



AICTE Training And Learning (ATAL) Academy

sponsored

Online Faculty Development Programme

on

Integrating Synergism among Chemical Processes and Technologies for Sustainable Development

10th to 15th February 2025

Organized By:



Department of Chemical Engineering Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat

ABOUT THE INSTITUTE

The institute was established in 1961 as a Regional Engineering College and was granted the status of "Institute of National Importance" from 2007 with the objective to provide high quality technical education to meet the needs of the Nation in the present competitive world. At present, the Institute is offering 11 UG and 21 PG Programmes in various disciplines of Technology, 3 Five Years Integrated M.Sc. Programmes as well as Dual Degree B.Tech. + MBA Programme. The Institute also offers PG Programmes by Research and Doctoral Programmes in all disciplines of Engineering and Applied Sciences. Institute receives research project grants from MHRD, DST, CSIR, GUJCOST, BRNS, etc. SVNIT has an excellent placement record with a number of top ranking companies visiting the campus every year.

ABOUT THE DEPARTMENT

Department of Chemical Engineering of S. V. National Institute of Technology, Surat was started in 1995. The Department has built up a comprehensive research infrastructure with topnotch facilities for carrying cutting-edge teaching and research. The department strives to provide facilities and environment that are conducive for creative and dynamic work. The Department is fully equipped with modern equipment and computer facilities which are being entertained by trained and experienced faculties.

ABOUT THE PROGRAMME

Integrating synergism among chemical processes and technologies is pivotal for sustainable development within the field of chemical engineering. As the industry navigates through the challenges posed by increased environmental regulations and the pressing need for resource conservation, the role of chemical engineers becomes increasingly critical. By embracing and implementing synergistic strategies, chemical engineers can optimize process efficiencies, reduce energy consumption, and minimize waste production—all crucial for sustainable growth.

The synergy in chemical engineering involves harmonizing various technological advancements such as process intensification, advanced materials, and systems biology. These integrated approaches not only enhance the performance of chemical processes but also lead to innovations that could revolutionize industry standards. For instance, combining catalytic systems with renewable feedstocks can lead to cleaner production methods that align with global sustainability goals.

The **major objective** of the FDP is to equip academicians, researchers and industry personnel with the advancements in chemical processes and technologies and their potential impact towards sustainable development. Greener processes contribute directly to several United Nations Sustainable Development Goals, including affordable and clean energy, industry innovation and infrastructure, responsible consumption and production and climate action.

BROADER TOPICS TO BE COVERED

- Innovations in Product and Process Design for Sustainability
- Green Solvents and Catalysts
- Process Intensification Techniques in Green Chemistry and Engineering
- Valorization of Renewable Resources
- Renewable and Clean Energy
- Integrated Biorefineries and Circular Economy
- Carbon Capture, Storage and Utilization

RESOURCE PERSONS

Experienced and recognized experts from various Engineering institutes like IITs, NITs and Field Experts from industries will conduct the program.

TARGET AUDIENCE

The faculty members, Research scholars & PG scholars of the AICTE approved institutions and Industry Personnel are eligible to attend.

Mailing Address

Prof. (Dr.) Jigisha Parikh, Coordinator, Department of Chemical Engineering, SVNIT, Surat-395007, Gujarat.

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COURSE REGISTRATION

Participants can apply online https://atalacademy.aicte-india.org/login through participant login.

COURSE FEE

There is no registration fee. Interested participants can apply through the above mentioned link.

IMPORTANT DATES

Last date of registration: 3rd February 2025 Date of intimation: 5th February 2025

PATRON

Prof. (Dr.) Anupam Shukla, Director, SVNIT

HEAD OF DEPARTMENT

Prof. (Dr.) Meghal A. Desai, Department of Chemical Engineering, SVNIT

COORDINATOR



Prof. (Dr.) Jigisha K. Parikh, Department of Chemical Engineering, SVNIT Total Experience: 33 Years

CO-COORDINATOR



Dr. G. C. Jadeja, Associate Professor, Department of Chemical Engineering, SVNIT

Total Experience: 14 Years

FDP Speakers



Prof. Debapriva Mandal Professor, Department of Chemical Engineering, IIT Jammu

Experience: 35 Years

Session Title: Nuclear Energy and

Development of Materials



Mr. Nilesh Bhatt

Discipline Manager, L&T Technology

Services, Vadodara Experience: 24 Years

Session Title: Pinch and Exergy Retrofitting Analysis for Heat

Exchanger Methods



Mr. Rajesh Shah

Principal Process Engineer, Worley,

Muscat, Oman Experience: 24 Years

Session Title: Mosaic of Climate Mitigation Pathways with Focus on

Carbon Capture Technologies



Dr. Yogendra Shastri

Professor, Chemical Engineering

Department, IIT Bombay Experience: 12 Years

Session Title: Industrial Ecology Approach for a Sustainable Sugar

Industry Complex



Dr. Prasenjit Mondal

Professor, Department of Chemical Engineering, IIT Roorkee

Experience: 20 Years

Session Title: Sustainable Utilization of Waste Plastics and **Biomass Towards Circular Economy**



Mr. Vipul Prajapati

General Manager R&D. MYK LATICRETE India Pvt. Ltd..

Hyderabad

Experience: 21 Years

Session Title: Sustainability Innovation and Product Development



Dr. S. Sridhar

Chief Scientist & Professor, CSIR -IICT, Hyderabad

Experience: 30 Years

Session Title: Membranes for Sustainable Development of

Industry and Society



Dr. Sonil Nanda

Assistant Professor, Department of Engineering, Dalhousie University,

Canada

Experience: 15 Years

Session Title: Biofuels and Circular Economy: Emerging Approaches for UN Sustainable Development Goals

and Net-Zero Targets



Dr. Akhilesh Gupta

Professor (HAG), Civil Engineering Department, MNIT Jaipur

Experience: 40 Years

Session Title: Application Chemical Sciences for Evolving Treatment Sustainable Water

Technologies



Dr. Krunal Shah

Co-founder, Impulse Research Lab,

Surat

Experience: 13 Years

Session Title: Catalysis for Green

Chemistry



Mr. Chetan Joshi

Process manager, Worley, Vadodara

Experience: 20 Years

Session Title: Process Optimization

by Engineering



Dr. Jigisha Parikh

Professor, Department of Chemical

Integrated

Engineering, SVNIT, Surat

Experience: 33 Years Title:

Session **Biorefineries**