

## LET'S WORK, FRIENDS!



It is likely that everybody in Ukraine understands that the key precondition for the national development, especially in the twentieth century, is an advanced level of research and education that would help Ukraine to take its rightful place in the world economy.

As part of the solution to this problem, on November 21, 2014, the Executive Committee of Western Research Center (WRC) of the National Academy of Sciences of Ukraine and the Ministry of Education of Ukraine held a meeting at which the researchers and economists of the Western Region of Ukraine listened to the report of *Michael Jaworski*, Director of the Lviv Center for Science, Innovations, and IT Development, Candidate of Engineering Sciences on the status of the innovation infrastructure in Western Ukraine. While discussing the report the attendees noted that the competitiveness of the Western Region as part of Ukraine should be associated with a consistent policy for the development of all parts of the regional innovation system designed to commercialize the results of research instead of implementing large-scale and extremely expensive projects.

Elements of market-oriented innovation infrastructure are known to be established in the region in the mid-1980s as self-supporting research centers for the youth, research cooperatives, small businesses, etc. In September 1990, the Lviv Oblast Council passed a resolution no.82 on the concept of the elements of market economy. Then, we have witnessed the creation of *Lviv Guild Association of Small and Medium*

*Enterprises, Yavoriv Technology Park, and Brody Agricultural Technology Park.* Upon initiative of the Center for Research, Engineering, and Economic Information (now, the Center for Science, Innovation, and IT Development) the *Innovation and Investment Projects in Western Ukraine* regular exhibition has been launched and science parks have been established in Uzhgorod and Ternopil.

At the *Investments, Technologies, Development International Forum* held in May 2012, in Lviv, three priorities were defined: 1) the promotion of energy efficient and resource-saving technologies, the implementation of alternative energy sources, and the introduction of environmentally-friendly production technologies; 2) the development of innovative culture and the improvement of innovation infrastructure: a favorable environment for establishing businesses and promoting the growth of advanced technological sectors; 3) the elaboration of financial and tax policy to promote the innovation through joining international innovation projects and establishing a regional fund to support the innovative development.

It is clear that every year the business environment should improve. And the most important thing is to create jobs in the high-tech environment. Now, the western oblasts of Ukraine are rated by their investment attractiveness as follows: Lviv Oblast 1; Ivano-Frankivsk Oblast 2; Volhynian Oblast 7; Ternopil Oblast 14; Khmelnytskyi Oblast 19; Zakarpattia Oblast 24; and Chernivtsi Oblast 26. However, the number of researchers involved in manufacturing processes while implementing the projects accounts for only 4% of the total research staff.

According to the researchers, there is an innovation gap: in Ukraine, the industrial and agricultural sectors order and receive new technologies from global sources, while local researchers and developers cooperate with foreign research groups and institutions in fields that are not referred to the priorities of Ukrainian industry.

What elements of innovation infrastructure support are available in Western Ukraine? They are Chambers of Commerce; Centers for Science, Innovation, and IT Development; Regional Centers for Investments and Development; science and technology parks, industrial parks; innovation incubators; clusters and other groups; small academies of sciences; and non-governmental organizations. Eventually, the experience of innovation support will be used in the formation of cross-border innovation infrastructure. There are also international consortia involving Ukrainian researchers. Unfortunately, the majority of interviewees (87%) responded “no” to the question “Will Ukraine join the path of innovation development?” versus only 7% who answered “yes”. The most of respondents said that in Ukraine, there was neither political will nor interest of financial groups nor middle class to do this.

The following attendees took part in the discussion of report: *Natalia Gurska*, Deputy Director of the Lviv Regional Center for Investments and Development, Candidate of Biological Science (the main task is to combine science and manufacture; this requires grants and technology parks); *Taras Danylovysh*, Director of *Yavoriv* Technology Park, Candidate of Economic Science (the Western technology platform will enable establishing *science – production – business* relations and creating conditions for research commercialization; it is necessary to create a “single window” for getting all required approvals for the projects); *Volodymyr Mayik*, Vice Principal of the Ukrainian Academy of Printing, Candidate of Engineering Science (currently, in Lviv, thanks to the Canadian investors, clusters are developing in the field of publishing, IT, and tourism); *Pavlo Muzyka*, Dean of the Faculty of Economics and Management

at the Gzhytskyi Lviv National University of Veterinary Medicine and Biotechnology, Doctor of Economics (it is necessary to take into consideration an extensive experience of the region in the agricultural sector); *Rostislav Pasichnyk*, Director of *MAiL Service* (we are working on the implementation of R&D products and understand that a platform is necessary. Each manufacturer wants to get a specific R&D product. However, now, there is no mechanism to ensure this, therefore it is very difficult for the manufacturer to find a partner or a design office that would develop and commercialize R&D products and ensure immediate results).

*Zinovii Nazarchuk*, Chairman of the Western Research Center of the NAS of Ukraine and the MES of Ukraine concluded, “Unless science funding reaches, at least, 1.7% of GDP, there will be neither scientists, nor research teams. The participants unanimously agree that there should be a platform for combining the interests and capabilities of all stakeholders. The Oblast Public Administrations in the region should give the Western Research Center an official status of the key research and expert organization responsible for the examination of regional programs and forecasts of the economy, science, and technology in the region, while the associations of manufacturers and entrepreneurs should formulate their needs, as well as research and engineering problems to be addressed involving experts of both research institutions and higher education establishments.”

Hence, one can conclude that it is necessary to create a mechanism for cooperation (the effective *science – industry – government* triangle), insofar as for the most manufacturers it is difficult to find suitable partners or design offices for the R&D development and commercialization and, respectively, to get desired results.

So, let’s work, gentlemen!

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