

The project TRANSENERGY – Transboundary Geothermal Energy Resources of Slovenia, Austria, Hungary and Slovakia (it is implemented through the CENTRAL EUROPE programme and co-financed by the ERDF) deals with trans-boundary thermal water management from a geoscientific point of view. Four national geological surveys are partners in TRANSENERGY project: MÁFI (Geological Institute of Hungary), GeoZS (Geological Survey of Slovenia), GBA (Geological Survey of Austria) and ŠGÚDŠ (State Geological Institute of Dionyz Stur, Slovakia). The project started in April 2010 and it will deliver its services in September 2013.

The project TRANSENERGY will deliver multilingual tools supporting a sustainable trans-boundary thermal water management. These tools comprise a profound geoscientific evaluation of the thermal water resources of the project area in which particular attention is paid to the pilot areas (see also fig. 1). These tools are based on geological, hydrogeological and geothermal models. Moreover, the project will deliver an overview on the actual legal framework on the use of thermal waters in the participating countries and the EU level and it will deliver a strategy paper with recommendations for an improved sustainable thermal water management in the project area. After the end of TRANSENERGY in September 2013 all achieved results (multilingual maps, databases, reports etc.) will be provided to the public by the project website (<http://transenergy-eu.geologie.ac.at>) in terms of online services.

10 years of Terrestrial Laserscanning (TLS) at the very active rock glacier Hinteres Langtalkar, Schober Mountains, Austria

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Rock glaciers are the most prominent landforms in mountain permafrost environments. Active rock glaciers consist of perennially frozen debris supersaturated with ice and gravitationally creep downslope with rates ranging from a few centimetres to a few metres per year. Ongoing global warming affects rock glaciers behaviour as for instance warming of the permafrost body leading to thawing processes. Rock glaciers respond synchronously in velocity changes even at regional scale to changes in climate thereby mainly related to air and consequently ground temperature. The frontal part of this rock glacier Hinteres Langtalkar (N46°59', E12°47') is heavily influenced by disintegration through active sliding processes since about 1994. This process is even unusual for rock glaciers. Due to these specific geomorphic processes at the rock glacier front, it was decided in 2000 to initiate a terrestrial laserscanning (TLS) monitoring program. These measurements were carried out once or even twice per year since then (except 2002 and 2003) using the sensors RIEGL LPM-2k and RIEGL LMS-Z620. Therefore, this TLS data series is some of the longest for rock glaciers globally. Results show that the high movement especially in the lowest part stresses the internal structure of the rock glacier causing deformations on several shear horizons in the active layer or even in shallow depths of the permafrost body. The research activities at the rock glacier Hinteres Langtalkar are currently part of a monitoring network within the project "permAfrost – the Austrian permafrost research initiative".

Mineralogy and microstructure of "glaze residues" and/or "glaze raw materials" from Anabaptist pottery production centres in Moravia

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Production of tin-glazed earthenware in East-Central Europe was disseminated by Anabaptists (Hutterites). They started faience production in the late 16th century. The main production centres of Anabaptist faience existed in Moravia at that time; nowadays twelve centres are documented thanks to the archaeological research. Among