

First International Conference on Concrete Sustainability (ICCS13)

ICCS13, the first international conference on concrete sustainability, was held from May 27 to May 29, 2013 in the Toshi Center Hotel, Tokyo. It was organized by the Japan Concrete Institute (JCI) with co-organizers the International Federation for Structural Concrete (fib), the American Concrete Institute (ACI), and the International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM).

Approximately 250 persons from 37 countries registered for the conference, and there were 230 actual participants from 32 countries. The conference included 158 general presentations, eight lead paper presentations, and four keynote speeches. In addition, a technical tour of Tokyo was held on the day after the conference.

Koji Sakai, a professor at Kagawa University, and other Japanese persons had taken the initiative at organizations such as fib in activities related to the environment and sustainability, and it was therefore considered that an international conference should be created on these themes in order to play the role of promoting further advances in this area.

To launch the conference, greetings at the opening session were given by the chairman of the ICCS13 organizing committee, Prof. Koji Sakai (Photograph 1); and a welcoming address was given by Dr. Taketo Uomoto, Chief Executive of the Public Works Research Institute and President of JCI.

Next, keynote speeches were given at the plenary session by Dr. Uomoto, Mr. Gordon Clark (president of fib), Ms. Anne M. Ellis (president of ACI), and Dr. Nicolas Roussel (honorary president of RILEM). Each keynote speaker gave interesting talks on actions for sustainability by their academic associations and directions for future involvement.

Eight of the sessions of general presentations were begun with lead paper presentations. The presenters of lead papers were Dr. Mette Glavind (Denmark, chair of fib Commission 3), Ms. Julie Buffenbarger (U.S., presented by Professor Doug Hooton), Professor Doug Hooton (Canada), Adel Zaki (Canada), Professor Harald Müller (Germany, vice president of fib), György Balázs (Hungary, former president of fib), Professor Nemkumar Banthia (Canada), and Professor Dong-Uk Choi (Korea).

The main categories of conference topics were environmental impact reduction technologies; sustainability aspects in durability; environmental design, evaluation, and systems; social and economic aspects; and case studies. About of 100 papers presented dealt with environmentally friendly materials and the characteristics of concrete using such materials. Other popular topics were structural durability and repair (about 30 papers), environmentally friendly design (6 papers), and carbon dioxide fixation and environmental impact assessment (18 papers). As the needs of society continue to change in the future, it will become increasingly important to study concrete sustainability from a variety of different perspectives.

A banquet was held during the conference (Photograph 2), and the ICCS awards for submitted papers were announced at the banquet. The "Best Conference Paper" award went to Aruz Petcherdehoo (Thailand) for "Environmental Impacts due to Combined Repairs for Extending Service Life of Concrete Structures under Marine Environment." The "Best Technical Application" award was given to Seishi Shiraiwa (Japan) for "Effects of Improving

Durability of Concrete by Aqua Curtain Curing and its Application." The "Excellent Young Researcher" award went to Viet Duc Nguyen (Spain) for "Exploring the Potential of the Functionally Graded SCCC for Developing Sustainable Concrete Solutions."

At the close of the banquet, Prof. Koji Sakai, chairman of the organizing committee, announced that the next International Conference on Concrete Sustainability will be ICCS16, which will be held three years from now in Madrid, Spain in 2016. A conference participant appreciated ICCS13 as "This international conference has planted an important seed."



Photo 1 Opening Address by Prof. Koji SAKAI,
Chairman of ICCS13 Organizing Committee



Photo 2 Banquet (Ms. Anne ELLIS ACI President and
Dr. Taketo UOMOTO JCI President)