MUUSEUMIKOGUD

The war in Ukraine: universities and their museums

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Russian armed aggression, of course, did not leave Ukrainian educational institutions untouched. Every day, after missile attacks and kamikaze drone raids, there are reports of the destruction of kindergartens, schools, colleges, educational centres, and universities throughout Ukraine, even far from the line of active hostilities. The situation has been changing so rapidly recently that it is very difficult to provide specific figures about and describe the features of the geography of destruction. There is generally little information about the state of the educational infrastructure in the occupied territories, its catastrophic destruction can only be guessed at after seeing the results in the liberated areas. For example, in the spring, during the occupation, the State Tax University in Irpin was badly damaged, <code>^1</code> as well as the Ukrainian Humanities Institute in Bucha. <code>^2</code>

The main building of the Admiral Makarov National University of Shipbuilding in Mykolaiv was destroyed.³ The building of the H. Skovoroda Kharkiv National Pedagogical University was hit by rockets and badly damaged.⁴⁵ The Kharkiv National University named after V. N. Karazin, its sports complex, the building of the Faculty of Economics and the Karazin Business School were destroyed, the university clinic, the building of the Central Scientific Library, and the Museum of Nature were damaged, student dormitories were decommissioned, teachers and students were killed.⁶ In August, the Petro Mohyla Black Sea National University was damaged.⁷ In October, in the very centre of Kyiv, the building of the Institute of Philology, the building of the Scientific Library named after M. Maksimovych, the Botanical Gardens, and the main building of the Taras Shevchenko National University of Kviv were damaged by rocket fragments.⁸ The premises of universities in Sumy and Chernihiv and many other educational institutions were damaged and destroyed.

Practically all higher education institutions were forced to adapt to new working conditions, conducting an introductory campaign in the extremely difficult conditions of the war. Some continue to work in an online or mixed format in between long air raid alerts, others were forced to radically change their conditions of instruction and urgently evacuate to safer regions when the line of fire approached.

On the first day of the full-scale invasion, the rector and several employees of the Mariupol State University were able to remove all servers, legal documents, and seals from the institution. Later, it was possible to evacuate 90% of the staff and students through

¹ <u>https://24tv.ua/education/pid-chas-okupatsiyi-irpeni-postrazhdav-derzhavniy-po-datkoviy_n1947406</u> (26.10.2022).

² <u>https://www.facebook.com/ugi.edu.ua/videos/5379704005396598</u> (26.10.2022).

³ <u>https://nikvesti.com/ua/news/photoreportage/251944</u> (26.10.2022).

⁴ <u>https://www.pravda.com.ua/news/2022/07/6/7356587/</u> (26.10.2022).

⁵ <u>https://2day.kh.ua/ua/kharkow/raketnyy-udar-po-pedahohichnomu-universyte-tu-kharkova-zahynula-lyudyna</u> (26.10.2022).

⁶ <u>https://life.nv.ua/ukr/socium/harkiv-v-universiteti-karazina-rozpovili-pro-vs-tup-2022-i-podalshu-robotu-zakladu-novini-ukrajini-50259511.html</u> (26.10.2022).

⁷ <u>https://pivdenukraine.com.ua/2022/08/17/u-mikolayevi-pid-obstrili-potrapiv-uni-versitet-komunalniki-likvidovuyut-naslidki/</u> (26.10.2022).

⁸ <u>http://ukr.radio/news.html?newsID=99748</u> (26.10.2022).

filtering posts. The university is fully operational online. The management is temporarily staying at the Kyiv National University of Construction and Architecture. The university buildings in Mariupol were completely destroyed.⁹ Pryazovsky State Technical University was also evacuated. The educational institution currently operates at the Dnipro Polytechnic. The walls of its buildings are also badly damaged.¹⁰

The main attention of the administration, of course, was focused on preserving the life and health of students and faculty members, scientists and researchers were allowed to switch to remote work from the first days of the war. Some members of the university community were forced to leave Ukraine with their children and work remotely from different parts of the world.

In this situation, which is alarming, sometimes catastrophic, and chaotic, the museums of higher educational institutions and their collections were in many cases not the primary focus of attention and were not considered for evacuation. Often, there was simply not enough time and logistical data for this. In fact, all the responsibility for their preservation was voluntarily assumed by the museum workers on the spot. The total scope of evacuation is currently almost impossible to track for many reasons. Communication links are broken, because many people have temporarily changed their place of residence, official channels are not working, and many university websites went offline and are not being updated since 23 February. No one knows yet for obvious reasons where and how the collections of university museums are stored and whether they have been successfully saved. It is difficult to learn about the state of museum collections, it will be possible only after the end of the hostilities.

At the same time, both universities and museums have received new aid opportunities and welcomed colleagues from around the world and local volunteers to help us.

Each specific museum has its own life story during the war, and its own personal experience. Using the example of three Kyiv univer-

⁹ <u>https://dnipro.tv/news-dnipro/mariupolskyi-universytet-evakuiuvavsia-do-dnipra/</u> (26.10.2022).

¹⁰ <u>https://www.rbc.ua/rus/news/mariupolskiy-tehnicheskiy-universitet-pereezz-haet-1649934712.html</u> (26.10.2022).

sity museums, without unnecessary details, we endeavour to describe our situation and draw some conclusions. We hope that they will be useful to other museums because no one is protected from surprises, including such catastrophic ones.

The activity of any institution is determined by its legal status. Normative legal acts in the field of museums determine and regulate all aspects of museum activity, from personnel policy to full funding, which ensures the protection of cultural heritage.

The university museology of Ukraine has a long and tumultuous history. The first university collections and museums in Ukraine appeared at the beginning of the 19th century (Volyn Lyceum, Lviv, Kharkiv, Kyiv universities, etc.). The collections of university museums were often the largest museum collections in their cities. They went through significant structural changes and systematisation, gradually turning into solid, painstakingly compiled and described scientific collections, often consisting of thousands of items. They became crucial for education and science, the environment where instruction and research took place, and the basis for their development. After all, museums in universities arise as a result of the scientific activity of teaching staff and are widely used for the needs of education and training students. They are also involved in the preservation of corporeal history and culture.

From the beginning of their activity, university museums were distinguished by a high scientific level, a desire for amassing systematic and complete collections, the search for optimal formats, methods of funding, and exposition. Significant progress was achieved in their development through the efforts of outstanding scientists and researchers, creators of scientific schools, and directions championed by university museums. On the basis of museum collections, scientific research of various scopes was carried out, in which both scientists, researchers and students participated. Undoubtedly, in the course of their evolution, university museums also had a significant impact on the improvement of museum work and formed the basis of museum accounting. University statutes provided the legislative basis for museum activity.

However, from the 1920s the picture changed dramatically. When the new Soviet system of educational institutions began to take shape, scientific research was removed from among the activities of higher education institutions, and together with the liquidation of universities, university museums were closed, and their collections were transferred to other institutions or simply died.

Soviet legislation rejected the positive experience of the second half of the 19th and early 20th century. The university museums were primarily involved in ideological and educational work. An important task was to provide education on Soviet class position and disseminate the worldview of the builders of socialism. Over time, the management of the museum network was withdrawn from the educational leadership and transferred under the control of the Central Committee of the Communist Party (CPSU). Museums were losing their important place in the structure of universities, which, together with the archive and library, have always formed a single educational, scientific, informational, and communication block.

Gradually, university museums were deprived of state care and received the status of non-official, voluntary museums. They were subjected to public asset and party organisations, or the care of an individual faculty member working in a field related to the museum's profile. Museums were not provided professional personnel. No state body purposefully allocated funds for the maintenance, development, and protection of museums and their collections in higher education institutions in Ukraine. The preservation of national heritage in such museums became haphazard and depended only on the position of a university's rector.¹¹

In independent Ukraine, among the first legislative acts that regulated social relations in the field of museum affairs and determined the legal, economic, and social foundations of the creation and operation of Ukrainian museums, the Law on Museums and Museum Affairs was approved in 1995. It applies to all types of museums, and all forms of ownership. But even this law did not provide a worthy status for museums of higher education institutions. Article 9 of this Law denies state registration to such museums, leaving them to exist within the framework of a public institution as museums that do not have the status of a separate legal entity.

The Ministry of Education and Science of Ukraine, with its or-

¹¹ For more details, see: <u>http://www.library.univ.kiev.ua/ukr/host/10.23.10.100/db/ftp/</u>visnyk/istoriya_131_2016.pdf#page=53 (26.10.2022).

ders No. 151–153 of 1997, united school and university museums and approved the procedure for their accounting, which it entrusted to the Ukrainian State Centre for Tourism and Local Lore of Students. In museums that are under the management of the Ministry of Education and Science of Ukraine, "a responsible person from the pedagogical staff or the head of the museum is appointed for work on a voluntary basis". In many university museums, this practice still exists today. For example, at the Zhytomyr Ivan Franko State University, Maryna Khadatova, a senior lecturer at the Department of World History, is responsible for two museums, the Archaeological Museum and the University History Museum.

In 2006, the Ministry of Education and Culture of Ukraine approved the new Museum Regulation, which applies to all educational museums. Its general content remained unchanged, only the title "folk" was changed to "exemplary" for the best museums, and the activities of museums were categorised as extracurricular and educational work.

The university museums of Ukraine worked on the basis of such an outdated and imperfect regulatory legal base until 2014, when the Ordinance on Educational Museums was canceled and university museums were left without any basic document that regulates and directs their activities. Because of this, university museums often hid behind the names of laboratories, sectors, or centres, which gave more advantages in everyday activities but did not allow them to assume the legal functions of the storage and protection of cultural and scientific heritage.

Awareness of their problems and the desire to fight for changes in the legislation of Ukraine prompted museum workers to organise a number of conferences. Thus, since 2007, several annual conferences on the topic of the problems and prospects for the development of museums of higher educational institutions in Ukraine have been held at the State Polytechnic Museum at National Technical University of Ukraine Ihor Sikorsky Kyiv Polytechnic Institute (NTUU KPI). In 2011, employees of several university museums together with ICOM Ukraine were able to organise the international conference *University Museums: European Experience and Ukrainian Practice*.¹²

¹² http://icom.in.ua/podiyi-icom-ukrayini/2011-rik/universitetski-muzeyi — evropejiskiji-dosvid-ta-ukrayinska-praktika (26.10.2022).

In order to clearly define that a museum is necessary in the structure of a university, important for the educational, scientific, and educational activities of the unit, and deserves its comprehensive support, we pushed for amendments to the Law on Museums and Museum Affairs through participation in the public Museum Council under the Ministry of Culture of Ukraine in the years 2012–2018. Efforts have been made to amend the Law on Higher Education. Our initiative was supported by ICOM Ukraine. Finally, on 2 September 2020, the Verkhovna Rada of Ukraine adopted the Law on Amendments to Certain Legislative Acts of Ukraine on Ensuring the Activities of Museums of Higher Education Institutions.¹³

It should be admitted that the development of university museology is extremely slow. Museum workers are often far from being museum professionals, and are not sufficiently united.

Museums of higher educational institutions of Ukraine are still "museums between two worlds" (M. Lawrence), situated between the Ministry of Culture and Information Policy, which cancelled the registration of university museums, and the Ministry of Education and Science, which excluded museums of higher educational institutions from the Typical Regulations on Museums Belonging to the Sphere of Management of This Ministry. It is impossible to calculate how many and which museums are subject to the Higher Education and Research Centre of Ukraine, how they work, what, how and how much they store, and how they are financed. Often, thousands of collections are stored in higher education institutions basically without museum curators, as these positions are not included among the staff of universities. The only far from complete, official list of university museums is available on the website of the Union of Rectors of Ukraine.¹⁴ The paradox is that the orders of the Ministry of Culture and Information Policy of Ukraine do not apply to departmental museums (which they actually are, because they are subordinated to the Ministry of Education and Science of Ukraine). Because of this, there are, in principle no national policies in the field of museums, and a museum's development and support are completely dependent on the founder - the management of the university. University mu-

¹³ <u>https://www.facebook.com/search/top?q=icom%20ukraine</u> (26.10.2022).

¹⁴ <u>https://zvo.knu.ua/ua/museums/category/7</u> (26.10.2022).



Photo 1. Repositories of the Archaeological Museum of Taras Shevchenko Kyiv National University (photo Ljubov Samoilenko).



Photo 2. Bronze Age exhibits returned to the museum after restoration (photo Ljubov Samoilenko).

seums are often not registered or accounted for in any way. In such a vulnerable state, our university museums were left to cope with the challenges of martial law.

<u>The Archaeological Museum of Taras Shevchenko National Univer-</u> <u>sity of Kyiv</u> was opened in 1987 for the preservation and study of an important part of the historical heritage of Ukraine. It is also an important creative laboratory, a place of studying and developing hypotheses for the faculty of the Department of Archaeology and Museum Studies. Along with their lecturers, students improve their professional skills while performing practical tasks.¹⁵

On the eve of the war, the museum underwent a major renovation of the storage room (photo 1), which is a testing time for any museum. All the attention of the two (!) employees was directed to moving and systematising the collections, creating new accounting documents, and digitising them. The work was complicated owing to the cancellation of the practical training of students due to the quarantine of 2020–2021. Only a few students had the opportunity to participate in foundation work within the educational programs of archaeological or museum practice.

Since no orders about special measures during the state of war were received from the leadership of the university or the Ministry of Education and Science of Ukraine, the museum continued its activities within the framework of tasks planned for 2022.

As soon as the explosions in Kyiv subsided and it became possible to get to the university in early April, the museum staff continued their work. At the end of 2021, at the request of our museum, the university concluded an agreement with the Kyiv Centre for the Conservation of Archaeological Objects and began to restore bronze objects from the exposition (photo 2). The condition of the exhibits has required the urgent intervention of specialists for a while now. Part of the exposition was taken down, and all necessary documents and acts were prepared. Despite the war, the restorers were able to return the restored items in June. The museum started to prepare a new exposition. Due to limited staff, museum employees have to select exhibits themselves, be the designers and artists, glue and sew, etc (photo 3).

¹⁵ <u>http://www.archaeology.univ.kiev.ua/home/index.php?option=com_content&-view=article&id=42&Itemid=112</u> (26.10.2022).

We continue our work with the collections. In July, students did their internship at the museum. Three were able to work in the offline funds. Together with the students, museum workers continued to reorganise the anthropological collections. The museum items were packed in new cases and containers, updated labels, new descriptions and general lists were prepared. Actual work with collections is an invaluable experience for future museum employees and a significant help to the museum. Most of the interns received their assignments online. For them, the museum prepared photos of reports from excavations by the staff of the Department of Archaeology and Museum Studies, which were carried out in the 1950s and 1970s, and are stored in the form of typewritten texts in need of digitisation. Such work is very important for the museum, and the students got to know the work of faculty members in detail and learnt more about the origins of the collections kept in our museum. (photo 4)

Of course, it is difficult to convey the situation and daily experiences that one has to overcome during the war just to be able to work. This would not be possible without the support of the global democratic community. Almost immediately, the Ukrainian Archaeologists Association added our museum to the list of international volunteer assistants to receive packing materials. In May, we received a letter from the Ministry of Education and Science of Ukraine with a proposal for cooperation from the US State Department, the Interagency Working Group on Scientific Collections (IWGSC), the US Department of Agriculture (USDA), and the Smithsonian Cultural Rescue Initiative (SCRI). The university museums provided data on the most valuable collections to be entered into the database to facilitate their rescue and protection.

However, the work of Irina Nikiforova, a member of a public council under the Ministry of Culture, is notably active and effective today. Thanks to the international non-governmental organisation World Heritage Watch (chairman Stephan Dompke), the German Ministry of Culture, Art Aid Ukraine (coordinators Olena Balun and Maria Tomka) dozens of museums received the assistance they needed in different regions of Ukraine. Since April, Iryna Nikiforova has been able to establish communication and coordination with about 150 museums, from national to very small, rural ones. Everyone was



Photo 3. Discussion of the layout of the future exposition with the teachers of the Department of Archeology and Museum Studies (photo Ljubov Samoilenko).



Photo 4. Student interns help to reconcile the anthropological collection in the museum's repository (photo Ljubov Samoilenko).

provided a bit of much-needed help. The archaeological museum of our university was not left out. (photo 5)

The shelling of the centre of Kyiv on 10 October was a really terrible test for the Archaeological Museum. Several explosions occurred and a fire broke out in the immediate vicinity of the red building of the university, in which the museum is located. (photo 6)

The windows on the second and third floor were badly damaged, and the humanities building and the university library were damaged. (photo 7)

There was no significant damage in the Archaeological Museum, the exhibits were displaced only in some display cases (photo 8). The bulk of the museum's collections is kept in basements and it is more or less protected, to the extent that any museum on the map of Ukraine can be protected from the barbaric Russian shelling of our cities. Therefore, it has not yet been dared to organise the evacuation with a limited number of employees. As the ministries sent no orders or instructions regarding the protection of the collections during the period of martial law, we can only count on the protection of the Armed Forces and have faith in our victory.

The Astronomical Museum of the Astronomical Observatory of Taras Shevchenko National University of Kyiv has actually existed since the 1920s, but was officially founded only on the eve of the 145th anniversary of the opening of the Observatory in 1988. It was registered in 2009 as a scientific and technical departmental museum. Only at the cusp of war, on 1 February 2022, did it receive a full-time director. The Observatory and the museum itself are located in the central old part of Kyiv on a hill, a separate small estate with a park area. When the explosions started in Kyiv on 24 February, soon after transport stopped working in the city and all institutions were closed, the Astronomical Museum found itself practically alone with preservation problems. Many residents of campus left the city, employees, and most importantly, full-time security, could not get to the Observatory for several weeks. When the fire of small arms sounded from all sides, because by that time the sabotage and reconnaissance groups of the enemy had already entered Kyiv, the territorial defence was our only support. Several times a day, its fighters went around and checked all the nooks and crannies of the



Photo 5. The museum received help from volunteers (photo Ljubov Samoilenko).



Photo 6. The morning of October 10, 2022, under the walls of the university (<u>https://suspilne.</u> <u>media/292372-porane-</u> nij-universitet-pro-us-<u>kodzenna-knu-ime-</u> <u>ni-tarasa-sevcen-</u> <u>ka-rozpovidae-rektor-vo-</u> <u>lodimir-bugrov/</u>)



Photo 7. The red building of the university after the explosions (<u>https://suspilne.media/292372-poranenij-universitet-pro-uskodzen-na-knu-imeni-tarasa-sevcenka-rozpovidae-rektor-volodimir-bugrov/</u>).



Photo 8. Damage to the exposition of the times of Kyivan Rus after the explosions (photo Ljubov Samoilenko).

park with us day and night, verified the integrity of the windows and doors of all premises. The most valuable exhibits of the museum were moved to safer places. This continued until the moment when the enemies were pushed back from the city and its surroundings.

The museum received its first real support proposal, in addition to letters with offers of shelter from colleagues from different countries, from Australia. We were offered to place our server and digitised materials on additional file storage, which we did back in March. Next, the museum registered on the websites of several centres for assisting Ukraine. Active correspondence was conducted regarding our needs, but as our museum was fortunately not physically damaged, we did not insist on receiving the proposed means of preservation.

An interesting case happened in the summer, when our museum was able to help the soldiers at the front. The website of the museum, among other things, includes some photos from the history of the Station for Visual-Optical Observations of Earth's Artificial Satellites in Kyiv. One of the military units from the south was urgently looking for a certain optical device for its positions and saw one in our photographs. They approached us with this question on a Friday evening, and by Monday we managed to resolve all administrative issues and hand over not one but two different devices to them, which they installed and started using a day later. Fortunately, we had several copies of the devices, so our exposition did not suffer, and the soldiers were glad of our help.

On 18-21 October, the annual international conference that is usually organised in May was held at the Astronomical Observatory, albeit online.¹⁶ The history of astronomy was among the covered topics, and interesting research from various museums was presented. It is noteworthy that during the work of the section in Kyiv, there was an air alert and explosions occurred, but the air defence fortunately worked. Life goes on, and museums, universities and the whole nation continue to live and fight.

The <u>State Polytechnic Museum</u> has a special status among the museums of the universities of Ukraine. We are a separate structural unit of the Kyiv Polytechnic Institute and a separate museum of the

¹⁶ <u>http://www.observ.univ.kiev.ua/conference/</u> (26.10.2022).

city, which is financed as a communal enterprise. This creates some problems and solves some questions at the same time. Thus, the museum is financed by the Department of Culture of the city, which provides the salary of employees and communal services. Security, current repairs, communications support are guaranteed by the University. The museum reports on its work to the Academic Council of the University, which includes respected scientists and researchers, as we conduct research on the history of the university, science and technology. Supporting the educational process, organising conferences, participating in international events and programs makes up a significant part of the museum's work. At the same time, over the 25 years of its existence, the museum has turned into one of the city's museums. Thus, in 2005 there were approximately 3,000 visitors, most of whom were students, in 2020, the year of Covid-19 there were 31,400 visitors, in 2021, thanks to the use of online technologies and participation in a joint exhibition at the Lithuanian Museum of Ethnocosmology, we received about 35,000 visitors. By the way, thanks to the Open Space exhibition, we became good friends with our Lithuanian colleagues, and our young researchers had the opportunity to intern at the museum. We are extremely grateful to our colleagues who took on all the expenses. It was a great opportunity to gain experience and take a break from the war.

This year, the families who remain in Kyiv and the temporarily displaced persons make up most of the visitors – this is the new reality of our lives. We also welcomed military personnel on rotation, who were brought to the museum by our employee, head of the department Hryhoriy Luparenko, as they were fighting together. They collected exhibits of modern warfare at the front, brought them to the museum by themselves and sent objects by mail.¹⁷

With the beginning of the academic year, the number of visitors increased, so in September there were about 1,000 of them. These were entrants, first-year students, official foreign delegations, school-children.

In peacetime, the museum constantly expanded its audience, attracting new groups of visitors – we went beyond the campus. Events

¹⁷ <u>https://kpi.ua/files/2022-kp33.pdf</u> (26.10.2022).

such as TedxKPI, steampunk festivals, national fashion week shows, courses of public speaking were held together with the museum. For many years, the museum has cooperated with the Ukrainian Automobile Club and the Old Car Festival, which unite the community of retro motorists. Even in this difficult time for the country, we continue our relations with them and expand our ties with various volunteer organisations.

We cooperate with the Ukraine Crisis Media Center, which is currently extremely active in helping museums. "We want to survive, survive the winter, not die of hunger, live, and be people with a human face from planet Earth. Strange plans for the 21st century, aren't they?" These are the words of Olha Honchar, the initiator of the Museum Crisis Center, from a speech she gave at the Arendalsuka International Forum in Norway.¹⁸ "In 210 days of work, the Museum Crisis Center, thanks to 10 institutional partners and 20 people of planet Earth, collected and distributed 2,056,245 UAH to Ukrainian museum workers who remained in Ukraine. Museum workers from the Zaporizhzhia, Donetsk, Luhansk, Mykolaiv, and Kherson region received financial assistance. During this time, it was possible to help 9 museum workers and 2 museum collections with evacuation. We really want to believe that with the joint efforts of various people, organisations, government structures, and volunteers, we will be able to preserve the specialists of the museum industry as much as possible - an invaluable human resource for this field," she added.

A few words about the history of the State Polytechnic Museum. It was created in 1902 by V. L. Kirpychev, the director of Kyiv Polytechnic Institute, together with the students of the engineering club. The Engineering Museum was established at the construction department of the geodetic office. From 1905 to 1912, the museum was managed by E. O. Paton. The State Polytechnic Museum began its revival with the Resolution of the Cabinet of Ministers of Ukraine No. 360 of 29 May 1995. Building No. 6 and the adjacent territory were allocated for the museum, in accordance with the general development plan of the University. The exhibition halls of the museum were opened on the 100th anniversary of the Kyiv Polytechnic Ins-

¹⁸ Chairman of the Museum Crisis Center Olha Honchar is the director of the Lviv Museum Territory of Terror. <u>https://museumterror.com/publications</u> (26.10.2022).

titute on 11 September 1998. The museum continues to develop and supplement its collections, and today it is the only museum in Ukraine, which covers both the history and development of the Kyiv Polytechnic Institute, as well as all branches of domestic technology from different periods and Ukraine's contribution to the development of global technical civilization.

The museum exposition has twelve sections that tell the story of different eras of the history of technology: electronics, instrument building, radio engineering, telecommunications, informatics, minerals, industrial technologies, mechanical engineering, transport, metallurgy, electric welding, energy.

Each section contains unique exhibits: there is a fragment of a wooden aqueduct from Kyiv's Podil (late 17th – early 18th century), a telephone set and a switchboard of the first public telephone exchange in Kyiv and the Russian Empire (1886), and the first Soviet mass-produced television - the "people's" KVN-49, the first sound recording device – a prototype tape recorder, the Morse telegraph, the first Soviet forerunners to personal computers Promin and MIR, the Junior glider, the world's first piezoelectric engine (1963) created at KPI, the electric racing car of the Kharkiv Road Institute (1976) and many others. In 2005, the exhibition of military weapons was opened, the only one among the museums of Ukraine, which shows the evolution of weapons as technology. The collection covers the period from the second half of the 19th to the beginning of the 21st century. New modern exhibits are constantly added to the collection. Today, the museum's collection includes more than 20,000 exhibits, the museum's staff consists of 35 employees, and almost all of them have now returned to work.

The main expositions of the State Polytechnic Museum aim to present the technosphere of Ukraine as it is today and a cross-section of its history as thoroughly as possible. Some of the museum exhibits have become symbols of the 20th century.

The department of the History of Aviation and Cosmonautics Museum was opened on 14 May 2008 in the restored and rebuilt premises of the former aviation and automobile workshops. In the aviation section, the main emphasis is on the birth of this branch of technology in Ukraine, which, without exaggeration, is closely connected to the Kyiv Polytechnic Institute. Subsequently, Ukraine produced a whole galaxy of outstanding aircraft designers and pilots, and a network of powerful aviation enterprises.

The collection of the museum of veterans of the Baikonur Cosmodrome forms the basis of the cosmonautics section. The exhibits were brought from the Cosmonaut Training Center at Baikonur Cosmodrome, and the space storage base of the Military and Space Forces of the former USSR. The descent device of the Voskhod series spacecraft that visited space, a training complex consisting of a space communication operator's console, simulators of the night sky and a space sextant installed in the spacecraft cabin, a combustion chamber with steering engines of the Soyuz launch vehicle, which took spacecraft into space, the tail compartment and engine of a R-12 combat missile, samples of space food, a copy of the first artificial satellite of the Earth are among the unique exhibits. For many years, the department was headed by the former head of the Cosmonaut Training Center at Baikonur, Lt. Col. O. S. Boltenko.

Currently, the museum is going through the difficult process of working through Ukrainian scientific and technical heritage. This is a very important topic since many figures prominent in both the cultural and technical sphere of Ukraine are said to be Russian in sources covering world history. In the current conditions, this is humiliating for the Ukrainian nation. Many countries have followed the post-colonial path, and we are no exception.

In recent months, the work of the museum has intensified. Our traditional events have been resumed. On 27 September, the KPI-FirstYearMarathon, an event for first-year students, took place. More than 200 students, successful graduates and faculty members attended the meeting. The talks covered topics ranging from how to study, how to live in the conditions of war, who to follow as an example. And the main message of the event was to learn, live, love and dream! (#student #students #museum #KPI #Sikorsky #KPI_talks)

On 4 October 2022, the jubilee exhibition dedicated to the 100th anniversary of the Section of KPI Students in Poland was opened. At the beginning of the 1920s, graduates of the Kyiv Polytechnic Institute in Poland created a society that operates to this day. Polish graduates of KPI always maintained close ties with each other and never forgot their student years and *alma mater*. In November 1922, the Circle of Alumni of KPI in Poland was created in Warsaw – perhaps the only example of such an organisation in the history of education and science, the 100th anniversary of which will be celebrated this year.

The museum continues to welcome official delegations visiting the university, including representatives of government institutions, businesses, educational institutions from Canada, Iraq, China, and Poland.

The State Polytechnic Museum is one of the co-organisers of the All-Ukrainian Scientific Conference Actual Issues in the History of Science and Technology. On 20–21 October, researchers of the museum made presentations on their research subjects.

For World Space Week, held under the auspices of the United Nations, the museum planned to hold scientific readings and round table discussions on the topic *Space – From an Idea to Practical Implementation*. Taking into account the state of war, we could not fully implement the plan, but we still prepared and opened an exhibition. The main exhibit was a Zvuk 1 M-64 tape receiver, which contains a recording of the pre-launch training and the communication of the Soyuz-21 crew with the Russian mission control centre (TSUP) in orbit from 6 July 1976.

After the air raids on Kyiv on 10 October, I recalled the events of February and March, the beginning of full-scale war. The cosy campus of KPI and the surrounding streets were blocked off with barricades and metal hedgehogs, there were no people on the streets, except for the armed fighters of the territorial defence of the city – yesterday's teachers, scientists, students. It was scary to go to the museum, because one of the first battles with Russian saboteurs took place very close by. It was dark in the campus, the KPI guard was on duty day and night together with the Territorial Defence Forces' fighters. However, it was necessary to save the exhibits and pay wages to the museum employees. Public transport did not run, the museum staff got to work with the help of volunteers and on foot, they packed and hid the exhibits at their own discretion. There was no help from the state, and this was a very important lesson for us. We must have our own plan. Now we voice our thanks to our friends from Germany, Stefan Dompke, volunteer Irina Nikiforova, Art Aid Ukraine, the German Ministry of Culture, who provide high-quality and valuable materials and equipment. We understand that in the future we need to be ready for any situation, we believe that our experience will be useful to everyone.

One of the first messages of support and offers of help I received on 24 February from our colleague Reet Mägi. I met her in 2011 at the Universeum conference in Padua, where she represented the University of Tartu. Her Facebook page contains wonderful heartfelt posts that help Ukraine.

The support of our country on the Independence Day of Ukraine on 24 August this year was also very important. The Estonian delegation was the first to publish a congratulatory photo with the hashtag #ukrainminut#PowerOfMuseums#icomprague2022#ukrainaiseseisvuspaev. It also sounded like the slogan of the 26th ICOM General Conference held in Prague. Little Estonia ranks first among the countries providing aid to Ukraine. We are so grateful to our colleagues; we thank you from the bottom of our heart. We are grateful to Estonia for the support. We hope to meet you soon in a free, beautiful and peaceful Ukraine.

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Liliya Kazantseva, Astronomical Museum of the Astronomical Observatory of Taras Shevchenko National University of Kyiv, Ukraine. Nataliya Pysarevska, The State Polytechnic Museum named after Boris Paton at National Technical University of Ukraine Ihor Sikorsky Kyiv Polytechnic Institute.

Liubov Samoilenko, Archaeological Museum of Taras Shevchenko National University of Kyiv.

Sõda Ukrainas: ülikoolid ja nende muuseumid

Lilija Kazantseva, Tarass Ševtšenko nimelise Kiievi Riikliku Ülikooli Tähetorni Astronoomiamuuseum Natalija Pisarevska, Ukraina Riikliku Tehnikaülikooli Igor Sikorskõi nimelise Kiievi Polütehnilise Instituudi Borõss Patoni nimeline Riiklik Polütehniline Muuseum Ljubov Samoilenko, Tarass Ševtšenko nimelise Kiievi Riikliku Ülikooli Arheoloogiamuuseum

Kolme Ukraina kõrgkoolimuuseumi juhatajad annavad ülevaate, mida on 24. veebruaril 2022 alanud Venemaa agressioon kaasa toonud Ukraina ülikoolimuuseumidele. Juba enne sõda oli nende muuseumide juriidiline seisund ebaselge, nad ei kuulunud õiguslikult ei riigi muuseumisüsteemi ega olnud päriselt osa ka akadeemilisest maailmast, ning see on kriitilises olukorras teinud nad väga haavatavaks. Veidi erinevas situatsioonis on ainult polütehniline muuseum, mis on ametliku munitsipaalmuuseumi staatuses ning on seetõttu saanud abi rohkem ja organiseeritumalt. Polütehnilise muuseumi kogumisteemade hulgas oli ka varem kosmos ja sõjandus, nüüd on neile lisandunud eksponaate otse rindelt.

Olukorra teeb mõneti keerukamaks eelnenud koroonapandeemiast tingitud kaugõppe periood, mis teisalt on siiski sundinud välja arendama e-õppe võimalused, mida nüüd tuleb kasutada õhuhäirete vahel õppetöö tegemiseks. Riigil pole olnud mahti ülikoolide teaduskollektsioonidele ja -muuseumidele spetsiaalseid käitumisjuhiseid jagada. Kogu vastutus on seega kohapealsetel entusiastidel. Füüsilisi kogusid on püütud kaitsta ohutumasse kohta viimisega, kui muuseumitöötajate jõud esemetest üle käib. Arvestatavat tuge pakuvad välisabi organisatsionid ja kohalikud vabatahtlikud. Eriti tõhusat tööd on teinud Irina Nikiforova ja World Heritage Watch, mille abi – pakkematerjale ja ennekõike vajalikku infot – on saanud 150 muuseumi, sh ka väikemuuseumid. Ukrainasse jäänud muuseumitöötajate ja muuseumide abistamiseks on loodud muuseumide kriisikeskus, mis kogub ja jaotab annetusi. Inimnäolise ühiskonna hoidmiseks püüavad muuseumid jätkata traditsioonilisi üritusi, et aidata inimestel elada, armastada ja unistada.