

Registration Form

Name: _____

Designation: _____

Organization: _____

Gender: _____

Educational Qualification: _____

Address for correspondence: _____

Mobile No.: _____

Email Id: _____

Accommodation Required (Yes/No): _____

Experience: _____

Details of Money Transfer:

Amount: _____

Number: _____

Date: _____

Date

Signature of Applicant

Organizing Committee

Chief Guest

Prof. Ashok Misra

Chairman, Intellectual Ventures of India
Bangalore

Patron

Prof. M.K. Mishra

Vice Chancellor, BIT, Mesra

Convener :

Prof. (Mrs.) S. Goswami (HOD)

Prof. Gautam Sarkhel

Chemical Engineering, BIT Mesra

Organizing Secretary:

Dr. Raghu Raja Pandiyan K.

Dr. Arnab Karmakar

Chemical Engg., BIT Mesra

Organizing Committee

Dr. Chandan Das

Dr. Bikash Kumar Mondal

Dr. Dan Bahadur Pal

Dr. Anand Bharti

TEQIP III SPONSORED ONE WEEK WORKSHOP ON INDUSTRIAL PROCESS SIMULATION

16th - 20th May 2018



Organized by

**Department of
Chemical Engineering**

**BIRLA INSTITUTE OF TECHNOLOGY,
MESRA, RANCHI**

<https://www.bitmesra.ac.in>



About BIT Mesra

The Birla Institute of Technology, Mesra, Ranchi was established in 1955 by the philanthropist and industrialist Late Shri B.M. Birla with a vision to provide quality learning and dissemination of knowledge. The institute today offer undergraduate, postgraduate as well as doctoral level programmes in diverse disciplines of science and Engineering

About Department

The Department was established in 1994 and currently offers two undergraduate programmes in B.E. (Chemical Engineering) & B.E. (Chemical Engineering–Plastics & Polymer) and two postgraduate programmes in M.E. (Chemical Engineering) & I.MSc. (Food Technology). The Department also provides facilities for doctoral research in the fields of Chemical Engineering, Polymer Science-Technology and Food Science- Technology . The Department received national recognition by winning the Gold Trophy for Plasticon Award 2012 in the category of Best Educational Institution Contributing to Plastics at the 8th International Plastics Exhibition and Conference, New Delhi.

About the Location and Travel

Birla Institute Technology (BIT) is located at Mesra, about 16 Km from Ranchi, the state-capital of Jharkhand. Ranchi is well connected to rest of the country through regular flight from major airports as well as through well developed rail and road networks. The BIT 'more' on National Highway-33 is well known landmark from where a tree-lined avenue leads one to the grounds that are always abuzz with young voices. The sprawling campus is located in a picturesque 780 acres setting at the confluence of the rivers Jumar and Subarnarekha.

Facilities

CAE: ASPEN PLUS •FLUENT •Poly Flow •MATLAB
•Mold FlowSoftware: Flow, Stress, Warp and Cool •Accelrys
Material Studio: Synthia, Blend, COMPASS, Amorphous
Cell, Discover, MesoDyn, DPD•CATIA •Autodesk
Inventor •Pro-engineer •ANSYS •Virtual Laboratory
Paulson Training Modules, Injection Moulding, Single
Screw Extrusion, Compounding with Twin Screw Extrusion,
and SIMTECH, etc.
Mass transfer, Mechanical Operations, Heat Transfer , Fluid
flow, Reaction Engg., Fuel Technology, Process Control Lab.,
Polymer Processing Facilities etc.

Registration Details:

Important Dates

•Last date for registration: 04.05.2018

Registration Fees

- Faculty Members: Rs.5000/- (including GST)
- Research Scholar and P.G. Students: Rs. 3000/-(Including GST)
- Industry Participants: Rs. 6000/-

Travelling, lodging, boarding and other expenses will have to be borne by the participants. Accommodation will be provided on request in Institute Guest House/Hostels and hostels depending upon availability.

The course fee includes Registration kit, High tea, snacks, lunch, dinner(for outside Participants only) and certificate, registration fee will be accepted through NEFT with details (of SBI BIT) given Below.

Account number: 37354860062

IFSC code: SBIN0018056

Accommodation for external participants is available in Institute Guest Houses/Hostels.

The filed registration form (hard/scanned copy) along with copy of Money Transfer to be sent to :

For Correspondence

Prof. (Mrs.) S. Goswami

Email- chemical@bitmesra.ac.in

Phone: 9431991789

Dr. R.R. Pandiyan

Email. raghuchemraj@gmail.com ,

raghu@bitmesra.ac.in

Phone No. 8002486897

Who Should Attend?

Faculty members of Engineering colleges, PG students, research scholars and practicing engineers with active interest in the field can apply.

Importance & Scope of the Programme

At the present time, Process Simulations are the fundamental steps to design and develop a chemical process plant. Suitable description of the performance of the various unit operations of the plant should be made and integrated, to understand the mutual interferences both under steady state conditions and under unsteady state conditions. Process simulation tools are helpful to compute both situations. The stationary case can be simulated with package dealing with material and energy balance applied to each case needs dynamic modeling to describe the time-dependent evolution of the system.

Thus the main aim of this workshop is to provide well knit training on simulating vital chemical process under steady & unsteady state conditions, in order to design & develop the chemical process & product. The technocrats & academic participating will be put through enriching technical session from primitive property predictions to advanced industrial flow sheeting simulations. The TEQIP workshop is proposed diversified chemical field simulation so that the participants of different disciplines can take benefits of chemical process simulations.

Course Content

The workshop aims to cover the following topics:

- Aspen Simulation: introduction to Aspen Software, Simulation of single unit operations-Pressure Changers, Flash Drum, Distillation columns, Reactors etc.
- ASPEN Industrial Process Simulation: Industrial Flow Sheeting & Process Simulation of Conventional/In conventional chemicals (eg. Complex-amine reactions, chemical loop combustion etc.)
- ASPEN Tool Analysis: Sensitivity Tool, Design Spec, Optimization Tool, Cost Analysis.
- MATLAB SIMULINK: Unsteady state process simulations-Lumped & Distributed parameters model.
- CFD: Classical flow Phenomenon.
- Molecular Dynamics: Atomic/molecular simulations-phenomena associated with density, phased transition point and diffusion of Lennard-Jones system