



**Perceptive Engineering** are pleased to announce an introductory training course on **process control for the pharmaceutical industry**, which is free to attend for members of the ADDOP T consortium.

**Day 1** will cover the core topics of why and how processes should be controlled, and an introduction to regulatory control techniques. **Day 2** will extend the scope into process system identification, and the fundamentals of model predictive control. **Presentation delivery** will be interspersed with regular hands-on software sessions, working with a variety of simulated processes.

<b>Dates</b>	<b>Tuesday 23 - Wednesday 24 August 2016</b>
<b>Venue</b>	The Innovation Centre Keckwick Lane SciTech Daresbury Cheshire WA4 4FS
<b>Registration</b>	Reserve your place by email or phone to Matthew McEwan <a href="mailto:mmcewan@PerceptiveAPC.com">mmcewan@PerceptiveAPC.com</a> / 01925 607150
<b>Topics and Timetable</b>	
<b>Day 1</b>	<b>Coffee and Registration 08:45</b> Introduction to Control Elements of a Control System Process Dynamics Controller Operation and Tuning What Makes Control Difficult?
<b>Day 2</b>	Introduction to System Identification Introduction to Model Predictive Control Hands-on Session with MPC Examples Using PharmaMV Software

#### **Trainer Profile: Dr Andy Clegg**

*Andy joined Industrial Systems and Control Ltd in 1996 as a consultant control engineer, during which time he has been responsible for providing consultancy, training and research in the field of control engineering, for many large international companies including Ford, BP, Shell, Rolls-Royce, EDF, BAE Systems across a very broad range of industrial sectors. Andrew was awarded a Ph.D. from Heriot-Watt University for research on hydraulic robot control, and received BEng and MEng degrees in Electrical and Electronic Engineering from the University of Bradford. Andy is now the Managing Director of ISC.*

#### **Trainer Profile: Dr Ewan Mercer**

*Ewan is the Senior Technology Consultant at Perceptive Engineering Ltd. As part of the software development team his role involves identifying new technologies for inclusion in the PerceptiveAPC software suite and opportunities for collaborative research and development. Prior to working for Perceptive Engineering, Ewan worked for Shell as a consultant in their Statistics and Chemometrics group and as an Advanced Process Control Engineer at Stanlow Refinery.*

#### **Trainer Profile: Dr Matthew McEwan**

*Matthew is a Principal Engineer with Perceptive Engineering. Matthew has been involved in the design and commissioning of advanced control, optimisation, and monitoring applications for over 15 years, on processes varying from copper smelters in northern Canada, to paper machines in Australia, to evaporator dryers in Singapore, and most things in between. Matthew is one of the founder employees of Perceptive Engineering.*