



NEWSLETTER OF THE OBUDA UNIVERSITY | SEPTEMBER-OCTOBER 2025





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A New Excellence Program Launched under the Name Excellence Obuda

Obuda University has significantly strengthened in recent years, becoming a flagship of practice-oriented Hungarian technical higher education. Today, it ranks among the top 3 percent of universities worldwide and has grown into one of the leading institutions in Central and Eastern Europe – declared **Prof. Dr. Levente Kovács**, Rector of Obuda University, at the Senate meeting, which also served as the Carpathian Basin Hungarian Higher Education Opening Ceremony on September 8.

The event featured speeches by **Dr. András Cser-Palkovics**, Mayor of Székesfehérvár and President of the Rudolf Kalman Foundation for Obuda University, and **Dr. Veronika Varga-Bajusz**, Deputy State Secretary for Higher Education, Vocational and Adult Education, and Youth at the Ministry of Culture and Innovation. The ceremony was attended by representatives of numerous cross-border partner institutions and high-ranking diplomats. Awards for Honorary Professor, Distinguished Professor, Founding Distinguished Researcher, and Student Union Recognition were also presented at the ceremony.

In the 2025 admissions period, nearly 6,000 applicants selected Obuda University as their first choice – a historic record. This autumn, 4,532 freshmen, including about 300 international students, are starting their studies – emphasized **Prof. Dr. Levente Kovács**. Among the achievements he listed were: moving up in the Times Higher Education ranking from the 1001-1200 band to the 601-800 category, and in the QS Rankings, doubling its overall score and advancing to a higher category.

He also highlighted the importance of mobility opportunities, underlined by the **Pannonia Scholarship Program**, in which participation last year was already double compared

to the Erasmus program. “The numbers prove that we are able to respond flexibly to international challenges and successfully adapt to changing circumstances,” he noted. He recalled that the Rudolf Kalman Foundation for Obuda University, as the maintainer, is providing nearly HUF 1 billion in support this year. Furthermore, the University will launch its new excellence scholarship program, Excellence Obuda, this autumn, with the aim of supporting the most outstanding talents by offering individual mentoring and customized academic pathways.

Dr. András Cser-Palkovics stressed that stability and security must define the life of a university community, as only then can development take place. The Foundation’s goal is to provide opportunities that support students, lecturers, and researchers alike.

Dr. Veronika Varga-Bajusz emphasized that the renewal of universities has brought a scientific, competitiveness, and economic turning point. She noted that now 12 Hungarian universities rank among the world’s top 5 percent. Since the operational changes, 6 out of 10 students have been admitted to fields of national economic priority, corporate revenues have increased by 67 percent, university publication performance has risen by 50 percent, and the ➤

» number of patents has grown by 35 percent in just one year. "Hungarian higher education is living its second golden age," she underlined, adding that in the coming years, HUF 1,300 billion will be allocated to university development, with the goal that by 2030 at least one Hungarian university will rank among the world's top 100 and Europe's top 30 universities. Regarding Obuda University, she emphasized that through renewal the institution has "leapt forward" and continues to strengthen year after year in global competition.

Welcoming First-Year Students

After the oath, **Prof. Dr. Levente Kovács** officially admitted the students as citizens of Obuda University. **András Batta**, President of the Student Union, also welcomed the freshmen.

Recognitions

Honorary Professor titles were awarded to:

▪ **Prof. Dr. Ferat Sahin**, Professor at the Rochester Institute of Technology (USA), Head of the Department of Electrical and Microelectronic Engineering, Director of the Multi-Agent Bio-Robotics Laboratory and the Cooperative Robotics Laboratory. He maintains close ties with Obuda University, regularly participates in joint conferences, and actively collaborates in robotics research.

▪ **Prof. Dr. Péter Érdi**, computational neuroscientist, Professor at Kalamazoo College (USA). His research focuses on reaction kinetics, neuroscience, and complex systems. Founder of several scientific initiatives, including ELMOHA (Theory, Model, Tradition) and the Budapest Semester in Cognitive Sciences

program. He also maintains active relations with Obuda University.

▪ **Prof. Dr. Almaz Kadyraliev**, Rector of Kyrgyz Economic University, Kyrgyz Republic. Through his outstanding academic and leadership activity, he has contributed significantly to the internationalization of higher education, the development of transport economics, and the promotion of sustainable economic models in Central Asia. His academic and organizational activities are exemplary, making him worthy of the honorary professorship.

▪ **Dr. Thomas I. Strasser**, Principal Scientist at the Austrian Institute of Technology. His main research fields include automation and control, electrical and nuclear engineering, and energy systems. He plays an active role in IEEE and conference organization, and has long-standing cooperation with Obuda University through joint research.

Distinguished Professor title was awarded to:

▪ **Prof. Guang-Ren Duan**, internationally recognized researcher in control science and engineering.

Founding Distinguished Researcher titles were awarded to:

▪ **Prof. Dr. habil. Árpád Baricz**, internationally recognized researcher in the theory of special functions and applied mathematical analysis.

▪ **Prof. Dr. Róbert Rajkó**, internationally recognized expert in environmental chemistry and chemometrics.

(More on the Distinguished Professors is available on the University's website: [Link](#))



» **Civis Academicus Honoris Causa - Honorary Citizen title** was awarded to Károly Mátrai, economist and energy expert, with decades of professional experience in energy trade and finance, maintaining a close and active relationship with Obuda University.

Prof. Dr. Rustam Khamdamovich Khamdamov, Doctor of Technical Sciences, Professor in the field of Systems Analysis, Control and Information Processing, with 46 years of professional experience, including 38 in academia and 27 in leadership positions. Currently, he is a senior leader at the Research Institute for Digital Technologies and Artificial Intelligence Development of the Republic of Uzbekistan. As a professional advisor to the Jizzakh regional government, he supported the Science Park cooperation between Obuda University and Jizzakh from its inception.

Ambassador of Obuda University title was awarded to Ergas Alibekovich Saliev, Doctor of Technical Sciences and Honorary Doctor of Kazan University, recipient of several high state awards. Currently a professor and rector's senior advisor at Sambhram University in Jizzakh, he previously served as Governor of Jizzakh, supporting and overseeing the joint Uzbek-Hungarian Inno-Techno Park investment and actively contributing to the cooperation from the very beginning.

Student Union Recognitions

- **Athlete of the Year: Dávid Uhrin**, professional canoeist, who has represented the University in multiple competitions at university, national, and world level, achieving outstanding results.

- **Lecturer of the Year in Student Life: Dr. habil. Orsolya Szigeti**, Secretary of the Doctoral School of Innovation Management, for her significant contribution to the smooth functioning of the new doctoral school.
- **Staff Member of the Year in Student Life: László Visnyei**, Head of the Operations Group of the Technical and Operational Office, for his years of dedicated support to the Student Union's activities.
- **Partner of the Year: Budapest Beer - Urban Beer Ltd.**, a long-term partner of the BGK Student Union, supporting the organization of numerous high-quality student events.

Acknowledgement Awards were presented to:

- **Dávid Baráz**, as President of the Student Union of the Faculty of Keleti.
- **Zsombor Kovács**, as President of the Student Union of the Faculty of Bánki.
- **Péter Pató**, as Board Member responsible for PR and Events of the Faculty of Bánki Student Union.
- **Gergő Horváth**, for years of dedicated service as President of the Faculty of Bánki Student Union.
- **Levente Koppány Barcsa**, for his conscientious and precise work as President of the University Student Union.

The program featured performances by Hungarian pianist **Tünde-Ilona Krasznai**, as well as lecturers and students of the vocal department of the Partium Christian University of Oradea.

New Distinguished Professors Join Obuda University

Obuda University continues its Distinguished Program, launched three years ago with the aim of strengthening internationally competitive research and education. As a result of the latest call for applications, this year the title of Distinguished Professor of Obuda University has been awarded to Prof. Guang-Ren Duan, a renowned expert in control science; while the title of Founding Distinguished Researcher of Obuda University has been awarded to Prof. Dr. habil Árpád Baricz, a researcher in the theory of special functions, and Prof. Dr. Róbert Rajkó, a recognized professor of environmental chemistry and chemometrics, announced Prof. Dr. Levente Kovács.

Over the past three years, 14 researchers have joined the University Research and Innovation Center (EKIK) of Obuda University, further enhancing the institution's research excellence. Within the framework of a four-year collaboration, the selected researchers establish international research groups, carry out globally impactful scientific projects, and organize workshops, thereby contributing to the University's research and educational excellence as well as to the promotion of innovation and knowledge transfer – emphasized Rector Prof. Dr. Levente Kovács.

Applications for the title Distinguished Professor of Obuda University were open to full professors of the University – either already employed full-time or committed to such employment – who could demonstrate outstanding achievements in scientific education, research, and innovation, along with a substantial publication record.

Following the evaluation of applications, the distinguished titles this year were awarded to the following professors:

Prof. Guang-Ren Duan, internationally recognized researcher in control science and engineering, full member of the Chinese Academy of Sciences, honorary fellow of CAA, IEEE, and IET. Author of more than 600 SCI-indexed publications and six monographs, his research has had a significant impact on linear and nonlinear control theory as well as their applications in space exploration and robotics. He serves as a scientific leader at the Harbin Institute of Technology research center.

Prof. Dr. habil Árpád Baricz, internationally acknowledged researcher in the theory of special functions and applied mathematical analysis. His scholarly work has gained worldwide recognition through hundreds of high-impact publications and extensive international collaborations, making him one of the leading authorities in his field.

Prof. Dr. Róbert Rajkó, internationally recognized expert in environmental chemistry and chemometrics, whose research has significantly influenced the development of analytical methods. His outstanding publication record,

scientific citations, and international collaborations make him a highly esteemed representative of both the Hungarian and international scientific communities.

Obuda University launched its Distinguished Program in 2022 with the aim of reinforcing internationally competitive research and education. With a budget of HUF 900 million, the program supports outstanding researchers through three distinct grant opportunities.



Deepening Cooperation with Beijing University of Posts and Telecommunications

On September 26, 2025, Obuda University had the honor of welcoming a high-level delegation from the Beijing University of Posts and Telecommunications (BUPT). The initiative built on the recent visit of Obuda University's leadership to Beijing earlier this month, where a Memorandum of Understanding was signed between the institutions.

The highlight of the Budapest meeting was the signing of a Letter of Intent, confirming both universities' commitment to long-term cooperation in several strategic areas. These include the establishment of a Confucius Institute with digital education features, a joint Artificial Intelligence Laboratory, and a Digital Education Demonstration Center. The framework also foresees faculty exchanges, joint research initiatives, and innovative projects at the intersection of culture and technology.

The delegations were led by Prof. Dr. Levente Kovács, Rector of Obuda University, and Prof. Xu Kun, President of BUPT. Representatives of both institutions engaged in constructive discussions on the next steps of collaboration, supported by the presence of Huawei Technologies Hungary, whose leaders also attended the event.

During the program, BUPT presented its latest research and initiatives on the transformative role of artificial intelligence in higher education, while Huawei highlighted its ongoing partnership with Obuda University.

Their presentation showcased the university's Smart Education Campus project, a global benchmark in intelligent campus networks, and emphasized joint achievements such as the Huawei ICT Academy, scholarship opportunities, and the introduction of Hungary's first Wi-Fi 7-enabled smart campus.

The visit marked an important step in strengthening academic and cultural ties between the two institutions and reaffirmed their shared commitment to innovation, global engagement, and excellence in higher education.

Fighting for Justice at the Court of Justice of the European Union in Luxembourg

Almost two years after Obuda University—together with several other restructured Hungarian universities—initiated legal action to challenge its exclusion from the Erasmus+ and Horizon Europe programs, the Grand Chamber of nine judges of the General Court of the European Union held a hearing in Luxembourg on September 10, 2025. The institution was represented at the hearing by Prof. Dr. Levente Kovács, Rector of Obuda University.

In December 2022, the European Commission decided that Hungarian universities operating under the foundation-based model would no longer be eligible for funding from the Erasmus+ and Horizon Europe programs. In Obuda University's view, this decision is discriminatory, politically motivated rather than professionally justified, and failed to duly consider the lawful and compliant operation of the institutions concerned.

Following the hearing, Prof. Dr. Levente Kovács emphasized:

"Obuda University—just like the other affected institutions—has complied with all relevant regulations, and its operations are transparent and lawful. We are convinced that education, knowledge, and research are universal values that must remain free from any external influence. Our goal now is nothing less than to restore the rights of our students and researchers and to secure a fair, depoliticized regulatory environment for all Hungarian universities in accessing EU programs."

He added:

"The primary mission of universities is to contribute to the advancement of society, both nationally and internationally, through science,

education, and innovation. Exclusion from the Erasmus+ and Horizon Europe programs not only deprives students and researchers of vital opportunities, but in the long run also undermines the integrity, competitiveness, and credibility of the European scientific and educational community."

Obuda University firmly believes that access to European educational and research programs must not become subject to political bargaining. Exclusion restricts the opportunities of students, faculty, and researchers, thereby closing off professional and personal development paths that are of great value for Europe's knowledge-based society.

In the next stage of the proceedings, deliberations and judgment are expected. Obuda University trusts that the Court of Justice of the European Union will deliver a fair, lawful, and forward-looking decision, enabling the affected Hungarian higher education institutions to return as full participants in the Erasmus+ and Horizon Europe programs.

At the hearing, the Rector of Semmelweis University, Prof. Dr. Béla Merkely, also delivered remarks, which can be read [here](#).

International Advisory Board Established at Obuda University's Space Lab

The Space Lab International Advisory Board of Obuda University held its inaugural meeting, marking a milestone in the university's global engagement in the space industry. The newly established board consists of three distinguished international experts with outstanding experience in the fields of space industry, venture capital, and space innovation ecosystem development, representing perspectives from across the globe—from New Zealand to Switzerland and the United States.

The inaugural meeting was opened by Prof. Dr. Levente Kovács, Rector of Obuda University; Dr. Miklós Kozlovszky, Head of the Space Lab; and Dr. Péter Kristóf, the Rector's Commissioner for Space Affairs. With the establishment of this board, the university further strengthens its position in space research, engineering innovation, industrial collaboration, investment, cybersecurity, the space economy, and space sustainability, while also opening new pathways toward dual-use technologies.

"The creation of the International Advisory Board is a significant step forward for Obuda University and for the Hungarian space industry as a whole. With the involvement of Jeffrey Manber, Emeline Paat-Dahlstrom, and Raphael Röttgen, we are connecting Hungarian talent and research with the global space innovation ecosystem. This enables us to accelerate the development of cutting-edge technological solutions and to play a decisive role in shaping the future space economy, while striving for a leading regional role in education and research across the fields we cover," emphasized Prof. Dr. Levente Kovács.

Strengthening Obuda University's Role in the Global Space Economy

Established in 2024, the Space Lab's mission is to educate, train, and inspire the next generation of space engineers, scientists, entrepreneurs, and professionals. The lab coordinates projects in spacecraft development, space weather research, cybersecurity, and robotics, while also playing an active role in incubating startups, building industrial partnerships, and implementing international research initiatives.

With the creation of the International Advisory Board, Obuda University is elevating its international relations to a new level. Representing leading companies in the global space industry, venture capital ecosystems, and international innovation networks, the board members will provide strategic guidance over the next three years, primarily in the areas of innovation partnerships and investment transactions.



» **Members of the International Advisory Board**

Emeline Paat-Dahlstrom (New Zealand)

Co-founder and CEO of SpaceBase, Emeline is an experienced space entrepreneur and ecosystem builder. An alumna and current faculty member of the International Space University (ISU), she has been actively involved worldwide in developing global space education programs aimed at democratizing access to space. Through SpaceBase and the Global Space Enablers Network, she has been at the forefront of building highly successful and sustainable space ecosystems, particularly in emerging countries. She brings extensive expertise in startup development, innovation strategy, and building collaborations across continents.

Jeffrey Manber (United States)

President of the International Space Station business unit of Voyager Technologies, listed on the New York Stock Exchange, Jeffrey is one of the most prominent figures in the global space industry. With more than three decades of experience, he has played a defining role in the development and operation of commercial space stations and in strengthening international collaboration. Recently inducted into the International Astronautical Federation's (IAF) Hall of Fame, he continues to be a key leader in shaping the future of space infrastructure, commercial solutions, and space policy.

Raphael Röttgen (Switzerland)

Founding Partner of E2MC (Earth to Mars Capital) Ventures, Raphael leads one of the world's foremost venture capital funds focused on the space industry. He supports early-stage space startups with the aim of making them pivotal players in the future space economy. As a guest lecturer, he regularly teaches at EPFL in Switzerland and at the International Space University, focusing on space finance, venture capital, and entrepreneurship. He also hosts the Space Business Podcast and is the author of *To Infinity*, a book on the space economy. His career includes extensive experience in investment banking, hedge funds, and fintech, giving him unique insight into space investment, innovation, and startup development.

More Obuda University Researchers Included in Stanford's Global Top 2%

Each year, an increasing number of Obuda University researchers are featured in the database of the world's most highly cited scientists, compiled by Stanford University in California. While only two scholars from Obuda University were included five years ago, this year nine researchers represent the university among the top 2% of the world's leading scientists.

Among the most cited researchers worldwide in 2024 are Prof. Dr. Levente Kovács, Rector of Obuda University; Prof. Dr. Imre Rudas, Founding Rector of Obuda University; Prof. Dr. Tamás Haidegger, Professor and Head of the Medical Robotics Research Group; Prof. Dr. Mónika Garai Fodor, Dean of the Keleti Károly Faculty of Business and Management; Prof. Dr. Ágnes Csiszárík-Kocsir, Director of the Institute of Economics, Finance and Accounting at the Keleti Károly Faculty of Business and Management; Dr. habil. József Katona, Associate Professor at the Kandó Kálmán Faculty of Electrical Engineering; Dr. János Varga, Vice-Dean for Education at the Keleti Károly Faculty of Business and Management; Dr. Amir Mosavi, Associate Professor at the John von Neumann Faculty of Informatics; as well as Prof. Dr. János Fodor, former Rector of Obuda University.

The database published by Stanford University contains the achievements of more than 100,000 researchers – approximately 2% of the world's scientists. It provides standardized information on citations, the h-index, the hm-index (co-authorship adjusted), as well as citation metrics across different authorship positions. The ranking assesses both annual performance and the cumulative impact over an entire scientific career. Researchers are classified into 22 scientific fields and 176 subfields.

The list is published in two versions: one based on citation data for the year 2024, and another reflecting the cumulative career impact up to the end of 2024. In the latter ranking, nine scholars affiliated with Obuda University are also included: Prof. Dr. Levente Kovács, Prof. Dr. Imre Rudas, Prof. Dr. János Fodor, Dr. Amir Mosavi, Prof. Dr. Tamás Haidegger, Prof. Dr. Mónika Garai-Fodor, Prof. Dr. habil. Ágnes Csiszárík-Kocsir, Dr. habil. József Katona, and Dr. János Varga.

Our Distinguished Professors Presented Their Latest Scientific Achievements

On the day following the Opening Ceremony of the Academic Year, the Honorary Professors, Distinguished Professors, and Founding Research Award recipients delivered their inaugural lectures at the *Mini Symposium 2025* held on 9 September. The aim of the organizers was to provide a platform for presenting the latest innovative, scientific, and research results of internationally renowned scholars who have received one of Obuda University's most prestigious recognitions.

The symposium was opened with a welcome speech by **Prof. Dr. Levente Kovács, Rector of Obuda University**.

At the event, distinguished Hungarian and international speakers presented their most recent research findings. **Péter Érdi** (Kalamazoo College, USA) gave a lecture on the feedback control of biological systems, followed by **Thomas I. Strasser** (AIT Austrian Institute of Technology GmbH, Center for Energy, Austria), who addressed the design and validation of interdisciplinary smart energy systems.

Focusing on industrial and technological applications, **Ferat Sahin** (Kate Gleason College of Engineering, USA) examined the role of AR/VR solutions and the human comfort index in human-robot collaboration, while **Almaz Kadyraliev** (Kyrgyz Economic University) presented the impacts of increasing energy consumption on climate, as well as Kyrgyz efforts in energy efficiency and green technologies.

Árpád Baricz (Obuda University, Babeş-Bolyai University) showcased analytical error rate estimations using Marcum-type functions applied in signal processing, followed by **Róbert Rajkó** (Obuda University), who gave a comprehensive lecture on the multidisciplinary applications of chemical, biological, environmental, and technometric statistical methods.

Our Latest Research Results: Personalized Medicine and Digital Medical Technology

Acta Polytechnica Hungarica has published a special issue dedicated to the latest research outcomes on digital medical technologies conducted at Obuda University. The special issue addresses the globally relevant challenge of how medical solutions supported by artificial intelligence and machine learning can contribute to personalized medicine, patient safety, the sustainability of healthcare systems, and overall societal well-being.

The articles explore, among others, the following topics:

- Development and methodological challenges: mathematical modeling of chemotherapy, personalized therapies, robot-assisted and virtual reality (VR)-based rehabilitation programs.
- Clinical evaluation: the use of digital device data in medical decision-making, innovative testing and data collection methods, transparent and reproducible study protocols.
- Health economics approaches: synthesis of clinical evidence, perspectives in health technology assessment.
- Societal readiness, acceptance, and usability: the role of robots and chatbots in healthcare, implantable digital devices, digital literacy, patient and caregiver attitudes, as well as safety, ethical, and market entry considerations.

The research was supported by the National Research, Development and Innovation Fund (TKP2021-NKTA-36).

*The special issue (Guest Editor: Prof. Dr. Márta Pén-tek) is available at the following link:
<https://acta.uni-obuda.hu/Issue162.html>*



Delegation from Xi'an Jiaotong University Visits Obuda University

On 2 October 2025, Obuda University welcomed an academic delegation from China, including representatives from Chongqing University, Xi'an Jiaotong University, and Xi'an University of Architecture and Technology.

The visit provided a platform for the introduction of Xi'an Jiaotong University (XJTU) by Prof. Dr. SHEN Chao, who presented the history, achievements, and strengths of one of China's oldest and most prestigious higher education institutions.

XJTU is a member of the C9 League, the alliance of China's top universities. Obuda University already maintains partnerships with two other C9 members, Tsinghua University and Harbin Institute of Technology. XJTU itself is ranked 95th in the 2024 Academic Ranking of World Universities (ARWU) and placed in the 201–250 bracket in the 2025 Times Higher Education World University Rankings.

With 34 schools, more than 80 majors, and strong academic performance in engineering, management, economics, law, science and



medicine, XJTU is a leading institution in China's higher education landscape.

During the meeting, the universities presented their profiles and identified possible fields of cooperation, including:

- Student and faculty exchange
- Joint research projects
- Scholarship opportunities for international participants (such

as the Chinese Government Scholarship and Belt and Road scholarshi

The discussions also highlighted the Belt and Road Initiative, building on Obuda University's existing cooperation with Chongqing. The visit provided a solid basis for strengthening academic ties between Obuda University and Xi'an Jiaotong University.

Keleti Faculty Hosts Global Conferences on the Latest Scientific Innovations

The Keleti Károly Faculty of Business and Management recently hosted four major international scientific conferences, placing a spotlight on diverse fields including management, agriculture and life sciences, technology research, and education. For several days, Obuda University once again became a vibrant hub of global scientific exchange.

The event series was held as part of the international ISRES (International Society for Research in Education and Science) program, bringing together researchers, educators, and students from around the world.

Over the course of four days, participants not only shared their latest scientific findings but also established new professional networks and research collaborations. The conferences were coordinated by Prof. Dr. Ágnes Csiszárík-Kocsir, Vice Dean for Research at the Keleti Károly Faculty of Business and Management.

Prof. Dr. Péter Galambos, Vice Rector for Innovation, also attended the event.

The program included the following conferences:

- 8th International Conference on Veterinary, Agriculture and Life Sciences
- 7th International Conference on Management, Economics and Business
- 5th International Conference on Basic Sciences and Technology
- 2nd International Conference on Research in Education and Technology

The wide-ranging lectures and panel discussions spanned from economics and management sciences to natural sciences and educational technology, reflecting the innovative, open, and international spirit of Obuda University.

The presented research emphasized the power of scientific cooperation, highlighting that global challenges — whether economic, environmental, or technological — can only be effectively addressed through shared knowledge and cross-border dialogue.

This project (No. MEC_SZ 149231) was implemented with the support of the National Research, Development and Innovation Fund provided by the Ministry of Culture and Innovation, under the MEC_24 grant program.

Our Students Win Silver at EuroSkills Robotics Competition

Students from the Alba Regia Faculty (AMK) at Obuda University secured second place in the EuroSkills 2025 robotics competition in Herning, as members of the Hungarian industrial robotics team.

Competing students Márk Liszi and Bence János Kápolnás, both from AMK, represented our country and institution on the world stage in Denmark. Their preparation was strongly supported by Bálint Farkas, a departmental engineer at AMK, and István Bíró, an expert from Fanuc.

Over three days, the participants built a fully automated manufacturing cell: they designed and simulated it in ROBOGUIDE software, physically assembled the hardware, produced documentation, and created a custom user interface. The complexity of this project rivals those implemented by established system integrator firms over weeks or months.

This achievement illustrates that the knowledge nurtured at our Alba Regia Faculty in Székesfehérvár meets international standards, making this especially meaningful for our university.

KEPsoft Kidney Exchange Optimization Software Receives Prestigious Recognition

The KEPsoft software, developed with the contribution of researchers from Obuda University, has been awarded 3rd place in the EARTO (European Association of Research and Technology Organisations) Expected Impact Award. The software aims to improve the quality of life for patients suffering from kidney failure while also delivering significant cost savings for healthcare systems.

Obuda University joined the international consortium implementing EURO-KEP, a European Union–funded project under the EU4Health program. EURO-KEP is working to establish a pan-European living-donor kidney exchange network.

The four-member consortium, represented in Hungary by Obuda University and the Mechanism Design Research Group of the Eötvös Loránd University Centre for Economic and Regional Studies (ELTE KRTK), received the award for developing the KEPsoft software. The software is commercialized by KEPsoft Collaborative, a non-profit organization jointly established with the University of Glasgow and INESC TEC Porto.

Developed through close collaboration between Hungarian, Portuguese, and Scottish researchers, KEPsoft enables a higher quality of life for patients with kidney failure. To support the distribution, licensing, and wider application of this life-saving innovation, a non-profit company was founded.

The software facilitates optimal donor-recipient matching within kidney exchange programs by creating exchange cycles. It helps



patients who cannot receive kidneys from their own living donors due to immunological incompatibility or other health-related factors (such as large age differences) find suitable matches.

The researchers' goal is to provide better solutions for patients with kidney failure and address the acute shortage of living donors required for transplants—thereby offering patients a better chance of survival and improved quality of life.

Obuda University, which plays a key role in the development of cybermedical and medical technology systems, is also part of this collaboration.

"KEPsoft is an excellent example of effective, practice-oriented RDI collaboration centered around patients. The software provides real support for both patients and healthcare professionals. At the same time, it represents an internationally recognized solution that has also resulted in shared intellectual property with our partners. Obuda University aims to promote the growth of the KEPsoft community in Central Europe and worldwide,"

highlighted Rita Fleiner, head of the university's KEPsoft development team.

Using advanced algorithms, the software optimizes donor-recipient pairings on a national and »

» international level every three months, increasing the number of successful transplants. The platform already plays a key role in the EURO-KEP project, launched in 2024 with EU4Health support, which aims to build a unified pan-European kidney exchange network.

The Mechanism Design Research Group, established with the support of the Hungarian Academy of Sciences Momentum (Lendület) Program, has been instrumental in the software's development. Led by Péter Biró, the group has been studying since 2016 how game theory and algorithmic methods can be applied to design fair, efficient, and transparent matching mechanisms—for example, in school choice, internship allocation, or organ donation.

The use of KEPsoft delivers tangible social impact: by increasing the number of transplants and reducing waiting times, it can save thousands of lives each year and reduce healthcare costs by tens of thousands of euros per patient through the replacement of dialysis.

The development of KEPsoft represents not only a breakthrough at the intersection of medicine and information technology but also a new model of European collaboration—a joint platform born from the synergy of research, healthcare practice, and technological innovation.

Obuda University participates in the project as an associated partner, with funding provided by Hungary's National Research, Development and Innovation Fund – Innovation Subfund.

Obuda University Expands Cooperation with Hebei Province

Obuda University has taken another significant step in strengthening its international relations: two senior representatives from Hebei Province, Mr. Shi Dexin and Ms. Liu Honglei, visited Budapest to discuss potential areas of collaboration between the institutions. The talks focused on industrial development in the province, the application of the university's engineering expertise, and plans for a joint Science Park and dual degree program.

The Chinese delegation, Shi Dexin, Deputy Head of the Economic Division, and Liu Honglei, Deputy Head of the Investment Subdivision, previously met representatives of Obuda University at the International Science Park Conference in Shanghai. The purpose of their visit was to strengthen the relationship through concrete forms of cooperation.

Mr. Shi emphasized that while agriculture remains the main driver of Hebei's economy, the province aims to develop its industrial sector, adopt advanced Western technologies, and promote knowledge transfer. To achieve this, Hebei is dedicating substantial resources and has expressed particular interest in Obuda University's international reputation and strong engineering profile.

The delegation was received by Prof. Dr. Zoltán Rajnai, Vice-Rector for General Affairs, who presented the development concept of the OU Science Park and highlighted the university's broad range of research, development, and innovation (R+D+I) activities. Key focus areas included medical technology, materials science, cybersecurity, and hydrogen technology, the latter particularly capturing the guests' interest. The Vice-Rector also proposed the launch of short, intensive training programs, modeled after the Summer University.

During the discussions, Mr. Shi expressed Hebei Province's willingness to support and finance the establishment of a future Obuda University campus in China, and invited the university's delegation to personally visit the newly designated development site. The Chinese side's vision is to create an innovative educational hub in Northern China that would support Beijing's decentralization and boost regional development.

At the conclusion of the meeting, both parties signed a joint statement of intent to begin developing a dual degree program and to lay the foundations for a joint Science Park, marking a new milestone in the cooperation between the two institutions.

Obuda University Wins the Huawei Cloud Industry AI Application Innovation Award

Obuda University has achieved outstanding international recognition by winning the "Huawei Cloud Industry AI Application Innovation Award", presented at the Huawei Connect 2025 conference, held at the World Expo Exhibition & Convention Center in Shanghai. The event gathered approximately 15,000 participants from around the globe.

The 10th anniversary edition of the conference focused on artificial intelligence technologies and innovations, showcasing Huawei's latest cloud and AI solutions.

The Industry AI Application Innovation Award honors leading organizations that demonstrate exceptional achievements in adopting cutting-edge AI technologies to address complex industrial challenges and set new benchmarks in intelligent transformation. The award carries international significance, reinforcing the role of Hungarian higher education in global AI development.

"By combining forward-looking scientific research with our strong industry expertise, our university has created pioneering, transformative AI applications that not only deliver immediate impact but also lay the foundation for the future of education," emphasized Prof. Dr. Levente Kovács, Rector of Obuda University. The award was received on behalf of the university by Csaba Iván, Head of the IT Office.

About the Technology

The awarded solution was implemented within the Huawei cloud-based AI infrastructure used by Obuda University, which provides a secure, accessible developer interface for all members of the university community to conduct LLM (Large Language Model)-based research.

The infrastructure is powered by 1.5 TB of VRAM, more than 5 PFlops of computing capacity, and the DeepSeek R1 LLM (671 billion parameters).

In a recent interview, Prof. Dr. Levente Kovács explained that Obuda University is running several pilot programs exploring various infrastructure solutions. In collaboration with Huawei, the university is leasing a 5-petaflops system, primarily focused on large language model research and applications. However, the Ascend GPU-based system also supports a wide range of AI-driven research and development initiatives.



Research Challenges and Innovations in Informatics at the SISY Conference

More than 120 scholars from four continents participated in the 23rd IEEE International Symposium on Intelligent Systems and Informatics (SISY 2025), held in Subotica from September 25–27. The conference was jointly organized by Obuda University, Subotica Tech – College of Applied Sciences, University North, Juraj Dobrila University of Pula, and the IEEE Hungary Section.

A total of 128 scientific papers were submitted, of which 97 were presented. The program also featured four plenary lectures. Researchers and experts from 21 countries participated in the event, further strengthening its international and interdisciplinary character. Participants were welcomed by Prof. Dr. Levente Kovács, Rector of Obuda University.

The conference addressed key challenges of the digital era, including artificial intelligence, machine and deep learning, robotics, mechatronics, manufacturing systems, digitalization, 5G technologies, and

cybersecurity. Special sessions were dedicated to PhD research, generational studies, and the role of women in engineering and informatics. The plenary speakers focused on the applications, past, present, and future of fuzzy mathematics, delivering the following presentations:

- Márta Takács — *Fuzzy Challenges*
- Bernard De Baets — *“Fuzzy Sets,” 60 Years Later*
- Robert Kozma — *Implementation of Brain-Inspired Multi-Sensory Integration and Decision Making using Embodied Robotic Platforms*
- Ljiljana Trajković — *Data Mining and Machine Learning for Analysis of Network Traffic*

SISY 2025 was also a celebratory occasion, honoring the birthday of Prof. Dr. Márta Takács and her internationally recognized scientific achievements in fuzzy systems research.

The accepted and presented papers, following the peer-review process, may be published in the IEEE Xplore database, contributing to the academic value and global visibility of the conference.

Rector of Obuda University in EUA Board Nomination

Prof. Dr. Levente Kovács, Rector of Obuda University, advanced to the final round as an official candidate for the Board of the European University Association (EUA). This marks the first time in the history of Hungarian higher education that a Hungarian rector has been nominated for such a prestigious international governing body, representing a significant milestone in the global recognition of national university leadership.

The EUA Board election for 2025 took place on October 2. Candidates were selected by the EUA Nominations Committee, which recommends nominees to be approved by the EUA Council. For the four open positions, the number of candidates equaled the available seats. The final decision was between *Prof. Dr. Levente Kovács* and *Sunniva Whittaker*, Rector of the University of Agder, Norway, for a place on the EUA Board.

This nomination represents a strong professional recognition and demonstrates that Hungarian university leaders are increasingly active on the international stage. It is particularly noteworthy in a period when Hungarian higher education faces challenges in its European cooperation. The result reflects that, despite current difficulties, the international professional community acknowledges the achievements, ambitions, and constructive role of Hungarian institutions and their leaders in shaping European higher education, and has expressed its support for Hungarian academia.



Visit from Beijing University of Chemical Technology

On 21 October 2025, Obuda University welcomed a delegation from the Beijing University of Chemical Technology (BUCT) to discuss future cooperation and explore new avenues for academic and research collaboration.

The session was opened by **Vice Rector Zoltán Rajnai**, who greeted the guests and provided an overview of Obuda University's structure and international strategy. **Dr. habil. Johanna Sápi** from the Faculty of Informatics and **Prof. Dr. Tünde Anna Kovács** from the Faculty of Mechanical and Safety Engineering presented their faculties' educational and research activities, highlighting shared interests in engineering, materials science, and environmental technologies.

The BUCT delegation, led by **Vice President Prof. Su Haijia**, introduced the university's international strategy and expressed a strong commitment to innovation-driven cooperation. Both sides discussed opportunities for student and staff mobility, joint research projects, and the preparation of a Memorandum of Understanding to formalize collaboration.

The visit reflected the shared dedication of Obuda University and BUCT to fostering long-term academic relations and promoting excellence through education, research, and international exchange.

Our New Distinguished Professors

Our University continues its **Distinguished Program**, launched three years ago with the aim of strengthening internationally competitive research and education. As a result of the latest call, this year the title of “**Distinguished Professor of Óbuda University**” has been awarded to Prof.

Guang-Ren Duan, a renowned expert in control science, while the title of “**Founding Distinguished Researcher of Óbuda University**” has been granted to Prof. Dr. habil Árpád Baricz, a researcher in the theory of special functions, and Prof. Dr. Róbert Rajkó, a recognized professor of environmental chemistry and chemometrics – announced Prof. Dr. Levente Kovács, Rector.

Over the past three years, a total of **14 researchers** have joined the University Research and Innovation Center (EKIK), further strengthening the institution’s research excellence. Within the framework of four-year collaborations, the selected researchers will **establish international research groups, work on globally impactful scientific projects, and organize workshops**, thereby contributing to the university’s academic and educational excellence as well as the advancement of innovation and knowledge transfer – emphasized Rector Kovács.

The “**Distinguished Professor of Óbuda University**” call was open to full-time professors of the university, or those undertaking full-time positions, who demonstrably possess **high-level achievements in education, scientific research, and innovation**, along with a **significant publication record**.

Following the evaluation of applications, this year the following professors received the honorary titles:

- **Prof. Guang-Ren Duan** – an internationally recognized researcher in control science and engineering, a full member of the Chinese Academy of Sciences, and honorary member of the CAA, IEEE,



and IET. Author of more than 600 SCI-indexed publications and six monographs, his research has made a major impact on linear and nonlinear control theory as well as their applications in space research and robotics. He holds a leading scientific position at the Harbin Institute of Technology research center.

- **Prof. Dr. habil Árpád Baricz** – an internationally acknowledged researcher in the theory of special functions and applied mathematical analysis. With several hundred high-impact publications and extensive international collaborations, he is regarded as one of the leading authorities in his field.

- **Prof. Dr. Róbert Rajkó** – an internationally recognized expert in

environmental chemistry and chemometrics. His work has had a significant impact on the development of analytical methods. With outstanding publication activity, high citation record, and international collaborations, he is a distinguished representative of both the Hungarian and international scientific communities.

Óbuda University launched the **Distinguished Program** in 2022 to strengthen internationally competitive research and education. With a **budget of 900 million HUF**, the program supports outstanding researchers through three different grant opportunities.

<https://uni-obuda.hu/2025/09/08/uj-kivalosagi-professzorok-csatlakoztak-az-obudai-egyetemhez/>

Our students also learn from outstanding Chinese experts!

"The Chinese are not uncertain about what the future will be like — they create it themselves," said Dr. Zsombor Zrubka, Director General of the University Research and Innovation Center, in an interview with Index.

In the interview, Dr. Zrubka also spoke about the **Parallel Intelligence Decentralized Science Center**, led by the university's Excellence Professor and one of the world's leading artificial intelligence researchers, **Professor Dr. Fei-Yue Wang**. The center not only provides cutting-edge knowledge in artificial intelligence but also introduces students to **Chinese scientific and cultural perspectives**.

In China, research results achieved at universities are quickly transferred to industry. In Professor Wang's research group, while students are learning to program artificial intelligence algorithms, **many of those algorithms are already being applied in real industrial environments**, such as programming multimillion-dollar mining trucks. Initially, these trucks are remotely operated, then gradually become self-driving — and the team is already planning the production of **fully automated, cableless trucks**.

<https://index.hu/gazdasag/2025/10/08/obudai-egyetem-zrubka-zsombor-mesterseges-intelligencia-robotok-onvezeto-auto-kina/>



Award Ceremony for OTDK Certificates at Obuda University

On September 3, Obuda University hosted the **OTDK Certificate Award Ceremony**, where students and their supervisors received **Special Rector's Certificates** for their outstanding achievements.

The awards were presented on behalf of **Prof. Dr. Levente Kovács**, Rector of Obuda University, by **Dr. habil. Viktória Sugár**, Vice-Rector for Sustainability and Strategic Development.

The program also featured an insightful presentation by **Dr. István Szabó**, Head of the Talent Management Office about the newly launched **Excellence Óbuda Scholarship Program**.

Later, **Prof. Dr. Zoltán Vámossy**, Chair of the ETDT, summarized the results of the **37th OTDK**.

The event was supported by the **National Talent Program (NTP-HHTDK-25)** and the **Ministry of Culture and Innovation**, fostering excellence in student research and mentorship.



SISY 2025 Conference

The 23rd IEEE International Symposium on Intelligent Systems and Informatics (SISY 2025) took place on September 25-27, 2025 in Subotica, Serbia. The event was jointly organized by Obuda University, Budapest (Hungary), Subotica Tech (Serbia), University North (Croatia), Juraj Dobrila University of Pula (Croatia), and the IEEE Hungary Section.

The in-person conference focused on current research challenges and advances in intelligent systems and informatics. A total of 128 papers were submitted, of which 97 were presented at the symposium; the program included 4 plenary lectures. Participants represented 21 countries, underlining the international and interdisciplinary character of the event.

The plenary speakers were:

Márta Takács — Fuzzy Challenges

Bernard De Baets — “Fuzzy Sets”, 60 Years Later

Robert Kozma — Implementation of Brain-Inspired Multi-Sensory Integration and Decision Making using Embodied Robotic Platforms

Ljiljana Trajković — Data Mining and Machine Learning for Analysis of Network Traffic

A highlight of the conference banquet was a joint celebration dedicated to Márta Takács's birthday, to which the conference was dedicated.

Accepted and presented papers will be eligible for inclusion in the IEEE Xplore digital library, further supporting the conference's scientific impact.

For more information please log on to <https://conf.uni-obuda.hu/sisy2025>

The conference proceedings is now available via IEEE Xplore.





Obuda University Team Recognized by IEEE Region 8

At the IEEE Region 8 Committee Meeting held in Dubrovnik, Croatia, on 18 October 2025, Dániel Drexler accepted a token of appreciation on behalf of the Obuda University team.

The award, presented by IEEE Region 8 Director Dušanka Bošković and Secretary Ljupčo Kjurdažinov, recognizes the Hungary Section and the Obuda University organizers for their exemplary service in hosting the 124th IEEE Region 8 Committee Meeting, held in Budapest, Hungary, 5–6 April 2025.

The recognition highlights the team's dedicated effort and professionalism in supporting one of IEEE Region 8's most important gatherings, strengthening Hungary's role in the international engineering and scientific community.





Obuda University at IEEE SMC 2025

The IEEE International Conference on Systems, Man, and Cybernetics (SMC 2025) was successfully held, bringing together leading experts from around the world to discuss the latest advances in intelligent systems, automation, and human-machine collaboration.

This flagship event of the IEEE Systems, Man, and Cybernetics Society provided a unique platform for researchers and professionals to present their latest findings and strengthen international collaboration in the fields of systems engineering, human-machine interaction, and intelligent control.

Obuda University played a prominent and strategic role in this year's conference. Several researchers from the university presented their scientific results and participated in workshops and technical sessions. The university's

leadership also contributed significantly to the organization of the event:

- **Prof. Dr. Levente Kovács**, Rector of Obuda University, served as **Program Chair**,
- **Dr. habil. György Eigner**, Dean of the **John von Neumann Faculty of Informatics**, acted as **General Co-Chair**,
- **Anikó Szakál**, Director of the **Department of International Scientific Affairs**, served as **Finance Co-Chair**, and
- **Prof. Dr. Imre Rudas**, **Founding Rector of Obuda University**, served as **Honorary Co-Chair**.

Their active involvement and continued dedication to the international research community further strengthened Obuda University's global visibility and reputation in the fields of cybernetics, systems science, and intelligent technologies.

European Innovation Award for Kidney Exchange Software Developed with the Participation of Obuda University

Obuda University participated in the creation of KEPsoft, an internationally developed software that won 3rd place in the Expected Impact category of the European Association of Research and Technology Organisations (EARTO) at this year's European Innovation Awards.

KEPsoft is an innovative, pan-European software platform that supports the efficient operation of kidney exchange programs using optimization algorithms. The system aims to increase the number of successful living donor kidney transplants, reduce patient waiting times, and thereby improve the quality of life of transplanted patients. The development could result in savings of up to 2 million euros for every 100 patients in the healthcare system.

In addition to Obuda University, the Economics and Regional Science Research Center of Eötvös Loránd University, the University of Glasgow and the INESC TEC – Institute for Systems and Computer Engineering, Technology and Science in Porto participated in the development of the software. In 2024, the consortium established the KEPsoft Collaborative, a non-profit organization, which ensures the maintenance and international utilization of the software.

KEPsoft was established based on the results of previous European research collaborations (ENCKEP COST Action, KEPsoft COST Innovators Grant), and with the support of the National Research, Development and Innovation Office, the researchers further improved its architecture and integration capabilities. The software has a modular structure,

so it can be easily adapted to different legal, clinical and data management systems, supporting European healthcare collaborations.

The application aims to connect national kidney exchange programs and create the foundations of a unified European data platform. The resulting cooperation not only benefits larger countries, but also opens up new opportunities for patients in smaller member states in finding a compatible donor.

The EARTO recognition highlights that the development has an outstanding impact not only from a technological but also from a social and economic perspective: it can save thousands of lives each year, while reducing the burden on the healthcare system.

The development continues within the framework of the EURO-KEP project with the support of the EU4Health programme, which provides the IT background for the kidney exchange programme being organised. The Hungarian member of the consortium is the National Blood Service, which is the coordinator of the domestic kidney exchange programme.

More details: www.kepsoft.org



SISY 2025 September

Four colleagues of Obuda University Alba Regia Faculty, Éva Hajnal, Andrea Pődör, Tünde Máté and Bertalan Beszédes, participated in the September 25.-27., 2025. at the IEEE 23nd International Symposium on Intelligent Systems and Informatics (SISY2025) international conference held in Subotica, Serbia.

The fields of their article presented at the conference are design and development of an ultrasound-based autonomous robot indoor localization, sport management, machine vision based fire detection system and geoinformatics .

The conference covered many topics, including the fields of intelligent robotics, mechatronics, artificial intelligence and education. The event was supported by several well-known organizations, including Subotica Tech – Serbia, Obuda University, and IEEE Hungary.

<https://conf.uni-obuda.hu/sami2025/>



Obuda University researchers at the ICL-IGIP 2025 Conference

Obuda University participated in the 28th International Conference on Interactive Collaborative Learning (ICL) and the 54th IGIP International Conference on Engineering Pedagogy, held in Budapest between 01-03 October 2025.

The Alba Regia Faculty contributed with three presentations:

1. The Future of Intelligent Engineering and How AI Shapes the Profession – Dr. habil Monika Pogátsnik explored how AI transforms engineering workflows and skill requirements, based on a survey of 124 alumni.
2. Integrating Artificial Intelligence in Technical Pedagogy – Tímea Bekk and Dr. habil Monika Pogátsnik presented findings from a study involving 125 educators, highlighting opportunities and risks of AI in teaching.
3. Cybersecurity Awareness and Soft Skills in Higher Education – Judit Módné Takács, Nikoletta Tolner, and Dr. Tünde Máté introduced an interactive eLearning curriculum developed from focus group research on students' online behaviour and emotional responses to cyber threats.

The conference provided a valuable platform for sharing innovative approaches in engineering education and digital transformation.

<https://icl-conference.org/current/>





Sustainability in the Construction Industry

Representing the Obuda University, Alba Regia Technical Faculty, Dr. Bertalan Beszédes and five students Kristóf Enczi, Zoárd Müllek, Noémi Bakó, Gergő Teknyős, and Martin Cseh participated in the Erasmus+ Blended Intensive Program (BIP) titled “From Waste to Byproducts: New Paradigms to Construction Engineering”, organized by the Coimbra Institute of Engineering (ISEC), *Polytechnic University of Coimbra* (P COIMBRA02) in Coimbra, Portugal, from 13 to 17 October 2025.

The program aimed to present innovative approaches to sustainable construction engineering practices and material recycling, with a focus on the reuse of waste-derived secondary raw materials for industrial applications. Dr. Bertalan Beszédes delivered a lecture titled “Reusing and Repurposing Electronics Components”, in which he discussed the potential for reusing and functionally repurposing electronic components.

Our students and lecturers have previously had the opportunity to participate in professional activities through the BIP program: in 2023 in Alba Iulia and in 2024 in

Székesfehérvár (Young Researchers Academy for Green Cities). From the 2025 BIP program in Portugal, our students highlighted the diversity that characterized the international atmosphere — discussions took place among Polish, Italian, Slovak, Romanian, French, Lithuanian, and Portuguese participants during the professional sessions.

The central theme of the BIP was imbued with the concept of sustainability, focusing on the generation, management, and reuse of waste in the construction industry. The team from Székesfehérvár also visited the Faculty

of Agricultural Sciences, which offers a wonderful environment with its vast campus, its own riding school, and a beautiful garden rich in plant species — providing a chance for natural recreation amid everyday life.

In addition to the professional programs, there was also time to explore Portugal. In Coimbra, they attended an authentic fado de Coimbra performance at Café Santa Cruz — a restaurant housed in a converted old monastery. There were also opportunities to surf in the ocean, and the leisure program even included a visit to the vibrant and energetic city of Porto.



Train the Trainers Workshop within the HUNEDU Earth Observation Curriculum Development ESA Project

As part of the *HUNEDU Earth Observation Curriculum Development ESA Project*, a one-week professional training is being held between October 27-31 at the John von Neumann Faculty of Informatics.

Following the “train the trainers” principle, the program aims to provide participating Hungarian educators and researchers with up-to-date knowledge of modern methods for processing satellite data. The expertise gained through the workshop will later be applied in training the next generation of professionals in Hungary, thereby contributing to the advancement of space technology and Earth observation in the country.

The workshop is organized with the participation of internationally

recognized experts from foreign universities and research institutes. The program includes both theoretical lectures and hands-on sessions.

Lecturers and Topics:

- **October 27** – Dr. András Zlinszky (Sinergise): *Copernicus Data Space Ecosystem*
- **October 28-29** – Dr. Jochem Verrelst (University of Valencia): *Hyperspectral Remote Sensing*
- **October 30-31** – Dr. Armando Marino (University of Stirling): *Introduction to SAR Technology*

The daily sessions run from **9:00 a.m. to 5:00 p.m.**, providing participants with the opportunity to gain an in-depth understanding of modern Earth observation techniques and to develop their practical application skills.



Those We Can Be Proud Of – The Awardees of OTDK 2025

More than 30 students of Obuda University achieved placements at the National Scientific Students' Associations Conference (OTDK). This prestigious event offered them an excellent opportunity to deepen and expand their knowledge through research. Their achievements stand as strong proof of their professional commitment and enthusiasm for scientific challenges.

We would like to extend our congratulations to all of our students who participated in the conference, and special congratulations to our awardees!

OTDK 2025 – Awarded Students from Bánki

Kevin Berzicai, Márton Gábor

Matyasovszki, Viktória

Annamária Varga

Development of an Artificial Intelligence-Based Decision Support System for Detecting Motor Insurance Fraud

2nd Place

Section: Engineering Sciences

Division: Transportation Science 3

Supervisors: Dr. Judit Lukács,

Péter Várdi

Brúnó Barnabás Krasnyánszki

Maritime Cybersecurity and Strategic Approaches to the International Management of Maritime Incidents

Special Prize

Section: Military and Law Enforcement Sciences

Division: Cyber Defense, Cybersecurity

Supervisor(s): Dr. habil. Csaba Kollár

Brúnó Barnabás Krasnyánszki, Réka Csizmadia

Possibilities for Improving E-mail Security with Natural Language Processing

Special Prize

Section: Military and Law Enforcement Sciences

Division: Infocommunication

Supervisor(s): Dr. habil. Csaba Kollár

Zoltán Molnár

Novel Methods for Local

Positioning

Special Prize

Section: Engineering Sciences

Division: Electronics, Electrical Measurement Technology, Telecommunications

Supervisor(s): Prof. Dr. Róbert Szabolcsi

Anett Szeledi

Static Analysis and Sensitivity Study of a Resistive 3D Force Sensor Using Simulation

3rd Place

Section: Engineering Sciences

Division: Mechatronics, Biomechatronics, Robotics 2

Supervisors: Dr. Tamás Szakács, Dr. János Volk

Ákos Zsámbok

Geometric Modeling of Mitsubishi RV-3SB Robot in Unity Environment

Special Prize

Section: Engineering Sciences

Division: Mechatronics, Biomechatronics, Robotics 2

Supervisor(s): Bence Varga



<https://bgk.uni-obuda.hu/en/those-we-can-be-proud-of-the-awardees-of-otdk-2025/>



The Alverad-Bánki International Conference on Cybersecurity and Research Development was a success

On October 15, 2025, the Alverad-Bánki International Conference on Cybersecurity and Research and Development was held for the fourth time, jointly organized by Alverad Technology Focus Kft. and the Obuda University Bánki Donát Faculty of Mechanical and Safety Engineering.

The aim of the conference, which takes place annually in a hybrid format, is to make the latest domestic and international research results available to the expert audience, and to provide an opportunity for young researchers and PhD students to gain publication experience and present the results of their thesis.

The event also aims to deepen scientific relations between lecturers and students of partner universities, as well as our colleagues.

The plenary session took place in the conference room of the Bánki Faculty at József körút, opened by

Dr. Richárd Horváth, Vice-Dean for Research, and **Attila Hinkel**, Managing Director of Alverad Technology Focus Kft., followed by four high-quality presentations before the symposium was divided into sections. The presentations took place at 3 locations in the Bánki building and in a remote section at the Cyber Islands site – which could be joined in person or online.

The following sections took place:

- Artificial Intelligence I-II
- Cyber Defense
- Cyber Security
- Research, Development I-IV
- Industrial Cyber Security
- NIS2

We are very pleased that so many interesting presentations and presentations were held regarding cybersecurity. Following the conference, the publications will be published in the conference volume of the Hadmérnök journal.

We would like to thank the organizers, speakers, our colleagues, and students for their contribution, organization, and implementation.

<https://bgk.uni-obuda.hu/en/the-alverad-banki-international-conference-on-cybersecurity-and-research-development-was-a-success/>



Lecture by our professor emerita, Dr. Lívia Cvetičanin Pintér, at the Hungarian Academy of Sciences

Former head of the Doctoral School on Safety and Security Sciences at the Bánki Donát Faculty of Mechanical and Safety Engineering at Óbuda University, professor emeritus at Obuda University, Dr. Lívia Cvetičanin Pintér, academician, gave her inaugural lecture at the Hungarian Academy of Sciences on October 22, 2025. The lecture, entitled "Dynamics of Systems with Changing Mass: Theory and Engineering Applications," took place in the Grand Hall of the MTA headquarters. [View the event on the MTA website.](#)

The research areas of the professor include applied mechanics, the dynamics of mechanisms, and vibration. Her scientific and teaching work is highly regarded both at home and internationally.

The event was attended by the dean of the faculty, the deputy deans for education and research, and several colleagues, who personally congratulated the former head of the Doctoral School. The event was organized by the Department of Engineering Sciences, highlighting the importance of the relationship between scientific excellence and engineering practice.

Our faculty and the Óbuda University community congratulate the professor with great pride and affection.

Her career, scientific dedication, and personal example are an inspiration to us all. Through her work and personal attitude, she strengthens the reputation of Óbuda University and the Bánki Faculty in domestic and international scientific life.



Lecture by our professor emerita, Dr. Lívia Cvetičanin Pintér, at the Hungarian Academy of Sciences

We are delighted to announce that Prof. Dr. Edit Ludányi-Laufer, head of the Institute of Mechatronics and Vehicle Engineering at the Bánki Faculty and our colleague, has been recognized in the Hungarian Scientific Association for Information and Communication Technology (HTE) Top 50 Women in Artificial Intelligence initiative.



The aim of the HTE Top 50 Women in Artificial Intelligence initiative was to present and recognize, from a professional perspective, those exceptional female professionals who are shaping the development of artificial intelligence in Hungary with their knowledge and responsible leadership.

The HTE Top 50 Women in Artificial Intelligence are professionals—engineers, researchers, educators, and corporate leaders—who work in areas where artificial intelligence has a tangible impact on industry, education, and the scientific world. The goal is not only recognition, but also connection: people and organizations working together for responsible, value-based Artificial Intelligence applications.

We would like to take this opportunity to congratulate them on their award!

<https://bgk.uni-obuda.hu/elismeres-prof-dr-ludanyi-laufer-edit-reszere-het-top-50-nok-a-mesterseges-intelligenzia-teruleten/>



Meeting with the Executive Director of the Gene Haas Foundation

On September 5, 2025, Kathy Looman, Executive Director of the Gene Haas Foundation, and György Péntek, Operations and Sales Manager at Haas Factory Outlet, paid a short visit to the Bánki Faculty.

The main purpose of the meeting was to further strengthen the existing ties between the Foundation and the Faculty, as well as to explore new strategic cooperation opportunities to elevate their partnership to an even higher level in the future.

Representing the University leadership, Prof. Dr. Zoltán Rajnai, Vice-Rector General, attended the event, while the Bánki Faculty was represented by Dr. habil. Tibor Farkas, Dean, and Dr. György Czifra, Assistant Professor at the Department of Manufacturing Technology, Institute of Mechanical Engineering and Technology. We are confident that this collaboration will bring further success to both the Bánki Faculty and the Gene Haas Foundation!

<https://bgk.uni-obuda.hu/en/meeting-with-the-executive-director-of-the-gene-haas-foundation/>



Bánki success at the SISY 2025 conference

Assistant lecturer Bence Varga, a faculty member of the Bánki Faculty, has been awarded the distinction of best doctoral student publication at the SISY 2025 (IEEE 23rd International Symposium on Intelligent Systems and Informatics).

The conference was organized under the leadership of Dr. Richárd Horváth and Dr. József Kázmér Tar, who served as session chairs for the event. The symposium was held in Subotica from September 25 to 27, 2025, bringing together leading researchers and academicians in the field of intelligent systems and informatics from around the globe.

Varga received the award in recognition of his original research contribution, entitled "Application of the Wegstein-type convergence accelerator in iterative adaptive control." The publication addresses the development and application of an advanced convergence

acceleration method within iterative adaptive control algorithms, aiming to improve convergence speed and stability in complex control systems. This work contributes to ongoing research in control theory and adaptive systems, with potential implications for automation, robotics, and related engineering domains.

The full paper is available in the journal Acta Polytechnica Hungarica, accessible via the following link: https://acta.uni-obuda.hu/Varga_Horvath_Tar_164.pdf.

We would like to congratulate you on the award!

<https://bgk.uni-obuda.hu/en/banki-success-at-the-sisy-2025-conference/>





Research Workshop Reflects on the 3rd Ybl Conference on the Built Environment

On 17 September, the Doctoral School of Architecture, Design, and Technology at the Ybl Miklós Faculty of Architecture and Civil Engineering held its first research workshop, reflecting on the achievements of the 3rd Ybl Conference on the Built Environment.

The event aimed to share the experiences of one of the faculty's most successful scientific gatherings with newly enrolled doctoral students. Prof. Dr. Anthony John Gall, Dean of the Faculty, opened the session, followed by Dr. habil. Viktória Sugár, Vice Rector for Sustainability and Priority Developments at Óbuda University, who highlighted how the Ybl Conference has grown from an internal academic initiative into a prestigious international event.

In the second part, eight doctoral students presented refined versions of their conference papers in English and Hungarian, encouraging lively discussion and professional reflection.

With initiatives like these workshops, the faculty aims to strengthen its research community and build a dynamic, internationally relevant, and successful doctoral school.

<https://ybl.uni-obuda.hu/en/research-workshop-on-the-experience-of-the-3rd-ybl-conference-on-the-built-environment/>





Visiting PhD Student from Italy at Ybl Miklós Faculty of Architecture and Civil Engineering

The Ybl Miklós Faculty of Architecture and Civil Engineering is delighted to welcome Giulia Percolla, a PhD student from Italy, as a visiting researcher during the autumn semester of 2025.

Her doctoral project, titled "Geospatial Surveying and Modeling of Historical Buildings," focuses on the intersection of engineering, heritage preservation, and advanced digital technologies. Through her research, Giulia aims to contribute to the growing field of digital documentation and analysis of historic architecture.

This academic collaboration builds upon the faculty's longstanding partnership with the University of Reggio Calabria, where Ybl lecturers have previously engaged in teaching and research activities. During earlier exchanges, Dr. László Szűcs and Barna Mihók delivered a series of guest lectures to local students, strengthening professional relations and paving the way for future cooperation.

Giulia's research stay marks a new milestone in this international partnership, enriching the faculty's

scientific community and reinforcing its commitment to cross-border collaboration in architectural and engineering education.

<https://ybl.uni-obuda.hu/en/welcoming-a-visiting-phd-student-from-italy/>





Erasmus+ Project “Fostering European Identity through Heritage Engagement” Concludes in Budapest

Professor Andor Wesselényi-Garay, representing the Ybl Miklós Faculty of Architecture and Civil Engineering of Óbuda University, participated as organizer and architectural expert in the Erasmus+ project Fostering European Identity through Heritage Engagement.

Following the earlier project venues in Bögöz (Transylvania) and Zavattarello (Italy), the final event was held in Budapest in Octobre, where Italian, Hungarian, and Transylvanian participants gained insight into Hungary's approach to heritage preservation and restoration. The program included site visits to the Rumbach Street Synagogue and Buda Castle, both emblematic examples of recent heritage renewal.

As part of the Budapest program, Professor Wesselényi-Garay organized a pop-up conference, where distinguished Hungarian architects presented their recently completed

works and shared their views on heritage protection and adaptive reuse in contemporary architectural practice.

The international cooperation, involving partners from three European countries, aims to strengthen a shared sense of European identity through active engagement with cultural heritage. The project also seeks to raise awareness of Europe's unity in diversity, promote cultural identity and historical awareness, and inspire participants—architects and non-architects alike—to become more involved in heritage care and protection.

The series of lectures and workshops took place in Bögöz, Zavattarello, and Budapest, emphasizing the importance of cross-border collaboration and shared European values in preserving the continent's cultural heritage.

The Ybl Miklós Faculty of Architecture and Civil Engineering of Óbuda University is committed to supporting international collaborations and projects that promote professional excellence, cultural understanding, and the protection of architectural heritage across Europe.

<https://www.cultural-crossroads.eu/>



Historical Tenements of Pest: Styles, Patterns, Evolution

The book "Historical Tenements of Pest: Styles, Patterns, Evolution" was presented at a full-house event at the Hungarian Architects' House on 24 September – as an accompanying event to the Faculty's Msc 2024 complex design exhibition.

Dr. habil. Viktória Sugár, Vice-Rector for Sustainability and Strategic Developments at Obuda University, and Michihiro Kita, researcher at Osaka University, presented the book at the Hungarian Pavilion of the Osaka World Expo. However, the national premiere has only just taken place.

The moderator of the evening, Dr. Viktor Rozmann, spoke to Viktória Sugár, one of the authors of the book, about her personal relationship with Japan, the one and a half decade long relationship between Osaka University and the Ybl Miklós Faculty of Architecture and Civil Engineering, and the more than 15 years of joint research history of the book, which was also the subject of her doctoral dissertation, which will be defended in Osaka in 2020.

<https://ybl.uni-obuda.hu/en/historical-tenements-of-pest-styles-patterns-evolution/>

