## Hydrogeology Specialist

Expertise	Hydrogeology, conceptual and numerical hydrogeological modeling applied to the design of depressurization systems, drainage and phreatic monitoring, behavior of fluids in porous media.
Education	Master's in Engineering Sciences, Mention in Resources and Water Environment, in progress University of Chile, Santiago, Chile
	Degree in Civil Engineering, Mention in Hydraulic, Sanitary and Environmental, 2022 Universidad de Chile, Santiago, Chile
	Satellite Image Analysis Course, 2021 SRGIS, Santiago, Chile
	Surface and Underground Integrated Modeling Course using WEAP- MODFLOW, 2020 Center for Advanced Studies in Arid Zones (CEAZA), Santiago, Chile
Professional Experience	
Jan 2023 – Present	Itasca Chile S.p.A., Chile Hydrogeology Specialist
2021 – 2022	Ecohyd, Chile Project Engineer
Academic Experience	
Nov 2022	University of Chile Trainer, Course on Integrated Management of Water Resources and Management of Socionatural Risks and Disasters, given to members of the Ministry of Public Works (MOP)
2020 - 2022	University of Chile Assistant of the Environmental Systems Analysis course
Nov 2020	Advanced Mining Technology Center (AMTC) Trainer in the use of integrated models WEAP and MODFLOW

## **Project Experience**

*Basin Hydrogeology:* Prepared methodological guides for the Dirección General de Aguas (DGA) on fundamental aspects of the underground environment aimed at groundwater users and communities with a focus on promoting aquifer knowledge and management (2020). Contributed to integrated modeling projects within the Strategic Water Management Plans (DGA, 2019) for the Casablanca, Río Toltén, Río Bueno, Ligua and Petorca basins.

*Mining Hydrogeology:* Collaborated in updating the numerical model of the lateral section of Laguna Seca (up to Peralte VIII) using SEEP/W of the Geoestudio software. Prepared quarterly report to update the status of the depressurization and drainage networks in Escondida and Escondida Norte.

## ITASCA Chile

*3D and 2D hydrogeological numerical modeling:* Built, calibrated and automated the post-processing of hydrogeological numerical models using programming languages (Python and R). This includes, among other activities, sensitivity analysis, generation of figures and graphs, calculation of statistics, etc. Primarily worked with the VisualModflow and ModelMuse software to model the underground environment.