SPARC Sponsored Course
on
"Reactor Design"

26th November- 05th December 2025

Department of Chemistry, National Institute of Technology

Tiruchirappalli, Tamil Nadu – 620 015

ABOUT THE COURSE

Unlock the future of sustainable engineering with our intensive Reactor Design Workshop. This program takes you beyond fundamentals, exploring cutting-edge innovations in CO_2 capture, hydrogen energy, and net-zero technologies that are reshaping global industries. Learn how modern reactor systems can drive real progress toward the Sustainable Development Goals, while mastering design strategies that balance performance, efficiency, and environmental responsibility. Whether you're a student, researcher, or industry professional, this workshop empowers you to create smarter reactors, greener processes, and a cleaner future - one design at a time.

The Faculty

Dr. Francisco R Garcia Garcia is a Senior Lecturer in Chemical Reaction Engineering at the School of Engineering at University of Edinburgh. He holds an M.Sc. in Chemistry by the Autónoma University of Madrid and a Ph.D. in Chemical Engineering by the Institute of Catalysis and Petroleum-chemistry, CSIC. He gained his first post-doctoral experience working at the Department of Chemical Engineering of Imperial College London. In this period, he focused in the design and development of catalytic multi functional reactors for hydrogen production. Afterwards, he worked as a Senior Scientist at Johnson Matthey in the Emissions Control Department. Despite having a very rewarding experience working in industry, he soon realized that he preferred to be involved in more fundamental science and he moved back to the academia. Hence, he joined the UK Catalysis Hub as a research fellow working at the Chemical Engineering Department at Cambridge University, and at the Chemical Engineering Department at Newcastle University. During this time his research focused in chemical looping reforming for syngas and hydrogen production.

You Should Attend If...

- **Undergraduate, postgraduate, PhD students and Faculty in Chemistry/Physics/Material science, and allied engineering disciplines.**
- **Early career, Middle level and senior scientists working in the field, heterogenous catalysis requiring an in-depth understanding of thermodynamics and kinetics of heterogenous molecules can learn and gain competitiveness.**
- **Scientists and research fellows from Government/Public sectors research organisations.**

REGISTRATION

All participants must register by paying the registration fee and completing the Google form, the link to which is provided below. (Registration can be done by scanning the QR code below)

Payment details per day

External students : Rs. 250/-
Faculty : Rs. 500/-
Industry : Rs. 1000/-

Accommodations will be provided on the basis of extra payment

Link for payment will be uploaded soon

Course Co-Ordinator

Dr. S. Velmathi,
Professor,
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Important Dates:

Last Date for Registration: 25/11/2025

FOR MORE INFORMATION, CONTACT:
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Ms. Lalitha (8110861359)
Mr. Karthik (9944945691)
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For Registration

Venue
Poppy Hall
Third-i Building