

Science with and for Society - SwafS – Partner search

☒ I offer **my expertise to participate as a Partner in a project**

☐ I offer **my expertise as a Coordinator in a project**

→ **Please** complete all sections of the Form:

Call: Science with and for Society

Topic: SEAC-1-2015 Innovative ways to make science education and scientific careers attractive to young people

Offer valid until: **16/9/2015**

① Project Information

Field of expertise related to the topic: Group of Advanced nanotechnologies at CEITEC has been closely cooperating with high tech companies dealing with development and fabrication of nanotechnology tools such as high resolution electron microscopes, focused ion beams and complex technological and analytical systems. A significant number of our graduates has been already drafted by these companies (FEI and TESCAN). Generally, we are experienced in the methods effective for attracting young people to study scientifically and technologically demanding fields and, most importantly, for making their sustainable decision to build a successful professional career in these fields

Potential Contribution to the project : We propose following activities:

1. towards secondary schools:

- a) Popular presentations on topics of modern physics and nanotechnology at secondary schools (interesting experiments) given mostly by PhD students and postdocs.
- b) Workshops and hands on training at IPE/CEITEC, especially Physical Exploratorium – “learning by doing” (described in details below).
- c) A series of popular lectures for young people and public (IPE, CEITEC, Technical museum,
- d) Excursions to universities and high-tech companies in CR (FEI, TESCAN, ON SEMICONDUCTOR, ...).

2. Towards secondary school teachers:

- a) Training secondary school teachers in modern physics and nanoscience.
- b) To help/assist teachers to become familiar with and competent in fields of modern physics and nanoscience.
- c) To facilitate creating/establishing a network between researchers in nanoscience and school teachers (cooperation with Union of Czech mathematicians and physicist and the Czech physical society).
- d) To support development/design/ of state-of-the-art secondary school textbooks focused on new physics and nanoscience.

3. Towards university students

- a) International workshops and hands on training at IPE/CEITEC or elsewhere (For instance, we propose a similar activity such as the summer course organized by BEST and IPE BUT in 2015 - “Size does matter: Explore, Design & Touch the Nanoworld “ (see <https://www.youtube.com/watch?v=nHkaChUmPN8> or <http://best.vutbr.cz/sc15/download/SC15-Schedule.pdf>).
- b) Student projects (experiments on true scientific instruments) through a project Grant

Agency. c) International Summer Schools (held every three years and devoted to topics related to nanotechnology). d) Excursions to universities and high-tech companies in CR and EU (FEI, TESCANA, ON SEMICONDUCTOR,...). e) Excursions to popularization institutions and scientific centers in EU
Role in the project <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Research <input checked="" type="checkbox"/> Training </div> <div> <input checked="" type="checkbox"/> Dissemination <input type="checkbox"/> Technology development </div> <div> <input type="checkbox"/> Other </div> </div>
Project idea:
Project description:
Already experience as a coordinator <input type="checkbox"/> yes <input checked="" type="checkbox"/> no x or partner <input checked="" type="checkbox"/> yes x <input type="checkbox"/> no If yes, in which projects?
Other partners in the consortium already identified (with their countries)

② Target Coordinator/Partner Sought	
Organisation details :	
<input type="checkbox"/> higher education / university	<input type="checkbox"/> industry/SME
<input type="checkbox"/> research institution	<input type="checkbox"/> consultancies
<input type="checkbox"/> public partner	<input type="checkbox"/> private partner
<input type="checkbox"/> NGOs / voluntary organisations	<input type="checkbox"/> other (specify)
<input type="checkbox"/> education	<input checked="" type="checkbox"/> No preferences
Expertise / competency :	

③ Contact Details			
Contact person	<input checked="" type="checkbox"/> Ms <input type="checkbox"/> Mr Marketa Borovcova		
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Website	www.ceitec.eu		
Short Profile of Organisation			
<p>CEITEC is a scientific centre in the fields of life sciences, advanced materials and technologies whose aim is to establish itself as a recognized centre for basic as well as applied research. CEITEC offers a state-of-the-art infrastructure and great conditions to employ excellent researchers. CEITEC was approved by the European Commission on 6th June 2011. It is a consortium whose partners include the most prominent universities and research institutes in Brno, and it benefits from the support of the Region of South-Moravia and the City of Brno. Multi-field CEITEC is in fact the first type of a scientific centre in the Czech Republic to integrate research and development in the fields of life sciences, advanced materials and technologies in such a large range. The research is divided into 61 groups and 7 programmes: 1. Advanced Nanotechnologies and Microtechnologies, 2. Advanced</p>			



Materials, 3. Structural Biology, 4. Genomics and Proteomics of Plant Systems, 5. Molecular Medicine, 6. Brain and Mind Research, 7. Molecular Veterinary Medicine.

Group of Advanced Nanotechnologies is offering its expertise to participate as a partner in SEAC project. This group has got a wide experience in teaching and research activities on nanoscience and nanotechnology. We have been focused to fundamental research in 2D -0D nanostructures and advanced materials (ultrathin films and multilayers, 2D materials – e.g. graphene, nanowires, nanodisks, nanodots,...) with functional properties in the field of nanoelectronics nanophotonics, biomedicine, etc. For several years we have been running a study programme Physical Engineering and Nanotechnology providing about 20 graduates yearly, most of them remaining in the field of R&D.

Date:

I agree with the publication of my contact data on the NCP Network website and on other national websites

yes ☒ no ☐

Please fill in the partner search form and return it to the national contact point for Science with and for Society.