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# **PR®MATECH**

Research Centre for Advanced Materials and Technologies

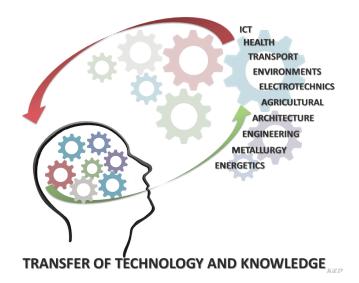
Podporujeme výskumné aktivity na Slovensku Projekt je spolufinancovaný zo zdrojov EÚ





#### Technological Transfer

- Data base of equipments/devices and methods
- Office of technological transfer in Košice and Žiar nad Hronom for protection of intellectual property rights and for technological transfer
- Broker center for linking the research results with • business needs by managing partnerships between researchers and potential clients
- Conditions for technological incubators will be created at the academic institutes, so that the starting inovative companies will have benefit from the potential of center
- Workshops, conferences will be organized to improve technological transfer



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#### Mission

Research Centre "PROMATECH" has an ambition to become a top, national, integrated, interdisciplinary and sustainable centre, producing excellent frontier and applied research, performing excellent international

co-operation, expertise activities and consulting service for industrial partners, technological and knowledge transfer, education activities in accordance with requirements of industry and dissemination of results together with popularization of the Centre.

## Partnering Institutions

- Slovak Academy of Sciences
- Institute of Materials Research of Slovak Academy of Sciences
- Institute of Experimental Physics of Slovak Academy of Sciences
- Institute of Geotechnics of Slovak Academy of Sciences
- Institute of Materials and Machine Mechanics of Slovak Academy of Sciences
- Pavol Jozef Šafárik University in Košíce
- Technical University of Košice

#### Financing

Project "Research Centre of Advanced Materials and Technologies for Recent and Future Applications "PROMATECH" is supported by the Operational Program "Research and Development" financed through European Regional Development Fund. (cca. 22 mill. Euro)









## The main areas of research are:

Research and development of advanced steels, alloys, ceramics, powder metallurgy materials and products and hard coatings.

Research and development of materials and technologies for biomedical and environmental applications.

Materials for ICT technologies and cryotechnologies.

Research and development of new magnetic materials.



## **Core Facilities**

Advanced technologies - Spark plasma sintering, microwave sintering, micro-fiber production technology, melt spinning and art melting, laser technology, PVD technologies, hot pressing, single crystal technology, nano-powder preparation technology, etc.

- Facilities for microstructure and chemical analyses TEM/HRTEM, FIB, AFM, SEMs, GDOS, X-rays from -180°C to 1800°C, Raman spectroscopy, Confocal and optical microscopies, etc.
- Facilities for mechanical, tribological and corrosion tests – Universal testing machines up to 1500°C, nanoindentation up to 500°C, nano/micro/macro tribology up to 800°C, corrosion facilities, etc.
- Facilities for functional and thermal tests Ultra high vacuum STM, Cryo-free 14 T magnet equipped with high temperature furnace, SQUID, etc.







