



International Seminar on Advanced Materials

A day conference in conjunction with the Particulate Fluids Processing Centre Science Board meeting.

Monday 14 July
8.30am-6.00 pm

Chemical and Biomolecular Engineering Lecture Theatre
The University of Melbourne

PFPC

Please register your attendance by Monday 7th July 2008

Email: mgds@unimelb.edu.au

Tel: 8344 6620

Program

- 8.30-9.00 Tea and coffee on arrival
- 9.00-9.30 **Professor Geoff Stevens**
Director's Overview
- 9.30-10.20 Tewkesbury Lecture:
Professor Alan Hatton, Massachusetts Institute of Technology
Functionalised Nano-Materials for Chemical and Biological Processing
- 10.20-10.45 **Associate Professor George Franks**
Advanced Ceramics
- 10.45-11.00 Morning Tea
- 11.00-11.50 Tewkesbury Lecture:
Professor Kazue Kurihara, Institute of Multidisciplinary Research for Advanced Materials
Resonance Shear Measurement for Nano-Rheology and Nano-Tribology
- 11.50-12.15 **Dr Rachel Caruso**
Porous Inorganic Structures
- 12.15-12.40 **Professor Geoff Stevens**
Greenhouse Gas Recovery
- 12.40-1.40 Lunch
- 1.40-2.00 **Professor Rob Lamb**
Title TBC
- 2.00-2.50 **Professor Aibing Yu**, University of New South Wales
Recent progress in computational particulate technology
- 2.50-3.20 **Dr Andrea O'Connor**
Tissue Engineering
- 3.20-3.45 Afternoon Tea
- 3.45-4.30 Tewkesbury Lecture:
Professor Brian Vincent, Chemistry, University of Bristol
Microgels and Core-Shell Particles for Controlled Release
- 4.30-6.00 Student poster session with drinks

Student Poster Session

Dr Meenakshi Arora

Title: *Use of Zeolite as a Controlled Release Fertilisation System for Hydrocarbon Remediation at Low Temperatures*

Authors: Kathryn Mumford, Geoff Stevens, Ian Snape, John Rayner

Peter Asimakis

Title: *Protein Aggregation during Processing*

Authors: Peter Asimakis, Joseph Bertolini, Dave E Dunstan

Alisa Becker

Title: *A General Approach for DNA Encapsulation in Degradable Polymer Microcapsules*

Authors: Alisa L. Becker, Alexander N. Zelikin, Angus P.R. Johnston, Kim L. Wark, Fabio Turatti, Frank Caruso

Eleanor Button

Title: *Dynamics of Water Bells Formed on the Underside of a Horizontal Plate*

Authors: Eleanor Button, John Sader, Claire Jenkins, Ben Dwyer, Graeme Jameson

Sam Cook

Details TBC

Kohei Endo

Details TBC

Dewi Go

Title: *Functionalization of PLGA Microspheres with Anti Inflammatory Peptide: α -MSH for Tissue Engineering*

Authors: Dewi Go, Sally Gras, Andrea O'Connor

Ailar Hajimohammadi

Title: *Geopolymers for Sustainable Construction*

Authors: John L. Provis, Jannie S. J. van Deventer, Peter Duxson, Dingwu Feng

Beena Jimmy

Title: *Study on Ultrasonic Atomization of Aqueous Solutions of Surfactants*

Authors: Beenamma Jimmy, Muthupandian Ashokkumar, Sandra Kentish, Franz Grieser

Ofer Manor

Title: *Hydrodynamic Boundary Conditions and Dynamic Forces between Bubbles and Surfaces*

Authors: Ofer Manor, Ivan U. Vakarelski, Xiaosong Tang, Sean J. O'Shea, Geoffrey W. Stevens, Franz Grieser, Raymond R. Dagastine and Derek Y. C. Chan

Michael Simioni

Details TBC

Nicolin Tirtaatmadja

Title: *Development of Mesoporous Bioaffinity Adsorbents*

Authors: Sasha Boskovic, Nicolin Tirtaatmadja, Terry W. Turney, Geoff W. Stevens, Michelle L. Gee, Andrea J. O'Connor

Xingdong Wang

Title: *Synthesis, Characterization and Photocatalytic Application of Porous Au/TiO₂ Nano-Hybrids*

Authors: Xingdong Wang, David R. G. Mitchell, Kathryn Prince and Rachel A. Caruso

Claire White

Title: *Multiscale Modelling of Geopolymers*

Authors: Claire E. White, John L. Provis, Jannie S. J. van Deventer