

## **Senior Consultant in Geomechanics**

Expertise Geotechnical Engineering and Numerical Modeling

**Education** Master in Engineering Sciences, Mention Structural, Seismic and Geotechnical

Engineering, 2021

Universidad de Chile. Santiago, Chile

Postgraduate studies in Geological Engineering applied to Civil Works, 2015

Universidad de Chile, Santiago, Chile

Civil Engineering, 2011

Universidad Católica de la Santísima Concepción, Concepción, Chile

**Honors** DAAD Scholarship Award (German Academic Exchange Service) 2009- 2010.

RWTH Aachen University, Germany.

**Professional Affiliations** Member: Chilean Geotechnical Society (SOCHIGE)

**Professional Experience** 

2022 – Present Itasca Chile SpA, Santiago, Chile

Senior Consultant

2018 – 2021 Itasca Chile SpA, Santiago, Chile

Geomechanic Engineer, Project Manager

2011 – 2017 Itasca Chile SpA, Santiago, Chile

Project Engineer

## **Project Experience**

Soil Mechanics Applied to Civil Engineering: Numerical modeling projects related to two and three dimensional analysis of tailings dams and dumps. Numerical study of liquefaction analysis of tailings dam. Dynamic stability analysis using advanced constitutive models in soil based on the critical state of the soil for tailings dams and waste dumps in highly active seismic area. Numerical modelling and analysis of dumps over material subjected to creep movements and calibration of time-dependent properties. Interpretation of laboratory tests for soil characterization and determination of strength parameters for the calibration of numerical models. Technical review and analysis of instrumentation data in tailings dams.

Rock Mechanics Applied to Surface Mining: Slope stability analysis of open pits using continuum and discontinuum numerical methods in two and three dimensions and recommendation inter-ramp angles. Experience with the modeling of structural elements and dynamic analysis of slopes under effects of earthquakes.

01/09/2023