



Department of Chemical Engineering
NIT Andhra Pradesh

**LET'S
LEARN FROM
THE GUEST SPEAKERS**



Dr. Saratbabu Anne

Professor
Department of Chemical Engineering
National Institute of Technology,
Warangal - 506004, Telangana, INDIA

Dr. V. Ramsagar

Associate Professor
Department of Chemical Engineering
National Institute of Technology,
Warangal - 506004, Telangana, INDIA



Dr. Manohar Kakunuri

Assistant Professor
Department of Chemical Engineering
National Institute of Technology,
Warangal - 506004, Telangana, INDIA

**14,15
APRIL 2023**

**WORKSHOP On
Aspen plus and
its significance in
Chemical
Engineering**



Chemical Engineering Association
NIT Andhra Pradesh

IChE Student's Chapter
NIT Andhra Pradesh
Amaravati Regional Centre



aspen Plus

Technology That Loves Complexity

PATRON

Prof. Pramod M. Padole
Director (in-charge)

COORDINATORS

Dr. Vinoth Kumar Raja
Head & Assist. Prof., Chemical Engg.

Dr. Dinesh P. Sankar Reddy
Asso. Prof., Chemical Engg.

Dr. Gourhari Chakraborty
Faculty Advisor (CEA), Chemical Engg.

ABOUT WORKSHOP

An interactive Two-Day workshop to provide a hands-on experience with the software used in chemical process industry, to simulate unit operations by Dr. Saratbabu Anne and Dr. V. Ramsagar of NIT Warangal.

Day-1

Workshop (Hands -on training in modelling and simulation of chemical problems)

Day-2

Skill development (On process design and simulation of chemical engineering systems)

SCHEDULE

Date & Day	Time	L/P	Topic
April 14, 2023 Friday	10:00 to 11:30	L1	Introduction to Process Simulation - Dr A Sarath Babu
	11:30 to 13.00	P1	Problem solving session: Simulation of simple units, Sensitivity analysis and Design specification tools - Dr A Sarath Babu & Dr V Ramsagar
April 14, 2023 Friday	14:00 to 15.30	P2	Problem solving session: Fluid Mechanics and Heat Transfer Dr A Sarath Babu & Dr V Ramsagar
	15:30 to 17:00	P3	Problem solving session: Reaction Engineering - Dr A Sarath Babu & Dr V Ramsagar
April 15, 2023 Saturday	09:00 to 10.30	L2	Design and Development of Sustainable Battery Systems Dr Manohar Kakunuri
	10:30 to 12:30	P4	Problem solving session: Material and Energy Balances Dr A Sarath Babu & Dr V Ramsagar
April 15, 2023 Saturday	14:00 to 15.00	P5	Problem solving session: Material and Energy Balances - Dr A Sarath Babu & Dr V Ramsagar
	15:00 to 16:30	P6	Problem solving session: Mass Transfer - Dr A Sarath Babu & Dr V Ramsagar

AIM OF WORKSHOP

- Introduction to Aspen Plus and its features
- Building a basic simulation using Aspen Plus for Industrial Unit operations (e.g. Absorption and Distillation Columns)
- New skills for the latest industrial exposure !
- Create process flow diagrams in Aspen Plus
- Enter and manipulate data in Aspen Plus
- Develop and simulate process models in Aspen Plus
- Analyze simulation results and draw conclusions from them

WHY THIS SOFTWARE ?

Aspen Plus is a computer program used in chemical engineering to simulate and design chemical processes. It allows engineers to model and analyze the behavior of chemical systems, including reactions, heat and mass transfer, and phase behavior. By using Aspen Plus, engineers can optimize process design, predict equipment performance, and troubleshoot problems. Aspen Plus is widely used in the chemical, petrochemical, and energy industries. It is an important tool for engineers to design, operate, and optimize processes that are safe, efficient, and environmentally friendly.

ABOUT INSTITUTE

The National Institute of Technology Andhra Pradesh is the 31st institution in the Government of India's NIT chain. NIT Andhra Pradesh was founded in the state of Andhra Pradesh in the academic year 2015-2016. The Institute currently offers B.Tech., M.Tech., Ph.D., and M.S. programmes in a variety of disciplines.

ABOUT THE DEPARTMENT

The goal of the Department of Chemical Engineering at NIT Andhra Pradesh, which was founded in 2015-16, is to provide top-notch engineering education and shape the students to fulfil the industry's constantly expanding need for technical human resources in the field of chemical engineering.

ABOUT PARTICIPANTS

This Workshop is going to be beneficial for Chemical Engineering and Allied Department Students. Certificate will be provided to all the participants.

ORGANIZING TEAM MEMBERS

Dr. B. Anil K. Naik, Dr. Sudha Minz, Dr. M. S. V. Prasad, Dr. Bindhya K. P., Dr. G. Sai Manikiran, Dr. Atanu K. Paul

Velamuri Satya Someswara Sarma, Ganga Bhavani, Adarsh kumar, Reethu Kumari, Adarsh Singh, H Sanskruti Ajay, Saify Imam

[Registration link](#)



CONTACT US

Velamuri Satya Someswara Sarma
Secretary CheA NIT Andhra
Mob. No:- +91 95154 47172

Ganga Bhavani
Co- Secretary CheA NIT Andhra
Mob. No:- +91 96761 44554

Email:- fdp.chem@nitandhra.ac.in