

## Knowledge exchange centre

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“The transfer of knowledge to the economy is a major part of our school’s growth strategy. The Warsaw University of Life Sciences (SGGW) has been working with the commercial sector for years on a broad scale – among others in personnel training, R&D, expertise, and organizing conferences and other meetings on knowledge transfer”, SGGW Rector Professor Alojzy Szymanski tells Polish Market’s Maciek Proliński.

Q: Professor, what was your vision of SGGW when you took over its chair? And how are you managing to realize this mission today?

A: When I took over as the rector of SGGW I had already spent 6 years as the school’s pro-rector for development and was sure its to-date growth policy should be continued. SGGW is Poland’s oldest agricultural school, dating back to 1816. Today it is a modern-day life sciences university with 27 faculties covering farming, technology, biology, veterinary medicine, economy and forestry. In all we offer more than 70 specialist fields where students can set up their own study programmes. We have close to 25 thousand students. We are a modern, open-minded school highly appreciated both in Poland and abroad. It takes quite some time to build up a reputation like ours. The past decade was strongly marked by investment, mainly in our teaching component. One of our major successes was to concentrate our different faculties, formerly scattered around Warsaw and the suburb of Brwinów, in our new, highly-modern building in the Warsaw district Ursynów. Now we are facing another task – developing our research base. We plan to equip the school with infrastructure comparable to that in leading European and world schools. This is important as unfortunately Poland lacks specialized labs and advanced research technology. I intend to carry this through during my term as rector, and a step in this direction will be the construction of several R&D centres. One, a hydrological centre in our environmental engineering department, is almost ready. In the blueprint phase are a food and nutrition, applied biology and renewable energy centres.

From 2007 to 2013 universities can apply for structural funding, which is a very important factor in my plans. I will do my best to make SGGW a well-organized

school with a good teaching and research offer.

Q: How does SGGW manage to forge the vital link between science and the market?

A: Transferring knowledge to the economy is an important part of our development plans. Most notable among our market-oriented units are the Food and Health Diagnostics Laboratory (research on food products, nutrition habits and nutrition levels, quality and safety testing on food and food processing), the Hydrological Research Centre (preparing emergency water intakes for Warsaw and its surroundings), the Analytical Centre (physical, chemical and micro-biological surveys. The unit has an accreditation certificate), the Fruit Storage Unit in our Horticulture Department in Wilanów (fruit quality checks, plant breeding), the Genetics, Plant Breeding and Biotechnology Institute (genetic research on crop plants to boost certain features like resilience to disease, in cooperation with enterprisers), the Experimental Breeding Centre in Obory (research for fodder industry, medical research), the Experimental Station in Żelazna (implementation of non-conventional energy research via wind and water power units), the Small Animals Clinic and Horse Clinic (complex clinical research), the Fishery Experimental Station in Łąki Jaktorowskie (fish breeding), the Arboretum Centre in Rogów (research on foreign tree and bush species and their application in landscaping, pharma industry, beekeeping and industry). Our Knowledge Centre promotes healthy nutrition in monthly public lectures, and the Nature and Forestry Education Centre in Rogów teaches about forests and forestland.

SGGW is part of the Science Ministry's Innovation Creator scheme and has founded an Academic Enterprise Incubator. I believe this is a form of student activity that should be developed to bring research and industry closer together.

Many of our research staff are involved in studies on sustained economic growth, especially in the context of environment protection.

The above-listed R&D units will play a big part in transferring scientific knowledge to the economy. These centres will conduct research on commission from commercial companies and institutions, which will greatly improve the flow of knowledge to industry.

I would like to say a few words about our Hydrology Centre, which is our current flagship project. Thanks to efforts by the Ministry of Science and Higher Education the project was entered on the priority list of the Operational Programme

Infrastructure and Environment for the years 2007-2013. The centre will be Poland's biggest water research unit. It will cover 1.5 hectares, on which there will be a research section including water-testing labs, as well as a historical part devoted to William H. Lindley, the constructor of Warsaw's and Hamburg's water systems. A separate section will focus on natural water environments. Equipped with advanced apparatus and lab facilities, it will conduct studies on water economy, water improvement, sewage treatment, environmental care, bio-diversity, and the effects of climate change on water environments. The offer will also include on-order services for the general public ranging from physical, chemical and bacteriological surveys to research on drinking water, fishery water, agricultural water, medical water, heating water and sewage. We also plan exhibitions focusing on water and sanitary engineering. The Hydrology Centre will be a true testing-ground for our staff and students.

As an educational help we also plan to construct an artificial river bed starting at a source in a mountain range and ending in a basin with waterfalls and cataracts. In the basin there will be an illuminated dock with a glass wall to enable shoreline surveys. All this will be built by our own landscapers and will be open to the public. Water is expected to be a major global problem in coming centuries. There is not enough water – not in Poland, Europe or the world. This is why it is so important to know how to store and protect it and restrict its usage.

Q: Innovation is a real keyword today. How do you define innovation at SGGW? What are the priorities in your research? And how does your Research and Training Organization Centre fit into this?

A: The purpose of our research is to transfer scientific findings to the economy. Our research ranges from livestock studies (new cattle and sheep breeds) to studies of grain, vegetables and fruit. We also carry our water improvement and forestry research. The effects of our research have been visible in Poland for years now. Today we want to intensify and modernize our work. The R&D facilities I have mentioned will certainly be a big help here.

Our research priorities are set down in EU directives: biology, biotechnology, IT, econometry, construction, environmental engineering and environment protection. It is our ambition to become a source of new technology and new methods enabling better products, safer food, bigger crops, and better human and animal health. The 2006-founded Research and Training Organisation Centre offers professional research services and well as consulting and training options

designed to enhance cooperation between science and the economy.

Q: What about innovative learning methods like e-learning, which some of your departments have already introduced?

A: We employ many different methods in our teaching. E-learning is a valuable auxiliary method which adds a lot to the teaching process, but I do not think it can ever replace traditional teaching.

Q: What are your main plans in coming years?

A: Our main project, which we have been working on for several years now, will be a conference centre. We want our school to function as an international meeting place for scientists and businessmen. There can be no progress without knowledge exchange. Our dream is for SGGW to become a major centre of such exchange.