

INFORMATION BULLETIN

Ukrainian Nuclear Society



THE YOUTH NUCLEAR FORUM OF UKRNS

DEAR COLLEAGUES,

The Ukrainian Nuclear Society presents to your attention the information bulletin, which was prepared at the invitation of the European Nuclear Society as a part of the ENS newsletter.

We're delighted to update our colleagues with the latest news from UkrNS, discussing our ongoing initiatives and projects. Additionally, we'll highlight the endeavors of our members who are actively engaged in the fields of nuclear energy, nuclear research in Ukraine.

We sincerely hope that the information about the UkrNS activity in the period from June to August 2024 will be interesting and useful for you.

With best regards,
Ukrainian Nuclear Society

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YOUTH NUCLEAR FORUM OF UKRNS

From June 28 to 30, the Rivne NPP site hosted the first Youth Nuclear Forum, organized by the Ukrainian Nuclear Society with the support of the primary trade union organization of JCS NNEGC "Energoatom" and the Rivne NPP branch, as well as financial support from Energy Safety Group and the Atom Trade Union of Ukraine. The event gathered over 35 young professionals, scientists, and specialists from Ukraine's nuclear industry.

The aim of the forum was to unite young professionals for networking, exchanging current ideas regarding Ukraine's nuclear industry, and engaging young specialists in discussions on pressing issues.



One of the main and most engaging activities of the forum was a case study project competition, prepared in advance based on tasks set by the organizers. The tasks focused on topics such as the efficient development of nuclear energy in Ukraine, the potential construction of small modular reactors (SMRs) or large power units like the AP 1000 at existing nuclear power plants, the restoration of the Zaporizhzhia NPP after its de-occupation, and strategies for reintegrating uninhabited satellite towns of planned but unbuilt nuclear facilities into Ukraine's economic and energy infrastructure.

The forum participants were divided into four teams, each of which collaborated with a mentor—an industry expert who assisted the teams in preparing to solve the tasks. Two weeks prior to the forum, the teams worked on ideas for their project presentations, which were further refined during a training session upon their arrival at the forum and then presented to the jury on the second day of the event. The teams' presentations and reports were of exceptionally high quality, and all projects were highly praised by the competition jury.



THE VIDEO ABOUT UKRNS YOUTH NUCLEAR FORUM (UA)



YOUTH NUCLEAR FORUM OF UKRNS



MEETING OF THE BOARD OF THE UKRNS

The regular meeting of the Board of the Ukrainian Nuclear Society took place on June 21, 2024, chaired by the President of UkrNS, Volodymyr Kholosha. The meeting was attended by 32 participants, including board members and invited guests. Among the attendees were the heads and representatives of newly established Society branches.

During the meeting, participants reviewed the report on the activities of the UkrNS Secretariat from December 2023 to June 2024, which included updates on the implemented events and projects in the fields of scientific, informational-educational, international, organizational, and volunteer activities.

Information was also presented on the analytical study "The Impact of the War on the Ukrainian and European Landscape of Nuclear Research, Development, and Innovation," which was conducted with the involvement of the Ukrainian Nuclear Society and partner organizations. Additionally, board members and meeting participants discussed the Society's upcoming plans, including the organization of the VI International Conference "Prospects for the Implementation of Innovations in Nuclear Energy," scheduled for fall 2024. A separate agenda item involved the approval of three newly established UkrNS branches.

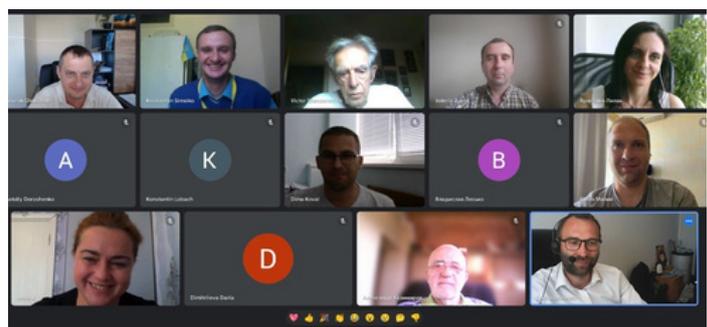


MEETING OF THE SCIENTIFIC AND ANALYTICAL SECTION OF UKRNS

On June 18, 2024, a meeting of the Scientific and Analytical Section of the Ukrainian Nuclear Society was held, chaired by Dr. Konstantin Simeiko, Doctor of Technical Sciences, Professor, Acting Scientific Secretary, and Head of the Laboratory at the Institute for Nuclear Power Plant Safety Problems of the National Academy of Sciences of Ukraine.

In addition to section members, the winners of the "Atomic Innovators-2024" scientific project competition also participated in the event. The participants discussed recent events and activities implemented by the NGO "UkrNS" in the field of scientific work, as well as plans for the future.

In particular, they discussed the upcoming annual International Conference "Prospects for the Implementation of Innovations in Nuclear Energy," scheduled for fall 2024.



Additionally, the participants reviewed the technical and economic study of the impact of martial law in Ukraine on innovation, scientific research and development in the nuclear energy sector, and workforce training in nuclear-related specialties. This study involves the Ukrainian Nuclear Society, the Institute for Nuclear Power Plant Safety Problems of the NAS of Ukraine, and other academic institutions and higher education establishments in the sector.

NEW SEPARATE SUBDIVISION OF THE NGO "UKRNS"

On June 14, 2024, the founding meeting of the members of the NGO "Ukrainian Nuclear Society" was held at the "Atomproektengineering" branch of JCS NNEGC "Energoatom." The meeting was attended by 5 members of the Society. During the meeting, a decision was made to establish a separate division. The purpose of the activity of the "Atomproektengineering" division is to provide engineering support for the design of new nuclear installations, develop and supply equipment for new installations, organize construction, installation, and commissioning work, and manage the decommissioning of nuclear installations.



PARTICIPATION IN THE FINAL OF THE EUROPEAN "INNOVATIONS FOR NUCLEAR" COMPETITION

A participant in the national "Nuclear Innovators" competition held by the Ukrainian Nuclear Society in the spring of 2024 and a representative of the Rivne NPP Eduard Omelchuk took part in the finals of the Innovations for Nuclear (I4N) Europe competition, held on June 27, 2024, during the International Forum "Sustainable Nuclear Innovations" in Sofia, Bulgaria.



In his project Eduard Omelchuk presented his own developments for creating an executive program for Rivne NPP, designed using 3D modeling of the reactor installation, containment area, and equipment of the VVER-440 power unit. The program aims to simplify and make the work of repair and operational personnel at the NPP safer.



In particular, such comprehensive three-dimensional models of the power unit could be used on a permanent basis for conducting pre-instruction briefings for contractors and repair personnel, onboarding new employees, training and exercises for fire-rescue teams, tracking equipment defects, and more.



JOURNALISM CONTEST "NUCLEAR ENERGY OF UKRAINE: YESTERDAY, TODAY, TOMORROW"

In June 2024, to mark Journalist's Day, the Ukrainian Nuclear Society and Energoatom announced the launch of a contest for journalists and aspiring media professionals titled "Nuclear Energy of Ukraine: Yesterday, Today, Tomorrow". The contest aimed to encourage media representatives to engage in well-founded discussions and exchange opinions on nuclear energy topics.

Journalists, bloggers, and students of journalism faculties were invited to participate by submitting analytical articles or video materials about the operations and future prospects of nuclear energy in Ukraine. Among all the entries reviewed by the jury, four outstanding works were selected.

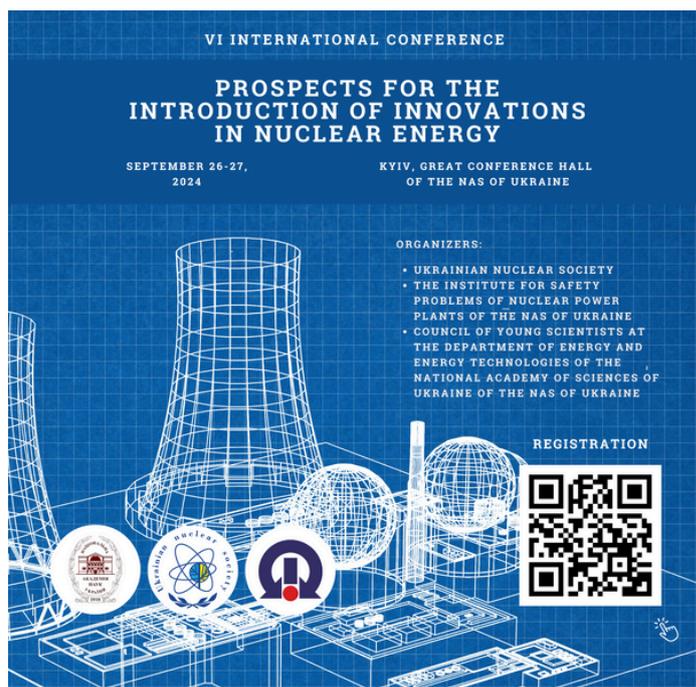


PROSPECTS FOR INNOVATION IN NUCLEAR ENERGY: REGISTRATION IS ONGOING

On September 26-27, 2024, the International Scientific Conference "Prospects for Innovation in Nuclear Energy" will take place in the Grand Conference Hall of the National Academy of Sciences of Ukraine, Kyiv.

The goal of the conference is to engage a wide range of experts and the public in constructive discussions on the scientific and technical challenges related to the functioning and development of Ukraine's nuclear energy sector. During the plenary session on the first day, presentations will cover the current state of nuclear energy and research in Ukraine and globally.

A special focus will be given to discussing the threats and challenges affecting the reliability and safety of the nuclear industry in wartime conditions. The second day will feature two panel sessions: Innovations for Sustainable Development of the Nuclear Industry and Innovations for Sustainable Development and Enhancing Nuclear Power Plant Safety.



TRAINING SESSIONS FOR THE WOMEN'S SECTION OF UKRNS



The events focused on providing psychological support to women working in the nuclear industry and young women considering a career in this field.

The sessions are filled with practical exercises, techniques, and activities aimed at helping participants improve their communication skills, learn how to take proactive steps, and make informed decisions in both their professional careers and other areas of life.

SUMMER SCHOOL OF NUCLEAR PHYSICS IN V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY



Several activities were also conducted by the Ukrainian Nuclear Society as part of the school.

In particular, participants attended a lecture on "The Current State and Prospects of Nuclear Industry Development in Ukraine and the World," and took part in an interactive game organized by the UkrNS in the city of Yuzhnoukrainsk, titled "How a Nuclear Power Plant Works." In this game, students competed in activities simulating real industrial processes at nuclear power plants.

From August 19 to 23, 2024, the "Summer School of Nuclear Physics" for high school students was held in Kharkiv.

The event was organized by the Educational and Research Institute "Faculty of Physics and Technology" of V.N. Karazin Kharkiv National University, with the support of the European Nuclear Education Network (ENEN).

The program included:

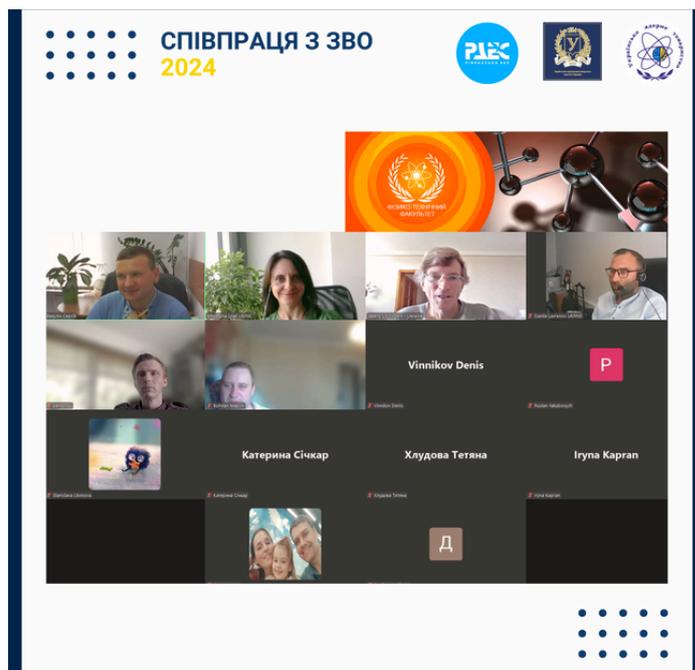
- Fascinating lectures by leading Ukrainian scientists;
- A workshop on nuclear medicine;
- Excursions to laboratories and the Nuclear Physics Museum;
- Interactive thematic games and valuable gifts from the organizers.



A PARTICIPATION IN THE SUMMER INTERNSHIP FOR STUDENTS OF V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY

As part of its educational and outreach activities, the Ukrainian Nuclear Society collaborates with leading higher education institutions that train specialists for the nuclear and related industries. This includes facilitating the involvement of industry experts in the educational process of specialized universities, such as V.N. Karazin Kharkiv National University.

On July 15, 2024, at the invitation of V.N. Karazin Kharkiv National University, a webinar was held as part of the summer internship for senior students of the Faculty of Physics and Technology. The webinar, titled "Personnel Training for Nuclear Power Enterprises and HR Management at Rivne Nuclear Power Plant," introduced students and faculty members, particularly from the Department of Reactor Materials and Physical Technologies, to the current state of nuclear energy in Ukraine and worldwide, prospects for industry development, and career opportunities at the Rivne NPP.

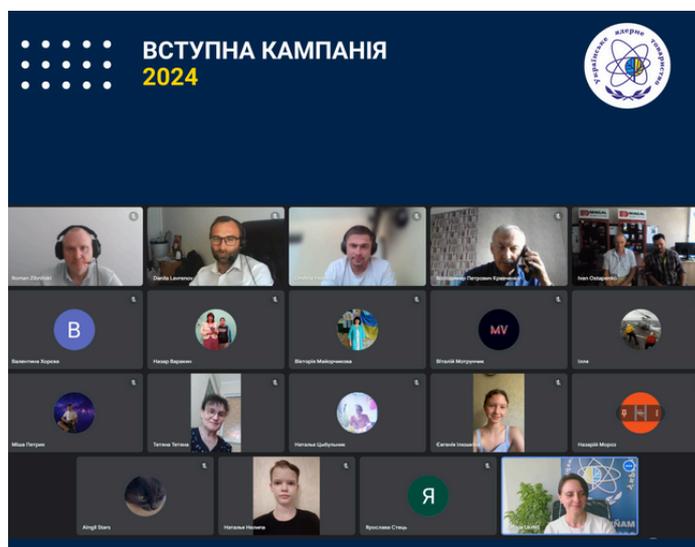


THE PATH TO A CAREER IN THE NUCLEAR INDUSTRY: A GUIDE FOR PROSPECTIVE STUDENTS

As part of the 2024 admission campaign Ukrainian Nuclear Society together with JCS NNEGС "Energoatom" have created and presented an electronic guide for prospective students "The Path to a Career in the Nuclear Industry". This electronic publication is a guide for applicants to explore the specialties and professions in demand within the nuclear energy sector. The guide is developed to promote technical specialties and to attract young people to pursue education, employment, and professional careers in Ukraine's nuclear industry. Future students can find valuable information to help them choose a specialty and study direction, learn about higher education institutions, and explore employment opportunities after graduation, as well as receive recommendations for building a career in the nuclear industry of Ukraine.

The UkrNS hosted a webinar titled *The Path to a Career in the Nuclear Industry* dedicated to the 2024 admissions campaign. The goal of the webinar was to introduce the audience to educational opportunities in areas that are in high demand within the nuclear sector, as well as future employment prospects at enterprises in Ukraine's nuclear energy sector. In addition to representatives from UkrNS, the webinar featured speakers from two leading specialized educational institutions - Odessa Polytechnic University and Igor Sikorsky Kyiv Polytechnic Institute - as well as from the employer company Energoatom.

YOU CAN VIEW THE GUIDE HERE (UA)



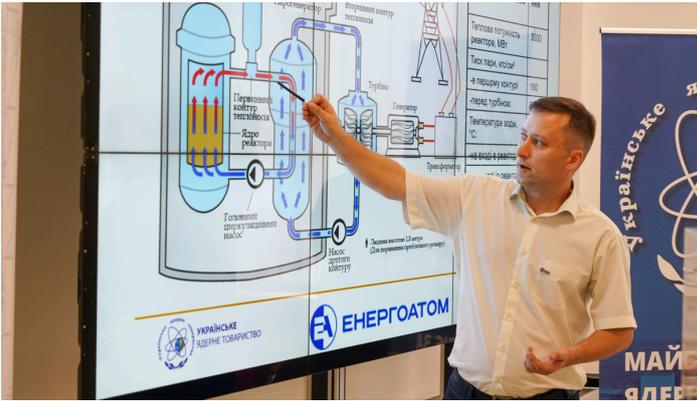
EVENTS FOR SCHOOLCHILDREN: DEEPENING KNOWLEDGE OF NUCLEAR ENERGY

The purpose of the events is to introduce young people to nuclear energy, promote awareness of the nuclear industry, and provide career guidance for choosing future professions in this field.

On September 5, 2024, in celebration of the new school year, the Ukrainian Nuclear Society, together with JCS NNEGC "Energoatom," organized an educational event for Kyiv school students. Specialists from JCS NNEGC "Energoatom" showcased the activities of Ukraine's leading energy company, the operator of active nuclear power plants, and discussed the current status and future prospects of the industry. With the help of virtual reality glasses and nuclear power plant models, the students were able to take a virtual tour of one of Ukraine's nuclear power plants.

A particular highlight of the event was the interactive game "How a NPP Works," developed by the Ukrainian Nuclear Society's branch in Yuzhnoukrainsk. The game aims to build trust in the peaceful use of nuclear energy and inform participants about key processes in electricity generation at nuclear power plants. Participants completed tasks simulating real stages of NPP operations, such as "NPP Construction," "Pipeline Installation," "Nuclear Fuel Loading," "Spin the Turbine," and "Connecting to the Power Grid."

During the event, participating teams receive brief information from the presenters on each activity, such as how nuclear power plants are built, methods for connecting and securing pipelines at a nuclear power plant, the process of loading nuclear fuel, turbine operations and the schemes and types of open switchgear at nuclear power plants. Afterward, they complete small practical tasks for each block of information as quickly as possible. For instance, in the game "Nuclear Fuel Loading," participants use models to simulate the process of loading mock fuel assemblies (TVELs) into a model reactor. Through coordinated team actions, participants control the handling and release of the "fuel assembly." After completing the mini-games, teams undergo a short test on the event's topics.



In addition to Kyiv, such events, including the "How a Nuclear Power Plant Works" games, have already been held for schoolchildren in Yuzhnoukrainsk, the satellite city of the South Ukraine NPP and in Kharkiv.

SPORTS AND CHARITY EVENTS FOR NUCLEAR INDUSTRY WORKERS

The Ukrainian Nuclear Society organizes and participates in various sports and charity events aimed at promoting sports within the nuclear community, encouraging a healthy lifestyle, and supporting the servicemen of the Armed Forces of Ukraine.

In the summer of 2024, several important events took place, benefiting both nuclear industry athletes and charitable causes. Among them were charity sports event WORKOUT in Yzhnoukrainsk, Open Water Swimming Tournament by the Ukrainian Swimming Association "MASTERS" and the Charity Energy Sprint Triathlon at Rivne NPP, charity competitions on the occasion of the Independence Day of Ukraine AtomRace 2024 in Netishyn - the satellite city of the Khmelnytsky NPP and others.



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