News

IS-Kyoto 2009: International Symposium on Prediction and Simulation Methods for Geohazard Mitigation

IS-Kyoto2009 was held at the Kyoto International Conference Center from May 25 to 27 under the organization of TC34 of the ISSMGE on 'Prediction and Simulation Methods in Geomechanics' under auspices of the JGS, the JGS Kansai Branch and the Commemorative Organization for the Japan World Exhibition '70. 202 participants from 19 countries attended the Symposium.



Prof. Oka at the opening ceremony

76 papers were presented and discussed during the technical sessions under the following topics:

- 1) Mechanisms of geohazards, namely, heavy rains, floods, typhoons, earthquakes, landslides, slope and snow slides, tsunamis, land subsidence, coastal erosion, etc.
- 2) Numerical and analytical simulation methods for geohazards, including conventional and advanced methods, FDM, FEM, Extended FEM, DEM, SPH and MPM.
- 3) Advanced constitutive modeling of geomaterials and numerical implementations and constitutive parameter determination using laboratory and field test results.
- 4) Thermo-hydro-mechanical instabilities, namely, large deformations, strain localization, progressive failure, liquefaction, ground water flow analysis, the rapid flow of complex geofluids such as mud flow, etc.
- 5) Monitoring and non-destructive investigation methods for geostructures during floods, earthquakes, heavy rains, etc. and design methods.
- 6) Evaluation of existing prediction methods, performance-based design methods aided by advanced numerical modeling, risk analysis and the management of mitigation programs.
- 7) Case records of geohazards and mitigation projects.

Keynote lectures were delivered by Prof. I.G. Vardoulakis from the National Technical University of Athens, Greece on "Thermo-poro mechanical analysis of catastrophic landslides", Prof. K.T. Chau from the Hong Kong Polytechnic University, Hong Kong on "Some geohazards associated with the 8.0 Wenchuan Earthquake on May 12, 2008", Prof. C.-L. Shieh from the National Cheng Kung University, Taiwan on "Risk assessment for hydraulic design associated with the uncertainty of rainfall", and Prof. H. Nakagawa from Kyoto University, Japan on "Recent flood disasters in Japan".



Delegates of IS-Kyoto2009