

*State Organization «Institute of Market and Economic&Ecological
Researches of the National Academy of Sciences of Ukraine»*

**Summary of scientific novelty for the research
"Assessment of the status and perspectives of the development of scientific
research in the southern region of Ukraine"
(Registration No. 0120U103993, period of execution 01.01.2021 - 31.12.2023).**

For the first time:

– a morphological approach was applied to the analysis of the distribution of the structure of regional fundamental, applied research and innovative developments in the context of systematization of the results and innovative activities of scientific institutions, higher education institutions in various scientific sectors, in a wide range of fields of knowledge, which consists in identifying characteristic structural or functional morphological features of research, for each of which the most complete list of their indicators is compiled, characterizing individual functional elements of the innovation system (Rubel O.E., Labunska O.B., Geiko L.M., Neboga T.V.);

Improved:

- methodological approaches to a comprehensive analysis of the participation of scientific institutions and higher education institutions in regional target and comprehensive programs, based on the developed system of participant identification, assessment of the potential for integrating the results of scientific and research work, involvement of scientific infrastructure and educational infrastructure in ensuring the prospective participation of scientific institutions and higher education institutions in the implementation of regional socio-economic and environmental policies aimed at the economic recovery of the region (Neboga T.V.);

- tools for coordination, interaction and mutual assistance of local authorities with scientific institutions, higher education institutions of the Southern region, in particular, regarding the processes of optimizing the preparation and implementation of regional development programs based on the application of the proposed concept of an "integration innovation platform" (Neboga T.V.);

- conceptual principles of assessing the effectiveness of scientific research, which provide for the convergence of statistical and comparative analysis and methods of assessing the effectiveness of scientific research with the separation of stages of

assessment, and namely - improvement of primary survey forms for analysis; determination of components for assessment; systematization of results by the method of morphological distribution; quantitative analysis of scientific research; structuring and analysis of elements of innovation and research infrastructure; assessment of the effectiveness of scientific research (Rubel O.E., Labunska O.B., Geiko L.M., Neboga T.V.);

- methodological approaches to assessing the effectiveness of the functioning of the scientific, educational and innovative ecosystem of the Southern region of Ukraine, based on taking into account the dynamics of the volume of scientific research according to the indicators of the size of financial costs for their implementation, the number of innovative developments in sectors and branches of the regional economy, the number of scientific and scientific-pedagogical personnel (Labunska O.B.);

- methodological approaches to structural monitoring of the contingent of applicants to higher educational institutions based on confirmation of the availability of places financed from state budget expenditures, relevant agreements with employers, focused on ensuring the expediency of using budget funds aimed at financing higher education in accordance with regional needs, taking into account indicators of the number of employed graduates of higher education institutions (Neboga T.V.);

– scientific and methodological approach and conceptual apparatus for forming a system of corporate professional training of personnel, which includes principles and approaches to determining training areas, elements of digitalization and professional training technologies, modern methods of personnel training using cloud-based services, which is aimed at improving and updating workers' knowledge based on increasing their qualification level in accordance with the requirements of the regional economic structure (Kuznetsova MA., Neboga TV.);

– proposals for financing the system of training of highly qualified specialists in Ukraine with the involvement of potential applicants for postgraduate and doctoral education through the provision of certain tax preferences (Kuznetsova M.A.);

- institutional approach to the formation of status provisions of scientific institutions of the NAS of Ukraine, which consists in providing functions of forming regional scientific and technical centers on their basis, which carry out activities to

develop directions and coordinate scientific research in accordance with national and regional interests and ensure the strategic development of the region based on the implementation of STEM principles (Kuznetsova M.A.);

Got further development:

- the essence of the "corporate university" following the innovation orientation of regional economic development substantiation of the concept of "innovative corporate universities" through their orientation to the implementation of the "open innovation" model, systematization and coordination of internal and external research projects (Kuznetsova M.A.);

- the conceptual foundations of "lifelong learning" as professional growth throughout life, which determines its implementation based on cooperation between higher education institutions and the creation of Retraining Centers on their basis; inclusion in regional development programs of funding items for the creation of Retraining Centers; organization of cooperation with business representatives through regional employment centers in the context of determining the needs of regional business in specific specialists (Neboga T.V.);

- a scientific approach to defining the socio-economic category of "human capital", which reveals its significance in the system of corporate professional training, which, unlike the existing ones, focuses on the permanent process of updating the set of existing skills, knowledge, and competencies of the employee, which are constantly improved through the system of corporate professional training of personnel based on the use of digital tools following the needs of reproducing the knowledge economy and are used as a source of income (Kuznetsova M.A.; Neboga T.V.);

- methodological approaches to comparative analysis of the financing structure of institutions of the Ministry of Education and Science of Ukraine and the National Academy of Sciences of Ukraine by budget classification at the national and regional levels for fundamental, applied research and innovative developments by sources and amounts of financing in general and specific indicators for the Primorsky region using ranking tools taking into account static indicators of the dynamics of the formation of gross regional product at the expense of basic sectors, namely, "Industry and Energy",

“Agriculture”, “Trade”, “Transport and Communications”, “Construction” sector (Rubel O.E., Neboga T.V., Labunska O.B.).

– applied use of the concept of “big science”, based on the transition from the multifunctional definition of “big scientific organizations” - “big research machines” - “big politics” to the multifunctional “big business” - “big databases” - “big industry” - “big cities” - “big democracy”, which is used to analyze the potential of regional research infrastructure, which is proposed to be assessed based on organizational and functional units, research elements, samples and complexes of unique research equipment and research networks of regional, national, international scale (Rubel O.E., Neboga T.V., Kuzetsova M.A., Labunska O.B.).

- approaches to determining the academic potential, and innovative activity of members of young scientists based on the application of methods of cognitive analysis of barriers to the formation and functioning of an innovative regional ecosystem, focused on strengthening administrative, functional, and informational interaction with local government bodies and regional military administration, which is ensured by institutional tools, financial support, development of cooperation and communication skills, improvement of scientific and pedagogical qualifications of young scientists, orientation towards cooperation with business and authorities, development of "soft skills" in the conditions of wartime challenges and post-war innovative recovery of the Ukrainian economy (Dokus A.A.).