

# 6<sup>th</sup> International Symposium on In-situ Rock Stress – RS 2013

**ISRM Specialized Conference  
20-22 August 2013  
Sendai, Japan**

Report by **Takatoshi ITO**, Symposium Chair, Tohoku University, Japan

This symposium was held as an ISRM Specialized Conference at the Sendai International Center, Sendai, Japan on 20-22 August, 2013 under the sponsorship of Japanese Committee for Rock Mechanics, JCRM.

Studies on state of rock stress and its measurements have been made so far mainly for the two purposes of underground construction and earthquake analysis. The studies in these two areas have been conducted almost independently of one another, in part because of the differences in the depths at which they were traditionally important, i.e. less than one kilometer and more than ten kilometers, respectively. In recent years, however, the study target expands to unconventionally-deep depth of few kilometers in order to meet the demand of petroleum industry, deep mining and new subsurface development such as geologic sequestration of carbon dioxide and that of nuclear waste. Then the 2011 great Tohoku-Oki earthquake occurred in the region of the symposium venue reminds us of the enormously-destructive power of nature. The symposium was organized considering such circumstances.



Keynote lecture by James J. Mori, Kyoto U.

On the first day, the symposium started with welcome addresses given by the JCRM president Yuzo Obara and the ISRM president Xia-Ting Feng, and it followed the technical program arranged in two parallel sessions for three days on the topics of

Earthquakes, Induced Seismicity, Geomechanics, Geological Storage of Carbon Dioxide, Nuclear Waste Disposal, Deep Mining, In-situ Testing and Core-based Methods of Stress Measurement, Regional Stress and Civil Engineering. The technical program included 5 keynote lectures by François H. Cornet, IPG Strasbourg, James J. Mori, Kyoto U., Jonny Sjöberg, Itasca Sweden, Koji Yamamoto, JOGMEC and Mark D. Zoback, Stanford U., and furthermore 11 session invited lectures by Jin-Seop Kim, KAERI, Erling Nordlund, Luleå U., Ivo Oprsal, Seismik, Rico G. Ramos, ConocoPhillips, Jonny Rutqvist, LBNL, Douglas R. Schmitt, U. Alberta, Kazuhiko Tezuka, JAPEX, Furen Xie, CEA, Ziqiu Xue, RITE, Arno Zang, Potsdam U. and Takatoshi Ito, Tohoku U.. In the evening of the second day, the symposium banquet took place at the Westin Sendai, and the opening address was given by the founder of this symposium series and also the co-chair of this symposium, Ove Stephansson. In the banquet, the Best Poster Presentation by a Student was awarded to Mr. Michiharu Hiyama, Tohoku U. As pre- and post-programs, the Workshop on Earthquake and Stress and two field trips of “Area Attacked by the 2011 Earthquake Tsunami & Paleotsunami deposition” and “Aratozawa Landslide & Cultural Tour in Hiraizumi” were held on 19 and 23 Aug., respectively.

The proceedings of 1200 pages with ISBN-978-4-907430-00-9 contains 136 papers for keynote lectures, session invited lectures and general reports presented by the authors from 21 countries. The proceedings in CD-ROM and the abstract book is still available. If you are interested, please contact with the symposium secretary, Kiyotoshi Sakaguchi at [saka@mail.kankyo.tohoku.ac.jp](mailto:saka@mail.kankyo.tohoku.ac.jp). This symposium could not be held without the effort and dedication of many people. We are very grateful for their assistance and commitment.