Event Report Part 1

Date: 6 - 7 Dec 2012
Place: Singapore
Venue: Mandarin Orchard Singapore
Organizer: IPA Committees and Secretariat
Participant: approximately 200 academics and engineers from 6 countries.

Programme:
- Special Presentation of the Press-in Engineering
- Research Presentation by the 3rd Grant Award Winners
- Award Ceremony and Proposal Presentation for 4th Grant Award Winners
- Tour of Press-in Construction Sites
- Reception and Banquet

Supporters:
- National University of Singapore
- Geotechnical Society of Singapore
- Giken Seisakusho Co., Ltd.
- THL Foundation Equipment Pte Ltd
- HG Metal Manufacturing Limited
- CSC Holdings Limited
- Eng Lee Engineering Pte Ltd
- Guan Chuan Engineering Construction Pte Ltd
- ATSUNEW GIKEN PTE.LTD.
- Fuchi Pte Ltd.
- NIPPON STEEL & SUMITOMO METAL CORPORATION
- JFE Steel Corporation

The 4th IPA International Workshop was held at a hotel in Singapore, Mandarin Orchard Singapore, on December 6 and 7. About 240 researchers and engineers from 6 nations participated. With great supports from National University of Singapore, Geotechnical Society of Singapore, major construction engineering companies, general contractors, subcontractors, trading companies and manufacturers of the steel products, the conference was completed with substantial content and size.

In the workshop, a variety of presentations were made from different point of views; fundamental researches on press-in engineering theories, press-in construction examples and so on. On the final day, a tour of two press-in construction sites - a private construction site of a highrise condominium and a public construction site of a drainage - was hosted by two local enterprises, where all the participants felt in their bodies the superiority of the Press-in Method that obeys Five Principles of Construction. The research grant award ceremony and research presentations by the previously granted three investigators were held as well, in accordance with custom. The participants enjoyed these programs of uniting the theory and the practice, which is the essence of IPA.
Singapore has been rapidly developing as a core country of Asia and is an international city that is playing an important role in
information transmission as well as in economical activities. It can be expected that this opportunity of transmitting the latest
information on press-in engineering should promote the recognition of press-in engineering and the speedy progress of the
researches.

**Opening**

**Special Presentation Part 1**

**Special Presentation Part 2**
Special Presentation Part 3

Mr Yukihiro Ishihara (Giken Seisakusho Co., Ltd.)
PPT Technique to Obtain Subsurface Information

Dr Yoshihiko Fukuchi (Giken Seisakusho Co., Ltd.)
Assessment for Implant Structure based on Five Principles of Construction and Lessons Learned from Great East Japan Earthquake

Mr David Law Wie Sein
(Guan Chuan Engineering Construction Pte Ltd)
The application of Crush Piling in Singapore and briefing of the press-in piling construction site

Mr Bong Saik King (Eng Lee Engineering Pte Ltd)
Briefing of the Crush piling construction site

3rd IPA Research Grant Award / Presentation of Research Result

4th IPA Research Grant Award / Award Ceremony
Tour of press-in construction site (1) Construction site of highrise condominium (December 7, 2012)

Name of construction: Construction of Highrise Condominium with 27 Stories
Main contractor: V3 CONSTRUCTION PTE LTD
Piling contractor: Guan Chuan Engineering Construction Pte Ltd
Objectives of construction: Temporary retaining wall for constructing underground car park (B1)
Press-in machine: Silent Piler SCU-ECO400S, SA150
Press-in material: Sheet pile type IIIA, L=9.0-12.0m, N=600

On December 7, the second day of the workshop, a tour of two press-in construction site was held. The first site was the construction site of a highrise condominium, where press-in piling was conducted by Guan Chuan Engineering Construction Pte Ltd, one of the supporters of this IPA workshop. Sheet piles were pressed-in to build the temporary retaining wall for the construction of the underground car park. Due to the conditions that the site is in the city area and that the subway is running about 18m below the adjacent street, the environmentally friendly Press-in Method had been adopted.

Although it was not possible to get into the site, the participants were able to observe the whole site from the fourth story of the church beside the site, through the courtesy of that church. The general information of the construction was provided by President David Liaw Wie Sein, and lively questions and answers followed. Two press-in machines (a machine for standard press-in and a machine for Hard Ground Press-in Method) were placed together, so that the difference of the two penetration systems could be easily understood.
The second site was the public construction site of a drainage, where the press-in piling was conducted by Eng Lee Engineering Pte Ltd, one of the supporters of this IPA workshop. A temporary retaining wall to replace the existing channel with a larger box culvert is under construction as a countermeasure against flood. The construction area had been restricted due to the adjacent factory and trunk road. The Press-in Method was adopted because it is environmentally friendly, requires no temporary works and assures safety. The Crushpiler, the press-in machine for Hard Ground Press-in Method, was being in operation, as the ground condition was hard with the layer of sandy silt with N value over 50.

The site was faced with a trunk road with a lot of traffic, and any passersby could see the piling work through fences around the site. The participants were able to observe close up in detail the process of press-in piling from pre-augering to pressing-in of a sheet pile, thanks to a special tent. In both sites, being filled with lively atmosphere, the participants were impressed with the superiority of the press-in machines, with its safe and silent motion, with its ability to save space and with its swift operation.

It was a rainy season in Singapore. The tour event had a narrow escape from a rain, but the staffs at sites had experienced squalls with thunders during preparation until the previous day. Their dedication is really appreciated.
On December 5, participants from different countries gathered in a welcome reception. The hall was filled with a congenial atmosphere, with newcomers introducing themselves to each other and with familiar faces informing each other of their recent conditions or sharing information.

In addition, wonderful performance of a harmonica was made by President Hiroshi Kajikawa of Kajikawa Construction Co., Ltd, a corporate member of IPA. The atmosphere was congenial and the ballroom was filled with smiling faces.

Closing remarks were given by IPA Director, Prof. Yoshiaki Kikuchi, one of the winners of the fourth IPA research grant award, with a Japanese-style clapping called 'Ippon-jime'. Then the lively ceremony was closed.

It was impressive that a variety of researchers and engineers from different countries with different ages and genders gathered around the tables to communicate with each other and

The international city with a variety of races and cultures which has developed as a global hub and has attracted people all over the world. Sophisticated landscape with the world class city beauty as a tourist city. Unique areas appealing differently with their own unique atmosphere and food. Singapore was the place beautifully brightening with lively people in the daytime and with Christmas illuminations in the night time. It is the place to visit again.