



## **The Alta schist, North Norway: unique rock with unique history**

Tom Heldal, Kari Aasly, and Gurli Meyer

Geological Survey of Norway, Trondheim, Norway (tom.heldal@ngu.no)

Near the small town of Alta, northernmost Norway, are more than thousand small and large schist quarries, some of them dating back to the 1850's. It was the need for roofing material on a local church and a hospital that triggered the production. Since then, the Alta schist has been widely applied in Norway and abroad, known for its quality for roofing material and hard floor covering. The quality lies in the processes behind the formation of the schist. Emplacement of thrust nappes during the Caledonian mountain chain formation in the Silurian caused deformation and metamorphism of the rocks. The Alta schist is situated in one such nappe sheet, where arkosic sandstone where flattened and transformed into mylonite. This made fine mica layers along which the rock can be split, rythmically spaced and separated by quartz-dominated bands. The production of the Alta schist is still characterized by old craft traditions, reflecting a rich history and culture around the schist production.