

# Computer Leaching Model in Monitoring Cavern Development

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## Abstract

Computer modelling is used as a routine tool to design leaching technology for new caverns. It still must prove to be useful in monitoring caverns during their leaching.

Problems connected with this kind of application are discussed, especially model adjustment to production data (history match) and to sonar measurement. History match simulations can supply the user with unknown model coefficients, and prepare the model for further steps, such as control of current leaching and prediction of future cavern development.

Current leaching control using computer model gives us knowledge (as much adequate as possible) about the process going in the cavern, but its main goal is to provide the opportunity to make quick decision on how to optimise leaching technology during every stage of leaching.

For this purpose one should have a good, true model of the cavern in the computer and using this model make short-time and medium-time predictions of further cavern development finally choosing the best variant. Application of computer leaching model to current control of cavern during leaching leads to several specific demands which should be fulfilled by modelling software (algorithm and user interface) to create an easy tool for monitoring cavern development.

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