

Seminar

Topic: Integration of on-line Measurement, Control and Modelling - The Path to Manufacturing Excellence of Pharmaceuticals and Fine Chemicals

Speaker: Prof. Xue Zhong Wang

Date & Time: 2:00-4:00 (pm) Jan, 15, 2013 (Tuesday)

Venue: Multifunctional Hall, IPE Mansion

Introduction

Professor Xue Zhong Wang holds a Personal Chair in Intelligent Measurement and Control in the Institute of Particle Science and Engineering, University of Leeds. Prior to this appointment, he was the industrially sponsored Malvern Reader. His key areas of expertise are in (i) sensor data mining and knowledge discovery (wavelets, neural networks, principal and independent component analysis, multivariate statistical process control, automatic decision tree generation, link analysis, multidimensional visualisation); and (ii) on-line process analytics and real-time control for particles processes (NIR, ATR FTIR, zeta-potential, laser diffraction, etc). In these areas, he has published over 100 papers and one research monograph entitled Data Mining and Knowledge Discovery for Process Monitoring and Control (Springer). Research in his group is being conducted with strong support from EPSRC, DTI and UK industries. Projects include research on on-line photon correlation spectroscopy and acoustic spectroscopy for size characterisation in high concentration nanoparticle slurries; crystal morphology measurement, modelling and control; investigation on scaling-up strategy and control manufacture of nanomaterials using a continuous hydrothermal synthesis process; as well as high-throughput discovery of inorganic nanomaterial.