







BRIDGE

German-Chilean Institute for Element Extraction from Brines and Integrated Geological Reservoir Modeling

Fabian Nitschke, Valentin Goldberg, Ali Dashti, Laura Spitzmüller, Fabian Jeschull, André Stechern, Thomas Kohl

BRIDGE addresses the urgent need to establish strategic partnerships to secure the supply of Critical Raw Materials (CRMs), as emphasized in the European Critical Raw Materials Act. The project aims to strengthen the German-Chilean cooperation in CRM extraction from brines through the establishment of a virtual research institute.

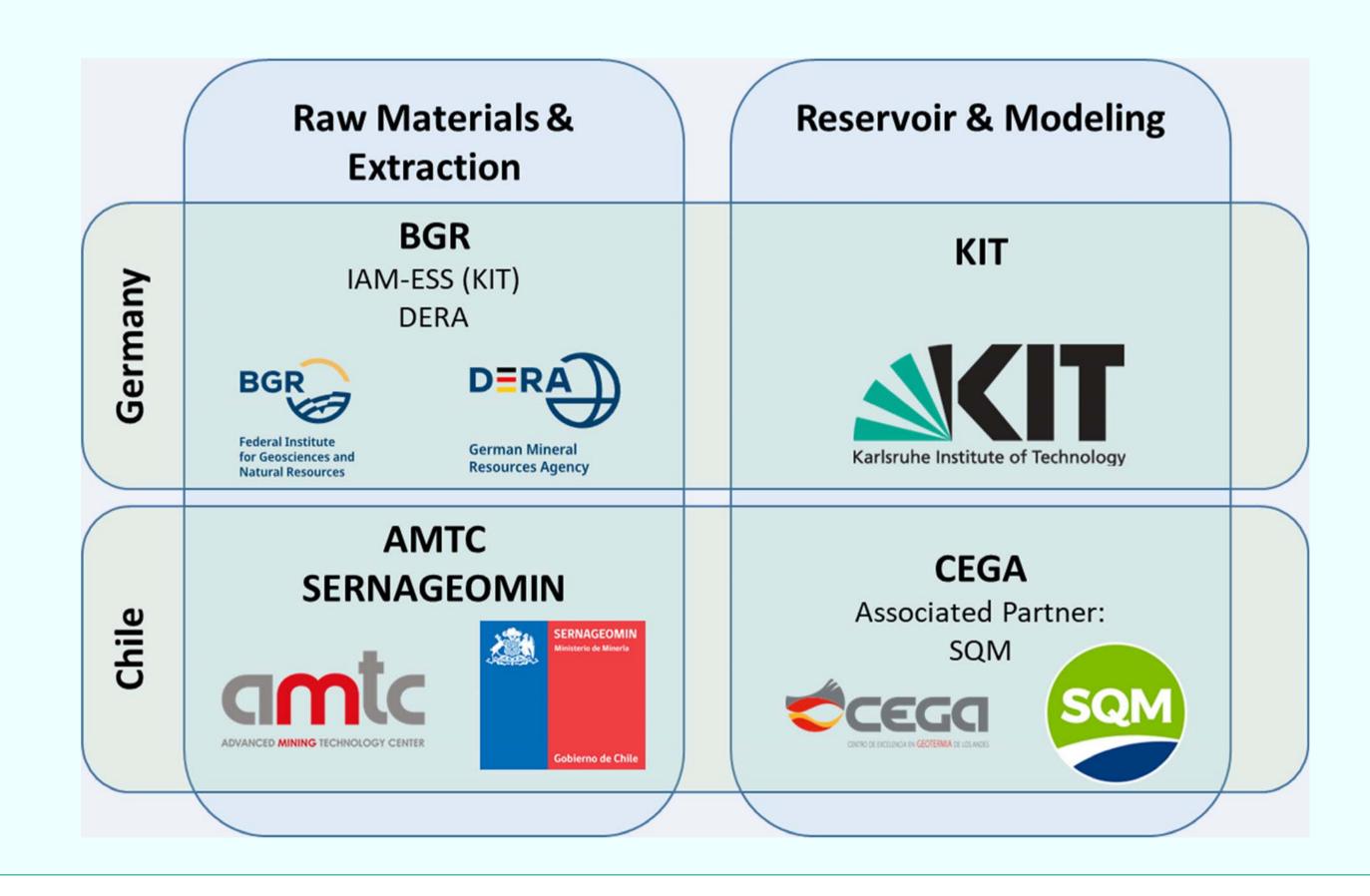
In Chile, exploration focuses on 26 salars recently opened for commercial development. In Germany, geothermal, oil and gas reservoirs with high concentrations of dissolved CRMs are being investigated. In both contexts, potentials are assessed, sustainable reservoir management strategies are developed and advanced Direct Element Extraction (DEE) technologies are evaluated and compared to identify synergistic opportunities.





Project Partners and Organization

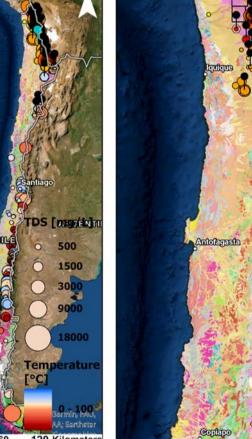
- Leading technical universities, geological services and governmental advisory bodies of both countries.
- Strong expertise in geological exploration, subsurface modeling, extraction technologies and CRM market and resource assessment across the full value chain.

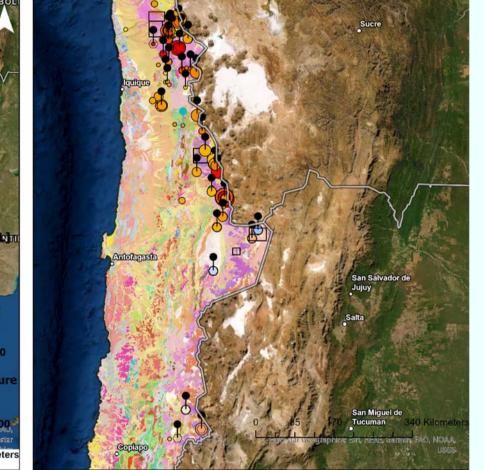


BRIDGE Research Tasks

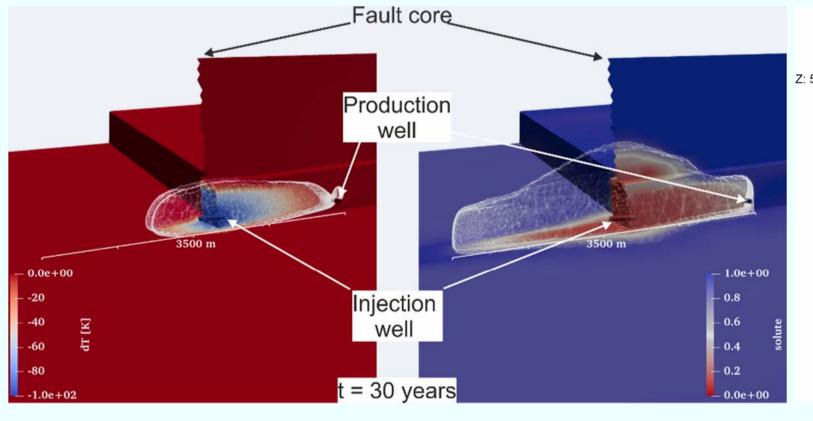
Raw Materials & Extraction

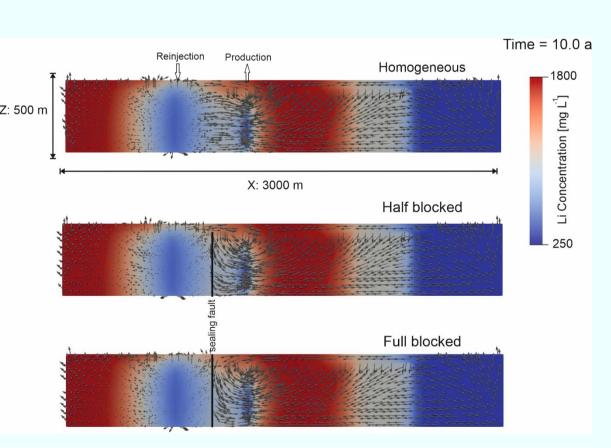






Reservoir Management & Modeling







First Symposium on Direct Lithium

Extraction in Karlsruhe (Oct. 2024).

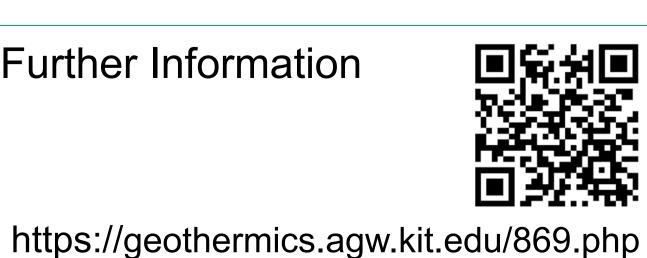




Santiago de Chile



Further Information



Get in Touch!

in Berlin (28th May 2025).



fabian.nitschke@kit.edu





