

36th



Indian Engineering Congress - Centenary Celebration

Hosted by
Delhi State Centre, Delhi
December 26-28, 2021

Theme

**Engineers for Viable Technology
and \$ 5 Trillion Economy**



Organized by

The Institution of Engineers (India)

Venue
Vigyan Bhawan
Maulana Azad Road
New Delhi-110001



Message from the *President*



The Indian Engineering Congress (IEC) is the apex activity of The Institution of Engineers (India) which is organized every year during the month of December. It gives me great pleasure to announce that the 36th Indian Engineering Congress is being organized by the Delhi State Centre of The Institution of Engineers (India) this year at Delhi. We were compelled by the circumstances due to COVID pandemic to organize the 35th Indian Engineering Congress through online platform last year. However, with improvement of the situation and gradual return to the normalcy due to large scale vaccination it has become possible to organize it this year in the physical mode.

COVID pandemic has hit the economy of all the countries across the world including India. But the way India has bounced back shows the resilience and core strength of the country to overcome any challenges to be encountered in emergency situations. This is a commendable performance and all the citizens of the country deserve the appreciation for the role played by them.

The engineers have a multifaceted role to play in this growth of the country as they are supposed to provide the basic infrastructure which is the backbone for any development and to ensure an inclusive and sustainable development for a clean, green, self-reliant and prosperous India for the future generation.

The theme for this year IEC ie “Engineers for Viable Technology and \$ 5 Trillion Economy” is very apt in the present day scenario and I am confident, the deliberations at this mega event, to be shared by visionaries and doyens in the field of engineering will enlighten us and generate awareness about the responsibility of the engineers in promoting engineering innovations and accelerating growth of the nation in all sectors.

I cordially invite you to join the Congress to make it a grand success.

Er Narendra Singh, FIE
President
The Institution of Engineers (India)

Relentless Journey towards Engineering Advancement for Nation Building since 1920

The Institution of Engineers (India) [IEI] is mandated to promote and advance the science, practice and business of Engineering in all its branches (hereinafter referred to as “Engineering”) in India., established in 1920 and incorporated by Royal Charter in 1935. It is the largest multi-disciplinary professional body of engineers encompassing 15 (fifteen) engineering disciplines with a membership of more than 0.9 million, and serving the nation for more than a Century. The IEI has its Headquarters located in Kolkata and it function through 125 Centres and several Overseas Chapters, Foras and Organ. Besides, IEI has bilateral agreements with about 34 international bodies and membership of another eight international bodies of the developed nations across the globe. Being recognized as a Scientific and Industrial 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 Ph.D. Research Scholars of Engineering Institutions and Universities.

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
- **Disaster Awareness and Management Forum (DAMF)**, Utrakhand to promote and propagate the concept of DAMF and to facilitate exchange of ideas and opinions pertaining to it.
- **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)**, Ranchi 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.

For further details, please visit: www.ieindia.org



About the Host Centre

Delhi State Centre-IEI has a history of nearly 90 years. Located at ITO, it is a landmark in the city of Delhi. It has played a crucial role in uniting various professional societies right from its inception. Delhi State Centre has organized various successful activities which include International and National Conferences, Indian Engineering Congresses, All India Seminars, Round Table Conferences and Workshops related to different streams of engineering and having crucial impact on society.

Aim of the 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.

History of Indian Engineering Congress

The Institution of Engineers (India), was earlier holding Annual General Meetings/Annual Sessions/Annual Conventions at different places in the country to take stock and review its activities and objectives. The Annual Convention later manifested into Indian Engineering Congress is intended to broaden the scope of interaction and transfusion of knowledge amongst engineers from the country as well as from the prominent parts of the globe. The Institution of Engineers (India) is organizing the Indian Engineering Congress every year to cater the needs of entire engineering professional community of India. The Indian Engineering Congress will throw open the threshold of knowledge to all members and non-members and provide them with a Forum.

The First Indian Engineering Congress was inaugurated by the then Prime Minister of India, Bharat Ratna Late Shri Rajiv Gandhi in 1987 in Kolkata. The then Hon'ble Chief Minister of Andhra Pradesh Shri N Chandrababu Naidu inaugurated the 15th Indian Engineering Congress held at Hyderabad in 2000.

It is a matter of great honour that Late Shri Pranab Mukherjee, Hon'ble President of India inaugurated the 27th Indian Engineering Congress in New Delhi (2012) and 28th Indian Engineering Congress in Chennai (2013). Hon'ble Governor of Telangana & Andhra Pradesh, Shri E S L Narasimhan inaugurated the 29th Indian Engineering Congress held at Hyderabad in 2014, Hon'ble Governor of Tripura, Shri Tathagata Roy inaugurated the 30th Indian Engineering Congress held at Guwahati in 2015, Hon'ble Governor of West Bengal, Shri Keshari Nath Tripathi inaugurated the 31st Indian Engineering Congress held at Kolkata in 2016, Hon'ble Governor of Telangana, Dr Tamilisai Soundararajan inaugurated the 34th Indian Engineering Congress held at Hyderabad in 2019, the 35th Indian Engineering Congress was held through online platform in 2020. Dr Harshvardhan, Hon'ble Minister of Health and Family Welfare, Minister of Science and Technology and Minister of Earth Sciences, Govt. of India was the Chief Guest and Inaugurate to congress online.

Congress Objectives

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 Congress

Engineers for Viable Technology and \$ 5 Trillion Economy

India has emerged as one of the fastest growing major economy and is expected to be one of the top three economic powers in the world over the next 10-15 years, backed by its robust domestic consumption and demographic dividend. Govt of India has set a target to emerge as a \$5 trillion economy by 2025. The pandemic has made the achievement of this target more challenging.

Currently, India's GDP is about **\$2.78 trillion**. India's nominal GDP, estimated at about **\$2.74 trillion** in FY 2019-20 pre-pandemic, shrank to **\$2.66 trillion** in FY 2020-21. While attaining this milestone within four years is indeed demanding, the growth in the key segments of the economy, Agriculture, Industry and Service need to fire in achieving this target.

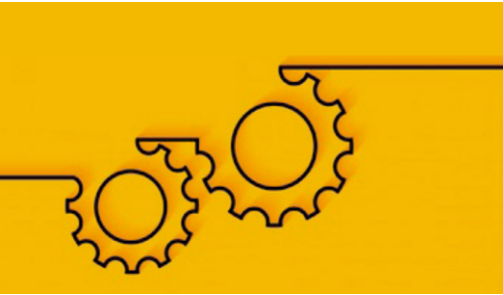
Agriculture has not just survived but thrived through COVID. Agriculture reforms can address income volatility of the farmers through improved market access, enhanced productivity, and modernised infrastructure. The reform process will also give a boost to the Agro Chemical industries, Food processing sector; etc.

To achieve India's ambitious goal to be a \$ 5 trillion economy by 2025, strong infrastructure growth is essential. In particular, the success of India's manufacturing sector and the focus on "Make in India" are directly influenced by how strong the backbone of India's infrastructure is. India needs to focus on building new cities, ports, bridges, high-speed rail and highways. Projects as part of National Infrastructure Pipeline (NIP), with capital spending of \$1.4 trillion, should be expedited and monitored against timelines.

The way India has handled the COVID-19 vaccination project indigenously for its 1.3 billion people is commendable and ensures it from any future economic disruption from COVID-19. This momentum should be capitalized to fully vaccinate our population. This is in line with the initiative of the Government for "Atmanirbhar Bharat". Investment in several sectors needs to be given priority to take advantage of China Plus One strategy. Land reforms, along with attracting longer-term capital, will support the "Make in India" initiative.

The services sector has suffered heavily during COVID-19 pandemic. But one of the services sector that gained from the pandemic situation is the software services sector which is an unexpected beneficiary, with surging global demand for digital services, reviving client additions, topline growth and most important, hiring. Another segment where there is immense growth potential and is the health-care system.

However, the challenge is to attain growth in an environment-friendly way. The country has committed to achieving Sustainable Development Goals adopted by the United Nations and also wishes to play its role in addressing global concerns such as climate change. India is committed to implement the SDGs based on the nationally defined indicators responding to national priorities and needs. NITI (National Institution for Transforming India) Aayog has mapped the SDGs with centrally sponsored programs of different Central Ministries/Departments. Following its commitment towards achieving the SDGs, Government has also initiated a series of nation-wide welfare and developmental programmes. The Government is committed to ensuring "SabkaSaath, SabkaVikas, SabkaVishwas" in the spirit of the Sustainable Development Goals' motto of "Leaving No One Behind".



Memorial Lectures

Following eight Memorial Lectures have been instituted by IEI to commemorate the outstanding engineers. These lectures form an important part of the Congress:-

- The 64th Sir Mokshagundam Visvesvaraya Memorial Lecture
- The 56th Nidhu Bhushan Memorial Lecture
- The 47th Bhaikaka Memorial Lecture
- The 43rd Sir Rajendra Nath Mookerjee Memorial Lecture
- The 34th Dr Ajudhia Nath Khosla Memorial Lecture
- The 30th Dr Amitabha Bhattacharya Memorial Lecture
- The 11th Prof CS Jha Memorial Lecture
- The 7th Dr KL Rao Memorial Lecture

Glimpses of Engineering Personalities

The success stories and achievements of engineering personalities will be presented in the Congress followed by felicitation. The Indian Engineering Congress offers a unique opportunity to the budding engineers to listen the experts/veterans from industries, research institutions and institutions of higher academic excellence, narrating their experience in tackling various engineering problems of complex nature during their professional career.

IEI Industry Excellence Award

The benchmarks created by the industries in India have included productivity, quality, safety and performance assurance thereby giving India the rightful place in the global markets. Realizing that such industries can provide the leadership to a large number of other industries in the country, IEI instituted the IEI Industry Excellence Awards in the year 2008, so as to recognize industry leaders for their innovation, excellence in engineering operations and thereby enable them to lead their industry in a competitive manner.

Industry excellence award will also be given away to the selected industry organisations during Indian Engineering Congress.

IEI Engineering Education Excellence Award

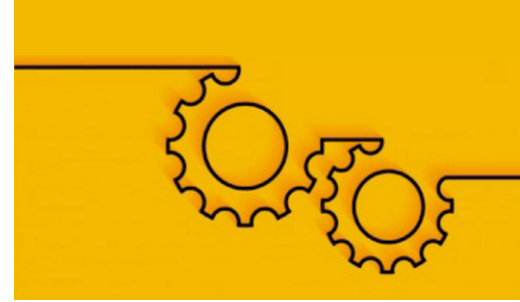
IEI has also instituted Engineering Excellence Award to recognize the significant contributions of engineering education institutions/organizations. During this 36th Indian Engineering Congress, the engineering education excellence award will also be given away to the selected recipients.



Who will Attend

- Engineers from all sectors – state and central govt., public enterprises, industries and services
- Academia – Student, Faculty and Management
- Research – Scientists and Engineers from all segments of R&D establishments – Defense, aerospace, Industrial R&D
- Corporate members of IEI, Technician student members of IEI
- International participation
- Members from other Engineering Professional bodies.

Tentative Programme
36th Indian Engineering Congress
26-28 December 2021, New Delhi



26 December 2021	08.30h - 10.00h	Registration
	10.00h - 12.00h	Inaugural Ceremony & IEI Industry Excellence Awards 2021 Safety & Quality Awards, National Design Awards (likely to be inaugurated by the Hon'ble Prime Minister of India)
	12.00h - 12.30h	Inauguration of Exhibition
	12.30h - 13.00h	Tea
	13.00h - 13.40h	64 th Sir Mokshagundam Visvesvaraya Memorial Lecture
	13.40h - 14.20h	Lunch
	14.20h - 15.00h	Glimpses of Engineering Personalities
	15.00h - 15.40h	IEI Prizes & Awards
	15.40h - 16.20h	43 rd Sir Rajendra Nath Mookerjee Memorial Lecture
	16.20h - 17.00h	56 th Nidhu Bhushan Memorial Lecture
	17.00h - 17.40h	47 th Bhaikaka Memorial Lecture
	17.40h - 18.20h	Visionary Address
	18.20h - 19.30h	710 th Adj. Council Meeting of The Institution of Engineers (India)
	19.30h - 20.30h	Cultural Programme
	20.30h - 22:00h	Congress Dinner
27 December 2021	10.00h - 10.45h	34 th Dr Ajudhia Nath Khosla Memorial Lecture
	10.45h - 11.00h	Tea
	11.00h - 11.45h	30 th Dr Amithabha Bhattacharya Memorial Lecture
	11.45h - 12.30h	11 th Prof C S Jha Memorial Lecture
	12.30h - 13.15h	7 th Dr K L Rao Memorial Lecture
	13.15h - 14.00h	Lunch
	14.00h - 15.00h	WFEO Meet
	15.00h - 16.00h	International Meet / Women Engineers Meet
	16.00h - 17.00h	IEI Alumni Meet
	17.00h - 18.00h	102 nd Annual General Meeting (Only for Corporate Members of IEI)
18.00h - 19.00h	Valedictory Session of the Congress	
28 December 2021	09.00h - 12.00h	711 th Council Meeting of The Institution of Engineers (India)



International Meet

Indian engineers and technologists have played a significant role in the advancement of engineering practice within and outside the country. The IEI also welcomes Engineers and Technologists from foreign countries to participate in the Congress and share the global best practices. Besides, the members of international bodies with whom IEI has bilateral relations will be invited to attend the Engineering Congress.

IEI Alumni/Alumna Meet

The Indian Engineering Congress provides an opportunity for IEI Alumni/Alumna for a reunion with their counterparts and is also expected to play a mentors role for the younger generation.

Women Engineers Meet

IEI recognizes the role being played and contributions being made by women engineers and provides an opportunity in the Congress for women engineers to network and participate in the deliberations.

Registration

Category	Registration Fee
Corporate Members of IEI	₹ 3500 + 18% GST*
Non-members	₹ 4500 + 18% GST*
Industry/Research Organizations	₹ 5000 + 18% GST*
Sr. Technician*/ Technician* Members, Students** of Engineering College and paper presenters in Technical Sessions	₹ 1500 + 18% GST*
Foreign Participants	\$ 500
Certificate of participation in Online Technical Sessions	₹ 200 + 18% GST

Note : Registration for spouse ₹ 1500 + 18% GST.

(*To be certified by Head of the Institution)(**Attested Xerox copy of Identify Card; and Bonafide Student/Study Certificate issued by the Head of the Department / Principal of College must be attached with the Registration Form)

The fee payable by each delegate is as mentioned above and the amount should be mentioned in the enclosed Registration Form.

Delegates may deposit fees online also as per Bank details given below and forward us the UTR number as a confirmation of the deposit.

Souvenir

A Souvenir (in colour) will be published on this occasion. Rates for advertisement in the Souvenir are follows:

Category	Registration Fee
Back Cover Page	₹ 1,00,000 (3 delegates Complimentary)
Inner Back Cover Page	₹ 75,000 (2 delegates Complimentary)
Inner Front Cover Page	₹ 75,000 (1 delegate Complimentary)
Full Page	₹ 50,000
Half Page	₹ 25,000

* GST as applicable



Exhibition

On this occasion, an exhibition is being organized to provide ample opportunities to industries to exhibit their products & services diversified stakeholders at Vigyan Bhawan, New Delhi.

Cost of each stall	₹ 50,000 + GST as applicable
--------------------	------------------------------

Stalls will be allocated on first come first served basis & size of stall - 10ft. × 10ft.

Sponsorship Opportunities

Platinum Sponsor	₹ 25 lakhs + GST as applicable
Gold Sponsor	₹ 15 lakhs + GST as applicable
Silver Sponsor	₹ 10 lakhs + GST as applicable
Bronze Sponsor	₹ 5 lakhs + GST as applicable
Sponsor	₹ 2 lakhs + GST as applicable

Company Logo of all the Sponsors will be suitably displayed at the Backdrop at the other suitable places. The other opportunities to sponsors are also available such as sponsoring the Congress Lunches, Cultural Program, Congress Dinner & Kit Bag etc.

Facilities/Benefits to Sponsors

SI No	Category of Sponsors	Free Delegates	Advertisement in Souvenir	Stall in Exhibition
1	Platinum Sponsor	15	Full Page Coloured	One
2	Gold Sponsor	10	Full Page Coloured	One
3	Silver Sponsor	5	Full Page Coloured	–
4	Bronze Sponsor	3	Half Page Coloured	–
5	Sponsor	2	–	–

Note

GRANT OF SPECIAL CASUAL LEAVE FOR GOVERNMENT OFFICERS ATTENDING MEETINGS OF SCIENTIFIC INSTITUTIONS

An extract from Notification No. 74(4)/50-SR.III dated July 28, 1951 printed in the Bulletin Vol. I No. 1 September 1951, p-28 and No. 227(7) / 50-SR, III dated December 10, 1953 printed in the Bulletin, Vol. 3 No 3 March 1964, p-14, issued by the Ministry of Natural Resources and Scientific Research, Government of India in regard to the grant of casual leave to such officers who desire to attend Meetings of scientific associations.



IEC 2021 can make this a reality

IEC 2021 will attract over 2000 members and accompanying persons, from India and abroad. The participants will comprise industry leaders, representatives, academicians, regulators and other stakeholders.

Sponsorship opportunities at IEC 2021 offers excellent value and return on investment.

At IEC extensive facilities will be available to encourage interaction between Congress participants and members of the industry. These include colloquium sponsor, exhibition, meeting room, press-interview room, and conference room. Sponsors are encouraged to make use of these facilities for interviews and for business and product announcements. Sponsors will be given priority over others in the scheduling of these facilities.

Payment

Payments for delegate Fees, Advertisement & Sponsorship will be accepted through NEFT / RTGS / Online transfer / Bank Draft / Banker's Cheque to be made in favour of "The Institution of Engineers (India) A/c IEC 2021"; Bank Account No. : 212205500308; ICICI Bank Ltd.; Bank Branch : Mayur Vihar Phase-II, Delhi; IFS Code : ICIC0002122; PAN No. : AAATT3439Q; GST No. : 07AAATT3439Q1ZW.

For further enquiry / information regarding Sponsorship / Exhibition / Advertisement / Delegate etc., please contact :



Shri Dinesh Kumar
Chairman, Org. Committee
Chairman, IEI-DSC
Mobile : +91-9810718565



Shri R N Rajpoot
Co-Chairman, Org. Committee
Chairman, SQF-IEI
Mobile : +91-9717649404



Shri Praveen Kr. Singh
Secretary, Org. Committee
Director, SQF-IEI
Mobile : +91-9783694136



HEADQUARTERS

The Institution of Engineers (India)

(Established 1920, Incorporated By Royal Charter 1935)
8, Gokhale Road, Kolkata - 700020

HOST CENTRE

The Institution of Engineers (India)

DELHI STATE CENTRE

"ENGINEERS BHAWAN", 2, Bahadur Shah Zafar Marg
New Delhi - 110002

Phone : +91-11-23379052, Mobile : +91-9783694136,
9810718565, E-mail : 36thiec@gmail.com

Website : www.36iec.org



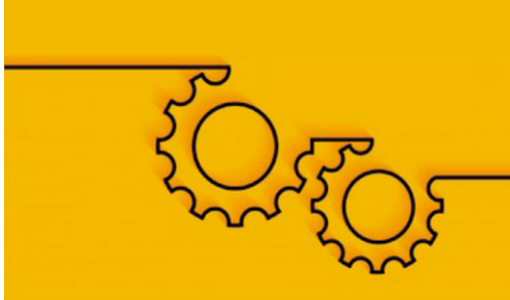
About the Venue

Vigyan Bhawan is a premier convention centre of Government of India in New Delhi. Built in 1956, over the years it has been the venue of conferences of national and international stature, seminars and award ceremonies attended by distinguished world leaders and dignitaries, including Commonwealth Heads of Government Meeting (CHOGM) in 1983, 7th Summit of the Non-Aligned Movement (NAM), March 7-12, 1983, and SAARC Summit. It is managed by the Directorate of Estates, under the Ministry of Urban Development, Government of India, and maintained by CPWD.

It only holds National-level functions and conferences, and functions by the Government of India, State Governments, PSUs and Autonomous Bodies order by priority given. It is allotted to NGOs/Private Enterprises where either the President, Vice President or the Prime Minister of India are present. It also holds various award ceremonies, including the annual National Film Awards.



Registration Form
36th Indian Engineering Congress
 26-28 December 2021, New Delhi



Please type or print in Block Letters

Name Prof/Dr/Mr/Mrs/Ms

Designation Company/Organisation

Mailing Address

Phone Fax E-mail

Details of Additional Participants (Name, Designation) etc. including spouse

i)

ii)

iii)

My interest is in (Tick as applicable)

Participation Submission of Paper Sponsorship Advertisement Exhibition

IEI Membership No. with Engg. Branch (if applicable)

F/M/AM

Payment Details (for Registration Fee only - please see page 8)

All fees and charges should be remitted in the form of Demand Draft/Cheque payable at New Delhi in favour of **“The Institution of Engineers (India) A/c IEC 2021”**; Bank Account No. : 212205500308; ICICI Bank Ltd.; Bank Branch : Mayur Vihar Phase-II, Delhi; IFS Code : ICIC0002122; PAN No. : AAATT3439Q; GST No. : 07AAATT3439Q1ZW.

Cheque/Bank Draft No. Dated Bank Name the sum of Rupees

Name

Designation

Authorised Signatory

Mail your registration form to :

The Institution of Engineers (India)
DELHI STATE CENTRE

“ENGINEERS BHAWAN”, 2, Bahadur Shah Zafar Marg, New Delhi-110002

Ph. : 011-23379052, 23379948, 9783694136, 9810718565 • E-mail : 36thIEC@gmail.com, Website : www.ieindia.org

(YOU MAY ALSO USE PHOTOCOPY FOR MULTIPLE FORMS)