



HITCHHIKER'S GUIDE TO PROCESS ANALYTICS AND CONTROL TECHNOLOGIES

CPACT advances manufacturing excellence to deliver business benefits across all sectors of the processing and manufacturing industries

CPACT initiates leading edge R&D and technology transfer for the exploitation of process analytics and control technologies

CPACT is managed by its industrial and academic partners with support from the Knowledge Transfer Network

BUSINESS IS BASED UPON SUSTAINABLE PROFITABILITY:

PROCESS ANALYSIS AND CONTROL BOOSTS YOUR BOTTOM LINE

CONTACT US:
www.cpacct.com

Natalie Kerr
CPACT Strathclyde
T: +44 141 548 4836
E: admin@cpact.com

Julian Morris
CPACT Technical Director
T: +44 7711 182739
E: technical@cpact.com

PROCESS VARIABILITY

What is Process Analytics?

- ◆ What technologies can be used?
Off-line; At-line; On-line; In-line
- ◆ Comparison of Optical Techniques
- ◆ Strengths and weaknesses of some Process Analytical Technologies
- ◆ Calibration Maintenance and Transfer
- ◆ What does process analytical miniaturisation provide?
- ◆ Software Sensors
- ◆ Data Fusion — the integration of spectroscopic and process data



What are Control Technologies?

- ◆ Basic feedback control: Proportional control; Proportional plus Integral control; Proportional plus integral plus derivative control
- ◆ Multi-loop Control: Cascade control; Ratio control; Feedforward control
- ◆ Inferential measurement and control
- ◆ Advanced Process Control
- ◆ Hybrid modelling and control



THE CENTRE FOR PROCESS ANALYTICS AND CONTROL TECHNOLOGY