

# ICMAT 2011

## International Conference on Materials for Advanced Technologies

26 Jun to 1 Jul 2011  
Suntec, Singapore



Organised by

### MRS

Materials Research Society  
SINGAPORE

**Final Announcement & Call for Abstracts**  
(Deadline: 15 January 2011)

[www.mrs.org.sg/icmat2011](http://www.mrs.org.sg/icmat2011)

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## FINAL ANNOUNCEMENT & CALL FOR ABSTRACTS

The 6th biennial International Conference on Materials for Advanced Technologies (ICMAT 2011) organized by the Materials Research Society of Singapore will be held from 26 June to 1 July, 2011 at International Convention & Exhibition Centre, Singapore. The first five conferences in this series attracted the participation of more than 10,000 delegates including 16 Nobel Laureates. ICMAT 2009 has also won the "Association Conference of the Year" award given by the Singapore Tourism Board.

ICMAT 2011 consisting of 40 technical symposia is expected to attract more than 2,500 delegates including 5 Nobel Laureates. The topics that shall be covered include all aspects of nanoscience and technology, energy and the environment, functional materials, bio/soft materials, imaging, crystal growth and crystal technology, and several interdisciplinary and industry related topics. The other highlights of the conference include plenary lectures, theme lectures, Nobel Laureate public lectures and exhibition. Conference will begin with the registration on Sunday, 26 June 2011, 2.00 pm to 8.00 pm and end on Friday, 1 July 2011 at about 2.00 pm.

## Symposia List

### NANOSCIENCE AND TECHNOLOGY

- A. Nanostructured Oxides, Interfaces, Heterostructures and Devices
- B. Synthesis and Architecture of Nanomaterials
- C. 4th Asian Nanoimprint Lithography Symposium (ASNIL)
- D. NanoFormulation2011
- E. Graphene: Calling all Chemists
- F. Toxicology of Engineered Nanomaterials
- G. NEMS/MEMS and microTAS
- H. Nanodevices and Nanofabrication
- I. Semiconductor Nanowires and Heterostructures: Synthesis, Properties and Multifunctions
- J. Nanoscale Patterning, Assembly, and Surface Modification
- K. Nanotechnology with Soft Matter
- L. Memory, Nanomagnetism, Materials and Devices

### ENERGY AND THE ENVIRONMENT

- M. Nanonets and Nanomaterials for Energy Harnessing & Storage
- N. Advanced Materials for Energy Storage Systems - From Fundamentals to Applications
- O. Photovoltaic Materials and Devices
- P. Membrane Materials and Technologies for Emerging Applications

### FUNCTIONAL MATERIALS

- Q. Interfacial Chemistry and Engineering and Their Applications for Molecular and Organic Electronics
- R. Organic, Flexible, and Printed Electronics
- S. Metamaterials
- T. Advanced Structural and Functional Materials for Protection
- U. Composites and Nanocomposites
- V. 3D TSV Process and Design Challenges
- W. Reliability and Variability of Emerging Devices for Future Technologies and ULSI Circuits and Systems

### BIO/SOFT MATERIALS

- X. Advanced Biomaterials for Delivery of Therapeutics
- Y. Biomaterials and Tissue Engineering
- Z. Sustainable Biobased Polymers

### IMAGING

- AA. Frontiers in Optical Bio-imaging and Microscopy
- BB. Nanoscale Imaging, Fabrication and Materials Modification Using Ion Beams
- CC. Nanophotonics and Imaging

### CRYSTAL GROWTH AND CRYSTAL TECHNOLOGY

- DD. CGCT-5-Fundamentals of Crystallization and Low Dimensional Crystallization
- EE. CGCT-5-Functional Materials Crystallization, Characterization and Devices
- FF. CGCT-5-Organic and Bio-related Crystallization
- GG. CGCT-5-Industrial Crystallization

### INTERDISCIPLINARY

- HH. Advanced Materials Supported by Synchrotron Radiation
- II. Computational Science of Transport Phenomena in Materials: Methods and Applications
- JJ. Solution Processing Technology for Inorganic Films, Nanostructures and Functional Materials
- KK. Microwaves in Science and Engineering Applications
- LL. Young Scientists Workshop

## INDUSTRY SESSIONS

- MM Industry Workshop on Applied Surface Engineering
- NN Industry Workshop on Microelectronic Process and Package Characterization and Reliability Analysis

## PLENARY LECTURES

1. Boey Yin Chiang, Freddy, Nanyang Technological University, Singapore - Biodegradable Cardiovascular implants: Opportunities and Challenges
2. Albert Fert, Nobel Laureate in Physics, Unite Mixte de Physique CNRS/Thales and Universite Paris-Sud (Orsay), France - Challenges and emerging directions in spintronics
3. Alan Heeger, Nobel Laureate in Chemistry, University of California, Santa Barbara, USA - Plastic Solar Cells: Self Assembly of Bulk Heterojunction Nano-Materials by Spontaneous Phase Separation
4. Susumu Kitagawa, Kyoto University, Japan - New Generation of Porous Materials-Soft Porous Crystals
5. Jean M. J. Frechet, University of California, Berkeley, USA - Functional polymers from energy to therapeutics
6. Charles Lieber, Harvard University, USA - Semiconductor Nanowires: Platform for Nanotechnology
7. Andre Geim, Nobel Laureate in Physics, University of Manchester, UK - Graphene: Status and Prospects
8. Richard R. Schrock, Nobel Laureate in Chemistry, Massachusetts Institute of Technology, USA - New Olefin Metathesis Catalysts for the Synthesis of Polymers with a Single Structure
9. Ada Yonath, Nobel Laureate in Chemistry, Weizmann Institute, Rehovot, Israel - Ribosomes-RNA Machines that Survive Evolution Pressure

## THEME LECTURES

1. Jonathan Adams, Thomson Reuters, UK - Evidence-based insights into the global trend and hot spots of research in Material Science
2. D. D. Sarma, Indian Institute of Science, Bangalore, India - Semiconductor nanocrystal: How do they grow and why do they glow?
3. Qi-Kun Xue, Tsinghua University, China - Topological Insulator, an Emerging Material for Information Technology

## EDUCATION FORUM

Title: Teaching the Nano Scale: A Global Revolution in Science Education - an education forum and open discussion.

Steve Fonash, Pennsylvania State University, USA and Marcel Van de Voorde, University of Delft, The Netherlands (Lead Presenters). G.U. Kulkarni, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India; Joe Shapter, Flinders University, Australia; Andrew Wee, National University of Singapore; ..... (Panelists). John Baglin, IBM Almaden Research Centre, San Jose, USA (Moderator)

## NOBEL LAUREATE PUBLIC LECTURES

1. Albert Fert, Nobel Laureate in Physics, Unite Mixte de Physique CNRS/Thales and Universite Paris-Sud (Orsay), France - Research and Applications: from the spin of the electrons to our computers and telephones
2. Alan Heeger, Nobel Laureate in Chemistry, University of California, Santa Barbara, USA - Creativity, Discovery and Risk: Nobel Prizes Past and Future
3. Richard R. Schrock, Nobel Laureate in Chemistry, Massachusetts Institute of Technology, USA - The Nobel Prize in Chemistry in 2005
4. Ada Yonath, Nobel Laureate in Chemistry, Weizmann Institute, Rehovot, Israel - The Amazing Ribosome

## EXHIBITION

- Dates : 27 to 30 June 2011
- Set-up : 26 June 2011 from 2pm to 5pm
- Booth Dressing : 5pm to 7pm on 26 June 2011
- Dressing Down : 30 June 2011 from 6pm to 8pm
- Tear Down : 30 June 2011 from 8pm to 10pm

ALL HAPPENING AT SUNTEC Gallery & Level 3 Foyer

## EXHIBITION PACKAGES:

Type	Description
Exhibition Booth - Standard Size 3mx3m	Standard Booth Price includes shell scheme with wall paneling on needle punch carpet, fascia board with organization name, one information counter & 2 folding chairs, one wastepaper basket, 2 no. fluorescent lights and power supply (one 13 amp powerpoint)
SGD6000 (in-line booth)	
SGD8000 (corner booth)	

## IMPORTANT DEADLINES

30 Sep 2010	Abstract Submission Opens
01 Oct 2010	Hotel Registration Opens
15 Jan 2011	Abstract Submission Closes
01 Feb 2011	Acceptance Notification & Conference Registration Opens
24 Mar 2011	Author Registration Deadline & End of Fee Payment at Discounted Rate
31 Mar 2011	Exhibitor/Sponsor Advertising Materials Due
19 May 2011	Hotel Registration Closes Fee Payment at Normal Rate Ends Fee Payment by TT Ends (Only Credit Card Payment Allowed) Sessions & Schedules on Web All Changes Arriving After this Date will not be included in the publications
16 Jun 2011	Online Portal Closes; Please Register & Pay Onsite
26 Jun 2011	Registration Desks Open from 2pm to 8pm Exhibitor Booth Dressing from 5pm to 7pm

About Singapore\*, please refer to <http://www.visitsingapore.com/mice/>

## FEES AND REGISTRATION

REGISTRATION CATEGORY	*FEES ARE IN SINGAPORE DOLLARS		
	Discounted Rate If Paid By 24 Mar 2011	Normal Rate If Paid By 19 May 2011	Late/Onsite Rate If Paid After 19 May 2011
MRS Singapore Member	SGD 825	SGD 925	SGD 1,025
Non-MRS Singapore Member	SGD 925	SGD 1,025	SGD 1,125
Student /Premier Sponsor	SGD 625	SGD 675	SGD 725
<b>Additional Purchase (Optional)</b>			
30 June 2011 Conference Banquet	SGD 120	SGD 130	SGD 140
Conference Program Book & Abstract CD	SGD 45	SGD 55	SGD 65
Symposium Program & Abstract Book	SGD 25	SGD 35	SGD 45
*Prevailing Goods & Services Tax Applicable. Currently, at 7%			
*Exchange rate: USD 1 is approximately SGD 1.25			

Each registered participant is entitled to attend any of the technical symposia, plenary lectures, public lectures, theme lectures, lunches and refreshments during 27 June to 1 July, 2011 and receive a copy of the program book of the entire conference, abstract book of the primary symposium one registers, and CD of all conference abstracts.



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