

NWASP-2010

National Workshop on “Advances in Separation Process”

December 13-18, 2010

A five day Workshop on Advances in Separation Process was organized by the department of Chemical Engineering, JUET, Guna from December 13-18, 2010.

Current manufacturing practices have put tremendous pressure on the fragile ecosystem that we have inherited. There is thus an urgent need to design chemical plants for manufacture of chemicals in an environment-friendly and sustainable way so that the ecosystem can be preserved for future generations on this planet. In view of this, *process intensification* and *sustainability* have become important driving forces for improving today's chemical manufacturing processes. Understanding the fundamentals of separation processes is crucial to the design of a modern chemical plant taking into account the safety, environmental protection and sustainability. In this context, certain separation processes have assumed importance today such as distillation, absorption, adsorption, membrane separation and extraction.

In this course, the participant will learn about the advances in separation processes and be able to design selected separation processes for a modern chemical plant. Topics covered

- Fundamentals of Distillation and Distillation column design; Reactive Distillation.
- Fundamentals of Absorption, Absorption with chemical reaction; Design of absorption columns.
- Membrane processes and their design.
- Adsorptive processes.
- Liquid-liquid, liquid-solid, emulsion liquid membrane and supercritical fluid extraction; Design aspects of extraction equipment.

Resource Persons

Experienced faculty from Institute of Chemical Technology (ICT), Mumbai and JUET Guna will give lectures in this workshop. Some of the resource persons are given below:

1. Prof. V.V. Mahajani, ICT-DAE Professor, ICT Mumbai.
2. Prof. V.G. Pangarkar*, Consultant.
3. Prof. K.K. Tiwari*, Visiting Professor, JUET Guna.

* Former Professors, ICT Mumbai.

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