

## THERMEC' 2006 - Vancouver



<http://www.thermec.uow.edu.au/>


### Venue

Fairmont Hotel, Vancouver, B.C., Canada

### Contact Information

Enquiry about the abstract and manuscript submissions, registration fee, exhibition booth/space and information regarding manuscripts acceptance for the Conference, please contact:

**Professor T. Chandra**  
Faculty of Engineering  
University of Wollongong  
Northfields Avenue  
Wollongong NSW 2522, Australia  
Email: [tara@uow.edu.au](mailto:tara@uow.edu.au)  
Fax: +61 2 42214921,  
Phone: +61 2 4221 3008

 - Official Convention Airline –  
 - Co-sponsored by The Minerals, Metals & Materials Society

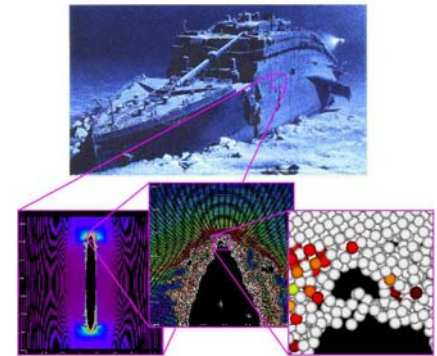
### Contact Information

Enquiry about the abstract and manuscript submission for the Symposium, please contact:

**Prof. Patrizia Trovalusci**  
Department of "Ingegneria Strutturale e Geotecnica"  
University of Rome "La Sapienza",  
Via Gramsci 53, 00197 Rome (Italy)  
[patrizia.trovalusci@uniroma1.it](mailto:patrizia.trovalusci@uniroma1.it)  
Tel. +39.06.49919248  
Fax +39.06.3221449,



International Conference on  
PROCESSING & MANUFACTURING OF ADVANCED  
MATERIALS  
PROCESSING, FABRICATION, PROPERTIES,  
APPLICATIONS  
July 4-8, 2006  
Vancouver, Canada



International Symposium on

**“Multiscale Mechanical  
Modelling of Complex  
Materials  
and  
Engineering Applications”**

deadline for abstracts:  
**OCTOBER 4<sup>th</sup> 2005**  
deadline for papers  
**FEBRUARY 4<sup>th</sup> 2006**

## DESCRIPTION

This symposium will provide a forum for the presentation of fundamental, theoretical, experimental and practical aspects of mechanical modelling of materials with complex microstructures and with complex behaviour.

The symposium will include invited and contributed papers that will be published as a proceedings volume. The symposium is expected to bring together researchers (engineers, physicists, mathematicians) specialized in multiscale mechanical modelling of complex materials finalised to engineering applications, with particular attention to structural engineering applications.

The symposium will also provide opportunities to identify and discuss future developments in the field of multiscale modelling and design of new materials.

### Coordinator

Patrizia Trovalusci, Department of 'Ingegneria Strutturale e Geotecnica', University of Rome 'La Sapienza' (Italy).

### Invited speakers

Luciano Colombo, Department of Physics, University of Cagliari; 'Istituto Nazionale per la Fisica della Materia' (INFN) (Italy);

Marc G.D. Geers, Eindhoven University of Technology, Mechanical Engineering Materials Technology (The Netherlands);

Martin Ostojic-Starzewski, Professor and Canada Research Chair in Mechanics of Materials, Department of Mechanical Engineering, McGill University (Canada);

## TOPICS

- \_ Materials with micro(/nano)-structure
  - Composites, Fibre-Reinforced Laminated
  - Granular, Masonry-Like
  - Biomaterials
  - Defected, Amorphous
  - Shape-Memory Alloys
- \_ Complex material behaviour
  - Damage, Defect Creation, Growth, Interaction
  - Fracture, Crack Propagation
  - Shear Bands
  - Wave Propagation
- \_ Multiscale Methods
  - Coupled Atomistic-Finite Elements Methods
  - Multifield Finite Elements Methods
  - Homogenization Methods
- \_ Inverse Problems in Micromechanics
  - Nonconvex Optimization
  - Stochastic Optimization

### Abstracts

Please save your abstract of approximately 250 words in Microsoft word format (see the conference website [www.thermec.uow.edu.au](http://www.thermec.uow.edu.au) for formatted abstract form and submission method and you will be guided through the procedure step by step to paste your abstract into the appropriate text area (Modelling/PT Symp) and send via email to: [thermec@uow.edu.au](mailto:thermec@uow.edu.au) and a copy to [patrizia.trovalusci@uniroma1.it](mailto:patrizia.trovalusci@uniroma1.it) prior to **October 4, 2005**.

### Manuscripts

The Program committee will review papers and those found suitable are recommended for inclusion in the "Materials Science Forum" periodical /proceedings to be produced by the Trans Tech Publishers, Switzerland. Manuscripts are due by **February 4, 2006** (strict due date please note)

Works presented at the Symposium will be selected to be published on *International Journal of Multiscale Computational Engineering*.

## THERMEC' 2006

is built upon the proven concept and continues the tradition of its four predecessors, Japan (1988), Australia (1997), USA (2000) and THERMEC' 2003 in Spain. This conference series provides a forum for researchers from around the globe to present papers on recent advances in the overall field of science and technology of processing and manufacturing of advanced materials

### Scope

The Conference will cover all aspects of processing, fabrication, structure/property evaluation and applications of both ferrous and non-ferrous materials including hydrogen & fuel cell technologies, metallic glasses, thin films, ecomaterials, nanocrystalline materials, biomaterials and other advanced materials.

Oral and poster presentations dealing with the various conference topics listed on this website will be included in the conference program. In addition to the contributed papers, the conference committee will invite papers by eminent researchers in key areas of materials science and materials processing /manufacturing. Internationally known experts from various countries will deliver Plenary/Keynote/Lead lectures at THERMEC' 2006

### General Chairmen

K. Tsuzaki, Japan  
M. Militzer, Canada  
N. B. Dahotre, USA  
D. Ghosh, Canada  
T. Chandra,  
Australia

### Program Chairmen

C. Ravindran, Canada  
T. Sakai, Japan  
D. N. Lee, Korea  
M. W. Mahoney, USA  
D. Mantovani, Canada

Any other information about the Conference can be found at the official website

[www.thermec.uow.edu.au](http://www.thermec.uow.edu.au)