EURAXESS – Researchers in Motion is an initiative of the European Research Area (ERA) that addresses barriers to the mobility of researchers and seeks to enhance their career development.

This pan-European effort is currently supported by over 40 countries, of which we will profile one in each of our quarterly EURAXESS Japan newsletters. In this edition, we will zoom in on Slovakia.

EURAXESS Members in Focus: Slovakia

Slovakia is a young and dynamic country offering an increasing number of opportunities to carry out excellent research and to turn it to practical application or business ideas. Slovakia has a strong ambition to take another step forward, to become the hub of innovations and encourage more Slovak companies to follow the examples of ARDACO, c2i, ESET, Ecocapsule, GA Drilling and several others that are among the innovation leaders in their fields. Research and development should be in the heart of this exciting transformation.

Slovakia and its Research, Development & Innovation System

R&D in the Slovak Republic is carried out particularly at public sector institutions, including 23 public and state universities, 57 institutes of the Slovak Academy of Sciences and specialised research institutes established by state administration central bodies. The private sector currently lags behind in R&D activities but several targeted policies and funding programmes should help to increase the number of researchers in private companies in the near future.

The share of researchers in the working population is slightly under the EU average. However, foreign researchers only represented 2.44% of researchers employed in Slovakia in 2014. Increasing the number of international researchers is therefore one of the main challenges for Slovakia.
R&D expenditure in Slovakia was of 0.89 % of the GDP in 2014, but plans are to reach up to 1.2 % by 2020. During the last decade brand new research infrastructures have been established or upgraded in all key research institutions and many research institutions now have an infrastructure comparable to that of the best R&D institutions in Europe, thanks to the Structural and Investment Funds of the European Union. Further upgrades are expected by 2020: indeed the Slovak Republic became together with Portugal the most successful country in the first Teaming for Excellence Call (Horizon 2020) with a gain of four projects which should result in the creation of international centres of excellence.

GOOD IDEA SLOVAKIA

Research and Development in Slovakia, Brochure, 2016

Several new Science Parks were established since 2007. Comenius University Science Park in Bratislava (in the picture above) should provide the space for collaborative interdisciplinary research in the fields of biomedicine, biotechnologies, environmental medicine and related societal challenges. (Photo: Vladimír Kuric)

Research Excellence in Slovakia

The areas with the largest potential to contribute to the excellent, cutting edge research on the international scale were defined in the Research and Innovation Strategy for Smart Specialisation which outlines the R&D priorities to be funded in the forthcoming years via national funding schemes but also via EU structural funds. These areas reflect both the scientific and research capacities available and the economic specialisation of Slovakia. The R&D priorities include materials & nanotechnology, ICT, biomedicine & biotechnology. Technology priorities include industrial research, environmental & agricultural research and research on environmentally friendly and sustainable energy. The role of social sciences in tackling the global and local societal challenges is also stressed in the Strategy.
The majority of institutions producing excellent and innovative research are located in Bratislava, one of the most innovative regions in the new EU member states according to the EU Innovation Scoreboard. But research excellence and strong innovation potential can also be found elsewhere. The region of Košice is

building its reputation of the Slovak "Silicon Valley" with a high concentration of ICT firms and related R&D activities**. "**IT Valley" cluster was one of the first industrial clusters in the region of Central and Eastern Europe awarded with the Gold Label of the European Cluster Excellence Initiative. The region of Žilina is becoming a home of top quality research on intelligent transport systems not only because of the presence of the numerous companies related to the car and transport industry but also due to the ERA Chair grant awarded to the University of Žilina.

Recruitment Opportunities

Public Sector Recruitment Opportunities

Most researchers in Slovakia are employed in public sector institutions, with universities being the most important employers of research staff. All positions open at the Slovak universities are published on the webpage of the Ministry of Education, Science, Research and Sport of SR. Similarly, the Slovak Academy of Sciences announces all vacancies via its public website. Experienced scientists from abroad who are interested in working at the institutes of the Slovak Academy of Sciences can also apply for a fellowship within the SASPRO programme, co-funded under FP7. The programme allows applications for a fellowship from 12 to 36 months, while the field of science within which it is possible to submit applications is not limited.

PhD candidates are considered to be regular students in Slovakia and receive a monthly scholarship if enrolled as full time students. Selected PhD programmes offered in English language can be found in the overview prepared by SAIA.

Slovak researchers working abroad who consider returning to Slovakia might be interested in the reintegration programme "Návraty" introduced last year. The programme enables research institutions from the public sector to open the positions for highly qualified Slovaks living abroad and receive the extra funding from the state that would enable them to provide competitive salaries and other conditions to the returnees.

Researchers considering a short-term research stay in Slovakia can choose from a variety of available options. The largest programme providing funding for study and research stays in duration from 1 - 12 months is The National Scholarship Programme (NSP) administered by SAIA, n. o., a mobility funding agency being also a member of European EURAXESS network. More information about the programme is available at www.scholarships.sk

Private Sector Recruitment Opportunities

Recently introduced innovation policies (support to clusters, innovation vouchers, tax reliefs) and funding programmes provide incentives to the development of stronger research potential in the business sector. The creation of new technological start-ups is also strongly supported without limitation to Slovak citizens only.The Concept Paper on Start-up support in Slovakia adopted in 2015 foresees various advantages for international researchers who decide to start their innovative business in Slovakia. These include start-up visa, grants and more. With its population of around 5 million Slovakia might be too small to be the final market for start-ups but it is ideal for testing new ideas.

Funding Opportunities

The competitive funding for R&D and innovation projects is provided by several public agencies. The major R&D grant agency in Slovakia is the Slovak Research and Development Agency (SRDA) offering funding for research project in both basic and applied research and across all scientific areas. Employees of universities and the Slovak Academy of Sciences can also apply for smaller grants supporting basic research (VEGA grants) and use of its outcomes in the educational process (KEGA grants).

Larger infrastructural project and collaborations between the academia and industry are mostly supported by the Structural and Investment Funds of the European Union. More than 2.2 billion euro is allocated in the Operational

Programme Research and Innovation for the period 2014 - 2020. Two agencies are involved in the distribution of funding from this Programme: the Research Agency and the Slovak Innovation and Energy Agency

Cooperation in science, research, development and innovation between Slovakia and Japan

The Joint Visegrad 4 - Japan Seminar on Technology Transfer seminar was organized as a joint effort of the Embassies and the Agencies of the Visegrad 4 countries and the Japan Science and Technology Agency. Its aim was to introduce top research institutes from the V4 countries and their latest findings in the area of “Nanomaterials for Industrial Use” to Japanese scientific and business audience.

The basis for scientific and technical cooperation between Slovakia and Japan is an agreement on Scientific and Technological Cooperation (1978) at the time of Czechoslovakia. After consultations on scientific and technological cooperation between Slovak Government and Government of Japan the two countries established cooperation the Slovak Academy of Sciences (SAS) and the Japanese Agency for Science and Technology (JST) followed by Slovak participation at the "Science and Technology Ministers' Roundtable Meeting" within the Forum for Science and Technology in Society (STS) in 2012.

In 2013, at the summit of Prime Ministers of the countries of the Visegrad Four - Slovakia, Czech Republic, Poland and Hungary - and Japan, the Year of exchanges between the V4 countries and Japan was established, leading also to various forms of exchanges in field of science and technology.
In 2014, during the Presidency of Slovakia in V4, a new form of cooperation on excellent scientific and technology institutions was established combining relevant agencies of each V4 country with the Japan Science and Technology Agency (JST), which have agreed to work together with the projects in the field of advanced materials and nanotechnology and signed a Memorandum of Cooperation which SAS is responsible of implementing.

The SAS launched in 2015 the first call for projects under the joint research program "V4 - Japan on Advanced Materials". As one of the results the Joint Visegrad 4 - Japan Seminar on Technology Transfer: “Nanomaterials for Industrial Use” took place in June 2016 in Tokyo.

Important information for incoming researchers

Practical assistance to international researchers is available at EURAXESS Service Centres in five Slovak towns. The most comprehensive summary of practical information for mobile researchers is available on the national portal of the Slovak EURAXESS Network (www.euraxess.sk) and in the regularly updated International Researcher’s Guide to Slovakia.

The instrument of **hosting agreement** was introduced to simplify the relocation of third country researchers to Slovakia. Researchers who signed a hosting agreement with a research institution or a university can apply for a temporary residence for the purpose of research and development. This type of residence requires fewer administrative duties and allows faster decision-making procedure. In this case, a researcher does not need a work permit or a confirmation of a possibility to fill a vacant position.