

CEU Centre of Excellence for Competitiveness for SMEs



Corrosion Management Committee

Indian Institute of Technology Ropar

IIT Ropar & CII announces

ONLINE POSTGRADUATE PROFESSIONAL DEVELOPMENT PROGRAM IN CORROSION MANAGEMENT AND TECHNOLOGY

(April 2022 – January 2023 Session) Weekend Online Evening Classes every Friday & Saturday, 6 PM to 8 PM, IST Enhance Your Career Prospects as Corrosion Professional!



(An Industry Oriented Online Continuing Education Program under Collaboration of Indian Institute of Technology Ropar, Punjab and Confederation of Indian Industry, Corrosion Management Division, Chandigarh)

Online Professional Development Program initiated by Indian Institute of Technology (IIT) Ropar & CII

Indian Institute of Technology Ropar ranked among the top 20 Engineering institutions in India, being ranked 19th in NIRF 2021 rankings. The Institute has been also ranked in the Overall Category, bagging 31st rank in India. IIT Ropar once again made a mark being ranked between the brackets of 351-400 in the World in Times Higher Education World University Rankings 2022. IIT Ropar made a debut this year in THE Young University Rankings 2022, being ranked 81st and entering the top 100 list. In spite of being a young Institution, Top 100 with 86th rank in **Times Higher Education Emerging Economies** University Rankings 2022 attaining the fourth position among best-performing Institutions in India.

INDIAN INSTITUTE OF TECHNOLOGY ROPAR (IIT Ropar)

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industries, Government, and civil society, through advisory and consultative processes. For 125 years, CII has been working on shaping India's development journey and, this year, more than ever before, it will continue to proactively transform Indian industries' engagement in national development. With 68 offices, including 10 Centers of Excellence, in India, and 9 overseas offices in Australia, China, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 394 counterpart organizations in 133 countries, CII serves as a reference point for Indian industries and international businesses.

Competitive Solutions: Working in tandem with Government, Industry and organizations, CII takes forward a robust agenda to catalyze excellence, innovation, employability, entrepreneurship, and productivity across sectors.

CII - **Centre of Excellence for Competitiveness, Chandigarh**, drives competitiveness in key domains including corrosion management, energy efficiency, and manufacturing excellence.

Corrosion Engineering: An Exciting and highly paid Career Option

What is so important about corrosion? The global cost of corrosion is estimated to be US\$2.5 trillion, which is equivalent to 3.4% of the global GDP (2013). These costs typically do not include individual safety or environmental consequences. Through near misses, incidents, forced shutdowns (outages), accidents, etc., several industries have come to realize that lack of corrosion management can be very costly and that, through proper corrosion management, significant cost savings can be achieved over the lifetime of an asset. It has significant costs to society. Besides the direct monetary loss to corrosion, it can compromise people's safety and life of infrastructure. It is in the country's best interest that corrosion be mitigated as much as possible.

Knowledgeable professionals are needed to mitigate the menace of corrosion so that assets can have a safe, reliable, and longer service life. Since corrosion engineering industry is an emerging & niche field, many job openings are expected to grow in this sector.

Business & Job Prospects in Corrosion Management

Engineers, Corrosion Auditors, and Technologists are employed in the field of corrosion engineering & management. Completing a four-year degree in a relevant engineering discipline is usually the first step towards a career in corrosion engineering. Engineering disciplines typically involved in the industry are mechanical engineering, civil engineering, chemical engineering, electrical engineering, materials engineering, marine engineering, metallurgical engineering, and corrosion engineering. Those trained in corrosion engineering are employed in industries where corrosion is a particularly significant safety or economic issue. The professionals are mostly found in the oil and gas industries, manufacturing, EPC & civil infrastructure, marine industries and as Corrosion Experts & Auditors with consulting agencies and Corrosion Technology providers. The corrosion engineering industry is a fascinating option worth checking out. It could be the career path you've been looking for.

With the objective of competence development and enhancing job prospects in corrosion engineering and management and to create world class leaders into the domain, CII jointly with Indian Institute of Technology, Ropar, Punjab have designed the **"Online Postgraduate Professional Development Program in Corrosion Management and Technology"**. The course aims at creating world class professionals in Corrosion Engineering and Management Domain by facilitating industry oriented online continuing education program for working professionals, recent graduates and for those who wish to build their career in corrosion management field.

Program Highlights	Career Prospects
 Program to be run jointly by IIT Ropar and CII Corrosion Management Division, Chandigarh 	 Opportunity to pursue and upgrade career as Corrosion Manager/ Corrosion Professional
 Industry Oriented Advanced Program for Working Professionals helping in career growth and better job prospects 	 Highly Job Oriented Course for Engineering Graduates/ Master of Science or Engineering Diploma holders to pursue career as Corrosion
 Learning and Mentorship from Eminent Experts in Corrosion Management, Technology and Asset 	Engineer/ Corrosion Analyst/ Corrosion Auditor in India & abroad
Management	✓ Professionals to Build Proficiency in Corrosion
✓ Exposure to Industrial Best Practices and Case	Management
Studies	✓ Opportunities for Entrepreneurs to learn and
 Highly interactive virtual classrooms 	start-up in emerging field of corrosion audit and management

W	ho Should Join?	
~	Working professionals from PSUs/ Industry/ Consulting Firms/ Oil & Gas & Process Sector, EPC Sector/ Defense/ Shipping/ Railways etc.	Mode of Conduct: The program will be conducted in online mode through virtual classrooms. The virtual classes would be conducted in the evening (6 PM to 8 PM, IST) on each Friday and Saturday.
✓ ✓	Practicing Corrosion Management and Asset Management Professionals Production/Maintenance/Design/Project	Program Duration: The program will be in two parts (Part 1 : 15 th April 2022 – 13 th August 2022, Part 2 : 16 th September 2022 – 14 th January 2023). Program will commence from 15 th April 2022.
	/EHS/Quality Engineers/Managers Recent Engineering Graduates, Postgraduates in Science Streams	 Eligibility: Minimum qualification required Bachelor's Degree in Engineering OR Master of Science or Diploma with at least 2 years of work
		experience

Program Structure: The program structure will comprise of virtual classroom, assignments, and Project work. Recordings of all the lectures/classes would be available for the reference. Course would mainly focus on practical case studies, analysis of corrosion failures, practical project work and assignment based on practical aspects, corrosion audits etc. Focus of the course would be to develop an understanding of corrosion, its mitigation & management and technology at global level, country level, industry level and as professionals with an aim to create corrosion expertise & leadership. Every subject would have experts' lectures from globally renowned experts, IIT faculty, CII – CMC, professionals including CEOs, MDs, and Heads of various business segments.

Course Outline

Part 1:	Part 2:
 Understanding Corrosion Materials and Corrosion Microbiologically Influenced Corrosion and its Control, Water Treatment Chemistry 	 Corrosion Inhibitors Application, High Temperature Corrosion, Pipeline Corrosion, Cathodic Protection, Corrosion of Steel in concrete structure Corrosion Management of Process Industry & Failure Analysis
 Protective Paints & Coatings Approach to Corrosion Management 	 Technology and Innovations in Corrosion Management Industrial Project

Program Fee*	Admission Process
For Indian Participants: Rs. 50,000 + 18% GST For International Participants: US \$ 1000 Program fee can be paid in following two ways- a) Lump sum fee at the time of registration:	The admission to the program will be done on first come first serve basis. Participants can register for the program in online mode. Program fee can be paid through NEFT, IMPS, Debit/Credit card or Net-
 Rs. 47,000 + 18% GST Or US \$ 940 b) Program fee can also be paid in three installments - 1st Installment during program registration: Rs 10,000 + 18% GST Or US \$ 200 	banking. Corporate nominations can be done by HR/Training department. Other individuals can directly register online.
 2nd Installment before Program Commencement (10th April 2022): Rs 20,000 + 18% GST Or US \$ 400 3rd Installment before Part 2 (30th August 2022): Rs 20,000 + 18% GST Or US \$ 400 	* Program fee is non- refundable

Bank details for NEFT:	Registration Process:
Bank: ICICI Bank Ltd, Address: Sector-28, Chandigarh, A/C Name: Confederation of Indian Industry, A/C No.096405000413, IFSC No. ICIC0000964 Note: Corporate program package is also available for group nominations.	 Registration can be done online or by confirming through email and fee can be paid by NEFT/RTGS/Check etc. Online registration link- <u>https://cam.mycii.in/OR/OnlineRegistrationLogin.ht</u> ml?EventId=E000056766
 Required Documents: scanned copies of, a) Aadhar Card/ PAN Card/ Any other National Identity Card b) Qualification Certificate (as per eligibility criteria/highest education) c) High School Certificate/ Mark-sheet / Passport copy (for Date of Birth Proof) d) Passport Size Photograph 	 Individual/ Self-Sponsored candidates need not to mention GST, or company details. Mention NA there. However, PAN No. is compulsory Participants will be required to pay first installment or Lump sum of program fee during program registration. After successfully completing the payment, participants will receive payment confirmation mail and program registration mail.
Important Dates: Last Date for Registration: 25 th March 2022 Program commencement: 15 th April 2022	 Participants will be required to mail the scanned copies of required documents. CII would send communication mail for the same. Participants will receive the registration number after document submission and verification.

Certificate:

The evaluation will be based on assignments, project work and examinations. Candidates completing the program with satisfactory performance in evaluations will be awarded with *Certificate of Completion* jointly by IIT, Ropar & CII. *Certificate of Participation* will be awarded jointly by IIT, Ropar & CII to the candidates for completing the program, to whom certificate of completion cannot be awarded.

Program Benefits:

Learning from the program will upgrade existing industry professionals to an expert in the field of corrosion management. For recent graduates this program will be highly beneficial to get in-depth knowledge on corrosion management and technology domain and to start their career journey into corrosion management. Participants will also get complementary registration in flagship events and conferences of CII like CII National Corrosion Circle Competition, Corrosion Summit, Conference on Addressing Corrosion in Auto & Auto Component Industry, and other virtual training programs related to corrosion.





CII – Corrosion Management Division

CII-Centre of Excellence for Competitiveness initiated a service on Corrosion Management for the benefit of Indian Industry with the objective of creating awareness about corrosion and its adverse effects on the pace of country's development. As one of initiatives to network expertise related to corrosion available in India, the Centre formed a **"Corrosion Management Committee" (CMC)** in the year 2004 under the Chairmanship of Late Dr. Baldev Raj, Distinguished Scientist & Former Director, Indira Gandhi Centre for Atomic Research (IGCAR) & Former Director, National Institute of Advance Studies, Bengaluru. This CII – CMC is presently chaired by Dr. U Kamachi Mudali, Vice Chancellor, VIT Bhopal University & Formerly Distinguished Scientist, Department of Atomic Energy (DAE), Chairman & Chief Executive, Heavy Water Board (HWB), Mumbai, Director, Materials Chemistry & Metal Fuel Cycle Group & Associate Director, Corrosion Science and Technology Group, Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam. The CII - CMC is a network of renowned individuals who have done distinguished work in area of corrosion from several prestigious Indian organizations. **Some of the key initiatives and activities of CII – Corrosion Management Committee includes.**

- To provide direction & guidance in minimizing the losses due to Corrosion in various sectors of Industry through consulting and advisory services (Corrosion Survey & Audits)
- To conceptualize new seminars and training programs, conferences which will create awareness about corrosion adverse impact and will provide technical knowledge about corrosion prevention techniques
- To build a databank of corrosion experts across the nation
- To take missions on corrosion at national & international forums to showcase the best practices followed in corrosion
- To explore possibilities of Corrosion Regulation in India
- To disseminate corrosion related knowledge to industry via recognizing various corrosion models/projects/experts from time to time.

For more details, please contact:



Sanjay Namdeo Program Coordinator & Head Energy and Corrosion Services Vertical E-mail: <u>sanjay.namdeo@cii.in</u> Mob: +91- 9915593898

Priyanshu Trivedi E-mail: <u>corrosion.services@cii.in</u> Mob: +91- 9560026069 Vivek Deshmukh Email: <u>vivek.deshmukh@cii.in</u> Mob: +91-8982635350

Confederation of Indian Industry Corrosion Management Division Office: +91-172-5022522 Block No. 3, Dakshin Marg, Sector 31-A Chandigarh 160030, W: www.cii.in/ www.ciicmc.org



Dr. Ravi Mohan Prasad Program Coordinator & Assistant Professor Department of Metallurgical and Materials Engineering E-mail: <u>ravimohan.prasad@iitrpr.ac.in</u> Mob: +91-8968534468 Office: +91-1881-232405

Indian Institute of Technology Ropar Rupnagar, Punjab