

Report from Egyptian Geotechnical Society EGS Lecture by Prof. Dr. Eng. Yasser El-Mossallamy

The Egyptian Geotechnical Society organized a public Geotechnical lecture at the evening of 8 June 2015. The lecture took place in Cairo at Housing and Building National Research Centre (HBRC). The lecture was entitled "FOUNDATIONS OF HEAVY STRUCTURES". It was delivered by Prof. Dr. Eng. Yasser El-Mossallamy. In the lecture, Prof. El-Mossallamy showed that reaching the most economic foundation system for heavy structures requires the co-operations between the geotechnical and structural engineers. He demonstrated the role of such co-operation through excellent well documented case histories. First, he showed that the mentioned co-operation as well as well-established soil investigation program has led to elimination of use of deep foundations of Clinker Silo in Hungary on medium to stiff cohesive soils allowing uniform settlement of the raft foundation of the structure up to about 30 cm without any damage or tilt to the structure. He further showed several cases of the foundation systems of high rise buildings in Frankfurt - Germany through which he demonstrated the involvement of the piled-raft foundation system that reduced the maximum as well as the differential settlement and the associated tilt. Additional examples of case histories from Kuwait and Saudi Arabia were also used to show the attendees of the lecture some aspects of behaviour of piled rafts. Prof. El-Mossallamy showed additional examples of the challenges that geotechnical engineers may face in the design of foundations of heavy structures such as those of elevated bridges and LNG Tanks on difficult soil and subjected to high seismic loads.

The lecture was very well attended. Due to heavy inclusions by interesting case histories, it was very well received by the attendees. The lecture was followed by interesting and fruitful discussions.



Prof. Dr. Eng. Yasser El-Mossallamy is a professor at Ain Shams University, Cairo, Egypt. He has been a researcher and consultant for 30 years. He received his PhD from Germany. His work includes the application of numerical modeling and analyses in geotechnical projects. He has a wide experience by the design and construction of high-rise buildings, bridge foundation and heavy industry foundations such as clinker silos and LNG tanks. He was also involved in many projects dealing with stability of landslides, soil improvement, rock fall hazards and tunneling. He has more than 80 publications dealing with different geotechnical topics. He is a member of many national and international technical committees such as the German Committee of Piled Raft and Soil Improvement as well as the Egyptian Bridge Design Committee, the Egyptian Committee of Piling as well as the International Committee TC 207.

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