

Event Report

Global Best Practices of Press-in Piling Method - IPA 15th Anniversary Seminar in Singapore -

IPA Secretary

The Global Best Practices of Press-in Piling Method - IPA 15th Anniversary Seminar in Singapore - was held by International Press-in Association (IPA) on 18 November 2022 in Singapore and it has been the first time to hold the event in physically since the Covid-19 pandemic started. IPA was founded in February 2007 and this seminar was held to commemorate the 15th Anniversary of the Association. A total of 91 participants attended this seminar including IPA Directors from 11 countries, consultants, contractors, and geotechnical engineering practitioners.

To further commemorate this special occasion, the seminar commenced with experts presenting the most recent advances in the applications of Press-in Piling in Asia, Europe, North America, South America, and Africa. Many of these projects such as coastal protection are highly relevant to Singapore and Southeast Asia. The past, present, and future of IPA were also presented as follows:

◆ Program:

Presentation 1	Brief introduction of IPA and Press-in Technology Mr. Hisanori Yaegashi (Japan)	Secretary General, IPA
Presentation 2	Remembering the early days of Press-in Piling research Prof. David White (United Kingdom)	Professor, University of Southampton
Presentation 3	Recent applications to the Press-in Piling Method in Asia with emphasis on coastal protection Mr. Hiroki Kitamura (Singapore)	Giken Seisakusho Asia Pte., Ltd.
Presentation 4	The application of Press-In Piling to increase the resilience of critical infrastructure in Europe Prof. Kenneth Gavin (Netherland)	Professor, Delft University of Technology
Presentation 5	Recent Notable Press-in Piling Projects in North America Mr. Takefumi Takuma (United States)	Giken America Corp.
Presentation 6	Recent application of Press-in Piling Method in Brazil: Downstream retaining structures for tailings dams Dr. Marcos Massao Futai (Brazil)	Associate Professor, Geoinfra University of Sao Paulo
Presentation 7	Recent applications of the Press-in Piling Method in Africa: Senegal and Egypt case histories Prof. Mounir Bouassida (Tunisia)	Professor, University of Tunis El Manar - National Engineering of School of Tunis -
Presentation 8	Recent research on the use of Press-in Piling data Mr. Yukihiro Ishihara (Japan)	Manager, GIKEN LTD.
Presentation 9	Future of IPA Prof. Chun Fai Leung (Singapore)	President, IPA Emeritus Professor, National University of Singapore

Prof. Leung, the President of IPA remarked that the Press-in methods have new applications in his presentation. These applications are multi-disciplinary in nature involving Civil engineers for construction, Mechanical engineers for machine and equipment innovation and development, Climate engineers for evaluation of water level rise, Coastal engineers for evaluation of impacts on seafront structures, Environmental engineers for evaluation of effects of new construction on the environment and Others. He also announced that the ICPE 2024 will be held from 3 to 5 July 2024 in Singapore and expressed his appreciation to all participants, and organizers at the final.



Photo 1 The venue of seminar



Photo 2 Prof. Leung is presenting

After the seminar, 46 people attended a live site press-in piling demonstration. The project is the construction of a private 2-storey house. On the project, the press-in piling method is being utilized to install Zero Sheet Piles (NS-SP-J Sheet Piles) which form an approximately 12m x 27m rectangular shape retaining wall, for the construction of a single-level underground parking lot Right on the boundary lines to maximize land use, 9m long sheet piles were being installed by the Zero Piler. Type of the Press-in Piling Method is known as the “Zero Clearance Method”. The sheet piles are to be left in place as permanent basement walls, in conjunction with cast in-situ concrete walls. The ground condition is soft-medium stiff clay (old alluvium) with the maximum SPT *N* value of 14. The Standard Press-in Mode (no driving assistance used) was utilized taking the ground conditions into account.

According to the contract managing director, Mr. David Liaw Wie Sein of Guan Chuan Engineering Pte., Ltd., the Zero Clearance Method is the most suitable for the construction of substructures in dense residential areas where construction nuisances are unacceptable. In addition to that, he stated “The method also enables project owners to maximize the dimension of the substructure, by constructing it right next to the boundary lines.”

Since it is crucial to maximize land use in urban areas, the IPA envisages that the Zero Clearance Method will also gain popularity in other countries.



Photo 3 Site Visit



Photo 4 Group photo