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OF THE SILESIAN UNIVERSITY OF TECHNOLOGY

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MAY THE 80TH YEAR BE GOOD, HAPPY, AND PROSPEROUS

Silesian University of Technology

RESEARCH UNIVERSITY EXCELLENCE INITIATIVE

INAUGURATION OF THE 80TH JUBILEE ACADEMIC YEAR AT THE SILESIAN UNIVERSITY OF TECHNOLOGY

Photos: *Maciej Mutwil*

FROM THE EDITOR

The Silesian University of Technology, the largest and oldest technical university in the Silesian Voivodeship, proudly, with the participation of friends, partners from the socio-economic environment, representatives of the ministry authorities, regional self-government and local authorities, as well as many members of the University Community and, above all, newly admitted students, officially and with great joy inaugurated the 80th year of activity. Mindful of the achievements and experiences of previous generations, we are entering the next stage of the University's development, which the Silesian University of Technology enters from the position of one of the ten best Polish universities, implementing a unique pro-quality program in the national higher education system, which is the Excellence Initiative – Research University. This year's October, the beginning of the academic year, was full of important and exciting events, the impact of which in the coming months will be significant. The latest issue of the Silesian University of Technology Bulletin, which we give to our readers, encourages human stories and offers suggestions for spending free time. Although in the rush of everyday life, it is becoming increasingly difficult to find moments only for oneself, it is worth taking time to admire the charms of autumn in the mountains, taking advantage of the opportunities that the mountain chalets of the Silesian University of Technology create for all lovers of hiking. I wish you a pleasant read and new impressions on behalf of the editorial board,

Iwona Flanczewska-Rogalska

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MAY THE 80TH YEAR BE GOOD, HAPPY, AND PROSPEROUS

text: *Jolanta Skwaradowska*
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THE SILESIAN UNIVERSITY OF TECHNOLOGY INAUGURATED THE NEW ACADEMIC YEAR WITH THE PARTICIPATION OF THE NEW UNIVERSITY AUTHORITIES, THE DEPUTY MINISTER OF SCIENCE AND HIGHER EDUCATION, GUESTS AND SCIENTISTS, STUDENTS, AND EMPLOYEES. IT WAS THE 80TH JUBILEE INAUGURATION AT OUR UNIVERSITY.

The Silesian University of Technology Rector, Prof. Dr Hab. Eng. Marek Pawełczyk, welcomed the Education and Congress Centre participants.

"For the 80th time and thus the jubilee year, our University inaugurates the academic year and offers students and PhD students of the Silesian University of Technology its infrastructure and engaged staff, as well as modern individual development programs," said the Rector.

This unique ceremony, which opens the next period of our activity, apart from building a sense of connection, also raises lofty expectations and hopes, especially for first-year students and doctoral students who are debuting in a new role. Perhaps the word "debut" best reflects the beginning of this year's academic year at our university. After all, even though I was Vice-Rector for Science and Development for eight years, today I stand before you as a debutant in the role of Rector," said Prof. Marek Pawełczyk, the Rector of the Silesian University of Technology.

"It is a great honour for me to lead our celebration today. Together with me, the 80th inauguration of the academic year at the Silesian University of Technology is attended by the Vice-Rectors of our University: Professor Anna Chrobok – Vice-Rector for Student Affairs and Education, Professor Bożena Skolud – Vice-Rector for General Affairs, Professor Marcin Staniek – Vice-Rector for Cooperation with the Social and Economic Environment, Professor Zbigniew Paszenda – Vice-Rector for In-

frastructure and Investment and Professor Sebastian Werle – Vice-Rector for Science and International Cooperation, as well as well as the Deans, Directors and heads of Units – welcomed the Rector.

Among the guests were the rectors of the friendly universities, the previous rectors of the Silesian University of Technology, and the Rector of the past term – Professor Arkadiusz Mężyk.

The inauguration was also attended by Professor Marek Gzik, Secretary of State at the Ministry of Science and Higher Education, Kinga Okrzesik-Faruga, General Director of the Ministry of Industry, MPs, senators, representatives of provincial and local authorities, representatives of business, scientific and research institutions, uniformed services, and churches of various denominations.

"It is with immense joy and a sense of importance that I greet you at a special event of the University, which is the inauguration of the academic year. This unique ceremony, which opens the next period of our activity, apart from building a sense of connection, also raises considerable expectations and hopes, especially for first-year students and doctoral students who are debuting in a new role. Perhaps the word "debut" best reflects the beginning of this year's academic year at our university. After all, even though I was Vice-Rector for Science and Development for eight years, today I stand before you as a debutant in the role of Rector. Full of ideas, enthusiasm, determination, and humility toward the responsibility for the mission's success, which we as a community must fulfil in the coming months and years," said the Rector of the Silesian University of Technology in his inaugural speech.

The Rector referred to the university's 80th anniversary and thanked all who created it for years.

"The Silesian University of Technology was established in May 1945, on the ruins of the world destroyed by the war fire, with dreams of freedom, autonomy of science and servitude to the needs of the inhabitants, region, and country. The commitment, dedication, and talents of successive generations of academic community members gave birth to a university that currently educates over fifteen thousand students in nearly sixty fields of study and seven hundred doctoral students in twelve scientific disciplines. We have an excellent staff and

a rich infrastructure that we will develop. The Silesian University of Technology is one of the most active universities in the country today. Since 2020, as one of the ten competition winners, we have successfully implemented the largest strategic program in Polish higher education, the Research University Excellence Initiative; we ensure it is accessible to everyone: our employees, doctoral students, and students. We will use this program to consistently strive for excellence and approach the best universities in Europe and the world," emphasized the Rector.

university is to restore a sense of security and create prospects for stable functioning against the background of changing reality. He stressed that the Silesian University of Technology has always been close to people and human affairs.

"As engineers, we are standing firmly on the ground, maintaining social sensitivity and being aware of responsibility for the consequences of actions taken and proposed technological solutions. We stand out from the background of universities focused on ad hoc business purposes. We follow the words of one of the most distinguished graduates of the Silesian University of Technology, Prof. Jerzy Buzek, who, when asked about the meaning of Education, said: 'As engineers, we are the demiurge of reality, but the technical university should increasingly humanize itself because the technology we produce is also responsible today for the solution of a philosophical nature.' We will consistently build a sense of value in society and the economic environment from the functioning of the Upper Silesia Technical and Public academic University. We will try to ensure that the region's inhabitants look proudly at the Silesian University of Technology," emphasized the Rector.

We live in an era of rapid technological progress and rapid information exchange. The world has become closer and more accessible, but global crises, climate change, natural disasters, dwindling raw materials resources, and the need to revise energy policy, as well as armed conflicts and threats in cyberspace, demand from us scientists not only attention and debates but also proposals for solutions.

The Rector reminded those gathered in the Education and Congress Centre auditorium that Poland, Europe, and the world are facing historical challenges today.

"We live in an era of rapid technological progress and rapid exchange of information. The world has become closer and more accessible, but global crises, climate change, natural disasters, dwindling resources of raw materials and the need to revise energy policy, as well as armed conflicts and threats in cyberspace, demand from us scientists not only attention, debates, but also proposals for solutions."

Prof. Marek Pawełczyk pointed out that the role of the modern

These words take on a special dimension in the Year of the European Science City Katowice 2024, when science is closer to people.

The acquisition of this title by the capital of Upper Silesia and seven public universities, including the Silesian University of Technology, is an excellent victory for Silesian universities and local government. Above all, it is a unique opportunity for a permanent transformation of the region toward a safe and prosperous future for its inhabitants, noted Prof. Pawełczyk.

The Rector also drew attention to the scientific community's challenges in his inaugural speech.

"After several years of functioning under the Law on Higher Education and Science, which caused significant changes in our functioning, we are again faced with the necessity and depth of changes. We are waiting for an amendment, a revision of the principles of university evaluation, and genuine support for internationalization processes. Universities gathered at the Conference of Rectors of Academic Schools in Poland have no doubt that without a fundamental change in approach and treatment of expenditures on science not as a cost but as an investment and a significant increase in their amount, our country will be used and relegated to the role of a cheap client. We appreciate the Ministry of Science and Higher Education's understanding of these problems and the friendly dialogue. However, some of the proposed provisions in the content of the new act and other ministries' actions are worrying

us. We are counting on our appeals," said the Rector.

The Deputy Minister of Science and Higher Education, Prof. Marek Gzik, who was present during the ceremony, also stressed that the new academic year for Polish science will be full of challenges.

"We are facing reforms in the Polish Academy of Sciences and amendments to the Law on Higher Education and Science. It is vital to strengthen the cooperation between science and business. On my initiative, the Ministry established a think-tank to diagnose and recommend what could improve this cooperation. We invite you to participate in the National Congress of Science and Business next year. The Silesian University of Technology has excellent experience in this area and a lot to offer. This is important because we are in a profound economic transformation, especially in the energy and Silesia regions. Therefore, only good cooperation between science and business can result in further dynamic development of our country," emphasized Prof. Marek Gzik.

During the inauguration ceremony, the presidents of Gliwice and Katowice also spoke.

"When I think about Gliwice, I think about this University. Gliwice and Silesian University of Technology are a system of connected vessels. The key to my recently started presidency is cooperation. Therefore, strengthening cooperation with the Silesian University of Technology is extremely important for me," said Katarzyna Kuczyńska-Budka, President of Gliwice.

"In cooperation with universities, we try to work together to develop our cities," added Dr Eng. Marcin Krupa, President of Katowice. "Why do I talk so often about development? Because we need students, graduates, and jobs for them. Prof. Jerzy Buzek frequently discussed the golden triangle of self-government, universities, and business. Their cooperation gives development opportunities," emphasized the President of Katowice.

The Rector of the AGH University of Science and Technology, Prof. Jerzy Lis, spoke on behalf of the academic community.

"Throughout Poland, there is an excellent inauguration of

the academic year, a festival of higher education and science on an unprecedented scale. Universities around the country celebrate their place in the society in this traditional way. These tens of thousands of people have gathered and can think momentarily about the university, science, and its role. These are scientists, students, graduates, and guests holding highly high positions. How we celebrate the start of the academic year

is unique. I would argue that there is no such tradition in other countries. It was created in 1936 when the rectors of public universities gathered at the Stefan Batory University and developed a particular canon of inauguration. The first element was the Holy Mass, followed by the Rector's speech on the current situation and the matriculation of students. And this tradition has passed to all universities," said Prof. Jerzy Lis.

After the guests' speeches, the Vice-Rector for Student Affairs and Education, Prof. Anna Chrobok, led a solemn matriculation.

"Today's inauguration ceremony of. The academic year is significant for first-year students who start their studies at our University. Dear students – through matriculation, you have been symbolically accepted into our university's academic community. I wish you success in passing subsequent passes and exams, that is, success in gaining knowledge at our University, using all the opportunities to develop your personality and satisfaction from participating in student life. Dear students, I wish you all the best," said Prof. Anna Chrobok

The Omnium Studiosorum Optimo Medals (the best of the graduates) were awarded during the ceremony. Established by a resolution of the Senate of the Silesian University of Technology, this medal is the highest distinction awarded to Silesian University of Technology graduates. It is awarded to graduates with exceptional academic performance and outstanding scientific achievements. These medals were awarded to:

- Eng. Bartosz Bdzionek, a graduate of the Faculty of Civil Engineering.
- Msc. Eng. Lukasz Jakubski, a graduate of the Faculty of Chemistry.
- Msc. Eng. Piotr Cichy, a graduate of the Faculty of Energy and Environmental Engineering.
- Msc. Eng. Klaudia Cholewa, a graduate of the Faculty of Biomedical Engineering.

After giving awards to his younger colleagues, Dawid Mordarski, Chairman of the Student Self-Government of the Silesian University of Technology, turned to his younger colleagues.

"I would like to address everyone starting their first year of study. You may wonder what awaits you at the University and ask yourself: 'Will I manage? Was it an excellent choice, and what if I fail?' You've probably heard it before, not to be afraid. And I will tell you, be afraid, and tell you why. Fear is natural for any person taking on new challenges, so if you feel a little stressed, it's good because it means that you are undertaking something different than before and have new goals ahead of you. It is important that this fear does not paralyze you and prevent you from acting but that it acts as a motivator. That is why I want to tell you to 'not be afraid to be afraid,' what today is a reason for fear and anxiety will be a pleasant everyday life in a few weeks. It is important that you plan your next step now and think about what you can start doing now at the University," said David Mordarski.

The Social Council of the Silesian University of Technology award and the Medal of the Association of Students of the Silesian University of Technology, "Outstanding Graduate of the Silesian University of Technology," were presented during the ceremony.

"The Social Council award is a distinction, which, in its assumption, is an expression of recognition for exceptional didactic achievements, interdisciplinary activities, popularizing professionalism, and raising the prestige of the university," said the Vice-Rector for Cooperation with the Socio-Economic Environment, Dr Hab. Eng. Marcin Staniek, Prof. SUT.

Prof. Janusz Kotowicz presented awards of the Social Council – Vice-Rector for Cooperation with the Socio-Economic Environment in 2016-2024, and Dr Jan Sarna, Director General of the Foundation for the Development of Cardiac Surgery and Vice-President of the Social Council.

"For the fourth time, we have the pleasure of presenting the Social Council of the Silesian University of Technology statuette to the winners. The criteria for awarding the award are not only related to strictly scientific activity and achievements. The Social Council promotes positive social attitudes, the development of cooperation between businesses and universities, the crossing of barriers of scientific disciplines, didactic achievements, involvement in development, mobility, and internationalization of the university," said Prof. Janusz Kotowicz.

The prize is awarded in the following categories: Employees and Students.

In the Student category, Mateusz Pawlik from the Faculty of Mining, Safety Engineering and Industrial Automation was awarded for the victory in the XVIII Mining Knowledge Tournament, while in the Employees category - a team composed of Dr Hab. Eng. Sebastian Student, Prof. SUT, Prof. Dr Hab. Eng. Ilona Wandzik, Dr Hab. Eng. Ziemowit Ostrowski, Prof. SUT, Dr Eng. Małgorzata Milewska, Dr Eng. Kazimierz Gut and Dr Eng. Maria Gracka. The statuette was awarded for creating a "Microsystem for cell steroid culture" in hydrogels. This solution allows us to imitate processes in the human body and use them, for example, to evaluate drugs for cancer.

Then, medals of the Association of Alumni of the Silesian University of Technology were presented, including one for "Outstanding Graduate of the Silesian University of Technology."

"A large group of graduates of the Silesian University of Technology has succeeded in industry, science, and local and state administration at home and abroad. They are all our representatives and our pride. To honour them, the Association of Alumni of the Silesian University of Technology established the title Outstanding Graduate of the Silesian University of Technology. Today, this title will be awarded for the third time," said the Vice-Rector for Cooperation with the Socio-Economic Environment, Dr Hab. Eng. Marcin Staniek, Prof. SUT.

We are facing the reform of the Polish Academy of Sciences and the amendment of the Law on Higher Education and Science. Strengthening the cooperation between science and business is particularly important. On my initiative, a team was established at the Ministry whose task is to diagnose and recommend what could improve this cooperation, emphasized Prof. Marek Gzik, Deputy Minister of Science and Higher Education.

When I think about Gliwice, I think about this University. Gliwice and Silesian University of Technology are a system of connected vessels. The key to my recently started presidency is cooperation. Therefore, strengthening cooperation with the Silesian University of Technology is extremely important for me," said Katarzyna Kuczyńska-Budka, President of Gliwice.

Medals received:

- Dr Eng. Andrzej Porszke graduated from the Faculty of Mining and Geology in 1999. He started his professional career at the Laboratory of Civil Engineering LABOTEST, and in 2013, he founded AP Geotechnika, which he successfully developed. He also conducts scientific activity – he is the author of over 160 research works, three patents and a dozen scientific publications.
- Eng. Jan Kurp graduated in the field of machinery and energy equipment in 1973. He was the President of the Management Board of Elektrownia Jaworzno III S.A. and then the Southern Power Concern S.A. President. He actively participated in the restructuring and consolidation of the energy sector.

Tomasz Gębka, the General Director of Stellantis Tychy, a Silesian University of Technology graduate, delivered the inaugural lecture. The director told the audience about his professional path, and the students gathered at the ceremony gave valuable advice on achieving success and what is essential in life.

"Studies are a time of incredible development. Although there is no golden recipe, it cannot be wasted. Of course, there is time for parties and all other pleasures, but you need to use the period of study in such a way that in the future it will bring you as many benefits as possible. You must gain experience, not sit at home or in a dorm, but experience life and explore it. It's a way to discover your hidden talents. Until we try something new, we will not know whether we are talented in this or that field," said Tomasz Gębka.

Throughout Poland, there is a grand inauguration of the academic year, a festival of higher education and science on an unprecedented scale. Universities around the country celebrate their place in the society in this traditional way. These are tens of thousands of people who have gathered and can think for a moment about the university, the university, science, and its role," said Prof. Jerzy Lis, Rector of the AGH University of Science and Technology

The ceremonial jubilee inauguration of the Academic Year 2024/2025 ended with the performance of the Academic Choir of the Silesian University of Technology, directed by Mr. Tomasz Giedwiłło.

HIGH-FLYING COOPERATION

text: Katarzyna Siwczyk
photo: Jan Szady

AFTER THE CEREMONY INAUGURATING THE NEW ACADEMIC YEAR, THE SILESIAN UNIVERSITY OF TECHNOLOGY SIGNED A COOPERATION AGREEMENT WITH LOT POLISH AIRLINES.

The new academic year at the Silesian University of Technology begins with another vital cooperation agreement. LOT Polish Airlines has joined our university's group of partners.

The agreement was signed by the Silesian University of Technology Rector, Prof. Dr Hab. Eng. Marek Pawełczyk, and President of the Management Board of PLL lot S.A., Michał Fijoł.

We have been investing heavily in aviation in recent years. We educate pilots, mechanics, engineers, and air traffic controllers, and we have our air base and aircraft. We want this education to be conducted at the highest level, and cooperation with partners such as Polish Airlines will undoubtedly allow it, emphasized the Rector.

A LOT representative can also see many opportunities for fruitful cooperation with the Silesian University of Technology.

- We are delighted to cooperate with universities, especially those at the forefront of Polish universities, said the President of PLL LOT S.A. Michał Fijoł. – We are pleased to sign an agreement with the Silesian University of Technology. This is important because we need the best graduates and job candidates to join our ranks. According to LOT's CEO, aviation is one of the most competitive industries. Companies must compete in Polish and worldwide markets, hence the need to educate outstanding staff in this area.

Michał Fijoł also stressed that LOT is developing intensively, acquiring new aircraft, launching new destinations, and transporting an increasing number of passengers yearly.

Artur Tomasik, the University Council chairman and the President of the Upper Silesian Aviation Society, also expressed their joy at the newly signed agreement.

– This is an essential day for the airport in Pyrzowice and the Silesian University of Technology. We have one of Poland's best Civil Aviation Personnel Training Centres, with Rzeszów and Warsaw at the forefront. We have been educating pilots for years, making obtaining a pilot's license possible, and this opens opportunities for work in companies such as LOT Polish Airlines. This beginning of cooperation opens excellent opportunities for our students – said President Tomasik.

Cooperation with LOT will enable students to take internships in the company's ranks soon. Nearly 5,000 students applied for recruitment in the last internship program, and 50 could already implement such an internship. This shows that the opportunity to gain professional experience in this company is exceedingly popular among young aviators and engineers.

PLL also organizes competitions for the best bachelor's, engineering, and master's theses, which can be an exciting way to start a cooperation with the company. ■

His Magnificence Rector of the Silesian University of Technology, Prof. Dr Hab. Eng. Marek Pawełczyk
The President of the Management Board of lot Polish Airlines Michał Fijoł.

THE SILESIAN UNIVERSITY OF TECHNOLOGY PROJECT IS SPREADING ITS WINGS

text: Anna Świderska
photo: Jan Szady

EIGHTY-SEVEN SCIENTIFIC PROJECTS, 237 PARTICIPANTS FROM FORTY-THREE SECONDARY SCHOOLS FROM OVER TWENTY CITIES – THIS IS HOW THE THIRD EDITION OF THE "POLITECHNIKA PROJECT", WHOSE POPULARITY AMONG SCHOOL YOUTH AND TEACHERS IS CONSTANTLY GROWING, CAN BE SUMMARIZED IN NUMBERS. DURING THE CONFERENCE, ALL RESEARCH WORKS IN THE FORM OF POSTERS WERE PRESENTED, AND A TEAM OF EXPERTS AWARDED OUTSTANDING PROJECTS.

The "Politechnika Project" aims to interest young people from secondary schools in exact sciences and stimulate their passions and interests. Under the supervision of a schoolteacher and a Silesian University of Technology tutor, pupils implement a selected project responding to current challenges and problems.

– We are happy that young people not only learn at school but can also take advantage of the rich offer of the Silesian University of Technology and the care of academic teachers – said Dr Eng. Florian Brom, Director of the 5th Secondary Comprehensive School in Gliwice, which as many as eight teams have represented. Thanks to laboratories and specialized equipment availability, young people can implement their ideas that were impossible to implement at school.

– Our scientists obtain funds for research from national and European grants, thanks to which they supply laboratories with highly specialized equipment – emphasized Prof. Dr Hab. Eng. Anna Chrobok, Vice-Rector for Student Affairs and Education at the Silesian University of Technology – We invite young people to our laboratories, giving provide them with the opportunity to use modern equipment under the supervision of an academic teacher already in a secondary school. This joint research develops their horizons and perspective on the world and ties them with us; maybe they will become our students in the future – added the Vice-Rector.

Furthermore, during the project's implementation, pupils got acquainted with the project-based learning (PBL) method developed several years ago at the Silesian University of Technology. This method involves solving specific problems or issues in interdisciplinary teams.

– The "POLITECHNIKA Project" is also intended to introduce a project-oriented method of modern education; such projects are also implemented during studies, and students in this way can pass subjects and gain valuable skills – said Prof. Dr Hab. Eng. Beata Orlińska, director of the College of Studies of the Silesian University of Technology. – We hope that thanks to the joint work with our scientists in the Silesian University of Technology walls, pupils will be encouraged to work in science and undertake higher education studies.

We invite young people to our laboratories and allow them to use modern equipment under the supervision of an academic teacher already in a secondary school. This joint research develops their horizons and perspectives on the world and connects them with us so that they may become our students.

Pupils from teams awarded by experts, if they decide to start their studies at the Silesian University of Technology, will receive a scholarship of PLN 700 per month for 10 months in the first year.

– First of all, we want to familiarize young people with science, show how the Silesian University of Technology works, what interesting scientific research we conduct – enumerated Prof. Dr Hab. Eng. Marek Pawełczyk, the Rector of the Silesian University of Technology. – The most excellent satisfaction for them is the opportunity to implement an attractive project under the supervision of excellent tutors, the effects of which can be used in the future for education and the school's promotion. In addition, these young people can also publish their first scientific work because each edition of the "POLITECHNIKA" project ends with a monograph - emphasized by Prof. Pawełczyk.

The summary of the third edition of the Politechnika project is also an opportunity to discuss and

exchange experiences during the poster session. Importantly, pupils learn how to present the results of their research.

– I am impressed by the pupils' work; their ideas are innovative, and this is what education is all about, to cross the border and here these boundaries are crossed, here something new, something creative is shown – said Dr Hab. Tomasz Huk, Prof. of the University of Silesia, Silesian Vice-curator of Education. – Today, we need to change the education model in universities a little, and the Silesian University of Technology is an example of this – it changes and implements it. Students must know that they will acquire specific knowledge and skills at the university that will be helpful in practice, and the Silesian University of Technology provides them with this. Cooperation with many potential employers is also an advantage, thanks to which young people can see their further career path – added the Vice-curator.

The next, fourth edition of the competition for projects implemented with secondary school pupils as part of the Excellence Initiative—Research University program has already been decided. Ninety research projects will be created in the coming months.

Awarded projects of the third edition of the competition:

- Analysis of the possibilities of automatic generation of routes available for people with limited options in the field of independent movement – "thoughtful maps"– Academic Secondary Comprehensive School in Rybnik; a supervisor from the Silesian University of Technology: Dr Eng. Maciej Sajkowski
- Innovative method of water sampling with a drone—School Complex No. 10 in Zabrze, named after Prof. Janusz Groszkowski; a supervisor from the Silesian University of Technology: Dr Hab. Eng. Roman Czyba, Prof. SUT.
- Development of a project and construction of a model of superconductor levitation– 5th Secondary Comprehensive School named after Andrzej Strug in Gliwice; a supervisor from the Silesian University of Technology: Dr Eng. Błażej Tomiczek
- Design and construction of a device supporting detection and visualization of signals based on in vitro cell tests– 4th Secondary Comprehensive School named after Lviv Eagles in Gliwice; a tutor from the Silesian University of Technology: Dr hab. Eng. Damian Borys, Prof. SUT.
- Speed measuring system – Secondary Comprehensive School named after Silesian Insurgents in Radzionków; a Silesian University of Technology tutor: Dr Hab. Eng. Roman Przyłucki, Prof. SUT.
- The use of virtual reality in the rehabilitation of cognitive functions of older people – Academic Secondary Comprehensive School in Gliwice; a supervisor from the Silesian University of Technology: Dr Ewa Lach.

Projects awarded by the European University EURECA PRO:

- Educational robot with an interactive module about terrible segregation—School Complex No. 10 named after Prof. Janusz Groszkowski in Zabrze; a Silesian University of Technology supervisor: Dr Hab. Eng. Roman Czyba, Prof. SUT.
- Company Management Championships. – 1st Secondary Comprehensive School, named after T. Kościuszko in Mysłowice; a Silesian University of Technology supervisor: Dr Eng. Sandra Grabowska
- "Green" synthesis of pure (S)-ibuprofen– 3rd Secondary Comprehensive School named after Stefan Batory in Zabrze; a supervisor from the Silesian University of Technology: Prof. Dr Hab. Eng. Anna Chrobok.

SILESIAN GRADUATES SALON WITH A RECORD ATTENDANCE!

text: *Jolanta Skwaradowska*
photos: *Przemysław Bratkowski*

NEARLY 30 UNIVERSITIES FROM ALL OVER POLAND, 10,000 SECONDARY SCHOOL PUPILS, AND THE BEST EDUCATION OFFERS—SILESIAN GRADUATES SALON PERSPEKTYWY 2024 WAS HELD AT THE SILESIAN UNIVERSITY OF TECHNOLOGY FROM SEPTEMBER 19TH TO 20TH, 2024, AT THE EDUCATION AND CONGRESS CENTRE OF THE SILESIAN UNIVERSITY OF TECHNOLOGY.

During the event, secondary school graduates and teachers can learn about the university's educational offer and complete information about the matriculation exam 2025 and the recruitment rules for studies. For most participants, the Silesian Graduates Salon was the first opportunity they had to visit the university campus and talk with representatives of higher education institutions about the offer of education, the rules of recruitment, and the conditions of studying.

We want to present the Silesian University of Technology's offer in such a way as to encourage students to study at our University. That is why not only lecturers but also PhD students and students are present at the faculty stands. We innovatively present our education; we show that our offer is diverse but also individualized—what makes us stand out—said the Rector of the Silesian University of Technology, Prof. Marek Pawełczyk.

– The Silesian University of Technology offers project-oriented education. We implement up to four hundred such projects, where students carry out a project, that is, they respond to the challenges of the modern world – explained the Vice-Rector for Student Affairs and Education, Prof. Anna Chrobok – Our University also participates in the "Universities of the future" program, which promotes personalized education. We select a group with an individual study plan for the project. We also try to cooperate with students actively, not necessarily in the form of boring lectures, but, for example, seminars, during which we encourage them to discuss – emphasized Professor Anna Chrobok

As Rector Marek Pawełczyk pointed out, it is essential to encourage young people to study because although there is no shortage of job offers nowadays, studies can provide young people with a better future.

It is not only about learning but also the opportunity to shape one's personality and certain maturity, and it takes several years to do so. Time spent immediately in industry or business is focused on individual tasks, but here at the university, one can think more consciously about one's future, added the Rector.

The Silesian Graduates Salon attracts crowds of pupils interested in studying every year.

"The Silesian Graduates Salon is where young people meet their future. Pupils often de-

We want to present the Silesian University of Technology's offer in such a way as to encourage students to study at our University. That is why not only lecturers but also PhD students and students are present at the faculty stands. We innovatively present our education; we show that our offer is diverse but individualized—what makes us stand out, said Professor Marek Pawełczyk, the Silesian University of Technology Rector.

cide about their studies at the last moment, so it would be good for them to understand better how to pass the secondary school diploma well and then get to their favourite university. It happens that young people visiting the Silesian Graduates Salon verify their ideas about studying or specific fields of study. Students emphasise that, for example, they did not know many exciting things about a given faculty or direction – said Andrzej Wyszyński from the Perspektywy Education Foundation.

During this year's 18th edition of the Perspektywy Graduates Salon, universities from all over Poland and all Silesian University of Technology faculties presented themselves. Each tried to attract young people with an attractive education offer by demonstrating their inventions.

There must always be something that catches the eye. Our department has prepared two exhibits. One is a robotic arm, a so-called industrial manipulator, which can move an egg in the same position even though the arm rotates in three-dimensional space. The second exhibit is a talking head, a social robot that can talk to users, answer given questions, and encourage students to study at the Silesian University of Technology, said Dr Eng—Oliwia Krause from the Faculty of Automatic Control, Electronics, and Computer Science.

For many pupils, a visit to the Silesian University of Technology was the first visit and a chance to learn about the education offered and talk with students. – We are curious about what fields of study are here, and during such an event, we can learn more than there is on the Internet– said Kajetan - a graduate pupil from the School Complex No. 3 in Kędzierzyn-Koźle. – The Silesian University of Technology is distinguished because its departments are in several cities in Silesia – Gliwice, Katowice, Zabrze, and Rybnik. There are also many exciting fields of study, for example, related to technology– adds Marcel from the Kędzierzyn school.

Perspektywy Silesian Graduates Salon 2024 is not only an opportunity to gain experience about the offer of university education from all over the country. Pupils visiting the event can meet with experts from the Regional Examination Board in Jaworzno, who will provide them with the most valuable information about next year's matriculation. ■

FULBRIGHT DIPLOMA FOR AN ARCHITECT

text: Anna Świderska
photos: Mariusz Kosiński, commissioned by Fulbright Poland

THE FULBRIGHT SCHOLARSHIP HAS ENABLED THEM TO STUDY OR RESEARCH AT AMERICAN UNIVERSITIES AND INSTITUTIONS. MORE YOUNG SCIENTISTS HAVE JOINED THIS PRESTIGIOUS PROGRAM'S GRADUATES, INCLUDING 60 NOBEL PRIZE WINNERS, 86 PULITZER PRIZE WINNERS, AND 27 HEADS OF STATE. KRZYSZTOF PRZYBYŁO, A FACULTY OF ARCHITECTURE OF THE SILESIAN UNIVERSITY OF TECHNOLOGY GRADUATE, OBTAINED A MASTER'S DEGREE FROM THE UNIVERSITY OF WASHINGTON THANKS TO A SCHOLARSHIP.

The Fulbright scholarship is widely recognized as one of the most prestigious in the world. To receive it, candidates must meet remarkably high requirements and present a convincing plan for scientific development. The scholarship opens the door to the best American universities and research institutions, enabling the holder to gain unique experience in recent technologies, sustainable architecture, cultural studies, aviation and aerospace, political science, art history, and biological and medical sciences. Graduates and scientists who had spent their previous academic year in the United States received their diplomas from the hands of that country's ambassador. Mark Brzeziński was a Fulbright scholarship holder, and in 1991-93, he studied in Poland, which opened unexpected career paths for him. Andrzej Szeptycki, Undersecretary of State in the Ministry of Science and Higher Education, who was present during the ceremony, emphasized the uniqueness of the Fulbright program and the bilateral nature of Polish-American exchange and thanked the scholarship holders for their contribution to science as well as for the development of Polish-American relations.

The scholarship opens the door to the best American universities and research institutions, enabling you to gain unique experience in recent technologies, sustainable architecture, cultural studies, aviation and aerospace, political science, art history, and biological and medical sciences.

The Fulbright program grants scholarships in eight categories. In recent years, three people associated with the Silesian University of Technology participated in this prestigious program. Dr Eng. Sandra Przepiórkowska, a Faculty of Archi-

tecture and a Doctoral School graduate received a scholarship for doctoral students in the Fulbright Junior Research Award category. She is the first implementation PhD student in Poland to gain this distinction; in the academic year 2022-23, she studied at the Massachusetts Institute of Technology (MIT) in Cambridge. Prof. Anna Skorek-Osikowska from the Department of Power Engineering and Turbomachinery at the Faculty of Energy and Environmental Engineering has been awarded the Fulbright STEM Impact Award, thanks to which she completed a scientific internship at Princeton University on modelling of energy systems and energy transformation.

Krzysztof Przybyło graduated with his first-degree studies from the Faculty of Architecture. He won a scholarship in the Fulbright Graduate Student Award category as one of six people in Poland. As a result, in 2022-24, he studied at the University of Washington in Seattle, where he earned a master's degree in architecture.

– It was very intense; we worked a lot in groups with people from all over the world, but I found myself well in it, and now I have an international group of friends, experience, and a good perspective for further development – said Krzysztof Przybyło. "I fully agree with the statement of one of the scholarship holders, who aptly described her stay in the USA as the hardest time that she would not change for anything else," he added.

More about his impressions from his stay in the United States, studying at an American university, and the benefits of foreign trips during our graduate studies are told in the Silesian University of Technology podcast. We invite you to listen to his inspiring story. ■

You can hear more about this in an interview with Krzysztof Przybyło in the podcast "Let's talk about science."

Fulbright scholarship holder Krzysztof Przybyło is third from the right.

TEACHERS TO TEACHERS

text: *Jolanta Skwaradowska*
photos: *Jan Szady*

INTEGRATION OF ACADEMIC TEACHERS AND SCHOOLTEACHERS, MUTUAL EXCHANGE OF KNOWLEDGE, EXPERIENCE, AND IDEAS – THE "TEACHERS TO TEACHERS ACADEMY" TOOK PLACE AT THE SILESIAN UNIVERSITY OF TECHNOLOGY. THE EVENT WAS ORGANIZED AS PART OF THE EUROPEAN CITY OF SCIENCE KATOWICE 2024.

The conference was attended by secondary school teachers from the Silesian Voivodeship, educators and professional advisors, scientists, and authorities of the Silesian University of Technology. It was devoted to modern teaching methods applicable to climate and environment education and was also an opportunity to establish broader cooperation between the University and secondary school teachers.

"We want to help teachers deepen their knowledge and become more involved in the life of secondary schools. After all, they are the ones who are preparing young people, who – I hope – will contribute to our University. I will add that the Silesian University of Technology already runs two academic secondary schools, which also gives us a better understanding of the needs of these schools. In the future, we would like to provide formal patronage and care for selected classes in secondary schools. We would conduct classes there and invite young people to the University to use our infrastructure and integrate with students," said the Rector of the Silesian University of Technology, Prof. Dr Hab. Eng. Marek Pawełczyk.

"This program aims to prepare pupils better to continue their education at higher levels," added Professor Beata Orlińska, Director of the College of Studies, the unit that prepared the event.

Cooperation between scientists from the Silesian University of Technology and secondary school teachers can benefit both parties.

" We can also draw on the experience of secondary school teachers because they know the needs of their pupils best and know how to interest them in continuing their education at the University. It must be remembered that this generation is changing very dynamically," said the Vice-Rector for Student Affairs and Education, Prof. Dr Hab. Eng. Anna Chrobok

The City Hall of Gliwice cooperates to improve teachers' competences and modify didactic methods to meet young people's expectations better. Barbara Gzik, Head of the Education Department of the City of Gliwice, who was present at the conference, emphasized the role of the city's cooperation with the University in improving the competences and qualifications of the staff. She also highlighted the city's efforts to improve the quality of education.

"The Teachers-to-Teachers Academy" began by presenting the University's educational offer.

"The meeting was an opportunity to present education and research within the priority research areas conducted at the Silesian University of Technology. We also showed how the

University educates in the field of environmental protection," emphasized Prof. Anna Chrobok

The introductory lecture entitled "Competences of the future – how to educate the generation of iGen" was given by the director of the Centre for Modern Education of the Silesian University of Technology, Dr Eng. Anna Waligóra. Then, there was a discussion panel entitled "Project–oriented education – implementation of PBL projects at the Silesian University of Technology," led by the press officer of the Silesian University of Technology, Iwona Flanczewska-Rogalska.

Dozens of representatives of secondary schools attended the conference.

" We are glad that the Silesian University of Technology has produced such an initiative. Together, we, secondary school teachers and university employees, must make sure that as many young people as possible want to study as possible. Over a dozen years ago, over 80 % of secondary school graduates had assumed studies, but now, it is about 60 %. Young people choose other options, for example, specialized courses, but you must remember that studying is an added value, and you can't learn everything in the classes. Studies are also about shaping a young person's personality and meeting with peers and university employees, which is particularly important." said Dr Eng. Florian Brom, Director of the V LO in Gliwice.

During the conference, the Silesian University of Technology signed an agreement with the Regional Teacher Training Centre "PTO" to improve the professional qualifications of vocational subject teachers.

We want to help teachers deepen their knowledge and become more involved in the life of secondary schools. After all, they are the ones who are preparing young people, who – I hope – will join our University," said the Rector of the Silesian University of Technology, Prof. Dr Hab. Eng. Marek Pawełczyk.

"The average age of teachers, especially those of vocational subjects, is relatively high. They are fantastic teachers, but they finished their studies many years ago. Therefore, we want them to improve their qualifications in the profession, which they teach at several types of training or postgraduate studies," said Dr Jerzy Grad, Director of the Regional Teacher Training Centre "PTO" in Katowice.

The "Teachers to Teachers" Academy was completed by workshops, during which the teaching mode based on the Project-based Learning (PBL) method was presented at the university. The researchers showed the laboratories, strategies, and research techniques used to transfer knowledge and acquire competences and qualifications. The Silesian University of Technology implements approximately 300 PBL projects annually involving students, doctoral students, and secondary school pupils. Project funding is conducted under the Initiative of Excellence – Research University using competitions.

The Academy is not the first project in which the Silesian University of Technology cooperates with schools. On October 15th this year, for the second time, the final of THE SILESIAN UNIVERSITY OF TECHNOLOGY PROJECT took place, under which pupils and our scientists conducted research projects.

The interest in this program was tremendous. Last year, our University established cooperation with 18 secondary schools from Gliwice, Rybnik, Katowice, Zabrze, Pyskowice, Siemianowice Śląskie, Dąbrowa Górnicza, Mikołów, Mysłowice, Radzionkow and Wodzisław Śląski. ■

5G WITHOUT SECRETS

text: Martin Huć
photos: materiał prasowy Loudy PR (Rafał Klimkiewicz, Bartłomiej Wondraszek), istock

THEY CREATED A PLATFORM TO INTRODUCE POLISH COMPANIES TO THE WORLD OF 5G TECHNOLOGY. THIS IS THE 5G ACADEMY, WHERE THE SILESIAN UNIVERSITY OF TECHNOLOGY, NOTABLY THE INDUSTRY 4.0 CENTRE, PLAYED A VITAL ROLE AS A BRIDGE BETWEEN BUSINESS, INDUSTRY, AND THE WORLD OF SCIENCE.

The 5G Academy is an educational project developed to introduce Polish companies and scientists from the Silesian University of Technology to the world of 5G. This program responds to the growing need to understand how 5G can transform businesses, especially in automation, production management, and logistics. The Academy is addressed to managers, innovation leaders, people responsible for technological development in enterprises, and all those who develop innovative technologies.

Two innovative companies—Orange Polska and APA Group—created the 5 G Academy and the Industry 4.0 Centre of the Silesian University of Technology, which is the primary coordinator of the events realized within the academy.

– The aim of the activities of the Industry 4.0 Centre of our University is to build bridges between science and business. Our leading strategic partner is APA Group, which, a few years ago, made available to us the industrial line it built with proprietary NAZCA software. The company also led to remarkably close cooperation with Orange Polska and the installation of the first industrial 5G network in Poland at the university. Thanks to this, we have a unique opportunity to conduct scientific research on industrial applications at the Silesian University of Technology – says Prof. Anna Timofiejczuk, Deputy Director of CP4.0. (Industry 4.0 Centre).

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APA Group and Orange Polska developed the curriculum, and the lecturers were mainly specialists from them.

The key role was played by experts such as Dr Hab. Aleksandra Przegalińska, Artur Kurasiński and Adam Przeździek, as well as practitioners of 5G technology from Orange and APA Group. The project was attended by both companies from various sectors that want to use 5G to improve their operations, as well as employees of the Silesian University of Technology – says Adam Maliszewski, responsible at APA Group for the organization of the 5G Academy, adding that the project outside the Silesian University of Technology was supported by the Office of Electronic Communications and the Future Industry Platform, which took patronage over it.

The 5G Academy aroused great interest among industry representatives and the University's employees.

The lectures focused on key aspects of 5G implementation. They presented topics such as acquiring 5G bands, implementing campus net-

The 5G network was launched in the Industry 4.0 Centre of the Silesian University of Technology - in the space where the industrial line is located, developed, and supervised by APA Group.

works, integration with enterprise infrastructure, using Big Data, and aspects of cybersecurity. The issues needed to be discussed in the context of practical implementations of 5G in Poland, showing how, step by step, organizations can be transformed using this technology.

The 5G network is undoubtedly the future. It offers breakthrough capabilities in speed, network capacity, and minimal latency. This technology enables better communication and automation, remote device control, and transformation in many fields—from industry to medicine and logistics.

The 5G Academy aimed to combine theory with practice, showing how modern technologies affect companies' productivity, efficiency, and competitiveness. The project consisted of a series of online meetings and a final stationary conference, which took place in the Industry 4.0 Centre of the Silesian University of Technology. The university is the first in Poland to launch an internal 5G campus network, i.e. an industrial network with all possibilities and security. The network is used to create and evaluate innovative solutions for Industry 4.0. The 5G network was launched at the Industrial Centre 4.0 of the Silesian University of Technology. This breakthrough in data communication is not only a faster Internet but also a tool for automation, managing large data sets, and supporting the development of AI and IIoT. Participants and speakers of the 5G Academy emphasized that it has the potential to revolutionize various sectors of the economy and introduce completely new ways of functioning enterprises. ■

The lectures for the 5G Academy participants focused on the critical aspects of 5G deployment.

THE SILESIAN UNIVERSITY OF TECHNOLOGY IS FIGHTING FOR THE CLIMATE

text: *Katarzyna Siwczyk*
photos: *Krzysztof Gronowicz, Przemysław Bratkowski*

THE SILESIAN UNIVERSITY OF TECHNOLOGY SHOULD PLAY A VITAL ROLE IN SILESIA'S ENERGY TRANSFORMATION, EMPHASIZED THE UNIVERSITY'S REPRESENTATIVES AT THE PRECOP CONFERENCE IN KATOWICE. DURING A TWO-DAY DEBATE ON THE CLIMATE CHALLENGES OF THE REGION AND THE WORLD, SCIENTISTS FROM THE SILESIAN UNIVERSITY OF TECHNOLOGY PRESENTED THEIR VISIONS AND CONCEPTS THAT CAN SUPPORT THIS PROCESS. AN IMPORTANT TOPIC OF DISCUSSION WAS THE USE OF ENERGY FROM THE ATOM. THE EVENT WAS ACCOMPANIED BY ANOTHER ENERGY CONFERENCE – ENERGY DAYS 2024.

Over 1500 participants, 150 speakers worldwide and thirty thematic sessions – this is how the next PRECOP conference in Katowice was presented in numbers. This is the third edition of the two-day conference, which precedes and prepares participants for the upcoming Climate Summit – COP29 (UN Climate Change Conference) in Baku, Azerbaijan – the most significant global forum, aiming to develop a standard policy to combat climate change.

Representatives of the Silesian University of Technology also participated in discussions on the planet's future and challenges related to climate and energy transformation in the region.

- We should play a vital role in this process because we are not only a technological and innovative university, but we also try to consider the social aspect - said Prof. Dr Hab. Eng. Marek Pawełczyk.

He pointed out that the Silesian University of Technology cooperates in this area with foreign partners, including scientists from the European University EURECA-PRO. Montan University in Leoben, the University of León, and Hasselt University share their experiences because they are very advanced in processes related to modern energy.

– We draw ideas from them to responsibly fulfil the role of the University, which supports the energy transformation process, which is essential for the region and the country at this moment – said the Rector. He also pointed out that the University has been involved in consortia and business clusters for years so that scientists can share knowledge with the energy industry, and students already at the beginning receive knowledge that can be used in modern enterprises.

Representatives of the Silesian University of Technology pointed out that the most important new plants will soon be those related to the production, processing, and storage of energy, especially from the atom.

It was possible to meet supporters and opponents of this solution during numerous thematic sessions.

– I can't imagine building a reasonable energy mix for a country without nuclear power – said Dr Eng. Tomasz Bury, head of the Nuclear Technology Laboratory of the Silesian University of Technology. – We see the future in this; we focus on the development of this discipline, which is why we have successfully conducted

I can't imagine building a reasonable energy mix for a country without nuclear power – said Dr Eng. Tomasz Bury, head of the Nuclear Technology Laboratory of the Silesian University of Technology.

education in the field of nuclear energy in the master's degree program since March. The group of students who have taken up studies is highly active; they know that they are waiting for a decent job in the future – he added, thus rebutting arguments against the construction of nuclear power plants in Poland.

– We cannot stop technological progress. We understand different points of view, but on the other hand, we see the country's energy needs and must meet those. We must choose conventional energy—a significant environmental threat—or modern – said the Rector.

Dr Eng. Łukasz Bartela from the Faculty of Energy and Environmental Engineering of the Silesian University of Technology confirmed that the Silesian University of Technology has the right to speak loudly about the atom, among others, due to conducting necessary research in this field. The University implements the DEsire project in cooperation with the Ministry of Climate and Environment, currently with the Ministry of Industry, which took over the implementation of the nuclear energy policy in the country, as well as with Energoprojekt-Katowice SA, the Institute of Chemistry and Nuclear Technology and the Sobieski Institute Foundation. The project was financed under the sixth competition of the National Centre for Research and Development "Gospostrateg."

The project plans to launch the National Energy Transformation Platform (PTE), providing the organizational base for transforming domestic and combined heat and power plants.

– We are trying to keep production in the places of coal-fired power plants operating today because the region needs these sources and energy security to stop the possibility of a recession – Łukasz Bartela said. One of the proposals to sustain such production is to invest in nuclear sources, particularly SMR, which may revolutionize the energy industry in a few years.

A crucial cognitive aspect of the project will be assessing the possibility of using existing coal-fired unit infrastructure as part of nuclear investments, assuming the use of Generation III/III+ and Generation IV reactors.

Not only representatives of the world of science participated in the discussions on various concepts of conducting the energy transformation of the region.

– During such events, we can meet representatives of local governments, institutions, and business, and thus exchange experiences, because each of these parties sees different opportunities and threats related to decarbonisation – added Dr Hab. Eng. Marcin Staniek, Prof. SUT, Vice-Rector for Collaboration with Civic and Economic Environment of the Silesian University of Technology

– We do not stop talking about those issues. We go one step further. A few days ago, we signed an agreement to establish the Energy Transformation Platform between the Silesian University of Technology, the University of Silesia, and the University of Economics. He added that we can create a strategy to help achieve sustainable goals.

The DEsire Energy Transformation Platform is one of the first results of the earlier mentioned Desire project, which concerns the decarbonization of the national energy sector through the Coal-to-Nuclear transformation.

Discussions on transformation and climate challenges took place in conference rooms and at the Silesian University of Technology, which many guests from Poland and abroad visited.

H IS FOR HYDROGEN

text: Anna Świderska
photos: Mariusz Drabek, Jan Szady

RYBNIK INVESTS IN HYDROGEN TECHNOLOGIES, AND THANKS TO COOPERATION WITH THE SILESIAN UNIVERSITY OF TECHNOLOGY, IT HAS BECOME A LEADER IN ENERGY TRANSFORMATION, THE FIGHT AGAINST CLIMATE CHANGE, AND DECARBONISATION. IN TURN, THE UNIVERSITY, WHICH HAS FUNCTIONED IN THE CITY SINCE THIS YEAR AS A BRANCH OF THE SILESIAN UNIVERSITY OF TECHNOLOGY, WILL IMPLEMENT AMBITIOUS PLANS AND EXPAND ITS EDUCATIONAL OFFER IN MODERN TECHNOLOGIES.

Rybnik has been running twenty hydrogen city buses for a year now, and there is also the second hydrogen fuel station in Poland. On October 4, representatives of the Silesian University of Technology, municipal and provincial self-government and the Silesian-Lesser Poland Hydrogen Valley met there. The guests got acquainted with the station's operation and storing and refuelling hydrogen technology. Safety systems, including emergency procedures and fire protection measures, were discussed. People operating and supervising the station shared their observations on everyday work with the meeting participants. They also demonstrated the tools and devices necessary for the station's operation. The meeting was an opportunity to exchange experiences and promote actions for sustainable transport based on hydrogen.

– We see the future in this; another 14 vehicles will soon join our hydrogen bus fleet, and we are glad that in cooperation with the Silesian University of Technology, we are a precursor in the country when it comes to the use of hydrogen technologies – said Arkadiusz Marcol, Vice President of Rybnik.

Behind the transformation is the need to find specialists. The tradition of educating students in Rybnik dates back over 60 years; more than nine thousand engineers have obtained diplomas here. The University Unit in Rybnik, until recently the Continuing Education Centre, has become a Silesian University of Technology branch since September of this year. This is an ennoblement but also a challenge emphasized during the inauguration of Dr Hab. Zyg-

munt Łukaszczyk, Prof. SUT, the director of the branch of the Silesian University of Technology in Rybnik, which accepted seventeen students to study in the field of logistics.

– We are in the centre of the Western Subregion, a powerful sub-region of over 600 thousand inhabitants, including large cities and smaller municipalities; we have signed a cooperation agreement that facilitates our students to undertake internships in municipal enterprises after obtaining a diploma – attractive employment. Rybnik is transforming toward modern technologies, transforming from Rybnik Coal District to ROW (Rybnik Hydrogen District) 2.0 and to meet these challenges, a well-educated staff is needed – said Director Lukaszczyk.

Therefore, the Rybnik Branch is preparing to start education in renewable energy sources and hydrogen technologies with the Silesian University of Technology authorities.

– In the past, students' education in Rybnik was conducted in various areas but mainly focused on the demand of the socio-economic environment, and the same is now – said Prof. Dr Hab. Eng. Zbigniew Paszenda, Vice-Rector for Infrastructure and Investment at the Silesian University of Technology, wishing students and hosts success in the new academic year. – We are entering this year with some hopes and plans to expand education in renewable and hydrogen technologies.

The changes are facilitated by model cooperation with the city authorities, which supports education in modern technologies at every level of education.

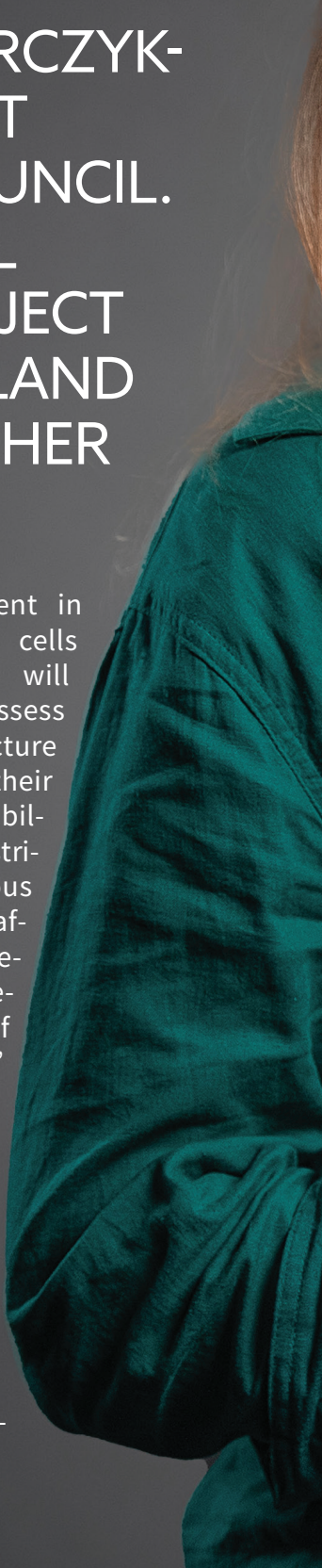
– This school year, our pupils from the last fifth grade can choose a specialization in hydrogen technologies. School employees and scientists of the Silesian University of Technology will conduct the classes in response to the needs of companies that operate hydrogen communication in our city and need professionals – said Piotr Tokarz, director of the Complex of Technical Schools in Rybnik.

The new academic year in the Silesian University of Technology branch in Rybnik also involves many investments within the Centre for Renewable Energy Sources and Hydrogen Technologies project. Prof. Janusz Kotowicz, Vice-Rector for Cooperation with the Socio-Economic Environment of the previous term, project manager and prof Zygmunt Lukaszczyk, deputy project manager, presented the main assumptions during the meeting with representatives of the Silesian–Lesser Poland Hydrogen Valley. Modern laboratories will be created within the Centre: ECO-HOUSE Energy, Hydrogen Technology Laboratory, Mobile Laboratory of Photovoltaic Panel Diagnostics and Competence Centre for Renewable Energy Sources and Hydrogen Technologies. They will enrich the campus of the Silesian University of Technology branch in Rybnik.

CANCER FROM THE BIOPRINTER

text: Katarzyna Siwczyk
photo: Przemysław Bratkowski

DR HAB. ENG. MAŁGORZATA WŁODARCZYK-BIEGUN PROF. SUT RECEIVED A GRANT FROM THE EUROPEAN RESEARCH COUNCIL. THANKS TO IT, THE RESEARCHER WILL IMPLEMENT AN INTERNATIONAL PROJECT INVOLVING CELL BIOPRINTING IN POLAND AND THE NETHERLANDS, AMONG OTHER THINGS.



The European Research Council announced the competition results for researchers from 2 to 7 years after the PhD. Among the 494 ERC Starting Grants winners are only two researchers conducting research in Poland and eight representatives of Polish scientific units conducting research abroad. One of those scientists is Dr Hab. Eng. Małgorzata Włodarczyk-Biegun, a professor at the Silesian University of Technology, also employed as an assistant professor at the University of Groningen in the Netherlands.

As part of the JAM-2PRINT grant, Prof. Włodarczyk-Biegun will develop modern bio-inks, i.e., printable materials containing living cells. The project could revolutionize breast cancer research.

"In general, my research focuses on developing new materials that will allow us to obtain structurally complex models of natural tissues found in our body. I want to prepare models of tissues affected by breast cancer with my team," explained Prof. Włodarczyk-Biegun.

In the next stage, researchers will observe how cancer cells interact with the environment in which they are located and what makes cancer grow faster in some cases and more slowly in others.

"My project aims to prepare a model that reflects the environment in which cancer cells develop. This will allow us to assess how the structure of tissues, their hardness, flexibility, and the distribution of various components affect the movement and development of cancer cells." The researcher adds that such information can be helpful in the treatment and diagnosis of patients.

The doctor, receiving a re-

sult with the information that the cancer is developing in an environment conducive to the rapid growth of cells dangerous to health, after receiving the biopsy result, will be able to treat the patient as a priority and implement treatment. If, in turn, the result indicates that the environment in which the cancer cell is located is not conducive to rapid growth, it will be able to calm the patient and administer rapid, precise treatment.

You can listen to the entire conversation with Prof. Małgorzata Włodarczyk-Biegun in the podcast "Let's Talk about Science."

According to the grant winner, such an approach to treatment may affect the speed and precision of diagnosis and allow the development of highly effective targeted therapy.

The results must wait at least five years because that is how long the research will take as part of the grant project. Even if the results prove promising and can support medicine, the primary research will be expanded to include further trials on a larger group of tissues before implementing the treatment system.

The team of Prof. Małgorzata Włodarczyk-Biegun does not exclude that the results will be achieved faster because the development of modern technologies, also in medicine, is developing dynamically. Artificial intelligence, already used to analyse and interpret large data sets, may also support the analysis of a more extensive sample database. ■

SCIENCE HAS TAKEN TO THE STREETS

text: **Martin Huć**
photos: **Maciej Mutwil**

ON SEPTEMBER 27TH, THE INTER-UNIVERSITY INAUGURATION OF THE ACADEMIC YEAR 2024/2025 IN THE EUROPEAN CITY OF SCIENCE KATOWICE 2024 TOOK PLACE IN KATOWICE'S POLISH NATIONAL RADIO SYMPHONY ORCHESTRA CONCERT HALL. THE SILESIAN UNIVERSITY OF TECHNOLOGY AUTHORITIES, HEADED BY THE RECTOR, PROF. DR HAB. ENG. MAREK PAWEŁCZYK, ATTENDED THE EVENT.

The Inter-University Inauguration of the Academic Year took place for the third time. It was started by the traditional March of the Rector's processions. The inauguration was attended by His Magnificence Rector, Prof. Dr Hab. Eng. Marek Pawełczyk, Vice-Rector for Science and International Cooperation Prof. Dr Hab. Eng. Sebastian Werle, Vice-Rector for General Affairs, Prof. Dr Hab. Eng. Bożena Skołud, Vice-Rector for Student Affairs and Education, Prof. Dr Hab. Eng. Anna Chrobok, Vice-Rector for Collaboration with Civic and Economic Environment, Prof. Dr Hab. Eng. Marcin Staniek, Prof. SUT, Vice-Rector Infrastructure Investment Prof. Dr Hab. Eng. Zbigniew Paszenda, Faculty authorities and employees of the Silesian University of Technology.

"Our universities want to leave a lasting mark after the year of the European City of Science Katowice. We have shown in previous years that we can work well together. We want our integration to progress so that we can continue to support each other in the didactic, scientific, and organizational fields. It is the will of all Rectors and doctoral students, students, and university employees. This is an example for other areas of functioning of our region so that it can complete the transformation process, which began more than twenty-five years ago," said the Rector of the Silesian University of Technology, Prof Marek Pawełczyk.

Our universities want to leave a lasting mark after the year of the European City of Science Katowice. We have shown in previous years that we can work well together. We want our integration to progress so that we can continue to support each other in the didactic, scientific, and organizational fields. It is the will of all Rectors, doctoral students, students, and university employees.

The ceremony was also attended by, among others, Minister of Science Dariusz Wieczorek and Minister of Industry Dr Hab. Marzena Czarnecka, and the Secretary of State at the Ministry of Science and Higher Education, Prof. Dr Hab. Eng. Marek Gzik.

Officially, the new academic year, by the stroke of the Rector's sceptre, was inaugurated by the Rector of the Academy of Fine Arts, Prof. Dr Hab. Grzegorz Hańderek, wishing the Latin phrase "Quod felix

Europejskie Miasto Nauki Katowice 2024

faustum fortunatum que sit" – that it be a good, prosperous, happy, and fruitful year. A crucial point of the event was the oath and matriculation of students and doctoral students of the University of Economics in Katowice, which was concluded by the Rector of the University – Prof. Dr Hab. Eng. Celina M. Olszak.

During the inauguration of the new academic year, there was no lack of an inaugural lecture, which was delivered by an exceptional guest, Prof. Norman Davies, a world-famous historian. In his speech entitled "Knowledge and Ignorance: Does the West understand everything?" he encouraged the promotion of Poland and Polish history in the international arena.

"We had the opportunity to talk with Professor Norman Davies. He recalled that he was in Silesia in the sixties and did not hide that our region had changed beyond recognition," said Rector Marek Pawełczyk, who thanked everyone who contributed to the organization of this event.

The inauguration ended with a concert performed by the Polish National Radio Symphony Orchestra conducted by the Polish National Radio Symphony Orchestra under the direction of Szymon Bywalec. Participants heard the musical works of Antonin Dvorak and Stanisław Moniuszko.

The organizers of the event were universities of the Academic Consortium – Katowice City of Science: University of Silesia in Katowice (leader), Karol Szymanowski Academy of Music, Academy of Fine Arts in Katowice, Jerzy Kukuczka Academy of Physical Education, in Katowice, Silesian University of Technology, Medical University of Silesia in Katowice, the City of Katowice, the Silesian Voivodeship and the Upper Silesian-Zagłębie Metropolis. ■

The event was financed by the EU. The views and opinions expressed are solely those of the author(s) and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). The European Union and the REA are not responsible for them. The Silesian Voivodship, which is also the organiser of the European City of Science Katowice 2024 co- financed the event.

Representatives of the Silesian University of Technology took part in the event.

His Magnificence Rector, Prof. Dr Hab. Eng. Marek Pawełczyk and Prof. Norman Davies

THE SILVER BOY

text: Martin Huć
photos: Jan Szady, Przemysław Bratkowski

JAKUB SIEDLARSKI, A STUDENT OF THE SILESIAN UNIVERSITY OF TECHNOLOGY, BECAME A VICE-CHAMPION OF THE WORLD AND A THREE-TIME BRONZE MEDALLIST OF THE WORLD SKI CHAMPIONSHIPS, WHICH TOOK PLACE IN THE WATER SPORTS CENTRE "WAKE ZONE STAWIKI" IN SOSNOWIEC. THIS IS ONE OF POLAND'S GREATEST SUCCESSES IN THE HISTORY OF THIS DISCIPLINE.

The Poles won seven medals at this event. This is a tremendous success! In addition, a significant participation of students from the Silesian University of Technology, in a sports outfit with an eagle on their chest, holding a white and red flag, stood on the podium four times and received medals in the most critical rank of competitions in water skiing.

The photos and videos of the event show that he did not hide his emotions. It is the fulfilment of his dreams. Learn the story of Jakub Siedlarski, our vice-champion of the world.

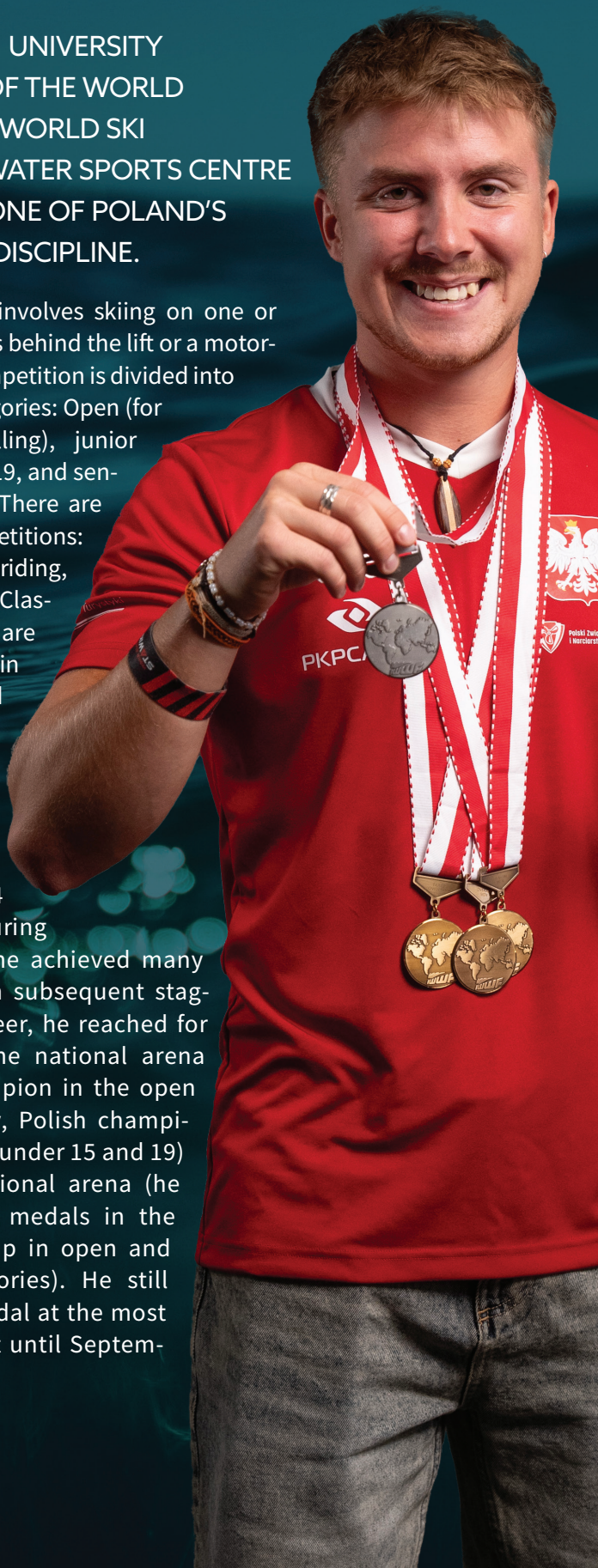
WATER SKIING INSTEAD OF A BALL

23-year-old Jakub Siedlarski is a third-year power industry student at the Faculty of Energy and Environmental Engineering of the Silesian University of Technology. He is also a member of the Student Science Club of Thermal Technology. He comes from Rogoźnik near Bobrowniki. When he was ten years old, he was infected with a passion for water skiing by Joachim Świętek, a sports gymnastics coach.

– Instead of doing flips, somersaults, and other stunts, I preferred football. The coach probably saw that I would not be a valuable player, so he persuaded me to try water skiing – Jakub Siedlarski begins the story. "Initially, I tried to reconcile football training with water skiing, but I chose to play on the water, and finally, I was utterly absorbed in this sport."

Water skiing involves skiing on one or two water skis behind the lift or a motorboat. The competition is divided into four age categories: Open (for everyone willing), junior up to 15 and 19, and seniors over 35. There are three competitions: slalom, figure riding, and jumping. Classifications are conducted in individual and team categories.

Jakub has been training in this sport for 14 years, during which time he achieved many successes. In subsequent stages of his career, he reached for medals in the national arena (Polish champion in the open age category, Polish champion of juniors under 15 and 19) and international arena (he won several medals in the European Cup in open and junior categories). He still missed a medal at the most critical event until September this year.



SPECTACULAR AND DANGEROUS

Jakub starts as one of the few players in the world in all three competitions. Usually, skiers compete in only one or two competitions.

The popularity of water sports is constantly growing—not only in Poland but all over the world. There are more centres where they can be trained. These disciplines are incredibly spectacular and, at times, extremely dangerous. In water skiing, athletes "fly" over 50 meters.

Jakub says there are already ten clubs that conduct training in Poland. About eighty players in different age categories compete at the Polish Championships. The best athletes are chosen from the Polish national team.

The World Championships are held only in the Open category. You need to "only" rank among the national leaders to start in them.

The four-time World Cup medallist emphasizes, "You must train a lot and give your best. I had a unique motivation this year. So far, I have only brought medals from the Polish Championships, and something is still missing in the world event. I wondered if I would ever achieve anything in the world championship. But I decided to try again, trained even harder, and finally succeeded."

I wondered if I would ever achieve anything in the world championship. But I decided to try again, trained even harder, and finally succeeded.

WHAT EXACTLY IS THAT COMPETITION?

The championship in the Sosnowiec resort "Wake Zone Stawiki" took place in mid-September and lasted three days. Dozens of athletes from ten countries attended the event. The competitors competed in water skiing behind an electric ski lift. After passing the elimination, Kuba reached the finals of all three competitions: slalom, figure riding, and jumping.

Here, we will stop and try to explain what each competition is about.

Jumping is the most spectacular. The rider runs on a hill with a height of 165 cm or 180 cm. The approach speed can reach 100 km/h—the athlete who jumps the farthest wins. There are no points for wind or style, as in the case of ski jumping. The previous world record is 70 m, and Jakub's record is 55.5 m.

Slalom. Here, the athlete must bypass six buoys on the outside at a maximum speed of 58 km/h. The initial length of the tow line, which the skier holds, is 18.25 m. In subsequent runs, the rope is shortened – until the skier falls. The players who have completed the whole journey go to the next round. The sum of correctly missed buoys on the shortest possible rope determines the victory.

Figure riding. The skier performs figures scored by judges. The result includes the 14 best-scoring evolutions. Athletes perform, among other things, saltworks, 360-degree and even 540-degree turns, and many others.

FULFILLING ONE'S DREAMS

Finally, Jakub Siedlarski became the vice-champion of the world in figure riding and beat the Polish record. He also won three bronze medals in slalom (additionally a Polish record), three combinations (for the sum of results from three competitions), and team classification for the Polish national team.

"This is my life's achievement; I've been waiting for this moment since I was a child," says the athlete from KS Zefir Bytom. "I was hoping for medals in the team, figure riding and Tri combos. They were within my reach. However, I was most surprised by the medal in slalom because I was not one of the favourites. I was the first Pole in history to win a medal in this competition, so I am thrilled. I have never been so happy. But I want to continue growing, breaking my records, and improving.

The podcast "Let's Talk About Science" provides more information about Jakub Siedlarski's success and history.

The four medals at the Jakub Siedlarski World Ski Championships are among Poland's greatest successes in this discipline.

LET'S GO MOUNTAIN HIKING!

text: Jolanta Skwaradowska
photos: Krzysztof Gronowicz

AUTUMN IS THE MOST BEAUTIFUL IN THE MOUNTAINS. THE BEGINNING OF THE ACADEMIC YEAR IS ALSO A TIME OF MOUNTAIN HIKING. IN THE CHARMING SITES OF THE BESKIDY MOUNTAINS, THE SILESIAN UNIVERSITY OF TECHNOLOGY HAS TWO STUDENT HUTS. THE FIRST OF THEM IS THE COTTAGE OF THE ACADEMIC TOURIST CLUB WATRA, LOCATED IN ISTEBNA, ON PIETRASZONKA, AND THE SECOND IS THE STUDENT TOURIST SHELTER "POD SOLNISKIEM," LOCATED IN THE BESKID ŻYWIECKI. THE LATTER HAS A FASCINATING STORY.

The history of Chatka in Lachowice as a student hostel begins in 1976, when the members of the Faculty Tourist Club "Maluch", operating at the Faculty of Mathematics and Physics of the Silesian University of Technology, decided to try to get their hut, like other faculties. – In late autumn of 1976, they found a wooden house in Lachowice, in the Adamy hamlet. There was neither running water nor electricity in the house high above the village centre on the slopes of Solnisko. The Silesian University of Technology officially purchased the building around 1978 – explains Helena Lesz-Przybył, one of the "hut-people", i.e., people who run the facility.

The "Pod Solniskiem" hut was managed, like many huts, by the Gliwice "Almatur ", and the service was provided by the members "Maluch" AKT or their friends. For many years, often with a huge effort of their own, the shelter standard was improved, electricity and water were introduced, and rooms were renovated. For many years, the cottage served tourists, but at the turn of the century, another tenant led to the devastation of the object. The abandoned house would have fallen into ruin had it not been for the guides from the Student Mountain Guides Circle "Harnasie" from Gliwice, who undertook to save the "Pod Solniskiem" hut.

In July 2001, the Silesian University of Technology hand-

Student Tourist Shelter "Pod Solniskiem" 34-232 Lachowice-Adamy 263. Reservations 732-775-956, (8.00-22.00). The cottage is one of the objects on the trail.

The Loop (https://theloop.travel/)

Information about the place can also be found on Facebook by typing:

Student Tourist Shelter "Pod Solniskiem"

ed over the facility to the University Branch of PTTK, which belonged to the "Harnasie". Many people participated in the reconstruction and necessary renovations – guides and friends, often also ordinary cottage guests. Soon, the building became a shelter, where not only an authentic tourist atmosphere but also many cultural, travel and music events were organized. It is distinguished from other student huts by an alcohol ban and a high standard of facilities.

Since 2010, the Chatka Club "Adamy", established at the university branch of PTTK, has provided service and further improved the condition of the facility, which has become one of the best-equipped student mountain shelters.

The shelter is open to the public. Students mainly use it, but the facility's guardians do not refuse to welcome anyone, accepting individual tourists and organized groups, employees, and scientists of the Silesian University of Technology.

The cottage building is made of wooden logs. The property has forty sleeping spaces in four rooms. There are no beds; tourists sleep on mattresses lying beside each other on the floor. The cottage has access to hot water. The bathroom has two toilets, two shower cabins, two sinks, and a working sink. The house does not run a buffet; food must be brought with you, but a well-equipped kitchen is on site.

Tourists will find all the necessary accessories to prepare a meal, eat, and clean up. We cook on a beautiful, tiled kitchen stove equipped with a wood-fired oven, says Helena Lesz-Przybył.

The cottage is an excellent starting point for mountain hiking, among others, to Jałowiec, Babia Góra or Lachów Groń. Stopping there, you can visit the Beskidy Toy Centre in Stryszawa, see the ruins of the border post on the Silent Pass, or see the Loreto Chapel in the Wsiórz hamlet.

– Coming to stay with us is certainly worth it. There are always interesting people here, and evening conversations and discussions often extend to sunrise. You can also hide in a hammock on the northern loggia to enjoy the silence and view. Our cottage certainly has its unique atmosphere. There is always something interesting to do here, from walking in the mountains, playing the guitar, playing board games, doing DIY skiing on the snow on a tractor tyre to talking to people. As our colleague Jacek Ginter once said: "It's nice here, even when it's ugly," – says Helena. ■

THE FORGOTTEN PROJECT OF PROFESSOR TODOROWSKI

text: Marek Gabzdyl
photos: mat. arch. autora

THERE ARE ARCHITECTURAL PROJECTS THAT, FOR VARIOUS REASONS, DESPITE THEIR ARTISTIC VALUE, DISAPPEAR FROM THE LANDSCAPE QUICKLY – TOO QUICKLY. HOWEVER, ALL PROJECTS IN WHICH THE MAIN EMPHASIS IS PLACED ON INTERIOR DESIGN ARE PARTICULARLY EPHEMERAL AND – IN RETROSPECT – TEMPORARY. ONE OF SUCH PROJECTS WAS CREATED IN GLIWICE, THE FINAL EFFECT OF WHICH WAS THE ABSOLUTE QUINTESSENCE OF THE CURRENTLY FASHIONABLE STYLE, WAS THE RECONSTRUCTION, OR RATHER ADAPTATION, OF PART OF THE USABLE SPACE IN THE BUILDING OF THE FORMER GERMAN HOTEL, FOR THE SEAT OF THE INTERNATIONAL PRESS AND BOOK CLUB. THE AUTHOR OF THE RECONSTRUCTION PROJECT AND THE DESIGNER OF THE ENTIRE EQUIPMENT WAS TADEUSZ TEODOROWICZ-TODOROWSKI – ARCHITECT, PROFESSOR AT THE SILESIAN UNIVERSITY OF TECHNOLOGY.

Todorowski, an extraordinary figure, almost a man of the Renaissance, left his mark on Earth not only in the form of large projects, such as university buildings or housing estates but also smaller – no less significant – especially in the context of the cooperation between the Silesian University of Technology and the city of Gliwice. Finally, the reconstruction project of the former hotel "Haus Oberschlesien" also came out of the hands of Prof. Todorowski; therefore, the order to execute the project of the club, located in this building, to him – could not have been accidental!

Information about the commissioning of the new club has been published in the local press, in the "Nowiny Gliwickie," published for the fourth year. From the note posted on December 6, 1959 (the club opened on December 3) you can find out: "The club's creation is primarily the merit of our city authorities. Thanks to their efforts, after 3 years of efforts to release the premises and conduct adaptation and renovation works, it was possible to give a beautiful and modern place to the needs of the Club. (…) giving this facility to the inhabitants of Gliwice was only a formal confirmation of the city's gift to the inhabitants." Further, readers learned that "Gliwice International Book and Press Club is the 25th such institution in Poland. Its interior and equipment were the most modern." In a brief note, shifted from the first page to the second, not even a word was made about the authorship of the project, probably not wanting to diminish the role of the city authorities – that "good uncle" who presented the new institution to his culture thirsty readers – the Gliwice residents.

Professor Todorowski's "Interiors and Equipment Recognized as the Most Modern" article provided many more details. It was published in the July issue of the 1960 periodical Architektura, which had a much smaller scope.

In the richly illustrated text, we read:

"The MPIK club in Gliwice, which was commissioned in December 1959, was placed in specially adapted rooms of an office building located on the Kłodnica River at the intersection of the main downtown routes: Zwycięstwa and Marcina Strzody Street. This building, which initially housed a sizeable representative hotel, was destroyed by a fire in 1945 and was rebuilt and rebuilt for office purposes. The addition of the function also changed the architecture of the building (…).

The building, commissioned in 1950 (…), had a functionally separate assembly of the party hall, with a separate entrance from the Strzody Street 10. Concerning its functional and architectural value, the ensemble was not properly utilized."

It turns out that the building, already in the reconstruction and adaptation project phase, had rooms intended for organizing special events, a consumption hall, and accompanying rooms, which—as it was in those years—quickly changed their function in the face of the growing administration and were filled with more desks, equipment, and telephones.

As Professor Todorowski continues to write: "The scope of adaptation of the premises of the complex for the KMPiK was relatively small and limited only to

the ground floor rooms, in which we designed:

- a reading room and a café room with a buffet recess and a telephone booth on the site of the liquidated office rooms, after removing the partitions
- facilities with kitchen, pantry, locker room and w.c.
- the club's bookstore, located on Strzody Street, with a new entrance and an external exhibition site.

The remaining rooms required only renovation and cosmetic treatments and, at this opportunity, received a new colour design."

Therefore, the scope of the work was not particularly extensive, so it remains a mystery what caused – as the author of the note from "Nowiny" himself admitted – the procedures for releasing the premises and conducting renovation and adaptation works lasted as long as 3 years.

But let's go back to what is most important, that is, to the interiors described by the author himself: "A characteristic element of the interior of the reading room is the shape of the ceiling, which is a logical consequence of the construction of the ceiling, resting on steel beams (…). The second factor that influenced the shape of the ceiling and the entire interior was the need for the designed mechanical ventilation of the reading room and bookshop. The action of these two real factors, and not, as it may seem, formalistic tendencies, resulted in an acoustically beneficial solution of the reading room ceiling and its architectural division, conducted consistently throughout the interior."

It is characteristic that even though socialist realism was abandoned in Polish architecture, the author rejects any "formalistic tendencies," justifying the use of such rather than other materials, colours, and geometric forms for structural or practical reasons (the need to provide ventilation).

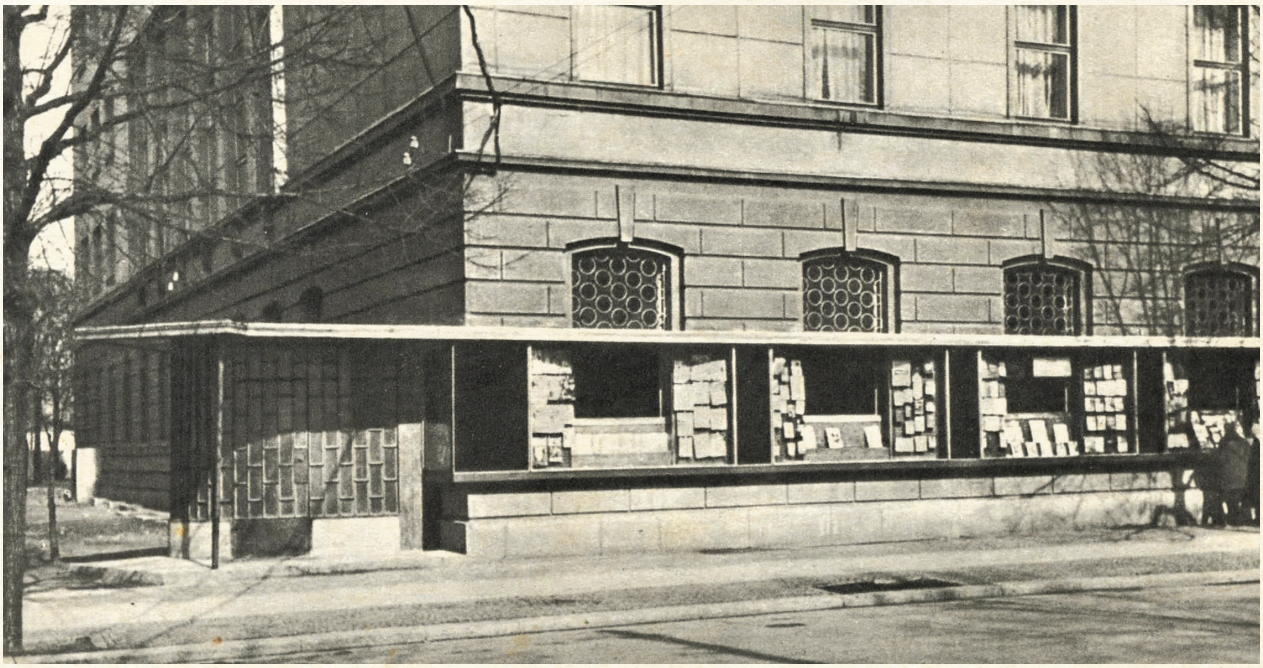
In the next part of the article, Prof. Todorowski describes in detail the selection of materials, colours of wall cladding, floors, small equipment, and installations: "The metal radiator grille, based on the motif of an open book, was painted oil in colours adapted to the interior. The floor now has a geometric-abstract pattern in greenish and reddish colours."

Among the detailed descriptions made according to the design of the author of tables and chairs (with three points of support, so they will not nod!), something that should not escape the interest of contemporary designers: "(…) (interesting design technology!) the authentic aluminium milk containers are low suspended above the main counter, adapted to the new function."

But where do you get an aluminium milk container today?

The professor concludes his description with the words: "The bookshop window, with its colourful covers of books and magazines on a black background, lit up and animated the night image of the street, which until now had the imprint of the administrative deadlock of the building in this part. This image will bring to life even more designed and previously unmade neon compositions, signalling the club's location from a distance."

If the writer remembers these words, the professor's wish was met, and the mentioned neon compositions appeared, at least for a while. The Club's websites with eye-catching covers of Western magazines and books have long become an element of colouring, not quite colourful, the landscape of Gliwice of those years. ■



The MPK Club. Entrance and elevation view

THE VOICE OF THE STUDENT COUNCIL

SUPPLEMENTARY ELECTIONS TO THE STUDENT SELF-GOVERNMENT BODIES

Until November 3rd, the candidates for supplementary elections to the student self-government bodies are selected. Students can apply via the online form, and the polls will be held on November 7 in the USOS system. The condition for participation is to have the status of a Silesian University of Technology student.

At the university level, there is also the opportunity to engage in the activities of the UZSS committees, which deal with areas such as image, Didactics and Benefits, and Projects and External Cooperation. Cooperation in committees does not require formal membership in local government structures, which gives greater flexibility in participation. Getting involved is a chance to have a tangible impact on the life of the University!

THE SPIRAL STUDENT CLUB – INTEGRATION OF FIRST-YEAR STUDENTS

The Faculty "Toothies" or "otrzęsiny" season continues, and the Spiral Student Club invites you to thematic integration events for first-year students. This is an excellent opportunity to meet older colleagues and experience academic life. "Otrzęsiny" are themed, and for the best costumes, you can earn prizes, stimulating creativity and promoting even greater integration. Studies are a time to build relationships that benefit both now and in the future.

WHY LOCAL GOVERNMENT?

The Silesian University of Technology's student self-government plays a crucial role in the university's life, supporting students in both formal and integration issues. Its main task is to represent students' interests before the University authorities and to organize events that enrich academic life. ■

Contact via local government social media or by e-mail to the address **biuro@samorzad.polsl.pl**

SAMORZĄD STUDENCKI POLITECHNIKI ŚLĄSKIEJ

EVENTS

THE INCREASING NUMBER OF STUDENTS AT THE SILESIAN UNIVERSITY OF TECHNOLOGY

Secondary school graduates increasingly choose to study at the Silesian University of Technology. Every year, the number of students starting their studies at our University is increasing. On October 1st, 2024, for the first time, 5828 students of the first and second cycle studies crossed the threshold of our university. This is an increase of almost 280 people compared to last year.

This year, the most popular majors among candidates for first-cycle studies were computer science (practical profile), mechatronics, aerospace engineering, mechanics and mechanical engineering, and industrial mechatronics. In the case of second-cycle studies, the most popular fields were industrial IT, automation and industrial IT, and architecture. ■

THE RECTOR OF THE SILESIAN UNIVERSITY OF TECHNOLOGY WITH A VITAL ROLE IN THE CONFERENCE OF RECTORS OF ACADEMIC SCHOOLS IN POLAND (CRASP)

photo Maciej Mutwil

The Rector of the Silesian University of Technology, Prof. Dr Hab. Eng. Marek Pawełczyk, became the chairman of the CRASP Committee on International Cooperation and a member of the CRASP Presidium. The new composition of the chairpersons of the standing committees for the next four-year term was chosen during the first meeting of the Presidium of the ninth term of CRASP. ■

RESULTS OF THE COMPETITION FOR THE LOGO OF THE 80TH ANNIVERSARY OF THE SILESIAN UNIVERSITY OF TECHNOLOGY

We learned the results of the logo competition for the 80th anniversary of the Silesian University of Technology!

Out of twenty-six qualified works, the selection committee chaired by the Vice-Rector for General Affairs, Prof. Dr Hab. Eng. Bożena Skołud, after careful evaluation, selected the winners.

Jan Szady took first place, Zuzanna Nych second, and Jakub Frączek third. ■

THE FIELD OF ARTIFICIAL INTELLIGENCE AND ROBOTICS IN MEDICINE AT THE SILESIAN UNIVERSITY OF TECHNOLOGY

We invite you to free postgraduate studies in the future and developing field of artificial intelligence and robotics in medicine. The Silesian University of Technology and the Medical University of Silesia jointly run the course.

Classes will be conducted in hybrid, online, and stationary formats at the Faculty of Medical Sciences in Zabrze and the Faculty of Biomedical Engineering at the Silesian University of Technology. The recruitment for the second edition of postgraduate studies will be conducted from 13 to 31 January 2025. ■

COMPETITION AND FREE TUTORING AT THE FACULTY OF ORGANIZATION AND MANAGEMENT OF THE SILESIAN UNIVERSITY OF TECHNOLOGY

The Faculty of Organization and Management of the Silesian University of Technology has begun recruiting secondary school pupils interested in participating in free preparation for the Matura exam and the beginning of their studies. These are individual tutoring sessions in exact subjects. Students can also count on counselling, preparatory courses for studies, and specialist workshops at the university.

The program's implementation is possible thanks to obtaining EU funding for nearly PLN 14 million from the project "developing competences from the NUB sector among students from secondary schools: Rybnik, Gliwice, Bytom, Katowice and Sosnowiec." Two thousand five hundred pupils can participate in the program.

We invite you to participate in a unique competition for secondary school pupils and students until November 15, 2024. You must record a short video (30 seconds to 5 minutes) for social media to participate. The film should be concerned with universally understood ecology, nature protection, or sus-

tainable development. The winners will receive financial prizes up to PLN 2000, -.

HOW CAN ENGINEERING HELP MEDICINE? ANOTHER HTIC CONFERENCE AT THE SILESIAN UNIVERSITY OF TECHNOLOGY IS BEHIND US.

photo Wojciech Kajzer

Several hundred participants from all over Poland, scientists from all centres dealing with innovations in medicine and medical industry representatives met in Zabrze at the European HealthTech Innovation Centre (EHTIC) during the conference "Innovations in Biomedical Engineering."

The conference is interdisciplinary by nature. Hence, the topics concerned, among others, modern technologies related to the production of medical devices and the use of artificial intelligence in medicine. We also discussed the creation of ecosystems supporting cooperation between science and business, said the director of the European HealthTech Innovation Centre (EHTIC), Dr Hab. Eng. Marcin Kaczmarek, Prof. SUT.

VISIT OF THE DELEGATION FROM AJOU UNIVERSITY IN TASHKENT AT THE SILESIAN UNIVERSITY OF TECHNOLOGY

The Silesian University of Technology hosted representatives from Ajou University in Tashkent, headed by the Rector of AUT, Prof Muratov Gayrat Azazovich. The visit culminated in the signing of a cooperation agreement between universities.

The main purpose of the visit of AUT representatives was to get acquainted with the research and didactic potential of the Silesian University of Technology and to identify shared areas for cooperation between universities. Guests from the University of Ajou met, among others, with the Rector of the Silesian University of Technology. Representatives of AUT visited the university campus and selected laboratories of the Silesian University of Technology, as well as the European HealthTech Innovation Centre (EHTIC) at SUT, the Academic Aviation Training Centre of the Silesian University of Technology, the Biotechnology Centre at SUT, the Museum of Deposit Geology named after Czesław Poborski and the radio station in Gliwice.

photo Maciej Mutwil

THE SILESIAN UNIVERSITY OF TECHNOLOGY WILL TRAIN AIRCRAFT MECHANICS IN CATEGORY B3.

The Training Organization of Technicians of Technical Service of the Silesian University of Technology has obtained the rights to train aviation mechanics in the following category: B3—-piston aircraft with a non-hermetic cabin and a permissible take-off weight of up to 2000 kg. This is the fourth category in which students are educated in the transport field—the speciality of mechanics and aviation operations.

Aviation mechanics are trained free of charge as part of the subsidy the Minister of Infrastructure receives annually for the training of aviation personnel and maintenance of the Silesian University of Technology's aviation training centres.

NATURE INSPIRES SCIENCE – FIRST NATIONAL SCIENTIFIC CONFERENCE KOSMOTREND

The Faculty of Chemistry organized the First National Scientific Conference Kosmotrend—natural cosmetic raw materials- on September 6 at the Education and Congress Centre of the Silesian University of Technology in Gliwice. Representatives of academic circles and the cosmetics industry discussed the latest trends and challenges related to using natural ingredients in cosmetics at the Silesian University of Technology.

The conference focused, among other things, on the sources and methods of obtaining natural cosmetic raw materials, evaluating the effectiveness of cosmetics, methods of analysing active substances, and legal regulations concerning natural cosmetic raw materials.

photo Przemyslaw Bratkowski

SILESIAN UNIVERSITY OF TECHNOLOGY AT NASA SPACE APPS CHALLENGE 2024

On October 5th and 6th, the second edition of the NASA Space Apps Challenge was held – a global space hackathon organized by NASA. The Silesian University of Technology partnered with the Polish edition in Stalowa Wola.

The competition took place in many places around the world,

and the one in Stalowa Wola was one of the largest in Europe, gathering over one hundred teams from all over Poland. Our university was represented by two teams, composed mainly of computer science students. One of the mentors who helped the participants implement the tasks was Dr Hab. Eng. Paweł Kasprowski, prof. SUT.

SCIENTIFIC CONFERENCE OF THE BEST SCIENTISTS OF THE TOP 2%

From the 9th to the 11th of September, the First Scientific Conference of the best scientists in the world – top 2% took place at the Faculty of Transport and Aviation Engineering of the Silesian University of Technology. This event was organized as part of the European City of Science Katowice 2024 celebrations.

Each year, 2% of the world's most influential scientists are selected based on accepted citation rates of publications in two categories: the previous year and the entire professional work period. The event was under the honorary patronage of, among others, the Rector of the Silesian University of Technology.

The EU finances the event. The views and opinions expressed are solely those of the author(s) and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). The European Union and the REA are not responsible for them. The Silesian Voivodeship co-finances the event and co-organises the European City of Science Katowice 2024.

NATIONAL COMPETITION FOR POPULAR SCIENCE ARTICLE "ABOUT SCIENCE IN HUMAN TERMS."

We invite scientists, PhD students and students from scientific units all over Poland to participate in the competition for the popular science article "About science in human terms." Applications can be submitted until NOVEMBER 24.

The participant's task is to write a popular scientific article in a way that is accessible and understandable for a broad audience. They can share their research or interests from many different areas of study with readers.

Participation in the competition should be submitted via the Science Popularization Centre's registration form. After submitting, you should send an encoded work (the code will be sent in the email confirming the application) to the e-mail address konkursycpn@polsl.pl. The work cannot contain the author's data.

BCU SKYPORT INVITES YOU TO FREE TRAINING

We invite all interested parties to participate in free training at the SKYPORT Skills Centre. It is the only education, training, and examination facility in Silesia focused on airport and terminal operations. Its scientific partner is the Faculty of Transport and Aviation Engineering of the Silesian University of Technology.

The purpose of BCU SKYPORT is to enable different target groups (students, teachers and adults who want to retrain) to obtain or supplement knowledge, skills, and professional qualifications or to transform into an area related to the operation of ports and terminals. Autumn courses include training in drones, remote sensing, photogrammetry, transport of dangerous goods DGR, and courses in commodity and outsourcing. More information can be found here: www.bcuskyport.katowice.pl

RETURN OF POPULAR SCIENCE LECTURES FROM THE "BIOMEDICAL ENGINEERING AROUND US CYCLE."

We invite students and teachers to participate in lectures from the cycle "Biomedical Engineering Around Us," which will take place in the auditorium of the Philips Auditorium at the Faculty of Biomedical Engineering in Zabrze, at 40 Roosevelt Street. The lecture broadcasts will also be available live on YouTube. For more information, please visit: www.polsl.pl/rib

MEETING OF THE HANACOAT PROJECT IMPLEMENTERS

At the beginning of September, the contractors of the HANACOAT project held a meeting entitled "The use of nanolaminate coatings for high-temperature applications." The project is implemented as part of the Weave-UNISONO program, financed by the National Science Centre. Representatives of an international consortium from Poland and Germany attended the meeting.

photo Łukasiewicz-GIT

Scientists from the Silesian University of Technology, the Upper Silesian Institute of Technology – a consortium leader, RWTH Aachen University and the German Aerospace Centre (DLR) discussed and presented the results of research on the production and degradation of MAX coatings at high temperatures. The three-day seminar also showed the scientific potential of the Silesian University of Technology and Polish project partners. Guests from Ger-

many visited, among others, our university's laboratories.

THE SILESIAN UNIVERSITY OF TECHNOLOGY COOPERATES IN DIGITISING THE BSP MARKET.

A presentation on the digitisation of the unmanned aircraft market took place in the hangar of the Academic Aviation Training Centre of the Silesian University of Technology at the Gliwice airport. Prof. Dr Hab. Eng. Bogusław Łazarz, the previous Vice-Rector for General Affairs and the Head of the Academic Aviation Training Centre of the Silesian University of Technology, Dr Hab. Eng. Pil. Jarosław Kozuba, Prof. SUT, attended the event.

In June, the Silesian University of Technology and the Upper Silesian-Zagłębie Metropolis signed an agreement on developing unmanned technologies, the main point of which is the creation of the Competence Centre of Unmanned and Autonomous Technologies. The cooperation includes activities to implement the results of the Silesian University of Technology's research in unmanned systems and their application in various areas of local government administration. Training and educational programs, as well as promotional activities aimed at bringing the importance of this field closer to the public, will be implemented. ■

photo Martin Huć

INTERNATIONAL STUDENT SYMPOSIUM DEVOTED TO THE APPLICATION OF GEOMATICS IN THE PROBLEMS OF NATURAL DISASTERS

On September 20th, 2024, the International Student Symposium on the Application of Geomatics in Natural Disasters was held online. During the meeting, fourteen papers prepared by students from Asian universities were presented. The meeting was held under the honorary patronage of the Rector of the Silesian University of Technology.

The project aims to create a new specialization of second-cycle studies, "Geomatics for Disaster Risk Reduction," with the necessary laboratory facilities at six Asian universities. A course will be created to train specialists in forecasting, monitoring, and analysing natural disasters. The new specialisation will educate highly specialized staff prepared to forecast, monitor, and analyse natural disasters and, in the event of their occurrence, manage them, with particular emphasis on ensuring the safety of victims and infrastructure. The Silesian University of Technology is the leader of the GeoDRR project implemented by a consortium of ten partners. ■

MEMBRANE SCHOOL AT SILESIAN UNIVERSITY OF TECHNOLOGY

photo Maciej Mutwil

The XVII Membrane School was held at the Silesian University of Technology. It was dedicated to students, PhD students, young researchers representing universities and scientific institutes, and representatives of companies and institutions interested in membrane issues. More than sixty people attended the school. The Vice Rector for Collaboration with Civic and Economic Environment welcomed the participants, Prof. Dr Hab. Eng. Marcin Staniek and Prof. SUT. ■

THE BEST OF THE BEST – WE KNOW THE WINNERS OF EUCYS 2024!

The final competition of promising young scientists worldwide is behind us as part of the European Union Contest for Young Scientists 2024 (EUCYS). During the awards ceremony on the 13th of September at the Silesian Museum, the European Union awards were granted.

Among the awards was a unique Silesian University of Technology prize, awarded to Ediz Osman from Germany. The project aims to develop a zero-emission jet capable of vertical take-off and landing (VTOL). The winner will spend a week interning in a selected unit of the Silesian University of Technology under the supervision of a mentor. ■

VISIT OF SAP MANAGEMENT AT SILESIAN UNIVERSITY OF TECHNOLOGY

photo Maciej Mutwil

Representatives of SAP, the world leader in enterprise software, visited the Silesian University of Technology campus. The guests were able to familiarize themselves with our university's various cooperation models with business partners. The Vice-Rector for Infrastructure and Investment welcomed

the delegation, Prof. Dr Hab. Eng. Zbigniew Paszenda.

The guests visited the electronics laboratory of Aptiv, a manufacturer of automotive parts, the laboratory of Alstom, a leader in the railway industry, and the Virtual Flying Laboratory, where they tried their hand at piloting an aircraft on a simulator. The campus also included visiting the Silesian University of Technology Library and the Industry 4.0 Technology Testing Centre, a demonstration production line built by APA Group. ■

XXVIII GLIWICE SCIENTIFIC MEETINGS

On the 21st -22nd of November 2024, the 28th edition of Gliwice Scientific Meetings will take place at the Education and Congress Centre of the Silesian University of Technology. They are organized by the National Institute of Oncology, named after Maria Skłodowska-Curie - National Research Institute Branch in Gliwice, the Association for Supporting Cancer Research, and the Silesian University of Technology. The conference focuses on various aspects of cancer research, molecular and cellular biology, medicine, biotechnology, and bioinformatics. ■

LECTURES ON INNOVATION AND ENTREPRENEURSHIP WITHIN EURECA-PRO

In October and November 2024, a series of short online lectures on innovation and entrepreneurship will occur. The meetings are planned as part of the EURECA-PRO consortium.

During the course, the lecturers will present innovative ideas that have aroused their interest, share valuable "know-how," and open the field for exchanging ideas and experiences between students and entrepreneurs. More information: www.eurecapro.EU/innovation-entrepreneurship-short-lecture-series-2024/. ■

LECTURES ON ENERGY TRANSFORMATION WITHIN THE FRAMEWORK OF EURECA-PRO

We invite you to a series of online lectures on "Energy transformation" as part of EURECA-PRO. The meetings will discuss topics related to the Green Deal, energy technologies and energy markets.

The lectures are open to students, scientists, and academic staff. For more information, visit www.eurecapro.EU/eureka-pro-online-lecture-series-et/. ■

NEW APPARATUS OF THE INSTITUTE OF PHYSICS OF THE SILESIAN UNIVERSITY OF TECHNOLOGY

The Institute of Physics—Centre for Science and Education of the Silesian University of Technology purchased an analyser using CRDS (Cavity Ring Down Spectroscopy) technologies for the MONCO2 project.

The device will be used for detailed analysis of changes in the level of carbon dioxide, methane and isotopic composition of gases occurring in the atmospheric air in Gliwice with high resolution and accuracy. Currently, work is underway on testing equipment and inter-laboratory calibration.

THE SECOND BICYCLE RALLY OF THE SILESIAN UNIVERSITY OF TECHNOLOGY IS BEHIND US.

The second edition of the Silesian University of Technology's Bike Rally gathered almost forty cycling enthusiasts. The group travelled from Rybnik to Rudy. Among the participants were university employees and their families. The youngest participant was 5 years old. At the rally's finish line, refreshments, souvenirs, and commemorative medals were waiting for the participants. During the rest, a first aid show was also presented. ■

photo Katarzyna Siwczyk

EXHIBITIONBY STUDENTS OF THE FACULTY OF ARCHITECTURE IN ITALY

On September 27th, at the Angevin-Aragonese Castle in Gaeta (Lazio, Italy), there took place the opening of the exhibition entitled "Architecture & Landscape in Conservation Design: Cassino-Folcara and Gaeta Castle", which is the result of a research and didactic project carried out as part of the "Conservation Design" course in the Department of Theory, Design and History of Architecture at the Faculty of Architecture of the Silesian University of Technology. ■

DESIGN A GREEN FUTURE WITH US – ECOLOGICAL WORKSHOPS FOR YOUNG PEOPLE.

They conducted experiments and analyses of waste, worked in groups to find solutions, and learned the principles of a circular economy. Students of the Silesian Technical Educational Centre in Katowice participated in laboratory workshops organized by scientists from the Faculty of Energy and En-

vironmental Engineering and the Centre of Climate and Environmental Protection of the Silesian University of Technology. The workshops aimed to make young people aware of why responsible and sustainable waste management is significant for environmental and climate protection. ■

THEY MET AFTER 25 YEARS.

photo Martin Huć

In 1999, they graduated from the Silesian University of Technology at the then Faculty of Mining and Geology in mining and geology, specialising in mining geodesy. Most of them have linked their professional lives with this field. After twenty-five years, the graduates of our University decided to meet again and return to the study period.

The meeting, which took place in the Szychta buffet, was attended by seventeen graduates, as well as the lecturers during their studies: Dr Hab. Eng. Violetta Sokoła-Szewioła, Prof SUT (currently Vice-Dean for Education and Cooperation at the Faculty of Mining, Safety Engineering and Industrial Automation of Silesian University of Technology), Prof. Dr Hab. Eng. Ryszard Mielimąka, Prof SUT - Vice-Dean Infrastructure and Organisation at the Faculty of Mining, Safety Engineering, and Industrial Automation of Technology), Prof. Dr Hab. Anna Manowska, Prof. SUT. ■

VOLUNTEER CENTRE AT THE SENIOR FAMILY PICNIC

At the invitation of the Council of Seniors of the City of Gliwice, the Volunteer Centre of the Silesian University of Technology participated in the Family Senior Picnic, which announced the Gliwice Senior Days.

Gliwice Senior Days is an important event aiming to integrate and create conditions for activation and joint spending time for Gliwice seniors. The needs and expectations in this regard are high and constantly growing. The Senior Council of the Polytechnic District is also planned to be established. ■

SUCCESSES

SCIENTISTS OF THE SILESIAN UNIVERSITY OF TECHNOLOGY AGAIN IN THE PRESTIGIOUS RANKING OF THE TOP 2% OF THE MOST INFLUENTIAL RESEARCHERS IN THE WORLD

As many as sixty-three scientists from the Silesian University of Technology have been ranked among the world's most influential 2% of scientists regarding accepted citation rates of their publications. This is the fifth edition of the study, launched in 2019, based on an article in the journal PLOS Biology by Stanford University, Elsevier, and SciTech Strategies. It presents a publicly available database with standardized information that considers publication achievements. ■

PROF. MIROSŁAW BONEK IS A DOCTOR HONORIS CAUSA OF KHMELNYTSKY NATIONAL UNIVERSITY

On the 26th of September 2024, Vice-Dean for Student Affairs and Education at the Faculty of Mechanical Engineering, Dr Hab. Eng. Mirosław Bonek Prof. SUT, following the resolution of the High Senate of Khmelnytsky National University in Ukraine, for his contribution to the development of education and science and many years of cooperation, encouraging friendly relations between Khmelnytsky National University and Silesian University of Technology, as well as between Ukraine and the Republic of Poland, was honoured with the title and dignity of Doctor Honoris Causa of Khmelnytsky National University. ■

DR ENG. OLENA PAVLIUK WON THE PRESTIGIOUS COMPETITION

Dr Eng. Olena Pavliuk from the Faculty of Automatic Control, Electronics, and Computer Science of the Silesian University of Technology and Dr Eng. Serhiy Shcherbovskykh from the State Academy of Applied Sciences in Jarosław is the winner of the 28th edition of the competition for the Siemens and Warsaw Univer-

sity of Technology Prize. The jury awarded them for the project "Methods and means of intelligent management of AGV vehicles based on the recognition of the activities of industrial personnel." ■

A ROVER WITH A SUCCESSFUL MISSION IN CANADA

During the holidays, the Silesian Phoenix Student Scientific Club from the Silesian University of Technology participated in the Canadian International Rover Challenge. Their Phoenix III Mars rover made a big impression on everyone, and the students themselves did very well in the competition, taking eighth place. Nine people in Canada represented the team.

The trip is co-financed as part of the task commissioned by the Minister of Science, "Participation of the Silesian Phoenix team in the international Canadian Rover Challenge 2024." ■

THE ITALIAN ADVENTURE OF POLSL RACING WITH THE SAE ITALY FORMULA

The beginning of September was extraordinarily intense and essential for students from the inter-faculty Student Scientific Club PolSl Racing. They competed with seventy teams in the Formula SAE Italy competition at the Varano de' Melegari motorsport racetrack.

The PolSl Racing team was remarkably successful in Italy. Their SW-05e car successfully passed all technical inspections, which was a problem for many competitors. Representatives of the Silesian University of Technology were appreciated primarily for the compactness of the entire vehicle. ■

THE HOUSING ESTATE GAME AWARDED IN GERMANY

The Housing Estate game, created at the Faculty of Architecture, was appreciated at the international Design Educates Awards competition, winning first place in the Product of the Year category in 2024. The Dean of the Faculty of Architecture, Dr Hab. Eng. Arch., collected the award. Tomasz Bradecki, Prof. SUT.

photo: private archives

The Student Science Club developed the game "Urban Model," operated at the Faculty of Architecture of the Silesian University of Technology. Design Educates is a cyclical competition that is gaining more importance. The jury consists of world-renowned designers and professionals who combine a passion for design with science. ■

SILESIAN UNIVERSITY OF TECHNOLOGY WITH THE AWARD AT THE EXPOBUD FAIR

photo Beata Kucharczyk-Brus

The Silesian University of Technology's Faculty of Architecture, Faculty of Civil Engineering, and Faculty of Mechanical Engineering presented their achievements at the 19th International Gliwice Civil Engineering Fair EXPOBUD, which took place at PreZero Arena in Gliwice from September 14th to 15th.

Our university's stand was awarded the category "Creative presentation of products at the stand." It featured diploma projects of students in the field of architecture and interior architecture: A mock-up of the ancient temple complex in Delphi prepared by students of The First year of architecture, hydroponic cultivation of plants together with a research station, which was prepared by employees of the Faculty of Mechanical Engineering and samples of innovative building materials (foam concrete, road asphalt) developed by researchers from the Faculty of Civil Engineering. ■

THERE ARE PRIZES FOR THE SILESIAN UNIVERSITY OF TECHNOLOGY STUDENT CREATIVITY CENTRE.

photo Maciej Mutwil

The Student Creativity Centre won first place in the Adaptation category in the Investment of the Year 2023/24 competition, organized by the National Chamber of Real Estate Management—the principal designer of the object, Dr Hab. Eng. Arch. Klaudiusz Fross, Prof. SUT, received the statuette during a gala ceremony in the Silesian Planetarium.

The Silesian University of Technology's investment also received a distinction in the competition for MODERNIZATION OF THE YEAR 2023 – XVIII edition. ■

THE BASKETBALL PLAYERS OF AZS SILESIAN UNIVERSITY OF TECHNOLOGY WON THE MATCH FOR THE LEAGUE'S INAUGURATION.

The 2024/2025 season of basketball players at AZS Silesian University of Technology be-

gan with this victory. In the away match of the second league, they beat the mountain resorts Spartacus Jelenia Góra 63:59. Two debuting female players, Karolina Kuszka and Oleksandra Hopkalo, who scored the most points for our team, played very well in the meeting. ■

Photo: the team archive

PROJECTS

EIGHT PROJECTS OF THE SILESIAN UNIVERSITY OF TECHNOLOGY WITH FUNDING

photo Tomasz Żak UMWS

On 24 September, in the Silesian Parliament building, a solemn presentation of congratulatory letters was held to beneficiaries who obtained funding from the Just Transition Fund under the European Funds for Silesia Program for 2021-2027. The Vice-Rector for Infrastructure and Investment, Prof. Dr Hab. Eng. Zbigniew Paszenda, received the letter on behalf of the Silesian University of Technology.

The Silesian University of Technology will implement as many as eight projects. Thus, it is the leader among Silesian universities regarding the number of projects and their total value (PLN 44 640 336.43). ■

STOCK EXCHANGE SCHOOL AT THE SILESIAN UNIVERSITY OF TECHNOLOGY

The Faculty of Organization and Management of the Silesian University of Technology and the Warsaw Stock Exchange Foundation invite you to participate in an educational program called "Stock Exchange School."

As part of the Stock Exchange School, you can take two courses: Basics of Investing on the Stock Exchange – the primary level (cost PLN 550) and the Intermediate Stock Exchange – the intermediate level (cost PLN 600). If you register for two courses, you will be entitled to a discount of 10%. More information on www.gpw.pl/szkola-gieldowa and at the e-mail address fundacjagpw@gpw.pl ■

POSITIONS, DEGREES, AND ACADEMIC TITLES

AWARDED DOCTORAL DEGREES

Dr Eng. Jakub COPIK
Silesian University of Technology – PhD student. Supervisor: Prof. Dr Hab. Eng. Mariusz Dudziak. Auxiliary Supervisor: Dr Hab. Eng. Edyta Kudlek, prof. SUT. Thesis topic: "Research of new technologies for water jet purification in terms of the elimination of micro-pollutants." Conferring the degree of Doctor of Engineering and technical sciences. Discipline - environmental engineering, mining, and energy. Resolution of the Environmental Engineering, Mining and Power Engineering Discipline Council of September 26th, 2024.

Dr Dariusz LEWANDOWSKI
Lukasiewicz Research Network – Institute of Non-Ferrous Metals. Supervisor: Prof. Dr Hab. Eng. Jolanta Biegaska. Thesis topic: 'Determination of the degree of recovery of copper from the waste of printed circuit boards by mechanical and thermal methods.' Conferring the degree of Doctor of Engineering and technical sciences. Discipline - environmental engineering, mining, and energy. Resolution of the Environmental Engineering, Mining and Power Engineering Discipline Council of September 26th, 2024.

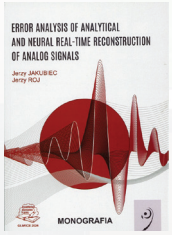
Dr Eng. Katarzyna NIESYTO
Supervisor: Prof. Dr Hab. Eng. Dorota Neugebauer. Thesis topic: "Design of vaccinated poly (ionic liquids) as potential drug delivery systems for antimicrobial therapy." Conferring the degree of doctor of exact and natural sciences with honours. Discipline – chemical sciences. Resolution of the Silesian University of Technology Chemical Sciences Discipline Council of September 18th, 2024.

AWARDED DEGREES OF HABILITATED DOCTOR

Dr Hab. Eng. Tomasz Krzeszowski
Rzeszów University of Technology. Resolution of the Technical Informatics and Telecommunications Discipline Council of September 14th, 2024. In the Discipline of technical informatics and telecommunications.

Edited by **Katarzyna Mryka**

PUBLISHING NEWS



Error analysis of analytical and neural real-time reconstruction of analog signals

Jerzy JAKUBIEC, Jerzy ROJ

Ed. I, 2024, PLN 69.30, p. 242

The monograph is devoted to signal reproduction by a sampling device that can operate autonomously or be part of a measurement and control system. The study's main aim is to analyse errors in the recovery process, based on which the model of error propagation in the sampling instrument is created. The uncertainty interval is determined based on the instrument's output error distribution using the proposed mathematical apparatus adapted to algorithmic measurement data processing.

Safety aspects in science and practice

Collective work edited by Marcin Krause

Wyd. I, 2024, 56,70 zł, s. 239

The monograph entitled "Safety Aspects in Science and Practice" begins a new series of publications, which will publish current theoretical and application achievements in the universally understood safety and threats field. Among the publications, the largest share will be content in occupational safety and health engineering. This monograph is a collection of twelve publications developed by fourteen authors, covering the following five areas of safety analysis: Requirements and tools for analysing health and safety status, examples of occupational stress and mental stress, human behaviour in the work environment and other safety issues.

Edited by **Małgorzata Mizera**

NOVEMBER REPERTOIRE OF THE STUDENT CULTURE CENTER "MROWISKO"

02.11 at 20:00
Halloween Rockoteka

05.11 at 19:00
100th Herbert's birthday
The Last Tango with Herbert
"The Prince and the Moon"
Theatre MrOFFisko

06.11 at 21:00
Student's Toothies (Otrzęsiny)

07.11 at 21:00
Student's Toothies (Otrzęsiny)

09.11 at 21:00
Tribute to R.A.P.

10.11 at 14:00
A show for children
"The Chronicles of Travellers"
"Adventure in the Dinosaur World"

10.11 at 17:00
A show for children
"Interactive Fairy-tale Music Concert"

12.11 at 19:00
Concert of Alicja Majewska

12.11 at 20:00
PubQuiz

13.11 at 19:00
Stand-up
Cezary Ponttefski "I'll Tell you when We meet."

13.11 at 21:00
Student's Toothies (Otrzęsiny)

14.11 09:00-16:00
Upper Silesian Space Scientific Conference

15.11 at 20:00
Good evening with a Vinyl Record

17.11 09:00-13:00
Gliwice Record Exchange

19.11 at 20:00
PubQuiz

21.11 at 19:00
Musical and dance performance
"Who Has the Key"

26.11 at 20:00
PubQuiz

27.11 at 19:00
Theatrical performance
Theatre "Scena Poczekalnia"

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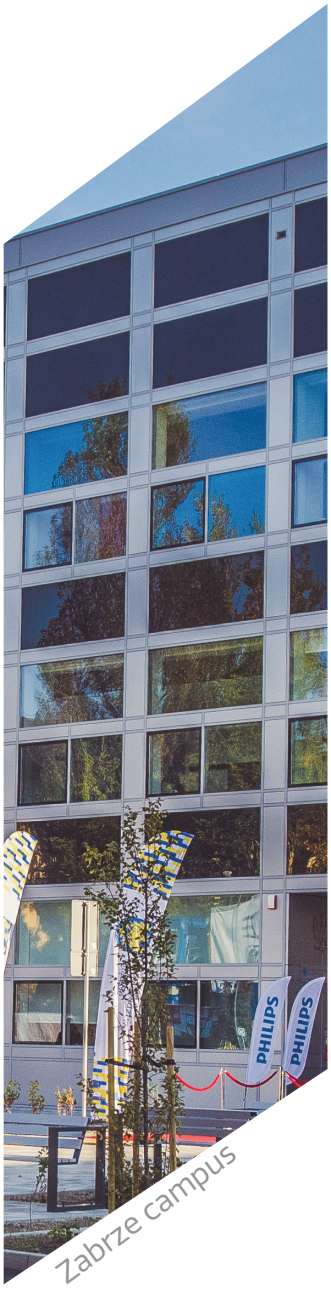

Zabrze campus

Rybnik campus

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