

2017 International Symposium on Design and Analysis of Piled Raft Foundations

Design, Analysis, Testing, Construction and Monitoring

Date: September 12-13, 2017
(Tuesday-Wednesday)

Venue: Tamkang University,
New Taipei City, Taiwan

Organized by:
Prof. D.W. Chang (Tamkang U., Taiwan)
Prof. T. Matsumoto (Kanazawa U., Japan)
Prof. D. Choudhury (IIT Bombay, India)

Supported by:
Taiwan Geotechnical Society
TC212/TC305/ATC18, ISSMGE
AGSSEA, Alliance of Geotechnical Engineering
in Taiwan

Sponsored by:
Tamkang University, Taiwan
Ministry of Science and Technology (MOST),
Taiwan

Scope: The Piled Raft Foundation has been commonly used as mega foundation for massive or high-rise buildings located in ground sites of soft clays or sandy soils suspicious of liquefaction under strong seismic motions. Design and analysis of such foundation can't rely on conventional geotechnical methods. Both rigorous and simplified numerical solutions have been suggested to carry out the work. In general, load-deformation relationships of the foundation and their effects to performance of structure should be monitored carefully. This Symposium of this purpose is supported by ISSMGE TC212/TC305/ATC18 to discuss the relevant technologies, in which the existing and newly developed methods are presented. Phenomena of foundation behaviors are reported based on numerical modeling, physical modeling as well as the monitoring data recorded in the field. The papers presented will be published in a book co-edited by the organizers.

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Time\Date	September 12 (Tuesday)	September 13 (Wednesday)
08:30-09:20	Registration	Registration
09:20-09:40	Opening Remark by TKU/TGS President, TC212/TC305/ATC18 Chairman	Registration
09:40-10:10	Lecture I - Piled Raft Concept: A Virtuous Example to Get More with Less - Prof. A. Mandolini (ISSMGE TC212 Chairman, Università degli Studi della Campania "Luigi Vanvitelli", Italy)	Lecture X - Recent Technology Development Trends in Japanese Construction Industry - Dr. K. Horikoshi (Taisei Corporation, Japan)
10:10-10:40	Lecture II - Practices of Pile Foundation Design in Japan, and Demonstrative Analyses of Piled Rafts Compared with Pile Groups - Prof. T. Matsumoto (Kanazawa U., Japan)	Lecture XI - Analysis of a Laterally Loaded Capped Bored Pile Group Using 3D Finite Element Method - Prof. San-Shyan Lin (National Taiwan Ocean University, Taiwan)
10:40~11:00	Coffee Break (Group Photo)	Coffee Break
11:00~11:30	Lecture III - Proposed 3-D Analytical Method for Piled Raft Foundations - Prof. Sangseom Jeong (ISSMGE ATC18 Chairman, Yonsei U., Korea)	Lecture XII - Pile Behavior in Liquefiable Seabed Sand Subjected to Lateral Loading - Prof. Tony Ni (National Cheng Kung University, Taiwan)
11:30~12:00	Lecture IV - Seismic Response of Combined Pile-Raft Foundation- The State of the Art Review - Prof. Deepankar Choudhury (IIT Bombay, India)	Lecture XIII - Numerical Study for An Offshore Wind Turbine Modal Test Using Effective Stress Analysis - Prof. C.W. Lu (National Kaohsiung First University of Science and Technology, Taiwan)
12:00~12:30	Q&A and Discussions - Moderated by Prof. D.W. Chang (TKU)	Q&A and Discussions - Moderated by Dr. J. Hamada (Takenaka Co.)
12:20~13:30	Lunch	Lunch
13:30~14:00	Lecture V - The Complexity of Piling Tests in Problematical Soil Ground of Kazakhstan - Prof. Askar Zhussupbekov (ISSMGE TC305 Chairman, LN Gumilyov ENU, Kazakhstan)	Lecture XIV - Example of Seismic Design of Piled Raft Foundation Using Finite Element Method and Simplified Method - Dr. J. Hamada (Takenaka Co. R&D Institute, Japan)
14:00~14:30	Lecture VI - Bearing Capacity and Deformation of Raft-Pile Foundations with a Joint Nonlinear Deformation of Piles and a Ground under Cyclic Loading - Prof. Ilizar Mirsayapov and Prof. I. Koroleva (Kazan State U. of Architecture and Engr., Russia)	Lecture XV - Analysis of An In-Situ Pile Group under Lateral Loading - Prof. J.S. Chiou (National Taiwan University, Taiwan)
14:30~15:00	Lecture VII - Seismic Behavior of Piled Rafts in Soft Ground Based on Field Monitoring - Dr. K. Yamashita (Takenaka Co. R&D Institute, Japan)	Lecture XVI - Numerical Evaluation of Seismic Performance of Piled Raft with Grid-Form DMWs under Large Earthquake Loads - Mr. Y. Shigeno (Takenaka Co. R&D Institute, Japan)
15:00~15:20	Tea Break	Tea Break
15:20~15:45	Lecture VIII - Monitoring of Load Distribution of the Piles and the Raft of a Building Foundation in Bangkok Clay - Dr. P. Kitiyodom (Geotechnical & Foundation Engineering Co., Ltd., Thailand)	Lecture XVII - Use of Grid Soil Mixed Wall for Increased Lateral Pile Resistance in Coal Ash Pond - Dr. S.H. Cheng (National Taiwan U. of Science and Technology, Taiwan)
15:45~16:10	Lecture IX - Experimental and Numerical Study on Performance of Piled Raft Models - Dr. V.A. Tuan (Le Quy Don Technical University, Vietnam)	Lecture XIII - Lateral Load Test on Model Monopile and its Analysis - Ms. Ya-Han Hsu (National Central University, Taiwan)
16:10~16:35	Q&A and Discussions - Moderated by Prof. C.W. Lu (NKFUST)	Lecture XIX - Performance Based Seismic Design of Piled Raft Foundations - Alternate Approaches with Approximate Numerical Analyses - Prof. D.W. Chang (Tamkang U., Taiwan)
16:35~16:55	TKU Campus and WERC Tour	Q&A and Discussions - Moderated by Prof. Irina Koroleva (KSUAE)
16:55~17:10	TKU Campus and WERC Tour	Closing Remarks and Return to Taipei

Internet Registration due on August 31, 2017, Internet Registration fees: TGS Member: NTD3,000、Others: NTD4,000 (Book/CD Rom/Lunch/Refreshment); Student w/ valid ID: NTD1,000 (Lunch/Refreshment). On-site registration + extra fees NTD500, Purchase Rates: Book-NTD1500, CD Rom-NTD600, Please see TGS website <http://www.tgs.org.tw> or contact Prof. Der-Wen Chang at E-mail: [dwchang@mail.tku.edu.tw](mailto:dwachang@mail.tku.edu.tw)