



# SME / Association / Researcher Profile Form



## FP7 Programme SECURITY Theme

Date (dd/mm/yyyy): 09/10/2009

Profile valid until (dd/mm/yyyy): 01/10/2010

### Section 1 - Contact details

<b>Organisation Name</b> (full name)	National Institute of Research and Development for Technical Physics
<b>Organisation acronym</b> (Abbreviation)	NIRDTP
<b>Address</b>	47 Mangeron Boulevard
<b>Postal code</b>	RO-700050
<b>City</b>	Iasi
<b>Country</b>	Romania
<b>www address</b>	www.phys-iasi.ro

<b>Contact person:</b>	
<b>Title</b>	Prof. Dr.
<b>First Name</b>	Horia
<b>Family Name</b>	Chiriac
<b>Telephone</b>	+40232430680
<b>Fax</b>	+40232231132
<b>E-mail</b>	hchiriac@phys-iasi.ro

### Section 2 – Type of organisation

#### If you are an Enterprise

<b>Enterprise type</b>	<input type="checkbox"/> Private <input type="checkbox"/> Non profit	<b>Is your Company a Small-Medium sized Enterprise (SME)?</b>	<input type="checkbox"/> YES <input type="checkbox"/> NO
	<input type="checkbox"/> Public <input type="checkbox"/> Other		<b>if YES, Number of Employees</b>
			<input type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> < 250
<p>According to Article 2 of the annex of Commission Recommendation 2003/361/EC of 6 May 2003, which applies from 01 January 2005, an SME (Micro, Small or Medium-sized Enterprise) is an enterprise which:</p> <ul style="list-style-type: none"> <li>• has fewer than 250 employees,</li> <li>• has an annual turnover not exceeding 50 million euro, and/or</li> <li>• an annual balance-sheet total not exceeding 43 million euro.</li> </ul> <p><a href="http://europa.eu.int/comm/enterprise/enterprise_policy/sme_definition/index_en.htm">http://europa.eu.int/comm/enterprise/enterprise_policy/sme_definition/index_en.htm</a></p>			
<b>Owned by a non SME:</b>		<input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>Description of the organisation (max 1.000 characters):</b>			



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### If you are an Association

<b>Association type</b>	<input type="checkbox"/> SME <input type="checkbox"/> Industrial <input type="checkbox"/> Cultural <input type="checkbox"/> Civil society <input type="checkbox"/> Other:	<b>Sector of activity</b>	
<b>Description of the association</b> (max 1.000 characters):			

### If you are a research organisation

<b>Research Organisation type</b>	Research Organisation ( <input type="checkbox"/> Private <input checked="" type="checkbox"/> Public) High Education School / University / Institute ( <input type="checkbox"/> Private <input type="checkbox"/> Public) <input type="checkbox"/> Other, please specify:
<b>Description of the organisation</b> (max 1.000 characters):	
<p>The National Institute of Research and Development for Technical Physics (NIRDTP) belongs to the highest ranked class of research institutes from Romania. As a result of its outstanding, nationally and internationally recognised results in the fields of magnetism, magnetic materials and their applications, the institute earned in 2000 a nationally acknowledged status of Center of Excellence. The specific research agenda within the Department of Magnetic Materials and Devices includes: the preparation of novel magnetic materials with new structural characteristics and enhanced physical properties by means of conventional and unconventional techniques; the study of new physical effects and phenomena in special magnetic materials (e.g., characterized by local magnetic ordering, low dimensionality, etc.); the development of new applications based on the magnetic properties of novel materials; design and testing of new sensor devices based on micro and nanomaterials.</p>	

### Section 3 – Sector of interest

<b>Further information on the sector of interest</b> (max. 500 characters)	New nanotechnology-based systems, microsystems, sensors for security applications: remote identification, tracking and monitoring
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<b>Research topic according to the work programme</b>	SEC-2010.3.2-1 Monitoring and tracking of shipping containers
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### Section 4 - Description of your expertise

<b>Description of the expertise</b> (max 2.000 characters)	<ul style="list-style-type: none"> <li>- Development of various sensor devices, including multi-parameter sensors, which allow remote detection, identification and tracking of different objects based on specific codes;</li> <li>- The sensitive elements are based on micro and/or nano-materials, such as microwires, nanowires, nanoparticles or nanodots;</li> <li>- We have an extensive experience in the design and test of magnetic sensors, transducers and actuators;</li> <li>- Preparation and characterization of amorphous and nanostructured materials under different shapes (wires, ribbons, powders, thin films) with tailored physical properties according to the specifications of the intended applications.</li> </ul>
<b>Keywords describing the expertise offered</b> (please complete as required)	<ol style="list-style-type: none"> <li>1. magnetic sensors</li> <li>2. remote identification, detection, tracking, monitoring</li> <li>3. materials for sensors</li> </ol>

### Section 5 – Your previous experience in FP projects

<b>Former participation in FP European projects?</b>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>If YES (please specify)</b>	<p>Project title: Spin Current Induced Ultrafast Switching, Network for Nanostructured Materials of ACC, Magnetoelastic Energy Systems for Even More Electric Aircraft</p> <p>Acronym: SPINSWITCH, NENAMAT, MESEMA</p>
<b>Activities performed</b>	<input checked="" type="checkbox"/> Research <input type="checkbox"/> Demonstration <input checked="" type="checkbox"/> Training <input checked="" type="checkbox"/> Technology <input checked="" type="checkbox"/> Dissemination <input type="checkbox"/> Management <input type="checkbox"/> Other:



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<b>Please describe briefly your role in the project</b> (max. 700 characters):	<p>-Preparation of materials for sensor applications;</p> <p>-Sensors design and testing;</p> <p>-Training of PhD Students;</p> <p>-Technology transfer.</p>
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### Section 6 – Expectations

<b>Term commitment</b>	<input type="checkbox"/> Short (< 1 year) <input checked="" type="checkbox"/> Medium (1 to 3 years) <input type="checkbox"/> Long (more than 3 years)
<b>Commitment offered</b>	<input checked="" type="checkbox"/> Research <input type="checkbox"/> Demonstration <input checked="" type="checkbox"/> Training <input checked="" type="checkbox"/> Technology <input checked="" type="checkbox"/> Dissemination <input checked="" type="checkbox"/> Management <input type="checkbox"/> Other:
<b>Proposed role in the project</b>	<input type="checkbox"/> Coordinator <input checked="" type="checkbox"/> Work package leader <input checked="" type="checkbox"/> Partner <input type="checkbox"/> Other role:
<b>Expected results for your organisation</b> (max 500 characters)	<p>-Increased capability for research on new materials for security applications;</p> <p>-A network of partners for future project applications in the Security programme;</p> <p>-Researchers with extensive experience in technological applications for security purposes.</p>

### Section 7 – International cooperation

<b>Are you interested in international cooperation?</b>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>If YES, Please specify the geographical area(s) of interest</b>	<input checked="" type="checkbox"/> Mediterranean area <input checked="" type="checkbox"/> Balkan area <input type="checkbox"/> Russia and NIS (Newly independent States) <input type="checkbox"/> Asia <input type="checkbox"/> Africa <input type="checkbox"/> South America <input type="checkbox"/> Other:



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### Section 8 – PPT or PDF Presentation

<b>Profile .ppt/.pdf presentation enclosed</b>	<input type="checkbox"/> Yes <b>(Please enclose the file!!)</b> <input checked="" type="checkbox"/> No
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In respect to the Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 Right to the Protection of Personal Data, I authorize the use of my personal data

PLEASE COMPLETE AND RETURN IT TO: