STEADY STATE & DYNAMIC CHEMCAD SIMULATION SOFTWARE

2 Day Seminar Programme

CHEMCAD Basics and Steady State Simulation

Day 1

Introduction

MNL501 Review of CHEMCAD, CC-BATCH, CC-ReACS, CC-DCOLUMN and CC-THERM
Folder / file handling - tool bars - function keys - zip - import/export - help

Fundamentals

MNL501 Flowsheet - units - components - calculation - convergence - simulation -report - PFD
Flash fundamentals and process applications

Report Handling

Excel mapping feature for reporting and model enhancements
Exporting data to Windows applications

Thermodynamics

MNL031 Component physical property plots and reports
MNL035 User component & aqueous mixture - physical property regression and predictions
MNL049 Thermodynamics model selection - expert system
Phase equilibrium ideal and non ideal mixtures

Fluid Flow & Piping Systems

Review of the capabilities and applications
MNL063 Fluid flow in pipes, valves, fittings and pumps – sizing and rating networks

Dynamic Simulation

Day 2

Introduction

MNL061 Set up flowsheet, run dynamic models (Direct/Indirect Flow Regulation)
MNL055 Process and Instrumentation control refresher
MNL061 p19 Setting up a tank level control model (Level Control 1 and 2)

Relief System Sizing and Dynamic Behaviour

MNL043 Relief system sizing fundamentals and review of validation cases (API & Diers)
MNL058 Relief network sizing and dynamic relief system cases (RELIEFNET, DIERS2DVSL)

Batch Distillation

MNL061 p53 Dynamic batch distillation - CC-BATCH module (Batch Distillation 1)
MNL061 p57 Batch distillation using dynamic batch reactor and column module(Batch Distillation 2)

Batch Reactors

MNL063 Batch reactor direct jacket temperature control(Direct Cool with Reaction)
Modelling of typical temperature control modules (Direct & Indirect Modes)
MNL062 p19 Exothermic reaction thermal stability in stirred reactor (RXDOWJ)