

Support for Research Teams in applying for European Union Funds on the Example of the Silesian University of Technology

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ABSTRACT: *In order to support research teams applying for European Union funds within Framework Programmes, a network of Contact Points was created in Poland and other Associated Countries. In Poland the network of Contact Points consists of one National Contact Point and nine Regional Contact Points distributed all over the country. Branch and Local Contact Points at universities or research institutes are also included in the network.*

One of the nine Regional Contact Points was established in 1999 at the Silesian University of Technology and since then has supported research teams from the region of Silesia. The aims and tasks of the Regional Contact Point at the Silesian University of Technology are the following:

- *to gain current information on Framework Programmes from the sources provided by the European Union, National Contact Point and other national centres*
- *to organise regular trainings, conferences and seminars devoted to dissemination of information on possibilities of co-operation in the field of research*
- *to actively help in search for partners from research and industrial units of Silesia*
- *to elaborate information materials, leaflets and to distribute them among employees of universities and research institutes of Silesia*
- *to provide help and advice on preparation of applications as well as day-to-day realisation and management of research projects financed by EU Framework Programmes*
- *to provide help and advice on preparation of applications to EU structural funds.*

Thanks to active operation of its Regional Contact Point the Silesian University of Technology is among the leaders in the field of fundraising for scientific research. There were 79 applications submitted within the 5th Framework Programme, 18 of which were accepted for funding. This fact puts the Silesian University of Technology on the 9th place among universities in Poland (according to National Contact Point's ranking as of February 2003).

1 INTRODUCTION

This paper concerns the role and activities of the units of Silesian University of Technology, Gliwice, Poland, responsible for promoting the successful participation of university researchers in the competition for European Union research funds. The main sources of such funds are the EU Framework Programmes for Research, Development and Presentation. The Silesian University of Technology actively participated in the 4th, 5th and currently in the 6th Framework Programme. The successful participation in the international research programmes has been identified by the SUT's authorities as one of the priorities of the university development and a special unit – called Epicentre – has been established at SUT in order to assist the scientists in applying for European Union funds in the field of collaborative research. This unit established the basis for the later creation of Regional Contact Point for European Union Framework Programmes at Silesian University of Technology. The paper concentrates on the role and achievements of this Regional Contact Point with respect to the training activities, finding partners for research projects and the projects management assistance as well as the creation of so called centres of excellence at the university and their impact on the research collaboration.

The role of SUT's units involved in the process of applying for EU funds for research is twofold: the first one concerns the research itself and the second – building the appropriate research support structures, including the workshops, seminars and training organisation. The Regional Contact Point plays both roles

as identified above and this is in accordance with the research and internationalisation policy of the Silesian University of Technology.

2 NATIONAL CONTACT POINTS NETWORK IN POLAND

In order to support research teams applying for European Union funds within Framework Programmes, a network of Contact Points was created in Poland and other Associated Countries. In Poland the network of Contact Points consists of one National Contact Point and nine Regional Contact Points distributed all over the country. Branch and Local Contact Points at universities or research institutes are also included in the network.

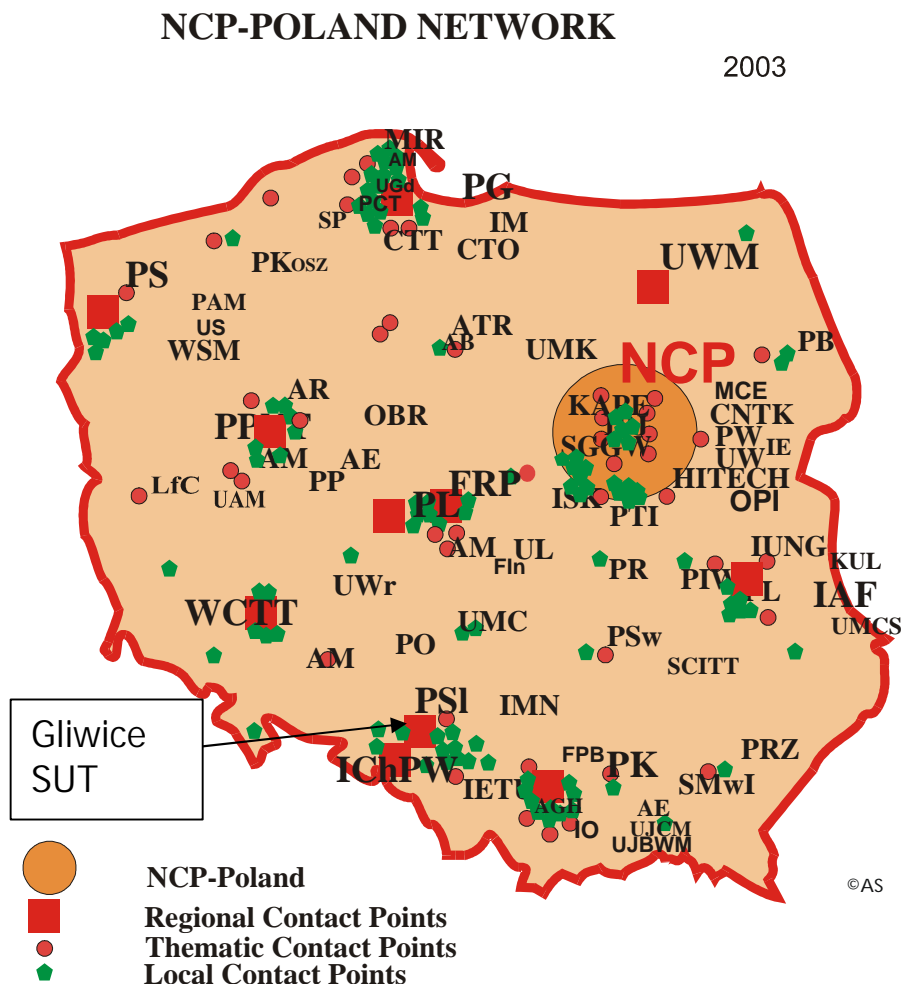


Figure 1 – Map of Contact Points Network in Poland

One of the nine Regional Contact Points was established in 1999 at the Silesian University of Technology as a result of previous involvement of the SUT's staff in the international collaboration in research. The RCP at Silesian University of Technology functions as a university unit and in addition supports research teams from the whole region of Silesia. The basic tasks of the Regional Contact Point at the Silesian University of Technology are the following:

- to gain current information on Framework Programmes from the sources provided by the European Union, National Contact Point and other national centres,
- to organise regular trainings, conferences and seminars devoted to dissemination of information on possibilities of co-operation in the field of research,
- to actively help in search for partners from research and industrial units of Silesia,
- to elaborate information materials, leaflets and to distribute them among employees of universities and research institutes of Silesia,

- to provide help and advice on preparation of applications as well as day-to-day realisation and management of research projects financed by EU Framework Programmes,
- to provide help and advice on preparation of applications to EU structural funds.

The main concepts of the future profile of the Silesian University of Technology are included in such documents as the SUT Development Plan, SUT's Mission and European Policy Statement. Participation in the EU Framework Programmes is one of the research policy priorities at the Silesian University of Technology. The active promotion and support for the Regional Contact Point operation by the authorities of SUT significantly contributed towards the success of the Silesian University of Technology research teams in the 5th and 6th EU Research Framework Programmes.

Thanks to active operation of its Regional Contact Point the Silesian University of Technology is among the leaders in the field of fundraising for scientific research. There were 79 applications submitted within the 5th Framework Programme, 18 of which were accepted for funding. This fact puts the Silesian University of Technology on the 9th place among universities in Poland (according to National Contact Point's ranking as of February 2003).

The projects led by the Silesian University of Technology staff concern both the research activities of the SUT's scientists and various activities supporting the research.

3 EXAMPLES OF SUT'S PROJECTS

Below, some examples of projects with the Silesian University of Technology staff participation are reported:

Table 1. Examples of international collaboration research projects with SUT's teams participation

Project title	Acronym	Project type	Faculty
Development, characterisation and scaling of atomizers for a combustion technology that offers significant fuel savings and drastic reductions in both CO ₂ and NO emissions	OIL-TECH	Research project	Energy and Environmental Engineering
Advanced infrastructure for Pan-European collaborative engineering	E-COLLEG	Research project	Automatic Control, Electronics and Computer Science
Information dissemination and European awareness launch for the IST programme under the 5th framework programme	IDEALIST -5FP	Supporting measures	Automatic Control, Electronics and Computer Science
High-resolution continental paleo-climate record from Lake Baikal: a key-site for Eurasian tele-connections to the North Atlantic Ocean and monsoonal system	CONTINENT	Research project	Mathematics and Physics
Assessment of technologies for the removal of pharmaceuticals and personal care products in sewage and drinking water facilities to improve the indirect potable water reuse	POSEJDON	Research project	Energy and Environmental Engineering
Thermo-mechanical fatigue – the route to standardisation	TMF STANDARD	Research project	Mechanical Engineering
Virtual organisations cluster	VOSTER	Supporting measures	Automatic Control, Electronics and Computer Science

Network of European medium- and Large-scale Transport Research facilities Operators	INSTRANSNET	Research project	Transport
Rapid Response Source Term Indicator Based on Plant Status for Use in Emergency Response	EU-STERPS	Research project	Mechanical Engineering
Innovative new high temperature superconducting magnetic energy storage system (SMES) for high efficient power quality	HIPOLITY	CRAFT	Electrical Engineering
400 years of Annual Reconstructions of European Climate Variability using a High Resolution Isotopic Network	ISONET	Research project	Mathematics and Physics
Ultra-compact marine propulsion	ULCOMAP	CRAFT	Electrical Engineering
Scheme to Provide Training and Assistance for Research Players for the Assessment of the Fate and Removal of Pharmaceuticals and Estrogenic Compounds (PECs) Released into the Environment	TRITON	Supporting measures	Energy and Environmental Engineering

As much as 1.045.234 € has been brought to the Silesian University of Technology as a result of the participation in the Framework Programmes projects quoted in the above table, which is an important part of the research-directed budget of the university. New opportunities of participation in the international research initiatives emerged as a result of launching the call for projects in the area of supporting research activities (so called support activities) aiming towards establishing the so called centres of excellence.

4 CENTRES OF EXCELLENCE IN POLAND

There was a special call for proposals at the end of the 5th EU Framework Programme – the one concerning the creation of so called centres of excellence, especially in the Central and Eastern Europe countries. Similar centres of excellence have been established in the Western Europe countries before and the call mentioned above was supposed to produce the matching structure of the highest level research institutions in the rest of the widened European Union.

The centres of excellence are special units or organizational structures which are active in the field of scientific research as well as the development of modern technologies at the world-leading level. The results obtained by such centres operation have to be of measurable nature and have to include substantial percentage of training activities.

The centres of excellence typically group together high number of outstanding scientists with important record of research results. It is supposed that such scientists collaborate with industry with respect to identifying the research areas important from the point of view of the industrial growth of the region, country and multi-country community. It is obvious that such procedure results in better support for innovative concepts developed within the centre of excellence as well as enables better promotion and dissemination research topics and results, new technologies and products, possibly of international interest and importance.

The scientists working in the centre of excellence typically work on strategic tasks from the point of view of region industrial development and collaborate with other research oriented institutions from the region. The centre of excellence is the leading partner of such cluster of research groups, such centre is the basic source of important decisions concerning the research fields and directions. The centres usually function as independent organisations but usually they are closely related to or form the part of well established and recognized research institutions like large universities, Academy of Science institutes and the best other research and development institutes.

The operation of the typical centre of excellence does not include the creation of new research institutes and laboratories. The basic aim of the centre establishing includes the operation as research and training laboratory with close contacts with other research groups and innovation open industrial enterprises in the region. Typically the centre of excellence is involved both in the basic and applied research, especially the ones of innovative character. Obviously as part the centre of excellence status

application it should be proved that the to-be centre employs sufficient number of scientists with relevant record of previous research achievements and that the necessary premises and laboratory equipment are at the applicant disposal.

The centres of excellence have been established in Poland in order to achieve the following basic results:

- to increase the importance of science and research as the decisive factors for the increase of Polish economy potential and the level of society services;
- to establish strong links between research oriented bodies and the industrial enterprises, thus enabling the transfer of innovation;
- to establish the links as well as information and knowledge transfer between research groups from various institutions in regions of Poland;
- to strengthen the Polish system of innovation transfer by establishing strong research and presentation structures and the active promotion of Polish research potential on national and international scale.

The research bodies that were granted the status of centre of excellence in Poland are obliged to undertake the following activities:

- to initiate and maintain contacts with similar research oriented centres in other countries, in the form of broad networks of excellence as well as by means of twins matching among similar centres in different countries;
- to broaden the scope of centre operation in response to new strategies and tasks formulated by the region governing bodies and industrial enterprises;
- to increase the effectiveness of the centre operation by recruiting young scientists and successful participation in various research oriented programmes like European Union Framework Programme.

5 CENTRES OF EXCELLENCE AT SILESIAN UNIVERSITY OF TECHNOLOGY

The Silesian University of Technology has been exceptionally active in applying for the centre of excellence status for several groups of its researchers and laboratories. In 2002 as many as 18 applications have been prepared within the Silesian University of Technology and 6 of them have been granted the status and co-financing from the European Union Framework Programme. The 6 successful SUT's centres of excellence are reported below:

Table 2. Centres of excellence at Silesian University of Technology

Centre of excellence title	Acronym	Faculty
Environmental Biotechnology Research Centre	DEMETER	Energy and Environmental Engineering
Centre of Excellence "Gliwice absolute DAting Methods"	GADAM	Mathematics and Physics
Optimisation, Simulation and Environmental Impact of Energy Systems and Process	OPTI-ENERGY	Energy and Environmental Engineering
Centre for Energy Efficient Technologies and Systems in Indoor Environment Engineering	ENER-INDOOR	Energy and Environmental Engineering
Durability and reliability of railway wheel sets	TRANSMEC	Transport
Centre of Excellence in Physics and Technology of Semiconductor Interfaces and Sensors	CESIS	Mathematics and Physics

As a result of the centres of excellence creation at the Silesian University of Technology several strong groups of researchers have been identified and trained in the field of research organization and project management. The existing scientific potential and skills of the SUT's staff has been accompanied by the new skills of training scientists and successful application for various European research co-financing funds, including the EU Framework Programme. The collaboration between SUT's centres of

excellence staff with similar structures from other European countries has resulted in new valuable contacts making it possible to apply for several important projects in the 6th Framework Programme.

8 CONCLUSIONS

The paper concerns the possibilities of supporting internationally oriented research initiatives of university scientists teams using the Silesian University of Technology example. The main source of the international contacts for collaborative research and co-funding for Polish universities is the EU Framework Programme for Research, Development and Presentation. It is stated in the paper that the Regional Contact Point for such Programme activities is of great help for university scientists aiming at applying for projects within the EU Framework Programme. The operation policies of such Contact Point at Silesian University of Technology are summarized in the paper.

The paper includes some details on successful participation of SUT's teams in the 5th and 6th Framework Programme. The examples of successful applications in the 5th FP are delivered together with the details on the centres of excellence established at the Silesian University of Technology. The whole concept of centres of excellence operation and impact is considered in the paper together with the specific Gliwice view on this subject. It is suggested in the paper that the proper operation of the Regional Contact Point and centres of excellence enabled the greater interest in the 6th Framework Programme among SUT's scientists and made their applications more mature and successful.