



## GROUNDWATER MODELLING AT MINE SITES

### Introduction to using FEFLOW in mining

This three-day, hands-on course provides you with the skills you need for applying FEFLOW for groundwater simulation at mine sites. It will cover typical modelling tasks such as mine dewatering (open-cut and underground mines), groundwater rebound, reactive transport (acid mine drainage), etc. The course uses specially developed hands-on exercises supported by lectures on theory and relevant practical aspects.

FEFLOW is widely recognised as a comprehensive software package for subsurface flow and transport simulation. FEFLOW's unique mesh (structured and unstructured) provides the highest degree of flexibility in all modelling processes. The software is used by leading research institutes, universities, consulting firms and government organisations all over the world.

FEFLOW's scope of application ranges from simple local-scale to complex large-scale modelling. Application areas include water management, mine water, saltwater intrusion, geothermal energy, and variably saturated media.

#### COURSE TOPICS

- Introduction to FEFLOW and its graphical user interface
- Estimation of dewatering volumes (open pit and underground mine)
- Simulation of pit progress and discussion in multiple approaches
- Obtaining pore pressure as a basis for slope-stability calculation
- Simulation of pumping wells, drains and other installations
- Modelling groundwater rebound
- Phreatic surfaces and variably-saturated media
- Faults, fractured systems and anisotropic porous media
- Introduction to reactive transport with piChem module (acid mine drainage)
- Interfacing with geological modelling and surface-water simulation
- Hands-on exercises

#### TARGET GROUP AND PREREQUISITES

Mining professionals working on ground water simulation in consulting companies, public authorities, university and research institutions. Participants are expected to have both a basic knowledge about groundwater systems as well as computer application. Prior experience with groundwater modelling is helpful, but not required.

#### THE ACADEMY BY DHI

THE ACADEMY offers a palette of courses and capacity building packages designed to fit your needs and challenges. We offer standard and/or tailored training - face-2-face as well as online.

**MIKE Powered by DHI** courses focus on practical skills, hands-on exercises and teaching you how to get the most out of your software. These courses also enable you to understand the power of the MIKE tools for building decision support systems.

**Thematic courses** allow you to apply concepts, applications and decision support principles to the entire business process within current areas: aquaculture and agriculture, energy, climate change, flooding, coast and marine, surface and groundwater, urban water, industry, environment and ecosystems, product safety and environmental risk, etc.

**Our trainers** are experienced professionals, many of whom are recognised international experts in their fields. The use of highly skilled trainers guarantees the quality of THE ACADEMY courses.

#### LEARN MORE AND CONTACT US



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