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ABOUT BENGALURU

Bengaluru, formerly known as Bangalore, blends a rich history and vibrant culture with modern cosmopolitan influences. Known for its pleasant climate and greenery, the city has evolved into a dynamic metropolis. Often called the "Silicon Valley of India," Bengaluru is a major IT hub of companies like Infosys, Wipro, and TCS. This has fostered a thriving ecosystem of startups and innovation, significantly contributing to India's GDP, employment, and exports. Bengaluru is also a key player in aerospace development, home to Hindustan Aeronautics Limited (HAL), the Indian Space Research Organisation (ISRO), and other aerospace companies.

ABOUT IISc

The Indian Institute of Science (IISc) was established in 1909 by a visionary partnership between the industrialist Jamsetji Tata and the Mysore royal family. Over the last 115 years, IISc has become India's premier Institute for advanced scientific & technological research and education. The Institute has over 42 academic departments and centres that come under six divisions. IISc's research output is diverse, interdisciplinary and cuts across traditional boundaries. With over 5,000 students and 481 faculty members, IISc excels in scientific research and innovation.

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STIS-V 2025

FIRST ANNOUNCEMENT

Fifth International Conference on the Science & Technology of Ironmaking and Steelmaking (STIS-V)

9 - 12 DECEMBER, 2025

ABOUT STIS SERIES

This Conference series was initiated in India when there was dwindling manpower and lack of technology development in the area of iron and steel making. The first Conference entitled Advances in the Theory of Ironmaking and Steelmaking (ATIS) was held in 2009 at the Indian Institute of Science (IISc), Bengaluru, focussing on the theoretical aspects of iron- and steel making, as envisioned by Prof. A. Ghosh, Prof. Emeritus, Indian Institute of Technology (IIT), Kanpur, India. The overwhelming success achieved by its organization, resulted in the Conference becoming a quadrennial event and was rechristened as Science and Technology of Ironmaking and Steelmaking (STIS) to include technology. The Second, Third, and Fourth STIS Conferences were organised at Jamshedpur in 2013 (by National Metallurgical Laboratory & Tata Steel), IIT Kanpur in 2017, and IIT Bombay in 2022, respectively.

ABOUT STIS-V 2025

The 21st century is witnessing significant development in technology and an ever-increasing growth in the manufacturing and infrastructure sectors. With this swift pace of development, there is an equivalent increase in the demand forecast for steel production all over the world. In addition, there is a huge impetus towards the iron and steelmaking processes becoming more sustainable by reducing harmful emissions and the carbon footprint. Consequently, researchers in the process metallurgy domain are continuously engaged in developing existing technologies and exploring alternatives. Keeping this view in mind, the fifth edition in the series of Science and Technology for Ironmaking and Steelmaking (STIS-V - 2025) Conference is being organised to showcase the advancements in the science and technology of ironmaking and steelmaking in different parts of the world.

CALL FOR PAPERS

Authors are requested to submit abstracts within 250 words on any aspect given in the scope of Conference. All abstracts will be peer reviewed, and the authors will be notified accordingly. The abstracts may be prepared in MS word format and sent electronically to the Conference e- mail address – **stis.mte@iisc.ac.in**

Participation of students is strongly encouraged. All student papers would be presented in dedicated poster/oral session.

CONFERENCE TOPICS

- Fundamentals of Ironmaking and Steelmaking
- Raw materials, use of low-grade ores and agglomeration
- Coke, PCI, Hydrogen, Syngas, Biomass, and other auxiliary fuels
- Blast furnace and alternative routes for the production of hot metal
- DRI/Solid-state ironmaking processes
- Primary, secondary steelmaking and clean steel technology
- Ingot, continuous casting and inclusion control
- Electric arc/Induction furnace steelmaking
- Process modelling, simulation and automation in ironmaking and steelmaking
- Energy, environment, and decarbonization in ironmaking and steelmaking
- Emerging and sustainable ironmaking and steelmaking processes
- Refractories in ironmaking and steelmaking
- Digital twins/transformation, Industry 4.0, and data analytics in ironmaking and steelmaking
- In-plant waste recycling and circular economy in ironmaking and steelmaking

IMPORTANT DATES :

Abstract submission : 30th April 2025

Acceptance of the abstract : 30th May 2025

Submission of paper/extended abstract: 30th September 2025

CONFERENCE PROCEEDINGS

Papers/extended abstract after peer-review process will be published in a Conference Proceeding. Attempts are being made to publish selected papers in identified international journals after due refereeing process as per journal requirements.

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