

5th INTERNATIONAL CONFERENCE ON ADVANCES IN STEEL, POWER AND CONSTRUCTION TECHNOLOGY

“EMERGING AND INNOVATIVE TRENDS IN THE FIELD OF STEEL, POWER AND
CONSTRUCTION TECHNOLOGIES FOR SUSTAINABLE DEVELOPMENT”

(JUNE 15-17, 2022)

IN ASSOCIATION WITH:



PUBLICATION BY:



Organised By:
OP JINDAL UNIVERSITY
OP Jindal Knowledge Park, Punjipathra
Raigarh (C.G.) PIN : 496109

ABOUT OP JINDAL UNIVERSITY

Founded by the **Jindal Education and Welfare Society, OP Jindal University (OPJU)** was set up to impart quality education to its students through a world class curriculum, the latest teaching methodology delivered by committed faculty members. The multidisciplinary university aims to develop young professionals and future leaders who will not only steer the growth and development in India, but also make a mark globally. At the core of the university's philosophy and approach lies the belief that students learn best when exposed to real world situations and when nurtured through enriching interactions with practitioners and industry leaders. OPJU believes that every student has innate potential that can be unlocked through quality teaching and mentorship. OPJU was established by an Act of Legislature in the state assembly of Chhattisgarh in 2014. It is promoted by Jindal Steel and Power Limited, India's fastest growing STEEL & POWER Company and is an industrial conglomerate of the US \$ 18 billion OP Jindal Group.

ABOUT THE CONFERENCE

After the grand success of Fourth International Conference on “ADVANCES IN STEEL, POWER AND CONSTRUCTION TECHNOLOGY” held at OP Jindal University during November 21- 22, 2019, the OP Jindal University in association with Jindal Steel & Power Limited, Raigarh India, Association for Iron and Steel Technology (AIST) USA, ASM International USA and Association of Welding Product Manufactures, is organizing the fifth international conference on Steel, Power and Construction Technology at OP Jindal University, Raigarh, Chhattisgarh, India.

This Conference will explore the new horizon of innovations from distinguished researchers, scientists, and eminent authors in academia and industry working for the advancements in Steel, Power and Construction Technology from all over the world. ICASPCT 2022 aims to bring together Academicians, Scientists, Research scholars and Students, to share and disseminate information on knowledge and scientific research works related to above topics and aims to confer the practical challenges encountered and the solutions adopted. The conference will create a path to establish a research relation for the authors and listeners with opportunities for National and International collaboration and networking among the Universities and institutions from India and abroad for promoting collaborative research and developing technologies.

It is a conference on Indian Steel, Power and Construction industries focusing upon the value enhancement from mining to steel production and delivery of the steel products to end consumers. Steel, Power and construction are the crucial and very important sectors to the development of any modern economy and is considered to be the backbone of human civilization. The level of per capita consumption of steel is treated as an important index of the level of socioeconomic development and living standards of the people in any country. Therefore, no developing country can afford to ignore these sectors of the industries. Steel industry derives its demand from other important sectors like infrastructure, power, aviation, engineering, construction, automobile, pipes and tubes etc. Thus its intense integration with other important industries makes it a strategic sector for the Governments as well as the economy as a whole.

Indian economy is rapidly growing with enormous focus on infrastructure and construction sector. Several initiatives mainly, affordable housing, expansion of railway networks, development of domestic shipbuilding industry, opening up of defence sector for private participation and the growth in the automobile sector, are expected to create significant demand for steel in the country. ICASPCT 2022 is thus, rightly positioned to lay the roadmap to the vision of balancing the supply and demand dynamics through cementing its position as the event for steel, power and construction industries. It is a convergence point for manufacturers, researchers, academician, suppliers, machinery companies, consultants, engineers, agents, traders, distributors.

OBJECTIVE

In order to explore the underlying facts, the conference has the following objectives:

- To Bring together academicians, researchers, industrialists, and stakeholders across the world on a common platform to present their findings related to research and development in the areas of steel, power, and construction technologies
- To Provide an opportunity for the participants to share their knowledge, interact with the experts of these areas, and focus on the recent advancement as well as future outlook in steel, power, and construction technology
- To stimulate the analytical skills in the core and non-core domain of the participants
- To Propagate wisdom about novel applications of steel amongst the user segments
- To Provide the pool of inventive wisdom and concepts to engrave its forte
- To Provide a bridge to all participants for association and alliance in future research activities
- To furnish a forum for conferring the further developments and demands in the industry

PARTICIPATION

OP Jindal University's 5th International Conference on “ADVANCES IN STEEL, POWER AND CONSTRUCTION TECHNOLOGY (ICASPCT-2022)” during June 15-17, 2022 is open to all academicians, industry persons and executives, policy makers, consultants, scholars, social workers and research and development community concern with construction, power and steel industries.

IMPORTANT DATES

Last date for Submission of abstracts	December 15, 2021
Confirmation of acceptance of abstracts	December 25, 2021
Submission of full length papers	February 15, 2022
Last date for registration (Early Bird)	March 05, 2022
Conference dates	June 15-17, 2022

SUBMISSION GUIDELINES

You are cordially invited to submit your Abstract and Full Length Paper to icaspct@opju.ac.in. The selected papers of the conference will be published in the **American Institute of Physics (AIP) Conference Proceedings** and **“Materials Today: Proceedings”**.

CONFERENCE VENUE : **OP Jindal University**, Raigarh (Chhattisgarh), India.

All accepted and registered papers in the conference within the scope areas of the engineering will be published in “American Institute of Physics (AIP) Conference Proceedings” and accepted papers related to the field of materials/material science/nanotechnology and related fields will be published in “Materials Today: Proceedings” which are indexed in SCOPUS (ELSEVIER), Web of Science, Inspec, Chemical Abstract Services (CAS), Astrophysics Data System (ADS).

KEY THRUST AREAS

- Advanced Engineering materials and applications
- Steel microstructures, properties and characterisation
- Advanced metal forming, Joining and Casting processes
- Coating and surface engineering in metallurgical industry
- Emerging trends in steel industry
- Energy scenario in steel industry
- Coke making, sintering, iron and steel making
- Application of AI and IOT Technologies in manufacturing
- Energy Storage Materials
- Environment Friendly Materials
- Modelling and simulation of materials and devices in steel industry
- Control and instrumentation in steel industry
- Flat and long products rolling
- Computer aided industrial design
- Automation and Robotics
- Advances in additive manufacturing
- Operations Management
- Advanced thermodynamics, Heat and Mass Transfer
- Green Technology for Power Generation
- Power Electronics and Drives
- Soft computing applications in Power System and Power Electronics
- High Voltage Engineering and insulation coordination
- Energy conservation and management
- Smart Materials and Structures in Construction
- Practices in Construction Management
- Environmental Impact Assessment (EIA) of Civil Engineering Structures
- Effect of Aggressive Environmental Conditions on Steel and Concrete Structure
- Repair Using Modern Materials and Technologies
- Solid waste and disposal
- Digital Manufacturing System
- Energy Efficient Manufacturing
- Flexible / Agile / Reconfigurable Manufacturing System
- Intelligent Manufacturing Systems
- Nanotechnology
- Other Related Topics

REGISTRATION FEE

	INDIA		ABROAD
	(Early Bird)	(Regular)	
Students (UG/PG)	₹ 2000	₹ 3000	USD \$100
PhD Research Scholars	₹ 5000	₹ 6000	USD \$150
Faculty/Academicians	₹ 8000	₹ 9000	USD \$200
Industry Personnel	₹ 12000	₹ 13000	USD \$250

"The Fee includes the Registration, Souvenir, Proceedings, Lunch, Coffee and Dinner during the Conference".

Registration fee is to be deposited into:

A/C No.: 34368061214 | IFSC Code: SBIN0012145

A/C Name: O.P. Jindal University

Bank Name: State Bank of India (SBI)

Branch Code: 12145 | Branch: SBI, Gerwani, Raigarh, INDIA.

Note: Delegates are requested to write their full name in the specified column at the time of depositing the registration fee.

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