

PREFACE

The International Conference on Safety Design and Construction of Underground Structures (SDeCUS 2016) is a conference intended to be a forum for researchers in all related fields, in addition to those listed under the conference topics, as well as case studies describing practical experiences. The conference is aimed on Safety in construction have the highest priority in the engineering of a underground structures and have to be fully integrated into the every stage of activities like design, construction and exploitation. This theme is of a great importance for researching a new more safety technology development.

Topics include risk analysis and risk management, rock and mining engineering, explosive engineering, seismicity and geomechanics, underground structures and excavations, safety material engineering, integrated safety design process, natural disaster management, emergency response, critical infrastructure protection, public safety and security, transportation safety and security, modelling and experiments, hardened structures (chambers), earthquakes

This issue contains selected papers from the SDeCUS 2016, which took place on the campus of Czech Technical University in Prague, Faculty of Civil Engineering, from April 11 to April 12 2016. This symposium included three invited talks, given by keynote speakers, leaders in their field, providing an overview of their topic of expertise as an introduction to the themes. SDeCUS 2016 have the following confirmed Keynote Speakers: Assoc. Prof. Dr. Ing. Jan Pruška, from the Czech Technical University in Prague, He holds the Research Position at the Department of Geotechnics of the Czech Technical University in Prague, Faculty of Civil Engineering, since 1998. His research areas include the back analysis in numerical modelling of underground structure, constitutive modeling of soils and rock, Larin Hypercube Sampling and swelling of the soils and rock. He holds a Adjunct Professor in Geotechnical Engineering from the CTU in Prague for his „Influence of the rock bolts to the stress and deformation of the discontinuous rock mass“ in 2003. Prof. Pruška is a Fellow of Czech Tunnelling Association ITA-AITES, Czech Chamber for certified engineers and technicians active in construction and of the Czech Geotechnical Society ČSSI. Ing. Ibragim Palankoev, President of Joint-Stock Company UMC “SouzSpecStroy”, Russia. Ibragim Palankoev has completed Russian Presential Academy of National Econimy and Public Administration (RANEPA) in 2005 and Moscow State Mining Unversity (MSMU) in 2010, where he completed his CSc. His research interests in geomechanical problems of mining and underground constructions, special construction methods such as artifical freezing of rocks. Aaron Mc Daid, MSc Bsc(HONS) Bsc AiFireE MIEI, Arup Gulf Ltd.. Aaron is a Fire Engineer based in Arup’s Dubai office. He has extensive experience in fire strategy for large rail and metro projects, including the development of individual tunnel and station fire strategies for the prestigious High Speed 2 (HS2), Northern Hub and Crossrail in the UK. Aaron has worked on a wide variety of rail and infrastructure throughout the Middle East region such as Istanbul Metro, Dubai Tram, Doha Metro, Abu Dhabi Integrated Public transport Network and Riyadh Metro. He is a guest lectures on fire and smoke dynamics, tunnel evacuation and the use of computational fluid dynamics in fire engineering.

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