

Mining Engineering, Seismicity in Mines, Rock Mechanics in Mines

Expertise Seismicity and Rockbursting in Mines, Mine Design, Stope Design, Ground Support

Education Ph.D. (Civil and Resource Engineering), in progress
University of Western Australia
M.A.Sc. (Mining Engineering), 1988
University of British Columbia
B.A.Sc. (Mining Engineering), 1986
University of British Columbia

Professional Experience

2008 – Present *Itasca Associate*
2006 - 2008 *Itasca Consulting Canada, Inc., Sudbury, Ontario
Senior Geomechanics Engineer*
1999 - 2006 *Australian Centre for Geomechanics, Perth Australia
Project Leader – Rockbursting and Seismicity in Mines*
1995 - 1999 *Mount Isa Mines, Mount Isa Australia
Senior Rock Mechanics Engineer*
1992 – 1995 *Noranda Inc, Brunswick Mining, Bathurst, N.B., Canada
Ground Control Engineer*
1988- 1992 *Noranda Inc., Noranda Technology Centre, Montreal, Canada
Geomechanics Engineer, Project Leader – Mine Seismicity*

Project Experience

Seismicity and Rockbursting in Mines: Design and use of seismic monitoring in underground, open-pit, and caving mines. Seismic hazard assessment and proactive application of seismic monitoring data. Rockburst investigations. Applied seismology for rock mechanics in mines. Rock mechanics training on seismicity and rockbursting in mines. *In situ* dynamic ground support trials. Regional seismic monitoring.

Mining Engineering: Sequencing and mine design in high stress/rockbursting conditions. Stope design and open-stope stability. Pillar design and assessment. Rock mechanics infrastructure (shaft, orepasses, crusher,) design. Shaft sinking. Shaft assessment. Experience with a wide range of mining methods, from small-scale cut-and-fill to large-scale open stoping and bulk mining.

Geomechanical Engineering: Rock mass classification. Ground support for squeezing and rockbursting conditions. Design, installation and interpretation of rock-mass monitoring instrumentation. Ground support design, quality control, auditing.