



**First Announcement  
&  
Call for Papers**

## **Joint International Symposium on Deformation Monitoring**

**Combining:**

**14<sup>th</sup> FIG Symposium on Deformation Measurement and Analysis**

**5<sup>th</sup> IAG Symposium on Geodesy for Geotechnical and Structural Engineering**

**&**

**2<sup>nd</sup> International Workshop on Spatial Information Technologies for Monitoring the  
Deformation of Large-Scale Man-made Linear Features**

**2 - 4 November 2011  
Hong Kong, China**



## Invitation

Structural failures such as collapses of bridges and buildings and geohazards caused by events such as landslides, ground subsidence and earthquakes are world-wide problems that often lead to significant economic and life losses. It is therefore important to carry out concerted systematic research to better understand and manage these problems.

Rapid developments in engineering, micro-electronics and computer sciences have significantly changed both sensors/instrumentation and methodology in Applied Geodesy, Engineering Surveying and the related fields, including those for monitoring natural phenomena and man-made structures. There is nowadays a high demand to develop new monitoring concepts and solutions to meet the real needs of the society in minimizing the negative environmental impacts.

The International Federation of Surveyors (FIG) Working Group 6.1 “Deformation Measurement and Analysis” and the International Association of Geodesy (IAG) represented by Sub-Commission 4.2 “Applications of Geodesy in Engineering” and Sub-Commission 4.4 “Applications of Satellite & Airborne Imaging Systems” have been very active in developing and applying new methods and technologies for deformation measurements, analysis and interpretation.

The announced symposium is the 3<sup>rd</sup> time for the FIG and IAG groups to have a joint meeting on this important topic, combining the 14<sup>th</sup> FIG Symposium on Deformation Measurement and Analysis and the 5<sup>th</sup> IAG Symposium on Geodesy for Geotechnical and Structural Engineering. In addition, this event is also joined by the 2<sup>nd</sup> International Workshop on Spatial Information Technologies for Monitoring the Deformation of Large-Scale Man-Made Linear Features.

Scientists, engineers, educators, representatives from public authorities, policy makers in surveying, geodesy, civil, structural, geotechnical and mining engineering, geology, geodynamics, geosciences, geohazard studies and hydrology are invited to attend this international event to share the latest research results and experiences in deformation measurement, analysis and interpretation.

*Prof. Wolfgang Niemeier, Chair of FIG Working Group 6.1*

*Prof. Günther Retscher, Chair of IAG Sub-Commission 4.2*

*Prof. Xiaoli Ding, Chair of IAG Sub-Commission 4.4 & Chair of Organizing Committee*

## Themes of Symposium

The technical programme will consist of plenary sessions followed by special and poster sessions. Keynote speakers will present their general views on selected topics of geodetic, geotechnical and structural monitoring, modern sensor developments and related fields. Presentations in special and poster sessions will cover specific areas of developments, concepts and ideas.

The symposium welcomes contributions on any topics related to deformation monitoring, including modelling, measurements, analysis and interpretation of deformations. As examples, the following areas of interest are listed:

- Monitoring Concepts for Static and Dynamic Deformations of Engineering and Geotechnical Structures
- Geometrical, Deterministic and Non-Parametric Modelling of the Behaviour of Structures
- Interdisciplinary Approaches for the Design and Analysis of Deformation Measurements
- Innovative Concepts for Sensors and Methods
- Multi-Sensor Systems and Sensor-Networks
- Automation of Monitoring Measurements and Interpretation
- Warning and Alert Systems
- Applications in Geotechnical and Structural Engineering
- Applications in Geosciences on Local and Regional Scales

## Technical Exhibition

A technical exhibition will be open to companies for presentation of their products and services related to the themes of the symposium. For additional information, please contact the symposium secretariat.

## Important Dates

- |                     |   |
|---------------------|---|
| ★ 1 May 2011        | Deadline for abstract submission              |
| ★ 1 June 2011       | Notification of acceptance                    |
| ★ 1 August 2011     | End of early bird registration                |
| ★ 1 September 2011  | Deadline for full paper submission (optional) |
| ★ 2-4 November 2011 | Symposium                                     |

## Organizing Committee

Prof. Xiaoli Ding (Chair)	Hong Kong Polytechnic University
Prof. Wu Chen	Hong Kong Polytechnic University
Mr. Wai-ben Cheng	Royal Institute of Chartered Surveyors
Dr. Bruce King	Hong Kong Polytechnic University
Mr. Simon Kwok	Hong Kong Institute of Surveyors
Mr. Lit Yin Lam	Hong Kong Institution of Engineering Surveyors
Prof. Zhilin Li	Hong Kong Polytechnic University
Dr. George Liu	Hong Kong Polytechnic University
Prof. Hui Lin	Chinese University of Hong Kong
Dr. Bo Wu	Hong Kong Polytechnic University
Prof. Qiming Zhou	Baptist University of Hong Kong
Miss Violet Tsang (Secretary)	Hong Kong Polytechnic University

## International Scientific Committee

Prof. Wolfgang Niemeier (Chair)	Technische Universität Braunschweig, Germany
Prof. Fritz Brunner	Graz University of Technology, Austria
Prof. Richard Bamler	German Aerospace Centre (DLR), Germany
Prof. Dorota Brzezinska	Ohio State University, USA
Prof. Adam Chrzanowski	University of New Brunswick, Canada
Prof. Anna Szostak-Chrzanowski	Wroclaw Technical University, Poland
Prof. Clive Fraser	University of Melbourne, Australia
Prof. Alojz Kopacik	Cartography at SUT Bratislava, Slovakia
Prof. Heiner Kuhlmann	University Bonn, Germany
Prof. Hansjoerg Kutterer	Leibniz University Hannover, Germany
Prof. Deren Li	Wuhan University, China
Prof. Jingnan Liu	Wuhan University, China
Prof. Zhong Lu	USGS, USA
Prof. Gyula Mentes	Hungarian Academy of Sciences, Hungary
Prof. Witold Proszynski	University of Technology, Poland
Prof. Guenther Retscher	Vienna University of Technology Austria
Dr. Bjoern Riedel	Technical University Braunschweig, Germany
Prof. Fabio Rocca	Politecnico di Milano, Italy
Prof. Chris Rizos	University of New South Wales, Australia
Prof. Gethin Roberts	University of Nottingham Ningbo, China
Dr. Masanobu Shimada	JAXA/EORC, Japan
Prof. C.K. Shum	Ohio State University, USA
Prof. Stathis Stiros	Patras University, Greece
Prof. Hoze Tsu	Chinese Academy of Sciences, China

Prof. Youlin Xu  
Dr. Sandra Verhagen  
Prof. Chao Wang  
Prof. Andreas Wieser  
Prof. Anthony Yeh  
Prof. Jixian Zhang  
Prof. Chenghu Zhou  
Prof. Jianjun Zhu

Hong Kong Polytechnic University  
Delft University, Netherlands  
Chinese Academy of Sciences, China  
Vienna University of Technology, Austria  
University of Hong Kong, Hong Kong  
Chinese Academy of Surveying and Mapping, China  
Chinese Academy of Sciences, China  
Central South University, China

## Co-Organizers

- ★ Department of Land Surveying and Geo-Informatics, The Hong Kong Polytechnic University
- ★ FIG Working Group 6.1: Deformation Measurements and Analysis
- ★ IAG Sub-Commission 4.2: Applications of Geodesy in Engineering
- ★ IAG Sub-Commission 4.4: Applications of Satellite & Airborne Imaging Systems
- ★ Engineering Surveying Sub-Society, Chinese Society for Geodesy, Photogrammetry and Cartography

## Sponsors

Sponsorships of the Symposium are welcome. Please contact the Secretariat for further information.

## Contact of Secretariat

Organizing Committee for Symposium on Deformation Monitoring  
c/f Department of Land Surveying and Geo-Informatics  
The Hong Kong Polytechnic University  
Hung Hom, KLN, Hong Kong  
Email: violet.tsang@inet.polyu.edu.hk  
Web site: <http://dma.lsgj.polyu.edu.hk>