

In memory of **Zoltán Németh** (* 1962 – † 2025)

Zoltán Németh, our friend and colleague and long-standing scientific editor of *Mineralia Slovaca* tragically left us forever on May 4, 2025.



Zoltán was born in the family of a mining engineer. He received his engineering degree in the field of mining geology and geological prospecting at the Technical University in Košice, in 1986. During his studies, he chose structural geology as his main tool for understanding geological processes.

After completing his university studies, he worked in the company Geologický prieskum Spišská Nová Ves, š. p., and then in the company Geocomplex, a. s., Bratislava. In 1996 he joined the State Geological Institute of Dionýz Štúr (SGIDŠ) in the regional centre in Košice, where he worked until the end of his career.

He was engaged in regional-tectonic research and detailed field mapping. Initially, he worked mainly under the supervision of RNDr. P. Grecula, DrSc., in the Gemeric Unit, where Zoltán contributed significantly to the creation of the geological and tectonic map of the Spišsko-gemerské rudohorie Mts. at a scale of 1:25 000.

He participated in the preparation of 5 regional-geological maps at a scale of 1:50 000 and accompanying explanatory notes (Spišsko-gemerské rudohorie, Slovenský raj, Galmus and Hornádska kotlina Basin, Malé Karpaty Mts., Záhorská nížina Lowland and Strážovské vrchy Mts. – eastern part). He is also co-author of the General Geological Map of Slovak Republic at scale 1:200 000 (sheet Košice) and contributed to the compilation of

Geological and educational maps of the Zemplínske vrchy Mts. and the Medzev–Jasov region.

In 1996–1998 he was principal investigator of the UNESCO/IUGS project IGCP 276 – *Paleozoic in the Tethys*. At this time, he successfully completed his doctoral studies in petrology with a focus on structural petrology and petrotectonics at the Faculty of Natural Sciences of Comenius University in Bratislava. He obtained his PhD. degree in 2001. He also completed specialised courses on geochronology at the University of Georgia, Athens, Georgia, U.S.A. (1994), and textural goniometry at the Karl-Franzens Universität Graz, Austria (1998).

In 2000–2004 he participated in research on the genesis of magnesite and talc in the framework of the UNESCO/IUGS IGCP 443 *Magnesite and Talc – Geological and Environmental Correlations* project, where he coordinated the activities of 40 countries as the Secretary and International Organizational Leader and co-authored a monograph on this topic.

From 2006 to 2010 he worked as the head of the Regional centre of SGIDŠ in Košice. Since 2021 he was the Head of the Department of International Relations of SGIDŠ and at the same time LEAR – Legal Entity Appointed Representative for SGIDŠ at the European Commission.

Zoltán devoted a large part of his active work to the tasks of geology of mineral deposits (deposits Dobšiná, Smolník, Košice I). He participated in metallogenesis and tasks on the environmental risk projects; potential sources of metallic magnesium; CO₂ sequestration by the carbonatization of ultramafic rocks; conversion of asbestos into an environmentally benign mixture of carbonates; sources of critical minerals; sources of silicon and raw materials for the renewable energy and electromobility industries. He served as an expert in the EC DG Growth – ERECON project on the supply of REE elements to the European industry in the crisis year 2010. In 2015–2018, as a commissioned staff member of the SGIDŠ, he participated in the international MINATURA 2020 project as a leader of the national research team in the harmonisation of European geological and mining legislation. He has also worked on applied projects, hydrogeological and engineering geological mapping, monitoring of environmental burdens and CO₂ capture and storage.

In recent years, as a member of the international team of the Coordination and Support Action Geological Service for Europe (CSA GSEU), he has been actively involved in the compilation of the *Lithotectonic Map of Europe* and related databases and dictionaries within the work package group. He fully applied his long year experience of research in the field of structural geology in this task. Based on the gradual formation of geosutures during orogenesis, he clearly understood the global geodynamics of polyorogenic zones in the Alpine-Carpathian-Himalayan belt and in his latest publication he explained the formation of geosutures and subduction zones as a consequence of the upwelling of the deep mantle into the upper mantle as the part of the rotation of the Earth in time. This mixing and upwelling of the mantle caused differential rotation between the lithosphere and the mantle, producing subductions and later geosutures. Unfortunately, tragic circumstances prevented him from finishing work on the project which he devoted a lot of time and energy.

His editorial and organizational activities are significant and cannot be overlooked. Since 1995, he has served in the editorial board of the journal *Mineralia Slovaca*, first as a translator and English language corrector and later, since 2006, as a scientific editor. He was a second long-standing scientific editor and shaped the journal into the present format. For many years he prepared the newsletter

of the Slovak Geological Society (*Geovestník*) within the *Mineralia Slovaca*. With his great contribution, the *Mineralia Slovaca* was indexed by the Scopus database in 2017.

He was a long-standing and active member of the Slovak Geological Society (SGS), organizer and co-organizer of several dozen scientific events (congresses, conferences, and the “Pre-Christmas Seminars” of the SGS) and numerous other international events.

Despite the health problems that have affected him in recent years, he has always been full of life optimism and great outlook on life. It is necessary to emphasize that Zoltán was extremely hard-working, very responsible and internally disciplined. He was admirable in many ways as educated, professional and person with excellent communication and organizational skills. Zoltán left us unexpectedly after a tragic car accident near Plavnica. He will always live in our memories.

We sincerely thank You, Zoltán, for your friendship, your indispensable cooperation and for everything you have done for the geoscience in the Western Carpathians.

Martin Radvanec, Ľubomír Hraško & Ľubomír Gazdačko

