

# Process Control Academy 2005

## 27<sup>th</sup> – 29<sup>th</sup> September 2005, Leicester, UK

DAY 1 – Tuesday, 27 <sup>th</sup> September “Getting the Basics Right”	DAY 2 – Wednesday, 28 <sup>th</sup> September “Turning Advanced Control into Applied Control”	DAY 3 – Thursday, 29 <sup>th</sup> September “Realising Improvements to Your Process”
9.00am Basics of Process Control <ul style="list-style-type: none"> <li>• overview of main issues</li> </ul>	9.00am Keynote: “Model Predictive Control - Past, Present and Future” Prof. David Sandoz, Perceptive Engineering Ltd.	9.00am Keynote: “Big Benefits from Optimisation and Fault Detection” Chris Hawkins, Emerson Process Management
9.30am The Process and Dynamics <ul style="list-style-type: none"> <li>• where and how dynamics arise</li> <li>• different process types</li> <li>• obtaining dynamics from plant tests</li> </ul>	9.45am “Applying DeltaV MPC to Furnace Control” Adrian Johnstone, Huntsman Tioxide	9.45am “Strategies for Performance Evaluation and Comparison of Fault Monitoring Techniques for Industrial Applications” Prof. Ron Patton and Dr Faisal Uppal, Hull University
10.30am Tea / Coffee	10.40am Tea / Coffee	10.30pm Tea / Coffee
10.50am Applying Control to the Processes <ul style="list-style-type: none"> <li>• proportional, integral and derivative control</li> <li>• PID structures and parameterisation</li> <li>• Tuning Methods</li> <li>• Real-Life Tuning Example</li> </ul>	11.00am “Applications of Model-Based Predictive Adaptive Control in Continuous Processing Industries” Duncan Meade, IDEAS Simulation & Control	10.50am “Process Control Benchmarking” Prof. Mike Grumble, ACTC
	11.45am “Application of MPC and PLS in the Paper Industry” Dr. Jonas Balderud, University of Strathclyde	11.35am “Process Plant: How to look like a Hero” Harvey Dearden, TDSL
12.45pm Lunch	12.20pm Lunch	12.20pm Lunch
1.45pm Real-Life Process Control Problems <ul style="list-style-type: none"> <li>• Example problems of filtering, stiction, nonlinearities and sampling</li> <li>• How problems can be spotted and corrected</li> </ul>	1.30pm “AutoPilot in Action – Combined Technologies, a Batch Example” Ernie Lamza and Michael Keaton, Optima Powerware	1.30pm “System Life Planning – How to Get More from your Existing Plant” Jim Houston, Emerson Process Management
	2:15pm “Equationless Modelling of the Operating Envelope for Batch & Continuous Processes” Dr. Robin Brooks, Curvaceous Software Ltd.	2.15pm “How Will You Pay For Automation in the Future?” Nick Taylor, Emerson Process Management
2.40pm Tea / Coffee	3.00pm Tea / Coffee	3.00pm Tea / Coffee
3.00pm Enhanced Process Control <ul style="list-style-type: none"> <li>• Ratio and split range control, averaging level control</li> <li>• Feed-forward compensation, cascade control</li> <li>• Smith Predictor for dead-time dominant processes</li> <li>• Decoupling control</li> </ul>	3.20pm “Introduction to Process Nonlinearities and Control” Dr. Andy Clegg, ACTC	3.20pm “Get More from your Process using Modelling and Simulation” Dr Andy Clegg, ACTC
	3.50pm “A Simple Nonlinear Controller for Process Control” Prof. Mike Grumble, ACTC	4.10pm Academy Synopsis Travis Hesketh, Emerson Process Management
4.30pm Questions and Close (5pm)	4.40pm Questions and Close (5pm)	4.30pm Questions and Close (5pm)
	7.00pm Academy Dinner (Terracotta Chinese Buffet, central Leicester)	