



The Korean Geotechnical Society-North America (KGS-NA) Distinguished Lecture Series

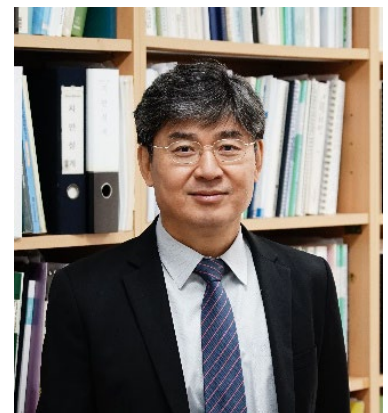
Presented by **Sangseom Jeong, Ph.D.**
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Yonsei University, Republic of Korea
7PM (EST) / 4PM (PST) Nov. 10, 2023 & 9AM (KST) Nov. 11, 2023
Zoom Link: <https://georgiasouthern.zoom.us/j/8544563643>

Piled Raft Foundation and Soil Structure Interaction

Abstract: In engineering practices, it is suggested that there is an increased need for communication between structural and geotechnical engineers to ensure that foundation system designs perform as intended. Special attention is given to the interaction between the structure and the piled raft in the design and analysis of foundation systems. It deals with a class of problems in which the behavior of both principal parts of the system (the geo-material and the structural foundation) must be considered. Aspects of soil-structure interaction have been introduced and relating several soil-structure interaction problems will be analyzed in depth. A series of numerical analyses are performed to verify the interactive analysis routine in comparison to the unified analysis method. Modeling techniques that can be used by foundation engineers in global building analysis models for shallow and deep foundations are proposed. An interactive analytical method for the interaction between the superstructure and the foundation is highlighted.

Bio: Dr. Sangseom Jeong is a professor at Yonsei University, a former president of the Korean Geotechnical Society (KGS), a vice chair of TC212 Deep Foundations and a chair of AsRTC-18 Mega Foundations in the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), a director of Green Infrastructure Technology for Climate Change (GIT4CC) Research Center in Yonsei University.

The main areas of expertise are mega foundation of long span bridges and high-rise buildings, LRFD, pile foundation, deep excavation, landslides, debris-flow and slope stability. Dr. Jeong is a passionate researcher in the fields of pile, drilled shafts, offshore deep foundation, and landslide assessment and an innovative engineer with proven leadership in the management of a wide variety of national and international projects. He is a member of the National Academy of Engineering of Korea. He has served as a reviewer for many geotechnical journals. He has co-edited 32 geotechnical engineering textbooks and authored about 115 papers in major reputable SCI & SCIE listed international journals, 159 articles in Korean journals, 116 international conference papers, 90 technical consulting reports and 71 patents in deep and shallow foundations, excavation and landslides and debris flow.



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