CENTRAL EUROPEAN TECHNOLOGY FORUM

Krakow
18-19.11.2024

POLSKA IZBA GOSPODARCZA ZAAWANSOWANYCH TECHNOLOGII
POLISH CHAMBER OF COMMERCE FOR HIGH TECHNOLOGY

Central European Technology Forum

Krakow

18 - 19.11.2024

IZTECH
WYDAWNICTWO
Polska Izba Gospodarcza Zaawansowanych Technologii

www.iztech.pl

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Warsaw, 16.11.2024

CENTRAL EUROPEAN TECHNOLOGY FORUM

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18-19.11.2024

Central European Technology Forum

18-19.11.2024

Auditorium Maximum of the Jagiellonian University
street: Krupnicza 33, Krakow

AGH University of Science and Technology
street: Adama Mickiewicza 30, Krakow

IZTECH
POLISH CHAMBER OF COMMERCE FOR HIGH TECHNOLOGY

under the patronage
of the European Parliament

WELCOME LETTERS

Jerzy Buzek
Chairman of the CETEF
Steering Committee

Ladies and Gentlemen,

On behalf of the Steering Committee, I have the pleasure of inviting you to the 4th Central European Technology Forum CETEF'24, which will be held on 18 and 19 November 2024 in the Auditorium Maximum of the Jagiellonian University. The main thematic path of this year's CETEF will be the problems of international scientific and industrial cooperation in emerging and breakthrough technologies.

Europe has made a special contribution to the development of science and technology. It was in this part of the world that the first industrial revolutions took place, it was in Europe that revolutionary theories were born, which are the foundations of modern science. In recent decades, however, we have been observing a shift in the frontier of technological research to other parts of the world.

Further development of advanced technologies and high-tech industry requires a huge concentration of intellectual, material and financial capital, exceeding the capabilities of many small and even medium-sized European national economies.

An indispensable condition for Europe to maintain its leading position, especially in technical sciences, is the development of scientific, technological and financial cooperation between EU countries, the creation of international research teams, especially in technologies that determine the achievement of the goals of digital and energy transformation.

During the two-day CETEF'24 conference, politicians, managers, scientists and technologists representing these countries will discuss how to strengthen and make more effective European scientific and technical cooperation, how to increase the participation of Central and Eastern European countries in it. I am deeply convinced that the CETEF'24 conference will make a valuable contribution to improving the instruments of European innovation and research development programs and will contribute to the expansion of international cooperation and the establishment of many personal contacts.

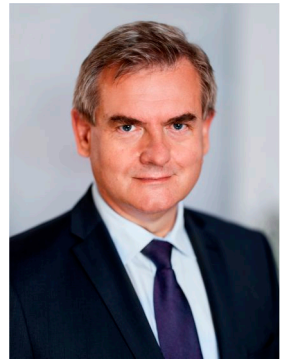
I wish all CETEF'24 participants a fruitful meeting.

Aleksander Miszalski
Mayor of the City of Krakow

Ladies and Gentlemen,

I cordially invite you to the fourth edition of the Central European Technology Forum in Krakow – an excellent city for creating cooperation networks to shape the future development of Europe.
For years, we have been creating favorable infrastructural and financial conditions to support young companies, technology parks and industrial parks. We are a thriving scientific center, and employment in the area of research and development is constantly growing!
Numerous technology transfer centers and special purpose vehicles of universities ensure a constant flow of knowledge to business. Every year, the number of institutions and enterprises ready to invest in Małopolska increases in our metropolis – also in the high-tech sector. We are ready to become the European capital of tomorrow's industry thanks to your presence!

See you in November!



Dr. Zygmunt Krasiński
President
Polish Chamber of Commerce
for High Technology

Ewa Mańkiewicz-Cudny
President of the Board
Polish Federation of Engineering Associations
Central Technical Organisation

Ladies and Gentlemen,

It is a great honour for us to invite you to the Central European Technology Forum – CETEF'24, which will be held in Krakow on 18-19 November 2024, on the eve of the Polish Presidency of the Council of the European Union.

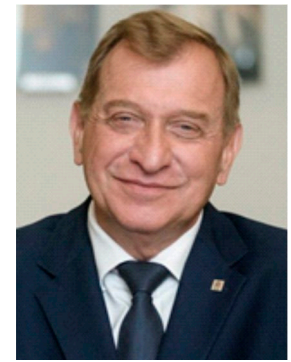
In the difficult time of growing global challenges and in the conditions of the ongoing war in Ukraine, the need to continue the long-term undertaking that is the Forum, enabling meetings and discussions of the new technology community and showing the technological potential of our region of Europe, is very strong.

We invite you to actively participate in the debate on the development of technical fields that are crucial for the success of the energy transformation in important technological areas. To achieve this goal, Europe should optimally use the strong research base, as well as the financial resources at our disposal, support the development of industry and the rapidly growing start-up sector.

This year, the two-day program of the Forum was enriched with study visits to leading Krakow research centers and the international networking meeting Horizon Europe Matchmaking Event. In this year's edition, we invite you to seven technological conferences in the field, the topics of which range from innovative technologies of energy transformation, through innovations in automation, robotics and artificial intelligence, space and satellite technologies, innovations in biotechnologies, to materials engineering, agri-food technologies and social innovations in technologies.

This year's edition of the Forum enjoys exceptionally great interest from the high-tech community, as evidenced by the record number

Prof. Piotr Jedynak
Rector
of the Jagiellonian University



Prof. Jerzy Lis
Rector
of the AGH University
of Science and Technology in Krakow

of Partners of this event. We are pleased that both high-tech companies and leading universities and research institutes, as well as organizations representing an experienced group of engineers, PhD students and young scientists, both from Europe and beyond, have joined the cooperation. In particular, we value the direct involvement in the preparation of the Forum of the Mayor of the City of Krakow, which focuses on start-ups and technological development.

The European Commission has started work on the next, already 10th Framework Programme of Research and Innovation of the EU. The voice of the Polish high-tech community in the consultations on this program is clearly audible in Brussels. For the first time in history, the Media Partner of the Forum is the influential Science|Business network dealing with the topics of research and innovation policy and the Framework Programmes of the European Union.

What distinguishes the Central European Technology Forum – CETEF'24 from other international conferences is its focus on industrial technologies, openness to the world, the inclusion of the young innovators' community, the debate on the shaping of the next 10th EU Framework Programme and building personal contacts between partners to undertake joint European projects. We hope that the high-class specialists gathered around CETEF'24 will show the way and prepare an action plan for the technological development of Europe.

Thanks to you, in November 2024, Kraków will become the European capital of advanced technologies and the industry of tomorrow. We hope that the exchange of ideas and experiences will be fruitful.

See you at CETEF'24!

ORGANIZERS

IZTECH
POLISH CHAMBER OF COMMERCE FOR HIGH TECHNOLOGY

The Polish Chamber of Commerce for High Technology (IZTECH) was established in 2008 as a non-profit organization associating scientific institutions, universities, high-tech companies and other business entities operating in various technological sectors. The Chamber's mission is to integrate the environment, support high-tech initiatives, digital and energy transformation, develop international cooperation and promote Polish technological solutions in Europe and around the world. The main goal of the Chamber's activities is to stimulate the development of knowledge-based entrepreneurship and comprehensive assistance to its Members in achieving commercial success of their innovative projects in the area of advanced technologies.

Our Members are listed as outstanding innovators, creators of patents and developments of new technologies that have an impact on the dynamic economic development of Poland. Our representatives sit on national and EU organizations, parliamentary committees, giving opinions on draft laws of economic importance. The Chamber organizes international and national forums for the exchange of experience of engineering staff.

A key undertaking is the Central European Technology Forum – CETEF, organised under the auspices of the European Commission and under the patronage of the European Parliament, in cooperation with technical universities and the high-tech industry since 2014.

The IZTECH Working Group for the EU Framework Programme for Research and Innovation Horizon Europe operates within the Chamber, the mission of which is to represent the voice of the Polish community in the field of EU research and innovation policy and EU Framework Programmes at the national and European forums and to initiate joint projects. The members of the Working Group are the authors of the Position Paper of the Polish Chamber of Commerce for High Technology (IZTECH) on the 10th Framework Programme.

ORGANIZERS

AGH

The AGH University of Science and Technology is a modern university that actively participates in building a knowledge-based society and in creating innovative technologies. The university has a strong position in the country and is becoming increasingly stronger abroad. Experienced staff, modern laboratories, a unique campus, and above all – the bond that unites the AGH community – these are our greatest assets.

We develop scientific research in the areas of technical sciences, exact sciences, earth sciences and social sciences, taking into account the current priorities of the economy and business, in such areas as digitization, cybersecurity, energy transformation and zero emission, climate change, circular economy or industry 4.0. Among many future research directions, AGH is actively developing work in the field of space engineering and artificial intelligence.

The educational offer includes nearly 70 fields of study conducted at 17 faculties. The university also offers doctoral education, MBA TECH studies and approximately 90 postgraduate courses.

JAGIELLONIAN UNIVERSITY IN KRAKÓW

The Jagiellonian University was founded on May 12, 1364 by the Polish king Casimir the Great and is the oldest university in Poland and one of the oldest in this region of Europe. Studium generale – as the University was then called – consisted of three faculties: liberal arts, medicine and law. In 1400, the University was re-founded by King Władysław Jagiełło. A fourth faculty was established at that time – theology. The 15th century and the beginning of the 16th century were the "golden period" in the history of the university, which was famous for teaching mathematics, astronomy and law, and its outstanding scholars. The university attracted students from all over Europe, who at that time constituted as much as 44% of the students. The high level of the university is also evidenced by its outstanding graduates, such as Nicolaus Copernicus.

Currently, the Jagiellonian University has 15 faculties, including three medical faculties, which form the so-called Collegium Medicum. Around 50 thousand students are educated here every year, 65% of whom are women. The national structure has also changed, in addition to students from European Union countries, young people from Asia and Africa, as well as from Eastern European countries, have appeared.

ORGANIZERS

Polish Federation of Engineering Associations

The Polish Federation of Engineering Associations, operating as a community of Engineering Associations, represents the technical community, integrates Polish technicians and engineers, acts for the benefit of strengthening the role of the technical circles, which are, in turn, a significant contributor and co-originator of civilisation progress and sustainable development. The Polish Federation of Engineering Associations is a voluntary federation of science and technology associations. Following the tradition of the Polish engineering associations dating back to the 19th century, established both in Poland and in exile for the purposes of supporting the patriotic aspirations of Poles and participation in laying the foundations of the economic prosperity of Poland upon its restoration and rebirth, the Federation currently operates for the benefit of continuous civilisation development of the Republic of Poland, simultaneously reinforcing the creative effort of Polish engineers and technicians.

Nowadays, the Polish Federation of Engineering Associations comprises of:

- 39 Federations of Engineering Associations (Member Associations) which bring together nearly 100,000 members
- 45 Local Branches of Federations of Engineering Associations, affiliating the branches federated within the structures of the Federation
- 35 Houses of Technicians, including two institutions built at the beginning of the 20th century with the funds originating from engineers' contributions (The House of Technicians in Warsaw – 1905 and the House of Technicians in Kraków – 1906)
- its own publishing house specialising in science and technology press (SIGMA-NOT) that currently publishes 31 titles, including Przegląd Techniczny (Technical Review), which has been published since 1866.

Kraków

The city of Kraków is a city with county rights, located in southern Poland, on the Vistula River, second in the country in terms of population and area. The former capital, coronation city and necropolis of Polish kings. Capital of the Lesser Poland Voivodeship. The city is located at the junction of several geographical regions: the Sandomierz Basin, the Western Beskid Foothills and the Kraków-Częstochowa Upland.

The history of Kraków as an organized urban center begins around the 7th–8th century AD. To this day, we can admire the remains of the first inhabitants in the form of two mounds: Krakus and Wanda. The center of power was centered on Wawel Hill from the beginning. One of the breakthrough dates in the history of the city was its location under Magdeburg law on June 5, 1257. At that time, the current urban layout of the Old Town was formed, as well as the seat of the ruler – Wawel. Its location at the crossroads of trade routes: from Russia to Germany and the Czech Republic, from Pomerania to Hungary, Turkey and the Balkans, allowed Krakow to develop economically quickly.

Today, Krakow is a modern city that is still developing. A melting pot where the tradition of its residents mixes with the student avant-garde. Thanks to its many monuments and perfectly preserved old buildings, it has not lost its majestic character.

Panorama of Wawel Castle, Krakow. Photo from the portal: https://pixabay.com

STRATEGIC PARTNERS

CETEF'24 STRATEGIC PARTNER

CETEF'24 STRATEGIC SCIENTIFIC PARTNER

CETEF'24 MAIN MEDIA PARTNER

STRATEGIC PARTNERS

CETEF'24 STRATEGIC PARTNER

Polskie Sieci Elektroenergetyczne involvement in the energy transition.

Polskie Sieci Elektroenergetyczne, the Polish transmission system operator, is at the center of the ongoing energy transition. It is driven by three major trends: decarbonization, decentralization and digitalization. For decades, the power system was based on large dispatchable units whose operation was quite easily predictable and controllable. This situation, however, substantially envolves with renewables now accounting for nearly half of all capacity in the national power system. It is necessary to observe distributed resources, a large part of which are not connected to the transmission grid, but to the distribution network. Generation forecasting becomes a real challenge.

We observe periods of excess of generation over demand, as well as hours by dispatchable sources. Their number, in turn, a large proportion of existing coal-fired units, which are to be restricted due to economic or technical reasons. As a result, operator faces the challenge of ensuring observability and controllability of the system, as well as the sufficiency of generation due – the need for sources to ensure the production of electricity, due to weather conditions, the supply from RES is too low. Therefore PSE have introduced the so-called "capacity market". That secures payments for power plants for their willingness to operate.

PSE are constantly improving its system management processes. Changes in market operations are an important part of that process. In June 2024, we introduced balancing market reform, recognized as a milestone in reflecting the system status though process

in technical market to spur economic momentum for better forecasting of source operation and demand.

Transformation is also about new sources and new customer needs. Adapting to these changes requires restructuring of the grid. We plan to spend ca. PLN 70 billion, during next 10 years only, on building new lines and substations and upgrading existing facilities. We prepare to evacuate power from offshore wind farms, whose capacity in 2040 could reach as much as 18 GW. New lines in the north of the country, will also serve to transmit power from the nuclear plant are required. We prepare the system for intensive development of RES and energy storage - according to investors' plans the capacity of onshore wind farms will increase to nearly 19 GW, photovoltaics to 52 GW, and storage to more than 31 GW by the end of this decade.

Visit
https://inwestycje.pse.pl/to read more about PSE's investments.

CETEF'24 STRATEGIC SCIENTIFIC PARTNER

Conference of Rectors of Polish Technical Universities

The Conference of Rectors of Polish Technical Universities (KRPUT) is an autonomous assembly of **23** rectors of technical universities and 10 associated universities operating in Poland. It serves to deepen ties and cooperation between universities.

It was established in 1989, initially as the Autonomous Conference of Rectors of Higher Technical Schools. The conference has been operating under its current name since 1996.

KRPUT, as one of the conferences of higher education institutions, is a member of the Conference of Rectors of Academic Schools in Poland (KRASP), and the chairman of KRPUT is a member of the KRASP presidium.

CETEF'24 MAIN MEDIA PARTNER

SCIENCE|BUSINESS®

Founded in 2024, Science|Business quickly established itself as Europe's leading news company specialised in research and innovation (R&I) policy. As part of our commitment to advancing R&I, we launched the Science|Business Widening Initiative in September 2022, which is a Network that brings together leading research and innovation actors from across Europe to showcase the know-how available in central and eastern Europe and address the challenges and opportunities for EU research in the upcoming Framework Programme (FP10).

Through news coverage, a series of events, policy reports, and strategic discussions, we aim to unlock the EU's full research potential, foster excellence without frontiers, and enhance visibility in key policy debates across Europe.

MAIN INDUSTRIALPARTNERS

United Robots

ADAMED

RYVU THERAPEUTICS

ATENDE

WASKO

WB ELECTRONICS WB GROUP

MediSensonic

EC GRUPA®

iTTi

ZGM BOLESŁAW

NIRBY

HUAWEI

GRÄNGES

MAIN INDUSTRIAL PARTNERS

United Robots

United Robots is one of the top technological companies specializing in the design and production of innovative autonomous robots for industrial usage. It is also one of the few robotics companies whose know-how has been entirely developed in Poland. With a diverse range of products including cleaning robots and intralogistics robots, United Robots is redefining efficiency across various industries. What sets the company apart is its production of robots from A to Z – from conception to implementation, both hardware and software. With such an approach, the company delivers fully refined products to its customers and provides substantive support at every stage of the business process – from workspace analysis, through deployment in the target facility, to technical service provision. Being close to the market and customers ensures that the solutions offered by United Robots are tailored to current needs and evolving business challenges. United Robots' flag product - an autonomous cleaning robot UR\Cleaner cleans vast spaces in warehouses, factories and public spaces without human supervision. It maps surrounding areas, safely plans cleaning routes, avoids obstacles and recharges and refills water and detergent all by itself. An intralogistics robot UR\Carrier streamlines internal logistics operations, optimizing workflows and enhancing productivity. Each robot is equipped with an industrial-grade safety system and the latest generation LIDARs. The heart of United Robots and the company's most valuable asset is a team of engineers specializing in mobile robotics. Their expert knowledge, experience, and passion are the driving force behind the improvement of products and the delivery of solutions that exceed customer expectations. The team's innovation and creativity allow the company to continuously develop technology and outpace competitors who often have significantly larger resources.

United Robots

United Robots

ADAMED

Adamed Pharma is a Polish research and patent based pharmaceutical and biotechnology company with 100 percent Polish capital. Established in 1986, today it employs more than 2700 people and owns 2 production plants in Poland as well as one in Vietnam. The pillars of the company's development are foreign expansion and investments in increasing the production of medication in Poland and in innovation.

For more than 20 years, the company has been conducting its own innovative R&D work, for which it has allocated PLN 2.2 billion since 2001. Adamed is currently implementing projects in three therapeutic areas: oncology, diabetology and neuropsychiatry. The company's intellectual property is protected by 250 patents in most countries around the world, and its portfolio includes nearly 900 products (so-called SKUs) in Poland and abroad. Each year, the company produces over 3 billion tablets offered in dozens of markets around the world. It ensures general access to therapy for millions of patients in Poland and many other countries.

Adamed Pharma has 9 representative offices. A consistently implemented development strategy based on innovation and foreign expansion has made the company a well-known and international brand today. For years, it has been observing a gradual increase in sales of its products – both in terms of volume and value. Currently, foreign operations account for a third of its business, and development plans assume that it will be 55%.


ADAMED

RYVU THERAPEUTICS

Ryvu Therapeutics is a clinical-stage drug discovery and development company focused on novel small-molecule therapies that address emerging targets in oncology. Internally discovered pipeline candidates use diverse therapeutic mechanisms driven by emerging knowledge of cancer biology, including small molecules directed at kinase, synthetic lethality, and immuno-oncology targets.

Ryvu's most advanced programs include RVU120, a selective CDK8/CDK19 kinase inhibitor with the potential to treat hematological malignancies and solid tumors, currently in Phase II development (i) as a monotherapy for the treatment of patients with relapsed/refractory acute myeloid leukemia (r/r AML) and high-risk myelodysplastic syndromes (HR-MDS) as well as (ii) in combination with venetoclax for the treatment of patients with r/r AML. Another clinical program, SEL24 (MEN1703), is a dual PIM/FLT3 kinase inhibitor licensed to the Menarini Group. Ryvu Therapeutics has signed multiple partnering and licensing deals with global companies, including BioNTech and Exelixis.

The Company was founded in 2007 and is headquartered in Kraków, Poland. Ryvu is listed on the Warsaw Stock Exchange and is a component of the mWIG40 index.
For more information, please see **www.ryvu.com**.


RYYU

ATENDE

Atende Group is a key player in delivering advanced IT and technology solutions tailored to the needs of various sectors, including energy, telecommunications, finance, and the public sector. With over three decades of experience, Atende empowers organizations through digital transformation, offering expertise in areas like cybersecurity, cloud infrastructure, data centers, and blockchain-based solutions. Atende's focus on innovation, efficiency, and security ensures that their clients are equipped to navigate the challenges of the modern digital landscape while enhancing operational resilience and achieving sustainable growth.

Atende Group encompasses specialized companies such as Atende Industries and Phoenix Systems, each contributing unique innovations to the market. Atende Industries focuses on the development and popularization of cloud platforms for Industry 4.0, therefore actively participates in the transformation process of the industrial sector of nowadays, in particular by co-creating new, hi-tech products for an optimized electricity grid system (Smart Grid). Meanwhile, Phoenix Systems is renowned for Phoenix-RTOS, a cutting-edge real-time operating system designed for smart devices like electricity and gas meters. This technology ensures secure, scalable, and highly efficient operations, making it a key enabler of digital transformation within critical infrastructure systems.

ATENDE

ATENDE

WB ELECTRONICS
WB GROUP

WB ELECTRONICS

WB ELECTRONICS is the leader of technological transformation in the Polish army and the defence sector. Operating in the field of specialised electronics and military IT, it has led the Armed Forces of the Republic of Poland into the 21st century, setting binding standards in key areas for national security.

It is the leader of the WB GROUP – the largest private defence industry group in Poland. It is guided in its business by innovativeness and the creation of major technological breakthroughs. The business philosophy adopted by us is expressed in a product offer that has incorporated unique solutions on a global scale, implemented in the toughest and most demanding markets.

COMPETENCIES

Technologies and solutions designed by WB ELECTRONICS engineers are currently exported to several dozen countries. Thanks to the experience of the engineering staff and developers' team, the Company has unique competencies in the fields of:

- Digital reconnaissance and command systems
- Digital communication and data transmission systems
- Cybersecurity
- Systems integration

WB ELECTRONICS
WB GROUP

WB ELECTRONICS
WB GROUP

WASKO

The **WASKO Corporate Group** has been accompanying various businesses and institutions in the process of adapting to the dynamic market changes and digital transformation for almost **35 years**.

The key area of services involves proactive support of entities connected with public administration in order to improve the quality and raise the standard of their activities. WASKO subsidiary companies provide advanced solutions in the areas of information technology, automation and electronics.

COIG belonging to the WASKO Corporate Group is one of the leaders in the market of public administration and the leader of information technology in the mining industry. Moreover, COIG is also a leading entity in the market of cybersecurity services.

Gabos, in turn, has been carrying out projects in the healthcare sector for the last 25 years. Its pioneering information technology solutions for medicine have been developed based on the experience acquired by running its own modern medical centre.

ENTE Production Plant, developing production in the field of automation in its newly opened production plant in Gliwice, perfectly complements the extensive competences of the WASKO Corporate Group.

Fonon, a company focused on designing, developing and maintaining telecommunication networks and being an integrator of broadband networks, is another significant entity within the group. Logic Synergy, D2S and WASKO 4 BUSINESS are also key players in the market of information technology.

The Group's portfolio includes Perimeter Protection Systems, System for Issuing Identity Cards and System for Issuing Biometric Passports and Road Traffic Management System, including the largest intelligent transport system operating in Poland, in the agglomeration of Wrocław.

The **WASKO's mission** is best expressed in the words of its founder, Dr Wojciech Wajda: *"Sharing our experiences, we have built an outstanding company with great legacy. We would like to transfer this potential to the next generations and our business partners in order to build a better tomorrow."*

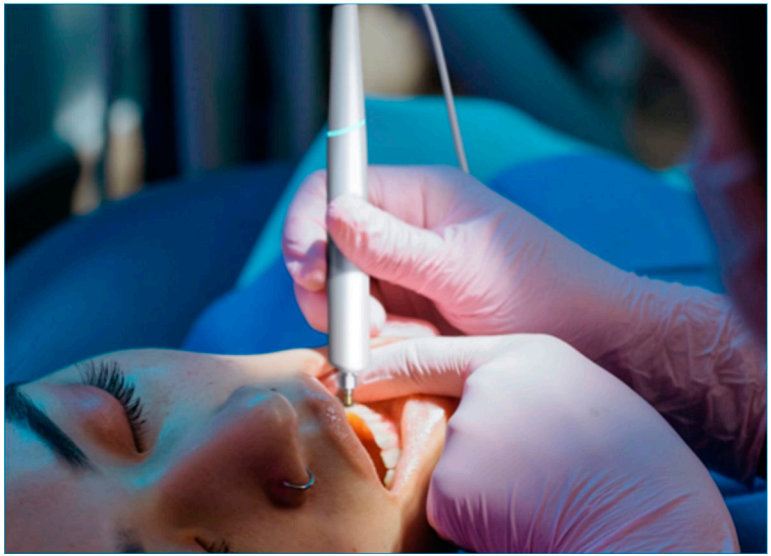
WASKO

MediSensonic

MediSensonic SA is a highly specialised technology company in the Med-Tech area, founded in 2018, specialising in innovative medical and technological solutions.

The company currently has several projects in the pipeline, the leading ones at the moment being:
Glucowave - the world's first fully needle-free, non-invasive device dedicated to glycaemia monitoring,
Touchwave - a state-of-the-art system for blood pressure monitoring without the use of an inflatable cuff
MPVT - a non-invasive microwave dental pulp tester.

The company is led by a skilled management team with engineering skills, cutting-edge management and a highly developed entrepreneurial spirit in its DNA. The company is a winner of the 2023 Ambassador of Innovation business award and was also among the inspiring group of Laureates of the 2023 Polish Smart Growth Award.
In 2025, MediSensonic plans to apply for prospectus approval and listing of shares on the regulated market of the Warsaw Stock Exchange.



MediSensonic

ITTI

ITTI is a company from Poznań, which has been working on innovations in the field of modern IT and communications technologies for almost 30 years. It started with the support of telecommunications operators in the process of building fixed and mobile telephone networks as well as data transmission networks in the 90ies of the last century, while now influences the development of enterprises and institutions by offering software and applications tailored to their needs.

ITTI works on systems for the space sector (European Space Agency), technologies in the area of public security and Industry 4.0, which use, inter alia, advanced mechanisms of machine learning and artificial intelligence, Internet of Things or agile software development methodologies.

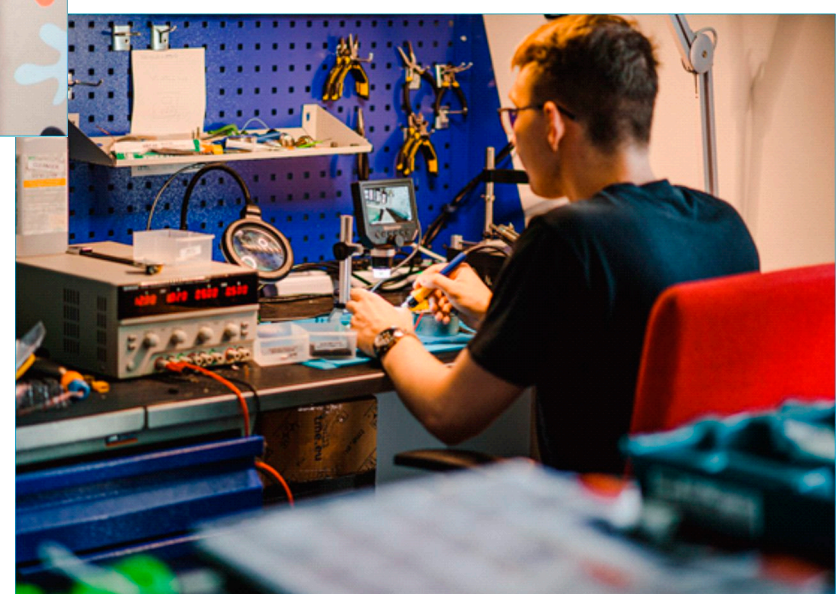
For more than 20 years ITTI has been involved in research and development programmes of the European Commission (most recently Horizon Europe), for which ITTI has received the Crystal Brussels Award several times.

Since 2023, ITTI is one of two Polish companies involved in the construction of the Extremely Large Telescope in Chile on behalf of the European Southern Observatory (ESO).

Main areas of activity of ITTI:

- Dedicated software and applications for businesses and institutions
- Software for the space sector (for engineers and astronomers)
- Innovative solutions in research and development projects

iTTi



iTTi

Zaklady Gorniczo-Hutnicze 'Boleslaw' S.A. – a mining and metallurgical plant in Bukowno is the largest company of ZGH 'Boleslaw' Capital Group, which also includes:

- Huta Cynku "Miasteczko Ślaskie" Shareholding Company (HCMS S.A.) – a zinc smelting plant
- Gradir Montenegro d.o.o – a zinc-lead open pit mine situated in Montenegro.

ZGH Capital Group is Poland's only zinc producer. Its current output stands at 160 000 tones a year, which accounts for 7% of European zinc production and 1% of world output.

ZGH Capital Group is the main zinc and zinc alloys supplier for the markets of Poland and the neighboring Czech Republic, Slovakia, Austria and Hungary. The plants operating within the Group use technologies of flotation and Waelz process to produce concentrates. The Roast-Leach-Electrowin and the Imperial Smelting Process are applied to obtain pure zinc.

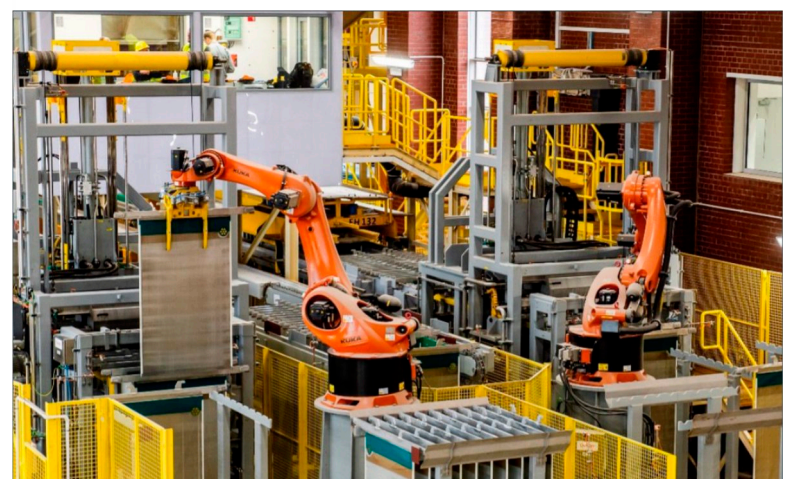
The biggest challenge ahead ZGH Group is to maximize the usage of secondary materials for metal production.

The following are examples of the circular economy applications in ZGH Group**:**

- **galvanized steel scraps**, re-melted for steel recovery, are the source of zinc dust – tailings containing recoverable zinc units. ZGH's Waelz technology converts these tailings to the zinc concentrates, which are subsequently used for zinc production

in classical electrolysis process. Recently almost a half of ZGH's zinc output comes out from recycling;

- **the old flotation tailings** are becoming a valuable source of zinc and lead minerals for more advanced flotation techniques thus a new installation for zinc lead concentrates production has been launched at ZGH and the refined metals based on it is recovered in pyro-metallurgical process.



HUAWEI

Huawei is a global leader in providing cutting-edge information and communication technology (ICT) solutions, committed to delivering high-quality connectivity for users worldwide. The company supports the growth of the information society by engaging in ongoing dialogue and close collaboration with industry representatives. Through significant investments in R&D, a client-focused strategy, and an open partnership approach, Huawei develops advanced, end-to-end ICT solutions that enable clients to gain a competitive advantage in telecommunications, networking, and cloud computing infrastructure.

Huawei's team of over 180,000 employees is dedicated to creating innovative solutions for telecom operators, enterprises, and individual users in more than 170 countries, reaching over three billion users worldwide. Founded in 1987, Huawei is wholly employee-owned.

CETEF'24 PARTNERS

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MDPI

A pioneer in scholarly, Open Access publishing, MDPI has supported academic communities since 1996. MDPI is leading the transition to Open Science by making a greater proportion of the research conducted worldwide free and accessible to everyone. To date, over 3.5 million researchers have entrusted MDPI with publishing their scientific discoveries. Our editorial process is bolstered by a network of dedicated reviewers, a team of 6,000 professional, well-trained staff members, and an in-house article submission platform designed to ensure efficient processes within its 440 fully Open Access journals.

We support more than 800 academic institutions worldwide. As at September 2024, 44 Nobel laureates had contributed to more than 115 articles across 35 MDPI journals. Authors publishing in an OA journal can expect more citations of their work, increasing its potential impact. Research findings that are freely available are more likely to be cited than those hidden behind a paywall. Freedom of access greatly increases the potential audience for each paper, fostering a sense of community among researchers worldwide. Heightened visibility can attract prospective collaborators and employers for young scientists. We believe that all these factors can only accelerate the advance of science. Additionally, authors retain copyright ownership of their work instead of signing it away, permitting broader dissemination under Creative Commons licenses and increasing its capacity for impact.

Acting on our objective to promote inclusivity in global science, we offer especial support for researchers who are at the outset

of their careers. This group includes young scientists and researchers from developing countries. We offer a range of opportunities for early career researchers, including a number of awards such as the Early Career Investigator Award or Travel Awards to encourage junior scientists to present their latest research at academic conferences.

At MDPI, we have a long tradition of fostering partnerships, including our Institutional Open Access Program (IOAP). This initiative reflects our dedication to transparent and inclusive publishing, providing stability and predictability for authors and institutions. Articles published in MDPI journals achieve world wide impact and reach, with over 21,000 mentions in policy documents from over 200 organizations, such as United Nations, WHO, CDC, and governments to shape and develop national and international policy.

At MDPI, we fund research to make the world a better place. Through the MDPI Sustainability Foundation we support researchers through two sustainability focused awards: the World Sustainability Award, amounting to USD 100,000, is given to senior researchers, and the Emerging Sustainability Leader Award, valued at USD 20,000, sponsored by the MDPI journal Sustainability, is presented to early career researchers.

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Elsevier, a global leader in information and analytics, helps researchers and healthcare professionals advance science and improve health outcomes for the benefit of society. Growing from our roots in publishing, we have supported the work of our research and health partners for more than 140 years. Elsevier offers knowledge and valuable analytics that help our users make breakthroughs and drive societal progress. We employ 8,700 people, including 2,160 technologists around the world.

Fast facts about Elsevier

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Trusted partner

~18%

The latest long-term comparison with the market showed that Elsevier journal articles accounted for about 18% of global research output and 28% of citations, demonstrating Elsevier's commitment to quality significantly ahead of the industry average.

2,800+

We publish more than 2,800 digitized journals, including The Lancet and Cell. Our 46,000+ eBook titles include iconic reference works such as Gray's Anatomy.

>99%

Since the year 2000, more than 99% of the Nobel Laureates in science have published in Elsevier journals.

1.5m+

As a founding partner and leading contributor to Research4Life, a unique UN-publisher partnership, Elsevier provides 15% of the 205,000 peer reviewed resources, encompassing about 5,200 journals and 31,900 eBooks. In 2022, there were over 1.5 million Research4Life downloads from ScienceDirect.

3k+

In 2022, Elsevier partnered with leading science organizations and Economist Impact for a global collaboration involving more than 3,000 researchers to understand the impact of the pandemic on confidence in research — and identify areas for action.

Supporting the research community

1.8b+

In 2022, Elsevier received more than 2.7 million article submissions, publishing over 600,000 new research articles following peer review, with the global scientific community accessing over 1.8 billion articles across its journal platforms.

18m+

ScienceDirect®, the world's largest platform for peer reviewed primary scientific and medical research, hosts 201 million pieces of content from over 4,600 journals and over 25,000 eBooks and receives more than 18 million visitors a month.

90m+

Scopus® uniquely combines a comprehensive curated abstract and citation database with enriched data and links to scholarly content with 90+ million records from 27k journals, 149K conferences, 285k books and 1.38m preprints from more than 7,000 publishers in 105 countries.

Open access

1,800+

Elsevier offers a range of pay-to-read and pay-to-publish options, both subscription-based and transactional, to fit the diverse needs of institutions, funders and researchers worldwide. As of 2022, Elsevier serves over 1,800 institutions worldwide with transformative deals that support open access to research. Learn more

700+

Nearly all of Elsevier's 2,800+ journals enable open access publishing, with more than 700 dedicated author-pays journals, the largest portfolio of open access titles

150k+

Elsevier published over 150,000 open access articles in 2022, a year-on-year increase of over 26%

88

We launched 88 new journals of which 93% were gold open access, growing the Elsevier portfolio to over 700 gold open access journals.

Supporting the health community

600+

Sherpath® provides highly focused, personalized learning paths at over 600 institutions, supporting more than 200,000 course enrollments in nursing and health education.

3m+

Over 3 million registered users in more than 300 medical schools and universities worldwide are using Complete Anatomy, the world's most advanced 3D anatomy education platform. In 2022, Complete Anatomy launched the world's most advanced full female anatomy model and the first model with diverse skin tones and facial features to better represent populations worldwide.

5k+

ClinicalKey®, our flagship clinical reference platform, is used by doctors, nurses, medical students and educators at 5k+ institutions in over 90 countries and territories. ClinicalKey Student is used in over 320 medical schools globally. In 2022, we introduced ClinicalKey Now in India.

3m+

Osmosis®, the world's leading medical education platform, has more than 3 million registered learners, 2.7 million YouTube subscribers, 8 million+ website visitors, and 170+ institutional partnerships, including marquee clients such as NYU, Imperial College London, and the CDC.

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CENTRAL EUROPEAN TECHNOLOGY FORUM

Krakow
18-19.11.2024

PROGRAM

PLENARY CONFERENCE
THEMATIC CONFERENCES

CETEF'24 FIRST DAY

18.11.2024

CETEF'24 PLENARY CONFERENCE PROGRAM

10:00 - 16:50

LOCATION:

Auditorium Maximum of the Jagiellonian University
street: Krupnicza 33, Krakow

09:00 – 10:00 Registration

10:00 – 10:20 Opening Ceremony

10:20 – 10:30 Introduction to the Forum

Prof. Jerzy Lis, rector of the AGH University of Science and Technology, Member of the Council of the Polish Chamber

of Commerce for High Technology

10:30 – 10:45 Strategic Energy Technology Development Plan (SET Plan) as a Key Tool for Research and Innovation Policy under Horizon Europe, Iliana Ivanova, EU Commissioner for Innovation and Research

10:45 -11:00 Challenges in the Area of Clean, Safe, Reliable and Affordable Energy in the European Union and their Potential Solutions

Borys Budka, Chairman of the Committee on Industry, Research and Energy of the European Parliament

11:00-11:15 Industrial Development and Energy Transformation in Poland

Waldemar Pawlak, Prime Minister of Poland in 1993-1995, Chairman of the National Economy and Innovation Committee of the Senate of the Republic of Poland

11:15-12:15 High-Level Debate: Opportunities and Challenges of Energy Transformation

Moderator: prof. Jerzy Buzek, Prime Minister of Poland in 1997-2001, Chairman of the Council of the Polish Chamber of Commerce for Advanced Technologies

Marzena Czarnecka, Minister of Industry

Miłosz Motyka, Deputy Minister of Climate and Environment

Piotr Lachowicz, Deputy to the Sejm (Polish Parliament) Economy and Development Committee

prof. Krzysztof Jóźwik, Chairman of the Conference of Rectors of Polish Technical Universities, Rector of the Lodz University of Technology

Grzegorz Onichimowski, President of the Management Board of Polskie Sieci Energoelektryczne S.A.

prof. Krzysztof Kurek, Director of the National Centre for Nuclear Research

12:15-12:30 Key tasks, objectives, and contributions of Hungary to the implementation of European climate policy

Dr. Ákos Horváth, Director General of the Centre for Energy Research, member of the Steering Board of the Strategic Energy Technology Plan of the European Commission, member of the Scientific Council of the Hungarian Atomic Energy Authority

12.30-12:45 German energy transition policy and the possibilities of cooperation between Germany and Poland in the implementation of European climate policy

Dr. Lars Gutheil, Managing Director of the AHK Poland, Official Representative of the Federal State of Bavaria in Poland

12:45-13:00 The Future of Artificial Intelligence: What to Expect in the Next 5 Years?

Prof. Piotr Sankowski, Informatics Institute of the Warsaw University

13:00 – 14:00 Lunch

14:00 – 14:20 How Industry 5.0 Advantages Address the Development Challenges of the Clean Transition

Maria Cristina Russo, Director for Prosperity, DG Research & Innovation, European Commission

14:20 – 15:30 Panel Discussion: The Role of CE Countries in the Implementation of the EU Framework Programmes for Research and Innovation – and preparation for the future

Moderator: Katarzyna Walczyk-Matuszyk, Vice president of Polish Chamber of Commerce for High Technology

Maria Cristina Russo, Director for Prosperity, DG Research & Innovation, European Commission

Adam Piotrowski, President of VIGO Photonics S.A., Member of the Commission Expert Group on the Interim Evaluation of Horizon Europe

Ian Gauci Borda, S&T Policy Adviser, Xjenza Malta

Beata Lubos, Director of Centre for International Cooperation and Research Excellence, Łukasiewicz – ILOT

Michele Andolfo, Chief Operating Officer, Artigo S.p.A.

15:30-15:40 MDPI Partner Presentation

Speaker: Stefan Tochev, Chief Executive Officer of MDPI Advancing Open Access and Global Scientific Collaboration

15:40 – 15:50 Short Break

15:50 – 16:50 Thematic Session: Kraków – City of the Future

Moderator: Jarosław Bułka, Representative of the Mayor of Krakow for Digital Transformation

Sławomir Kumka, Director, IBM SOFTWARE LAB Poland & Global Software Development

Bogusław Świeczkowski – CEO Selvita

Jarosław Królewski – CEO Synerise

Dominika Walec – OMGKRK Supporting Foundation

Paweł Schmidt – Director of the IT Service Center of the Krakow City Office

CETEF'24 ACOMPANYING EVENTS

YOUNG SCIENTIST DAY
STUDY VISITS

CETEF'24 ACOMPANYIG EVENT

Young Scientist Day

2nd Edition

18.11.2024 r.

14:00 - 16:30

LOCATION:

Auditorium Maximum of the Jagiellonian University

ul. Krupnicza 33, Krakow

Organizer

Work&Science

YOUNG SCIENTIST DAY KRAKÓW 2024

Work&Science Foundation is a rapidly growing organization focused on supporting young researchers in developing their careers. The foundation's main project is the Work&Science Forum, an Innovative Economy Sector Job Fair. In 2023, the third edition of this event was held, gathering and presenting job offers in the fields of science, research, and development to young professionals.

Another goal of this initiative is to raise awareness about the necessity of transferring not only technology but also personnel between the academic environment and the socio-economic sphere. In 2023, with the support of the Ministry of Education and Science, the foundation launched the Work & Science Academy, a proprietary training project. This initiative facilitated nearly 30 in-person training sessions across Poland, enhancing the soft skills of young researchers, essential for building an effective career in the research and implementation industry.

Introduction to the Conference

Young Scientist Day is a permanent fixture in the CETEF program. The event aims to introduce the activities of the Chamber of Innovative Technology to the community of young researchers, discuss the internationalization of science, and explore the development opportunities offered by the European Union. Topics related to young researchers are met with great interest and provoke meaningful discussions.

During this year's edition, we are focused on open conversations about the most important and current challenges faced by young researchers across Europe. The event will feature panel discussions that facilitate direct exchanges of thoughts and opinions between members of organizations representing the voices of young scientists at all career stages, experts from the scientific community, and representatives from the socio-economic environment. We hope this will be a space for scientific networking and the exchange of intergenerational experiences.

Conference Agenda

08:30 – 09:00 Participant Registration

Registration of participants, distribution of conference materials, allowing participants to attend the CETEF plenary sessions.

09:00 – 13:30 CETEF Plenary Sessions

Participants of Young Scientist Day can attend the CETEF plenary sessions.

14:00 – 14:15 Official Opening of the Second Edition of Young Scientist Day

Speakers:

- **Jarosław Olszewski** – President of Work&Science Foundation
- **Prof. Andrzej Rowiński** – President of All European Academies (ALLEA), Project Leader of PASIFIC

14:15 – 15:15 Discussion **Panel 1:**

Integration of Artificial Intelligence Tools in Scientific Research

A discussion on the role of artificial intelligence in science and its impact on research.

Moderator: Jarosław Olszewski

15:15 – 15:30 Coffee Break

15:30 – 16:30 Discussion **Panel 2:**

Career Paths for Young Researchers – From Academia to Industry. A discussion on career development opportunities in various sectors and researcher mobility.

Moderator: Magdalena Szczyrba

16:30 Official Closing of the Event

Summary of the discussions and event closure.

17:00 Opportunity for Young Scientist Day participants to join study visits.

17:00 – 19:00 Parallel Study Visits - **Starting Point: Auditorium Maximum**

20:00 – 22:00 Evening Networking - An informal meeting where participants can exchange views, establish contacts, and discuss their research projects

STUDY VISITS

18.11.2024

17:00-19:00

Starting Point:

Auditorium Maximum

National Synchrotron Radiation Center "Solaris" of the Jagiellonian University

Academic Computer Center Cyfronet AGH

Sano – Centre for Computational Personalised Medicine - International Research Foundation

Ryvu Therapeutics R&D Center for Innovative Drugs

Centre for Innovations and Research on Healthy and Safe Food - UAK

Krakow. Photo from the portal: https://pixabay.com

CETEF'24 - SECOND DAY

19.11.2024

CETEF'24 FRAMEWORK AGENDA

THEMATIC CONFERENCES

INNOVATIVE ENERGY TRANSITION TECHNOLOGIES

9:00 - 15:00

LOCATION:

Auditorium Maximum of the Jagiellonian University

street: Krupnicza 33, Krakow

Organizer

CEZATECH
CENTRUM ZASTOSOWAŃ PERSPEKTYWICZNYCH TECHNOLOGII
GRUPA IZTECH

Center for the Application of Future Technologies (CEZATECH) – Works for the effective use of future technologies supporting the achievement of sustainable development goals. It provides specific values to stakeholders of the ecosystem of suppliers and users of future technologies by initiating, organizing and conducting dedicated projects in the field of competence development, sharing information and knowledge, building resources supporting the implementation of technologies. The mission of CEZATECH is complementary to the sustainable development goals set by the United Nations.

Introduction to the Conference

In the face of the threat of a climate catastrophe and the rapid increase in global demand for electricity, the energy transition has become an indispensable condition for the cotinuation of civilizational and economic development of the modern world. The necessity to reduce the use of fossil fuels, significantly increase energy generation from renewable sources, and develop intelligent energy infrastructure has become obvious.

The scale of the challenges resulting from the need to move to a low-carbon economy, which the energy sector faces, is immense. Among these challenges, technological challenges hold a critical place. Without profound technological changes, without the development and implementation of new, breakthrough technologies for energy generation, storage, transmission, and distribution, achieving the set goals of the energy transition—net-zero emission by 2050—is impossible.

Ways to overcome technological challenges will be the main subject of the CETEF'24 sectoral conference on the energy transition, organized in collaboration with leading domestic and international producers and operators. During the conference, research and development efforts in key areas of energy technologies will also be presented.

Conference Agenda

09:00 Welcome to the participants and the opening of the conference

Dr. Michał Bachorz, President of the Board of the Center for Advanced Technology Applications CETECH

09:00 – 10:30 CHALLENGES OF TECHNOLOGICAL THE ENERGY TRANSITION:

- **09:05 Introduction to the Conference**
  Prof. Wojciech Nowak, Director of the Center of Energy at University of Science and Technology in Kraków
- **09:15 Keynote Address**
  Mr. Miłosz Motyka, Undersecretary of State in the Ministry of Climate and Environment
- **09:35 Subsidiarity as a Condition for Effective Energy Transition in Poland**
  Prof. Sławomir Cieślik, President of the Association of Polish Electrical Engineers SEP
- **09:55 Synthetic Fuels as a Way for Renewable Energy Storage**
  Dr. Aleksander Sobolewski, Director of the Institute of Energy and Fuel Processing Technology, Chairman of the Environmental Working Group of the European Coke Committee
- **10:15 MDPI's Role in Advancing High Technologies and Energy Transformation through Rigorous Peer-Reviewed Scientific Publishing**
  Dr. Giulia Stefenelli, Scientific Communications Lead at MDPI

11:00 – 12:30 INNOVATIVE DECARBONIZATION TECHNOLOGIES

13:30 – 15:00 ARTIFICIAL INTELLIGENCE AND THE FUTURE OF ENERGY NETWORKS

The conference proceedings will begin witH keynote addresses and panel discussions featuring decision makers, outstanding scientists and practitioners, during which participants will seek answers to the following questions:

- What is the current state and development trends of key energy transition technologies?
- How can we measure the effectiveness of breakthrough energy transition technologies?
- Which breakthrough technologies are most significant in achieving energy transition goals?
- How can we expand and strengthen European research and development cooperation in this area?
- How can we overcome differences in the pace and scope of energy transition among the economies of individual EU countries?

THEMATIC CONFERENCE
INNOVATIONS IN BIOTECHNOLOGY

19.11.2024 r.

9:00 - 15:00

LOCATION:

Auditorium Maximum of the Jagiellonian University

ul. Krupnicza 33, Krakow

Organizer

MALOPOLSKA CENTRE OF BIOTECHNOLOGY

Chairwoman:

Prof. Danuta Mossakowska-Earnshaw, Director of Małopolska Centre of Biotechnology, Jagiellonian University

Main Speakers:

Mark Therene, Innovate UK Council

Paweł Przewięźlikowski, President of Ryvu Therapeutics S.A.

Robert Gromada, President of MediSensonic

Maciej Adamkiewicz, Adamed Pharma S.A.

Zbigniew Zasłona, Scientific Director of Molecure S.A.

John Bason, nCage Therapeutics

Magda Kordon-Kiszala, intoDNA

Krzysztof Pyrć, Virology Laboratory at the Malopolska Centre of Biotechnology of the Jagiellonian University

Marta Winiarska, Polish Association of Innovative Medical Biotechnology Companies BioInMed

Introduction to the Conference

Innovation and creativity are essential to developing new areas of research. Biotechnology has come of age with the explosion of biotech companies worldwide. We will explore how cool science is the driving force behind translation, application and commercialisation, examining the stories of companies in the biotech industry, from small incubators to large companies. We will also explore the key features that enable successful translation of cool science into practice.

Biotechnology cannot stand still, so we want to show how European funding of high-risk, high-reward projects can accelerate the creativity that is essential for future discoveries in biotechnology, driving industry forward and fostering an environment in which

breakthroughs are not only possible but expected. By examining concrete cases where cutting-edge research has moved from concept to market, we will identify the critical factors that support this journey.

Conference Agenda

SESSION 1 - 09:00 - 10:30 Welcome and Plenary Speeches

SESSION 2 - 10:40 - 12:00 Translation of great science from start ups and beyond

SESSION 3 - 12:20 – 13:20 Panel discussion: Financing and enabling CEE to compete with other european regions in biotech

SESSION 4 - 13:50 – 15:00 Great science of the future

Krakow. Photo from the portal: https://pixabay.com

THEMATIC CONFERENCE MATERIALS ENGINEERING IN THE NON-FERROUS METALS INDUSTRY

19.11.2024 r.

9:00 - 15:00

LOCATION:

Auditorium Maximum of the Jagiellonian University

ul. Krupnicza 33, Krakow

Organizer

Łukasiewicz Institute of Non-Ferrous Metals

SITMN

Chairwoman:

Dr inż. Barbara Juszczyk – President of the Association of Non-Ferrous Metals Engineers and Technicians, Poland

Main Speakers:

Prof. Michał Szucki, Technische Universität Bergakademie Freiberg, Germany

Manel de Silva, PhD-Unit of Metallic and Ceramic Materials, Spain

Dr Nikolaus Borowski, General Manager, Non-Ferrous Metals and Alloys Dept., SMS group GmbH, Germany

Mgr inż. Bogusław Ochab, ZGH "BOLESŁAW" S.A., Poland

Dr inż. Paweł Rutecki, Gränges Konin S.A., Poland

Dr hab. inż. Piotr Kwapisiński, Chief Engineer of the Development, Investment and Repair Department, KGHM PM S.A. "Cedynia" Copper Smelter and Refinery, Poland

Dr hab. inż. Maciej Szczerba, Prof. of the Institute - Institute of Metallurgy and Materials Science of the Polish Academy of Sciences, Poland

Introduction to the Conference

Non-ferrous metals constitute a group of strategic materials. They represent nearly 3/4 of the currently known elements, they are omnipresent and occur in all sectors of the economy.

The aim of the conference is to concentrate the scientific and industrial communities on the most advanced problems related to the manufacturing and processing of non-ferrous metals. The conference is addressed to representatives of the non-ferrous metals industry, scientific institutions and organizations dealing with modern materials and technologies in the non-ferrous metals industry. Its goal is to create a platform for exchanging experience and knowledge. The subject of the conference " Materials Science in Non-Ferrous Industry" is focused on issues related to the latest directions in the implementation of modern solutions in the non-ferrous metals industry.

Conference Agenda

SESSION 1 - 09:00 - 09:30 Plenary Lecture: Materials Engineering in the Non-Ferrous Metals Industry

SESSION 2 - 09:30 - 11:00 Modern Materials

SESSION 3 - 11:30 – 12:30 Modern Technologies

SESSION 4 - 13:30 – 14:30 Final Presentations and Summary of the Conference

New aluminum alloys for a sustainable electric mobility

10:45 – 11:10 New aluminum alloys for a sustainable electric mobility

dr Nikolaus Borowski – General Manager, Non Ferrous Metals and Alloys Dept., SMS group GmbH, dr Katarzyna Rogóż – Director of Metallurgy Department, KGHM Polska Miedź SA. Digital process twinning and BlueControl to optimize overall plant performance

11:10 – 11:40 Coffee break

11:40 – 14:30 Session II: Modern technologies

12:30 – 13:30 Lunch

14:15 – 14:30 Summary of thematic conference

THEMATIC CONFERENCE
SOCIAL INNOVATIONS IN TECHNOLOGY

19.11.2024 r.

9:00 - 15:00

LOCATION:

Auditorium Maximum of the Jagiellonian University

ul. Krupnicza 33, Krakow

Organizer

SWPS University

SWPS University excels in exploring the human mind, creativity, and social relations. We believe that through applying this expertise to address practical challenges of today and tomorrow we can learn to thrive in the world of new technologies and dynamic social change.

We are a leading higher education institution in Poland, excelling in Psychology, Law, Language and Literary Studies, Political Science and Administration, Cultural and Religious Studies, Sociology, Media and Communication Studies, Management, as well as Art, Design and Art Conservation.

With 30 research centers and over 150 research projects annually, we are one of the most active research universities in Poland. With over 20% of our publications in top world journals and over 2,400 papers in Scopus, SWPS University is a unique research-focused private University in CEE.

Introduction to the Conference

During the conference, we would like to emphasise the importance of socio-technical readiness and social impact on developing innovative solutions and developing technology projects. We will discuss how these aspects can be effectively integrated into research and development projects and what benefits this brings to the development and implementation of technology.

Researchers developing advanced or deep technology solutions should be mindful of social technology readiness and create potential environmental and social impacts from the very beginning of the research and development process. Such a proactive and implementation-oriented approach ensures that solutions better address sustainability goals and reduce the risk of, for example, resistance to change that is innovation.

So how do we create technologies that prepare societies for innovation? How to create technologies that respond to real and complex societal problems? How to create solutions based on the achievements of design or universal design? How to create inclusive solutions? How to build super-interdisciplinary teams that can

develop technologies addressing the complexities involved in bringing solutions to market successfully?

You are cordially invited to discuss these complex topics.

Conference Agenda

09:00 – 09:20 Opening and the into of the Master of Ceremony

prof. Aleksandra Cisłak-Wójcik – Vice-Rector for Science, SWPS University, Poland

09:20 – 10:00 Dr Patrycja Sosnowska-Buxton – University of Stavanger, Norway. Keynote Designing with Data: The Co-Creation and Co-Destruction of Value

10:00 – 10:30 Discussion Impactful technolgies - prospects and opportunities for development.

10:30 – 11:00 Coffee break

11:00 – 12:30 Panel discussion: Do we need to consider social factors in technology design?

12:30 – 13:30 Lunch

13:30 – 14:50 Case studies session

14:50 – 15:00 Summary of the conference

THEMATIC CONFERENCE

INNOVATIONS IN AUTOMATION, ROBOTICS, AND ARTIFICIAL INTELLIGENCE: NEW TECHNOLOGICAL HORIZONS

19.11.2024 r.

9:00 - 15:00

LOCATION:

AGH University of Science and Technology

al. Adama Mickiewicza 30, Kraków

Organizer

Łukasiewicz PIAP

Chairman:

Ph.D. Eng. Piotr Szynkarczyk, D.Sc. Director of Łukasiewicz Research Network - Industrial Research Institute for Automation & Measurements PIAP, Poland

Main Speakers:

Prof. Tadeusz Burczyński, Director of the Institute of Fundamental Technological Research of the Polish Academy of Sciences (IPPT PAN), Poland

Prof.Mirosław Skibniewski, Department of Civil & Environmental Engineering A. James Clark School of Engineering University of Maryland, USA

Prof. Vytautas Bučinskas, Head of Department of Mechatronics, Robotics and Digital Manufacturing Vilnius Gediminas Technical University, Lithuania

M.Sc. Konrad Cop, Technology Lead in United Robots, Poland

M.Sc. Marek Woszczyna, Director of the Division in the Department of Teleinformatics Services Wasko SA, Poland

Gintaras Vilda, CEO of Manufacturing Innovation Valley, expert of Lithuanian Confederation of Industrialists and Board member of the Lithuanian Engineering and Technology industry association LINPRA, Lithuania

Introduction to the Conference

The conference is dedicated to the latest technological advances that are revolutionizing industry and everyday life. Automation is transforming production processes, introducing higher precision and efficiency, which leads to significant cost and time savings. Implementing modern systems allows to minimize human errors, increase production efficiency and flexibility, and optimize resource management.

Robotics, with its increasingly advanced robots, is changing the way we work and live, contributing to the improvement of the quality of life and safety. Robots are used not only in industry, but also in medicine, logistics, agriculture and many other sectors. Advanced robotic systems are able to perform complex tasks with high precision, supporting human work.

Artificial intelligence (AI), thanks to machine learning algorithms and the analysis of large data sets, opens up new possibilities in medical diagnostics, resource management and the creation of intelligent decision support systems. AI helps to predict trends, optimize processes and create innovative solutions that would be unattainable with traditional methods. In medicine, AI supports doctors in diagnosing diseases, planning treatments and personalizing therapies.

This conference aims to bring together experts, scientists and industry representatives to exchange experiences, discuss challenges and discuss future directions of development. The latest trends and innovations that shape the future of these dynamically developing fields will be presented. Participants will have the opportunity to learn how the integration of automation, robotics and artificial intelligence can transform various sectors of the economy, increasing competitiveness and supporting sustainable development. Discussions on the ethical and social aspects of these technologies will also play a key role, providing a comprehensive perspective on their impact on the future of society.

Conference Agenda

SESSION 1 - 09:00 - 10:30 Artificial Intelligence and Robotics, theory and applications

SESSION 2 - 11:00 - 12:15 Panel: How can we build on the experience of the CEE in European Programs?

SESSION 3 - 12:15 - 12:30 Success Story in Horizon Europe Programme – ITTI sp. z o.o.

SESSION 4 - 13:30 - 15:00 Parallel Worskhops:

- **Boost Innovation with European Institute of Technology (EIT)**
- **A new dimension of innovation: How EIT Food supports new technologies?**
- **Catapult your groundbreaking ideas into reality with EIT Health**
- **EIT Manufacturing Workshop: How to prepare open innovation projects?**

THEMATIC CONFERENCE

NEW HORIZONS FOR AGRI-FOOD TECHNOLOGIES

19.11.2024 r.

9:00 - 15:00

LOCATION:

AGH University of Science and Technology

al. Adama Mickiewicza 30, Kraków

Organizer

UNIVERSITY OF AGRICULTURE IN KRAKOW

Chairman:

prof. Tomasz Czech, Head of the Centre for Technology Transfer at the University of Agriculture in Krakow

Keynote speakers:

Prof. Malcolm Hawkesford, Discovery Leader and Head of the Delivering Sustainable Wheat Institute Strategic Programme at Rothamsted. Honorary Professor in Plant Sciences in the School of Biosciences, University of Nottingham

Prof. Jerzy Zawistowski, University of British Columbia, Academic Director, Master of Food Science Program

Prof. Brijesh K Tiwari PhD FIFST FRSC, Principal Research Officer Teagasc Food Research Centre, Ireland Professor (Adjunct) of Biosystems and Food Engineering, University College Dublin

Prof. Joanna Makluska, Faculty of Animal Breeding and Biology, Department of Genetics, Animal Breeding and Ethology, University of Agriculture in Krakow,

Anna Mikulska-Pospiszel, CEO of Top Gen Ltd.

Bartłomiej Skrzydlewski, CEO, Amplus Ltd.

Piotr Lazarek, CEO – Start-up Nirby Ltd.

Prof. Andrzej Borusiewicz, International Academy of Applied Sciences in Łomża, Advisor to the President of the Agency for the Restructuring and Modernisation of Agriculture

Introduction to the Conference

The EU food system provides over 400 million Europeans with fresh and safe food. Food production is not only a vital service, but also a source of income for many citizens. The developed agri-food chain is an important sector of the EU economy.

The agri-food sector has a significant impact on the environment, with around one third of global greenhouse gas emissions coming from food systems. The EU is transforming the way food is produced and consumed in Europe to: reduce the environmental footprint of food systems; strengthen resilience to crises, but still provide healthy and affordable food for future generations.

In May 2020, the Commission presented the Farm to Fork Strategy. The strategy aims to transform the current EU food system into a sustainable model. With food security a priority, the strategy also aims to: ensure sufficient, affordable and nutritious food; halve the use of pesticides and fertilisers and the sale of antimicrobials; increase the amount of land devoted to organic farming; promote more sustainable food consumption and healthy diets; reduce food loss and waste; combat food fraud in the supply chain; improve animal welfare. The transition to a more environmentally friendly food system will create new business opportunities and have a positive impact on incomes in the agri-food sector.

Conference Agenda

SESSION 1 - 09:00 - 09:15 Plenary Opening

SESSION 2 - 09:15 - 10:30 Panel: Agriculture

SESSION 3 - 11:00 - 12:30 Panel: Food

SESSION 4 - 13:30 - 15:00 Panel: Animal Breading

THEMATIC CONFERENCE
SPACE AND SATELLITE TECHNOLOGIES

19.11.2024 r.

9:00 - 12:30

LOCATION:

AGH University of Science and Technology

al. Adama Mickiewicza 30, Kraków

Organizer

AGH

SPACE TECHNOLOGY CENTRE AGH UST

Chairman:

Prof. Tadeusz Uhl, Director of the Space Technology Center at AGH University of Krakow, Krakow Poland, Universeh - European Space University for Earth and Humanities

Main speakers:

Dr BHM Durakesha, Professor visiting at AGH University of Krakow, Indian Space Agency ISRO

Dr Shreyas Srivatsa, Assistant Professor at AGH University of Krakow, Main researcher of MXene on LEO space missions

Dr Michał Lupa, Assistant Professor at AGH University of Krakow, RADSCAN company board member

Łukasz Wilczyński, Universeh - European Space University for Earth and Humanities, AGH University of Kraków, President of European Space Foundation

Prof. Czesław Kapusta, Professor at AGH University of Krakow, Leader of Materials for space Laboratory

Introduction to the Conference

We live in the times of the space revolution, the new space is entering our everyday lives widely. The new cosmos is that part of space research that serves the Earth and Humanity. Space gives us the opportunity to observe events and phenomena on Earth on a global scale, which in turn gives us a sense of security and the ability to better manage the management of resources on our planet. Satellite observations help to warn of dangerous atmospheric phenomena, give the opportunity to monitor environmental disasters and predict their impact on people. There is a growing interest in space resources, including resources for the energy sector. 95% of the universe is hydrogen and helium, which can be converted into energy. Technologies for the extraction and processing of space resources are currently being improved, which at the same time is related to the

need to send people to planets. In order to be safe, we need to know the mechanisms of the impact of the space environment on living organisms, and above all on humans. We need to learn how to produce food in space, these are the issues that the rapidly growing field of space science is dealing with, which is space biology. Most of the results of space research can be used for terrestrial applications, such as technologies for producing food in space conditions can be used on Earth to produce food in rapidly changing climatic conditions.

As part of the organized conference on Space and Satellite Technology, we would like to show the possibilities of using space technologies for the needs of humanity and the protection of resources on Earth, as well as the development of the space industry in Poland. One of the topics we want to discuss with the conference participants is the scope of space exploration and the benefits that people can derive from this research.

Conference agenda

SESSION 1 - 09:00 - 10:30 Overview of space research and applications

SESSION 2 - 11:00 - 12:30 Chosen projects of Space Technology Center at AGH

CETEF'24 - SUMMARY

19.11.24 15:00 - 15:30

Krakow. Photo from the portal: https://pixabay.com

CETEF'24 ACCOMPANYING EVENT

Horizon Europe Matchmaking Event

19.11.2024

15:30 - 17:30

LOCATION:

Auditorium Maximum Jagiellonian University

ul. Krupnicza 33, Krakow

Organizer

Branżowe Punkty Kontaktowe

Introduction to the Event

You are cordially invited to participate in a matchmaking event organised by the **Industry Contact Points**, dedicated to Horizon Europe Program. Matchmaking is an excellent opportunity to make valuable contacts, collaborate with other participants and learn more about the opportunities offered by Horizon Europe.

We dedicate this event to the representatives from the world of science and business interested in pursuing innovative international ventures and knowledge transfer in this field.

Why to take part in the Horizon Europe Matchmaking Event?

- You increase your chances of getting Horizon Europe funding.
- You have the opportunity to network with leading institutions from across Europe.
- You gain access to expert knowledge on the programme and application procedures.
- This is a great opportunity to network with other participants and potential project partners.
- During matchmaking, you will talk to potential partners and make international contacts in the areas of health, sustainable economy, industry 4.0, innovative mobile technologies, clean energy and digitalisation.

Partner - Event Organizer

Łukasiewicz ITECH Institute of Innovation and Technology – Łukasiewicz – ITECH (until 31.12.2023 ORGMASZ) is the coordinator of Industry Contact Points (BPK), which support entrepreneurs and scientists in applying for EU funds for the implementation of R&D projects under the Horizon Europe program. From 2021 to 2027, a total of EUR 95.5 billion has been allocated for innovative research and innovative solutions. The project, initiated by the Ministry of Education and Science, involves six institutes of the Łukasiewicz Research Network, which have access to specialist scientific and technical knowledge, including human, technological and infrastructure resources.

Industry contact points (icp) operate in 6 Łukasiewicz's institute:

- ICP Smart and Clean Mobility at Łukasiewicz – Aviation Institute in Warsaw,
- ICP Sustainable Economy at Łukasiewicz – Institute of Non-Ferrous Metals in Gliwice,
- ICP Medical and Health Technologies at Łukasiewicz – PORT Polish Technology Development Centre in Wrocław,
- ICP Digital Transformation at Łukasiewicz – Poznań Institute of Technology,
- ICP Industry 4.0 at Łukasiewicz – Industrial Research Institute for Automation and Measurements
- ICP Low Emission Technologies and Clean Energy at Łukasiewicz – Warsaw Institute of Technology.

Since 2022 Industry Contact Points (ICP) support entrepreneurs and scientists in applying for EU funds for research and innovation under the Horizon Europe framework programme. ICP organizes and participates in nationwide matchmaking, networking and brokerage events, which are addressed to domestic and foreign scientific and business partners. Industry Contact Points provide assistance in the selection and acquisition of international partners for European projects, organize training and workshops, and conduct individual consultations at the application preparation stage. One of the most important tasks is also to work towards integrating new partners into the structures of the European Partnerships and integrating them with more experienced members, resulting in the creation of joint consortia and the implementation of innovative, international projects.

Night panorama of Wawel Castle, Krakow. Photo from the portal: https://pixabay.com