

Event Report

IPA Seminar on Press-in Technology in Taiwan

IPA Secretariat

The IPA Seminar on Press-in Technology in Taiwan was held on June 14, 2023, at the Importers and Exporters Association of Taipei (IEAT) in the central Taipei, Taiwan. It was cosponsored by the Taiwan Geotechnical Society (TGS), the Taiwan Foundation Engineering Institute, the Taipei Foundation Engineering Institute and the Sino-Geotechnics Research and Development Foundation. The one-day seminar was attended by about 100 people, including engineers, contractors, academic researchers, machine manufacturers, pile suppliers and other interested industry colleagues. The seminar covered the full spectrum of the press-in piling method, which was requested by the press-in piling industry in Taiwan in order to expand their capability for future projects.

The seminar began with an opening address by Prof. Tai-Tien Wang, the president of the Taiwan Geotechnical Society (TGS), followed by nine presentations covering the following topics.

1. Prof. Chun Fai Leung, the president of the IPA, delivered a presentation titled “The prospect of International Press-in Association (IPA)”. He outlined the advantages of the press-in piling method and activities of the IPA, including its future prospects.
2. Mr. Tomotaka Hirose, assistant manager of GIKEN Seisakusho Asia Pte., Ltd., provided his presentation on “Press-in Retaining Structures: A Handbook (Construction)”, which was revised in 2021.
3. Mr. David, Kuo-Wei LIN, the president of Chuen Chang Enterprise Co., Ltd., introduced the current status of the press-in piling industry in Taiwan in his presentation, “To see the new possibilities for future application of steel sheet piles from the past summary of the silent piling work in Taiwan”.
4. Prof. Tatsunori Matsumoto, the vice president of the IPA, an emeritus professor at Kanazawa University, explained “Press-in Retaining Structures: A Handbook (Design)”, in line with the previous presentation which featured the “Construction” portion of the handbook.
5. Mr. Kai-Yu Wu, the assistant general manager of Tung Ho Steel Enterprise Corporation, described the challenge to develop steel sheet piles in Taiwan, with structural improvement over the current sheet pile models available in the Taiwan market.
6. IPA director and assoc. prof at the Tokyo Institute of Technology, Jiro Takemura, lectured on one of the IPA’s research activities “Application of cantilever type steel tubular pile wall embedded to stiff ground (TC1)”.
7. Mr. Chou, Yung-Chuan, the business manager of CECI Engineering Consultants, Inc., presented his experience with the press-in method on his previous project as “Case Study of Press-in Method for Archeology at Historic Site of Taipei MRT Station”.
8. Mr. Yasuhiko Nishi, the Senior Advisor of the GEOTETS Method Research Society, detailed their innovative ground displacement prevention method in his presentation “Simultaneous removal and filling method for earth retaining members contributing to SDGS”.
9. Mr. Tsunenobu Nozaki, the General Manager of the IPA, featured “Case Histories of the Press-in Piling Technologies and Applications for Permanent Structures”, which covered a wide variety of applications of the press-in piling method.

This was the first full in-person conference, with invited speakers, held by the IPA post Covid-19 pandemic. The main advantage of a full in-person conference over an online or hybrid conference is the person-to-person proximity to other attendees. The day before the conference day we had a welcome dinner at a local restaurant, to warm up the relationship between the co-organizers in Taiwan and the IPA (Photo 1). It was also a good opportunity to update guests on information, regarding both the Taiwan construction industry and the press-in piling industry.



Photo 1. The welcome dinner

On the day of the conference (Photo 2), there were enthusiastic questions after each session to obtain in-depth knowledge of the latest press-in piling method. Apart from the technical discussions, break times and lunch times were also used by the attendees as an in-person networking opportunity. Possible future plans in Taiwan, further activities of the IPA and mutual business developments were keenly discussed among the parties.



Photo 2. Conference day

The conference was sponsored by the 6 organizations, whose advertisements were inserted into the conference guidebook and circulated to all attendees.

Gold:	Chuen Chang Enterprise Co., Ltd.	GEOTETS Method Research Society	GIKEN LTD.
Silver:	Taiwan Foundation Engineering Institute and Taipei Foundation Engineering Institute		
Bronze:	Taiwan Professional Geotechnical Engineers Association	Tung Feng Construction Engineering Co., Ltd.	

Up to now, U-shaped steel sheet piles type 3 and type 4 have been predominantly used in Taiwan. Due to the limited availability of other pile types, the press-in piling method has been almost exclusively used for temporary earth retaining structures and cofferdams. In regards to the market area, the press-in piling method has been mostly utilized in the south of the country due to geographical reasons and ground conditions. Therefore, the IPA feels that there is substantial future potential for the expansion of the press-in piling method in Taiwan. The key factors of the expansion will be the introduction of a wider range of applicable pile types, applicable substructure types and methods for the construction of deeper foundations.