

## Personal information

First name(s) / Surname(s)

e-mail(s)

Nationality(-ies)

Date of birth dd/mm/yyyy

Gender

## position / occupational field

## Work experiences

Dates

Occupation or position held

## Main activities and responsibilities

Name and address of employer

Type of business or sector

## Education and training

Dates

Title of qualification awarded

Principal subjects /  
occupational skills covered

**Slavomír HREDZÁK, Ing., PhD.**

hredzak@saske.sk

Slovak

17.05.1967

Male

**Senior Researcher / Mineral Processing, Mineralogy, Environmental Technologies**

1989 →

2007 → senior researcher, qualification grade IIa (Slovak Academy of Sciences)

2001 – 2007 – researcher (PhD.) qualification grade IIb

1989 – 2001 – research fellow – specialist (including external PhD. study)

- ◆ director (2014→) (acting director 01/2022–06/2022)
- ◆ statutory deputy director (2004–2013),
- ◆ head of department (Dept. of Physical and Physicochemical Mineral Processing Methods, (2010–2013, 2022→),
- ◆ co-investigator of scientific and scientific-technical projects (Scientific Grant Agency of the Ministry of Education of Slovak Republic and the Academy of Sciences, Slovak Research and Development Agency, State Program of Research and Development, State order, NATO, FP7, H2020...), (principal) investigator of tasks and expert opinions for state organisations and industrial companies

Institute of Geotechnics of the Slovak Academy of Sciences, 45 Watsonova, SK-04001, Košice  
Science and Research

1996 – 2001

Philosophiae doctor abbrev. „PhD.“ in the field 21-32-9 “*Minerallurgy and Environmental technologies*” – awarded by Faculty of Mining, Ecology, Process Control and Geotechnology of the Technical university in Košice

Principal subjects:

- Theoretical Background of Minerals Separation,
- Solid State Physics,
- Mineralogy,
- Deposits of Coal Series Caustobioliths,
- English language, Russian language.

PhD. Thesis:

Application of Hydrocyclone in Preparation of Slovak Steam Coal.  
Institute of Geotechnics of the SAS, Košice, March 2001, 175 pages.

Composition to Dissertation Examination:

Characterisation of Coals from Important Slovak Deposits and a Review of Selected Physical Methods of Coal Preparation. Institute of Geotechnics of the SAS, Košice, 1998, 104 pages.

Solving of theoretical and practical problems of physical mineral processing methods:

- study on mineral composition of ores as well as by-products and wastes ,
- study on mineral matter in coal and (mineral) impurities in industrial minerals,
- comminution of minerals,
- physical separation methods, above all magnetic separation, hydrocycloning,
- assessment of classifying and separation processes, material balance of separation processes
- interpretation of XRD patterns, FT-IR spectra and DTA analyses.

Institute of Geotechnics of the Slovak Academy of Sciences, 45 Watsonova, SK-04001 Košice

ISCED 6

Name and type of organisation  
providing education and training

Level in national or international  
classification

## Dates

1985 – 1989

## Title of qualification awarded

Mining Engineer - abbrev. „Ing.“ (approx. MSc.) in the field 21-21-8 Mining Geology and Geological Prospecting, specialisation: Mining Geology

Principal subjects /  
occupational skills covered

Principal subjects: mineralogy, petrography, geochemistry, general geology, structural geology, historical geology, economic geology, exploration geology, hydrogeology, mining geology, regional geology, geological prospecting methods, raw materials research methods.

Diploma work: Small scale tectonics condition of the Šturec-North deposit.

Department of Geology and Mineralogy, Mining Faculty, Institute of Technology (now Technical University), Košice, 1989, 46 pages, 4 appendixes. Note: the Šturec-North deposit is located nearby Kremnica (Kremnitz in German, Körmöcbánya in Hungarian, Cremnicium in Latin) - Central Slovakia, generally gold – silver mineralisation in quartz dykes and quartzites)

Name and type of organisation  
providing education and training

Mining Faculty, Institute of Technology in Košice  
(now Faculty of Mining, Ecology, Process Control and Geotechnology  
of the Technical university in Košice)

Level in national or international  
classification

ISCED 5A

## Personal skills and competences

## Mother language(s)

Slovak

## Other language(s)

## Self-assessment

European level <sup>(\*)</sup>

## Russian

## English

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1 Independent user	C1 Proficient user	B2 Independent user	B2 Independent user	B1 Independent user
B1 Independent user	C1 Proficient user	B2 Independent user	B2 Independent user	C1 Proficient user

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

## Social skills and competences

team work, experiences in leading of scientific teams, experiences in scientific organization administration, organisation of scientific conferences

## Technical skills

working operation of laboratory devices for classifying and separation of raw materials, e.g. magnetic separators, electrostatic separator, hydrocyclone station, measurement of magnetic induction, volume magnetic susceptibility, etc.

## Computer skills

Microsoft Office (Word, Excel, PowerPoint), Internet

## Additional information

Publications and citations  
summary

Chapters in monograph: 2

WOS – Publications: 46, Citations (without self-citations): 432, h-index = 10

SCOPUS – Publications: 47, Citations (without self-citations): 470, h-index = 10

Other publications (including other journals and conference proceedings): 260

Other citations: 232

Research reports &amp; expert opinions (co-author) for industry, research institutions and authorities: 75

Projects (responsible and/or co-researcher): domestic / international (including bilateral): 32 / 13

selected  
publications

- HREDZÁK, Slavomír** - MATIK, Marek - ŠESTINOVÁ, Oľga - KUPKA, Daniel - HANČULÁK, Jozef - ZUBRIK, Anton - ZNAMENÁČKOVÁ, Ingrid - DOLINSKÁ, Silvia - SISOL, Martin - MARCIN, Michal. Characterization of polymetallic ore and flotation concentrate from the Mária Mine (Rožňava, Spiš-Gemer Ore Mts., Eastern Slovakia). In: *IOP Conference Series: Earth and Environmental Science*, 2021, vol. 906, iss. 1., art. no. 012137. ISSN 1755-1307. Available at: <https://doi.org/10.1088/1755-1315/906/1/012137>
- LÄNGAUER, David - ČABLÍK, Vladimír - **HREDZÁK, Slavomír** - ZUBRIK, Anton - MATIK, Marek - DANKOVÁ, Zuzana. Preparation of Synthetic Zeolites from Coal Fly Ash by Hydrothermal Synthesis. In: *Materials*, 2021, vol. 14, no. 5, article number 1267. ISSN 1996-1944. Available at: <https://doi.org/10.3390/ma14051267>
- HREDZÁK, Slavomír** - MATIK, Marek - ŠESTINOVÁ, Oľga - ZUBRIK, Anton - KUPKA, Daniel - DOLINSKÁ, Silvia - ZNAMENÁČKOVÁ, Ingrid. Eolian sands from Šajdíkove Humence and possibilities of their upgrading using physical techniques. In: *Geochémia 2020* (Geochemistry 2020): Conference Proceedings. Editors: Ľubomír Jurkovič, Jozef Kordík, Igor Slaninka; reviewers: Edgar Hiller, Peter Koděra. - Bratislava: State Geological Institute of Dionýz Štúr, 2020, pp. 47-50. ISBN 978-80-8174-054-1. (in Slovak)
- HREDZÁK, Slavomír** - DOLINSKÁ, Silvia - ZNAMENÁČKOVÁ, Ingrid - LOVÁS, Michal - ŠESTINOVÁ, Oľga: Possibilities of Siderite and Barite Concentrates Preparation from Tailings of Settling Pit Nearby Markušovce Village (Eastern Slovakia). In: *Inżynieria Mineralna - Journal of the Polish Mineral Engineering Society*, January-June 2019, vol. 20, Zeszyt Nr 1 (43), p. 19-24. ISSN 1640-4920. Available at: <https://doi.org/10.29227/IM-2019-01-03>
- ZUBRIK, Anton - MATIK, Marek - LOVÁS, Michal - DANKOVÁ, Zuzana - KAŇUCHOVÁ, Mária - **HREDZÁK, Slavomír** - BRIANČIN, Jaroslav - ŠEPELÁK, Vladimír. Mechanochemically Synthesised Coal-Based Magnetic Carbon Composites for Removing As(V) and Cd(II) from Aqueous Solutions. In: *Nanomaterials-Basel*, 2019, vol. 9, no. 1, p. 100. ISSN 2079-4991. Available at: <https://doi.org/10.3390/nano9010100>
- HREDZÁK, Slavomír**. Country Paper Slovakia: Low Rank Coals - the only Significant Domestic Energy Source. In: *Coal Preparation Society India Journal: CPSI Journal*, 2018, vol. X, no. 28, pp. 25-30.
- ZUBRIK, Anton - MATIK, Marek - LOVÁS, Michal - ŠTEFUŠOVÁ, Katarína - DANKOVÁ, Zuzana - **HREDZÁK, Slavomír** - VÁCLAVÍKOVÁ, Miroslava - BENDEK, František - BRIANČIN, Jaroslav - MACHALA, Libor - PECHOUŠEK, Jiří. One-step microwave synthesis of magnetic biochars with sorption properties. In: *Carbon Letters*, 2018, vol. 26, no. 1, pp. 31-42. ISSN 1976-4251. Available at: <https://doi.org/10.5714/CL.2018.26.031>
- ZUBRIK, Anton - MATIK, Marek - **HREDZÁK, Slavomír** - LOVÁS, Michal - DANKOVÁ, Zuzana - KOVÁČOVÁ, Milota - BRIANČIN, Jaroslav: Preparation of chemically activated carbon from waste biomass by single-stage and two-stage pyrolysis. In: *Journal of Cleaner Production*, 2017, vol. 143, pp. 643-653, ISSN 0959-6526. Available at: <https://doi.org/10.1016/j.jclepro.2016.12.061>
- VEREŠ, Ján - ŠEPELÁK, Vladimír - **HREDZÁK, Slavomír**: Chemical, mineralogical and morphological characterisation of basic oxygen furnace dust. In: *Mineral Processing and Extractive Metallurgy (Trans. Inst. Min. Metall. C)*, Vol. 124, Issue 1 (March 2015), pp. 1-8. ISSN 1743-2855.
- HREDZÁK, Slavomír** - MATIK, Marek - ZUBRIK, Anton - ŠTEFUŠOVÁ, Katarína - VÁCLAVÍKOVÁ, Miroslava: Remark to Fe oxides in so called Albanian leaching residuum from former Nickel smelter in Sereď. In: *Geochémia 2015 (Geochemistry 2015): Conference Proceedings*. Editors: Ľubomír Jurkovič, Igor Slaninka, Ondrej Ďurža; reviewers: Edgar Hiller, Peter Ivan, Peter Koděra, Ján Milička, Jozef Kordík, Igor Slaninka, Ľubomír Jurkovič, Peter Šottník, Bronislava Voleková. Bratislava: State Geological Institute of Dionýz Štúr, 2015, pp. 66-69. ISBN 978-80-8174-015-2. (in Slovak)
- HREDZÁK, Slavomír** - MATIK, Marek - LOVÁS, Michal - ZNAMENÁČKOVÁ, Ingrid - ŠTEFUŠOVÁ, Katarína - ZUBRIK, Anton: Separability of Calcined Magnesite Fines in Magnetic Field. In: *Inżynieria Mineralna - Journal of the Polish Mineral Engineering Society*, July-December 2015, vol. 16, Zeszyt Nr. 2(36), pp. 183-188. Available at: <https://doi.org/10.29227/IM-2015-07-12>
- HREDZÁK, Slavomír** - MATIK, Marek - LOVÁS, Michal - BRIANČIN, Jaroslav - ŠTEFUŠOVÁ, Katarína - ZUBRIK, Anton: Research on Pyrite Occurrence and Properties in Talc Ore with the Aim of Its Removal. In: *Inżynieria Mineralna - Journal of the Polish Mineral Engineering Society*, July-December 2014, vol. 15, Zeszyt Nr. 2 (34), pp. 23-28. Available at: <https://doi.org/10.29227/IM-2014-07-12>
- HREDZÁK, Slavomír** - LOVÁS, Michal - MATIK, Marek - BRIANČIN, Jaroslav - ŠTEFUŠOVÁ, Katarína - VEREŠ, Ján - ZNAMENÁČKOVÁ, Ingrid. Comment to Mineralogical-Chemical Limits of Slovak Spathe Iron Ores as Exemplified by Upgrading of Siderite Ore from the Nižná Slaná Deposit. In: *Situation in Ecologically Loaded Regions of Slovakia and Central Europe*. Proceedings of the XXIII Scientific Symposium with International Participation. Hrádok at Jelšava, October 23-24, 2014, S. Hredzák (ed.): Slovak Mining Society – a member of Association of Slovak Scientific and Technological Societies - a basic unit at the Institute of Geotechnics SAS, Košice, pp. 146-153. ISBN 978-80-970034-7-0. (in Slovak)
- ZUBRIK, Anton - LOVÁS, Michal - DOLINSKÁ, Silvia - **HREDZÁK, Slavomír** - TURČÁNIOVÁ, Ľudmila - CVAČKA, Josef - VRKOSLAV, Vladimír: Extraction Processes in Isolation of Diterpenes from Coal. In: *Chemické Listy - Chemical Papers*, Vol. 107 (2013), pp. 723-728. (in Slovak)
- VEREŠ, Ján - LOVÁS, Michal - JAKABSKÝ, Štefan - ŠEPELÁK, Vladimír - **HREDZÁK, Slavomír**: Characterization of blast furnace sludge and removal of zinc by microwave assisted extraction. In: *Hydrometallurgy*, Vol. 129 (2012), No. 129-130, pp. 67-73, ISSN 0304-386X. Available at: <https://doi.org/10.1016/j.hydromet.2012.09.008>
- HREDZÁK, Slavomír** - MATIK, Marek - LOVÁS, Michal - BRIANČIN, Jaroslav - ŠTEFUŠOVÁ, Katarína - JAKABSKÝ, Štefan - ZUBRIK, Anton. Float-sink analysis of talc ore from the Gemerska Poloma deposit. In: *Mineral Resources and Mineral Policy*. Proceedings of International Conference. Hotel Repiska, Demänovská dolina – the Low Tatras, Slovakia, October 6-7, 2011, ed. M. Beránek. Slovak Mining Society, Banská Bystrica, 2011, p. 194-202. (in Slovak)
- HREDZÁK, Slavomír** - ZUBRIK, Anton - DOLINSKÁ, Silvia - LOVÁS, Michal - JAKABSKÝ, Štefan: Preparation of low-ash products from Slovak sub-bituminous coals - a material balance. In: *Acta Montanistica Slovaca*, Vol. 15 (2010), Issue 4, pp. 283-289.

selected  
publications

- HREDZÁK, Slavomír** - LOVÁS, Michal - MATIK, Marek - JAKABSKÝ, Štefan - GEŠPEROVÁ, Danka - BRIANČIN, Jaroslav - BALOG, Marián: Mineral characteristics of dust outlets from rotary furnaces of iron ore works Siderite, Ltd. Nižná Slaná In: *Mineralia Slovaca*, Vol. 42 (2010), No. 3, pp. 295-300.
- ZUBRIK, Anton - **HREDZÁK, Slavomír** - TURČÁNIOVÁ, Ľudmila - LOVÁS, Michal - BERGMANN, Ingo - BECKER, Klaus Dieter - LUKČOVÁ, Mária - ŠEPELÁK, Vladimír: Distribution of inorganic and organic substances in the hydrocyclone separated Slovak sub-bituminous coal. In: *Fuel*, Vol. 89 (2010), Issue 8, pp. 2126-2132, ISSN 0016-2361. Available at: <https://doi.org/10.1016/j.fuel.2010.03.010>
- HREDZÁK, Slavomír** - LOVÁS, Michal - JAKABSKÝ, Štefan - BRIANČIN, Jaroslav - BALOG, Marián - GEŠPEROVÁ, Danka - FEČKO, Peter - MUCHA, Nikolas - JANÁKOVÁ, Iva: Magnetic Separation and XRD Study of Magnetite-bearing Feldspar Sands from the Philippines. In: *Mineral Resources of Slovakia and Their Utilisation*. Proc. of International conference (eds. M. Beránek, J. Pástor), October 8–9, 2009, Hotel Repiská, Demänovská dolina, the Low Tatras, Slovakia, Slovak Mining Society 2009, ISBN 978-80-969144-8-7, pp. 143-151. (in Slovak)
- HREDZÁK, Slavomír** - LOVÁS, Michal - JAKABSKÝ, Štefan - ZUBRIK, Anton: High Gradient Magnetic Separation of Dust Outlets Coming from Rotary Furnaces of the Iron Ore Works Siderit, Ltd. Nižná Slaná. In: *Journal of Mining and Metallurgy, Section A: Mining*, Vol. 44 (2008), No. 1, pp. 51-58. Available at: <https://scindeks-clanci.ceon.rs/data/pdf/1450-5959/2008/1450-59590801051H.pdf>
- VÁCLAVÍKOVÁ, Miroslava - GALLIOS, Georgios P. - JAKABSKÝ, Štefan - **HREDZÁK, Slavomír**: Removal of arsenic from water streams: An overview of available techniques. In: *Clean Technologies and Environmental Policy*, Vol. 10 (2008), No. 1, pp. 89-95, ISSN 1618-954X. Available at: <https://doi.org/10.1007/s10098-007-0098-3>
- HREDZÁK, Slavomír** - TOMANEC, Rudolf A. – MATIK, Marek – ŠEPELÁK, Vladimír – VÁCLAVÍKOVÁ, Miroslava: Magnetic separation and analysis of products obtained from coal-fired power plant fly ashes of Nikola Tesla B (Serbia). In: *Journal of Mining and Metallurgy, Section A: Mining*, Vol. 42 (2006), pp. 55-67. Available at: <https://scindeks-clanci.ceon.rs/data/pdf/1450-5959/2006/1450-59590601055H.pdf>
- HREDZÁK, Slavomír** - JAKABSKÝ, Štefan - LOVÁS, Michal - VÁCLAVÍKOVÁ, Miroslava - MATIK, Marek - NEUBAUER, Michal: Iron removal from secondary serpentinite raw material by high gradient magnetic separation. In: *Chemické listy - Chemical Papers* (CZ), Vol. 99 (2005), Issue 14, pp. 84-87.
- VÁCLAVÍKOVÁ, Miroslava - MISAEILIDES, Panagiotis - GALLIOS, Georgios P. - JAKABSKÝ, Štefan - **HREDZÁK, Slavomír**: Removal of cadmium, zinc, copper and lead by red mud, an iron oxides containing hydrometallurgical waste. In: *Studies in Surface Science and Catalysis Series, Oxide Based Materials*, Vol. 155 (2005), pp. 517-525. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S016729910580179X>
- MACÁŠEK, Fedor - KUFČÁKOVÁ, Janka - RAJEC, Pavol - KOPUNEC, Rudolf - JAKABSKÝ, Štefan - LOVÁS, Michal - **HREDZÁK, Slavomír**: The Sered' Leached Nickel Ores Residues - A Magnetic Sorbent for Fission Radionuclides and Lead Contaminants of Solids. In: *Chemické zvesti - Chemical Papers* (SK), 2004, vol. 38, no. 3, pp. 163-169. ISSN 0366-6352.
- HREDZÁK, Slavomír** - VÁCLAVÍKOVÁ, Miroslava - JAKABSKÝ, Štefan - LOVÁS, Michal - MATIK, Marek: Treatability of ash from coal-fired power plant EVO1 by magnetic way. In: *Environment and Mineral Processing*. Proceedings of International Conference, Fečko, Peter (ed.), June 26–28, 2003 Ostrava, ČR. Part. II. - Ostrava ČR: VŠB Ostrava, 2003, pp. 85-89. ISBN 80-248-0247-3.
- JAKABSKÝ, Štefan - LOVÁS, Michal - MOCKOVČIAKOVÁ, Annamária - **HREDZÁK, Slavomír**: Utilization of ferromagnetic fluids in mineral processing and water treatment. In *Journal of Radioanalytical and Nuclear Chemistry*, 2000, vol. 246, pp. 543-547. ISSN 0236-5731. Available at: <https://doi.org/10.1023/A:1006732705170>
- HREDZÁK, Slavomír**: Selected Results of Slovak Steam Coal Preparation in Hydrocyclones. In: *Gospodarka Surowcami Mineralnymi – Mineral Resources Management*, vol. 15, zeszyt/issue spec. 1/1999, pp. 221-228. ISSN 0860-0953.
- HREDZÁK, Slavomír** - LOVÁS, Michal - JAKABSKÝ, Štefan - ČURILLA, Jaroslav: Determination of Converter Mud Classification Sharpness. In: *WASTE 98*. Proceedings of the conference, Spišská Nová Ves, November 12–13, 1998, (eds. Antonická & Husár), GEOLOGIA, s.r.o., Spišská Nová Ves, Slovakia, 1998, ISBN 80-7078-599-3, pp. 179-185. (in Slovak)
- HREDZÁK, Slavomír** - KOŠÚTH, Marián - BRIANČIN, Jaroslav - TURČÁNIOVÁ, Ľudmila - LOVÁS, Michal - JAKABSKÝ, Štefan. Characteristics of mineral matter in brown coal from upper Nitra basin. In: *Ecotechnology & Mineralurgy*: Proceedings of the 9<sup>th</sup> International Mining Conference, Košice, September 2–5, 1997. Editor: Michal Leško. Košice: Štíroffek Publisher, 1997, pp. 62-65. (in Slovak)
- HREDZÁK, Slavomír** - JAKABSKÝ, Štefan - LOVÁS, Michal - BÁLINTOVÁ, Magda - BOLDIŽÁROVÁ, Eva - ČURILLA, Jaroslav. Properties and Possibilities of Magnetic Separation of Oxygen Converter Flue Dusts. In: *Acta Metallurgica Slovaca*, Vol. 3. (1997), No. 2/2, pp. 506-510.
- HREDZÁK, Slavomír** - JAKABSKÝ, Štefan - LOVÁS, Michal - MOCKOVČIAKOVÁ, Annamária - BOLDIŽÁROVÁ, Eva - BÁLINTOVÁ, Magdaléna. Deferization of Eolic Sands from Šajdikove Humence Deposit. In: *GÓRNICTWO - Zeszyty naukowe Politechniki Śląskiej / MINING - Scientific Papers of Silesian University of Technology*, Vol. 231, No. 1349, Gliwice, 1996. The 2<sup>nd</sup> International Mineral Processing Conference „Modern Technologies and Devices for Mineral and Waste Processing“, Ustroń, November 5–8, 1996, Poland, pp. 227-235. Available at: <https://dlibra.bg.polsl.pl/dlibra/publication/76434>
- FOFANA, Mohamad - KMEŤ, Stanislav - JAKABSKÝ, Štefan - **HREDZÁK, Slavomír** - KUNHALMI, Gabriel: Treatment of Red Mud from Alumina Production by High-Intensity Magnetic Separation. In: *Journal Magnetic and Electrical Separation: Magn Electr Separ*, 1995, vol. 6, no. 4, pp. 243-251. ISSN 1478 6478. Available at: <https://www.hindawi.com/journals/psse/1995/060564/>
- JAKABSKÝ, Štefan - LOVÁS, Michal - **HREDZÁK, Slavomír**: Reappraisal of Controlled Thermal Tetrahydrite Decomposition Technology Influence on the Final Product Quality and the Environment. In: *Ecology in Selected Agglomerations of Jelšava - Lubenik and Central Spiš*. Proceedings of the 4<sup>th</sup> Symposium, Hrádok 1995, pp. 103-109. (in Slovak)
- HREDZÁK, Slavomír** - LOVÁS, Michal - JAKABSKÝ, Štefan: Influence of Technological Changes in Hg-Bearing Ores Processing on the Environment in the Area of Rudňany and Mercury Balance in the Production Centres of Iron Ore Works – Branch Rudňany (Eastern Slovakia). In: *Ecology in Selected Agglomerations of Jelšava - Lubenik and Central Spiš*. Proceedings of the 4<sup>th</sup> Symposium, Hrádok 1995, pp. 110-121. (in Slovak)



science / research / boards /  
societies  
– memberships / functions

- ◆ Scientific Board of the Institute Materials Research of the Slovak Academy of Sciences, Košice (since 2020)
- ◆ Sector Council for Metallurgy, Metalworking and Blacksmith. The Ministry of Labour, Social Affairs and Family of the Slovak Republic (since 2019)
- ◆ chair of the Board of Directors of the Scientific Section 1 of the Slovak Academy of Science for Physical, Space, Earth, and Engineering Sciences (2019-2021)
- ◆ Committee for approving of mineral reserves. Ministry of Environment of the Slovak Republic (since 2018)
- ◆ delegate of the National Technological Platform for Research, Development and Innovation of Raw Materials at the European Technology Platform on Sustainable Mineral Resources (since 2017)
- ◆ Supervisory Board of the Research Centre of advanced materials and technologies (PROMATECH) (since 2015)
- ◆ Scientific Council of the Faculty of Mining, Ecology, Process Control and Geotechnologies of the Technical university in Košice (2015-2019)
- ◆ Selection board for competitive examinations for occupation of working positions of university teachers, research associates, functions of full professors, associate professors/docents and other university teachers and functions of managers at the Faculty of Mining, Ecology, Process Control and Geotechnologies of the Technical university in Košice (2015-2019)
- ◆ Industry Board of the Development and realisation workplace of raw materials extracting and treatment. Faculty of Mining, Ecology, Process Control and Geotechnology of the Technical University of Košice (since 2014)
- ◆ Presidium of the National Technological Platform for Research, Development and Innovation of Raw Materials (since 2014, vice-chair from 2019)
- ◆ Assessment committee of the Institute Materials Research of the Slovak Academy of Sciences, Košice (since 2014)
- ◆ vice-president of the Slovak Mining Society a member of the Association of Slovak Scientific and Technological Societies (since 2014)
- ◆ ERECON project - European Rare Earths Competency Network, Working Group I: Opportunities and road blocks for primary supply of rare earths in Europe (2013 – finished membership on one's own initiative and own proposal to the EC officers on nomination of associate from the State Geological Institute of Dionýz Štúr in Bratislava)
- ◆ EIP-RM - European Innovation Partnership on Raw Materials. Operational Group 3: Improving Europe's Raw Materials Regulatory Framework, Knowledge Base and Infrastructure, European Commission, Brussels (2013-2016)
- ◆ Scientific Council of the Slovak Academy of Sciences for the Earth and Space Sciences (since 2010)
- ◆ Scientific board in the Institute of Geotechnics SAS (1997-2001, 2008-2013)
- ◆ head of the Subbranch for "Mineral Processing and Ecology in Mining" of the Slovak Mining Society – a member of the Association of Slovak Scientific and Technological Societies (since 1999)
- ◆ chairman of the basic unit of the Slovak Mining Society a member of the Association of Slovak Scientific and Technological Societies at the Institute of Geotechnics of the Slovak Academy of Sciences (since 1996)

education system  
– memberships / functions

- ♣ vice-chair of committees for Final State Examinations of the studies for a bachelor's degree and master's degree in the faculty programme B0712A29001 (Bc.) / N0788A290001 (M.Sc.) "Waste Management and Mineral Processing" at the Faculty of Mining and Geology, VŠB – Technical University, Ostrava, Czech Republic (since 2022)
- ♣ committees for Final State Examinations of the studies for a bachelor's degree and master's degree in the field of study 2134 "Mineral Processing", later 2102R013 (Bc.) / 2102T013 (M.Sc.) „Mineral processing and recycling“ of the faculty programme B2102/N2102 "Mineral Raw Materials" at the Faculty of Mining and Geology, VŠB – Technical University, Ostrava, Czech Republic (2003-2022)
- ♣ Committees for Final State Examinations of study for a bachelor's degree and a master's degree in the field of study 3904R022 (Bc.) / 3904T022 (M.Sc.) „Waste Processing and Disposal" of the faculty programme B2102/N2102 "Mineral Raw Materials" at the Faculty of Mining and Geology, VŠB – Technical University, Ostrava, Czech Republic (since 2010, vice-chair from 2022)
- ♣ Field study council of the Doctoral Programme P2102/P2116 „Mineral Raw Materials" in the field of study 2102V009 „Mineral Processing" at the Faculty of Mining and Geology, VŠB – Technical University, Ostrava, Czech Republic (since 2010)
- ♣ doctoral advisor within the frame of Field study committee of the doctoral field of study „Extraction and processing of the earth's resources", faculty program „Metallurgy" (since 2019)
- ♣ doctoral advisor at the Joint committee for PhD. study in the field of study 5.2.40. Metallurgy (2008-2019)
- ♣ Committee for Final State Examinations of study for a master's degree in the field of study "Ecotechnologies of Minerals" at Faculty of Mining, Ecology, Process Control and Geotechnology of the Technical University of Košice (2004-2008)
- adviser of 2 successfully defended diploma works for a master's degree (Faculty of manufacturing technologies with the seat in Prešov of Technical University of Košice)
- doctoral adviser of 2 successfully finished PhD students (Faculty of Mining and Geology, VŠB – Technical University, Ostrava, Czech Republic), consulting expert of 1 successfully finished PhD student (IGT SAS)

conferences  
– memberships / functions

- ◆ preparatory and program committee of international conference series organized by the Presidium of the Slovak Mining Society - a member of the Association of Slovak Scientific and Technological Societies, aimed at mineral raw materials, mineral policy, advanced technologies in mining, geology and environment protection, Repiska, Demänovská valley, the Low Tatras (since 2014, guarantor of the conference since 2021)
- ◆ Scientific board of periodic conference "Environment and Mineral Processing", Ostrava (since 2014)
- ◆ Scientific board of periodic conference "Recyklace odpadu-Waste Recycling" (since 2012)
- ◆ member-corresponding of the International Organizing Committee of the International Coal Preparation Congresses on behalf of the Slovak republic (since 2009)
- ◆ Scientific boards of conference series in Serbia (since 2006):
  - International October Conference on Mining and Metallurgy
  - Recycling Technologies and Sustainable Development
  - International Serbian Symposium on Mineral Processing
  - Scientific and Professional Meeting "Ecological Truth" Eco-Ist (up to 2018)
- ◆ executive chairman of organizing committees of scientific symposia series on "Situation in Ecologically Loaded Regions of Slovakia and Central Europe" (since 2004)

editorial boards of journals  
– memberships

- ◆ Inżynieria Mineralna - Journal of the Polish Mineral Engineering Society (Poland) (since 2020)
- ◆ Acta Montanistica Slovaca (Slovakia) (since 2017)
- ◆ Recycling and Sustainable Development (Serbia) (since 2017)
- ◆ Waste Forum (Czech Republic) (since 2015)
- ◆ Zpravodaj Hnedé uhlí / Brown Coal Bulletin (Czech Republic) (since 2012)

(honorary) decoration and  
recognitions

- ♣ Gold medal of the Association of Slovak Scientific and Technological Societies "For Merit in Science and Technology Development", awarded in Košice, March 17<sup>th</sup>, 2022
- ♣ certificate of commendation "For long-lasting activities and cooperation" from the Košice Mining and Metallurgical Guild at the occasion of 20<sup>th</sup> anniversary of its foundation. Decorator: Master of the Guild, Košice, October 17<sup>th</sup>, 2019
- ♣ Commemorative Coin at the occasion of 65<sup>th</sup> anniversary of faculty foundation "For support and help at the faculty development". Decorator: Dean of the Faculty of Materials, Metallurgy and Recycling of the Technical university in Košice, November 16<sup>th</sup>, 2017
- ♣ Gold Commemorative Medal at the occasion of 255<sup>th</sup> anniversary of Mining Academy foundation in Banská Štiavnica and 65<sup>th</sup> anniversary of its continuator working Mining Faculty / Faculty of Mining, Ecology, Process Control and Geotechnologies of the Technical university in Košice "For cooperation between Faculty of Mining, Ecology, Process Control and Geotechnologies and Institute of Geotechnics SAS". Decorator: Dean of the Faculty, Košice, June 8<sup>th</sup>, 2017
- ♣ Silver medal of the Association of Slovak Scientific and Technological Societies "For Merit in Science and Technology Development", awarded in Košice, April 28<sup>th</sup>, 2016
- ♣ decoration "For marvellous work and merit in the Slovak Mining Society", awarded in Banská Bystrica, October 8<sup>th</sup>, 2015
- ♣ certificate of commendation "For Merit in the Association of Slovak Scientific and Technological Societies", awarded in Bratislava, October 10<sup>th</sup>, 2007
- ♣ certificate of commendation "Honorary Esteem for Merit in the Slovak Mining Society" awarded in Banská Bystrica, November 29<sup>th</sup>, 2000

further details

- ♠ evaluator of the project proposals (agency / call): 37
  - VEGA (scientific grant agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and of Slovak Academy of Sciences) • APVV (Slovak Research and Development Agency) • AV (Applied Research - Ministry of Education, Science, Research and Sport of the Slovak Republic) • GAČR (Czech Science Foundation)
  - FP7-NMP-2012-LARGE-6 • Assistance Centre for Regional Development (Czech Rep.)
- ♠ reviewer of scientific papers: 50
- ♠ (external) examiner's reports (diploma works for Bc. and MSc, PhD thesis, habilitation thesis): 23
- ♠ a member of ad hoc expert commission for scientific-technical services grant-in-aid. Appointed by Minister of Education, Science, Research and Sport of the Slovak Republic (2014)