

Third International Conference on Sustainable Construction Materials and Technologies (SCMT3)

The third International Conference on Sustainable Construction Materials and Technologies was held recently in Kyoto, Japan. The previous conferences were in Coventry in the UK (2007) and in Ancona in Italy (2010).

Many construction materials are made from natural resources. Advances in construction material technology to provide, for example, functional extension, quality improvement, and application or reuse of byproducts will certainly and significantly contribute to the future sustainable development of society. The first two conferences in the series were productive opportunities for many researchers and engineers from academia, industry, and government to exchange and share information, ranging from the latest research outcomes to actual construction applications. Nevertheless, environmental and social demands related to structures and construction materials are now greater than ever before. Issues such as preserving natural resources, protecting the global environment, developing resilience against natural disasters including earthquakes, and dealing with aging infrastructure are just a few examples. The main aim of this third conference is to continue the effort to transfer technology for dealing with these questions. The early realization of an ideal sustainable society depends in part on the continuing success of this conference series.

The conference covered a wide range of technical and research fields, with sessions on different subjects organized in parallel. The main subject areas covered at the conference are listed below.

1. Theory and methodology for achieving sustainability
2. Durability of concrete, steel, polymers, FRP, timber, etc.
3. Structural health monitoring and advanced sensing
4. Green new-deal construction methods

The total number of papers presented at the conference was 381, including the plenary and the keynote lectures. Delegates totaled 507 (from 40 countries), including accompanying persons.

Following the opening address, Prof. Hidenori Hamada of Kyushu University and Professor Ravindra Gettu of the Indian Institute of Technology gave plenary lectures. Prof. Hamada spoke on the issue of structural deterioration rate in a marine environment, while Prof. Gettu's lecture was on the issue of superplasticizers for sustainable concrete. Further to these plenary sessions, there were honoree sessions led by Professor Kenji Kawai of Hiroshima University and Professor Jan Olek of Purdue University.

A further 21 researchers and engineers from seven countries delivered keynote lectures. The issues covered included the introduction of technology standardization, performance of concrete materials, repair and reinforcement technology, and non-destructive inspection as well as geo-materials and wood building materials. These keynote lectures were delivered in the session relevant to each.

In parallel to the lectures and presentations of papers, there was a technical exhibition involving 17 organizations and companies, mainly from Japan. Materials manufacturers, design firms, construction and engineering companies, and related organizations exhibited their latest technology on the displays. Awards were given to the best exhibits in categories such as promising technology, practical utility, or uniqueness, based on voting by the participants.

A technical tour was offered to all participants. Those who were interested visited the Hanshin Expressway Earthquake Museum and the Kobe Port Earthquake Memorial Park. An official banquet was held at Hotel Granvia

Kyoto, next to Kyoto station.

We would like to thank the international organizing committee, the technical committee, the international advisory committee and the local host committee for their support in making the conference a success. And last, but not least, our thanks go to the authors from 40 countries who submitted papers and to all attendees.



Figure 1 Welcome reception



Figure 2 Technical tour (the Hanshin Expressway Earthquake Museum)



Figure 3 Banquet