



INTERNATIONAL CONFERENCE ON ADVANCES IN FOUNDRY AND FORMING TECHNOLOGY

November 18 & 19 | 2024

NIAMT (Formerly NIFFT), Ranchi



www.icafft2024.com

Jointly Organized By



Department of Foundry and Forge Technology
National Institute of Advanced Manufacturing Technology, Ranchi
Deemed to be University (Under Distinct Category)



The Institution of Engineers (India)
Jharkhand State Centre
Under Aegis of Mechanical Engineering Division Board, IEI

Knowledge Partner



DANIELI CORUS B.V.

About NIAMT, Ranchi

"Established in 1966 by Govt. of India and UNDP-UNESCO, National Institute of Foundry and Forge Technology (NIFFT) is a society for providing quality manpower in manufacturing technology. It is governed by a board of governors with representatives from various sectors. Recently, it has been renamed as National Institute of Advanced Manufacturing Technology (NIAMT). NIAMT is a leading institute for teaching, training, research, consultancy, and information services in manufacturing and related fields. It aims to achieve excellence in technical education and disseminate state-of-the-art knowledge and expertise in the field. For more information please visit: www.niamt.ac.in



About Dept. of Foundry and Forge Technology

The Foundry Technology and Forge Technology Department independently came into existence in 1966 at the time of inception of Institute. The department offers an Advanced Diploma Courses and M. Tech course in Foundry Forge Technology. In 2022, they merged and started a B. Tech course in Production and Industrial Engineering with honours in Foundry and Forge Technology.

About The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform for sharing professional interest. IEI has membership strength of above 0.8 million. Established in 1920, with its headquarter at 8 Gokhale Road, Kolkata-700020, IEI has served the engineering fraternity close to a century. During this period of time, IEI has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India which has been accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating through its 125 Centres located across the country and 6 overseas chapters. Besides, IEI has bilateral agreements with about 31 international bodies and membership of another 8 international bodies of the developed nations across the globe.

Being recognized as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, IEI promotes the cause of research and development by providing Grant-in-Aid support to undergraduate, post graduate students and PhD Research Scholars of Engineering Institutions and Universities.

IEI has been recognized as Scientific and Industrial Research Organisation (SIRO) by the Ministry of Science & Technology, Government of India and besides conducting its' own research, provides Grant-in-Aid to UG/PG/PhD students of Engineering institutes and Universities. IEI holds the International Professional Engineers (IntPE) Register for India under the global International Professional Engineers Alliance (IntPEA). The institution also awards the Professional Engineers (PE) Certification.

IEI in collaboration with Springer regularly publishes peer-reviewed international journal in five series, namely, Series A, Series B, Series C, Series D and Series E covering fifteen engineering disciplines.

About Jharkhand State Centre

The Ranchi Sub-Centre of The Institution of Engineers (India) was founded on 23rd July 1961 and over the years, the subcentre was upgraded to Local Centre on 5th August 1983 and elevated to State Centre on 30th March 2001 after the creation of Jharkhand State. This centre was always striven to increase its various activities so as to cater fully the needs of the engineering fraternity at Ranchi. This centre has been actively engaged in articulating various technical matters, and on the engineer's role in society and as managers. In addition to various technical activities, this centre has been actively associated in organizing cultural programmes by the wives of the members (EWA) to inculcate bond among members and their families. All Statutory Days such as Engineers day, World Water Day, World Telecommunication and Information Society Day, World Environment Day, etc. are celebrated every year with family members.

From a little hut to a campus with a three storied building, two conference halls, each capable of seating 100 people, office, library, guest an auditorium for 300 people, 3 classroom for continuous education has been an impressive journey. This has been possible only due to the dedicated contributions of esteemed members, State Government, Public Sector Undertakings and Private Sector Organisations.

Jharkhand State Centre has been designated as 'A' category centre by The Institution of Engineers (India) with around 6000 corporate members and 7500 student members. This centre has been adjudged as 'Best Centre' for All Round Performance in the years 2007-08, 2008-09, 2010-11, 2015-16, 2016-17 and 2017-18 by The Institution of Engineers (India). Jharkhand State Centre has received All India Beat Technician Chapter Award for last four years in a row i.e. 2016-17, 2017-18, 2018-19 and 2019-20.

For more details please visit: www.ieijscjharkhand.org

About Danieli Corus B.V.

Danieli Corus has firm roots in the IJmuiden steel plant, where ironmaking started in 1924 and operations quickly developed towards world benchmark for Blast Furnace Ironmaking and BOF Steelmaking.

In 1977, it was decided to initiate an engineering and contracting company, offering services to the global iron and steel industry. In 1999, 50% of the shares in the company were sold to the Italian equipment manufacturer Danieli & C Officine Meccaniche S.p.A, with the remaining 50% being transferred in 2015.

Throughout more than 30 years in the steel industry, Danieli Corus has worked with leading steel producers on all continents. We are committed to our clients' performance and embrace their targets as our own. Based on our leading technologies for Blast Furnace Ironmaking and BOF Steelmaking we bring steel producers around the world the highest operational as well as economic benefits at maximum sustainability.

Themes and Sub-themes

In an era of globalization, the dynamics of production and manufacturing are undergoing a significant transformation. The complexity associated with transformation leads us to explore and understand the evolving paradigm. Foundry and forming industries are one of the main contributors of metallic components for various industries, from automotive to medicine, from aerospace to the energy sector. For manufacturing a component, understanding of various interlinked field are required. Hence this conference is not limited to foundry and forming only and will act as a single place to address various related issues. ICAFFT 2024 is meticulously designed to bring together renowned academicians, honored researchers from distinguished institutions, industry leaders and practitioners as well as doctoral students.

Papers are called in the following tracks, but not limited to:

- Advanced Foundry Processes and Technologies
- Advanced Forming Processes and Technologies
- Advanced Materials and Technologies
- Simulation and Modelling
- Industry 4.0 and Smart Manufacturing
- Environmental Sustainability and Emission control
- Quality Control and Inspection Techniques
- Innovations in Tooling and Equipment
- Advancements in Heat Treatment
- Advanced Machining Processes and Technology
- Advances in Furnace Control, Energy Optimization and Maintenance
- Mechanization, Automation, Robotics and Digitization
- Education and Training in Foundry, Forming and allied Advanced Manufacturing

Call for Papers

All interested participants are invited to contribute technical/research papers and case studies detailing concepts, innovations, ideas, or practical experiences for oral and poster presentations. Abstracts are invited of approximately 200 words and should preferably be within 300 words in format provided by the conference committee. For more information, please visit website www.icafft2024.com

Abstraction Submission Starts	30 th June 2024
Abstraction Submission End	15 th August 2024
Manuscript Submission Starts	01 st July 2024
Manuscript Submission End	30 th September 2024
Early Bird Registration	05 th August 2024
Registration Deadline	30 th September 2024
Conference Dates	18-19 th November 2024

Publication

Peer-reviewed and selected papers will be considered for publication in SCI or SCOPUS indexed journals/ conference proceedings (like lecture notes in mechanical engineering, Institution of Engineers etc.). List will be informed later. Authors must submit original and unpublished research work that is not under consideration for publication elsewhere. Authors should check for plagiarism before submitting their work ensuring it is preferably below 15%. The plagiarism criteria are subject to change based on the requirements of the publishers. In this regard, decisions of the publication committee are final. For publication related queries contact us at publication.icafft@niamt.ac.in

Registration

The registration fee for the Conference will cover participation in Technical Sessions, Conference Proceedings, Printed materials, Conference kit, Lunch, Tea/coffee, Conference Banquet, etc

Category of Delegate	National Delegate	International Delegate
Delegates from Academia/Institutes	Rs. 5000	US\$ 95
Delegates from Industries	Rs. 6000	US\$ 100
Research Scholars and Students	Rs. 4000	US\$ 80
Conference Participation without Publication and KIT	Rs. 2000	US\$ 50
Spouse/Accompanying person/co-authors (Without KIT)	Rs. 2000	US\$ 50

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Account Details

Account Name: NIAMT IRG FUND ACCOUNT

Account No: 2730101006939

Branch: CANARA Bank, NIFFT Ranchi

IFSC: CNRB0002730



About Ranchi

Ranchi is the capital of state of Jharkhand, which is endowed with rich iron ore and coal deposits. With its rich mineral resources and industrial base, Ranchi is rapidly developing into an important industrial sector in India. The city is surrounded by thick forests and beautiful natural waterfalls and still unspoiled by modern commercialism. Ranchi is located in eastern part of India, around 400 km from Kolkata. It has very pleasant and cold climate throughout the year and the temperature in November may vary between +21°C and +26°C.

Travel

Domestic airlines operate between Ranchi and other major cities of India such as New Delhi, Mumbai, Kolkata, Bengaluru, Hyderabad, Raipur, Bhubaneswar and Patna. Ranchi is also well connected by rail and road with all major cities of the country, namely Bengaluru, Bhubaneswar, Chennai, Hyderabad, Jamshedpur, Jaipur, Kolkata, Mumbai, Nagpur, Patna, Raipur, New Delhi, Vishakhapatnam, etc.

Accommodation

Ranchi offers a wide range of accommodation to suit every budget. Both economy and luxury class hotels are located within 5 km from the directly or through Conference Venue. Delegates are requested to book the accommodation in advance to get preferred choice.

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For more details: www.icafft2024.com