



**DYNAMIC MODELLING  
CHEMCAD SIMULATION SOFTWARE**  
2 Day Seminar Programme  
(Presented by P&I Design Ltd.)



**Dynamic Modelling – Basic and Intermediate**

<b>Day 1</b>	<b><u>Introduction</u></b>	<b><u>MNL 061</u></b>
	<b>Session 1</b> Set up Control Valve with Ramp dynamic models Flow control and flow splitting with Dividers	Direct/Indirect Flow Regulation p4 Indirect Flow Divider 1 & 2 p17
	<b>Session 2</b> Process and Instrumentation Control refresher Setting up tank Level control models Pressure and Level control of Dynamic Vessel	MNL 055 Level Control Scheme 1 & 2 p23 Pressure Calculation p36
	<b><u>Dynamic Modelling of Process Systems</u></b>	
	<b>Session 3</b> Batch Evaporator with Dynamic Vessel Batch Evaporator with real heat transfer	Real 1 p45 Real Batch p50
<b>Session 4</b> Batch Distillation with CC-BATCH Batch Distillation with Batch Reactor and Column Batch Distillation with Control System	Batch Distillation 1 p56 Batch Distillation 2 p60 Batch Distillation 3 p69	

**Dynamic Modelling – Advanced**

<b>Day 2</b>	<b><u>Batch Reactor Control Schemes</u></b>	<b><u>MNL 062</u></b>
	<b>Session 1</b> Batch Reactor control indirect heat & cool exchange Batch Reactor control indirect heat & direct cool	Indirect Heat Cool p9 Indirect Heat Direct Cool p15
	<b>Session 2</b> Exothermic reaction in Batch Reactor Study of refrigeration system for batch process	Batch Reactor Exotherm Stability p19 Batch Reactor R407C p4
	<b><u>Speciality, Fine and Pharma Applications</u></b>	<b><u>MNL 067</u></b>
	<b>Session 3</b> Low temperature reaction system Services distribution system Heat exchanger network analysis Real time heat exchanger OHTC VOC Scrubbing System	Cryogenic Reactor System p6 Piping Distribution Dynamics p4 Heat Exch Circulation System p13 Batch Reactor Heat Cool Dyn U p10 Emission Control p11
<b>Session 4</b> Review and discussion on topics of specific interest.		