



PhD program in the Mikoviny Sámuel Doctoral School of Earth Sciences

University of Miskolc – Hungary

The objective of the Mikoviny Sámuel Doctoral School of Earth Sciences is to provide a sound scientific foundation for engineering activities requiring fundamental knowledge in earth sciences and to publish the achievements supporting the developments and applications related to teaching at the Faculty. Building on the results of the PhD training started in the 1990s. The doctoral school carries out activities in those fields of the earth sciences that fit into the profile of the Faculty of Earth Sciences and Engineering and that are within the scope of the accreditation granted to the doctoral program in four main streams based on the goals of the Centre of Excellence for Sustainable Natural Resources Management:

- **Raw Materials Management** (primary and secondary raw materials exploration, mining, preparation technology development, mining and industrial waste processing, metal bearing waste processing, waste management, waste recycling).
- **Energy management** (biomass, geothermal, renewable gas, carbon-dioxide storage, conventional energy resources: natural gas and petroleum engineering, clean coal technologies).

- **Geo-information processing** (inversion methods, spectral and geoelectric methods, the development of numerical methods for geological, petrographic mineral development numerical methods, surveying and GIS methods).
- **Water Resources and sustainable Soil Management** (innovative water management, protection of groundwater resources, hydrodynamic and transport modeling, geophysical exploration methods of water).

From September 2016 the PhD program takes for four years: the first 2 years the study and research period and the second 2 years the research and dissertation period.

Above topics can be reached in the following research fields: 1) Geotechnical Systems and Processes; 2) Fluid Production and Transport Systems; 3) Environmental Processing and Raw Material Preparation; 4) Research in Applied Geophysics; 5) Research on Applied Geology and Hydrogeology; 6) Physical and Human Geography.

Contact person: Dr. Gábor Mucsi Deputy Dean, ejtmucsi@uni-miskolc.hu

