Young Members Column

Hoang Thi Lua

Ph.D. Student, Kanazawa University

My name is Hoang Thi Lua and I am Vietnamese. I received my bachelor's degree in Hydraulic Engineering in 2011 and my master's degree in Geotechnical Engineering in 2014 at Thuyloi University. After graduation, I decided to pursue a teaching and researching career in the field of Geotechnical Engineering, so I came to Japan to start my Ph.D. course at Kanazawa University since 2017, and I am now a final year Ph.D. student.

My country, Vietnam - a developing country with a population of over 97 million - is experiencing a period of rapid economic growth. To make Vietnam an attractive destination for foreign investors, Vietnam has been investing a lot in human capital and infrastructure. In densely populated places such as big cities and industrial zones, new construction projects including residential buildings, hospitals, schools, roads, offices, factories and commercial centers are becoming increasingly common requirements. This calls for the need of civil engineers, especially geotechnical engineers to find safe, efficient, and economical construction solutions. While the need for infrastructure development is urgent, Vietnam also needs to address related challenges regarding local geological and geotechnical features, and natural disasters such as soft soil, complex groundwater, ground subsidence, soil erosion, landslides, and flooding. These demands require workers in the construction sector to improve their performance, learn from experiences, and update technology from developed countries to adapt to the demands of the country in the new era.

Ms. Lua (left side) at Geotechanoi 2019

My research topic focuses on pile foundation engineering, especially piled raft foundations supported by displacement piles which will be one of the economical and promising foundation solutions for the construction industry of Vietnam. As an important part of my research topic, I pay attention to pile-related issues. I have attended some geotechnical engineering conferences, read related papers to keep up with new information on the field of foundations in general and displacement piles in particular. Fortunately, Prof. Matsumoto introduced me to the International Press-in Association (IPA) as well as The Second International Conference on Press-in Engineering (ICPE) 2021 which will be held in Kochi. ICPE 2021 is really exciting to me, and searching on the internet, I have found useful information related to the IPA and ICPE, and the topic of ICPE really attracts me. I believe that I will gain a lot from IPA to improve my research. I will also introduce IPA to my colleagues so that more people may have opportunities to expand their knowledge and skills towards a more sustainable country development.

Wentao Guo

Master Student, Kanazawa University

Originally from Tianjin, China. Now I am a master student of Environmental Design at Kanazawa University, located in Hokuriku. Prior to that, I studied in the School of Architecture at the University of Tianjin. I moved to Kanazawa in the 2018. The Second International Conference on Press-in Engineering (ICPE) in Kochi will be my first time to attend an international conference as a student member, and it will be a good opportunity for me to learn and communicate with other researchers from all over the world.

My research focus on pile foundation, which is a foundation form with high bearing capacity, wide application scope and a long history. With the improvement of production level and the development of science and technology, the type, process, design, calculation method and application scope of pile foundation have been greatly developed, and are widely used in high-rise buildings, ports, bridges and other projects. Nowadays, the challenges to companies are to reduce costs and at same time keep safety. These are also my research subjects. With the development of China's urbanization, Civil Engineering will inevitably face more complex environmental and geological conditions, more difficult design and construction tasks of ultra-deep foundation as well as planning and construction of more large-scale underground space infrastructure. I hope that the Press-in Technology will be available in China in the near future.