



EURAXESS Members in Focus

Poland - Dynamic growth of R&D investment and a large market of opportunities

Highly developed specialist personnel, a large number of scientific institutions and research centres, dynamic growth in R&D investments make Poland an attractive research destination.

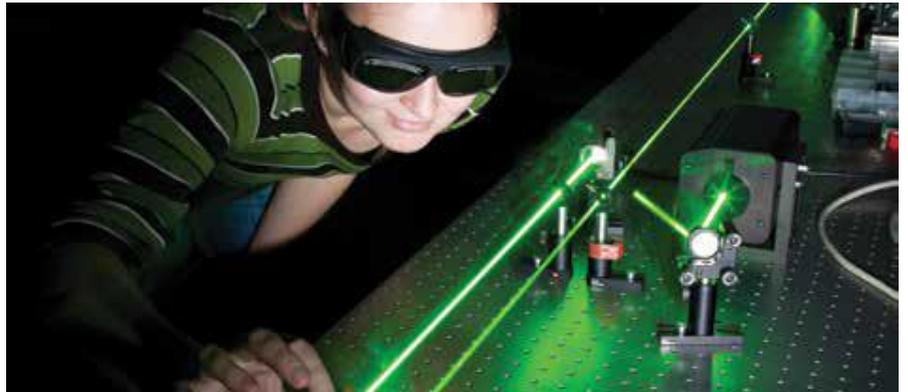
In 2013, Poland devoted more than €3.4 billion, almost 1% of its GDP, to Research and Development. The country's strategy is to increase this amount to 1.7% of GDP by 2020. The rate of investment in R&D has more than doubled since 2004 and continues to grow annually. The majority of the gross expenditure on R&D is funded by the government - 47.3% of the total R&D expenditure in 2013. However, the ratio of funding coming from the business sector is rapidly increasing and was 37.3% in 2013.



- Poland has a highly educated workforce, stable economic growth and strong security of research
- 25% growth in the number of international researchers from 2012 to 2013
- Poland is a prime location for international investment, housing
- R&D centres of multinational giants including Mc Kinsey & Co, Volkswagen, GlaxoSmithKline, Microsoft, Unilever, Roche, Siemens, Pratt&Whitney, IBM, Motorola, Google, Oracle and many others



- There are a large number of opportunities to get technological support for investment in fixed assets and training
- Science and technology parks facilitating the establishment and conducting of business and research activities



➤ According to Central and Eastern Europe Development Institute, the Polish cities of Warsaw, Wrocław and Cracow are the largest regional innovation clusters in terms of employment of scientists and engineers. Photo: Fotolia.com

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land's large domestic market offers plenty of opportunities to cooperate with local companies and universities. R&D activity is growing in all sectors of the economy, however, the following sectors are particularly attractive in Poland:

- Automotive
- Aerospace
- Business services
- Electronics
- Machine industry
- Nanotechnology
- Pharmaceuticals
- Biotechnology
- IT and telecommunications



Where can I find out more



National Centre for Research and Development

The National Centre for Research and Development is the implementing agency of the Minister of Science and Higher Education. It was appointed as an entity in charge of the performance of the tasks within the area of national science, science and technology and innovation policies.

<http://www.ncbr.gov.pl/en/>

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Portal on studying in Poland with information on doctoral programmes

www.go-poland.pl



National Science Centre (NCN)

NCN is a government executive agency that supports basic research by funding research projects carried out by individual researchers and research teams, both on the domestic and international level, as well as doctoral fellowships and post-doctoral internships. NCN announces calls for proposals four times a year. The NCN grantee must be employed at a Polish host institution

<http://www.ncn.gov.pl>



The Foundation for Polish Science (FNP)

FNP is the largest, non-governmental organisation involved in the financing of scientific research, personnel exchange with foreign institutions, and support of the transfer of technology to the economy. FNP activities include awarding individual prizes and scholarships, providing subsidies for the modernisation of scientific laboratories and financial support for implementation projects.

<http://www.fnp.org.pl/en/>



Euraxess Poland

EURAXESS Poland Portal is an information point for internationally mobile researchers wishing to come to Poland or intending to pursue a scientific career abroad.

The Polish EURAXESS Services network provides free and personalised assistance to mobile researchers and their families in various matters relating to their professional and daily life.

<http://www.euraxess.pl>



Current Funding Opportunity: The International Research Agendas (IRA) Programme

This programme gives top scientists, irrespective of their nationality, the opportunity to create a research unit (innovative center of excellence) in Poland, which will conduct world-class R&D activities focused on a specific and timely scientific challenge.

What is this programme about?

The International Research Agendas programme is aimed at enabling the creation of research organizations (scientific units), which will be led by scientists with considerable experience in science management as well as their own area of expertise, which will have international teams of renowned scientists from different fields who will conduct research in order to solve a specific global scientific challenge.

The grant should lead to the creation of highly specialized, world-class research centers which apply the best international practices with regards to:

- HR policy
- R&D management
- Commercialisation of R&D results.

Research centres implementing the International Research Agendas programme will conduct their R&D work in line with a pre-approved research agenda. According to the programme documentation the agenda has to highlight a specific scientific issue – a challenge and a means of addressing it. The challenge itself as well as the proposed means of solving it must be important enough so that the results of the research will be likely to be published in top scientific journals and presented at prestigious scientific meetings. The intellectual property developed over the course of the research should have the potential for legal protection and the developed solutions should be applicable. The suggested challenge must be contained within the National Smart Specialization framework (a list of NSS can be found in the downloads sections).



The scope of the proposed research as well as the project lead's international standing are key for the research center's success and its international scientific visibility.

Who should apply

The IRA programme is designed for distinguished researchers from Poland or abroad with recognized research achievements whose experience will ensure the effective functioning of the unit implementing the IRA.

Applicants should, if possible, represent the level of ERC Advanced Grant scientists and have profiles in line with those of applicants for directorial positions in leading scientific institutes in the world e.g. the Max Planck Institute, technological institutes in Cambridge (UK), MIT, etc.

What is on offer?

The International Research Agendas programme is based on the Teaming for Excellence programme announced by the European Commission as part of Horizon 2020. It provides support for specialised, independent research units in Poland which will pursue international research agendas in strategic cooperation with renowned scientific institutions from other countries.

The total amount committed for the International Research Agendas programme under the Smart Growth Operational Programme (Measure 4.3) is about EUR 126 million. The Foundation anticipates funding approximately 10 units pursuing International Research Agendas.

The Foundation for Polish Science has declared its support for three applications in competition no. 1/2015 that can be jointly implemented with the Teaming for Excellence project once Horizon 2020 funding is secured. One IRA unit project will be implemented as a result of competition no. 2/2015.

Project funding will include costs of R&D work conducted by the unit implementing the IRA, costs connected with efficient functioning of the unit, costs of operating existing infrastructure, cooperation between partners, and knowledge transfer. However, support for new infrastructure will be limited to the purchase of essential laboratory equipment and fit-out.

Funding will also cover the costs of research staff development related to project implementation.

Deadlines



The first part of the application must be filed by 30 October 2016 at 4:00 pm.

The second part of the application must be filed by 16 December 2016 at 4:00 pm.

The third part of the application must be filed by 21 March 2017 at 4:00 pm.

Every part of the application must be filed in electronic form (see link below)

Where can I find out more?

<http://www.fnp.org.pl/en/oferta/international-research-agendas-ira/>



Kinga Słomińska is in charge of the International Research Agendas Programme at FPS.

Interview with Ms Kinga Słomińska, Head of International Research Agendas Section, Foundation for Polish Science

Ms Słomińska, can you tell us a little about the Foundation for Polish Science and your role within this organisation?

The Foundation for Polish Science was established in 1991. It is a non-governmental, non-political non-profit organisation supporting science in all its areas through:

- *Support for distinguished scholars and research teams*
- *Modernization of research facilities*
- *Assisting innovative ventures and commercialization of scientific discoveries and inventions*

These are our principles.

- *Our main motto is “Supporting the best, so that they can become even better”*
- *Direct support – funding for scholars and research groups*
- *Competition format – all grants, prizes and stipends awarded on the basis of a competition*
- *Peer-review method – in all grant programmes*



- *Scientific excellence – the most important criterion in awarding of support*
- *“Hard money” principle – highly selective in awarding support in all programmes*

I have been working at the Foundation since 2009 and I value the NGO character of the institution greatly. I am responsible for the team implementing the International Research Agendas Programme. It is a great challenge and it requires a lot of internal collaboration and external expertise.

Me and my team work mainly on the substantial part of managing the programme i.e. setting out the principles of the IRAP writing the down into the documentation for the calls and organizing the evaluation process of the applications.

In this call all experts we will ask to perform the evaluation should come from outside Poland to avoid any potential conflicts of interest.

We also organize the support for applicants in explaining the formal requirements and legal aspects of the implementation of projects.

What makes Poland an interesting destination for scientists?

Poland has a great potential of many very talented young researchers, the necessary infrastructure and motivation to refocus our economy towards innovative products and technologies. The majority of funds for research to be spent in the new EU perspective dedicated to science will be spent on R&D projects implemented in academic institutions and companies.

Nature¹ puts Poland at the top of the list of raising stars – countries whose contribution to the number of publications in 68 index journals raised most significantly from 2012 to 2015.

Poland is the largest country in Central and Eastern Europe. Since 1989 it has been going through a huge economic and societal

¹ [http://www.nature.com/nature/journal/v535/n7613_suppl/full/535S56a.html], All countries, great and small, Nature 535, S56–S61 (28 July 2016) doi:10.1038/535S56a Published online 27 July 2016]



change. The democracy brought with it the possibility to build a new transparent policy system also in the area of support for scientific research.

The National Science Centre created in 2011 changed the landscape of funding basic research in Poland. Following the example of such agencies as the European Research Council and the Foundation for Polish Science the NSC makes the decisions on funding based on a peer-review competition system.

Poland has been receiving generous EU funding, of which substantial amount has been invested in R&D. Until 2023 we will spend close to 106 billion EUR received from the EU. Out of this 8,6 billion EUR will be spent in the Smart Growth Operational Programme dedicated to research, development and innovations.

Can you highlight some of the country's flagship research projects?

Poland takes part in many international research projects and initiatives. We are the member country in the European Space Agency, CERN. Polish researchers take part in large international collaborations.

Since 1989, when Poland became once again a democratic country and the doors opened much wider for our scientists have been gaining more and more from scientific collaboration with their colleagues from other countries.

We are at the stage where large scientific projects are being coordinated by Poles and in Poland. One of the fields where Polish science is very strong is physics. Some of the best known projects are implemented in the facilities of National Centre for Nuclear Research at Świerk with the only one in Poland and one of few in Europe nuclear reactor Maria. (<http://www.ncbj.gov.pl/en/o-nas/maria-research-reactor>)

In the general area of biological sciences the International Institute of Molecular and Cell Biology in Warsaw is a well-recognized place with its zebrafish core facility for one (<http://www.iimcb.gov.pl/zebrafish-core-facility.html>), and the Jagiellonian University with the Centre for Experimental Therapeutics (http://jcet.eu/new_en/about-jcet/).



Tell us a little about The International Research Agendas (IRA) Programme. What are the aims of this project?

This programme aims at creation of innovative centres of excellence in Poland, which will be led by outstanding scientists and where the world-class R&D activities focused on a specific and timely scientific challenge will be conducted.

We hope that the new centres of excellence will eventually become benchmarks for research excellence, the management of science and effective cooperation with entrepreneurial investors and partners.

Each centre will be created in cooperation with a foreign research institution. Our Foundation offers seed funding for the first five to seven research teams for 5 years plus administrative costs including access to laboratory space and large equipment.

Why should international researchers apply for this programme?

The International Research Agendas Programme is a unique chance for an established scientist to become the head of a specialized unit with sufficient funding for excellent collaborators.

The successful researcher will have the decisive role in the creation of the structures of the new unit the selection of the scientific problem to be approached and the methods used to approach it. The funding should allow for the engagement of very good researchers from different scientific areas and thus for the creation of a truly interdisciplinary and motivated team of specialists.

The project may be fully independent of existing administrative structures, for example the applicant may apply for funding for a research foundation. Another interesting option is to embed the project and the whole excellence centre within the structure of an existing university and benefit from its administrative support.

This is the second call for this programme. Can you already share any success stories that resulted from the first call?

In the first call the International Centre for Interfacing Magnetism and Superconductivity with Topological Matter (MagTop) project was selected for funding. The project is led by prof. Tomasz Dietl and prof. Tomasz Wojtowicz. Within the project a research

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foundation in Warsaw will be established in collaboration with the University of Würzburg (Germany). The research at the centre proposed by profs Dietl and Wojtowicz will focus on materials: the physics of semiconductors, magnetism and superconductivity, nanotechnology. The aim is to create new topological materials. The quantum materials are at the forefront of material research nowadays. This seems to be a timely choice of research area as this year's Nobel Prize was awarded to David J. Thouless, F. Duncan M. Haldane and J. Michael Kosterlitz "for theoretical discoveries of topological phase transitions and topological phases of matter". At the present formal aspects of setting up the research centre are under way and soon the research work should start. The centre will surely search for good candidates for team leaders and team members at the beginning of the next year.

Thank you very much for this interview!

Kinga Słomińska has been working at the Foundation for Polish Science for almost 8 years focusing mainly on “mobility in” programmes such as the Welcome programme – for established scientists and the Homing Plus programme for post-docs and international collaboration including the Polish-American Scientific Award and national selection for the first Teaming for Excellence call. Since June 2015 she is the Head of the International Research Agendas section responsible for the implementation of the IRAP. Her background is in high energy and particle physics. In 1997 she obtained the MSc from Warsaw University.