

Event Report

IPA Seminar on Press-in Technology in Singapore

Prof. Leung Chun Fai

Local Organizing Committees Chair

Department of Civil Engineering, National University of Singapore

The IPA seminar held at the National University of Singapore Kent Ride Guild House on 2 March 2017 was co-organized by IPA and Geotechnical Society of Singapore (GeoSS). The Seminar was supported by the National University of Singapore, Singapore Institute of Technology and University Tun Hussein Onn Malaysia and sponsored by Giken, Nippon Steel and Sumitomo Metal Corporation and JFE Steel Corporation. About 100 participants from Singapore and Malaysia attended the seminar.

During his introductory remarks, IPA chairman Prof. Osamu Kusakabe iterated that the aim of the seminar is to update the latest development in press-in technology and to highlight the important issues regarding the design and construction of press-in piling in the newly published IPA Press-in Piling Handbook English Edition. The first presentation was made by GeoSS Immediate Past President Dr. Tiong-Guan Ng who elaborated on the design aspects of press-in piling and practical considerations drawn from previous projects in Singapore. This is followed by the presentation of Professor Yoshiaki Kikuchi who represents the IPA. Prof Kikuchi summarized the first several chapters of the Handbook on the adoption and use of press-in piling and pointed out the important issues in the Handbook that the participants can look for when designing retaining and other structures using the press-in technique.

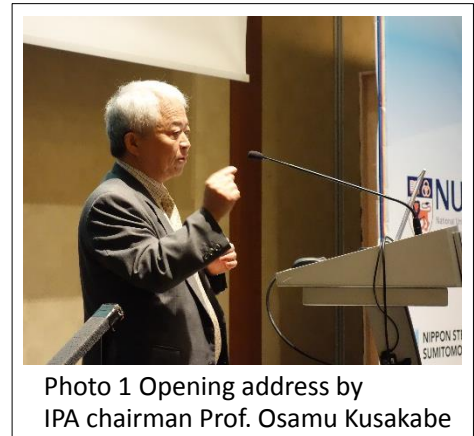


Photo 1 Opening address by IPA chairman Prof. Osamu Kusakabe

After the tea break, GeoSS Committee Member Dr. Teoh-Yaw Poh presented the risks involved in installing and extracting sheet piles with structures nearby. He also highlighted some good practices to mitigate the risks. Mr. Tsunenobu Nozaki representing IPA gave the final presentation by referring to the key points in the Handbook on the construction issues related to press-in piling. A video prepared by Giken Seisakusho Asia Pte Ltd was shown to the audience on the many press-in technique projects carried out in Singapore and other parts of the world.

A discussion forum chaired by Dr. Teik-Lim Goh of Singapore and Dr. Nor Azizi Yusof of Malaysia with the 4 speakers as the panelist was held as the last part of the seminar. During the Forum, many questions were raised by the audience with Mr. Nozaki being the busiest panelist as many questions are related to the construction and cost aspects of press-in technique. The panelists pointed out that press-in piling is the only technique feasible when installing sheet piles right next to existing buildings and the lowest headroom achievable for sheet pile installation using press-in technique is about 1 m and this is far superior to other available techniques. During the closing remarks, the Seminar Chairman Prof Chun-Fai Leung highlighted that although press-in installation of sheet pile walls is generally more expensive than conventional sheet pile installation involving vibration, engineers should evaluate the entire scenario including safety, time and other aspects. Professor Kusakabe then announced that the next IPA Seminar will be held in Kuala Lumpur, Malaysia tentatively in October 2017.



Photo 2 Moderators and panel members during forum discussion



Photo 3 Question raised by a participant during discussion forum