

The Institution of Engineers (India)

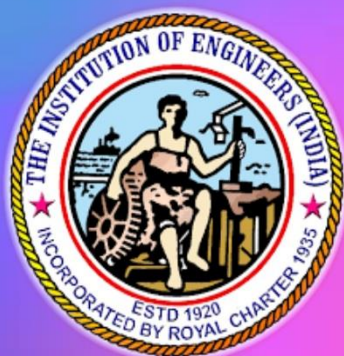
"A Century of Service to the Nation"

38th National Convention of Metallurgical and Materials Engineering and

Conference on Capacity Building in Process Metallurgy

Sub Title: Advances in Materials in
Automation of Industrial Processes and Green
Technology

JULY 26 & 27, 2025



Knowledge Partners

IIT Kharagpur
IIT Madras
IIT Kanpur
IIT Bhubaneswar
IIT BHU
IIT Indore
IMMT Bhubaneswar
CSIR-AMPRI-Bhopal
DRDO
NML Jamshedpur
Clemson University, USA

Organized by

The Institution of Engineers (India)
ROURKELA LOCAL CENTRE

*in association with National Institute of Technology
Rourkela and SAIL, Rourkela Steel Plant*

Venue

Rourkela Local Center Conference Hall + Dept. of MM, NIT Rourkela

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 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 Organization (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 THE ROURKELA LOCAL CENTER

The Rourkela Local Centre of the Institution of Engineers (India) was established on 24th November, 1964 to build up the personalities and to exchange the ideas amongst various Scientist, Engineers and Technocrats for promotional activities of different engineering professions and to promote various engineering and technical activities with the patronage of Rourkela Steel Plant and National Institute of Technology, Rourkela, the most ideal combination for a local Centre of the largest professional body of the country. Since then it has grown in size as well as has fulfilled the basic goals of IEI. Its strength as on 31.06.2024 is 1131 Corporate Members. The centre has been actively engaged in voicing its concerns to face challenges to emphasize on the engineers' role in society and engineers as managers. In addition to having regular paper meetings in all fields of engineering and technology, the Local Centre in the past had successfully organized three National Conventions and several All India Seminars and Science Exhibition for school children.

The Local Centre was functioning at the Regional Engineering College, Rourkela from its inception. However, with the savings from the AMIE coaching classes over a long period and grant from HQ and patronage of members, it was possible to start the construction of its own building which was inaugurated on 28th March, 1993. However, the Seminar Hall could be completed in February 2007 and the guest house could be completed in 2012. In recent times the Local Centre has made some additions to its facilities viz., separate room for office bearers, one more room added to the guest house and one more lecture hall to facilitate technical activities.

We have been consistently receiving cooperation and patronage from the authorities of Rourkela Steel Plant and National Institute of Technology, Rourkela to pursue our technical activities. We have been organizing Engineers' Day every year in a grand way with the in association with Rourkela Steel Plant. The various departments of National Institute of Technology, Rourkela are also extending their association to organize the national level seminars and conferences. Rourkela Local Centre takes this momentous occasion to express its heartfelt gratitude to these two illustrious organizations for their continuous patronage.

THEME

The purpose of capacity management is to ensure resources are as productive as possible. And the capacity-building is the process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world process metallurgy. By preventing a dependency relationship on outsiders from forming, capacity building encourages specialist/professional to take action on their industrial issues. Capacity building fosters a sense of ownership and empowerment, so that process metallurgical industry community gain greater control over their own future development. Capacity building is responsible for strengthening economies, governments, institutions and individuals through education, training, mentoring, orientation and the mobilization of resources.

The proposed national convection objective is to gather process metallurgists to discuss various challenges associated with processing of metals and responsible for the plant growth. Professor from IITs, NITs and Professional from industries related to metallurgical engineering, materials engineering and other interdisciplinary engineering will come to fulfil the proposed objectives.

SUB-THEMES (PARALLEL SESSIONS)

- **Processing of Materials**
- **Advanced Materials & Alloy Development**
- **Degradation of Materials & Fracture**
- **Energy Materials**
- **Additive Manufacturing**
- **Furnace technology & Extractive Technology**
- **Green Technology & Sustainable Materials**
- **Aerospace and Defense Materials**
- **Biocompatible Materials**
- **Waste Utilization**
- **Ferrous Metallurgy: Challenges & Opportunities**

CALL FOR PAPERS

Prospective authors are invited to submit manuscripts reporting original unpublished research and recent developments in the topics related to the session theme of the Convention. Authors should submit an Abstract up to 300 words in the link: <https://forms.gle/Wu5HA44KESAWZ71s8.or> or send the abstract to editor.ajitbehera@gmail.com. After both acceptance of the abstract and completion of the registration process, author can submit the full length paper in the web link to be updated in (www.cbpm2025.com). All presented papers will be published in the international journal (SCI/Scopus Journal/Conference proceedings), as below:



IMPORTANT DATE FOR PAPER PUBLICATION

Abstract Submission	30 th May, 2025
Acceptance of Abstract	01 June, 2025
Registration date	20 th June 2025
Submission of Full Paper	15 th July, 2025
Communication of accepted paper	28 th June, 2025

MEMBER/DELEGATES REGISTRATION FEE

	Early bard (before 20 th June, 2025)	Late (After 20 th June, 2025)
IEI Member	INR 4130 /- (=3500+18 % GST)	INR 4720 /- (=4000+18 % GST)
NON IEI Member	INR 5310 /- (=4500+18 % GST)	INR 5900 /- (=5000+18 % GST)
Research Scholar/Student	INR 4720 /- (=4000+18 % GST)	INR 5310 /- (=4500+18 % GST)
Spouse of Delegate	INR 2950 /- (=2500+18 % GST)	INR 3540 /- (=3000+18 % GST)

SPONSORS

The sponsors are entitled to free delegates one full page advertisement and a logo display

Platinum Sponsor	(INR 3,00,000/-+18 % GST)	12 free Delegates & Full Page Advertisement
Gold Sponsor	(INR 2,00,000/-+18 % GST)	8 free Delegates & Full Page Advertisement
Silver Sponsor	(INR 1,00,000 /- +18 % GST)	6 free Delegates & Half Page Advertisement
Bronze Sponsor	(INR 75,000 /-+18 % GST)	5 free Delegates

SOUVENIR ADVERTISEMINETS

you may also give wide publicity of your products in our souvenir that will be released on the occasion. the following are the advertisement rates:

Outside back cover page (Multicolour)	INR 50,000 /- + 5 % GST (4 Free delegates)
Inside front & Back Cover (Multicolour)	INR 40,000 /- + 5 % GST (3Free delegates)
Inside full page (Multicolour)	INR 25,000 /- + 5 % GST (2 Free delegates)
Inside full page (Black & White)	INR 15,000 /- + 5 % GST (2 Free delegates)
Half page (Colour)	INR 10,000 /- + 5 % GST (1 Free delegates)
Half page (Black & White)	INR 5,000 /- + 5 % GST (1 Free delegates)

An exhibition is planned to be arranged as part of this conference for the two days. Stalls of size 10 feet x 10 feet will be provided for display of various products related to the theme of the conference. One free registration will be provided for the sponsors of each exhibition stall. Additional details will be provided later. Twenty numbers stall will be provided as per the first come first service basis within date 1st July 2025.

Stall size	Amount	Free Delegates
10 x 10 feet	Rs 40,000 /-+18 % GST	1

TRAVEL & ACCOMMODATION

All delegates are advised to make their own arrangements for travel, boarding & lodging. All the contact information of nearer hotel to the venue will be provided prior to the convention date.

REGISTRATION KIT & FOODING

Registration kit containing Trolley bag, Conference Memento, Abstract Book, Pendrive containing useful materials, and other will be added as per the sponsorship. Two days working lunch & gall dinner for first day will be arranged.

NATIONAL ADVISORY COMMITTEE

Chairman: Er. VB. Singh, FIE, President, IE(I)

Co-Chairman: Er. Kishore Kumar Mehrotra, FIE, Chairman MMDB

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Dr. Nutan Kumar Dash, Imd. Past Vice President, IE(I) & Council member, Odisha
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Dr. Golaph Mohammad Chowdhury, FIE, Member, MMDB
Prof. (Dr.) Kamalesh Kumar Singh, FIE, Member, MMDB
Er. Santosh Kumar Polaki, FIE, Chairman, Rourkela Local Center
Prof. (Dr.) Ajit Behera, MIE, Honorary Secretary, Rourkela Local Center

ORGANISING COMMITTEE

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Organising Secretary Prof.(Dr.) Ajit Behera, Honorary Secretary, Rourkela Local Centre

Local Center Prof. A. Patra, MIE
Coordinators Prof. S. K. Dinda, MIE
Prof. J. Singam, FIE

Er. Santosh Ku. Sahoo, MIE
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Prof.(Dr.) Rachna Sehrawat, MIE, Committee Member, IEI Rourkela Local center
Prof.(Dr.) Satosh Kumar Sahoo, FIE, Committee Member, IEI Rourkela Local center
Prof.(Dr.) Ramesh Kumar Mohapatra, Committee Member, IEI Rourkela Local center
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Prof.(Dr.) Ratnakar Swain, MIE, Committee Member, IEI Rourkela Local center
Er. Chitrasen Tajan, MIE, Committee Member, IEI Rourkela Local center
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Er. Adhir Kumar Behera, FIE, Committee Member, IEI Rourkela Local center
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Prof.(Dr.) Anshuman Patra, Dept. of MM, NIT Rourkela
Prof.(Dr.) Archana Mallik, Dept. of MM, NIT Rourkela
Prof.(Dr.) Arnab Sarkar, Dept. of MM, NIT Rourkela
Er. Atanu Bhowmik, Professor in Practice & Former DIC, SAIL-RSP
Prof.(Dr.) Bankim Chandra Ray, Dept. of MM, NIT Rourkela

Prof.(Dr.) Debasis Chaira, Dept. of MM, NIT Rourkela
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Prof.(Dr.) Swapan Ku. Karak, Dept. of MM, NIT Rourkela
Prof.(Dr.) Syed Nasimul Alam, Dept. of MM, NIT Rourkela

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Chairman : Prof.(Dr.) Debasis Chaira, HOD, Metallurgical & Materials Engg., NIT Rourkela
Co Chairman : Prof.(Dr.) Ajit Behera, MIE, Honorary Secretary, IE(I) Rourkela Local Center
Members : Er. Adil Mohammed, FIE, Committee Member, IE(I) Rourkela Local Center
Er. Diptankar Mahapatra, FIE, Committee Member, IE(I) Rourkela Local Center
Prof.(Dr.) Ratnakar Swain, MIE, Committee Member, IE(I) Rourkela Local Center
Dr. Anil Kumar Barik, FIE, Committee Member, IE(I) Rourkela Local Center
Er. Chitrasen Tajan, FIE, Committee Member, IE(I) Rourkela Local Center

ADVISORY COMMITTEE

Dr. R. Nuggehalli, Professor, New Jersey Institute of Technology, USA and Co-Founder & Director, Renewable Energy Products Manufacturing Corp, USA
Dr. Er. Rama Rao Karri, Faculty of Engineering, Universiti Teknologi Brunei, Brunei Darussalam.
Dr. Amir Mostafaei, Assistant Professor, Illinois Institute of Technology, Chicago, USA
Dr. Zayna Connor, Subject Matter Expert for Shaped Castings, Wrought Aluminum Materials Science and Metallurgy, Chicago, USA
Dr. Ram Gupta, Professor, AVP for Research and Support, Department of Chemistry, Pittsburg State University, Pittsburg, KS 66762
Dr. Santosh Kumar Verma, Associate Professor, Yulin University of Technology, Shaanxi, China
Dr. Luke P. Lee, Professor, Harvard Medical School, Harvard University, California, USA
Dr. Dillip Kumar Panda, Department of Materials Science & Engineering, Clemson University, USA
Dr. Tuan Anh Nguyen, Senior Principal Research Scientist, Vietnam Academy of Science and Technology, Vietnam
Dr. Behnaz Rezaie, Assistant Professor, Mechanical Engineering Technology, University of Pittsburgh
Dr. John S McKillop, Principal Consultant, Texas, USA

PAYMENTS

All payments are to be made through Cheque/ NEFT/Demand Draft, drawn in favour of “The Institution of Engineers (India), Rourkela Local Centre” payable at Rourkela.



Bank Details:

Name of Beneficiary: The Institution of Engineers (India) Rourkela Local Centre
Name of Bank: State bank of India
A/c No: 00000010138951036
IFSC Code: SBIN0002109

CONTACT

Name of the contact person : Dr Ajit Behera, Honorary Secretary
Rourkela Local Centre
Address of the Centre : The Institution of Engineers (India)
Phone : 9938383765
Email : rourkelalc@ieindia.org

SIGHT VISIT NEARER TO THE VENUE

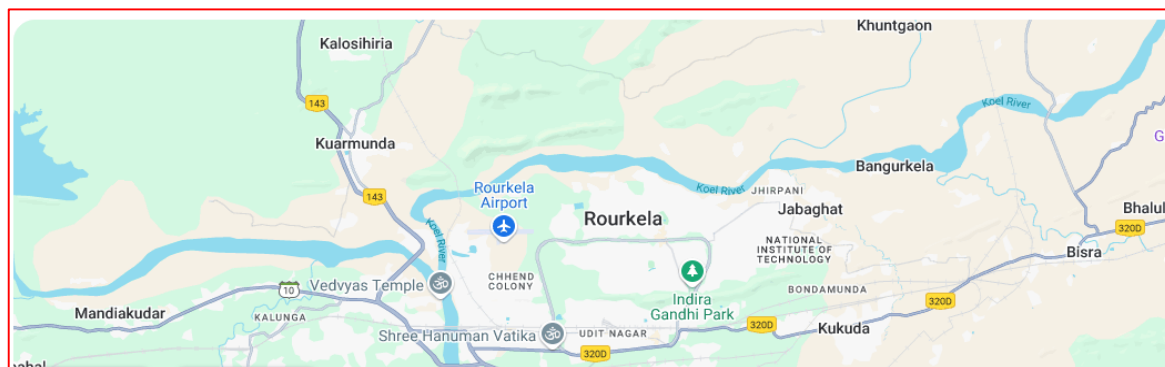
Transportation will be arranged as per the advanced payment basis at the registration counter.



CLIMATE OF ROURKELA IN JULY

The average temperature in Rourkela in July for a typical day ranges from a high of 31°C to a low of 24°C. Some would describe the temperature to be very warm.

GEOGRAPHIC LOCATION



Abstract Submission: <https://forms.gle/3ckUdu1xU94nTM6Z6>

Sponsor Registration: <https://forms.gle/cwReuQv2sx6pheNR7>

Final Registration: <https://forms.gle/xPpoLCmsCf8BRZ5E9>

38th National Convention of Metallurgical and Materials Engineering
&
Conference on “Capacity Building in Process Metallurgy”

The Institution of Engineers (India), Rourkela Local Centre

26-27th July, 2025

REGISTRATION FORM / ADVERTISEMENT BOOKING FORM

The Honorary Secretary
The Institution of Engineers (India)
Rourkela Local Centre
NIT Rourkela Campus,
Odisha-769008

Name Memb No.....

Designation

Organization

Address for Communication

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Phone.....(O).....(R) (Mob).....

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DD/Cheque No Dated.....for Rs

Rupees (.....)
.....) is enclosed towards

Sponsorship /Advertisement/Delegate fee.

Transaction ID/UTR No./ PaymentReference No. _____

Transaction Date_____

Amount (Rs) _____

Date

Signature

*DD / Cheque drawn in favour of “**The Institution of Engineers (India) Rourkela Local Centre**” Odisha. Out station Cheques should include Rs.50/- extra towards Bank Charges. At par Cheques are acceptable.



Prof. (Dr.) Ajit Behera
Honorary Secretary, IEI Rourkela
 (Asst. Prof., Dept. of MM, NIT Rourkela)
ajit.behera88@gmail.com
 Ph: 9938383765



Er. Santosh Ku. Polaki
Chairman, IEI Rourkela
 (General Manager, SAIL, RSP)
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 Ph: 8895500340

Rourkela Local Centre website: <https://ieirkl.in/>