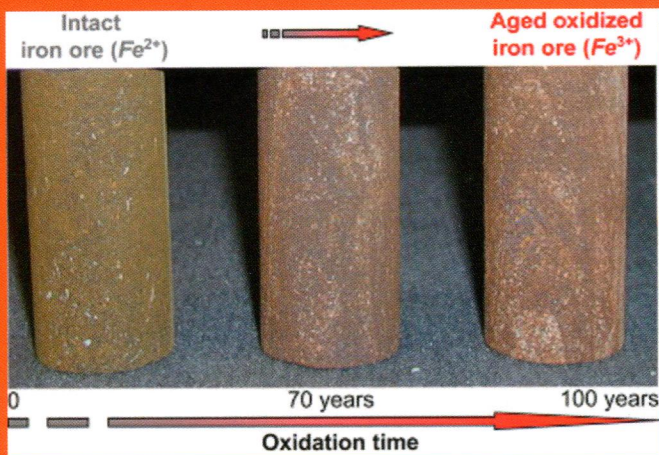


New developments and case studies in rock mechanics
and rock engineering

International Journal of Rock Mechanics and Mining Sciences

Editor-in-Chief: **R. W. Zimmerman**, *Imperial College, London, UK*



- fundamental rock behaviour
- *in situ* stress
- site investigation
- rock cutting and drilling
- underground excavations
- rock reinforcement and support
- dam engineering
- geothermal energy
- petroleum engineering
- radioactive waste disposal

CONTENTS

Articles

- | | | |
|---|-----|---|
| M.H.B. Nasser, S.D. Goodfellow,
L. Lombos and R.P. Young | 1 | 3-D transport and acoustic properties of Fontainebleau sandstone during true-triaxial deformation experiments |
| H. Elci and N. Turk | 26 | Rock mass block quality designation for marble production |
| F. Johansson and H. Stille | 31 | A conceptual model for the peak shear strength of fresh and unweathered rock joints |
| Y. Li, W. Liu, C. Yang and J.J.K. Daemen | 39 | Experimental investigation of mechanical behavior of bedded rock salt containing inclined interlayer |
| J. Liu, L. Chen, C. Wang, K. Man, L. Wang,
J. Wang and R. Su | 50 | Characterizing the mechanical tensile behavior of Beishan granite with different experimental methods |
| H.Q. Yang, Y.Y. Zeng, Y.F. Lan and X.P. Zhou | 59 | Analysis of the excavation damaged zone around a tunnel accounting for geostress and unloading |
| C. Occhiena, M. Pirulli and C. Scavia | 67 | A microseismic-based procedure for the detection of rock slope instabilities |
| S.J.T. Hangx, A.M.H. Pluymakers,
A. Ten Hove and C.J. Spiers | 80 | The effects of lateral variations in rock composition and texture on anhydrite caprock integrity of CO ₂ storage systems |
| J. Arzúa, L.R. Alejano and G. Walton | 93 | Strength and dilation of jointed granite specimens in servo-controlled triaxial tests |
| X. Ding and L. Zhang | 111 | A new contact model to improve the simulated ratio of unconfined compressive strength to tensile strength in bonded particle models |
| H. Sone and M.D. Zoback | 120 | Time-dependent deformation of shale gas reservoir rocks and its long-term effect on the in situ state of stress |
| <i>Technical Notes</i> | | |
| R. Lapčević, S. Kostić, R. Pantović, and
N. Vasović | 19 | Prediction of blast-induced ground motion in a copper mine |
| Å. Fransson | 105 | The use of basic models to explain in situ hydraulic and hydromechanical tests in fractured rock |

IJRMMS now has a dedicated WWW page: <http://www.elsevier.com/locate/ijrmms>

Int. J. Rock Mech. Min. Sci. is Indexed/Abstracted in: Appl. Mech. Rev., Cam. Sci. Abstr., Curr. Cont./Eng. Tech. & Appl. Sci., Eng. Ind., Curr. Cont. Sci. Cit. Ind., Curr. Cont. SCISEARCH Data, Geo. Abstr., Geo. Bib. & Ind., INSPEC Data., Int. Civil Eng. Abstr., Mater. Sci. Cit. Ind., PASCAL-CNRS Data., Res. Alert. Also covered in the abstract and citation database SCOPUS®. Full text available in ScienceDirect®.



1365-1609(201407)69:C;1-0

ISSN 1365-1609