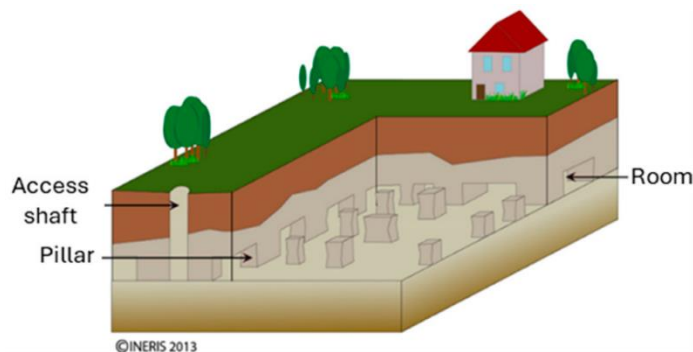




Εθνικό Μετσόβιο Πολυτεχνείο

Σχολή Μεταλλειολόγων – Μεταλλουργών Μηχανικών
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Causes and consequences of collapse of shallow underground mines



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Προσκεκλημένη Διάλεξη

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ΠΕΡΙΛΗΨΗ ΔΙΑΛΕΞΗΣ: France has developed extensive shallow underground mines over the years, mainly for construction purposes. Numerous collapses of these mines have already occurred, sometimes with serious human and material consequences. Data collection, numerical modelling, and expert analysis are used to better predict such events. The presentation highlights representative case studies of recent and historical major incidents in France that have had significant consequences, such as destroyed houses and injuries to people. The analysis of these case studies helps improve the risk assessment of ground movements related to shallow underground mines.

ΒΙΟΓΡΑΦΙΚΟ ΟΜΙΛΗΤΗ:

Marwan Al Heib obtained his Master's degree in Civil Engineering in 1983 from Aleppo University, Syria. He holds an MSc (DEA, 1989) and a PhD (1992) in Rock Mechanics and Numerical Modelling from Nancy University-School of Mines (France), and a Habilitation degree (2009) (the highest academic qualification after a PhD in European countries) in Modelling in Rock Mechanics Applied to Mining from the Polytechnic National Institute of Lorraine. He is a Professor at the Nancy University-School of Mines and he works at the INERIS (Institut National de l'Environnement Industriel et des Risques - France), as a project leader and programme coordinator in rock mechanics, geotechnique, soil-structure interaction, physical and numerical modelling. Throughout his career, Dr. Al Heib has investigated scientific problems related to underground cavities. He is an expert from the European Community for mines and underground excavation, geotechnics, numerical modelling and mine design (TGC1). He has published more than 200 scientific papers.