

# IGT-Kolloquium

**Wednesday, 27 November 2019**

## **Selected case studies from geotechnical engineering practice in Europe - Geotechnical design and execution**

Prof. Dietmar Adam, Institute of Geotechnics at TU Wien, Austria  
1.45 pm, ETH Zurich, Hönggerberg, HCI J7

In two lectures, projects of European significance with completely different geotechnical challenges will be presented. The focus is on the geotechnical design of foundations, deep excavations and dewatering schemes. Different concepts will be compared and discussed that all approaches have their justification. The selection process for the geotechnical measures strongly depends on the ground conditions, the building loads, the requirements for the allowable deformations and settlements of the building, but also taking into account technical and economic aspects and the available construction time. In addition to the design aspects, the experience gained during construction will be highlighted in the presentations.

**Professor Dr. Dietmar Adam** is Head of the Institute of Geotechnics at TU Wien, Head of the Research Unit of Ground Engineering, Soil and Rock Mechanics, and Head of the Soil Mechanics Laboratory (first chair Professor Karl von Terzaghi). Since the early nineties he has gained wide academic, research and professional experience in civil and geotechnical engineering. He obtained his PhD from TU Wien in 1996 and completed his habilitation (post-doc studies) in 2002. In 2008 he was appointed Full Professor for Ground Engineering, Soil and Rock Mechanics.

From the beginning of his academic career in 1992 he has been involved in research and application of Roller-integrated Continuous Compaction Control (CCC) respective Intelligent Compaction (IC) and since then he is one of the international key proponents of CCC/IC. His main research interests and current research activities cover theoretical and experimental soil dynamics, compaction and compaction control, ground improvement, deep vibro compaction, innovative geo-materials, railway tamping, ground freezing, and thermo-active foundations, structures and tunnels. He initiated numerous national and international research projects with pioneering findings. He is mentioned as inventor in numerous patent specifications.

His research is reflected in 300+ publications in International Journals and Conference Proceedings and more than 250 invitations to presentations, keynote and special lectures at International Conferences in the field of Geotechnical Engineering in about 80 countries. Since 1992 he received several awards for his scientific achievements, amongst others the Austrian State Award for sustainability in climate protection for transportation technologies.

He is the Secretary of the Austrian National Committee of the ISSMGE and active in numerous national and international standards and guidelines committees, member of several «Technical Committees» of the ISSMGE, as well as expert of the commission of large dams and authorized tunneling expert of the Republic of Austria. He has also been a member of advisory boards, scientific committees and paper review committees of numerous international conferences worldwide, and a member of editorial boards and peer review committees of international scientific journals. He is Editor of the prestigious journal BAUINGENIEUR.

His consulting activities are characterized by a high degree of internationality; he has been fully responsible for 1,000+ projects in civil engineering, geotechnical and environmental engineering in more than 40 countries all over the globe.