

INAE Annual Convention 2023

The Indian National Academy of Engineering (INAE) organized its Annual Convention 2023 on December 9-11, 2023 at Siksha 'O' Anusandhan University, Bhubaneswar in association with Siksha 'O' Anusandhan University, Bhubaneswar; Indian Institute of Technology (IIT) Bhubaneswar; CSIR-Institute of Minerals and Materials Technology (IMMT) Bhubaneswar and INAE Bhubaneswar Chapter. INAE, founded in 1987 is an autonomous professional body partly supported by grant-in-aid from the Department of Science & Technology (DST), Govt. of India and comprises of India's most distinguished engineers, engineer-scientists and technologists covering the entire spectrum of engineering disciplines. INAE functions as an apex body and promotes the practice of engineering & technology and the related sciences for their application to solving problems of national importance. Presently, INAE has 920 Indian Fellows and 99 Foreign Fellows who elected to the Academy.

The INAE Annual Convention 2023 was a mega event attended by Fellows, Foreign Fellows, Young Associates and Invitees and this year, there was an overwhelming attendance at Bhubaneswar, which has rich cultural heritage and famous historic temples. The convention commenced with the Inaugural Session on December 9, 2023 wherein the Welcome Address was delivered by Prof Damodar Acharya, FNAE, Chairman, Advisory Board, SOA University, Bhubaneswar and Prof PK Nanda, Vice-Chancellor, SOA University. Prof Indranil Manna, President, INAE and Vice Chancellor, Birla Institute of Technology (BIT), Mesra and former Director, IIT Kanpur delivered the Presidential Address and gave an overview of INAE highlighting the major ongoing and forthcoming technical activities undertaken with the objective of fostering the growth of engineering & technology and enhancement of engineering education in the country. He highlighted that in view of the Prime Minister's vision of an *Atmanirbhar* Bharat by 2047, technological self-reliance is an absolute necessity in all sectors including energy, habitat, transportation, defence and communication etc. He also mentioned that the Academy being a pool of most eminent engineering professionals can play a vital role in the technological progress of the nation. For example, in the thematic area of energy, the average per capita consumption of energy in the country needs enhancement. Prof Manna highlighted that India having the largest population in the world and being a young and aspiring nation requires the widescale deployment of green renewable energy technologies to meet the increasing demand for power and energy. In addition, to achieve further technological progress and advancement in the country and increase the Human Development Index in terms of health, education and living standards as a function of per capita energy consumption, there is a need to create engineering professionals from grassroot level itself to improve the quality of living. INAE can play an important role in these areas by promoting the cause of engineering and technology.

Mr. TV Narendran, FNAE, CEO and Managing Director of Tata Steel Limited, was the Chief Guest of the event and delivered the Inaugural Lecture. Mr Narendran is also currently on the Board of Tata Steel Limited and the Chairman of Tata Steel Europe. He spoke of the vital role of steel industry in the economic development of a nation. He brought out that India is the second largest producer of steel in the world, but it has a carbon footprint and there is a need to deploy greener technologies for sustainability. He spoke on the current challenges, futuristic technologies and role of interdisciplinary areas in development of greener technologies for the future of the steel manufacturing industry in the country. He emphasized that green hydrogen is key to decarbonising India's steel industry. He said that India is blessed with wealth of Iron ore and geological richness which can be leveraged for growth of the steel industry by adding steel capacity, which is pervasive requirement for other industries and growth of GDP in the nation. There is a need to find India-centric futuristic solutions to overcome technological and operational challenges for sustainability in the steel manufacturing process. He also touched upon other themes of importance such as the manufacturing industry, digitization and the contributions of the engineering fraternity in this regard. He expressed that attracting young engineering talent to core engineering areas is essential since many engineers choose other areas. Also, the industry professionals and academicians should work together to enhance the R&D activities on a larger scale and a stronger capital goods industry is desirable for progress. Mr

Narendran expressed that multidisciplinary activities is the need of the hour and INAE can play an active and holistic role in this regard.

A Book on “Diverse Space Applications” authored by Dr. BN Suresh, FNAE, Former President, INAE & Chancellor, Indian Institute of Space Science & Technology (IIST), Thiruvananthapuram was released which is a compilation meant to showcase the contributions of Indian Space program towards National development. The Inaugural Session concluded with the Vote of Thanks proposed by Lt Col Shobhit Rai (Retd), Officiating Executive Director, INAE.

The event features several important meetings wherein INAE Fellows participated such as the Governing Council Meeting, Annual General Meeting featuring a Brainstorming Session on pertinent issues for the way forward for the Academy and a Special General Meeting of Fellows wherein amendments to Rules & Regulations were deliberated. Forty-eight Fellows and five Foreign Fellows were elected this year. Some of the eminent luminaries inducted as Fellows during the Annual General Meeting of Fellows include Mr. Satya Narayana Nadella, Chairman and Chief Executive Officer of Microsoft; Mr. Sunil Bharti Mittal, Founder and Chairperson of Bharti Enterprises; Mr. K. Krithivasan, Chief Executive Officer and Managing Director of Tata Consultancy Services (TCS); Prof. TG Sitharam, Chairman, All India Council of Technical Education (AICTE), New Delhi; Mr. Ajai Chowdhry, Co-Founder- HCL, Chairman – EPIC Foundation; Mr. Girish Arun Wagh, Executive Director, Tata Motors Ltd., Mumbai; Dr. Pramod Madhukar Chaudhari, Executive Chairman, Praj Industries Ltd., Pune; Mr. Chander Prakash Gurnani, MD and CEO, Tech Mahindra; Dr. Tapan Sahoo, Executive Director (Engineering), Maruti Suzuki India Limited, Gurgaon; Mr. Sreenivas Subramoney, Intel Fellow, Director of Processor Architecture, Intel Corporation, Bengaluru; Dr. Kanakasabapathi Subramanian, Senior Vice President, Product Development, Ashok Leyland Ltd., Chennai and Prof. Indumathi M Nambi, Professor in Environmental Engineering, Department of Civil Engineering, Indian Institute of Technology Madras, Chennai . Other prominent newly inducted Fellows are Dr. M. Ravichandran, Secretary to the Govt. of India, Ministry of Earth Sciences; and Dr. Purnendu Chatterjee, Founder and Chairman of The Chatterjee Group (TCG). The newly elected Fellows, Foreign Fellows and Young Associates of INAE were inducted during the Annual General Meeting and they were presented their Fellowship/ Young Associateship Certificates accordingly. They also made brief Technical Presentations on their most significant scientific/ engineering contributions which shall be of interest for all delegates. The list of newly elected Fellows, Foreign Fellows and Young Associates can be viewed by [clicking here....](#)

The Annual Convention provided a golden opportunity for networking amongst Fellows and Young Associates and was a memorable event and is eagerly awaited by all concerned every year. The other technical highlights of the INAE Annual Convention 2023 were the First Panel Discussion on “New Tech industry”; Brief Presentations on Technical Report by Conveners, Sectional Committees; Special Talk on "Chandrayaan 3: The Mission and its Accomplishments" by Mr. S Somanath, Chairman, Space Commission, Chairman, ISRO and Secretary, Department of Space; Plenary Talk on “Green Hydrogen” by Prof. GD Yadav, FNAE, Emeritus Professor of Eminence, ICT and JC Bose National Fellow, Institute of Chemical Technology, Mumbai and Second Panel Discussion on “Artificial Intelligence in Industry 4.0 and Sustainability”. The Cultural Programme - Performance on Evolution of Odissi Dance; Audio-Visual Presentation on Culture & Heritage of Odisha and Local Excursion tour to heritage sites in Bhubaneswar enthralled all the participants and delegates.

As envisaged the programme of the INAE Annual Convention 2023 was rich in technical content and surpassed the expectations with the increased enthusiasm shown by all Fellows, Foreign Fellows, Young Associates and invitees, in line with the traditions of the Academy. The cultural events conducted also delighted the august audience. Dr Sanak Mishra, former President, INAE and Member of the Governing Board of the Steel Research & Technology Mission of India; Formerly Managing Director, Rourkela Steel Plant and Director, Steel Authority of India Ltd.(SAIL) and Vice-President, ArcelorMittal and CEO India Projects was the Co-Chair of the Annual Convention 2023. The event was sponsored by DST, SERB and other sponsors.