## ABOUT THE INSTITUTE

Established in 1988, Datta Meghe College of Engineering (DMCE) is a renowned institution, and approved by AICTE, New Delhi, recognized by DTE & Govt. of Maharashtra and affiliated to Mumbai University. With an annual intake of 1027 students across various levels (UG, PG, Ph.D.), and diverse branches including Civil, Mechanical, Computer, IT,AIDS, Civil & Infra, Chemical, Electronics and Telecommunication, etc. Our institute is supported by a highly qualified faculty of over 3000 students. Our faculty members actively participate in national bodies and university boards. We prioritize industry-focused education, fostering strong industry relationships and benefit from a robust alumni network.. The Institute is accredited by National Assessment and Accreditation Council (NAAC) with grade 'A'. Chemical and Civil department are accredited by NBA.

## ABOUT THE DEPARTMENT

Established in 1999, the Department of Chemical Engineering is NBA-accredited (2023-24 to 2025-26). It boasts highly qualified PhD faculty specializing in areas like Membrane Technology, Petrochemical Technology, Environmental Technology and Biotechnology. The department features six well-equipped laboratories and utilizes advanced modeling software like DWSim. Aspen Plus. Students gain industry exposure through internships at RCF, BARC, HPCL, Reliance, and more. Strong industry ties include MoUs with RCF Mumbai and various industries. Faculty are members of IIChE, ISTE, and IIE. SOChE (Student Organization of Chemical Engineering)and IIChE-MRC Student Chapter organize various activities, supporting a consistently strong placement record in core industries.

## About ATAL Academy

The primary objective of the Atal Academy is to plan and help in imparting quality technical education in the country and to support technical institutions in foresting research innovation and entrepreneurship through training The Academy stresses upon empowering technical teachers and techniques using information and Communication Technology it also aims at utilising SWYAM platform and other resources for delivery of the trainings. It provides variety of opportunities for training and exchange of experience. such as workshops orientation learning communities and other FDP's

## PATRON

**Hon'ble Dr. Subir Kumar Banerjee**
*Founder President & Trustee, NYSS, Airoli*

**Hon'ble Mrs. Suvra Banerjee**
*Former President & Trustee, NYSS, Airoli*

**Hon'ble Mrs. Gauri Bhattacharya**
*President, NYSS, Airoli*

**Hon'ble Dr. Rituparna Banerjee**
*Secretary, NYSS, Airoli*

**Hon'ble Shri. Sreejit Bhattacharya**
*Treasurer, NYSS, Airoli*

**Dr. A.R.Katti** — *Managing Director*

**Dr. S.D.Sawarkar** — *Executive Director*

**Dr. P. A. Dode**
*Principal (DMCE Airoli)*

## ORGANIZING COMMITTEE

**Dr. Satyajit M. Deshmukh**
*(Coordinator)* 9224667176

**Dr. Prashant M. Ingole**
*(Co- Coordinator)*
*9322159707prashant.ingole@dmce.ac.in*

**Dr. R. W. Tapre**

**Dr. S. R. Dhokpande**

**Dr. M. T. Sose**

**Dr. S. G. Ingle**

**Dr. P. R. Gawande**

**Dr. V. N. Raut**

**Dr. R. H. Jawale**

# AICTE Training and Learning Academy (ATAL)

**(ATAL FDP NO.1748754989)**

Sponsored

## Faculty Development Program

On

## Emerging Sustainable Practices in Chemical Engineering

**6.10.2025 – 11.10.2025**

Organized by

**Department of Chemical Engineering**

(NBA Accredited Program)

# DATTA MEGHE COLLEGE OF ENGINEERING

(Recognized by AICTE, DTE, Govt of Maharashtra & Affiliated To University of Mumbai)
NAAC (Cycle 2) 'A' Grade Accredited,
Sector 3, Airoli, Navi Mumbai, Maharashtra 400708

## About the Course

The proposed Faculty Development Program (FDP) aims to strengthen academic and research capabilities in Chemical Engineering by integrating sustainability principles such as green chemistry, energy-efficient technologies, and circular economy concepts. It will feature expert-led sessions on key topics like process intensification, waste valorization, renewable feedstock's, LCA, CCS, and sustainable process design. The program will equip faculty with tools and strategies to incorporate sustainability into teaching and research, while promoting interdisciplinary collaboration to tackle environmental challenges.

## RESOURCE PERSON

**Dr. Sanjay Mahajani**
Professor, Department of Chemical Engg. IIT, Mumbai.

**Mr. Sukumar Roy**
HOD-Process, NPCC Engineering Pvt. Limited (NEL)

**Dr. Virendra K. Rathod**
Professor, Intsitute of Chemical Technology(ICT), Mumbai

**Mr. Prasad Pangarkar**
Vice President Reliance Industries Ltd.

**Dr. Jitendra Sanghwai**
Professor Chemical Engineering IIT Chennai.

**Mr. Atul Wankhade**
Vice President Navin Fluride International Ltd

**Dr.Sachin A.Mandavgane**
Professor, VNIT, Nagpur

**Mr. Gajendra S. Patil**
Sr.IT Operation Manager, Shell India Markets Pvt. Limited , Bangalore

**Dr. Ashish M. Gujarathi**
Department of Petroleum Engineering ,Oman.

**Mr. Parag Kachare**
Director, Esmil Process System London UK

**Dr. Vaibhav V.Goud**
Professor, IIT Guwahati.

**Mr. Abhijeet Adhaoo**
General Manager –Process, Jacobs Gurugram , Haryana

**Mr.Deepak Tadse**
Assist. General Manager , Arvind Composite Ltd.Gujrat

## COURSE OBJECTIVE

- Enhance faculty technical competencies in sustainable Chemical Engineering through dissemination of current information and best practices aligned with global sustainability goals.
- The fdp covers emerging paradigms such as circular economy, green chemistry, process intensification, low-carbon reactors, and renewable feedstock integration in chemical design.
- Applications of life cycle assessment (LCA), waste-to-resource conversion technologies, and environmentally friendly process, optimization techniques will be highlighted.
- The FDP seeks to enable participants to incorporate sustainability metrics into research methodologies, departmental practices, and pedagogical frameworks through case-based learning modules, applied workshops, and expert-led technical sessions.
- The program aims to foster collaboration between academia and industry, encourage interdisciplinary work, and co-develop sustainable solutions and innovative curricula aligned with the SDGs and green engineering principles.

## EXPECTED OUTCOME

- Faculty members will gain advanced knowledge and practical skills in sustainable chemical engineering practices.
- Faculty will be able to initiate and guide research projects focused on low-carbon technologies, renewable feedstock's, and waste-to-resource solutions.
- Industry Linkages: Strengthened academia-industry interactions for co-developing sustainable technologies and industrial case studies.
- Enhanced capacity of departments and institutions to lead sustainability-driven education and research initiatives.
- Faculty will align their teaching and research with the United Nations Sustainable Development Goals (SDGs), especially those related to clean energy, climate action, and responsible production.

## CERTIFICATE

The certificate shall be issued to the participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test the participants also have to provide compulsory online feedback on the last day of fdp

## PERSPECTIVE PARTICIPANTS

This fdp is open for participants of academicians, research Scholars from AICTE approved Institutions and Central Government institutions

## KEY POINTS

- There is no registration fee from any participants
- Participants will be selected on first Come First serve basis
- Selected candidates will be intimated by email.
- Registration is mandatory for attending the fdp

## ADDRESS FOR COMMUNICATION

Dr. Satyajit M. Deshmukh
Professor & Head of Department,
Department of Chemical Engineering,
Datta Meghe College of Engineering, Airoli.
Navi Mumbai 400708
Email ID: hodchem@dmce.ac.in
Ph: 09224667176

# ATAL Online 6 Day Faculty Development Programmes 2025-26 Schedule

| | | | | | |
|---|---|---|---|---|---|
| **FDP Thrust Area: Engineering and Management** | | | | | |
| **FDP Title: Emerging Sustainable Practices in Chemical Engineering** | | | | | |
| **Start Date: 6.10.2025** | | | | **End Date: 11.10.2025** | |
| **DAY 1** | **DAY 2** | **DAY 3** | **DAY 4** | **DAY 5** | **DAY 6** |
| **6:00PM to 6:30PM** | **6:00PM to 7:30PM** | **6:00PM to 7:30PM** | **6:00PM to 7:30PM** | **6:00PM to 7:30PM** | **2:00PM to 3:30PM** |
| **INAUGRAL SESSION** | **SESSION 3**<br>**Topic:** Sustainable Synthesis through Ultrasonic Innovation<br>**Name of the Expert:**<br>Dr. Virendra K. Rathod<br>**Designation & Organization:**<br>Professor, Department of Chemical Engg. ICT, Mumbai<br>**Years of Exp:** 25 | **SESSION 5**<br>**Topic:** Role of Carbon Capture in Sustainable Development<br>**Name of the Expert:**<br>Dr.Jitendra Shital Sangwai<br>**Designation & Organization:**<br>Professor, Department of Chemical Engg IIT-Chennai,<br>**Years of Exp:**26 | **SESSION 7**<br>**Topic:** Biorefinary: Sustainable approach for Production of Bio material & Bio fuels<br>**Name of the Expert:**<br>Dr.Sachin A.Mandavgane<br>**Designation & Organization:**<br>Professor, Department of Chemical Engg, VNIT, Nagpur<br>**Years of Exp:** 26 | **SESSION 9**<br>**Topic:** Sustainable Green Chemical Technology<br>**Name of the Expert:**<br>Dr.Ashish M. Gujarathi<br>**Designation & Organization:**<br>Associate Professor, Department of Petroleum Engineering, College of Engineering, MUSCAT OMAN<br>**Years of Exp:**24 | **SESSION 11**<br>**Topic:** Waste to fuel for a Greener Future<br>**Name of the Expert:** Dr.Vaibhav V.Goud<br>**Designation & Organization:**<br>Professor, Department of Chemical Engg, IIT Guwahati.<br>**Years of Exp:**25 |
| **6:30PM to 8:00PM** | **7:30PM to 9:00PM** | **7:30PM to 9:00PM** | **7:30PM to 9:00PM** | **7:30PM to 9:00PM** | **3:30PM to 5:00PM** |
| **SESSION 1**<br>**Topic:** Sustainable Practices in Distillation<br>**Name of the Expert:**<br>Dr.Sanjay Mahajani<br>**Designation & Organization**: Professor, Department of Chemical Engg. IIT, Mumbai,<br>**Years of Exp: 33** | **SESSION 4**<br>**Topic:** Process Intensification in Chemical Engineering<br>**Name of the Expert:**<br>Mr Prasad R. Pangarkar<br>**Designation & Organization:** Vice President, Research and Technology Centre at Reliance Industry Ltd., Navi Mumbai<br>**Years of Exp:** 25 | **SESSION 6**<br>**Topic:** Process Intensification Strategies for Enhanced Process Performance<br>**Name of the Expert:**<br>Mr.Atul Wankhade<br>**Designation & Organization:** Vice President, Navin Fluorine International Ltd. Surat<br>**Years of Exp:** 26 | **SESSION 8**<br>**Topic:** Sustainability driven Safety Strategies, HAZOP and Process Optimization<br>**Name of the Expert:**<br>Mr.Gajendra S. Patil<br>**Designation & Organization:** Sr.IT Operation Manager<br>Shell India Markets Pvt. Ltd.<br>**Years of Exp:**22 | **SESSION 10**<br>**Topic:** Cutting edge Membrane applications for Sustainable Effluent Treatment<br>**Name of the Expert:**<br>Mr.Parag Kachare<br>**Designation & Organization:**<br>Director, Esmil Process Systems Ltd London U.K.<br>**Years of Exp:** 31 | **SESSION 12**<br>**Topic:** Energy efficient and Sustainable approaches in Piping Engineering<br>**Name of the Expert:**<br>Mr. Abhijeet Adhaoo<br>**Designation & Organization:**<br>General Manager –Process, Gurugram , Haryana<br>**Years of Exp:**30 |
| **8:00PM to 9:30PM** | | | | | **5:00PM to 7:30PM** |
| **SESSION 2**<br>**Topic:** Life Cycle Assessment in Process Engineering<br>**Name of the Expert:**<br>Mr. Sukumar Roy<br>**Designation & Organization**:<br>HOD-Process, NPCC Engineering Pvt. Limited (NEL) Mumbai<br>**Years of Exp:** 31 | | | | | **SESSION 13**<br>**Topic:** Smart & Sustainable Composite Material<br>**Name of the Expert:**<br>Mr.Deepak Tadse<br>**Designation & Organization:**<br>Assist. General Manager<br>Arvind Composite Ltd. Santej Gujarat<br>**Years of Exp:**18 |
| | | | | | **6:30PM to 7:30PM**<br>**Online test & feedback** |
| | | | | | **7:30PM to 8:00PM**<br>**Valedictory Session** |