

## **Technical University of Crete**

Technical University of Crete (TUC) was established in 1977 in Chania, Crete and today comprises five academic engineering departments. The Department of Production Engineering and Management, the Department of Mineral Resources Engineering, the Department of Electronic & Computer Engineering, the Department of Environmental Engineering and the Department of Architectural Engineering, assisted in their curriculum by the Sciences Department. The mission of the TUC is to develop modern engineering specialties, to place emphasis on research in fields of advanced technologies as well as to establish close cooperation with the industry and other production organizations in Greece.

### **Department of Mineral Resources Engineering**

The primary goal of the Department of Mineral Resources Engineering is to educate engineers in a broad range of scientific and technical activities related to the extraction and processing of minerals as well as environmental geotechnology. More particularly, the Department offers basic engineering training as well as education in new technologies such as detection of ore bodies, observation of geodynamic phenomena through satellites, geophysical techniques of high resolution for archaeology, structural works and environmental applications, evaluation of raw materials by means of electronic microscopy etc.

The Department consists of three major divisions (1. Exploration and Positioning, 2. Mining Technology and 3. Minerals Exploitation) corresponding to three main directions of research.

The laboratory of “*Inorganic and Organic Geochemistry and Organic Petrography*”, under the direction of Prof. V. Perdikatsis, belongs to the first division. The main activities of the laboratory include:

- Geochemical analysis of main and trace elements in rocks, sediments, ores, soils and plants
- Soil analysis (mineral and grain size analysis, pH and conductivity measurements, ion exchange capacity)
- Study of the behaviour of various soil lithologies as a result of the disposal of olive oil mill wastewaters
- Geochemical analysis of pigments and plasters

The research Unit of “*Management of mining / metallurgical wastes and rehabilitation of contaminated soils*” belongs to the third division, under the direction of Prof. K. Komnitsas. The following research areas are related to the protection of the environment and sustainable development by the industry:

- Soil decontamination
- Clean up/management/stabilisation of solid wastes, effluents and offgases
- Risk assessment in industrial and disposal areas
- Secondary and environmental uses of wastes aiming at their valorisation

*For further information please visit the follow links:*

[www.tuc.gr](http://www.tuc.gr) kai [www.mred.tuc.gr](http://www.mred.tuc.gr)