#### **About ICCM**

The ICCM is an international conference providing an international forum for exchange ideas on recent advances in areas related to computational methods, numerical modelling & simulation, as well as their applications in engineering and science. It will accommodate presentations on a wide range of topics to facilitate inter-disciplinary exchange of ideas in science, engineering and related disciplines, and foster various types of academic collaborations.

The conference series were originated in Singapore in 2004 by Professor GR Liu, followed by ICCM2007 in Hiroshima, Japan, ICCM2010 in Zhangjiajie, China, ICCM2012 in Gold Coast, Australia, and ICCM2014 in Cambridge, England. We are looking forward to seeing you all in ICCM2015 in Auckland, New Zealand.

### **Contact Us**

Conference Chairman:

Dr. Raj Das

Tel: +64 9 923 5094 Fax: +64 9 373 7479

E-mail: r.das@auckland.ac.nz

Conference Secretary: Ms. Joanne Wang

E-mail: iccmdesk@gmail.com





#### Welcome

The 6th International Conference on Computational Methods (ICCM2015) will be held in Auckland, New Zealand from 14 to 17 July 2015. The organization team would like to welcome all scholars worldwide working on computational mechanics and numerical modelling to exchange breakthrough and ideas on the latest research in areas related to computational methods, numerical modelling & simulation, as well as their applications in engineering and science.

#### **Themes**

The scope of ICCM 2015 will be broad, covering theory, algorithm, programming, coding, numerical simulation, High Performance Computing techniques, error and uncertainty analysis and/or novel applications of computational techniques to problems in engineering, science, and other disciplines related to computations. Topics include but not limited to:

- Computational mechanics for solids and structures
- Computational Fluid dynamics
- Computational heat transfer
- Computational mathematics
- Computational biology
- Computational meso/micro/nano Mechanics
- Computational uncertainties
- Meshless/Meshfree/Particle methods
- Advanced finite element/difference/volume methods
- Boundary element methods
  Molecular and quantum methods
- · Computational Rheology

- · Multi-scale methods
- Inverse problem
- Optimization
- · Health monitoring
- · Uncertainty analysis
- Validation and verification
- Development of software for numerical simulation
- Computational techniques for applications in engineering, science, and other disciplines
- High-performance computing techniques
- Data intensive computing techniques
- Others

### Call for paper

Authors are invited to submit papers on any of the above or related topics. All papers accepted for publication in the proceedings will be subject to a full peer review. Only paper registered and presented at the ICCM2015 will be included in the Proceedings. A number of papers will be selected and invited to be developed into a full journal paper for publication in special issues of SCI and/or EI journals.

#### Deadlines\*

Registration Start on September 15, 2014

Minisymposium title submission due October 25, 2014

Deadline for submitting abstracts or papers March 15, 2015

Notification of acceptance of abstracts or papers March 31, 2015

Deadline for early-bird payment April 15, 2015

Deadline for regular payment May 15, 2015

Deadline for submitting final revised abstracts or papers May 15, 2015

Deadline for registration for on-site payments May 31, 2015

Conference dates July 14-17, 2015

### **Updated Information**

Updated information on technical sessions, keynote and invited lectures, registration fees, paper preparation, accommodations and other related affairs will be posted on the conference web site:

http://www.sci-en-tech.com/ICCM2015/

#### Location

New Zealand is well-known for its magnificent natural beauty. Auckland is the largest city in New Zealand and has been consistently rated as one of most liveable cities in the world. It is well connected to major cities by direct flights.

Visiting the beautiful city and surrounding landscape will provide a unique and unforgettable experience (http://www.aucklandnz.com/, http://www.tourism.net.nz/).

<sup>\*</sup>subject to change

## The 6th International Conference on Computational Methods (ICCM2015)

July 15-17, 2015, Auckland, New Zealand www.sci-en-tech.com/ICCM/

**Organizer: University of Auckland** 

## **Conference Chairman**

Raj Das	The University of Auckland, New Zealand
---------	---

# **Honorary Chairmen**

Gui Rong Liu	University of Cincinnati, USA
Mingwu Yuan	Peking University, China

### **Co-Chairmen**

Anatoly Yagola	Lomonosoy Moscow State University, Russia
Carlo Sansour	The University of Nottingham, UK
Hiroshi Okada	Tokyo University of Science, Japan
Jinsong Leng	Harbin Institute of Technology, China
Ming Li	Taiyuan University of Technology, China
Sung-Kie Youn	KAIST, South Korea
Weihong Zhang	Northwestern Polytechnical University, China
Xi-Qiao Feng	Tsinghua University, China
Yuantong Gu	Queensland University of Technology, Australia
Zhongwei Guan	University of Liverpool, UK

# **International Scientific Committee**

Alex Ng	University of Adelaide, Australia
Alexander Korsunsky	University of Oxford, UK
Allessandro Reali	University of Pavia, Italy
Amar Khennane	University of New South Wales, Australia
Andrei Kotousov	University of Adelaide, Australia
Bhushan L. Karihaloo	Cardiff University, UK
Bozidar Sarler	University of Nova Gorica, Slovenia
Byeng Dong Youn	Seoul National University, South Korea
Chao Jiang	Hunan University, China
Chao Xu	Zhejiang University, China
Cheng Yuan	Institute of High Performance Computing, Singapore
Chengfeng Li	Swansea University, Swansea
Chin-Long Lee	University of Canterbury, New Zealand
Daya Reddy	University of Cape Town, South Africa
Ekkehard Ramm	Institut für Baustatik und Baudynamik, Germany
Ernian Pan	University of Akron, USA
Feng Xiao	Tokyo Institute of Technology, Japan
Filippo Berto	University of Padova, Italy
Francesco Mammoliti	Istituto Nazionale di Fisica Nucleare, Italy
Francesco Noto	Istituto Nazionale di Fisica Nucleare, Italy and European Organization for Nuclear Research, Switzerland
George S. Dulikravich	Florida International University, USA
Grant Steven	University of Sydney, Australia
Hengan Wu	University of Science and Technology of China, China
Hiroshi Kanayama	Japan Women's University, Japan
Hongling Ye	Dalian University of Technology, China
J. N. Reddy	Texas A&M University, USA
Jan Blachut	University of Liverpool, UK
Jihua Guo	University of Central Florida, USA
Jizeng Wang	Lanzhou University, China

Joe Petrolito	La Trobe University, Australia
Jorge Ambrosio	Technical University of Lisbon, Portugal
Julien Yvonnet	Université Paris-Est, France
Karol Miller	The University of Western Australia, Australia
Kun Zhou	Nanyang Technological University, Singapore
Leonid Antanovskii	Defence Science and Technology Organisation, Australia
Lian Shen	University of Minnesota, USA
Liangchi Zhang	University of New South Wales, Australia
Lihai Zhang	University of Melbourne, Australia
Maenghyo Cho	Seoul National University, South Korea
Makoto Ohsaki	Hiroshima University, Japan
Marcelo Colaco	Federal University of Rio de Janeiro, Brazil
Martin Veidt	University of Queensland, Australia
Mike Xie	Royal Melbourne Institute of Technology, Australia
Mingwu Yuan	Peking University, China
Moubin Liu	Institute of Mechanics, Chinese Academy of Sciences, China
Muneo Hori	University of Tokyo, Japan
Nasr Ghoniem	University of California Los Angeles, USA
Nasser Hassan Sweilam	Cairo University, Egypt
Nguyen Xuan Hung	Vietnamese-German University, Vietnam
OhJoon Kwon	KAIST, South Korea
Perumal Nithiarasu	Swansea University, UK
Prasad Potluri	University of Manchester, UK
Qing Li	University of Sydney, Australia
Qing Zhang	Hohai University, China
Qinghua Qin	Australian National University, Australia
Robert O. Richie	University of California, USA
Rooh Khurram	King Abdullah University, Saudi Arabia
Seiichi Koshizuka	University of Tokyo, Japan
Sergey Panin	Tomsk Polytechnic University, Russia

Shankar Kalyanasundaram	Australian National University, Australia
Sundararajan Natarajan	Indian Institute of Technology Madras, India
Sung-Kie Youn	KAIST, South Korea
Tinh Quoc Bui	University of Seigen, Germany
Tomasz Bednarz	Commonwealth Scientific and Industrial Research Organisation, Australia
Wei Gao	University of New South Wales, Australia
Weihong Zhang	Northwestern Polytechnical University, China
Weiqiu Chen	Zhejiang University, China
Wingkong Chiu	Monash University, Australia
Xi-Qiao Feng	Tsinghua University, China
Xiong Zhang	Tsinghua University, China
Xu Guo	Dalian University of Technology, China
Xu Han	Hunan University, China
Yusuf C. Toklu	Bilecik Şeyh Edebali University, Turkey
Ya-Pu Zhao	Institute of Mechanics, Chinese Academy of Sciences, China
Yang-Yao Niu	Tamkang University, Taiwan
Yijun Liu	University of Cincinnati, USA
Yixiang Gan	University of Sydney, Australia
Yongjin Yoon	Nanyang Technological University, Singapore
Yuantong Gu	Queensland University of Technology, Australia
Yue-Sheng Wang	Beijing Jiaotong University, China
Yuichi Tadano	Saga University, Japan
Zbigniew Kowalewski	Institute of Fundamental Technological Research, Poland
Zhan Kang	Dalian University of Technology, China
Zheng Zhong	Tongji University, China
Zheng-Ming Huang	Tongji University, China
Zhiqian Zhang	Institute of High Performance Computing, Singapore
Zhongwei Guan	University of Liverpool, UK