

Research topic areas and research teams:

Fluid production and transport systems:

- Fluid reservoir operational procedures
- Integrated oil and natural gas production systems
- Research and development of deep drilling technologies
- Integrated hydrocarbon transport and storage systems
- Research into natural gas distribution and consumer systems
- Geothermal energy production and supply systems
- Chemical processes in hydrocarbon production
- Numerical modelling of hydrocarbon sites

Raw material extraction and preparation, environmental process technology:

- Geotechnical systems
- Investigation of theoretical issues in geomechanics, formation of underground areas
- Natural and mining hazards and how to guard against them
- Automation and mechanization of raw material production systems
- Mechanical process technology
- Raw material and waste preparation
- Environmental process technology
- Geotechnics for environmental protection

Research in applied geophysics:

- Geophysical inversion and tomography
- Method development in engineering and environmental geophysics
- Seismic method development
- Electromagnetic method development
- Geophysical method development for deep drilling
- Development of informatics in geophysics
- Geophysical modelling
- Application of GIS and positioning systems

Research on applied geology and hydrogeology:

- Research into hydrocarbon genetic and migration processes, basin analysis
- Integrated research into utilizable solid mineral raw materials

- Sedimentary and igneous formations: investigations of their structural geology, stratigraphy, sedimentology, paleoenvironmental and environmental geology
- Research into Pleistocene and Holocene paleogeography
- Applied mineralogy and petrology
- Research into engineering geology
- Research into water geology

Physical and human geography:

- Physical geography
- Digital plotting and relief modelling
- Studies in the interactional structure of physical and social factors
- Utilizable natural resources, focusing on raw mineral materials and their significance in the economic history of Hungary
- Research into social configurations