



ΕΛΛΗΝΙΚΗ
ΕΠΙΣΤΗΜΟΝΙΚΗ
ΕΤΑΙΡΕΙΑ
ΕΔΑΦΟΜΗΧΑΝΙΚΗΣ
& ΓΕΩΤΕΧΝΙΚΗΣ
ΜΗΧΑΝΙΚΗΣ

ΔΙΑΛΕΞΗ

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«Rockfall Protection – Design of Mitigation Measures Tembi Valley Case Study»

από τον

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Rockfall Protection – Design of Mitigation Measures Tembi Valley Case Study

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Flexible rockfall barriers have been continuously developed and improved in performance over the past 4 decades. Systems available now, allow the mitigation of extremely powerful and hazardous rockfall events. Due to the relatively light components and simple system setup such barriers are especially suitable for installation on steep difficult access slopes.

Part one of the presentation deals with the special requirements regarding the design and implementation of flexible barriers. Emphasis is put on how to evaluate the necessary design parameters such as outcrop zone, design boulder and catchment area as well as on the 2 and 3-D simulation of rockfall events and related risk assessment tools. For the design and positioning of the barriers special focus is put on the aspect of constructability since the terrain is often extremely steep and unfavorable for standard construction equipment

Part two provides comprehensive insight into the Tembi Valley rockfall protection works carried out in 2009, 2010 and 2011, ranging from rope access scaling over rock bolting and barrier construction to the installation of monitoring devices and maintenance works. Detailed information on the sequencing of works, the applied construction techniques and special equipment used will be on display as well as the constraints leading to some innovative solutions.

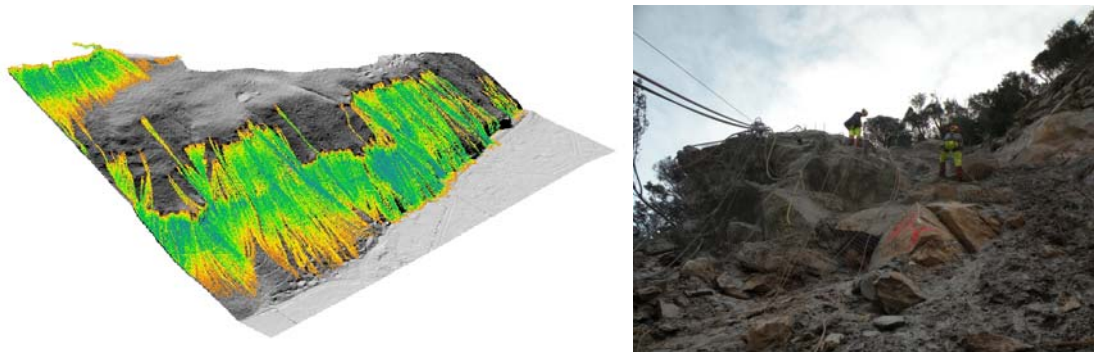


Figure 1. Energy distribution 3-D rockfall model – Tembi Valley rope access drilling works

The presentation further provides a short outlook on barrier performance and maintenance as well as the latest developments in flexible rockfall barriers.

ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ ΟΜΙΛΗΤΗ

Mr. Hannes Salzmann graduated from the University of Vienna in 1992 with a masters degree in Geotechnical Engineering and Mechanical Engineering. From 1992 through to 1999 he was employed with Poeyry Infra as a Project Manager for Infrastructure and Hydropower Projects on a worldwide basis. In 1999 he joined Geobrug Protection Systems as a Regional Manager for the Asia Pacific and Southeast Europe Region. Since then he has been working extensively on rockfall protection, slope stabilisation and debris flow mitigation works throughout the region. His main interests lie in rockfall protection, slope stabilisation, debris flows and the associated simulation modelling and mitigation structure design, as well as in risk assessment associated with these hazards. Hannes has worked all over the world and gained extensive geotechnical experience in the fields of mining, infrastructure, hydropower and residential development projects over the past 20 years.

He is a member of the Austrian Society of Professional Engineers.