

# RAISE 2023



Contact Us:

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## One-day National Conference on **Recent Advancements in Iron & Steel Industries and Emerging Areas**

**24<sup>th</sup> February 2023**

Jointly Organized by



## About the Conference

The iron and steel industry forms the backbone of Indian economy as it renders that support to other secondary industries, thereby facilitating the national growth and development. On the global front India holds a competitive advantage over others driven by two main factors, namely abundance of iron ore reserves and easy access to low-cost manpower. At present, India is recognized as the second largest producer of crude steel (133.59 MT of crude steel production in 2022) and placed fifth among the top countries having iron ore reserves. With India targeting to increase the production figure to 300 MT by 2030, it calls for obvious attention to bring down the extent of greenhouse gases that are released to the environment due to production of steel. In this regard, the path from blue steel and grey steel to finally green steel production should be gradual as the conventional process of making steel is very much established. Along with reducing carbon footprints towards attaining net zero by 2050, the focus is also on production of in-house quality steel and other high-duty products that could curb the import costs. Hence, proper waste collection, management, and recycling practices have to be adopted right from the mining operation to production of steel. Wastes, such as, overburden materials, slime, lean-grade ores, oil sludge, bag house dust, etc., can be taken care of with niche value recovery through efficient recycling and recovery techniques.

In this context, CSIR-Institute of Minerals and Materials Technology and The Indian Institute of Metals, Bhubaneswar chapter have joined hands to organise a one-day National conference on 'Recent Advancements in Iron & Steel industries and Emerging areas' (RAISE-2023) to discuss new developments and practices in both metallurgical and minerals industries. This conference targets to bring together experts from industries and academia via series of lectures, and also young researchers and students to contribute their innovative research works through posters.

## About CSIR-IMMT

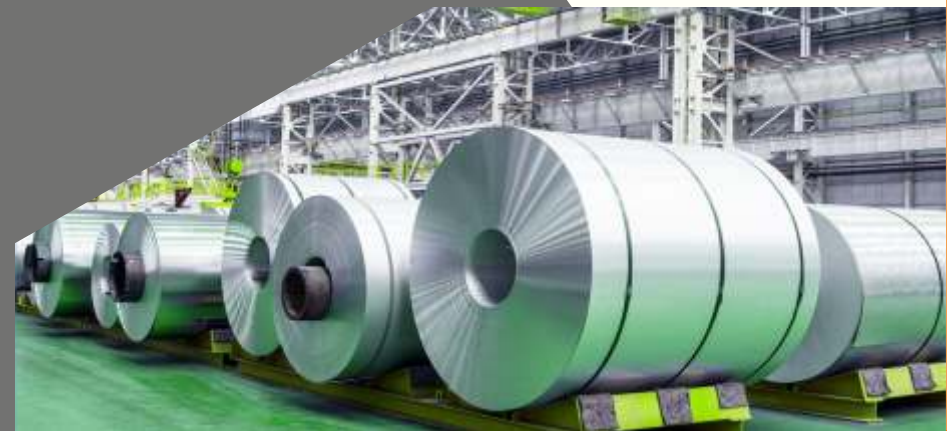
CSIR-IMMT was established on 13.04.1964 as Regional Research Laboratory, Bhubaneswar in the Eastern part of India under the aegis of the Council of Scientific and Industrial Research (CSIR), New Delhi. It was renamed in 2007 with a renewed research focus and growth strategy to be a leader in the areas of Mineral & Material domain. The institute has expertise in conducting basic research and technology-oriented programs in a wide range of subjects to address the R&D problems of Mining, Mineral and Metals industries and ensure their sustainable development. For the last one decade, the main thrust of R&D at CSIR-IMMT has been to empower Indian industries to meet the challenges of globalization by providing advanced and zero waste process know-how and consultancy services for commercial exploitation of natural resources. Visit website <https://www.immt.res.in>

## About IIM-Bhubaneswar Chapter

The Bhubaneswar Chapter of the Indian Institute of Metals (IIM) came into existence in 1976 with its office at RRL, Bhubaneswar (Presently named CSIR-Institute of Mineral and Materials Technology). The chapter actively contributing for the development of metallurgy and materials professionals working at various organizations in and around Bhubaneswar such as IDC (IDCOL) Odisha, FACOR, IMFA, IPICOL, NALCO, OMC, JSPL, JSW, Tata Steel, etc. Visit website <https://www.immbbsr.org>

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**ORGANIZERS**



# Conference Theme



## A: Ferrous/Non Ferrous

- Advances in reducing carbon in clean production technologies
- CO<sub>2</sub> capture from blast furnaces and other units
- Electrification of processes for better energy efficiency
- Indian roadmap for CCUS
- Green Steel: Present status and technical constraints
- Plasma processing of ores (high & lean grade) and industry waste
- Corrosion & coating and powder metallurgy
- Utilization of scrap and low emission practices
- Mineral processing and beneficiation
- Recycling and utilization of mineral processing plant tailings
- Adoption of zero waste practice through value addition

## B: Emerging areas

- Additive manufacturing
- Advanced functional and composite materials
- Ultra high temperature materials
- Industry 4.0
- Materials for energy and energy storage
- Waste recycling for value recovery



# Creative Team



**Dr. G. Narahari Sastry**  
**Patron**



**Er. Hemanta Kumar Tripathy**  
**Chairman**



**Dr. Pravas Ranjan Behera**  
**Convener**



**Dr. Ajit Panigrahi**  
**Co-Convener**



**Mr. Deepak Kumar Sahu**  
**Treasurer**





# Meet The Speakers

## Guest of Honour



**Dr. N. C. Pal**  
Engineer-in-Chief (Design)  
PWD, Govt. of Odisha

## Keynote Speaker



**Mr. Markus Reifferscheid**  
Sr. Vice President, R&D  
SMS Group GmbH

## Speakers



**Prof. Ajay Kumar Shukla**  
IIT Madras



**Dr. Bharat Kumar Davda**  
MD, Tara International



**Prof. Soobhankar Pati**  
IIT-Bhubaneswar



**Prof. Maneesh C. Srivastava**  
AMITY University, Lucknow



**Dr. Manila Mallik**  
VSSUT, Burla



**Dr. Samik Nag**  
Head, Iron making & Research Group  
Tata Steel



**Mr. Jitendra Kumar**  
NPM, Anton Paar India Pvt. Ltd.

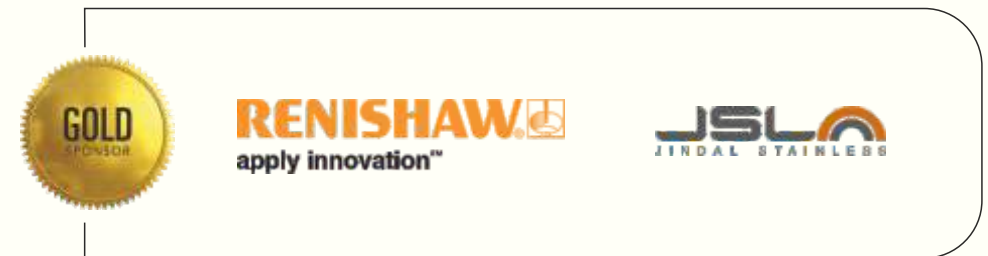


**Dr. Monalisa Mishra**  
SOA Deemed to be University



**Dr. Bhagyadhar Bhoi**  
Chief Scientist & Head, AMT Dept.  
CSIR-IMMT, Bhubaneswar

# Sponsorship



## Venue of the Conference



CSIR-Institute of Minerals & Materials Technology  
Bhubaneswar - 751 013, Odisha, INDIA

## Payment Details

Registration fee (inclusive of 18% GST) may be paid in the form of Cheque/ Demand Draft in favour of 'IIM Bhubaneswar Chapter' payable at Bhubaneswar. In case of wire transfer, following details may be used:

Bank name: State Bank of India  
Branch: IMMT Branch, Bhubaneswar  
A/C No: 39796021050  
IFSC Code: SBIN0007499

### Registration

Registration starts : **23.01.2023**

Registration ends : **20.02.2023**

## Important Dates

### Abstract for Poster Presentation

Submission of abstracts : **02.02.2023**

Acceptance of abstracts : **20.02.2023**



## Programme **Schedule**

- 8.30 - 9:30AM:** Registration confirmation and Collection of welcome kit
- 9:30 - 11:10AM:** Inaugural Session
- 11:50 - 1:20PM:** Technical Session I    **12:15 - 1:15PM:** Poster Presentation
- 1:20 - 2:20PM:** Lunch Break
- 2:20 - 4:15PM:** Technical Session II
- 4:15 - 4:45PM:** Felicitation of Dr. Bhagyadhar Bhoi
- 4:45 - 5:25PM:** Valedictory Session
- 5:25 - 6:00PM:** Photo session, High tea and Networking



## About **Bhubaneswar**

Bhubaneswar is best known by the name temple city of Odisha and is the capital of the state. It encompasses magnificent sculptures and architectural heritage which hold a significant position in the tourism map of India. Well-connected by air, rail and road to all major Indian cities, the city serves as the central hub of Odisha.

This eastern Indian city with a rich history has undergone eye-catching developments to become the major industrial centre and a prominent R&D hub in recent times. Bhubaneswar also offers a very rich treasure in the tourist basket with the major tourist attractions being the 13<sup>th</sup> century magnificent Konark, Sun temple (a world heritage site declared by UNESCO), Lord Jagannath Temple- Puri, Dhauligiri- Shanti Stupa (also known as peace pagoda), Raja-Rani temple, Lingaraj Temple, Nandankanan National Park, Chilka lake and Puri Beach, and many more.

