



# STEADY STATE & DYNAMIC CHEMCAD SIMULATION SOFTWARE

## 2 Day Seminar Programme



### CHEMCAD Basics and Steady State Simulation

<b>Day 1</b>	<p><b><u>Introduction</u></b> MNL501 Review of CHEMCAD, CC-BATCH, CC-ReACS, CC-DCOLUMN and CC-THERM Folder / file handling - tool bars - function keys - zip - import/export - help</p> <p><b><u>Fundamentals</u></b> MNL501 Flowsheet - units - components - calculation - convergence - simulation -report - PFD Flash fundamentals and process applications</p> <p><b><u>Report Handling</u></b> Excel mapping feature for reporting and model enhancements Exporting data to Windows applications</p> <p><b><u>Thermodynamics</u></b> MNL031 Component physical property plots and reports MNL035 User component &amp; aqueous mixture - physical property regression and predictions MNL049 Thermodynamics model selection - expert system Phase equilibrium ideal and non ideal mixtures</p> <p><b><u>Fluid Flow &amp; Piping Systems</u></b> Review of the capabilities and applications MNL063 Fluid flow in pipes, valves, fittings and pumps – sizing and rating networks</p>
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### Dynamic Simulation

<b>Day 2</b>	<p><b><u>Introduction</u></b> MNL061 Set up flowsheet, run dynamic models (<a href="#">Direct/Indirect Flow Regulation</a>) MNL055 Process and Instrumentation control refresher MNL061 p19 Setting up a tank level control model (<a href="#">Level Control 1 and 2</a>)</p> <p><b><u>Relief System Sizing and Dynamic Behaviour</u></b> MNL043 Relief system sizing fundamentals and review of validation cases (API &amp; Diers) MNL058 Relief network sizing and dynamic relief system cases (<a href="#">RELIEFNET</a>, <a href="#">DIERS2DVSL</a>)</p> <p><b><u>Batch Distillation</u></b> MNL061 p53 Dynamic batch distillation - CC-BATCH module (<a href="#">Batch Distillation 1</a>) MNL061 p57 Batch distillation using dynamic batch reactor and column module(<a href="#">Batch Distillation 2</a>)</p> <p><b><u>Batch Reactors</u></b> MNL063 Batch reactor direct jacket temperature control(<a href="#">Direct Cool with Reaction</a>) Modelling of typical temperature control modules (<a href="#">Direct &amp; Indirect Modes</a>) MNL062 p19 Exothermic reaction thermal stability in stirred reactor (<a href="#">RXDOWJ</a>)</p>
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