## **Advanced Course in Rock Grouting**

## Developing the craftsmanship of rock grouting into the art of engineering

A final time schedule will be sent to all participants in August.

PART 1	PART 2		
Day 1	Day 2	Day 3	Day 4
Welcome & introduction to the course.	Recap and feed back on course task.	Hydraulic test practice (WLM and PBT).	Recap and compile results.
Problem to be solved; dams and underground openings with rock grouting.	Hydraulic tests, theory.	Evaluation of the hydraulic tests.	Design verification based on field observations.
Basic facts about groundwater flow in rock fractures.	Evaluate design parameters from hydraulic tests.	Design of grouting for Äspö boreholes.	Durability.
Basics facts about grout properties.	Refusal criteria based on theories of jacking and grout spread.	Grouting preparations.	Case histories.
Theories about grout spread.	Grout mixing practice.	Grout practice.	Summary and Course evaluation.
Basic about jacking.	Grout property evaluation.		Closure (approx. 16.00 h).
Course task hand out: Grout spread under			

given circumstances.

Closure (approx. 18.00 h).