



**SCHOOL OF CHEMICAL ENGINEERING (SCHEME)  
IN ASSOCIATION WITH  
SOCIETY OF PETROLEUM ENGINEERS - VIT  
INDIAN INSTITUTE OF CHEMICAL ENGINEERS - VIT**

**PRESENTS**

**WORKSHOP  
on**

# **SIMULATION TOOLS FOR ENGINEERING APPLICATIONS**

**Venue:** SMV G17

**Date:** 18<sup>th</sup> December to 22<sup>nd</sup> December

**No. of Participants:** 60

**Registration Fee:** INR. 300 per person

**Registration Link:** <https://events.vit.ac.in/>



Society of Petroleum Engineers



**WINTER SEMESTER 2023-24**

## **PROGRAMME SCHEDULE**

**Date:** 18.12.23 - 22.12.23

**Venue:** SMV G17

Day	Date & Time	Lecture Topic	Resource Person
1	18.12.23 2.00 P.M – 4.00 P.M	Welcome Address, Aspen Simulation Basics, Hands on session on how to develop the Phase Diagrams, Flash Calculations, etc.	Dr. Bandaru Kiran, Faculty Coordinator, SPE-VIT Student Chapter
	18.12.23 4.00 P.M – 5.00 P.M	Property Method selection	Prof. L. Muruganandam, Professor and Dean, SCHEME
2	19.12.23 2.00 P.M – 5.00 P.M	Hands on session on Aspen Simulation studies on Separation Processes, Reaction Engineering & Heat Exchanger Networks	Dr. Bandaru Kiran, Assistant Professor, SCHEME
3	20.12.23 2.00 P.M – 5.00 P.M	Hands on session on Multi Criteria Decision Making using MS Excel	Dr. Samarashi Chakraborty, Assistant Professor, SCHEME
4	21.12.23 2.00 P.M – 5.00 P.M	Matlab: Basics, Hands on session on functions handling & Data Analysis.	Dr. P. Monash, Professor, SCHEME
		Hands on session on Research tools in Matlab, Simulink model for research experiments.	
	22.12.23 4.30 P.M – 5.00 P.M	Vote of Thanks	Dr. K Sivagami, Faculty Coordinator, IICHe-VIT Vellore Student Chapter



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## COURSE OBJECTIVE:

This course aims to provide students/faculty rich hands on experience on the use of simulation tools such as Matlab; Aspen Plus ;in addressing Chemical Engineering Problems so that the students/faculty will be able to simulate the design of new plants, debottlenecking, optimizing the performance of units.

## COURSE OUTCOME:

- To analyze physical and chemical phenomena involved in various processes
- To develop mathematical models for various chemical processes
- To solve real life problems from industry using the simulation tools.

## WHO MAY BENEFIT:

The course will be beneficial to faculty, PG Students and Research Scholars.

## CO ORDINATORS:

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## RESOURCE PERSONS



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