

NSERC-Matrikon-Suncor-iCORE Industrial Research Workshop
Department of Chemical and Materials Engineering
University of Alberta
Monday, 3 December 2007
Room: E6-060 (ETLC) Building, University of Alberta
Program

8:30 AM	Registration and Coffee	
Talk 1 9:00 AM	Progress report on new results and case studies: Temporal and Spectral Methods for Process Data Analysis	<i>Sirish Shah</i>
Talk 2 9:20 AM	Equipment Condition Monitoring <ul style="list-style-type: none"> ▪ Detection and Quantification of Impeller Wear in Tailings Pumps ▪ Detection of faults in Rotating Equipment using Time-Frequency domain analysis 	<i>E. Halim & F. Vanderham</i>
Talk 3 10:00 AM	Image-based soft sensors for interface level detection in Bitumen Separation Vessels	<i>P. Jampana & R. Kadali</i>
10:30 AM	Coffee-Tea Break	
Talk 4 10:45 AM	MPC Performance Monitoring of KHU and NHU units	<i>H. Jiang & B. Wilson</i>
Talk 5 11:20 AM	Detection of model-plant mismatch in MPC applications and assessing its effect on controller performance	<i>A. Badwe & R. Patwardhan</i>
12:00	Lunch	
Talk 6 1:00 PM	Data-driven approaches for assessing the need for Nonlinear Model Predictive Control	<i>H. Raghavan & R. Patwardhan</i>
Talk 7 1:30 PM	Nonlinear System Identification using Support Vector Regression	<i>Saneej Chitrlekha</i>
Talk 8 2:00 PM	Reconstruction of Missing Data	<i>Liqian Zhang</i>
2:30 PM	Coffee-Tea Break	
Talk 9 2:45 PM	Analysis of Process and Biological Data using Support Vector Machines	<i>Sankar Mahadevan</i>
Talk 10 3:15 PM	Smart Alarm Monitoring	<i>Iman Izadi</i>