

Alternatives in Sealing Off Porous Rock Formations by Directed and Controlled Crystallization of Slightly Soluble Minerals

by

**Gerald Ziegenbalg
TU Bergakademie Freiberg
Freiberg University of Mining and Technology
Institute of Technical Chemistry**

Summary

On the basis of solid-liquid phase equilibria, a new method is proposed to seal off fractured and porous rock formations, as well as brine inflows. The following concept provides for the directed and controlled crystallization of slightly soluble minerals in the flow routes. Solutions supersaturated with respect to minerals which are present in the rock are normally used. Results of laboratory investigations are provided along with pilot testing results.

©2023 – Solution Mining Institute
Full Paper is Available in the SMRI Library(www.solutionmining.org)