Material studies

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The overall objective of the NOMATEN project is to establish a Centre of Excellence (CoE) in Multifunctional Materials for Industrial and Medical Applications that will exploit unique nuclear research infrastructure and expertise from Poland and Europe. The long term vision for the NOMATEN CoE will be to provide world-class research and development of innovative multifunctional materials – materials combining advanced structural and functional properties – for industrial and medical applications.
To achieve this vision, the CoE will be created by three consortium partners with complementary facilities and expertise:

- Narodowe Centrum Badań Jądrowych (NCBJ), Poland;
- Commissariat à l'Énergie Atomique et aux Énergies Alternatives (CEA), France;
- Teknologian Tutkimuskeskus VTT Oy (VTT), Finland.

They will be supported by Narodowe Centrum Badań i Rozwoju (NCBiR) – an implementing agency of the Ministry of Science and Higher Education of Poland – which is the fourth consortium partner. The consortium partners will develop and execute a long-term science and innovation strategy for the CoE, that focuses on two strategic research and innovation topics:

- Novel high-temperature, corrosion and radiation resistant materials for industrial applications
- Novel radiopharmaceutical materials for medical applications

This strategy will enable the CoE to address specific research and innovation needs of Poland and Europe in the fields of material sciences, harsh-environment industrial processes, and nuclear medicine. [1].

Keywords: NOMATEN CoE, modelling, ion implantation, materials, functional properties

References:
[1]. http://nomaten.ncbj.gov.pl/