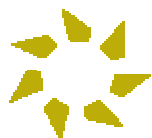


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(PFPC)
A Special Research Centre of the Australian
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Scaling Down to a Nano-Materials World

Challenges for 21st Century

Scientists and Engineers

**Monday December 1 to
Thursday December 4
2003**

Presented at:

The Particulate Fluids Processing Centre
A Special Research Centre of the Australian
Research Council
The Department of Chemical and Biomolecular
Engineering
The University of Melbourne
Victoria, AUSTRALIA

www.conferences.unimelb.edu.au/Nanotech

Conference Theme

SCALING DOWN TO A NANO-MATERIALS WORLD

“Nanotechnology” features in the Frontiers programs embraced by Governments of industrialized nations. Universities and research organizations worldwide now have “Nano”- badges on their premier institutes.

There is no doubt that there are clear advantages posed by entrepreneurial developments based on nanosciences. We cannot, for example, sustain the waste and waste management associated with current levels of metals and materials exploitation. Nanoscience will increasingly offer us means to achieve many of the effects society expects with significantly less material consumed and discarded.

Mimicry of the structures and function in the bio-world, a world intrinsically built on units in the nanosize range, again offers us exciting opportunities. Nanoscience is central to the development of biosensors, biochips and bioplatforms that couple the great advances of medical research to improved quality of health and medical care for us all.

So, how do we implement this spectacularly bright future offered us by nanoscience? What are the challenges facing our 21st Century technologists who will “engineer” our nanoscale future? How do we move from an almost “science fiction” level towards real world outcomes in nanotechnology?

The conference brings together a cohort of scientists from around the world who are playing a central role in the development of nanoscience and technology. They will highlight the challenges facing scientists and engineers in the manufacture of nanoparticles and nanomaterials, the management of the flow of particulate and other fluids in nanoscale films, the use of nanosize droplets reactors, the construction of nano-networks of biofilms that mimic biostructures and the assembly of nano-scale photonic components and electronic devices of all kinds.

In addition the conference will highlight a cohort of outstanding young Australians, all of whom are making significant contributions to nanoscience and technology.

Overseas Plenary Speakers:

- **Professor Michael Graetzel** EPFL, Lausanne, Switzerland
- **Professor Helmuth Möhwald** Director, Max-Planck Institute of Colloids and Interfaces, Germany
- **Professor Toyoki Kunitake** Director, Spatio-Temporal Function Materials Research Group, The Institute of Physical and Chemical Research (Riken), Japan
- **Dr Stephen Haubold** CEO, Nanosolutions, Germany
- **Professor William Ducker** Virginia Tech, USA
- **Professor Ryong Ryoo** Korea Advanced Institute of Science and Technology, Korea
- **Professor Peter Cummings** Vanderbilt University, USA
- **Professor Louis Brus** Columbia University New York, USA

Australian Invited Speakers:

- **Professor Frank Caruso** Federation Fellow The University of Melbourne
- **Professor Max Lu FTSE** University of Queensland
- **Associate Professor Paul Mulvaney** The University of Melbourne
- **Dr Terry Turney FTSE** CSIRO Manufacturing and Infrastructure Technology
- **Professor Steven Praver** The University of Melbourne
- **Professor Matt Trau** University of Queensland
- **Dr Calum Drummond** Vice President Research Capp-X Ltd
- **Professor Barry Muddle FTSE** Director of NanoVic
- **Professor Paul McCormack FAA FTSE** Advanced Nano Technologies Pty Ltd
- **Professor Peter Hudson FTSE** Scientific Director, CRC for Diagnostics Health Science & Nutrition, CSIRO

Registration

ABN: 84 002 705 224

Name: _____

Organisation: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

Are you attending the welcome reception? Sun 30 Nov. YES NO

Are you attending the conference dinner? Wed 3 Dec. YES NO

Do you agree to have your details available to other delegates?

_____ YES NO

Are you a vegetarian? _____ YES NO

All amounts in Australian Dollars and include GST

Full Registration	\$600.00
Student Registration	\$200.00
Additional Reception Tickets	\$30.00
Additional Conference Dinner Tickets	\$80.00
Tours Puffing Billy/Wildlife Sanctuary	\$130.00
The Great Ocean Road	\$115.00
Victoria Winery Tour	\$115.00

Registration Sub Total \$ _____

For Rydges Hotel and further accommodation options please visit the website.

Economy accommodation at St Mary's College, University of Melbourne

Sunday	Monday	Tuesday	Wednesday	Thursday
30 th	1 st	2 nd	3 rd	4 th

Other nights _____ Number of nights _____

\$58.00 per person per night \$ _____

Accommodation Sub Total \$ _____

TAX INVOICE FOR GST PURPOSES –
- once information is completed and paid

Total \$ _____

Credit Card: Mastercard Visa Bankcard

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Cancellation: A fee of \$100.00 applies for registrations cancelled before 10 November. For registrations cancelled after 10 November, no refund applies, but substitutions are possible