## Role of Technical University in the Development of Innovation Process

## Daniel Kaminsky<sup>1</sup>, Ví tì zslav Zamarsky<sup>2</sup>

<sup>1</sup> Associate Professor, Department of El. Measurements, FEI VSB TU Ostrava, Member of the board of directors of Ostrava Science Technology park, http://www.vsb.cz, Tel: +420 602 794569, Fax: +420 69 699 6147, Daniel.Kaminsky@vsb.cz

**Abstract:** Ostrava Region located in the northeast part of the Czech Republic is now in the critical phase of heavy restructuralisation. It is based on playing down the coal mining, metallurgical and heavy machinery industry. The restructuring requires the development of tertiary sector in the region and mainly the intensive development of small and medium companies (SMEs). In this situation the role of VSB Technical University Ostrava is changing too. The university is now playing the important role in the region process by taking the responsibility in support of innovation technologies. One important activity the VSB Technical University supports is the process of establishing the new businesses in technological area and creating new jobs within the Ostrava Science-technology Park. The paper describes this problematic in detail.

Keywords: Science-technology parks, SMEs, employment, technology transfer

Ostrava Region located in the northeast part of Czech Republic in the neighborhood of Poland and Slovac Republic is now in the critical phase of heavy restructuralisation. It is based on playing down the coal mining and metallurgical industry. The restructuring requires the development of tertiary sector in the region and mainly the intensive development of small and medium companies subsequently creating the new jobs for the people being unloaded from the region traditional industry. These new companies focused into the high-tech will be providing the space where the highly qualified university graduates can find their jobs too.

In this situation the role of VSB Technical University is changing too. The University with long historical tradition (over 150 years) having the polytechnic character is now playing the important role in the region process by taking the responsibility in the support of innovation technologies. The focus is on the technologies leading to innovation process at the University itself but also in looking for other ways to support the technology transfer processes. The University is implementing the technology transfer problematic into the educational process in almost all specializations. University is participating on the R&D tasks on national and international level and also established the Liaison office to help the technology transfer process from University to the industry.

Other important way the University supports the process of establishing new business in technological area and creating new jobs in this sphere is the project of Ostrava Science-technological Park. Its main goal is to open the effective collaboration among the Universities, Research and Development Centers and Industry within the high-tech. The founders of Ostrava Science-technology Park are VSB Technical University Ostrava, Ostrava Municipality, Agency for Regional Development and two other regional Universities – Ostrava University and Silesian University in Opava.

The idea of Science and Technology Park came in 1994 from VSB Technical University Ostrava and City of Ostrava. The project was seen as the international from the very beginning. The pre-

<sup>&</sup>lt;sup>1</sup> Professor, Head of the Institute of Geology, HGF VSB TU Ostrava, Chairman of the board of directors of Ostrava Science Technology park, http://www.vsb.cz, Tel: +420 69 699 5461, Fax: +420 69 691 8507, Vitezslav.Zamarsky@vsb.cz

investment phase has been financed by the EU funds ad the project design was executed by the consortium of the firms – IDG Ireland and DHV CR. Coordination and management of the project was entrusted to the Regional Development Agency Ostrava who secured the finances too. According to the feasibility study conclusions the form of multipole concept with the core center and satellite units has been proposed and realized. In 1997 the joint stock company – Ostrava Science and Technology Park has been established as the results of a couple of years effort within the preparatory phase. The multipole concept advised in the feasibility study allows integrating the already existing companies and firms from the North Moravia Region into the Science and Technology Park structure. The concept is based on the idea of having the main center and the links with the satellites units – centers of excellence.

The main center will be build up in the close neighborhood of the VSB Technical University Ostrava in the green field area of about 100.000 m<sup>2</sup>. The center will be offering the following services:

- Economical, law and tax consulting service
- Credit and venture capital service
- Support to the new established companies and entrepreneurs
- Central services (information center, library, reception services)
- Technology transfer center
- Incubation units
- Industry liaison center
- License and patent law center

Satellite centers will be also providing the services for the incubation units inside the Science and Technology Park, as are the offices, labs etc.

The most important purpose of the established company Science-technology park is to create a top level workplace in the region in cooperation with universities and science & research institutes for the coordination of scientific and technological development in companies and for the transfer of advanced technologies, with the objective to attract important international investors in the field of high technology as well as to commercialize the results of scientific research.

The business areas into which the company Science and Technology Park is focused are the following ones:

- Purchasing, facilitation and sale of realty
- Facilitating of the business and services
- Counseling
- Offices and building renting

Currently the company Science and Technology Park operates within the region of Northern Moravia and Silesia but goes forward to extend the operational space to the whole Czech Republic and expands also abroad. The Science and Technology Park project is built in stages. Currently the company operates inside the offices rented from the VSB Technical University

Ostrava. There are now both the company administration offices and also the incubation units. Currently there are 5 companies inside the incubation units and the company works with 5 satellite centers. Further grow of the company is now kept back by the lack of free space for further incubation units. Therefore now the main effort is put into the construction of the full serviced building site where the main center facility will be build as well as the space for the further private investors will be prepared. The result will be approximately 30.000 m² prepared for the building of the main center facility and for private investors willing to build up their own facilities within the Ostrava Science and Technology Park. The Science and Technology Park main building will be offering approximately 2600 m² for incubation units. The fully serviced building site will be finished within this year and also the construction of the Science and Technology Park main building and first private company facility will start in the last quarter of this year. Funding will be provided from EU funds via the Regional Development Agency Ostrava jointly with the investments from Ostrava Municipality.

Further the Science and Technology Park is offering to the potential partners complete technological research and development back office by three regional universities and all services described above in this paper. All this is mainly targeting the new companies and entrepreneurs focused into the high-tech.

The project of Ostrava Science and Technology Park was seen as the international project from the very beginning. The president of the VSB Technical University Ostrava and the Mayor of the Ostrava City put it in neatly when the Science-technology Park has been established:

"We see this Science-technology Park built with the support of the City of Ostrava, as an initiative for the future. From the Science and technology park we expect development of new business and of employment opportunities in the field of high technologies and the exploitation of foreign investment in this field"

Evžen Tošenovský, Mayor of City of Ostrava

"The Science and technology park is not just a project for the universities and their scientific staff but an opportunity for the whole a range of firms seeking a high quality environment for investment of strong intellectual potential. It will be a valuable legacy for the next generation"

Tomáš Èermák, President of VSB TU Ostrava