

Science parks as ecosystems for efficient technology transfer and innovation

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TECHNICKÁ UNIVERZITA
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Innovation is an important part of life; it is the engine of society's development that can improve the quality of life. Support for innovative technologies and technology transfer in Slovakia is offered through science parks - established universities and the Slovak Academy of Sciences.

Science parks play an important role in the process of innovation, development of new technologies and technology transfer. Through the research and development capabilities, they contribute to economic growth and development of the country. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), there are more than 400 science parks worldwide. Stanford University Science Park in Silicon Valley, established in the 1950s, is one of the oldest science parks. Sophia Antipolis Science Park in France (established in the 1960s), or Tsukuba Science City in Japan (established in the 1970s) have also served their purpose for long decades. Most of the science parks, innovation centers and technology parks are, as reported by UNESCO, located on the European continent.

The main role of science parks is to support leading applied research and enable the transfer of knowledge from the academia to the economic and social practice through technology transfer (licenses, spin-offs or other forms of knowledge processing). From this point of view, science parks are complex units that:

- focus on the systematic development of the key science and research institutions in the region;
- integrate the research infrastructure into a larger entity and have a network of unique modern research equipment, laboratories and departments;
- provide opportunities for the acceleration of ideas and for the incubation of innovative companies through applied research: they facilitate the creation and accelerate the growth of new businesses

through incubation and spin-off mechanisms;

- have high-quality, effective scientific management, based on relevant experience from prominent science parks, which guarantees the quality management and sustainability of the university science park;
- in addition to research and development support, they also provide a growth impulse to the region.

The USP TECHNICOM has become an innovative platform and interface for all regional research and industrial actors.

Until now, seven science parks have been established in Slovakia: The University Science Park for Biomedicine (Bratislava); the Comenius University in Bratislava Science Park; the University Biomedical Science and Technology Park in Košice (MediPark); the University Science park of the University of Žilina; the University Science Park TECHNICOM (Košice); the University Science Park at the Slovak University of Technology (Bratislava); and the University Science Park CAMBO (Trnava).

Also, five research centers were established in Slovakia: the

Biomedical Center Martin; the AgroBioTech Research Centre (Nitra); the Research Centre of the University of Žilina; the Centre for Applied Research of New Materials and Technology Transfer (Bratislava); and the Research Centre for Progressive Materials and Technologies for Present and Future Applications "PROMATECH" (Košice).

In the context of public research and development institutions, the established science parks and research centers represent a significant institutional innovation in the area of applied research and development, and are considered a national strategic R&D infrastructure, which has the potential to increase the innovative performance of the Slovak economy.

University Science Park TECHNICOM

The establishment of science parks in Košice was a natural step towards innovation and technology transfer as a result of the conditions in the region - the presence of three well-known universities in the municipality and a strong IT industry.

The USP TECHNICOM, as an organizational unit of the Technical University of Košice, creates an ecosystem enabling more efficient acceleration of technological transfer, innovation and business support at the university. Further, it supports the implementation of applied research and development, while ensuring the transfer of research and development results into economic and social practice. The USP provides an incubation environment that enables the acceleration process for the formation and development of small and medium-sized

hi-tech companies or startup and spin-off businesses.

The USP TECHNICOM is also a place where scientists and researchers get involved in commercial activities and collaborate with technology companies, thus promoting the transfer of research and development results to economic and social practice. The USP TECHNICOM focuses on applied research in multiple fields: information and communication technologies, electrical engineering, mechanical engineering, civil engineering and environmental engineering.

Startup and Incubation Program

The USP TECHNICOM formed the ground for the emergence and development of business activities enabling business acceleration in the form of a Startup Center and Incubator. Since 2014, twice a year it has been organizing a competition of innovative ideas, involving so far over 140 innovative projects. The winners are rewarded with a six month stay at the Startup Center, which includes an accelerated training program to support the development of innovative ideas.

The startup support then continues with the incubation program in Incubator, where a business plan is created for the innovative project and ultimately a business entity is created. At this stage, USP TECHNICOM helps to obtain real financing for the development of innovative projects.

The USP TECHNICOM has become an innovative platform and interface for all regional research and industrial actors. It is home to several research and development innovation centers, established by specialized departments of TUKE, and external entities, yet also home to nearly 20 innovative startups.

We believe that with our activities we will help to support innovation and promote talents from the region of Košice, and assist them on their path to international success.