## Report from Egyptian Geotechnical Society (Con't)

EGS Lecture by Prof. Dr.-Ing. Herbert Daniel Klapperich

The Egyptian Geotechnical Society organized a public Geotechnical lecture at the evening of 14 April 2015. The lecture took place in Cairo at Housing and Building National Research Centre (HBRC). The lecture was entitled "BROWNFIELD REDEVELOPMENT & RENEWABLE ENERGIES". It was delivered by Prof. Dr.-Ing. Dr. H.C. Herbert Klapperich.

In the lecture, the "groundwater protection" was demonstrated as an issue in the context of Brownfield revitalization to slow down land consumption (greenland) as well as in the construction of deposits and landfills. For the redevelopment of derelict land, different technical solutions were presented for urban sites and former mining areas by forming new landscapes.

The focus on "energy consumption" were stressed by comparison of standard construction principles and innovative approaches taking into account the CED (Cumulative Energy Demand) with the role of geothermal energy as a promising one of the renewable fractions.

Results of extensive research activities governed by the role of geosynthetics - including experimental investigations to soil-geosynthetics interaction (shear, friction & pull out tests) - in cohesive soils with and without additive improvements were presented.

At the end, Prof. Klapperich demonstrated examples from landfill and Brownfield construction and retaining structures.

The lecture was very well received by the attendees. The lecture was followed by interesting discussions.



Prof. Dr.-Ing. Herbert Daniel Klapperich is University Professor at the Geotechnical Institute, TU Bergakademie Freiberg (Technical University of Mining and Technology), Germany for Soil Mechanics, Foundation Engineering, Geotechnique in Mining and Dynamics. He is Board of directors (speaker), CiF Interdisciplinary Centre of Excellence for Brownfields & renewable energy, Freiberg/Berlin/Aachen, Germany. He has broad interests in several areas of geotechnical engineering including environmental geotechnics, tunnelling and underground construction, soil reinforcement and design with geosynthetics, and geotechnical aspects of natural hazards including landslides and earthquakes. He has more than 100 papers published in scientific journals and conference-proceedings.

Prepared by
Prof. Marawan Shahien
Professor of Geotechnical Engineering
Soil Mechanics & Geotechnical Eng. Lab.
Structural Engineering Department
Tanta University
Tanta, Egypt
&
Head of Geotechnical Engineering Dept.
Hamza Associates
Cairo, Egypt