# DEMYSTIFYING INDUSTRY 4.0

Calcutta 27th November 2021 at 3:00 pm

The Organising Committee cordially invites you to the Curtain Raiser event of year-long program in holding webinars and seminar on Industry 4.0 on the occasion of Platinum Jubilee celebration of Indian Institute of Chemical Engineers & Indian Institute of Metals with Jadavpur University as program partner.

Sri Abhijit Kumar Mitra Chairman, CRC-IIChE Dr. Asim Ray Chairman, IIM-Kolkata Chapter

#### **PROGRAM**

The program will be held on Saturday, 27th November 2021 at the auditorium of Dr. Hiralal Roy Building, Jadavpur University campus at 3:00 pm

#### **CHIEF GUEST**

Mr. T V Narendran, MD, Tata Steel has kindly consented to grace the occasion as Chief Guest.

#### **KEYNOTE ADDRESS**

Professor Partha Pratim Chakraborty, Ex. Director, IIT Kharagpur will deliver the keynote address and will speak on 'Artificial Intelligence & Industry 4.0'.

Strategy, feasibility and benefits; Progression in Process Industries; Enabling Technologies, from an Academic Perspective are the other three topics in connection with Industry 4.0-will be presented by eminent Speakers.

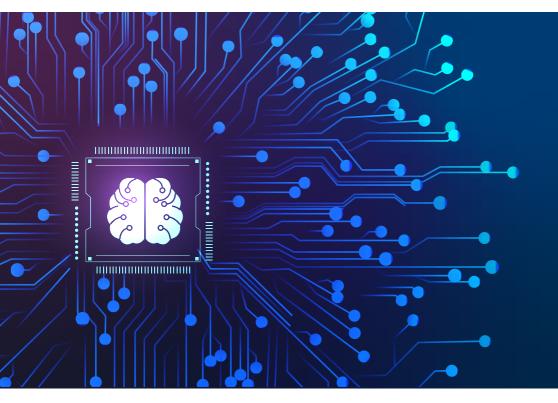
# **PROGRAMME**

27th November 2021, Prof Hiralal Roy Building Jadavpur University

3:00 pm	Invocation	
	Welcome address	Sri Abhijit Mitra, Chairman – IIChE CRC
3:15 pm	Opening Remark	Prof. M.K. Jha, President - IIChE
3:25 pm	Address	Prof. C. Bhattacharjee, Pro VC Jadavpur University
3:35 pm	Address	Sri Subhasendu Chatterjee, Director – Haldia Petro Chemicals
3:45 pm	Address	Sri Aloke Mukherjea, Former Chairman CII(ER) & Past President - BCCI
4:00 pm	Inaugural Address	Sri T. V. Narendran, President - IIM
4:20 pm	Tea Break	
4:30 pm	Key Note	Prof. Partha Pratim Chakraborty, Ex-Director, IIT Kharagpur
4:45 pm	Management perspective	Sri Ambarish Dasgupta, Senior Partner - intueriglobal.com
5:15 pm	Industry Perspective	Sri Amitabha Sinha, TCG-Digital
5:45 pm	Enabling Technologies – Academic Perspective	Prof. Amitava Gupta, Professor & Head (Power Engg.), JU
6:15 pm	Vote of Thanks	Dr. Asim Ray, Chairman – IIM , Kolkata Chapter
6:25 pm	Refreshment	

Registration form Link: https://forms.gle/oJfFpZCcxxu5igu97 Zoom Meeting link: https://us02web.zoom.us/j/5310655737?pwd=dldITWErTWpYd245alE0eWdISkpXUT09 Meeting ID: 531 065 5737, Passcode: 1234

# DEMYSTIFYING INDUSTRY 4.0



Organised by



Indian Institute of Chemical Engineers
Calcutta Regional Centre



Indian Institute of Metals Kolkata Chapter



Jadavpur University

Platinum Jubilee Year

Indian Institute of Chemical Engineers & Indian Institute of Metals

Venue: Calcutta

Date : 27th Nov, 2021-30th Nov, 2022.

#### Preamble

Ilndustry 4.0 is considered the fourth industrial revolution, and is defined by advanced automation and data exchange in manufacturing technologies. It includes integration of sensing, computation, control and networking into physical objects and infrastructure (cyber-physical systems), the Internet of Things and cloud computing. The result is often referred to as a "Smart factory". Indian industries are gradually implementing Industry 4.0 that helps transform production, leading to greater productivity, and changing traditional production relationships among suppliers, producers, customers and importantly between humans and machines. Keeping the above in mind, the Calcutta Regional Chapter of Indian Institute of Chemical Engineers, the Kolkata Chapter of Indian Institute of Metals and Jadavpur University are planning to organize a series of Webinars followed by a Seminar to discuss the various aspects of Industry 4.0, its implementation strategy in process and engineering manufacturing industries. Experts from academic institutions, R&D organizations, equipment manufacturers, system integrators, design and manufacturing organizations will share their knowledge and expertise so as to create a "Body of Knowledge" for demystification of Industry 4.0 in Indian manufacturing industries.

# About the Organisers

#### Indian Institute of Chemical Engineers - Calcutta Regional Centre (CRC)

Indian Institute of Chemical Engineers (IIChE) having started its humble beginning in 1947 today is a confluence of 29000 professional from academia, industry and research institutes. It provides them appropriate forum for joint endeavours to work for development of human resources and serve industries through application of chemical engineering and allied science & engineering in all sectors of Indian Industries. The Calcutta Regional Centre of IIChE is the first regional among the 42 regional centre was established in 1959 and since then actively working in pursuit of bridging the knowledge of Industry and academia by organizing planned seminars, workshop and refresher course in collaboration with various industrial houses, Research Institutes and Academic Institutes with participants from across the country and aboard.

#### Indian Institute of Metals - Kolkata Chapter

In 1906 the parent body of Jadavpur University, National Council of Education Bengal (NCE Bengal) The idea of forming of an Indian Institute of metallurgists/ technocrats was conceived as early as 1945. Starting with a modest membership of 42, the IIM membership now stands at more than ten thousand drawn from various fields of metallurgical activities. Kolkata is the Head Quarter of the IIM. The institute has grown into a reputed institution devoted to promotion and advancement of study, practice and research of Metallurgical Science and Technology. The IIM is now recognised throughout the world as one of the premier metallurgical organizations and operates in India through its 62 chapters located in all the Metros, Industrial cities and Technical institutes of repute. The strength of Kolkata chapter is more than 400 members, with its own building for conducting regular activities. The scope of the Institute's activities includes organising seminar, technical workshops, discourses on various areas such as mineral beneficiation, extraction, fabrication, heat treatment, finishing as well as practical and theoretical aspects of metallurgy of all ferrous and non-ferrous metals and alloys. Ceramics and other disciplines and technologies allied to metallurgical problems also come under the scope of the Institute.

# Jadavpur University

In 1906 the parent body of Jadavpur University, the National Council of Education Bengal

(NCE Bengal) set the goal "To achieve self reliance through empowerment of Youth by imparting Best of Global Knowledge". Today the University, which was established in 1955, also aims to promote and pursue higher education by linking up traditionally diverse subjects in the light of an ever-changing global scenario. Jadavpur University has successfully established itself as a foremost Indian University with a vast repertoire of courses offered, an enviable list of faculty members and has come to be known for its commitment towards advanced study and research. The University is continuously working on setting up platforms for close interaction with the industry, National R&D Laboratories and neighbouring institutions.

# Webinar & Seminar Topics:

- Industry 4.0: evolution and Enabling Technologies
- Digitization and Cyber-Physical Systems
- Data Acquisition and its Applications
- Smart sensors
- Data Mining
- Big Data Analytics
- Artificial Intelligence
- Cloud Computing
- Internet of Things

# **Industry Focus**

- Oil & gas
- Iron and Steel
- Chemical, Pharmaceuticals, Food processing & Breweries
- Engineering & Manufacturing Industries
- Small & Medium Scale Industries

- Location detection technology
- Advanced Human- machine
   Interface & Ergonomics
- Digital Twins
- Data security
- 3 D Printing
- Customer and Supplier Profiling
  - Mobile Devices
- Condition Monitoring
- Fault Tolerant & Self-stabilizing Systems

# Key Take Away

- Overview of Industry 4.0 and its applicability with an Indian perspective
- Insight into different enabling technology modules
- Introduction to different process and product vendors in the realm of Industry 4.0
- Assessment of available skills and readiness for implementing Industry 4.0
- Access to a diverse knowledge pool from Industry, Academia and the R&D Institutes.

### Who will Attend the Webinars & Seminars

- Technology Providers, System integrators, Designers and operators in Oil and natural gas industries, Chemical & Pharmaceuticals industries, Metals, Mining and allied industries
  - Equipment Manufacturers and Logistics Providers
- Environmental and Pollution Control Equipment Manufacturers.
- Energy Conservation Technology Experts.
- Metallurgical/Chemical Engineering Consultants
- Safety Engineering Consultants
- Academicians and R&D personnel.
- UG, PG, Research Scholars

#### **Patrons**

Sri. T. V. Narendran, MD, TATA Steel

Sri. Sajjan Jindal, MD, JSW Steel

Sri Naveen Jindal, MD, JSPL

Prof. Suranjan Das, Vice Chancellor, Jadavpur University

Prof. M. K. Jha, President, IIChE

Sri. Subhasendu Chatterjee, Whole Time Director, Haldia Petrochemicals Ltd

# **Organising Committee**

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Prof. Asit Mazumder Sri. Parijat Mukherjee Sri. Arunava Dutta Gupta

# Program Schedule\*

Subject	Date	Location & Mode
Curtain Raiser	November 2021	Jadavpur University Campus (Hybrid Mode)
Webinars	January 2022 to November 2022	
National Seminar - Platinum Jubilee Celebration	June 2022	Taj Bengal : Kolkata

\*Version 1.0. Revision if any will be communicated.

# Registration

#### Curtain Raiser: 27th November 2021

Registration Charges: Free

All participants are required to be Pre-registered

Webinars

#### (Monthly Calendar to be issued)

Registration Charges: Free

All participants are required to be Pre-registered

# Sponsorship Detail

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#### Contact Person

Mr. Abhijit Mitra, Chairman, IIChE Kolkata Regional Chapter akmitra103@gmail.com , 9874777227, Office : IIChE – CRC crc.iiche@gmail.com, +91 33 2414 6071

#### National Seminar:

Registration Fee:

Corporate Delegates: Rs.5000 /-

Individual: Rs. 3000/-

IIChE & IIM & JU – Members: Rs. 2000/-Research Scholar (Members/Non Members):

Rs. 1200/ Rs.1500

Students (Members/Non-members): Rs.500 / Rs.700

# Advertisement Tariff

Back Cover : Rs. 30,000 /Inside Front Cover : Rs. 25,000 /Inside Back Cover : Rs. 25,000 /Full Page : Rs. 15,000 /½ Page : Rs. 10,000 /#Plus, GST @ 18%.

Cheque should be drawn in favour of "Calcutta Regional Centre, Indian Institute of Chemical Engineers"

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