

**APPLIED MANAGEMENT METHODS IN R&D: THE CASE OF THE REGIONAL
UNIVERSITY CENTRE OF EXCELLENCE OF THE SZENT ISTVÁN UNIVERSITY
(HUNGARY)**

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Szent István University rendered a successful application in 2005 called the **Regional University Centre of Excellence in Environmental Industry based on Natural Resources (KÖRET – Technology Transfer Centre)**.

The tasks of the Centre of Excellence are to integrate and develop the accumulated knowledge of this field and the existing potential of research and education in the region, to participate in the transfer of knowledge primarily to innovative small and medium size enterprises (SME) in the region.

The objectives of Centre of Excellence are the complex use of natural-economic resources, increase in efficiency of innovative enterprises that share our objectives, require knowledge-intensive technologies as users and cooperate during the realization of objectives.

In my paper I would like to examine the management methods both of state supported and market demand based research projects within the frame of the Technology Transfer Centre as follows:

Research projects

The KÖRET recently has three projects (subprogrammes):

1. Combined composting of sewage sludge and lignocellulose containing waste, supplement of the compost with macroelements and utilization of the end product as a precision plant nutrient in plant farming.
2. Establishment of Danubian monitoring system, model development for the prediction of contaminations.
3. Ecological impact of environmental industry on environmental safety.

Knowledge - technology transfer, use of research results

Management of KÖRET regards technology transfer as a significant issue. An important task of the Centre of Excellence is to **present its activities and disseminate the results** on a national and international level, and also hand over **the existing technologies and processes and also those still under development** to practical usage.

Discovering a new hydrocarbon degrading bacteria:

From the isolated hydrocarbon degrading **microorganisms we described a new bacteria species under the name *Chryseobacterium sp. nov. „hungaricum”***, which is perfectly suitable for: 1) activate and speed up the biodegradation of environmentally polluting organic materials; 2) treatment and cleaning of soil and underground water and surface waters; 3) treatment and cleaning of sewage and sewage sludge; 4) treatment and cleaning of wastes and hazardous waste.

Announcement of patents and know-hows:

We placed microorganisms of the SAFEREMED AH product in **patent deposit**.

We formulated a commercial product named **SAFEREMED AH** consisting of **11 microorganisms** and **received authorization for marketing** it.

Our RETPATHOgen know-how contains a molecular biology/genetic identification process, which detects *Pseudomonas aeruginosa* bacterium from a concentration of 1-10 cell/ml ground water, and 1-10 cell/g soil.

Another deposited **patent** of KÖRET is a **synthetic compound with hormonal activity** that helps induced (artificial) propagation of fish. The patent is waiting for acceptance, the project is in the phase of establishing a spin off company and drawing up the business plan.

Development and benefiting of the laboratory base:

KÖRET established a **high tech research base**. During the investments we managed to create a) ecotoxicological; b) molecular biology; c) fish monitoring laboratories, and the fermentation experimental base is still under construction. With this background KÖRET can already offer services in these research areas.

Education and trainings

Organization and management of educational and training activities plays an emphasized role in the operation of the Center of Excellence.

Fields of training programs: exploitation and utilization of innovation; project management; leadership skills; reintegration trainings of labour market; project generation; EU courses; network establishments, international project management

Project generation

An important task of the Center of Excellence is to generate and manage regional projects. Professional colleagues help to establish consortiums and projects by which cooperation between business and university sphere and also other sectors of the region are realized and thus complex developmental and local synergies are created.