



Tunnelling 4.0 : New technologies and automation

24th of September 2019

Buenos Aires, Argentina

Objective: To highlight some of the most advanced aspects of digital technology applications in the design and construction of underground facilities

Session 1: Building Information Modelling for underground applications

09:00-09:15 Opening - introduction

09:15-10:00 Fundamentals of BIM (Dr J. Karlovsek)

10:00-10:45 Specific aspects to be dealt with BIM for underground infrastructure design (Dr J. Karlovsek)

10:45-11:15 Coffee Break

11:15-12:00 BIM for the management of mechanized excavation data (V. Floria – Geodata)

12:00-12:45 Applications of BIM - case studies (P. Grasso & C. Pallaria – Geodata)

12:45-13:00 Question & Answers

13:00-14:00 Lunch

Session 2: Automation perspectives in the design and construction

14:00-14:45 New technologies for the survey and monitoring of tunnel construction (Dr J. Karlovsek)

14:45-15:30 Better TBM Advance Rates and Efficient Operation through Monitoring & Instrumentation (R. de la Torre - Robbins)

15:30-16:00 Coffee Break

16:00-16:45 Reduce downtime and labour requirements through TBM automation and semi-automation (C. Lang - Robbins)

16:45-17:30 Automation in drilling equipment (S. Leao - Sandvik)

17:30-18:00 Open discussion and closure