Invitation

The Discontinuous Deformation Analysis (DDA) method has been making progress as a powerful numerical method in rock mechanics and engineering for the last two decades, particularly in dealing with and understanding the behaviour of discontinuous rock masses at engineering scale.

Since the first conference in 1995, ICADD has had 9 meetings (*) and the last one ICADD-9 in Singapore received overwhelming response. The ICADD series will have its 10th meeting (ICADD-10) in 2011. As the previous meetings, ICADD-10 aims to exchange ideas and new developments in various discontinuous analysis methods, and to promote the application of the developed numerical methods in rock engineering. In addition, immersed with new modelling methods and techniques, ICADD-10 will also be a milestone event to look back on the past progress and look forward to the future development of discontinuous deformation analysis and other discontinuous methods.

We would like to invited colleagues in the numerical modelling and rock mechanics community to join this event to celebrate and to anticipate the progress of discontinuous numerical methods.

(*) ICADD-1 1995 Chungli Taiwan, ICADD-2 1997 Koyto Japan, ICADD-3 1999 Vail Colorado USA, ICADD-4 2001 Glasgow UK, ICADD-5 2002 Wuhan China, ICADD-6 2003 Trondheim Norway, ICADD-7 2005 Honolulu Hawaii, ICADD-8 2007 Beijing China, ICADD-9 2009 Singapore.

Hawaii – Conference Venue

ICADD-10 will take place in Honolulu Hawaii, at the Hotel Sheraton Waikiki, situated on the best stretch of the legendary Waikiki beach. Information on travel and tourism of Hawaii is available at http://www.hawaiitourismauthority.org/.

10th International Conference on Analysis of Discontinuous Deformation (ICADD-10)

«Appraise, Advance, Apply»

Waikiki, Hawaii
6–8 December 2011

Organised by

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

KYOTO UNIVERSITY FOUNDED 1897

Supported by

ARMA — american rock mechanics association

SRMEG

www.ICADD10.org

Organising Committee

Jian ZHAO (EPFL, CH), *Co-Chair*
Yuzo OHNISHI (Kyoto-U, JP), *Co-Chair*
Yuyong JIAO (CAS, CN)
Guowei MA (UWA, AU)
Takeshi SASAKI (Suncoh, JP)
Liang SUN (EPFL, CH)
Gao-Feng ZHAO (EPFL, CH)
Yingxin ZHOU (DSTA, SG)

Contact

Email: **contact@icadd10.org**

Website: **www.icadd10.org**

Prof Jian ZHAO
Ecole Polytechnique Fédérale de Lausanne
Laboratory for Rock Mechanics (LMR)
EPFL-ENAC-LMR, Station 18, GC-D1-413
CH-1015, Lausanne, SWITZERLAND

Scientific Committee

Don BANKS (US)
Giovanni BARLA (IT)
Nenad BICANIC (UK)
Wai-Fah CHEN (US)
So-Keul CHUNG (KR)
Antonio GENS (SP)
Yossef HATZOR (IL)
Seokwon JEON (KR)
Lan-ru JING (SE)
Heinz KONIETZKY (DE)
P.H.S.W. KULATILAKE (US)
Ming LU (NO)
Mary MACLAUGHLIN (US)
Antonio MUNJIZA (UK)
Yuri PETROV (RU)
Krishan Gopal SHARMA (IN)
Gen-hua SHI (US)
Jean SULEM (FR)
John TINUCCI (US)
Ying WANG (CN)
Ai-Qing WU (CN)
Hai-Sui YU (UK)
Guoxin ZHANG (CN)

Abstract Submission

Prospective authors are invited to submit abstracts on various aspects within the conference schemes. Abstracts should be about 300-500 words long, with a title, authors' names and affiliations, and email addresses, and be sent by email to the Conference contact (gaofeng.zhao@epfl.ch) before the deadline.

Abstract Submission Deadline: 15 January 2011.

	Mon, 5 Dec 2011	Tue, 6 Dec 2011	Wed, 7 Dec 2011	Thu, 8 Dec 2011
Morning		Registration Opening Keynotes	Keynotes	Discussion Closing
Afternoon	Registration	Presentations	Presentations	Site visits
Evening	Reception		Banquet	

Conference Themes

The theme of ICADD-10 is to summarise the progress of discontinuous numerical methods in the past decades and to advance toward the future development and application of discontinuous methods in geomechanics and geoengineering. The technical presentation will cover a wide scope of discontinuous numerical methods from algorithms and mechanics, to modelling techniques and application, including, but not limited to the following topics:
• Key Block Theory and Engineering Applications
• Discontinuous Deformation Analysis (DDA) Method
• Numerical Manifold Method (NMM)
• Distinct/Discrete Element Method (DEM)
• Applications of UDEC, 3DEC and PFC codes
• Meshless Method and Engineering Applications
• Contact Algorithms and Joint Contact Modelling
• Interfacing of Discontinuum and Continuum Methods
• Wave Propagation in Rock Joints and Jointed Rock Masses
• Deformation Analysis of Heterogeneous Materials
• Multi-Scale and Multi-Physics in Discontinuous Modelling
• Other Advanced Analytical and Numerical Methods in Rock Engineering
• Experiment and Measurement of Discontinuous Deformation
• Case Studies of Engineering Projects

Keynote Speakers

Keynote presentations will be given by a number of distinguished speakers to highlight some of the latest development in numerical methods and applications to engineering projects, including a summary report by Dr Gen-hua Shi on the progresses and prospects of DDA and manifold method. The list of keynote presentations will be announced later.

Discussion on Future Development

A plenary discussion session will be organised to discuss the future development of discontinuous numerical methods, including new mathematical and analytical techniques, micromechanics manifold method, multi-physics modelling, coupling of different numerical methods, large scale engineering modelling, estimating model parameters from engineering properties, application of modelling results in engineering practice, and promotion of discontinuous numerical methods in geomechanics research and geotechnical engineering.