

**Proposals topics dissertations for academic year 2022/2023  
1st round**

**P0724D290005 Mining and Mining Geomechanics**

***Supervisor: doc. Ing. Pavel Zapletal, Ph.D.***

Possibilities of Determining and Using the Natural Pressure Drop for Subsurface Ventilation

***Supervisor: doc. Ing. Jan Nečas, Ph.D.***

Effect of fluidization to mining material

***Supervisor: doc. Ing. Jindřich Šancer, Ph.D.***

The issue of surface movement above deep coal mines after closure and flooding of underground workings in OKD (Ostrava-Karvina coal district)

**P0724D290002 Processing**

***Supervisor: doc. Ing. Jan Nečas, Ph.D.***

Multiphase fluid separation of waste mixtures

***Supervisor: prof. Ing. Jiří Zegzulka, CSc***

Impact of Time Consolidation on the Mineral Processing "

***Supervisor: prof. Dr. Ing. Miroslav Kyncl***

Research on the distribution of arsenic in the water treatment process

**P0532D330040 Applied Geology**

***Supervisor: prof. Ing. Petr Skupien, Ph.D.***

Organic Facies and Their Significance for Paleocological Interpretations

Organic Facies of Mikulov Marls - Palaeoenvironmental Interpretation and Source Potential for Hydrocarbons

**P0532D330038 Geoinformatics**

***Supervisor: doc. Ing. Petr Rapant, CSc.***

Qualitative Spatio-temporal Modelling and Reasoning

***Supervisor: doc. Dr. Ing. Jiří Horák***

Urban mobility and accessibility in a local scale

***Supervisor: doc. Ing. Igor Ivan, Ph.D.***  
Visual Analytics in GeoCriminology

Crime Prediction Possibilities using Spatial Data

***Supervisor: doc. Ing. Igor Ivan, Ph.D.***  
Unmanned Air Vehicles in Forestry

GNSS Meteorology for Meteorological Nowcasting Support