## ΔΙΑΛΕΞΗ

την Τρίτη, 13 Ιουνίου 2017, ώρα 16:00

στην

Αίθουσα Εκδηλώσεων της Σχολής Πολιτικών Μηχανικών ΕΜΠ στην Πολυτεχνειούπολη Ζωγράφου

# «Practical rock slope design and risk management during excavation»

από τον

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#### Σύντομη Περίληψη Διάλεξης

Rock slope design, is often based on limited factual data obtained from drilling and surface exposure mapping. Large extrapolations and interpretations of the available data are made to derive the geological, hydrogeological and geotechnical models. Slopes are then designed using numerical techniques using industry-accepted design criteria. In order to make slope designs economically feasible or more profitable (in the case of mining), slope angles are usually steepened as much as. Model uncertainty coupled with low factors of safety slope designs inherit risk in terms of unpredicted and uncontrolled collapse that could impact people or make the project economically unfeasible. Slope monitoring strategies and observational design approaches can be used to minimize the risk during excavation. This presentation discusses the practical aspects of rock slope design, slope monitoring strategies and risk management approaches used in current industry practice through several case studies.

### Σύντομο βιογραφικό κ. Neil Bar

Principal Geotechnical Engineer (Gecko Geotechnics Pty Ltd). Mr Neil Bar has over 12 years experience as Geotechnical Engineer on a diversity of mining, tunneling and civil engineering projects throughout Australia and overseas (Laos, Papua New Guinea, Rio Tinto Australia). He authored / co-authored over 80 geotechnical reports, developed 2 software packages and published 10 technical papers. He has developed in collaboration with N. Barton the Q-slope system for application of Q system in the design of slopes.



Αστοχία πρανών του ορυχείου χρυσού OkTedi στην Παπούα Νέα Γουινέα (Bar et al., 2016)