 - CORPUS/CAPITAL FUND

Particulars	Current Year	Previous Year
Balance at the beginning of the year	936,532,018.96	1,064,848,732.73
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 received from Ministry of Human Resource Development (Govt. of India)	30,000,000.00	-
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	966,532,018.96	1,083,955,792.73
Deduct: Deficit transferred from Income & Expenditure Account	(55,244,087.30)	(147,423,773.77)
Balance at the year end	911,287,931.66	936,532,018.96



SCHEDULE - 2 - CURRENT LIABILITIES

CURRENT LIABILITIES		Current Year	Previous Years
1	Deposit from Staff	1,117,947.00	70,839.00
2	Deposit from Student		
a	Caution Money	7,862,803.50	7,537,103.50
b	Unclaimed fees	253,550.00	253,550.00
3	Deposit-Others		
a	Earnest Money	1,435,841.00	377,981.00
b	Security Deposit	174,738.30	159,412.30
4	Statutory Liabilities		
a	GIS Premium	-	-
b	UC Premium	6,698.40	6,698.40
c	TDS U/s 192A	75,490.00	71,890.00
d	TDS U/s 194C	18,411.00	37,467.00
e	TDS U/s 194I	741.00	12,000.00
f	GPF Deduction from Salary	-	7,500.00
g	Employees Loan Repayment	58,940.00	19,607.00
h	Professional Tax on Salary	40,488.00	-
5	Other Current Liability		
a	Receipt against Sponsored Projects (Schedule 2(a))	3,222,572.00	4,826,817.00
b	Receipt against Sponsored Fellowship & Scholarship (Schedule 2(b))	4,864,613.00	7,581,608.00
c	Other Liabilities		
g	Account Payable/ Receivable	223,441.00	223,441.00
b	AICTE	140,000.00	140,000.00
c	Consultancy Charges	-	730,598.00
d	Grant From CBSE Board	50,000.00	50,000.00
e	M/s Total Library Solution	92,784.00	92,784.00
f	NIFT Alumni Association	247,000.00	168,000.00
g	Online Fee Deposit	-	4,556,819.50
h	Expenses Payable	1,867,011.00	1,930,093.00
i	Amount Payable to Mos(Chair Prof. Fund)	19,000.00	-
		21,772,036.20	29,045,208.70



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	445,865	-	2,182,279	2,628,144	2,628,144	-	-
2	Consultancy-ITIMEE - Jamalpur	254,102	-	-	254,102	254,102	-	-
3	Consultancy-Tata Steel Ltd.	300,000	-	675,000	975,000	600,000	375,000	-
4	Direct Admission of Students Abroad(DASA)	300,000	-	-	300,000	171,825	128,175	-
5	Project-Board of Research in Nuclear Science(BRNS)	1,639,363	-	-	1,639,363	-	1,639,363	-
6	Project-Science and Engineering Research Board(Old)	180,450	-	-	180,450	-	180,450	-
7	Project-Science & Engineering Research Board(New)	1,688,333	-	-	1,688,333	807,453	880,880	-
8	Technical Education Quality Improvement Programme	18,704	-	-	18,704	-	18,704	-
	Total	4,826,817	-	2,857,279	7,684,096	4,461,524	3,222,572	-

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	5,663,200	-	3,393,000	9,056,200	5,663,200	3,393,000	-
2	Ministry of Steel Scholarship	1,200,000	-	120,000	1,320,000	1,320,000	-	-
3	Scholarship-Ministry of Tribal Affairs	-	-	-	-	-	-	-
4	Shriam Autotech Ltd.Scholarship	192,000	-	384,000	576,000	-	576,000	-
5	S N Sinha Memorial Scholarship	5,000	-	-	5,000	-	5,000	-
6	State Scholarship for Students	521,488	-	1,632,305	2,153,713	1,263,100	890,613	-
	Total	7,581,688	-	5,529,305	13,110,913	8,246,300	4,864,613	-



CHEDULE - 9 FIXED ASSETS (D.11)

S.No	Assets Heads	Rate of Depreciation (%)	Gross Block		Depreciation for the Year			Net Block		
			Opening Balance 01.04.2016	Additions	Closing Bal/ncf	Depreciation Opening Balance	Depreciation for the Year	Total Depreciation	As on 31.03.2017	As on 31.03.2016
1	2	3	4	5	6	7	8	9	10	
1	Land	0%	-	-	-	-	-	-	-	-
2	Van Investment	0%	-	-	-	-	-	-	-	-
3	Buildings	2%	186,543,001.73	-	186,543,001.73	79,640,500.37	5,731,000.00	81,378,555.17	85,144,446.56	81,912,476.56
4	Roads & Bridges	2%	-	-	-	-	-	-	-	-
5	Miscellaneous & other Supply	2%	-	-	-	-	-	-	-	-
6	Security & Dr-alarm	2%	-	-	-	-	-	-	-	-
7	Electrical installation and Equipments	5%	122,538,242.97	-	122,538,242.97	90,716,685.43	1,583,864.00	92,296,648.43	30,209,317.81	31,791,281.81
8	Plant & Machinery	5%	-	-	-	-	-	-	-	-
9	Scalable & Laboratory Equipment	5%	-	-	-	-	-	-	-	-
10	Office Equipment	7.5%	1,541,790.36	-	1,541,790.36	1,541,790.36	-	1,541,790.36	-	-
11	Audio Visual Equipment	10%	-	-	-	-	-	-	-	-
12	Computers & Peripherals	20%	-	-	-	-	-	-	-	-
13	Furniture, Fixtures & Fittings	7.5%	22,407,763.89	-	22,407,763.89	11,561,669.50	782,687.00	12,748,556.10	9,653,140.44	10,433,837.44
14	Wharves	15%	3,855,719.07	-	3,855,719.07	1,835,719.00	1,835,719.00	1,835,719.00	-	-
15	Lib. Books & Scientific Instruments	10%	100,534,832.58	-	100,534,832.58	88,733,811.39	1,340,068.00	87,636,830.29	12,086,126.18	13,424,058.18
16	Good Value Assets	100%	-	-	-	-	-	-	-	-
17	Equipment UNRESCD A/D	-	2,497,317.00	-	2,497,317.00	2,497,317.00	-	2,497,317.00	-	-
	Total (A)		417,878,366.53	-	417,878,366.53	274,461,698.35	5,453,609.00	279,915,307.35	137,113,081.00	140,566,880.00
17	Capital work in Progress (B)		-	-	-	-	-	-	-	-
	Total (A+B)		417,878,366.53	-	417,878,366.53	274,461,698.35	5,453,609.00	279,915,307.35	137,113,081.00	140,566,880.00



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SCHEDULE - 3A - PLANNED ASSETS

S.No	Assets Heads	Rate of Depreciation (%)	O.B. As on 01.04.2016	Gross Block Additions (Net)		Closing Balance	Depreciation for this Year			Net Block		
				Within 6 Months	After 6 Months		Depreciation on O.B.	Depreciation for the Year	Total Depreciation	As on 31.03.2017	As on 31.03.2016	
1	2	3	4	5	6	7	8	9	10	11	12	
1	Land	0%	-	-	-	-	-	-	-	-	-	
2	Site Development	0%	-	-	-	-	-	-	-	-	-	
3	Buildings	2%	-	-	-	-	-	-	-	-	-	
4	Roads & Bridges	2%	-	-	-	-	-	-	-	-	-	
5	Telerswells & Water Supply	2%	-	-	-	-	-	-	-	-	-	
6	Sewerage & Drainage	2%	-	-	-	-	-	-	-	-	-	
7	Electrical Installation and Equipment	5%	-	-	-	-	-	-	-	-	-	
8	Plant & Machinery	5%	227,026.00	191,991.00	49,500.00	308,671.00	11,351.00	22,629.00	33,980.00	474,891	215,662	
9	Scientific & Laboratory Equipment	8%	76,075.00	451,700.00	-	527,775.00	6,006.00	23,594.00	29,600.00	497,175	69,069	
10	Office Equipment	7.5%	31,525.00	37,375.00	-	68,900.00	3,865.00	5,370.00	9,235.00	28,585	47,660	
11	Audio Visual Equipment	8%	36,000.00	-	-	36,000.00	2,395.00	6,893.00	9,288.00	45,302	90,705	
12	Computers & Peripherals	20%	37,500.00	164,400.00	936,300.00	1,338,200.00	7,500.00	142,540.00	150,040.00	998,459	30,000	
13	Furniture, Fixtures & Fittings	7.5%	116,503.00	146,792.00	173,623.20	436,908.00	10,238.00	24,949.00	35,187.00	439,693	176,765	
14	Vehicles	10%	740,289.00	-	3,977,821.00	4,718,110.00	75,025.00	264,411.00	339,436.00	4,386,564	575,200	
15	Lib. Books & Scientific Journals	10%	164,303.00	-	-	164,303.00	35,438.00	52,793.00	88,231.00	255,142	327,925	
16	Small Value Assets	100%	1,740,383.00	540,488.00	5,625,643.00	7,906,514.00	157,740.00	518,135.00	675,875.00	7,234,489	1,502,553	
Total (A)												
17	Capital work in Progress (B)		41,115,650.00	11,409,568.00	38,463,261.00	90,988,579.00	-	-	-	-	90,988,579	41,115,650
Total (A+B)												
S.No	Intangible Assets	Rate of Depreciation (%)	O.B. 01.04.2016	Within 6 Months	After 6 Months	Closing Balance	Depreciation on O.B.	Depreciation for the Year	Total Depreciation	As on 31.03.2017	As on 31.03.2016	
18	Computer Software	60%	-	-	-	-	-	-	-	-	-	
19	Patents	40%	4,231,298.00	-	-	4,231,298.00	1,692,519.00	1,015,517.00	2,708,036.00	1,523,267	2,538,779	
20	Patents	(0 Years)	4,231,298.00	-	-	4,231,298.00	1,692,519.00	1,015,517.00	2,708,036.00	1,523,267	2,538,779	
Total (C)												
Grand Total (A+B+C)												
Grand Total (A+B+C)			47,097,201.00	11,970,068.00	44,090,904.00	103,028,253.00	1,850,799.00	1,519,647.00	3,370,446.00	99,648,307	45,238,082	





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SCHEDULE - 3B NON PLAN FIXED ASSETS

S.No	Assets Heads	Rate of Depreciation (%)	Gross Block			Depreciation for the Year			Net Block		
			O.B. 01.04.2016	Within 6 Months	Additions (Net) After 6 Months	Closing Balance	Depreciation On	Depreciation for the Year	Total Depreciation	As on 31.03.2017	As on 31.03.2016
1	Land	0%	-	-	-	-	-	-	-	-	
2	Site Development	0%	-	-	-	-	-	-	-	-	
3	Buildings	2%	-	-	-	-	-	-	-	-	
4	Furniture & Fixtures	20%	-	-	-	-	-	-	-	-	
5	Tools, Jewellery & Water Supply	2%	11,7495.00	-	-	117,4095.00	2,350.00	2,303.00	4,653.00	115,1403.00	
6	Sewerage & Drainage	2%	-	-	-	-	-	-	-	-	
7	Electrical installations, lift & equipment	5%	-	-	-	-	-	-	-	-	
8	Plant & Machinery	5%	48,387.00	9,355.00	2,200.00	65,737.00	2,460.00	2,994.00	5,004.00	60,293.00	
9	Scientific & Laboratory Equipments	20%	-	-	-	-	-	-	-	-	
10	Office Equipment	7.5%	21,650.00	-	68,530.00	91,180.00	1,825.00	4,109.00	5,734.00	85,426.00	
11	Audio Visual Equipment	8%	268,290.00	-	-	268,290.00	20,152.00	10,647.00	30,800.00	229,964.00	
12	Computers & Peripherals	20%	471,245.00	13,390.00	111,425.00	666,011.00	96,248.00	103,220.00	197,468.00	468,593.00	
13	Furniture, Fixtures & fittings	7.5%	31,525.00	11,625.00	5,017.00	86,117.00	3,065.00	6,135.00	10,000.00	76,117.00	
14	Vehicles	10%	-	-	-	-	-	-	-	-	
15	Lib. Books & Scientific Journals	10%	8,764.00	1,150.00	13,045.00	20,965.00	476.00	5,457.00	2,113.00	18,618.00	
16	Small Value Assets	200%	988,656.00	125,529.00	204,198.00	1,318,383.00	125,583.00	138,835.00	264,438.00	1,053,945.00	
Total (A)											
17	Capital work in Progress (B)	-	-	-	-	-	-	-	-	-	
Total (C)											
S.No	Intangible Assets	Rate of Depreciation	O.B. 01.04.2016	Within 6 Months	Additions After 6 Months	Closing Balance	Depreciation On	Depreciation for the Year	Total Depreciation	As on 31.03.2017	As on 31.03.2016
18	Computer Software	40%	-	-	-	-	-	-	-	-	-
19	E-Books	40%	-	-	-	-	-	-	-	-	-
20	Patents	9 Years	-	-	-	-	-	-	-	-	-
Total (C)											
Grand Total (A+B+C)			988,656.00	125,529.00	204,198.00	1,318,383.00	125,583.00	138,855.00	264,438.00	1,053,945.00	863,073.00





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SCHEDULE - 4 - INVESTMENTS

	Current Year	Previous Year
Term Deposits With Nationalized Bank (Canara Bank-NIFFT Branch)	48,390,969.00	114,573,536.00
1. PLAN		93,765,569.00
2. NON-PLAN	48,390,969.00	20,807,967.00
	48,390,969.00	114,573,536.00

DETAILS OF TERM DEPOSITS WITH CANARA BANK -NIFFT BRANCH- AS ON 31.03.2017

Account Number	Investment Head	Principle Balance as on 31.03.2017	Date of Opening/Reinvestment	Rate of Interest	Due Date	Accrued Interest as on 31.03.2017
2730401007000/3	Non-Plan	23,390,969.00	01.10.2016	7.00%	01.10.2017	811,955
2730307000005/3	Non-Plan	5,000,000.00	24.11.2016	6.50%	28.02.2017	113,082
2730307000005/4	Non-Plan	5,000,000.00	24.11.2016	6.50%	28.02.2017	113,082
2730307000005/5	Non-Plan	5,000,000.00	24.11.2016	6.50%	28.03.2017	113,082
2730307000005/6	Non-Plan	5,000,000.00	24.11.2016	6.50%	28.03.2017	113,082
2730307000005/7	Non-Plan	5,000,000.00	24.11.2016	6.50%	28.03.2017	113,082
		48,390,969.00				1,377,365





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SCHEDULE - 5 - CURRENT ASSETS

PARTICULAR		Current Year	Previous Year
1	Sundry Debtors:		
a	Debts outstanding for a period exceeding six months	514,152.68	514,152.68
b	Amount Receivable From M/s EdCIL India Ltd.	3,500,000.00	-
2	Cash and Bank Balances		
a	In Saving Accounts		
i	Canara Bank SB A/c No. 2730101006939 (Non-Plan)	20,221,246.25	34,275,442.25
ii	Canara Bank SB A/c No. 2730101007913 (Plan)	0.10	4,828,821.10
iii	Canara Bank SB A/c No. 273010109959	1,000.00	1,000.00
iv	SBI Hatit SB A/c (O.B.)	3,344.10	3,344.10
v	Canara Bank SB A/c No. 102191203	70,637.50	-
vi	SBI SB A/c No 3622871268	21,147.70	-
3	Cash		
a	Cash in hand	-	150,889.00
TOTAL		24,331,540.33	39,773,649.13





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SCHEDULE - 6 - LOANS, ADVANCES & DEPOSITS

	Current Year	Previous Years
1 Advances to Employees: (Non Interest Bearing)		
a Expenses Advance	135,700.00	110,571.00
b Festival Advance	28,800.00	46,800.00
c Leave Travel Concession Advance	13,000.00	8,000.00
d Medical Advance	15,079.00	12,079.00
e Travelling Advance	43,775.00	75,167.00
f Rolling Advance	348,208.00	314,970.00
2 Advances to Employees: (Interest Bearing)		
a House Building Advances	61,000.00	85,000.00
b Computer Advance	177,663.00	253,105.00
c Car/Motorcycle/Scooter Advance	288,706.00	592,206.00
3 Advances & Other amounts Recoverable in Cash/Kind		
a (in Capital Account)		
a NIFT Golden Jubilee Celebration	5,000,000.00	1,500,000.00
b Contribution to Annual Feast-INES	1,425,000.00	750,000.00
c Advance for E- Ticketing Account	-	50,000.00
d SAT India Collegiate Club-NIFT	-	250,000.00
e Advance to NIFT Student's Gymkhana	60,000.00	-
4 to Suppliers		
a Advance to Suppliers(O.B)		
a M/s Eo. Cl. (India) Ltd.	1,353,195.00	4,853,195.00
b M/s Micon 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	3,235.00	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	1,150,000.00	1,145,000.00

Contd.





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5	Deposits:		
a	Telephone		
	a Security Deposit With P&T Department	29,550.00	29,560.00
b	Electricity		
	a Security Deposit With Jharkhand Electricity Board	1,215,000.00	1,215,000.00
c	ARCTE	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
	g M/s Jyoti India	55,000.00	-
6	Income Accrued:		
	a On Advance to Employers	14,143.00	14,143.00
	b On Investment	1,377,365.00	1,502,489.00
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	-	-
	d Rent Receivable from BSNL	21,000.00	21,000.00
	e TDS - Unrealized	1,153.00	1,153.00
		622,526,115.53	622,566,297.53





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NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY HATIA, RANCHI-834003

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31st MARCH, 2017

	Schedule	Current Year	Previous Year
I N C O M E			
ACADEMIC RECEIPTS	7	44,003,031.50	34,191,548.00
GRANTS	8	100,000,000.00	-
INCOME FROM INVESTMENT	9	4,715,327.00	16,060,756.88
INTEREST EARNED	10	2,060,534.00	2,060,639.00
OTHER INCOME	11	2,149,487.00	703,928.00
TOTAL(A)		152,928,379.50	53,015,893.88
E X P E N D I T U R E			
STAFF PAYMENT & BENEFITS (Establishment Expenses)	12	132,902,753.00	117,576,001.00
ACADEMIC EXPENSES	13	34,767,531.00	33,884,150.00
ADMINISTRATIVE AND GENERAL EXPENSES	14	25,200,766.80	24,571,230.65
TRANSPORTATION EXPENSES	15	1,117,801.00	750,782.00
REPAIR & MAINTENANCE EXPENSES	16	7,057,504.00	7,229,500.00
PRIOR PERIOD EXPENSES	17	-	8,667,687.00
DEPRECIATION	3	7,126,111.00	7,761,317.00
TOTAL(B)		208,172,466.80	200,440,667.65
Balance being Deficit Carried to Capital Fund		(55,244,087.30)	(147,423,773.77)

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.-40255
PLACE : RANCHI
DATE: 31.03.2017

(Signature)
Asstt. Registrar

(Signature)
Dir., Registrar

(Signature)
Prof. U.K. (Admin)

(Signature)
Director

SCHEDULE - 7 - ACADEMIC RECEIPTS

PARTICULAR		Current Year	Previous year
FEES FROM STUDENTS			
1	Academic		
a	Admission Fee	882,300.00	54,800.00
b	Application Fee	163,070.00	144,650.00
c	Computer Fee	1,518,469.00	1,160,000.00
d	Grade Card Fee	23,700.00	41,100.00
e	Library Access Fee	1,518,469.00	1,166,640.00
f	Registration/Enrolment Fee	297,693.00	269,880.00
g	Seat Rent	2,589,251.00	2,023,100.00
h	Tuition Fees	26,923,223.50	20,564,713.00
	Total (A)	33,916,125.50	25,444,883.00
2	Examinations		
a	Examination Fee	759,234.00	657,120.00
b	Examination Fee-Banarsi University	2,328,000.00	2,216,280.00
	Total (B)	3,087,234.00	2,873,320.00
3	Other Fees		
a	Fines & Penalties	239,700.00	82,835.00
b	Gymkhana Fee	455,540.00	353,400.00
c	Hostel Fee	415,900.00	1,014,800.00
d	Hostel Maintenance Fee	4,673,408.00	3,364,530.00
e	Identity Card Fee	350.00	300.00
f	Internet Access Fee	455,540.00	375,000.00
g	Medical Fee	759,234.00	666,750.00
h	Placement Fee	-	4,200.00
i	Poor Boy Fee	-	60.00
j	Practical Fee	-	8,400.00
k	Sports Fee	-	3,150.00
	Total (C)	6,999,672.00	5,873,425.00
	GRAND TOTAL (A+B+C)	44,003,031.50	34,191,548.00





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SCHEDULE - 8 - GRANTS

PARTICULAR	Govt. of India (MHRD)		Current Year Total	Previous Year Total
	Plan	Non Plan		
Receipts during the Year		100,000,000.00	100,000,000.00	
Less: Refund			100,000,000.00	

SCHEDULE - 9 - INCOME FROM INVESTMENTS

PARTICULAR	Plan		Non Plan		Current Year	Previous Year
	Plan	Non Plan	Plan	Non Plan		
1 Interest on Term Deposit with Nationalized Bank	1,299,262.00	2,038,700.00			3,337,962.00	14,558,269.88
2 Income accrued but not due on Term Deposits			1,377,365.00		1,377,365.00	1,502,489.00
Total:	1,299,262.00	2,038,700.00	1,377,365.00	3,416,065.00	4,715,327.00	16,060,758.88

SCHEDULE - 10 - INTEREST EARNED

PARTICULAR	Plan		Non Plan		Current Year Total	Previous Year Total
	Plan	Non Plan	Plan	Non Plan		
1 Interest on Saving Account with scheduled banks	506,090.00	1,421,911.00			1,930,003.00	1,958,131.00
2 Interest on Loans/Advances to Employees					130,491.00	102,528.00
Total:	506,090.00	1,421,911.00	130,491.00	2,060,534.00	2,060,534.00	2,060,659.00



SCHEDULE -11- OTHER INCOME

PARTICULAR	Current Year	Previous Year
A. Income from Land & Buildings		
1. Electricity Charges Recovered	296,206.00	276,212.00
2. Rent Recovered	165,800.00	98,090.00
3. License Fee	225,515.00	232,530.00
4. Water Charges Recovery	810.00	2,728.00
Total (A)	688,331.00	609,560.00
B. Others		
1. Others Incomes		
a) Bus Charges Recovery	16,300.00	25,645.00
b) Certificate Verification & Transcript Fee	22,250.00	14,050.00
c) Mess Fee	103,700.00	6,000.00
d) Others Income	-	4,260.00
e) Photocopy Charges	-	578.00
f) Rechecking Charges	-	1,250.00
2. Income From Consultancy	1,279,820.00	36,000.00
3. Misc. Receipts (Sale of Tender Form ,Etc)	38,624.00	6,000.00
4. RTI Fees	962.00	585.00
Total (B)	1,461,156.00	94,368.00
Grand Total (A+B)	2,149,487.00	703,928.00



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

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Salaries and Wages						
a) Salaries and Wages (Teaching & Non Teaching)	-	78,547,556.00	78,547,556.00	-	62,429,078.00	62,429,078.00
b) Salary Arrear	-	445,622.00	445,622.00	-	1,308,519.00	1,308,519.00
2. Allowance and Bonus						
	-	117,436.00	117,436.00	-	127,222.00	127,222.00
3. Retirement and Terminal Benefits						
a) Composite Transfer/TA Grant	-	34,957.00	34,957.00	-	35,092.00	36,092.00
b) Encashment of Leave	-	509,027.00	509,027.00	-	7,106,169.00	2,106,169.00
c) Leave Salary & Pension Contribution	-	423,485.00	423,485.00	-	410,179.00	410,179.00
d) Medical Allowance Arrear to Pensioner	-	-	-	-	239,560.00	239,560.00
e) Other Retirement Benefit	-	1,284,153.00	1,284,153.00	-	1,629,125.00	1,629,125.00
f) Payment of Gratuity	-	671,748.00	671,748.00	-	3,313,999.00	3,313,999.00
g) Pension	-	37,748,852.00	37,748,852.00	-	36,325,857.00	36,325,857.00
4. Leave Travel Concession facilities	-	1,036,260.00	1,036,260.00	-	1,020,249.00	1,020,249.00
5. Medical Facility	-	711,139.00	711,139.00	-	582,242.00	582,242.00
6. Children Education Allowance	-	1,061,312.00	1,061,312.00	-	902,136.00	902,136.00
7. Honorarium	-	48,065.00	48,065.00	-	48,860.00	48,860.00
8. Payment to Adhoc Staff						
a) Consultants & Contractual Staff	-	694,258.00	694,258.00	-	524,146.00	524,146.00
b) Medical Attendant	-	-	-	-	88,060.00	88,060.00
c) M/s Raj Traders- Manpower supply	-	132,815.00	132,815.00	-	3,993,377.00	3,993,377.00
d) M/s Service Master Clean Ltd., Manpower Supply	-	9,436,068.00	9,436,068.00	-	2,491,137.00	2,491,137.00
TOTAL	-	332,902,753.00	332,902,753.00	-	117,576,001.00	117,576,001.00



SCHEDULE - 13 - ACADEMIC EXPENSES

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Examination Expenses	-	2,790,884.00	2,790,884.00	-	2,394,931.00	2,394,931.00
2. Payment to Visiting Faculty	-	3,158,530.00	3,158,530.00	-	2,582,350.00	2,582,350.00
3. Stipend /Merit Cum Means Scholarship						
a) Merit-Cum-Means Scholarship	-	1,326,000.00	1,326,000.00	-	1,038,000.00	1,038,000.00
b) Scholarship to M.Tech Students	-	19,391,015.00	19,391,015.00	-	18,683,750.00	18,683,750.00
c) Stipend to Advanced Diploma Course Students	-	2,871,400.00	2,871,400.00	-	3,808,253.00	3,808,253.00
d) Stipend to PhD Scholars	-	3,848,386.00	3,848,386.00	4,253,705.00	-	4,253,705.00
4. Student Welfare Expenses						
a) NIFT Student Gymkhana	-	-	-	-	126,793.00	126,793.00
b) Student Medical Reimbursement	-	93,165.00	93,165.00	-	65,208.00	65,208.00
c) Students Recreation Activities	-	50,860.00	50,860.00	-	44,182.00	44,182.00
5. Laboratory & Workshop Expenses	-	809,839.00	809,839.00	-	530,705.00	530,705.00
6. Participation in Seminar & Conferences	-	46,143.00	46,143.00	-	82,980.00	82,980.00
7. Seminar/Workshop/Conference Expenses	-	259,019.00	259,019.00	-	214,189.00	214,189.00
8. Subscription/Membership Expenses	-	69,290.00	69,290.00	-	59,104.00	59,104.00
9. Other Academic Expenses	-	53,000.00	53,000.00	-	-	-
TOTAL	-	34,767,531.00	34,767,531.00	4,253,705.00	29,630,445.00	33,884,150.00



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SCHEDULE - 14 - ADMINISTRATIVE AND GENERAL EXPENSES

PARTICULARS	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
A) Infrastructure						
a) Electricity & Power						
a) D.G. Set Fuel Expenses	-	528,128.00	528,128.00	-	444,103.00	444,103.00
b) Jhankhand Biji Vitran Nigam Ltd.	-	7,908,510.00	7,908,510.00	-	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	-	51,804.00	51,804.00
b) Municipal Tax	-	400,000.00	400,000.00	-	400,000.00	400,000.00
B) Communication						
a) Telephone, Fax and Internet Charges						
a) M/s BSNL	-	375,257.00	375,257.00	-	366,468.00	366,468.00
b) M/s Ernet	-	120,474.00	120,474.00	-	132,559.00	132,559.00
c) M/s Software Technology Parks of India	-	233,529.00	233,529.00	-	277,454.00	277,454.00
d) Other Mobile & Landline	-	15,881.00	15,881.00	-	19,551.00	19,551.00
e) BSNL Internet Leased Line	-	1,145,000.00	1,145,000.00	-	-	-
b) Postage & Stationery Expenses	-	57,288.00	57,288.00	-	92,747.00	92,747.00
C) Others Expenditure						
a) Advertisement & Publicity						
a) M/s ABP Pvt. Ltd.	-	183,063.00	183,063.00	-	336,283.00	336,283.00
b) M/s Bennett Coleman & Co. Ltd.	-	3,530,960.00	3,530,960.00	-	599,000.00	599,000.00
c) M/s Employment News	-	46,769.00	46,769.00	-	32,375.00	32,375.00
d) M/s Hindustan Media Ventures Ltd.	-	1,183,776.00	1,183,776.00	-	159,598.00	159,598.00
e) M/s HT Media Ltd.	-	238,998.00	238,998.00	-	1,758,021.00	1,758,021.00
f) M/s Neutral Publishing House Ltd.	-	201,960.00	201,960.00	-	92,400.00	92,400.00
g) M/s D B Corpn Ltd.	-	223,997.00	223,997.00	-	-	-

Contd...





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a) The Indian Express (P) Ltd	-	136,000.00	136,000.00	-	-	-
b) Hospitality Expenses	-	983,403.00	983,403.00	-	1,052,315.65	1,052,315.65
c) Internal & CAG Auditor Remuneration	-	120,372.00	120,372.00	-	282,813.00	282,813.00
d) Magazine/Journals/News Paper/Subscriptions	-	6,397.00	6,397.00	-	27,125.00	27,125.00
e) Printing & Stationary (Consumption)	-	432,164.00	432,164.00	-	570,842.00	570,842.00
f) Rajbhasha Activities Expenses	-	70,061.00	70,061.00	-	75,810.00	75,810.00
g) Security Expenses						
i) Jharkhand Home Guards		6,070,015.00	6,070,015.00		4,916,260.00	4,916,260.00
h) Sitting Charges for Meetings	-	71,000.00	71,000.00	-	367,000.00	367,000.00
i) Travelling & Conveyance	-	2,125,753.34	2,125,753.34	-	4,581,733.00	4,581,733.00
jj) Website Development Expenses	-	-	-	-	165,971.00	165,971.00
k) Legal Expenses	-	173,250.00	173,250.00	-	164,850.00	164,850.00
l) Bank Charges	-	2,278.46	2,278.46	-	4,546.00	4,546.00
m) Miscellaneous Expenditure	-	458,782.00	458,782.00	-	5,966.00	5,966.00
n) Medical Facility Expenditure	-	105,897.00	105,897.00	-	-	-
TOTAL	-	25,200,766.80	25,200,766.80	-	24,571,230.65	24,571,230.65





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SCHEDULE-15 - TRANSPORTATION EXPENSES

PARTICULAR	Current Year		Previous Year	
	Plan	Non Plan	Plan	Non Plan
1. Vehicles (Owned by Institutions)				
a) Insurance Expenses	-	154,476.00	-	79,203.00
B) Running Expenses (Fuel)	-	544,566.00	-	466,469.00
C) Vehicles Repairs & Maintenance	-	317,798.00	-	105,181.00
2. Vehicles Hiring Expenses				
	-	100,971.00	-	99,929.00
Total	-	1,117,801.00	-	750,782.00

SCHEDULE-16 - REPAIRS & MAINTENANCE

PARTICULAR	Current Year		Previous Year	
	Plan	Non Plan	Plan	Non Plan
1. Annual Maintenance Cost				
a) AMC of DG Set	-	41,400.00	-	40,320.00
b) AMC of Photocopier	-	46,926.00	-	49,834.00
c) AMC of Water Purifiers	-	9,310.00	-	101,700.00
d) AMC of Induction Furnace	-	13,740.00	-	-
2. Building Maintenance				
	-	1,214,976.00	-	1,942,178.00
3. Cleaning Material & Services				
	-	3,894,354.00	-	3,962,684.00
4. Book Binding Charges				
	-	-	-	56,680.00
5. Computer Maintenance				
	-	290,915.00	-	118,076.00
6. Electrical Maintenance				
	-	481,422.00	-	574,220.00
7. Furniture & Fixtures Maintenance				
	-	48,367.00	-	223,059.00
8. Gardening				
	-	45,096.00	-	84,023.00
9. Office Equipments Maintenance				
	971,038.00	-	-	76,726.00
10. Water Filtration Plant Maintenance				
	971,038.00	6,086,466.00	-	7,229,500.00
Total				
	971,038.00	7,057,504.00	-	7,229,500.00



SCHEDULE-17 - PRIOR PERIOD EXPENSES

PARTICULAR	Current Year			Previous Year		
	Plan	Non Plan	Total	Plan	Non Plan	Total
	1. Academic Expenses	-	-	-	-	172,144.00
2. Administrative Expenses	-	-	-	-	874,238.00	874,238.00
3. Establishment Expenses	-	-	-	-	645,7325.00	6,457,325.00
4. Repair & Maintenance	-	-	-	-	1163980.00	1,163,980.00
Total	-	-	-	-	8,667,687.00	8,667,687.00





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NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY MADRAS (MADRAS-834003)

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDING 31.03.2017

	Current Year 2016-17	Previous Year 2015-16	PAYMENTS	Current Year 2016-17	Previous Year 2015-16
I. Depositing Balances:			I. Expenses		
A) Cash Balances	150,888.00	34,010.00	1. Staff Payments & Benefits (w/ Families)	112,242,595.00	116,533,755.00
B) Bank Balances			2. Non Plan Expenses	34,207,069.00	29,374,081.00
In Savings Accounts	34,275,442.25	10,008,594.43	3. Academic Expenses	21,899,310.00	20,288,043.00
SB A/c No. 2720101009839 (Plan)	0.00	32,550,388.30	4. Administrative and General Expenses	1,095,572.00	596,837.00
SB A/c No. 2720101007913 (Plan)	1,000.00		5. Repair & Maintenance	5,288,033.00	4,954,423.00
SB A/c No. 2720101009659 (OP)	3,344.28		6. Other Recd Expenses	971,088.00	8,833,405.00
SB (Holds IOB)			7. Other Expenses	4,253,705.00	4,253,705.00
II. Grants Received			II. Payments Against Sponsored Projects	3,410,934.00	
From Government of India (MHRD)			III. Payments Against Sponsored Fellowship	0.336,300.00	
1. Plan Grant	35,000,000.00		IV. Expenditure on Fixed Assets	55,745,572.00	47,258,592.00
2. Non Plan Grant	100,000,000.00		1. Plan Fixed Assets	10,214.00	406,200.00
III. Academic Receipts			2. Non Plan Fixed Assets	75,000,000.00	24,000,000.00
1. Academic	36,015,512.00	28,129,548.00	V. Term Deposits With Scheduled Banks	42,218,730.00	81,701,118.00
2. Examination	2,407,000.00		VI. Loans, Advances and Deposits:		
3. Other Fees	1,040,185.00		VI. Other Payments	817,564.00	1,194,470.00
IV. Receipts Against Sponsored Projects	3,207,279.00		VII. Closing Balances		
V. Receipt Against Sponsored Fellowship	5,328,100.00		A) Cash Balances	1,433,953.00	1,958,131.00
VI. Interest Received on			B) Bank Balances	130,481.00	0,564.00
1. On SB Account (Non Plan)			In Savings Accounts	1,275,725.00	1,289,703.00
2. On Loans & Advances			Causa Bank SB A/c No. 2720101009839 (Plan)	506,096.00	
3. On Term Deposits (Non Plan)			Causa Bank SB A/c No. 2720101007913 (Plan)	11,833.00	
4. On SB Accounts (Plan)			Causa Bank SB A/c No. 2720101009659 (OP)		
5. On Term Deposits (Plan)			Causa Bank SB A/c No. 2720101009839 (OP)		
VII. Term Deposits Encashed			SB (Holds IOB)		
1. Plan Investment	21,436,145.00	224,873,373.00	SB A/c No. 2720101009659 (OP)		
2. Non Plan Investment	133,176,234.00		SB A/c No. 2720101009839 (OP)		



VIII. Other Income					
1. other income	1,714,111.00	1,788,004.00			
IX. Miscellaneous receipts including statutory Receipts	29,930,385.00	48,547,160.49			
X. Deposits & Advances	2,416,958.00	23,360,042.40			
XI. Any Other Receipts	546,713.80	364,531.00			
	400,220,417.25	375,603,040.45		400,220,417.25	375,603,040.45

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

CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO.-402655
PLACE : RANCHI
DATE: 14.07.2017

J.P. Sharma
Asstt. Registrar

J.P. Sharma
Asstt. Registrar

J.P. Sharma
Prof. J. Sharma

J.P. Sharma
Director



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NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY KATIA, BANCHI-334003

BANK RECONCILIATION STATEMENT AS ON 31.03.2017

1) CANARA BANK SB A/C NO. 273010100939 (NON PLAN A/C)		Amount
Particulars		
Balance as per Ledger as on 31.03.2017		20,221,248.25
Add: Cheques issued but cleared as on 31.03.2017 (Amesure-I)		4,419,396.00
Less: Cheques deposited but cleared as on 31.03.2017 (Amesure-II)		27,033.00
Balance as per Bank Statement as on 31.03.2017		24,613,611.25
Difference		

2) SBI SB A/c No 36228721258(Online-Non Plan)		Amount
Particulars		
Balance as per Ledger as on 31.03.2017		21,147.70
Less: Cheques deposited but cleared as on 31.03.2017 (Clq No 729538 for Rs. 11,831.00)		11,831.00
Balance as per Bank Statement as on 31.03.2017		9,316.70
Difference		

3) CHITRA Bank SB A/c No. 102191203(Online-Non Plan)		Amount
Particulars		
Balance as per Ledger as on 31.03.2017		20,637.50
Balance as per Bank Statement as on 31.03.2017		20,637.50
Difference		

4) CANARA BANK SB A/C NO. 2730101007913 (PLAN A/C)		Amount
Particulars		
Balance as per Ledger as on 31.03.2017		0.10
Add: Cheques issued but cleared as on 31.03.2017		4,826,195.10
Date: 31.03.2017	Cheque No. 872413	Amount 1,10,100.00
31.03.2017	872421	47,10,095.00
Balance as per Bank Statement as on 31.03.2017		4,826,195.10
Difference		4,826,195.10



Annexure Forming Part of the Reconciliation Statement

ANNEXURE - I Cheques Issued but Cleared as on 31.03.2017

Date	Particulars	Chq. No.	Amount
03.03.2017	LIC PREMIUM	147071	60,515.00
10.03.2017	LEASE RENT TO HEC LTD.	210087	51,806.00
24.03.2017	ADVERTISING & PUBLICITY	279537	3,0131.00
24.03.2017	VEHICLE REPAIR & MAINTENANCE	279537	11,820.00
24.03.2017	GAM LAKHONDI YADAV (INDIVIDUAL)	279500	10,715.00
24.03.2017	SALARY AREA 4	220022	11,625.00
31.03.2017	REPAIR & MAINTENANCE OTHER	345540	12,142.00
31.03.2017	VISITING FACILITY - GOVIL PRAKASH YADAV	410578	4,570.00
31.03.2017	MINOR COMMISSIONER CHINA PAYBLE	279535	83,251.00
31.03.2017	SALARIES TO EMPLOYEES	279536	76,000.00
31.03.2017	M/S. LHMCT INJUA	279534	52,096.00
31.03.2017	TELEPHONE EXPENSES	279533	50,900.00
31.03.2017	VISITING FACILITY OF JINJUA	411028	27,680.00
31.03.2017	REPAIR & MAINTENANCE OTHER	945926	5,950.00
31.03.2017	SECURITY DEPOSIT FOR OXIDIZER	855480	55,000.00
31.03.2017	REPAIR & MAINTENANCE OTHER	945928	11,015.00
31.03.2017	CHANDY GUNJARA HAY DIPA PAYBLE	945931	50,708.00
31.03.2017	STIPEND TO PND, STUDENT	945933	75,000.00
31.03.2017	S. TALLUJANI MEDICAL REIMBURSEMENT	729579	67,663.00
31.03.2017	REPAIR & MAINTENANCE OTHER	852489	14,585.00
31.03.2017	MICELLANEOUS EXPENSES	852487	37,471.00
31.03.2017	MISCELLANEOUS EXPENSES	852488	1,730.00
31.03.2017	VISITING FACILITY GOVIL PRAKASH YADAV	852486	18,500.00
31.03.2017	VEHICLE REPAIR & MAINTENANCE	852486	27,327.00
31.03.2017	ASHOK SINGH - END	852484	40,000.00
31.03.2017	WAG CONSTRUCTION - END	852485	40,000.00
31.03.2017	MAJUNWADI BEL VITRON ARIAM LTD.	229933	1,603,860.00
31.03.2017	REPAIR & MAINTENANCE OTHER	852482	15,890.00
31.03.2017	BURNING EXPENSES OTHER	145538	30,560.00
31.03.2017	DEPT. REPAIR FACILITY PAYMENT	145536	15,250.00
31.03.2017	AMC OF WATER PURIFIERS	145537	9,310.00
31.03.2017	UNIVERSITY KUNJAL VISITING FACILITY	345535	1,486.00
31.03.2017	M/S. B.L. GOPAL BUILDING MAINTENANCE	852471	1,87,120.00
31.03.2017	AMC OF PHOTOCOPIER	145534	1,011.00
31.03.2017	REPAIR & MAINTENANCE OTHER	145532	1,200.00
31.03.2017	M/S. B.L. GOPAL BUILDING MAINTENANCE	145533	14,733.00
31.03.2017	PRINTING & STATIONERY DONATION	145528	24,130.00
31.03.2017	STATE SCHOLARSHIP FOR STUDENTS	145531	31,800.00
31.03.2017	HIMANT KUMAR GUPTA - KUNJAL	145529	16,275.00
31.03.2017	REPAIR & MAINTENANCE OTHER	145530	12,011.00
31.03.2017	ADVERTISING & PUBLICITY	852481	22,348.00





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31.03.2017	M.V. RAD PHYSICAL TRAINER	855476	7,560.00
31.03.2017	REPAIR & MAINTENANCE OTHER	855480	11,935.00
31.03.2017	OTHER COMPUTER MAINTENANCE	855478	8,700.00
31.03.2017	REPAIR & MAINTENANCE OTHER	855479	4,900.00
31.03.2017	OTHER COMPUTER MAINTENANCE	855477	12,194.00
31.03.2017	D.G. SET FUEL EXPENSES	855475	50,320.00
31.03.2017	ADVERTISEMENT & PUBLICITY	855473	386,600.00
31.03.2017	INTERNET EXPENSES	855474	1,150,000.00
31.03.2017	ADVERTISEMENT & PUBLICITY	855472	17,639.00
31.03.2017	SEMINAR/WORKSHOP EXPENSES	729537	40,150.00
31.03.2017	REPAIR & MAINTENANCE OTHER	729540	57,544.00
31.03.2017	VEHICLE REPAIR & MAINTENANCE	729538	11,833.00
31.03.2017	CLEANING MATERIAL & SERVICES	729539	49,791.00
31.03.2017	HEMANT KUMAR GUPTA (CANTEN)	729530	2,820.00
31.03.2017	RUNNING EXPENSES (FUELS)	729531	54,922.00
31.03.2017	TRAVELLING & CONVENIENCE	729525	3,768.00
31.03.2017	B. MALIK-CPDA PAYABLE	729527	47,362.00
31.03.2017	REPAIR & MAINTENANCE OTHER	729526	8,852.00
31.03.2017	CHAIR HIRE CHARGES	729524	9,504.00
Total:			4,419,386.00

ANNEXURE - II : Cheques deposited but cleared as on 31.03.2017

Date	Particulars	Chq. No.	Amount
01.01.2017	ELECTRIC CHARGES	475276	5,420.00
31.03.2017	U.K. GHOSH-LTC ADVANCE	095492	1,389.00
31.03.2017	ELECTRICITY CHARGES-BSNL	105385	4,674.00
31.03.2017	ELECTRICITY CHARGES-CANARA BANK	322514	6,060.00
31.03.2017	K.K. SINGH -ICCLINUS ADVANCE	190344	9,485.00
Total:			27,033.00



NATIONAL INSTITUTE OF FOUNDRY AND FORGE TECHNOLOGY

HATIA, RANCHI-834003

Schedule 1B

SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS (FY: 2016-17)

A- SIGNIFICANT ACCOUNTING POLICIES

A) GENERAL

The Financial Statements 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. NIFTT- General Provident Account and Technical Education Quality Improvement Programme-NIFTT. The Annual Accounts of the Institute for FY 2016-17 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, Shri Sri Bhawan, New Delhi vide No. 29-4/2012 IFO dated 17th April, 2015.

SIGNIFICANT ACCOUNTING POLICIES

1. Accounting Conventions:

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.



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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 irreplaceable, 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 Written Down Value 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%
Sewage & 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 tradeable 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 EVERY DATE

FOR: MANMOHAN SINGH & CO. (CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)

MEMBERSHIP NO-402655

PLACE: BANGALORE

DATE: 14.07.2017



[Signature]
Asstt. Registrar

[Signature]
Dy. Registrar

[Signature]
Prof. / VC Admin

[Signature]
Director



ANNUAL REPORT 2016-17



8- 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. 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. 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).
3. **Expenditure in Foreign Currency**
NIL
4. 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.
5. Previous year's Figures have been regrouped /rearranged wherever found necessary.
6. schedule 1 to 18 are annexed to and bears an integral part of Balance Sheet as at 31st March 2017 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: RAJCHH

DATE: 14.07.2017



J.P. Sharma
Asstt. Registrar

J.P. Sharma
Dr. Registrar

J.P. Sharma
Prof. I/C Admin

J.P. Sharma
Director

**GENERAL PROVIDENT FUND ACCOUNT
FOR THE FINANCIAL YEAR 2016-17**



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ANNUAL REPORT 2016-17



NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT BALANCE SHEET AS AT 31st MARCH, 2017

Previous Year	Liabilities	Current Year	Previous Year	Assets	Current Year
55,833,239.00	GPF	64,077,415.00	50,192,240.75	Investment in Term Deposit	66,057,400.00
	Opening Balance	55,833,239.00		203040100221172	8,280,494.00
	Add: Subscription	9,367,000.00		203040100221172	8,280,495.00
	Add: Advances Recovered	163,051.00		270382000004/3	5,777,898.00
	Less: Advances	45,000.00		271040100144/3	13,872,823.00
	Less: Withdrawals	5,078,000.00		2730401001627/3	13,789,785.00
	Less: GPF Final settlements	81,780.00		2741401001844/4	6,350,571.00
	Add: Interest Credited	4,668,404.00		30155723633501	5,665,333.00
	Closing Balance	64,077,415.00		Accrued Interest	3,374,000.00
12,557,417.04	Interest Reserve	13,755,570.29	3,337,904.00	Cash at Bank	
	Opening Balance	12,557,417.04		Canara Bank SB A/c No. 2730101007115	8,401,385.29
	Add: Excess of Income over Exp	1,198,153.25	4,560,511.29	Total	77,832,985.29
	Closing Balance	13,755,570.29	68,390,656.04		
68,390,656.04	Total	77,832,985.29	68,390,656.04		

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

CA. I.P. SHANMUGA (PARTNER)
MEMBERSHIP NO.-417355
PLACE: RANCHI
DATE: 14.07.2017



Diwan
Acht. Registrar

Dr. Registrar

Prof. W. (Admin)

17-07-17
Director

NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY

HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2017

EXPENDITURE	Current Year	INCOME	Current Year
Interest credited to GPF Account	4,668,404.00	Interest Earned on Investment. Interest received on FDR Add: Interest accrued on 31.03.2017 Less: Interest Accrued on 31.03.2016	5,601,255.25
Excess of Income over Expenditure transferred to GPF Interest Reserve	1,198,113.25	Interest on Saving Bank Account	285,302.00
Total	5,866,517.25	Total	5,886,557.25

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

CA. J.P. SHARMA (PARTNER)

MEMBERSHIP NO. 407655

PLACE: RANCHI

DATE: 14/07/2017



(Signature)
Asstt. Registrar

(Signature)
Dy. Registrar

(Signature)
Prof. V.C. (Admin)

(Signature)
Director



ANNUAL REPORT 2016-17



NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT RECEIPT AND PAYMENT ACCOUNT FOR FINANCIAL YEAR ENDED 31st MARCH 2017

RECEIPTS	Current Year	PAYMENTS	Current Year
Opening Balance			
Canara Bank SB A/c No. 2730101007115	4,560,511.29	GPF Advance	45,000.00
GPF Subscription	9,367,000.00	GPF Final Settlement	811,280.00
GPF Advance recovery	143,052.00	GPF Withdrawal	5,078,000.00
Interest on Saving Bank Account	265,302.00	Closing Balance	8,401,585.29
Total	14,335,865.29	Total	14,335,865.29
		Canara Bank SB A/c No. 2730101007115	

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



CA. J.P. SHARMA (PARTNER)
MEMBERSHIP NO. 40265
PLACE - RANCHI
DATE: 14.07.2017

(Signature)
Dr. Registrar

(Signature)
Asstt. Registrar

(Signature)
Prof. VC (Admin)

(Signature)
Director

NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY

HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT DETAILS OF TERM DEPOSITS AS ON 31.03.2017

Sl.	Account Number	Bank	Principle	Interest Accrued
1	2030401002217/2	Canara	8,280,494.00	549,348.00
2	2030401002218/2	Canara	8,280,495.00	549,348.00
3	270302000004/3	Canara	5,777,898.00	120,632.00
4	2730401001442/3	Canara	13,872,823.00	1,039,694.00
5	2730401001627/3	Canara	13,789,786.00	220,637.00
6	2730401001848/4	Canara	6,390,571.00	60,018.00
7	30155723633(SBI)	S.B.I	9,665,333.00	834,323.00
Total:			66,057,400.00	3,374,000.00



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**NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY
HATIA, RANCHI-834003**

Bank Reconciliation Statement as on 31.03.2017

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

Particulars	Amount
Balance as per Ledger as on 31.03.2017	8,401,585.29
Balance as per Bank Statement as on 31.03.2017	8,401,585.29
Difference	-



**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT
FOR THE FINANCIAL YEAR 2016-17**



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NATIONAL INSTITUTE OF FOUNDRY AND FORGE TECHNOLOGY

HATIA, RANCHI-834003

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

BALANCE SHEET AS AT 31st MARCH, 2017

SOURCES OF FUNDS	Schedule	Current Year 2016-17	Previous Year 2015-16
CORPUS/CAPITAL FUND	1	46,862,897.39	50,940,395.93
TOTAL		46,862,897.39	50,940,395.93
APPLICATION OF FUNDS	Schedule	Current Year 2015-16	Current Year 2015-16
FIXED ASSETS	2	45,002,659.28	49,680,157.82
CURRENT ASSETS	3	705,484.11	705,484.11
LOANS, ADVANCES & DEPOSITS	4	1,154,754.00	1,154,754.00
TOTAL		46,862,897.39	50,940,395.93

AS PER OUR REPORTS ON GIVEN DATE

FOR: MANMOHAN SINGH & CO. (CHARTERED ACCOUNTANTS)



CA. J.P. SHARMA (PARTNER)

MEMBERSHIP NO.:AU2655

PLACE - RANCHI

DATE: 14.07.2017

J.P. Sharma
Chartered Registrar

J.P. Sharma
Dy. Registrar

J.P. Sharma
Prof. J.P. Sharma

J.P. Sharma
17-07-17

NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY

HATIA, RANCHI-834003

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31st MARCH, 2017

	INCOME	Schedule	Current Year	Previous Year
GRANTS		-	-	-
OTHER INCOME		-	-	-
	TOTAL(A)		-	-

	EXPENDITURE	Schedule	Current Year	Previous Year
OTHER EXPENSES			4,077,498.54	4,450,404.63
DEPRECIATION		2.	4,077,498.54	4,450,404.63
	TOTAL(B)		(4,077,498.54)	(4,450,404.63)

Balance Being Deficit Carried to Capital Fund

AS PER OUR REPORTS ON EVEN DATE

FOR MANMOHAN SINGH & CO. (CHARTERED ACCOUNTANTS)

CA. J.P. SHARMA (PARTNER)

MEMBERSHIP NO. 40355

PLACE : RANCHI

DATE : 14.07.2017



(Signature)
Chartered Registrar

(Signature)
Dr. Manoj Kumar

(Signature)
Prof. V.C. Mishra

(Signature)
17-07-17
Director



ANNUAL REPORT 2016-17

SCHEDULE - 1 - CORPUS/CAPITAL FUND

Particulars	Current Year	Previous Year
Balance at the beginning of the year	50,940,395.93	55,390,800.56
Add: Contributions towards Corpus/Capital fund	-	-
Add: Grants Received	-	-
Add: Excess of Income over Expenditure transferred from the Income & Expenditure Account	-	-
TOTAL	50,940,395.93	55,390,800.56
Deduct: Deficit transferred from Income & Expenditure Account	(4,077,498.54)	(4,450,404.63)
Balance at the year end	46,862,897.39	50,940,395.93





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SCHEDULE - 2 - TEGIP 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	40,896,624.80	-	-	40,896,624.80	3,264,529.98	37,542,094.82
2	Furniture, Fixtures & Fittings	575,389.80	-	-	575,389.80	43,154.24	532,235.57
3	Vehicles	258,828.81	-	-	258,828.81	25,882.88	232,945.93
4	Lib. Books & Scientific Journals	7,439,314.40	-	-	7,439,314.40	74,393.44	6,995,382.96
	Total (C)	49,080,157.82	-	-	49,080,157.82	4,077,498.54	45,002,659.28

SCHEDULE - 3 - CURRENT ASSETS(OB)

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 - (OANS & ADVANCES)(OB)

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





भारतीय लेखा तथा लेखा परीक्षा विभाग
आर्यसम प्रसाद विदेशीय लेखापरिषद् (सेन्ट्रल) लखनऊ



INDIAN AUDIT & ACCOUNTS DEPARTMENT
Office of the Principal Director of Audit (Central) Lucknow

No PDAC/LKO/SAR-NIFFT/2016-17/318

Dated: January 30, 2018

To

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

Sub: *Separate Audit Report on the accounts of the National Institute of Foundry and Forge Technology, Hatia, Ranchi for the year 2016-17.*

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 2016-17 for information and necessary action.

2. 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.

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

4. 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.

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

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

Yours faithfully,

Encl: - As above.

Principal Director of Audit (Central)

In Register
Date: 02-02-18



Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of the National Institute of Foundry and Forge Technology, Hatia, Ranchi for the year ended 31 March 2017

We have audited the Balance Sheet of the National Institute of Foundry and Forge Technology, Hatia, Ranchi as at 31 March 2017 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 ii) 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-cum-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.D-2 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.

iii. In our opinion, proper books of accounts and other relevant records except schedules of Receipts & Payments Account have been maintained by the National Institute of Foundry and Forge Technology (Institute), Hatia, Ranchi as required under Section 20 (i to ii) 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.

iv. We further report that:

A. BALANCE SHEET

A.1. Liabilities

A.1.1 Current Liabilities (Schedule -2)-Rs217.72 lakh

A.1.1.1 As per agreement Elsevier B.V. provided online access to E Journals (Science Direct Collection) from January 2016 to December 2016 for USD 66614.86. Although the payment was not released till March 2017, the Institute did not make provision for the liability of USD66614.86 amounting to Rs 43.19 lakh. This resulted in understatement of liability and intangible assets by Rs 43.19 lakh.

A.1.1.2 The Institute did not make provision for payment of unpaid liability of February 2017 against supply of man power (Rs 6.21 lakh) by Service Master Clean Ltd and security (Rs 4.95 lakh). This resulted in understatement of Current Liabilities and deficit by Rs 11.16 lakh.

A.1.1.3 The Institute did not pay or make provisions for water charges for using water supplied by HEC since financial year 2011-12. The Institute is required to make provision for all known liabilities even though the amount could not be ascertained with substantial accuracy.



A.1.1.4As per Schedule-2, Current Liabilities consisted Rs 6698 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.

A.2 Assets

A.2.1 Capital Work-in-Progress (Schedule-3) - Rs 908.87 lakh

A.2.1.1 The Institute paid advance of Rs 683.32 lakh to CPWD for civil works sanctioned during 2015-16 and accounted for the amount mentioned above as Work-in-Progress. Records, however, revealed that CPWD executed works of Rs385.18 lakh only up to March 2017. Thus, the Capital Work-in-Progress was overstated and CPWD Deposit was understated by Rs 298.14 lakh.

A.2.1.2 During the year, the Institute advanced Rs 225.55 lakh to CPWD (Electrical) for execution of electrical works and without obtaining Form 65 booked the entire amount under the head Capital Work-in-Progress instead of CPWD Deposit. The irregular treatment resulted in overstatement of capital work-in-progress and understatement of current assets by Rs 225.55 lakh.

A.2.2 Investment (Schedule 4) – Rs 483.91 lakh

A.2.2.1As per Format of Accounts introduced by MHRD, investment in TDR of unspent balance is to be exhibited under the head 'Current Assets'. The Institute, however, exhibited the Fixed Deposits of Non-plan fund of Rs 483.91 under the head 'Investment' instead of 'Current Assets'. This resulted in overstatement of investment and understatement of current assets Rs 483.91 lakh.

A.2.2.2Physical verification of FDR certificates of GPF revealed that the Institute has shown investment in GPF amounting to Rs 660.57 Lakh; however investment as per FDR certificates was Rs 651.67 Lakh. This resulted in overstatement of investment and understatement of accrued interest by Rs 8.90 Lakh.

A.2.3 Current Assets (TEQIP) – Rs 7.05 lakh

A.2.3.1 TEQIP Account was closed on 31.03.2009. The Balance Sheet and Receipts and Payments Account of TEQIP showed cash balance of Rs 1255 and Bank balance of Rs 704129.11 as on 31.03.2017. The Institute, however, could not make available cash book, Bank Book or Bank Statement in support of existence of above amount. As such existence of Rs 705414.11 is doubtful.

A.2.4 Loans, Advance and Deposits (Schedule-6) –Rs6225.26 lakh

A.2.4.1 The Loans, Advances and Deposits depicted advance to CPWD amounting to Rs 5992.17 lakh against work sanctioned up to 2014. The works entrusted to CPWD amounting to Rs5403.69 lakh were completed and handed over to the Institute but these works were not capitalized under the head 'Buildings' or 'Work-in-Progress'.

This resulted in overstatement of advance to CPWD and understatement of fixed assets by Rs 5403.69 lakh.

A.2.4.2 A sum of Rs65.22lakh (under the head FLC) was shown in the Loans, Advances and Deposits since 2006. Records regarding FLC were not produced to audit by the Institute. As the recovery of these advances is doubtful, suitable provision/adjustment should be made for old outstanding.

A.2.4.3 Records revealed that Bank deducted TDS of Rs 0.86 lakh on interest on investment (Certificate No 27302070000004/2) from 2013 to 2015 which was not accounted for in Annual Accounts for the year 2013-14 and 2014-15. During the year, the Bank deducted TDS amounting to Rs 1.28 lakh from interest on investment, which was also not exhibited in the Balance sheet as receivables. This resulted in understatement of receivables by Rs 2.14 lakh and prior period income by Rs 0.86 lakh and income by Rs 1.28 lakh.

A.2.4.4 There was short realisation of interest of Rs8.55 lakh on Fixed Deposit due to deduction of TDS. The Institute, however, did not account for the interest in its accounts. This resulted in understatement of income and current assets by Rs 8.55 lakh.



A.2.5 Loans, Advances and Deposits (TEQIP)–Rs11.55 lakh

Although TEQIP project had been completed and closed on 31 March 2009, loans and advances amounting to Rs11.55 lakh were lying unadjusted (Rs 11,23,225 advance to EDCIL Ltd. (2008-09) and Rs31,529 advance to NIFFT (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 As per Format of Accounts prescribed by MHRD for Central Higher Education Institute, depreciation on fixed assets is to be charged as per prescribed rate on straight line method. The Institute is charging depreciation on fixed assets on written down value method at the rate prescribed for straight line method.

The impact of deviation from prescribed method is that the current year deficit is understated by Rs 167.86 lakh.

Thus, the irregular treatment resulted in understatement deficit for the year 2016-17 and overstatement of assets by Rs 167.86 lakh.

C. Accounting Policy and Notes to Accounts

C.1 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 November 2017. This was not mentioned even in the Notes on accounts.

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

C.3 The Institute had not shown unspent grant in current liabilities and provisions as prescribed in MHRD format.

D. General

D.1 Advance toSuppliers: Rs13.68 lakh

The advances of Rs13.68 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 advances.

D.2 Non-production of records

The Following Records were not produced to Audit

- I. Cash Book and Bank Statement of
 - I. Canara Bank SB Account No. 102191103
 - II. SBI A/c No. 36228721268
 - III. Canara Bank SB A/c NO. 273010109959
 - IV. SBI, Hatia Account.
2. Purchase file regarding Fixed Assets during the year.
3. Water Charges File.
4. Form 65 regarding electrical Work.
5. Receipts regarding Fee
6. Settlement of O/s Previous para of PDA (C) Lucknow, Br. Ranchi
7. Advance Register
8. Expenditure control Register
9. Medical claim Register
10. Library Accession Register
11. Investment Register
12. Register of contracts
13. Grants-in-aid Register
14. Lapsed cheques were not made available on record.

E Grants- in-Aid

The Institute received Grants Rs1300.00 lakh (Non-plan Rs1000.00 lakh and Plan Rs300.00 lakh) from MHRD during the financial year 2016-17. The internal income of the Institute was Rs529.28 lakh (Non-plan Rs 511.23 lakh and Plan Rs 18.05 lakh). The unspent balance of previous year was Rs1787.66 lakh (Plan Rs614.62 lakh and Non Plan Rs1173.04lakh). Thus, the Institute had total fund of Rs3616.94 lakh (Plan Rs932.67 lakh and Non plan Rs2684.27 lakh). Out of which the Institute utilized a sum of Rs2075.43 lakh (Plan Rs71.41 lakh and Non-plan Rs2004.02 lakh) and leaving of balance of Rs1541.51 lakh (Plan Rs 861.26 lakh and Non-plan Rs 680.25 lakh) as unutilized amount as on 31.03.2017.



F 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 Receipts & Payments 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 2017, 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: 3-4-18

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

Principal Director of Audit (Central), Lucknow

Annexure - I 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 :

- GPF cash book revealed that Rs. 84.02 lakh (including Rs. 45.61 lakh as on 31.03.2016) was lying on 31.03.2017 in Saving Bank Account. After assessing the requirement, rest amount should have been invested in term deposit to get higher rate of interest. This indicated that the Institute has no cash management policy.
- According to Rule 14 (i) of the Rules and Regulation of Memorandum of Association (MOA) of NIFFT, The Board shall ordinarily meet once in every three months. Records revealed that during the year 2016-17 only two meetings of BOG were held. No action was taken to hold the meeting quarterly as per rule. This was in violation of the provision of the MOA.
- 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 transfer policy prevail especially the employees dealing with cash, valuables, stores and stock.
- Physical progress of the work in - progress of buildings was not monitored by the concerned authority, resulting in delays in completion of these buildings.
- The institute did not maintain / prepare Asset Register. In absence of Asset register the existence of Asset as shown in Balance Sheet of Main Account and TEQIP could not be vouched safe.
- 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.
- No physical verification was done of Fixed Assets and Inventory during the year.



- Institute is not regular in payment to statutory dues.
- Cheque issue register were not being maintained properly.
- Acknowledgements of receipts were not attached with vouchers.

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 since a long time. 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 2016-17, the Institute paid penalty of Rs. 14,042 to the Income Tax Department.

Gymkhana Activities





Gymkhana Building