

## PERSONAL INFORMATION



## Ferenc Má dai, PhD, LL.M.

 Egyetemváros, 3515 Miskolc (Hungary)

 (+36) 46/565-111 (Extension: 1207)

 [ferenc.madai@uni-miskolc.hu](mailto:ferenc.madai@uni-miskolc.hu)

 [www.uni-miskolc.hu/exploration](http://www.uni-miskolc.hu/exploration)

 [www.researchgate.net/profile/Ferenc-Madai](https://www.researchgate.net/profile/Ferenc-Madai)

Date of birth: 14/02/1965 | Nationality Hungarian

## POSITION

Associate professor, head of Institute of Exploration Geosciences

## WORK EXPERIENCE

01/2023 – Present

**Associate professor, head of Institute of Exploration Geosciences – University of Miskolc**

Lectured topics: Petrology, Geochemical exploration, Mineral Resource Management; Minerals Policy, Optical Mineralogy, Mineral resource exploration.

Leading the optical research laboratory.

Work in research and institution development projects (TÁMOP, GINOP, EFOP, Horizon2020, EIT RawMaterials).

Faculty coordinator of Stipendium Hungaricum scholarship programme, Board member of AMIR EIT-Labelled joint master programme consortium, Project coordinator of the TIMREX joint master programme

07/2012 – 12/2022

**Associate professor, head of Institute of Mineralogy and Geology – University of Miskolc**

Lectured topics: Petrology, Geochemical exploration, Mineral Resource Management; Minerals Policy, Optical Mineralogy, Mineral resource exploration.

Leading the optical research laboratory.

Work in research and institution development projects (TÁMOP, GINOP, EFOP, Horizon2020, EIT RawMaterials). Vice-dean on academic affairs of Faculty of Earth Sciences and Engineering.

Faculty coordinator of Stipendium Hungaricum scholarship programme, Board member of AMIR EIT-Labelled joint master programme consortium

07/2004 – 07/2012

**Associate professor, Institute of Mineralogy and Geology – University of Miskolc**

Lectured topics: Petrology, Geochemical exploration, Mineral Resource Management; Minerals Policy, Optical Mineralogy. Leading practical lessons in mineralogy and microscopic petrography;

Leading the optical and electronmicroprobe research laboratories.

Work in research projects (OTKA, FP6, TÁMOP).

Vice-dean on academic affairs of Faculty of Earth Sciences and Engineering (since February 2006). Hungarian representative in the CEN TC292/WG8 workgroup (Wastes from the extractive industry)

07/1997 – 07/2004

**Senior lecturer – University of Miskolc**

Lectured topics: Applied Petrology, Mineral Resource Management, Minerals Policy, Optical Mineralogy, Mine Waste Geochemistry. Leading practical lessons in mineralogy and microscopic petrography;

Leading the optical research laboratory.

Work in research projects (OTKA, FKFP).

The secretary of the Faculty Council of Faculty of Earth Sciences and Engineering

08/1989 – 07/1997

**Professors assistant**

Leading practical lessons in mineralogy and microscopic petrography; Leading the optical research laboratory; Curator of the mineral and rock collections of the department.

Participation in the research work of the department

**EDUCATION AND TRAINING**

1996 - 2003

**Ph.D. in Earth Sciences (Grade: Summa cum laude)**

EQF level 8

University of Miskolc Mikoviny Sámuel Doctoral School of Earth Sciences, Miskolc (Hungary)

Research area: Rock physics and chemistry, environmental mineralogy, research in fields of rock surface alteration and texture development during low-grade metamorphism

Date in which degree was obtained: 05.05.2004.

1997 - 19998

**LL.M. (Master of Laws) in Mineral Law and Policy**

EQF level 7

Centre for Energy, Petroleum and Mineral Law and Policy (CEPMLP), University of Dundee, UK

Mineral law and Policy; Economics of natural resources; International environmental law

1992 - 1995

**Dr. Univ.**

University of Miskolc, Hungary

Research in texture development of carbonate rocks during low-grade metamorphism

1994 - 1989

**Exploration geologist**

EQF level 7

Moscow State Geological Survey Academy, USSR, programme: Geological Prospecting and Exploration of Mineral Deposits

Mineralogy, Petrography, Geological prospecting, Structural geology, Historical geology, experience in geological prospecting

**PERSONAL SKILLS**

Mother tongue(s) Hungarian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C1
Russian	C2	C1	B2	C1	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2 Proficient user  
Common European Framework of Reference for Languages

**Social skills and competences** 6-year experience in study abroad (USSR and Scotland), primarily in multicultural environment; 15-year tutorial experience in the Department of Mineralogy and Petrology at the University of Miskolc; participation in international teamwork: CEN TC292/WG8 Wastes from the extractive industry. Organization of the Miskolc International Mineral Shows since 1997, Organization of several Hungarian and international conferences (Mineralogy & Museums, 1996; Minerals of the Carpathians, 2000; Mineral Sciences in the Carpathians, 2003; 2006 Mid-European Clay Conference, 2004, member of the OC consortium of the IMA 2010), Co-ordination of research and development projects (FKFP, GVOP).

**Technical skills and competences** Enhanced computer literacy, special skills in graphical, GIS and image analysing software, Work with optical microscopes, scanning electron microscope, electron microprobe. Advanced skills in Windows applications

## ADDITIONAL INFORMATION

---

**Honours and awards**

- MTA-MAB Science Award 2004.
- Mining stewardship merit award 2005, 2009, 2015, 2020.
- Hungarian Mining merit award 2010
- Pro Universitate (University of Miskolc) 2013
- International relationships merit award (University of Miskolc) 2014
- Environmental Higher Education merit award (Hungarian Chamber of Engineers) 2014
- Hungarian Gold Merit Award 2019.
- Pro Geologica Applicata award (Hungarian Geological Society) 2021

**Scientific interest**

- Geochemistry, petrography
- GIS applications in mineral exploration
- Mineral resource exploration
- Mineral resources economics, law and policy
- Skills and competence development in higher education

**Memberships**

- MTA MAB Geology Workgroup member (chairman 2017-2020)
- Hungarian Geological Association NE-Hungarian Branch member
- Hungarian Geological Association Chairman of the Monitoring Committee
- Chairman of the Gyulay Zoltán Foundation
- International Mine Water Association, member
- Society of Mining Professors, member
- EIP Raw Materials Operational Group, member
- EIT RawMaterials Eastern CLC Education Committee, member

- Projects
- TIMREX <https://timrexproject.eu/> (2022 - ) Built on existing strong minerals exploration MSc programmes, TIMREX is a joint master's degree in mineral exploration with add-on innovation and entrepreneurship skills. The programme has a strong emphasis on field activities and the application of innovative exploration techniques and solutions is the specialty of TIMREX among the EIT-Labbed master programmes.
  - MOBI-US <https://eitmobius.eu/> (2020-2021) The aim of the MOBI-US project is to strengthen the networking of raw materials-related university master programs by creating a set of structured mobility options for students between the ESEE partnering universities.
  - TrainESEE <https://trainesee2.eu/> (2020-2021) TrainESEE v.2 is a capacity building project targeted at the six universities of the East and South Eastern Europe, with a focus on improving specific generic skills, in line with the curricula insufficiencies identified through the implementation of the EE S – Train ESEE pilot (2017-2018). The duration of the project is 2 years, during which four training modules will be developed, implemented and prepared as acceleration programmes: Teaching methodology; Project development and management; Innovation and entrepreneurial module and Science to Business module.
  - REEBAUX (2017-2020) The aim of this project is to collect and evaluate available data on bauxite deposits and bauxite residue accumulations in the ESEE region and on the respective rare earth elements (REE) concentrations. Results help to define perspectives and strategies for a viable REE production from bauxite primary and secondary resources.
  - AMIR-RIS, AMIR-LIH <https://amirmaster.eu/> (2019 - ) The AMIR programme has been developed to help students understand the full spectrum of all the core topics within the field of raw materials recycling. Drawing on the expertise of 6 European universities, AMIR brings together the collaboration of academia, industry and research partners to develop one of the world's leading programmes within the field of recycling.
  - IN4SOC <https://blogs.upm.es/in4soc/> (2018 - 2021) This project is to enhance the involvement of technical universities in the social responsibility of organizations, as a pedagogical approach that considers the acquisition of the key social and civic competence of students and strengthens the engagement of academia with the community.
  - MINLEX <https://op.europa.eu/en/publication-detail/-/publication/18c19395-6dbf-11e7-b2f2-01aa75ed71a1/language-en> (2016-2017) MINLEX "Legal framework for mineral extraction and permitting procedures for exploration and exploitation in the EU" in response to a need by the Commission to foster the sustainable supply of minerals from within Member States under the understanding that this can be achieved by improving the framework conditions of the extractive industries across the 28 Member States of the European Union.
  - INTRAW <https://intraw.eu/> (2015 - 2018) INTRAW H2020 project focusing on mapping best practices and boosting cooperation opportunities on raw materials with technologically advanced non-EU countries (Australia, Canada, Japan, South Africa and the United States) in response to similar global challenges
  - Establishment of guidelines for the inspection of mining waste facilities, inventory and rehabilitation of abandoned facilities and review of the reference document on the best available techniques [https://ec.europa.eu/environment/waste/mining/pdf/Annex2\\_guidelines\\_inspection.pdf](https://ec.europa.eu/environment/waste/mining/pdf/Annex2_guidelines_inspection.pdf) (2010 - 2011)
  - Overall guidance document for characterization of wastes from the extractive industry [https://infostore.saiglobal.com/preview/98699918865.pdf?sku=876728\\_SAIG\\_NSAI\\_NSAI\\_2083766](https://infostore.saiglobal.com/preview/98699918865.pdf?sku=876728_SAIG_NSAI_NSAI_2083766) (2009 - 2011) Establishment of guidelines for the inspection of mining waste facilities, inventory and rehabilitation of abandoned facilities and review of the reference document on the best available techniques.
  - Improving the safety of the tailings management facilities in the Danube river basin (2019 - 2020) <https://www.icpdr.org/main/improving-safety-tailings-management-facilities-danube-river-basin> The project contributed to strengthen the technical and management capacity at the concerned facilities and responsible authorities by providing them with practical tools.
- Publications
- MTMT ID: <https://vm.mtmt.hu/search/slist.php?lang=0&top10=0&AuthorID=10028582>
  - ResearchGate: <https://www.researchgate.net/profile/Ferenc-Madai>