



The International Conference on Synthetic Metals 2004

Wollongong, New South Wales, Australia

28 June to 2 July 2004

“The Role and Impact of Nanoscience and Nanotechnologies”

CONFERENCE PROGRAM

Last Updated 21 May 2004

Whilst every attempt will be made to ensure that all aspects of the conference will take place as scheduled, the Organising Committee reserves the right to make last minute changes should the need arise, without prior notice.

We suggest you check updated versions of this document (posted regularly on the ICSM 2004 website) to keep up-to-date on changes to the program between now and the commencement of the conference.

CONFERENCE HIGHLIGHTS

Sunday June 27	Lord Mayor's Welcome Reception and Registration at the University Hall and UniBar, University of Wollongong.
Monday June 28	Nobel Laureate Session featuring presentations by the Nobel Prize Laureates in Chemistry for 2000.
Poster Sessions	Poster Sessions will be held between 5pm and 7pm on the evenings of Monday 28 June, Tuesday 29 June and Thursday 1 July.
Wednesday June 30	Business Opportunities in Synthetic Metals and Nanotechnology Session.
Wednesday June 30	Conference Dinner (entry is by presentation of dinner ticket only).
Friday July 2	Special Memorial Session for Michael Rice, Sasha Ovchinnikov, and Vic Emery.
Friday July 2	Presentation of ICSM 2004 Student Prizes and Closing Ceremony.

PLENARY, KEYNOTE and other INVITED SPEAKERS

Nobel Laureates

Alan Heeger	University of California, USA
Alan MacDiarmid	University of Pennsylvania, USA
Hideki Shirakawa	University of Tsukuba, Japan

Plenary Speakers

G�rard Bidan	CEA-Grenoble, France
Arthur J. Epstein	The Ohio State University, USA
Andrew B. Holmes	University of Cambridge, UK
Junji Kido	Yamagata University, Japan
Klaus M�llen	Max-Planck-Institute for Polymer Research, Germany
Timothy M. Swager	Massachusetts Institute of Technology, USA
Z. Valy Vardeny	University of Utah, USA

Keynote and Invited Speakers

Shuji Abe	National Institute of Advanced Industrial Science and Technology, Japan
Ray Baughman	University of Texas, USA
Fabio Biscarini	CNR – ISMN, Italy
Stephen Blundell	University of Oxford, UK
Paul Burn	University of Oxford, UK
David Carroll	Wake Forest University, USA
R. Torsten Clay	Mississippi State University, USA
Paul Dastoor	University of Newcastle, Australia
Liming Dai	The University of Akron, USA
Maria Forsyth	Monash University, Australia
Robert Haddon	University of California Riverside, USA
Peter Ho	National University of Singapore, Singapore
Olle Ingan�s	Link�ping University, Sweden
Alan Kaiser	Victoria University of Wellington, NZ
Leon Kane-Maguire	University of Wollongong, Australia
Changhee Lee	Inha University, Korea
Larry L�er	Politecnico di Milano, Italy
Benjamin Mattes	Santa Fe Science and Technology, USA
Hatsumi Mori	University of Tokyo, Japan
Klaus M�llen	Max-Planck Institute Polymer Research, Germany
David Officer	Massey University, New Zealand
Yung Woo Park	Seoul National University, Korea
Ben Powell	University of Queensland, Australia
Elizabeth Smela	University of Maryland, USA
Xin Sun	Fudan University, P.R. China
Carlo Taliani	CNR – ISMN, Italy
Dennis Tallman	North Dakota State University, USA
Masayoshi Watanabe	Yokohama National University and CREST-JST, Japan
Bernhard Wessling	Ormecon GmbH, Germany
Yang Yang	University of California Los Angeles, USA
Malgorzata Zagorska	Warsaw University of Technology, Poland

A Special Memorial Session for Michael Rice, Sasha Ovchinnikov, and Vic Emery will be held on Friday morning (2 July), and will feature invited presentations by:

Alan Bishop	Los Alamos National Laboratory, USA
Serguei Brazovskii	University of Paris-Sud, France
Natalia Kirova	University of Paris-Sud and the University d'Angers, France
George A. Vinogradov	Institute of Biochemical Physics, RAS, Russia
Anvar Zakhidov	The University of Texas at Dallas, USA

BUSINESS OPPORTUNITIES in SYNTHETIC METALS and NANTOTECHNOLOGY SESSION

Wednesday 30th June, 2004

1.30 p.m. – 4.00 p.m.

Venue: McKinnon Building, University of Wollongong

We propose a special “Business Opportunities from Synthetic Metals and Nanotechnology” session as part of ICSM 2004.

The aim of this session is to communicate directly with businesses about potential partnerships and collaborations that are an integral part of modern R & D and which make possible the commercialisation of cutting-edge technology. In particular, we aim to inform businesses about the huge potential within the area of synthetic metals and in nanotechnology generally that currently exists within the Illawarra.

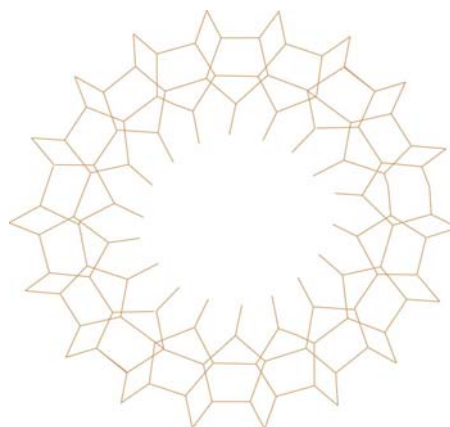
The session would be an opportunity for businesses to hear from speakers of international companies who have successfully made the leap from research and development of conducting polymer-based products and devices, to commercialisation. Talks will be presented by business and scientific leaders in the field, but aimed at the business community.

Business Opportunities in Synthetic Metals and Nanotechnology Session speakers will include:

Andrew B. Holmes	Professor of Organic and Polymer Chemistry, University of Cambridge, UK
Benjamin R. Mattes	President and CEO, Santa Fe Science and Technology, Inc. (SFST), USA
Chris Officer	President & CEO, Anzode Inc.
Takeshi Sano	SANYO Electric Co., Ltd., Japan
Gregory R. Smith	Co-founder SciVentures Investments Pty. Ltd., and Manager of SciVentures Pre-Seeded Fund
Bernhard Wessling	Ormecon founder and CEO, ZKC President and Managing Partner

Registered ICSM 2004 delegates are most welcome to attend this session, however seating is limited and so must be pre-booked. If you would like to attend, send an email to Louisa Willdin at louisa_willdin@uow.edu.au

More information on this session is available to download from the ICSM 2004 website.



ICSM 04 PROGRAM

Wollongong, Australia



SUNDAY, 27 June

**THE LORD MAYOR'S WELCOME RECEPTION
and ICSM 2004 REGISTRATION**

5.00pm – 7.00pm at the University Hall and UniBar, University of Wollongong
The ICSM 2004 Registration and Information Desk will be open from 3pm to 7pm.



MONDAY, 28 June

The ICSM 2004 Registration and Information Desk will be attended from 8am to 5pm.

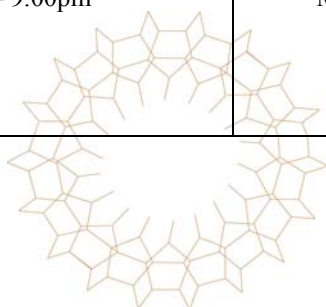
<p>ICSM 2004 OPENING CEREMONY 9.15am – 9.45am</p>	<p>Official welcome to ICSM 2004 delegates.</p>
<p>NOBEL LAUREATE SESSION 9.45am to 12.30pm</p>	<p>Featuring presentations by the Nobel Prize in Chemistry for 2000 Laureates, Alan MacDiarmid, Alan Heeger and Hideki Shirakawa</p>
<p>PARALLEL SCIENTIFIC SESSIONS 2.00pm – 4.00pm</p>	<p>Advanced Coatings A Materials for Advanced Display Technologies A Nanotubes and Nanostructure A Organic Conductors and Superconductors A</p>
<p>PARALLEL SCIENTIFIC SESSIONS 4.30pm – 6.00pm</p>	<p>Advanced Coatings B Materials for Advanced Display Technologies B Nanotubes and Nanostructure B Organic Conductors and Superconductors B</p>
<p>MONDAY EVENING POSTER SESSION and MIXER 7.00pm – 9.00pm</p>	<p>Posters from the following conference themes will be on display:</p> <p>Advanced Coatings Inherently Conducting Polymers Nanotubes and Nanostructures Materials for Advanced Display Technologies Organic Conductors and Superconductors</p>



TUESDAY, 29 June

The ICSM 2004 Registration and Information Desk will be attended from 8am to 5pm.

<p>PARALLEL SCIENTIFIC SESSIONS 8.30am – 10.30am</p>	<p>Electronic Fabrics and Other Unconventional Substrates A Inherently Conducting Polymers A Molecular Electronics A Nanotubes and Nanostructure C</p>
<p>TUESDAY PLENARY LECTURES 11.15am – 12.45pm</p>	<p>Timothy M. Swager Massachusetts Institute of Technology, USA “Polymer Electronics for Ultra-Sensitive Chemical/Biological Sensors”</p> <p>Z. Valy Vardeny University of Utah, USA “Spin Valves of Organic Semiconductor Films and Single Molecules”</p>
<p>PARALLEL SCIENTIFIC SESSIONS 2.00pm – 4.00pm</p>	<p>Energy – Materials for Conversion and Storage A Materials for Advanced Display Technologies C Organic Spintronics and Organic Magnets A Organic Conductors and Superconductors C</p>
<p>PARALLEL SCIENTIFIC SESSIONS 4.30pm – 6.00pm</p>	<p>Energy – Materials for Conversion and Storage B Materials for Advanced Display Technologies D Organic Spintronics and Organic Magnets B Organic Conductors and Superconductors D</p>
<p>TUESDAY EVENING POSTER SESSION and MIXER 7.00pm – 9.00pm</p>	<p>Posters from the following conference themes will be on display:</p> <p>Energy – Materials for Conversion and Storage Posters Electronic Fabrics and Other Unconventional Substrates Posters Materials for Advanced Display Technologies Posters Molecular Electronics Posters Organic Spintronics and Organic Magnets Posters Transport Phenomena in Single Molecules Posters</p>



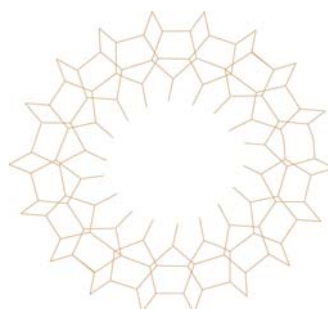


WEDNESDAY, 30 June

The ICSM 2004 Registration and Information Desk will be attended from 8am to 5pm.

PARALLEL SCIENTIFIC SESSIONS 8.30am – 10.30am	Inherently Conducting Polymers B Molecular Electronics B Nanotubes and Nanostructures D Transport Phenomena in Single Molecules A
WEDNESDAY PLENARY LECTURES 11.15am – 12.45pm	<p>Klaus Müllen Max-Planck-Institute for Polymer Research, Germany “Polyphenylene Materials for Electronic Devices – New Structures, New Properties”</p> <p>Junji Kido Yamagata University, Japan “Recent Progress in Organic Light-Emitting Devices: Efficiency and Lifetime Issues”</p>
BUSINESS OPPORTUNITIES IN SYNTHETIC METALS AND NANOTECHNOLOGY SESSION** 1.30pm – 4.00pm	More information on this special session has been posted on the ICSM 2004 website**
CONFERENCE DINNER at the WIN Entertainment Centre 7.00pm – 12.00pm	Seating is limited. Entry is by presentation of dinner tickets at the door. No ticket at the door = No entry. Bring your cameras!

** Seating is limited for the Business Opportunities in Synthetic Metals and Nanotechnology session. If you would like to attend, please send an email to Louisa Willdin at louisa_willdin@uow.edu.au





THURSDAY, 1 July

The ICSM 2004 Registration and Information Desk will be attended from 8am to 5pm.

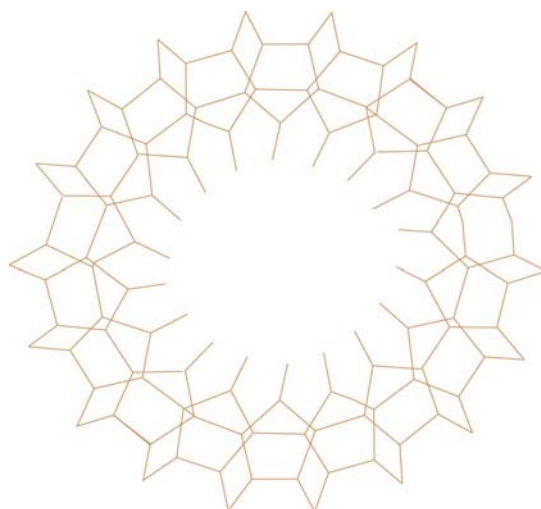
<p>PARALLEL SCIENTIFIC SESSIONS 9.00am – 10.30am</p>	<p>Devices; Electrolytes, Interconnects and Packaging A Energy – Materials for Conversion and Storage C Materials for Advanced Display Technologies E Organic Conductor and Superconductors E</p>
<p>THURSDAY PLENARY LECTURES 11.15am – 12.45pm</p>	<p>Gérard Bidan CEA-Grenoble, France “Interfacing Conjugated Polymers And Biology : Implementation Of DNA chips”</p> <p>Arthur J. Epstein The Ohio State University, USA “Organic-Based Magnets: New Materials, New Phenomena, And New Applications”</p>
<p>PARALLEL SCIENTIFIC SESSIONS 2.00pm – 4.00pm</p>	<p>Biofunctional Materials A Devices; Electrolytes, Interconnects and Packaging B Inherently Conducting Polymers C Molecular Electronics C</p>
<p>PARALLEL SCIENTIFIC SESSIONS 4.50pm – 6.00pm</p>	<p>Biofunctional Materials B Inherently Conducting Polymers D Molecular Electronics D Organic Conductors and Superconductors F</p>
<p>THURSDAY EVENING POSTER SESSION and MIXER 7.00pm – 9.00pm</p>	<p>Posters from the following conference themes will be on display:</p> <p>Biofunctional Materials Posters Devices; Electrolytes, Interconnects and Packaging Posters Inherently Conducting Polymers Posters Molecular Electronics Poster Nanotubes and Nanostructures Posters Organic Conductors and Superconductors Posters</p>



FRIDAY, 2 July

The ICSM 2004 Registration and Information Desk will be attended from 8am to 2pm.

<p>PARALLEL SCIENTIFIC SESSIONS 8.30am – 10.00am</p>	<p>Inherently Conducting Polymers E Memorial Session A Nanotubes and Nanostructures E Organic Conductors and Superconductors G</p>
<p>PARALLEL SCIENTIFIC SESSIONS 10.30am – 11.30pm</p>	<p>Memorial Session B Nanotubes and Nanostructures F Organic Conductors and Superconductors H</p>
<p>FRIDAY PLENARY LECTURE 11.45am – 12.30pm</p>	<p>Andrew B. Holmes University of Cambridge, UK “Controlled Synthesis of Conjugated Materials for Optoelectronics”</p>
<p>ICSM 2004 CLOSING CEREMONY 12.30 – 1.00pm</p>	<p>Presentation of ICSM 2004 Young Scientist Awards and Closing address by the ICSM 2004 Organising Committee Chair Gordon G. Wallace University of Wollongong, Australia</p>



ICSM 2004 SCIENTIFIC PROGRAM BY CONFERENCE THEME

CONFERENCE THEME / SESSION	Monday am	Monday pm	Tuesday am	Tuesday pm	Wednesday am	Wednesday pm	Thursday am	Thursday pm	Friday am
Nobel Laureate Session	✓								
Advanced Coatings		✓ P							
Biofunctional Materials								✓ P	
Business Opportunities in Synthetic Metals and Nanotechnology						✓			
Devices: Electrolytes, Interconnects and Packaging							✓	✓ P	
Electronic Fibres and Other Unconventional Substrates			✓	P					
Energy – Materials for Conversion and Storage				✓ P			✓		
Inherently Conductive Polymers		P	✓		✓			✓ P	✓
Materials for Advanced Display Technologies		✓ P		✓ P			✓		
Memorial Session									✓
Molecular Electronics			✓	P	✓			✓ P	✓
Nanotubes and Nanostructures		✓ P	✓		✓			P	✓
Organic Conductors and Superconductors		✓ P		✓ P			✓	✓ P	✓
Organic Magnets / Organic Spintronics				✓ P					
Transport Phenomena in Single Molecules				P	✓				

✓ = Oral presentation session scheduled.

P = Poster session for this theme from 7pm to 9pm.

Business Opportunities in Synthetic Metals and Nanotechnology Session

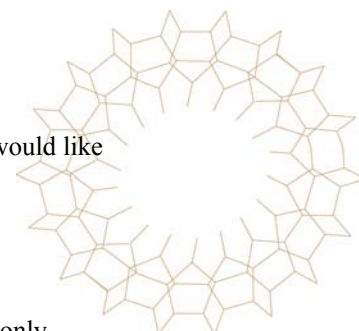
will be held between 1.30pm and 4.00pm on Wednesday June 30. Seating is limited. If you would like to attend, please send an email to Louisa Willdin at louisa_willdin@uow.edu.au

Lunch will be provided for all registered delegates on Monday to Friday.

Morning tea will be provided for all registered delegates on Monday to Friday.

Afternoon tea will be provided for all registered delegates on Monday, Tuesday and Thursday only.

On-Campus dining facilities will be available between 6pm and 7pm on Monday, Tuesday and Thursday evenings. Meals at this time will be available at delegate's own expense.





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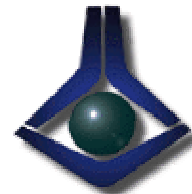
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We wish to thank the following for their contribution to the success of this conference

