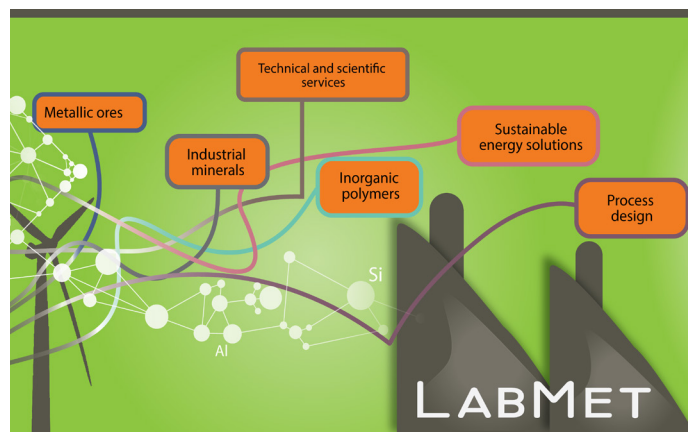


LabMet NTUA

Laboratory of Metallurgy, National Technical University of Athens
Athens, Greece



ABOUT

The National Technical University of Athens (NTUA) is the oldest and most prestigious technical educational institution in Greece. Based on Euro Research Ranking Data, NTUA reached 10th place in 2010 for educational organisations and 3rd position in Networking Rank (Reputation).

The Laboratory of Metallurgy (LabMet), School Mining Engineering and Metallurgical Engineering, one of the most active NTUA laboratories has gained significant expertise in the fields of extractive industries, including processing of ores and industrial minerals, environmental protection, rehabilitation of sites polluted from mining and metallurgical industries, valorisation of metallurgical wastes and development of high-added value products, development of energy efficient processes, modelling and computer simulation of industrial production processes, life cycle analysis and environmental assessment of products and industrial processes.

EXPERTISE

In the last 10 years LabMet has been involved in more than 30 European and 20 national research projects, with a turnover of more than €10 M in funding, and disseminating more than 300 scientific publications in international journals and scientific conferences.

LabMet also provides technical and scientific consulting services to various Greek and EU companies, including Aluminium of Greece, LARCO S.A, SCHLAGMAN BAUSTOFFWERKE GmbH & Co KG., EMED SLOVAKIA, Thracian Minerals S.A., S&B Industrial Minerals S.A. and Hellas Gold S.A.

Networking in the areas of mining, ornamental stones and mineral processing is another important activity. The laboratory was actively involved in the establishment of networks at European level like EUROTHEN (European Thematic Network on Extractive Industries), OSNET (Ornamental and Dimensions Stones Network) and NESMI (Network focused on Sustainable Mining and Processing Industries).

LabMet is an associated partner in the Knowledge and Innovation Community (KIC) called EIT Raw Materials, while its team leaders are members of the European Construction Technology Platform (ECTP), the ERECON Steering Committee, the EIP on Raw Materials Operational Groups and the Ad-Hoc working group of SHERPA Group on the Raw Materials Score Board.

FACILITIES & SERVICES

The laboratory is equipped with modern equipment for physicochemical characterisation like, ICP-MS, XRF, XRD, SEM, TEM, TG/DTA/DSC, laser particle analyser and thermal conductivity testing of insulation materials (meets the industry standards ASTM C518, ISO 8301, JIS A 1412, DIN EN 12939, DIN EN 13163 and DIN EN 1266), NIR reflectance.

The laboratory's infrastructure includes equipment for raw materials preparation, like crushing, grinding, separation, and for "finishing" processes and semi-industrial scale pilots for pyrometallurgical and hydrometallurgical processes. Complementary tools such as engineering simulation packages (TRNSYS, SuperPro, ANSYS and FLUENT), and environmental impact assessment software for Life Cycle Assessment of a product/process (Gabi and Simapro) are available in LabMet's library, enabling modelling approaches through systems Engineering Life Cycle.



MORE INFORMATION

Website: www.labmet.ntua.gr/Default_en.aspx

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