#### INFORMATION LETTER



# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE MAIN DEPARTMENT OF EDUCATION AND SCIENCE OF THE KHARKIV REGIONAL STATE ADMINISTRATION REGIONAL COUNCIL FOR POPULATION SAFETY



INTERNATIONAL ACADEMY OF HUMAN LIFE SAFETY
NATIONAL TECHNICAL UNIVERSITY "KHARKIV POLYTECHNIC INSTITUTE"

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### The XVII International Scientific and Methodological Conference "HUMAN SAFETY IN MODERN CONDITIONS"

Kharkiv, Ukraine, December 4-5, 2025

#### **Conference Topics**

- 1. Issues of life safety during war and military operations.
- 2. Education in the scientific field of civil safety, preservation of human life and health.
- 3. Hazards of enterprises, agriculture, transport, and the environment.
- 4. Modern technologies, equipment, and facilities for the protection of nature and humans.
- 5. Information and expert systems in addressing life safety issues.

The conference is included in the official list of scientific conferences of the Ministry of Education and Science of Ukraine.

University lecturers, researchers, postgraduate students, professionals in relevant fields, as well as undergraduate and graduate students are invited to participate.

#### **Format of Participation**

The conference will be held online. Participation includes the submission of abstracts and papers, review of materials, and discussion on the official conference Facebook page: https://www.facebook.com/ICHSiMC/.

Conference materials will be available on the website of the Department of Occupational and Environmental Safety, NTU "KhPI": <a href="http://web.kpi.kharkov.ua/safetyofliving/uk/golovna/">http://web.kpi.kharkov.ua/safetyofliving/uk/golovna/</a>, on the conference Facebook page from December 4, 2025, and as an electronic collection of conference proceedings.

All participants will receive electronic certificates of participation. Conference materials will also be placed in the NTU "KhPI" repository and will be citable. Participation is free of charge.

Conference languages: Ukrainian, English.

Publications (Submission Deadlines and Formatting Requirements). Materials should correspond to the conference topics (please indicate the topic number in the application). Authors are responsible for the content of their submissions. Abstracts submitted for Facebook discussion should be 1–2 pages (A4 format), in .doc or .rtf format. File names must include the topic number and the authors' surnames. Formatting: Times New Roman, font size 12 pt, line spacing 1.5, margins 2.5 cm, paragraph indent 1.0 cm. Title (in the language of the paper and in English, bold uppercase, centered). Below: academic degree, academic title or position; for students – indicate "student" and level (Bachelor/Master); initials and surname(s) (bold italic). Next line: institution (organization) and city (italic). Below, after one line: abstract and keywords in both Ukrainian and English (Times New Roman, 10 pt, single spacing, max. 10 lines). Separate abstracts in different languages with a blank line. English abstracts should preferably be checked by specialists. After abstracts: main text of the paper. References: formatted according to DSTU 8302:2015, Times New Roman, 10 pt, single spacing. Tables and figures must meet the requirements of scientific publications (see example). Student submissions must include one scientific supervisor (no more than three student abstracts per supervisor).

**Submission Deadline - by** November 1, 2025, please send by email to the Organizing Committee: <a href="mailto:bezpekaconfer@ukr.net">bezpekaconfer@ukr.net</a> abstracts, and an APPLICATION with data on all authors (included in the same file as the abstract). **The application should include:** surname, first name, patronymic, institution (without abbreviations), phone number, and email address. **Mandatory for participants:** Discussion of abstracts on the conference Facebook page during the event (December 4–5, 2025). Authors should also prepare a full paper for sharing with interested researchers for further study and collaboration.

**Conference Organizers' Contact Information -** Department of Occupational and Environmental Safety, NTU "KhPI" 2 Kyrpychova St., Kharkiv, 61002, Ukraine

- +38097-943-6160 Prof. Viacheslav V. Berezutskiy, Doctor of Technical Sciences, Member of the International Conference Organizing Committee
- +38050-654-8746 Olga V. Osmanova, Senior Lecturer, Conference Secretary, <u>bezpekaconfer@ukr.net</u> Website of the organizers: <a href="http://web.kpi.kharkov.ua/safetyofliving/uk/golovna/">http://web.kpi.kharkov.ua/safetyofliving/uk/golovna/</a>

## APPLICATION FORM FOR PARTICIPATION IN XIII INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE

#### "HUMAN SAFETY IN MODERN CONDITIONS"

Surname, Name	Author 1	Author 2	Author 3			
Academic degree						
Academic status						
Position (for students level of study)						
Place of work / study						
Address of the organization						
Phone						
E-mail						
Title of the report						
Topic number (leave selected topic)	<ol> <li>Issues of life safety during war and military operations.</li> <li>Education in the scientific field of civil safety, preservation of human life and health.</li> <li>Hazards of enterprises, agriculture, transport, and the environment.</li> <li>Modern technologies, equipment, and facilities for the protection of nature and humans.</li> <li>Information and expert systems in addressing life safety issues.</li> </ol>					

## EHEPГОВИКОРИСТАННЯ ТВЕРДИХ ПОБУТОВИХ ВІДХОДІВ ENERGY CONSUMPTION OF MUNICIPAL SOLID WASTE

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**Анотація.** Обґрунтовано доцільність та необхідність використання твердих побутових відходів як відновлювальних джерел енергії.

Ключові слова: тверді побутові відходи, енергоефективність.

**Annotation.** Feasibility and necessity of using municipal solid waste as resource and suitable for further using materials and the renewable energy.

**Keywords:** solid waste, energy efficiency.

<u>Introduction.</u> The transition to sustainable use of limited natural resources of the planet and reduce the economy's dependence on traditional fossil fuels, which have a negative impact on climate change and cause energy vulnerability of many countries, including Ukraine, is fundamental to the functioning of the economic and social spheres in the XXI century.

Actuality. Another problem for the global civilization has become a trend of accumulation of municipal solid waste (MSW). For this reason, a long time technology improved management of this waste in order to bring their life cycle to its logical conclusion. The European Union is expected by 2020 to achieve the following objectives: reduction in the consumption of conventional energy by 20%, increase the share of alternative energy in the EU energy mix to 20%, and the 20 percent reduction in greenhouse gas emissions. In Germany, a law according to which 40% of energy should be made by non-traditional sources. In Denmark, the share is 60%.

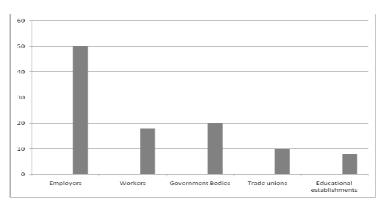


Figure 1 – Percentage share of respondents who recognize the crucial role of employers, workers, governments, trade unions and educational institutions in the management of occupational safety and health management at the facility.

Alternative energy. The share of alternative energy in Ukraine is only 0.3-0.5 percent of total energy consumption. Gas and oil are the main sources of energy and 60% in the total structure of energy sources. In addition, at present one of the main problems of Ukrainian economy is the high energy intensity of GDP - 0.89 kg of fuel at \$ 1 US manufactured products in three to five times higher than in developed countries. The economic situation in Ukraine is such that for the implementation of measures to introduce alternative

(ecological) energy sources, the country needs foreign investment, so you need to create an attractive environment for potential investors. The trend in the global investment market shows that interest in wind and solar power has dropped significantly over the past few years, there was a need to find new technologies.

At the same time the volume of waste in Ukraine is constantly growing. Over the past 10 years the amount of waste generated per person increased by 75% and amounts to about 300-400 kg per year. In addition, the total number of only 4500 legalized Ukrainian landfills, more than 300 of them are overwhelmed, and almost 900 do not meet the standards of environmental safety, ie, represent a direct threat to the environment.

Table 1 – Physical factors in metro areas that do not meet hygienic standards

Name of factor	Do not meet health standards, %						
	2009 year			2010 year			
	workplaces	passenger rooms	total	workplaces	passenger rooms	total	
Noise	10,79	80,9	36,22	11,72	83,24	51,09	
Vibration	1,57	3,67	3,54	1,83	0,82	4,04	
Lighting	10,75	15,92	15,31	11,51	17,14	16,84	
Microclimate	14,22	7,19	8,74	28,23	19,43	20,12	

<u>Conclusion.</u> Energy efficiency and resource efficiency close to the introduction of "green" technologies are defined as priority areas for economic development of Ukraine, where the market potential for products and technologies to improve energy efficiency is extremely high.

#### **LITERATURE**

- 1. Рекомендації щодо оформлення списків літератури згідно ДСТУ 8302:2015 / Офіційний сайт <u>Bicник HTУ «ХПІ»</u>. URL: <a href="http://vestnik.kpi.kharkov.ua/wp-content/uploads/2018/08/References.pdf">http://vestnik.kpi.kharkov.ua/wp-content/uploads/2018/08/References.pdf</a> (дата звернення: 20.0.2020).
- 2. Jilcha K., Kitaw D. Industrial occupational safety and health innovation for sustainable development. Engineering science and technology, an international journal. 2017. Vol. 20. №. 1. P. 372-380.
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- 4. ДСТУ EN ISO 12100:2016 Безпечність машин. Загальні принципи проектування. Оцінювання ризиків та зменшення ризиків (EN ISO 12100:2010, IDT; ISO 12100:2010, IDT) / Нац. стандарт України. Київ: ДП «УкрНДНЦ», 2018.