

Principal Geomechanics Engineer

Expertise Mining Engineering, Numerical Modeling, Cave Mining

Education M.Sc. (Mining), 2012

B.Sc. (Mining Engineering), 2010 Universidad de Chile, Santiago, Chile

Honors "Juan Bruggen" Best Graduate of Class 2010 Mining Engineering,

University of Chile. Awarded by the Mining Engineering Institute of Chile

(IIMCh)

Professional Affiliations Member: American Rock Mechanics Association (ARMA)

Professional Experience

Itasca Consulting Group, Inc., Minneapolis, Minnesota

2023 – PresentPrincipal Geomechanics Engineer2019 – 2023Senior Geomechanics Engineer2013 – 2019Mining and Geomechanics Engineer

2012 – 2013 Advanced Mining Technology Center (AMTC), Universidad de Chile

Research Assistant

2011 BCTec, Santiago, Chile

Project Engineer

Project Experience

Underground Mining: Ten years of experience in the geomechanical analysis of underground mines (longwall, stoping, cut and fill and room and pillar methods) applying numerical modeling to sequencing, stability, ground support and mining-induced seismicity. Clients include Tronox and Nyrstar Mines (United States); Red Lake, Raglan and Trevali (Canada).

Cave Mining: Ten years of experience in sublevel, block and panel caving mines from concept to feasibility level. Specialized in undercut and extraction level design, draw scheduling, forecasting of caveability, fragmentation, recovery, infrastructure stability and surface subsidence. Caving consulting clients include New Afton, Kemess, Stornoway and Ekati (Canada); Kiruna (Sweden); Ghaghoo and Karowe (Botswana); Northparkes and Cadia Valley Operations (Australia); Henderson and Dome (United States); Narkuzgan (Kazakhstan); El Teniente, Chuquicamata and Escondida (Chile); and GBC and DMLZ (Indonesia).

Rock Mass Characterization: Performed core logging and site tests to assess the rock mass characterization of various rock types. Clients include Henderson and MnDOT (United States).