

Andrieux, P., A. Turichshev, L. Cotesta, J. Fedorowich and R. Brummer. “Explicit Three-Dimensional Analysis of Structurally-Controlled Unraveling in Large Excavations,” in *Continuum and Distinct Element Modeling in Geomechanics — 2011 (Proceedings, 2nd International FLAC/DEM Symposium, Melbourne, February 2011)*, Paper 06-04, pp. 341-348. D. Sainsbury et al., Eds. Minneapolis: Itasca International Inc., 2011.

Andrieux, P. P., M. R. Hudyma, C. P. O’Connor, H. Li, L. Cotesta and R. K. Brummer. “Calibration of Large-Scale Three-Dimensional Non-Linear Numerical Models of Underground Mines Using Microseismic Data,” in *Continuum and Distinct Element Numerical Modeling in Geo-Engineering (Proceedings, 1st International FLAC/DEM Symposium, Minneapolis, August 2008)*, Paper No. 07-04. R. Hart et al., Eds. Minneapolis: Itasca Consulting Group, Inc., 2008

Cotesta, L., P. K. Kaiser, M. Cai and A. Vorauer. “Application of Scientific Visualization — Stress Control on Permeability Anisotropy in Moderately Fractured Rock,” in *Rock Mechanics: Meeting Society’s Challenges and Demands (1st Canada-U.S. Rock Mechanics Symposium, Vancouver, May 2007)*, Vol. 2: *Case Histories*, pp. 1203-1212. E. Eberhardt et al., Eds. London: Taylor & Francis Group, 2007.

Vorauer, A., and L. Cotesta. “Scientific Visualization for Enhanced Interpretation and Communication of Geoscientific Information,” in *Proceedings of the Canadian Nuclear Society, Waste Management, Decommissioning and Environmental Restoration for Canada’s Nuclear Activities: Current Practices and Future Needs (Ottawa, 2005)*.

Henning J. G., L. Cotesta and P. K. Kaiser. “Geomechanics Design of Underground Excavations Utilizing Virtual Reality,” in *Proceedings of the Fourth International Conference on Computer Applications in the Minerals Industries (CAMI), Calgary, September 2003*.

Kaiser, P. K., J. Henning, L. Cotesta and A. Dasys. “Innovation in Mine Planning and Design Utilizing Collaborative Immersive Virtual Reality (CIVR),” in *Proceedings of the 104th CIM-AGM, Vancouver, 2002*.

Cotesta, L., S. Maloney, P. K. Kaiser and P. Vasak. “Development of a Ground Penetrating Radar for Fracture Detection,” in *Proceedings of the 103rd CIM-AGM, Quebec City, 2001*.

Cotesta L., P. Vasak, S. Maloney, P. K. Kaiser, H.-M. Braun and C. Ralle. “Radar Assessment of Rock Mass Integrity,” in *Proceedings of the Mine Operators Conference, Sudbury, 2001*.

Cotesta, L., W. Lidkea and D. Martin. “Quality Control in Drift Development,” in *Proceedings of the 101st CIM-AGM, Calgary, 1999*.

Abstracts, Special Sessions & Presentations

Cotesta, L. Scientific Visualization for Interpretation and Communication of Sub-Regional Flow in the Canadian Shield. Ontario Power Generation's 3rd Annual Deep Geologic Repository Technology Program (DGRTP) Geoscience Seminar, 2005.

Cotesta, L., P. Vasak, J. Ayer and R. Calhoun. From Paper to Prospectivity: Overview and Results of the Discover Abitibi 3-D Mineral Deposit Modeling Project. 107th CIM-AGM, Toronto, 2005

Cotesta, L. Effect of Stress on Permeability Anisotropy in Moderately Fractured Rock. Ontario Power Generation's 2nd Annual Deep Geologic Repository Technology Program (DGRTP) Geoscience Seminar, 2004.

Cotesta, L., P. Vasak, P. Thurston and J. Ayer. From Paper to Prospectivity: Challenges in Data Integration, 3D Geological Modeling and Dissemination of Historical Mineral Deposits. Ontario Exploration and Geoscience Symposium, Toronto, 2004.

Cotesta, L. Application of Virtual Reality Technology for Site Characterization: Moderately Fractured Rock Experiment Pilot Project. Ontario Power Generation's 1st Annual Deep Geologic Repository Technology Program (DGRTP) Geoscience Seminar, 2003.

Cotesta, L. Demonstration of Ground Penetrating Radar Technology for Engineering Blast-Off Show. TVO Kids Crawlspace episode of "Engineers are Everyday Heroes". Demonstration at INCO Cavern (Science North) to 250 kids for National Engineering Week, 2001.

Public Virtual Reality Demonstrations

OEGS 2004

- ◆ Millstream Mines Ltd.
 - 3D geological model of historical Potter Mine

PDAC 2004

- ◆ Goldcorp
 - 3D geological model of Goldcorp's world class Red Lake Mine gold deposit
- ◆ Placer Dome
 - 3D geological model of Placer Dome's Campbell Mine gold deposit

PDAC 2003

- ◆ Goldcorp
 - 3D geological model of Goldcorp's world class Red Lake Mine gold deposit
- ◆ Placer Dome
 - 3D geological model of Musselwhite deposit

CIM Vancouver 2001

- ◆ Goldcorp
 - 3D geological model of Goldcorp's world class Red Lake Mine gold deposit
- ◆ Falconbridge
 - 3D geological model of Kidd Creek deposit as well as a demonstration of advanced targeting process
 - Displayed initial 3D model of Nickel Rim project