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# IMPORTANT GEOLOGICAL AND MONTANISTIC SITES OF SLOVAKIA

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COVER: Left-up: Lava flows of pyroxenic andesite with conspicuous columnar jointing in the area of the hill Štangarígel' (pen-andink drawing by Vlastimil Konečný).

Right-up: A ceremonial visit to the Glanzenberg Hereditary Adit.

Left-down: A qualitatively exceptional sample (10 x 6 cm) of the emerald-green euchroite from the L'ubietová – Svätodušná deposit. The size of the euchroite crystals is up to 2 cm. Finding of 2003 (Photo: T. Bancík).

Right-down: Memorial Plaque commemorating a visit of Francis I, Holy Roman Emperor, spouse of Maria Theresa, to the Glanzenberg Hereditary Adit on June 7, 1751.

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## **Preface**

#### Important Geological and Montanistic Sites of Slovakia

Since the restoration of the Slovak Geological Magazine issuing in 2013 there has been published wide spectrum of themes covering both basic and applied research in geology. However, the theme of geoheritage and geotourism has not been covered yet, despite the SGIDŠ workers have significantly contributed also to this booming sector of geological science. We could mention the publishing of important geological sites in the scope of the edition of regional geological maps. SGIDŠ has published several geological-tourist maps, for instance Cerová vrchovina Upland, Vysoké Tatry and Vihorlat Mts., Zemplín region. The specialists from our institute played a key role in establishment of Banská Štiavnica, Novohrad and Sapag geoparks. The SGIDŠ website presents to the society almost 500 important geosites of Slovakia, which were elaborated in collaboration with prominent geologists from Faculty of Natural Science CU University and then Geological Institute of the Slovak Academy of Science.

Nevertheless, despite the above activities, we have to admit, that due to the lack of the subject geology in the Slovak education system at elementary at elementary, but especially at high school since nineties of the previous century, we have experienced the down-warding trend in the geological knowledge level of the Slovak population. This is reflected also in declining number of students in geology and in degrading society perception of the environmental links among the compounds of the landscape – rocks, water, soil, atmosphere, and biota.

If we look back to history for a few centuries to millennia, we have always met geomorphosites, gems and the raw materials that have motivated the human population, and have significantly affected the course of human history. Just remember, for example, the routes of obsidian, amber, salt, copper, iron, silver, gold and the fortification networks built to protect them. This volume of SGM includes three contributions devoted to information system on geosites of Slovakia, exceptional minerals from our territory and Slovak mining road connecting historic mining towns.

Pavel Liščák & Dušan Kúšik

#### LIST OF ACRONYMS

a.s.l. above sea level

BABB Back-Arc Basin Basalt

BERG TU Faculty of Mining, Ecology, Process Control and Geotechnologies of Technical University

E-MORB Enriched Mid-Ocean Ridge Basalt

Fm. Formation

GPS Global Positioning System

HSCS Heritage Sites and Collections Subcommission

HFSE High-Field-Strength Elements
HSM High-Sulphidic Mineralisation

IAG International Association of GeomorphologistsICG International Commission on GeoheritageIUGS International Union of Geological Sciences

KI Kubler Index Mb. Member (Beds)

MIAG Magnesite Industrial Joint-Stock Company (Magnesit Industrie Aktien-Gessellschaft)

Mts. Mountains, Mountain Range
NAPANT National Park Nízke Tatry
NHM Natural History Museum
NL National Landmark

NNL National Nature Landmark

NOŠ New Drainage Gallery (Nová odvodňovacia štôlňa)

NP National Park

n.p. National Enterprise (národný podnik)

NNR National Nature Reserve

NR Nature Reserve

OIT Ocean-Island Tholeiite
PF Protected Finding
PIENAP Pieniny National Park
PKB Pieniny Klippen Belt
PLA Protected Landscape Area
P-T Pressure-Temperature
REE Rare Earth Elements

SGIDS State Geological Institute of Dionýz Štúr SHRIMP Sensitive High-Resolution Ion Microprobe

SIR Slovak Iron Road SMR Slovak Mining Road

SNR Slovak National Council (Slovenská národná rada)

SOP SR State Nature Conservancy of the Slovak Republic (Štátna *ochrana prírody SR*)

SSPA Small-Scale Protected Areas š.p. State Enterprise (*štátny podnik*)

TANAP Tatra(s) National Park

UNESCO United Nations Educational, Scientific and Cultural Organization

VHJ RBMZ Rudné bane Production Unit and Magnesite Plants

VSEGEI Geological Research Institute (Всероссийский научно-исследовательский геологический институт)