

# INTENSE research framework – the questionnaire

The name of the partner organisation:

[V. N. Karazin Kharkiv National University](#)

Contact person and e-mail address:

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Departments or other academic units at your organisation concerned with INTENSE-related topics: -

Department of Ecology and Environmental Management;  
Department of Ecological Safety and Environmental Education;  
Department of Environmental Monitoring ad Protected Area Management

Current and past projects implemented at your institution and concerned with INTENSE topics:

Project title	Funding agency	Project topics concerned (2-3 keywords)	Type of the project (research, education, mobility, capacity for the organization or external stakeholders building, promotion etc)
Green & Blue Infrastructure in Post-USSR cities: exploring legacies and connecting to V4 experience (2019-2021)	International Visegrad Fund	A syllabus and a set of interactive learning materials for graduate students in fields of environment or urban planning	Education
INENCY – Instruments of the EU Environmental Policy (2018-2021)	Erasmus+, Jean Monnet Module	Development of the module “Instruments for the EU Environmental Policy” that consists of three courses: (i)	Education

		The economics of global environmental change and environmental management in the EU, (ii) Advanced topics of sustainability – EU environmental policies and sustainable development and (iii) ICT tools for environmental policy and management – EU experience. Introduction of courses into the education process for BSc and MSc students	
Political and economic aspects of biodiversity conservation in V4 countries (2016 – 2019)	International Visegrad Fund	Development and introduction into the education process a course «Political and economic aspects of biodiversity conservation in V4 countries»	Education
Qualifications Framework in Environmental Science at Ukrainian Universities – QANTUS (2014 – 2017)	TEMPUS	Development of a sectoral framework of qualifications in the field of environmental sciences	Education
Project "Surface runoff quality: reducing the impact on water bodies and adapting to climate change" (2012-2014)	Swedish Institute	Research of qualitative characteristics of surface runoff	Research
Open Society Institute Regional Seminar for Excellence in Teaching "Governance of Global Environmental Change" OSF ReSET (2011-2014)	Open Society Institute	Within the framework of the project, young teachers from different CIS countries get acquainted with modern European practice of teaching disciplines for students of environmental universities and develop work programs for new disciplines and test the developed disciplines	Education
Network for Ecological	With the	Development of a courses	Education

<p>Assessment and Remediation of Aquatic Ecosystems "(NEAR-4) (2010 - 2012)</p>	<p>support of the Swiss National Science Foundation and the Agency for Development and Cooperation</p>	<p>"Protection and management of water resources"</p>	
<p>Improvement of education in the field of environmental management (2009-2012)</p>	<p>TEMPUS</p>	<p>Improving the system of higher education in the field of environmental management and environmentally friendly nature management using the experience of the European Union and the post-Soviet space with the use of modern management information technology</p>	<p>Education</p>

**Topics of PhD thesis** (or other graduate works if you do not have a PhD program):

- Ecological assessment of natural and anthropogenic ecosystems for environmental management
- Ecological assessment of agricultural landscapes
- Ecologically tolerance nature protection network
- Ecological tourism
- Green and blue infrastructure of territory
- Climate change impacts on natural processes
- Landscape planning and landscape-ecological planning
- Nature conservation, ecological network
- Conservation of landscape and biological diversity
- Ecological safety of consumer goods;
- Environmental safety of food
- Medical ecology and medical geography

Key personalities publishing on INTENSE -related topics:

Name	Key words (2-3) describing research interests	Personal webpage, if applicable
Ganna TITENKO	Environmental management, soil ecology, ecosystem services	<a href="https://ecology.karazin.ua/personnel/titenko_ganna/">https://ecology.karazin.ua/personnel/titenko_ganna/</a>
Nadiya MAKSYMENKO	Landscape planning, ecological network, climate change, green and blue infrastructure of territory	<a href="http://ecology.karazin.ua/wp-content/uploads/2020/07/ua_maksymenko_supervisor-profile_updated.pdf">http://ecology.karazin.ua/wp-content/uploads/2020/07/ua_maksymenko_supervisor-profile_updated.pdf</a>
Alla NEKOS	Ecological safety of consumer goods; environmental safety of food; human ecology	<a href="http://ecology.karazin.ua/wp-content/uploads/2020/07/ua_nekos_supervisor-profile_updated.pdf">http://ecology.karazin.ua/wp-content/uploads/2020/07/ua_nekos_supervisor-profile_updated.pdf</a>
Sergiy SONKO	Mapping and geoinformatics, ecological assessment of agricultural landscapes, ecological tourism	<a href="http://ecology.karazin.ua/wp-content/uploads/2020/08/ua_sonko_potential-supervisor-profile.pdf">http://ecology.karazin.ua/wp-content/uploads/2020/08/ua_sonko_potential-supervisor-profile.pdf</a>
Vilina PERESADKO	Thematic mapping, systematic regional ecological and environmental mapping	<a href="http://ecology.karazin.ua/wp-content/uploads/2020/09/ua_peresadko_potential-supervisor-profile.pdf">http://ecology.karazin.ua/wp-content/uploads/2020/09/ua_peresadko_potential-supervisor-profile.pdf</a>
Mykola NAZARUK	Social ecology, urbanistics, problems of the revitalization, nature conservation, ecological network	<a href="http://ecology.karazin.ua/wp-content/uploads/2020/09/ua_nazaruk_potential-supervisor-profile.pdf">http://ecology.karazin.ua/wp-content/uploads/2020/09/ua_nazaruk_potential-supervisor-profile.pdf</a>
Andrii ACHASOV	Remote sensing in ecological researches, Design of agrarian landscapes, Precise agriculture, Digital soil	<a href="http://ecology.karazin.ua/wp-content/uploads/2020/12/achasov_supervisor-profile.pdf">http://ecology.karazin.ua/wp-content/uploads/2020/12/achasov_supervisor-profile.pdf</a>

	mapping	
Kateryna UTKINA	Waste management, sustainable development, EU environmental management practices	<a href="https://ecology.karazin.ua/personnel/utkina/">https://ecology.karazin.ua/personnel/utkina/</a>

### Current research profile of the organization in relation to INTENSE topics:

Within the INTENSE framework, the INTENSE school was established in 2020, starting with several Universities (core INTENSE partners: V. N. Karazin Kharkiv National University and Odessa State Environmental University, new INTENSE school members: Ivan Franko National University of Lviv, Uman National University of Horticulture) and Institute of Ecology of the Carpathians NAS of Ukraine.

During 2015-2020 academic year the following research works were performed:

- 1) Research project "Criteria for preliminary selection of territories and objects on the lands of the military-defense industry in order to include them in the nature reserve fund of Ukraine" ("EARTH-ECO");
- 2) Research project "Scientific and innovative bases of landscape analysis of agroecosystems";
- 3) Research project "Minimization of environmental risks in the elimination of the consequences of natural and man-made disasters (accidents) in the environmental safety system" (2017-2019);
- 4) Research project "Landscape and ecological modeling of forest plantations in the green zone of Kharkiv to assess environmental risks" (2018-2019);
- 5) Research project "Innovative approaches to soil exploitation in urban landscapes" – joint project, partner "National Scientific Center «Institute for soil science and agrochemistry research named after O. N. Sokolovsky»;
- 6) Research project "Constructive-geographical and cartographic justification for determining the boundaries of the nature reserve fund in terms of land reform in Ukraine".

### Ambitions of the organization (in terms of research topics) or aspired activities in relation to INTENSE topics

According to the Development Strategy of the Karazin University for 2019–2025 <https://www.univer.kharkov.ua/docs/work/project-3.pdf>, the strategic vision of the future for V. N. Karazin Kharkiv National University in the field of higher education quality is as follows:

- Karazin university science in 2025 is one that retains leadership in the Ukrainian scientific space, has a high international level of competition, optimal ratio of fundamental and applied research and the high potential for commercialization of results nationally and globally markets of scientific and technical developments;
- Karazin university educational activity in 2025 is combination of modern world standards quality, has a strong practical component and thus ensures the successful employment of graduates in modern labor markets;
- Karazin University is in the global scientific and educational space in 2025 organically integrated into the world community universities with a high international reputation and wide recognition, actively engaged in bilateral and multilateral international partnerships, attractive to international students and graduate students;
- Karazin University management in 2025 is flexible, debureaucratized, project-oriented, based on modern information and computer technologies, with a clear understanding of the strategic goals of the university and ways to achieve them.

**Priority projects** are as follows:

#### 1. University science in 2025

Project 1.1. «Increasing the competitiveness of the university of Science in the World Academic Space»

Project 1.2. «Modernization of the material base of scientific research»

Project 1.3. «Creating a system of effective incentives teachers and scientists to scientific developments world level, innovation, development applied research»

Project 1.4. «Commercialization of scientific developments»

Project 1.5. «Creating a system of communication with leaders national and foreign corporations, interested in university innovative developments»

Project 1.6. «Effective postgraduate and doctoral studies»

#### 2. Educational activities in 2025

Project 2.1. «Potential students for KGNU» (support and strengthening of the existing pre - university system work with talented children, further development of successful ones career guidance practices, strengthening and finding new opportunities to promote the university to attract talented and motivated bachelor's entrants programs, in particular, natural sciences and physics and mathematics profile, as well as an emphasis on the involvement of internal and external entrants to master's programs)

Project 2.2. «KGNU graduates» (development of a model of general requirements for university graduates with an organic combination of professional, social, business, language and computer skills)

Project 2.3. «Didactic and psychological adaptation of 1-st year students»

Project 2.4. «Effective curator»

Project 2.5. «Individual educational trajectories» (extension opportunities for student participation in the formation of individual educational trajectories)

Project 2.6. «Practical component of the educational process»

Project 2.7. «Professional career of graduates»

Project 2.8. «E-learning» (creating an effective dynamic balance of classroom and distance learning)

Project 2.9. «Information and computer competence of teachers»

Project 2.10. «English in the educational process»

Project 2.11. «The latest psychological and pedagogical learning technologies»

Project 2.12. «Modernization of logistics and software ensuring the educational process»

Project 2.13. «Student monitoring of learning quality» (introduction of a system of effective quality control of education process with the participation of student government)

Project 2.14. «Accreditation of educational programs» (including foreign agencies)

### 3. Karazin University in the global scientific and educational space in 2025

Project 3.1. «International partnership and network» (intensification of international cooperation on bilateral and multilateral contractual grounds)

Project 3.2. «University opens to the world» (creation of an internationally oriented model university branding)

Project 3.3. «Graduates from abroad» (creation of a system of effective interaction with graduates, working in foreign institutions and foreign graduates)

Project 3.4. «University publications in international scientific metric databases»

Project 3.5. «International Academic Mobility»

Project 3.6. «International grant programs» (stimulating the participation of university departments, teachers and researchers in international grant programs)

Project 3.7 «International students» (Involvement of foreign citizens in education for all faculties. Development and implementation of quality English-language educational programs at faculties)

#### **Obstacles and barriers hampering the aspired developments**

Lack of funding is one of the typical obstacle for the aspired developments at the University.

#### **Enabling conditions and positive factor behind your current successes in relation to INTENSE -related research developments, and/or making you hopeful about your ambitions:**

The enabling conditions for INTENSE-related developments are sufficient theoretical basis and the availability of various scenarios in development.



Specific capacities you want to develop to reach you aspired INTENSE-related research goals, such as equipment, training for academic or technical staff, access to international databases, external experts support or PhD supervision etc etc

We intend to develop the training of academic staff and research capacities, including equipment, access to international databases, joint PhD supervision etc.

**Are there any national research or development policy objectives that support your current or aspired INTENSE-related research developments? Please expand on this, if so**

**At the national level** and at the level of the Ministry of Education and Science of Ukraine, there is a multifaceted state policy to support and develop research related to INTENSE. This confirms the existence of legislative documents and the functioning of expert scientific councils.

1. Law of Ukraine "On Priority Areas of Development of Science and Technology" (Vidomosti Verkhovnoi Rady Ukrainy (VVR), 2001, № 48, Art. 253), as amended in accordance with Laws № 1162-IX of January 29, 2021
2. Resolution of the Cabinet of Ministers "On conducting an experiment in awarding the degree of Doctor of Philosophy" of March 6, 2019 № 167
3. Resolution of the Cabinet of Ministers "On approval of the list of priority thematic areas of research and scientific and technical development for the period up to 2021" of September 7, 2011 №942
4. Expert scientific councils have been established in Ukraine at the state level to obtain high scientific results: the Scientific Expert Council of the Ministry of Education and Science of Ukraine in professional fields and the Scientific and Technical Council in the development of science and technology of MES of Ukraine. The National Research Fund of Ukraine was created as a separate structure. All councils have a structure "Young Science", which separately considers the scientific achievements of young and promising scientists under 35 years.

**At the level of V. N. Karazin Kharkiv National University**

1. The Development Strategy of Karazin University for 2019-2025 has been developed, which was approved by the Decision of the Conference of the University staff on December 27, 2018. The main provision of the Strategy is that in the global scientific and educational space, university science is integrated into the global scientific community of universities, actively engaged in bilateral and multilateral scientific international partnerships. This approach is attractive to international students and graduate students. The Strategy also envisages the development of university science, which maintains leadership in the Ukrainian scientific space, has a high

international level of competition, the optimal ratio of basic and applied research and high potential for commercialization of results in national and global markets for scientific and technical developments. University science meets modern world standards, has a strong practical component, material base in the form of certified laboratories and a variety of modern equipment, thus ensuring successful employment in the labor markets of graduates of all educational and qualification levels.

A significant number of Strategy Projects support current or anticipated INTENSE-related research (see above). Today the projects are under active implementation, including at the Institute of Environmental Sciences.

2. For quality training of doctors of philosophy and doctors of science at Karazin University developed "Regulations on the procedure for training specialists in doctoral and doctoral degrees in postgraduate and doctoral studies of V. N. Karazin Kharkiv National University " dated August 27, 2019
3. 27.07.2017 the Karazin University received the International Certificate ISO 9001: 2015 "Quality Management System", and 22.06.20 passed the audit and recertification for compliance with this standard, which certainly guarantees and confirms the high quality of training of university graduates.

### **What are specific enabling conditions or obstacles for the development of research training at your organization – in general, and in INTENSE-related fields**

Research training is conducted at a fairly high level, as evidenced by the successful defenses of doctoral theses, the availability of scientific publications by students, student participation in scientific circles and seminars etc.

#### **Conditions that allow:**

- Strategic development of the Karazin University
- A separate structure "Postgraduate Department", which supports and manages the activities of graduate students
- New classrooms for graduate students
- Free access to computer classes, laboratories
- Support for academic mobility of graduate students
- Opportunities for business trips, internships
- Financial reward for publications in publications indexed in international scientific metric databases

- Support for participation in the implementation of youth research projects

**Obstacles:**

- Lack of finances
- Complications with the purchase of modern equipment
- Low scholarships
- Low salary for academic staff