### The FP7 NANOSENS Project

NANOSENS aims to upgrade the research and innovation capacity of the National Institute of Research and Development for Technical Physics (NIRDTP) to the highest European level in microsensors for medical applications and biosensors based on magnetic nanoparticles and nanowires.



The NANOSENS project is a support action, which is funded by the European Commission under the Capacities area -Research Potential of Convergence Regions theme of the 7th Framework Programme (FP7). The project started in June 2013 and will run for a period of 42 months. It is being implemented by an excellent and skilful consortium composed of seven partners. The twinning and cooperation partners will help and guide NIRDTP with their expertise and knowledge in sensing applications.

## Contact Information

For more information about the NANOSENS project and/or start an R&D collaboration with NIRDTP, please do not hesitate to contact:



**FP7 NANOSENS Project** Coordinator Email: hchiriac@phys-iasi.ro

### Visit the NANOSENS website: http://nanosens.phys-iasi.ro

NIRDTP Website: http://www.phys-iasi.ro/

# NNËSENS

June 2013 – November 2016

Upgrading the capacity of NIRDTP to develop sensing applications for biomedicine using magnetic nanomaterials and nanostructured materials

http://nanosens.phys-iasi.ro



Co-funded by the 7<sup>th</sup> Framework Programme of the European Union

## NANOSENS Activities

Development of twinning partnerships with 6 specialist research organisations in the fields of microsensors and biosensors research:

- Organisation of extensive know-how exchanges;
- Staff exchanges.

Organisation of workshops and conferences:

- Organisation of the NANOSENS satellite meeting within the ANMM 2015 International Scientific Conference at NIRDTP:
- Organisation of 3 regional workshops and a dedicated workshop to update the national strategy in the field of sensors.
- Participation of NIRDTP's researchers on international conferences and events.

Hire 7 experienced researchers and 1 Innovation and IPR manager.

Upgrade the equipment and facilities with the following items:

- Scanning Auger nanoprobe equipment
- Laser ablation capabilities for the existing RF sputtering equipment
- Gel electrophoresis system.



NIRDTP's NANOSENS will increase competitiveness and visibility in the most advanced topics of sensing applications biomedicine usina for magnetic nanomaterials and nanostructured materials:



on nano- and microwires for medical applications

Microsensors for Medical

Implantable magnetic microsensors based on nanostructured materials for medical applications

Applications Biosensors based on Nanoparticles and Nanowires **Biosensors** based on multilavered nanowires for the detection of biomolecules

Sensors based on

nanosized

detection

elements for

applications in

Twinning and **Co-operation Partners** 

#### The Twinning Partners are:



Sheffield Centre for Advanced Magnetic Materials and Devices, Department of Engineering Materials, University of Sheffield, UK www.magnetics.group.shef.ac.uk



Department of Materials for Information Technologies, Instituto de Ciencia de Materiales de Madrid, CSIC, Spain www.icmm.csic.es INESC MN

Instituto de Engenharia de Sistemas e Computadores para os Microsistemas e as Nanotecnologias (INESC MN), Portugal www.inesc-mn.pt



Nanobioelectronics & Biosensors Group, Institut Català de Nanotecnologia, Barcelona, Spain www.icn.cat



Solid State Physics Group, Department of Physics and Astronomy, University of Glasgow, UK

www.ala.ac.uk/schools/physics



Materials Science Electron Microscopy Department, University of Ulm, Germany www.uni-ulm.de/en/einrichtungen/electronmicroscopy-group-of-materials-science.html

