

Event Report

The First International Conference on Press-in Engineering 2018, Kochi

The First “International Conference on Press-in Engineering (ICPE) 2018, Kochi” was held by the ICPE Organizing Committee / International Press-in Association (IPA) at Kochi University of Technology in Kami city, Kochi Prefecture, Japan on 19th and 20th September, 2018.

The IPA is an international academic organization founded in 2007 and tasked with the challenging aims of explication and expansion of the Press-in technology. IPA marked the eleventh anniversary this year and is kept growing. “**Press-in retaining structures: a handbook (First edition 2016)**” was published and the international seminars have been held regularly to apply this unique technique to society. After more than one decade of activities, the ICPE Organizing Committee was set up and the first international conference was held in the city of Kochi, Japan, since Kochi is the birthplace of a piling machine called “Silent Piler”, which plays a key role in Press-in Engineering. At the conference, there were 418 participants including researchers, engineers, practitioners and students from 17 countries.

The three key words of the ICPE2018 as an international conference are “Disaster prevention”, “i-Construction^{*1}” and “Regional revitalization”. As an aim of “Regional revitalization”, the ICPE2018 disseminate the Press-in technology through the international conference held in Kochi, Japan where the Press-in technology was originated. As an aim of “Disaster prevention”, the counter measures of Kochi Prefecture against Tsunamis expected to occur as a result of future Tonankai earthquakes was the main topic of this conference. As an aim of “i-Construction”, it was recognized that the use of ICT or IOT in construction machines is vital to improve productivity and solve the issue of labour shortage. In support of these aims, 28 supporters including Kochi Prefecture and the Japanese Society of Civil Engineers (JSCE), and the ICPE Organizing committee received four subsidies including the International Scientific Exchange Fund of Japan Society of Civil Engineers.

^{*1} A project promoted by the Japanese Ministry of Land, Infrastructure, Transport and Tourism to make the construction work more productive as well as appealing, mainly based on ICT (Information and Communication Technology).

In the plenary sessions, two Key-note lecturers were invited. Professor Fumihiko IMAMURA of Tohoku University, of the director of the International Research Institute of Disaster Science, who is a world-renowned expert on Tsunami disaster prevention, and Mr Kenjiro SHIMADA, who is active in the front line of Komatsu Ltd. which is a leading company developing ICT construction machinery. Also, a video message by Mr Akio KITAMURA (Honorary president, IPA / President, GIKEN Ltd.), who is an inventor of the Press-in technology, was shown. The message mentioned the background and the future prospects of the Press-in technology and machines contributing to society due to their multiplicity of broad versatility in construction. Furthermore, the state-of-the-art report of the collaboration between the Cambridge University and GIKEN LTD. was unveiled. Across the sixteen general sessions, including two organized sessions regarding “i-Construction” and “Dialogue among operators and researchers”, in total 88 presentations on the research and project reports were made. It seems that many participants listened attentively to lectures in the plenary session whilst proactive discussions and useful opinion exchange occurred in the general sessions, which demonstrated the high level of academic interest in the Press-in technology.

In addition to the international conference, a technical visit was conducted. A site tour of the Kochi coast protection system of which the Press-in technology was adopted, keeping the function of both the existing levees and arterial roads, was arranged, as was a tour of the facilities of the Kochi head office, GIKEN LTD. This tour including the tsunami simulator, the underground mechanical car park “ECO-park” and the museum of pile drivers. Particularly during the site tour, some participants exclaimed in astonishment “I can’t believe that this levee was reinforced without the suspension of traffic. Additionally, the scenery of beautiful coast was kept after the construction!”. Thus, this technical visit was a good opportunity for the participants to grasp the practicability of the Press-in technology.



Key-note lecturer
Prof. Fumihiko Imamura
Professor, Tohoku University



Key-note lecturer
Mr. Kenjiro Shimada
Team Leader, Komatsu Ltd.



Video Message
Mr. Akio Kitamura
President, GIKEN LTD.



Opening Ceremony
Dr. Osamu Kusakabe
Chair, ICPE2018 Organizing Committee



Opening Ceremony
Mr. Takaaki Iwaki
Deputy Governor, Kochi Prefecture



Opening Ceremony
Prof. Masahiko Isobe
President, Kochi University of Technology



Opening Ceremony
Prof. Kiyoshi Kobayashi
President, JSCE



Opening Ceremony
Prof. Jun Otani
President, JGS



Opening Ceremony
Prof. Charles NG
President, ISSMGE



Closing Ceremony
Mr. Masanao Ozaki
Governor of Kochi Prefecture



Technical Tour: The Museum of
Pile Drivers



Technical Tour: Demonstration of
Tsunami Simulator