

**CALL  
FOR  
PAPERS**



**The Institution of Engineers (India)**

*A Century of Service to the Nation*

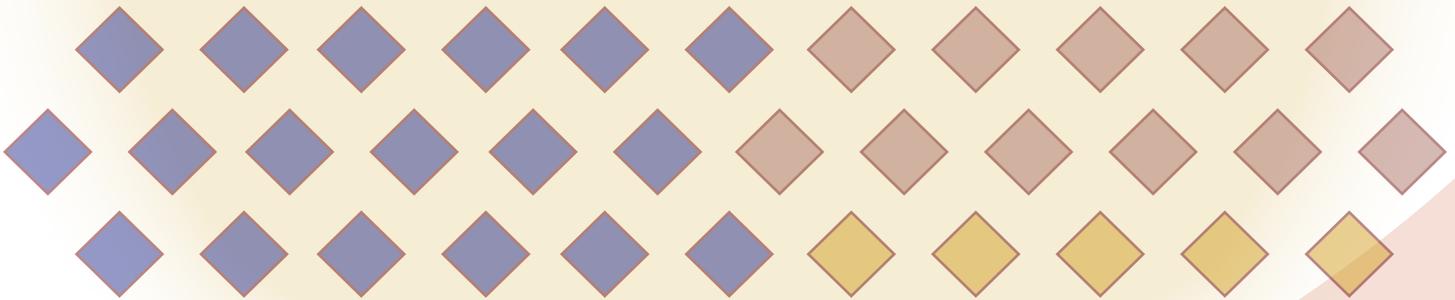


**38<sup>th</sup>**

**Indian Engineering Congress**

**December 27-29, 2023, Jabalpur, MP**

**Hosted by Jabalpur Local Centre**



*Theme*

**Reimagining Tomorrow:  
Shaping the Future through  
Disruptive and Interdisciplinary  
Technologies**

*Technical Partner*



**Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal  
(State Technological University of MP)**

*Venue:*

**Hotel Royal Orbit, Nagpur Road, Jabalpur, MP**

## About The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body in India that encompasses 15 engineering disciplines and provides engineers a global platform for sharing professional interests. IEI has a membership strength of over 9 lakhs. Established in 1920, with its headquarters at Kolkata, IEI has rendered over a century of service to the engineering fraternity of the nation. In this period of time it 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 to be accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious organization across the globe. IEI functions among professional engineers, academicians and research workers. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from 125 State/Local Centres, seven Foras located across the country and an organ viz Engineering Staff College of India (ESCI), Hyderabad and six Overseas Chapters. IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Govt. of India and provides Grant-in-Aid to UG/PG/PhD students of Engineering Institutes & Universities to conduct research and development on engineering subjects. IEI holds the International Professional Engineers (IntPE) Register for India under the global International Professional Engineers Alliance. The Institution also awards the Professional Engineers (PE) Certification.

In order to create sharp focus on National priority areas, The Institution of Engineers (India) has established the following Organ and Fora to work in close co-operation with the stake holders in the respective fields.

- **Engineering Staff College of India (ESCI)**, Hyderabad for providing continuing education and Research & Development, is an autonomous Organ of IEI.
- **National Design and Research Forum (NDRF)**, Bangalore to encourage design talents in engineering and technology.
- **National Skill Development Forum (NSDF)**, Shimla to enhance skill of engineering and technical personnel.
- **Rural Development Forum (RDF)**, Kolkata to encourage and promote multifaceted development of rural India.
- **Safety and Quality Forum (SQF)**, New Delhi to address the aspects of Safety and Quality in Engineering Profession.
- **Sustainable Development Forum (SDF)**, Patna for expression of authoritative views on technologies for sustainable development and for enunciating practical solutions to the problems faced by India.
- **Water Management Forum (WMF)**, Ahmedabad to promote and advance the engineering and practice of water resources management in its totality.

- **Disaster Awareness and Management Forum**, The Disaster Awareness and Management cell, located at IEI Uttarakhand State Centre, Dehradun, was operational since the calamity of Kedarnath shrine area in 2013 and has been extending technical co-operation and assistance during natural calamities e.g. landslide, cloud bursting, earthquake etc, keeping in close liaison with the Disaster Management Department, Government of Uttarakhand. The Council at its 709<sup>th</sup> meeting held on July 30-31, 2021 at Hyderabad decided to upgrade the Cell to Disaster Awareness and Management Forum (DAMF) of IEI.

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 15 engineering disciplines, which are Scopus Indexed.

For further details, please visit: [www.ieindia.org](http://www.ieindia.org)

## Indian Engineering Congress

The aim of the Indian Engineering Congress is to enlighten the technical fraternity about the developments in various fields of Engineering and thereby enabling them to face the future challenges and ensure development of the nation.

The Congress will provide a Forum:

- To have discussion around the theme to promote ideas, broaden operational horizon of engineers from different disciplines, and to pursue newer domains and concepts
- For exchange of information, updating knowledge and stimulating a sense of responsibility in their professional work
- To foster international and national co-operation in the engineering fields
- To inculcate and promote a growing commitment to the social objective of the profession
- To promote engineering practices that lead to sustainable development.

## Theme of the 38<sup>th</sup> Indian Engineering Congress

### Reimagining Tomorrow: Shaping the Future through Disruptive and Interdisciplinary Technologies

In a landscape of boundless innovation, the theme “**Reimagining Tomorrow: Engineering the Future through Disruptive and Interdisciplinary Technologies**” summons engineers, professionals, and scholars to not only envision a future of transformation but to intricately engineer its very fabric.

Disruption is the crucible of engineering innovation. This theme delves into the avant-garde engineering advancements reshaping industries, dismantling conventions, and crafting a narrative of progression.

The intersection of engineering disciplines cultivates fertile ground for groundbreaking innovation. This theme champions the convergence of disciplines resulting in a symphony of thought that orchestrates solutions for intricate, multifaceted challenges.

### Sub-Themes:

- ❖ Nanomaterials for Sustainability
- ❖ Biomimicry in Architecture
- ❖ Smart Energy Grids-Shaping Sustainable Power
- ❖ Additive Manufacturing Evolution
- ❖ Marine Tech for Ocean Health
- ❖ Aerospace Advancements
- ❖ Neuromorphic Computing
- ❖ Wearable Tech and Smart Textiles
- ❖ Sustainable Chemical Processes
- ❖ Materials for Extreme Environments
- ❖ Smart Infrastructure
- ❖ Circular Economy Solutions
- ❖ Secure Networks in the Digital Era
- ❖ Mining Engineering for Sustainable Resource Management
- ❖ Agricultural Engineering for Food Security

“Reimagining Tomorrow” isn’t just a theme—it’s an odyssey. It beckons engineers to pioneer the uncharted, where the interplay of disruptive technologies and interdisciplinary fusion crafts a narrative of progress. Engineers translate the abstract visions of tomorrow into tangible realities, sculpting a future that surmounts boundaries and perpetually aspires to the zenith of human innovation.

In essence, the theme encapsulates engineering’s essence: the audacity to challenge, the acumen to integrate, and the artistry to forge. It is a salute to the engineers who decipher the enigmas of today, orchestrate the symphonies of innovation, and architect a future that stands as a testament to human potential.

### Call for Papers

Engineering professionals from Industries, Academic Institutions, Research & Development Organisations, Government Departments and Entrepreneurs are invited to contribute papers pertaining to the theme and sub-themes of the Congress under each of the following 15 engineering disciplines of IEL. The papers should focus on sharing the experience, concepts, innovative ideas, research findings etc.

Following disciplines are covered

- ❖ Aerospace Engineering
- ❖ Agricultural Engineering
- ❖ Architectural Engineering
- ❖ Chemical Engineering
- ❖ Computer Engineering
- ❖ Civil Engineering
- ❖ Electrical Engineering
- ❖ Electronics and Telecommunication Engineering
- ❖ Environmental Engineering
- ❖ Marine Engineering
- ❖ Mechanical Engineering
- ❖ Metallurgical & Materials Engineering
- ❖ Mining Engineering
- ❖ Production Engineering
- ❖ Textile Engineering

The above areas are indicative. Authors may also submit papers on other areas based on the main theme of the 38<sup>th</sup> Indian Engineering Congress

### Submission of Synopsis / Full Text

The authors are requested to submit the synopsis and full text (post-acceptance of synopsis) through e-mail to [icttech@ieindia.org](mailto:icttech@ieindia.org)

### Nodal Dates (Revised)

Synopsis	31 <sup>st</sup> October 2023
Intimation of Acceptance of Synopsis	10 <sup>th</sup> November 2023
Submission of full-text	20 <sup>th</sup> November 2023
Intimation to Author with Session Details	30 <sup>th</sup> November 2023

### Guidelines for Authors

Authors intending to submit a paper for 38<sup>th</sup> Indian Engineering Congress are advised to adhere to the guidelines as mentioned below. The papers not conforming to these guidelines may not be considered for review / publication. The full text of accepted papers will be published by a reputed publisher in the **Technical Volume of the 38<sup>th</sup> Indian Engineering Congress (with ISBN)**.

### Preparation of Full Text of Paper

1. **Synopsis of Paper** within 500 words with maximum five key-words have to be submitted along with **Full Text**. The author should mention the Engineering Discipline of the paper on the top right hand corner.
2. Papers should be camera-ready in MS-Word format, not exceeding 3000 words in length and should not carry more than 5 illustrations /photographs.
3. The language of the Publication is English. The mode of presentation should be in third person.

4. SI units should be used wherever possible. Other units, if used, should be given only in parentheses preceded by SI units.
5. Mathematical symbols should be typed and care should be taken to differentiate between similar characters (e.g. l and I), upper and lower case letters and superscripts and subscripts.
6. Lengthy mathematical proofs and derivations and extensive test data are discouraged. If absolutely essential, they should be given as an appendix.
7. The Template of Paper can be downloaded from the link :  
[https://www.ieindia.org/webui/IEI-Activities.aspx#Call\\_Papers](https://www.ieindia.org/webui/IEI-Activities.aspx#Call_Papers)  
The decision will be communicated to those authors whose paper is accepted.

### **Copyright**

The papers are considered for possible publication on the understanding that these have not been submitted to any other

publisher. The copyright of papers accepted for publication lies with The Institution of Engineers (India) and reproduction of the papers or any part thereof is not allowed without the permission of the Institution. Contributors are required to sign a declaration to this effect while submitting their papers.

As per Bye-Law 115 of IEI, Copyright of each paper published in Institution Journals or Proceedings in full or in Abstract at its Centres shall lie with the Institution.

The Declaration Form of IEI can be downloaded from the link:

[https://www.ieindia.org/webui/IEI-Activities.aspx#Call\\_Papers](https://www.ieindia.org/webui/IEI-Activities.aspx#Call_Papers)

### **Submit your papers to the following email address**

Director (Technical)

The Institution of Engineers (India),  
8 Gokhale Road, Kolkata – 700020

Email: [iectech@ieindia.org](mailto:iectech@ieindia.org)

Website: [www.38iec.org](http://www.38iec.org)