

Diesman, N., D. Mas Ivars, C. Darcel and R. J. Chalaturnyk. “Empirical and Numerical Approaches for Geomechanical Characterization of Coal Seam Reservoirs,” *Int. J. Coal Geol.*, **82**(3-4), 204-212, doi:10.1016/j.coal.2009.11.003 (2010).

Mas Ivars, D. ***Bonded Particle Model for Jointed Rock Mass***. Doctoral Thesis, Royal Institute of Technology, Dept of Land and Water Resources Engineering, KTH-Engineering Geology and Geophysics Research Group, 2010.

Tawadrous, A., D. DeGagné, M. Pierce and D. Mas Ivars. “Prediction of Uniaxial Compression PFC3D Model Micro-Properties using Artificial Neural Networks,” *Int. J. Numer. Anal. Methods Geomech.*, **33**(18), 1953-1962, doi:10.1002/nag.809 (2010).

Bäckström, A., M. Jonsson, R. Chistiansson and D. Mas-Ivars. “Analysis of Factors That Affect and Controls the Excavation Disturbance/Deformation Zone in Crystalline Rock,” in ***Rock Characterisation, Modelling and Engineering Design Methods (Proceedings, SINOROCK 2009, The University of Hong Kong, May 2009)***. Sponsored by International Society for Rock Mechanics, Chinese Academy of Sciences, Chinese Society for Rock Mechanics & Engineering, The University of Hong Kong, 2009.

Deisman, N., R. J. Chalaturnyk and D. Mas Ivars. “An Adaptive Continuum/Discontinuum Coupled Reservoir Geomechanics Simulation Approach for Fractured Reservoirs,” ***2009 SPE Reservoir Simulation Symposium (The Woodlands, Texas, February 2009)***, Paper No. SPE 119254.

Cundall, P. A., M. E. Pierce and D. Mas Ivars. (2008) “Quantifying the Size Effect of Rock Mass Strength,” in ***SHIRMS 2008 (Proceedings, 1st Southern Hemisphere International Rock Mechanics Symposium, Perth, Western Australia, September 2008)***, Vol. 2, pp. 3-15. Y. Potvin et al., Eds. Nedlands, Western Australia: Australian Centre for Geomechanics.

Pierce, M., D. Mas Ivars and B. Sainsbury. “Use of Synthetic Rock Masses (SRM) to Investigate Jointed Rock Mass Strength and Deformation Behavior,” in ***CD Proceedings, International Conference on Rock Joints and Jointed Rock Masses (Tucson, January 2009)***, Paper 1091. P. H. S. W. Kulatilake, Ed. Tucson: Kulatilake & Associates, 2009.

Deisman, N., R. J. Chalaturnyk, D. Mas Ivars and C. Darcel. “Geomechanical Characterization of Coal seam Reservoirs: The SRM Approach,” in ***Proceedings, Asia Pacific CBM Conference (Brisbane, September 2008)***, Paper No. 003.

Deisman, N., D. Mas Ivars and M. Pierce. “PFC2D Smooth Joint Contact Model Numerical Experiments,” in ***GeoEdmonton '08: A Heritage of Innovation (61st Canadian Geotechnical Conference, Edmonton, September 2008)***, Paper No. 83.

Mas Ivars, D., M. Pierce, D. DeGagné and C. Darcel. “Anisotropy and Scale Dependency in Jointed Rock-Mass Strength — A Synthetic Rock Mass Study,” in ***Continuum and Distinct Element Numerical Modeling in Geo-Engineering (Proceedings, 1st International FLAC/DEM Symposium, Minneapolis, August 2008)***, Paper No. 06-01. R. Hart et al., Eds. Minneapolis: Itasca Consulting Group, Inc., 2008.

Mas Ivars, D., D. O. Potyondy, M. Pierce and P. A. Cundall. “The Smooth-Joint Contact Model (Abstract),” in *Proceedings, WCCM8 - ECCOMAS 2008 (8th World Congress on Computation Mechanics/5th European Congress on Computational Methods in Applied Sciences & Engineering, Venice, Italy, June-July 2008)*. Paper No. a2735. B. A. Schrefler and U. Perego, Eds. Barcelona: International Center for Numerical Methods in Engineering (CIMME), 2008.

Sainsbury, B., M. E. Pierce and D. Mas Ivars. “Analysis of Caving Behaviour Using a Synthetic Rock Mass — Ubiquitous Joint Rock Mass Modelling Technique,” in *SHIRMS 2008 (Proceedings, 1st Southern Hemisphere International Rock Mechanics Symposium, Perth, Western Australia, September 2008)*, Vol. 1, pp. 343-252. Y. Potvin et al., Eds. Nedlands, Western Australia: Australian Centre for Geomechanics, 2008.

Sainsbury, B., M. Pierce and D. Mas Ivars. “Simulation of Rock Mass Strength Anisotropy and Scale Effects Using a Ubiquitous Joint Rock Mass (URJM) Model,” in *Continuum and Distinct Element Numerical Modeling in Geo-Engineering (Proceedings, 1st International FLAC/DEM Symposium, Minneapolis, August 2008)*, Paper No. 06-02. R. Hart et al., Eds. Minneapolis: Itasca Consulting Group, Inc., 2008.

Mas Ivars, D., M. Pierce, D. O. Potyondy and P. A. Cundall. “A New Modelling Approach for the Study of Deformation, Yield and Failure of Jointed Rock Masses,” in *Bergmekanikdag 2007 (Swedish Rock Mechanics Day 2007)*, pp. 33-41. Stockholm: SveBeFo.

Pierce, M., P. Cundall, D. Potyondy and D. Mas Ivars. “A Synthetic Rock Mass Model for Jointed Rock,” in *Rock Mechanics: Meeting Society's Challenges and Demands (1st Canada-U.S. Rock Mechanics Symposium, Vancouver, May 2007)*, Vol. 1: *Fundamentals, New Technologies & New Ideas*, pp. 341-349, E. Eberhardt et al., Ed. London: Taylor & Francis Group, 2007.

Mas Ivars, D., N. Deisman, M. Pierce and C. Fairhurst. “The Synthetic Rock Mass Approach — A Step Forward in the Characterization of Jointed Rock Masses,” in *The Second Half Century of Rock Mechanics (11th Congress of the International Society for Rock Mechanics, Lisbon, July 2007)*, Vol. 1, pp. 485-490, L. Ribeiro e Sousa, C. Olalla, and N. Grossmann, Eds. London: Taylor & Francis Group, 2007.

Mas Ivars, D. “Water Inflow into Excavations in Fractured Rock — A Three-Dimensional Hydro-Mechanical Numerical Study,” *Int. J. Rock Mech. Min. Sci.*, **43**, 705-725 (2006).

Chan, T., R. Christiansson, G. S. Boulton, L. O. Ericsson, J. Hartikainen, M. R. Jensen, D. Mas Ivars, F. W. Stanchell, P. Vistrand and T. Wallroth. “DECOVALEX III BMT3/BENCHPAR WP4: The Thermo-Hydro-Mechanical Responses to a Glacial Cycle and Their Potential Implications for Deep Geological Disposal of Nuclear Fuel Waste in a Fractured Crystalline Rock Mass,” *Int. J. Rock Mech. Min. Sci.*, **42**(5-6), 805-827 (2005).

Mas Ivars, D. “Inflow into Excavations — A Coupled Hydro-Mechanical Three-dimensional Study,” in *Bergmekanikdag 2005*. Stockholm: SveBeFo, 2005.

Mas Ivars, D. *Inflow into Excavations — A Coupled Hydro-Mechanical Three-Dimensional Numerical Study*, Licentiate Thesis, KTH, Stockholm, Sweden, 2004.

Mas Ivars, D. “Influence of Non-linear Fracture Behavior on the Prediction of Inflow into Excavations — A Coupled Hydro-Mechanical Analysis Using 3DEC,” in *Contribution of Rock Mechanics to the New Century, (Proceedings of the ISRM International Symposium 3rd ARMS, Japan, 2004)*, pp. 1277-1282, Ohnishi and Aoki, Eds., Rotterdam: Millpress, 2004.

Mas Ivars, D., E. Hakami and O. Stephansson. “Influence of Rock Mass Characteristics on Inflow into Deposition Holes for Nuclear Waste Disposal — A Coupled Hydro-Mechanical Analysis Using 3DEC,” in *Numerical Modeling of Discrete Materials in Geotechnical Engineering, Civil Engineering & Earth Sciences (Proceedings of the 1st International UDEC/3DEC Symposium, Bochum, Germany, September 2004)*, pp. 95-103, H. Konietzky, Ed. Leiden: Balkema, 2004.

Ivars, D. M., L. Min and J. Ling. “Homogenization of Mechanical Properties of Fractured Rocks by DEM Modeling,” in *Frontiers of Rock Mechanics and Sustainable Development in the 21st Century — Proceedings of the 2nd Asian Rock Mechanics Symposium (Beijing, September 2001)*, pp. 311-314. S. Wang et al., Eds. Rotterdam: Balkema, 2001.

Mas Ivars, D. *Homogenization of H-M (Hydro-Mechanical) Properties of Fractured Rocks by DEM Modeling for BMT2-DECOVALEX-III Project*, M.S. Thesis, KTH, Stockholm, Sweden, 2001.

Min, K.-B., D. M. Ivars and L. Jing. “Numerical Derivation of the Equivalent Hydro-Mechanical Properties of Fractured Rock Masses using Distinct Element Method,” in *Rock Mechanics in the National Interest (Proceedings of the 38th U.S. Rock Mechanics Symposium, Washington D.C., July 2001)*, Vol. 2, pp. 1469-1476. D. Elsworth et al., Eds. Rotterdam: Balkema, 2001.