

2025

ENGAGED  
UNIVERSITY



2025



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*„Be the change you want  
to see in the world.”*

Mahatma Gandhi



**Prof. Bogumiła Kaniewska**

RECTOR OF THE ADAM MICKIEWICZ UNIVERSITY IN POZNAŃ

## Ladies and Gentlemen,

it is with great pleasure that I present to you the newest edition of the "Engaged University" report, which showcases research and activities that fulfill the environmental and social responsibility of our university.

We present interesting social initiatives, including the preservation of historical memory and cultural heritage, deliberations on the challenges of early adulthood, activities addressed to seniors, and studies on the intergenerational perception of climate change or regulations for preventing food waste. The report also presents several environmental initiatives: we study water as a precious resource; discover the secrets of the pine tree, known and loved by everyone; and learn about bee research and innovative means of energy storage.

The report is also an opportunity to look deep into our academic community. This year we have consulted AMU administrative staff regarding their needs, expectations and ideas; we analyzed how to improve the university campus so that it serves the needs of the academic community and residents of Poznań alike. It is also worth emphasizing that we have established multiple interesting partnerships at the local, national and international level, which has expanded our impact and improved the quality of our work.

Sustainable development is not only a global challenge, but also a responsibility. This is particularly true for universities, which educate the social, intellectual and professional elites of the future.

This report is just a snapshot of the activities that take place at our university. Initiatives like these help us build an academic community that is better, more sensitive and more self-aware.

For me, the report is not just a summary of our activities, but a source of inspiration for many other extraordinary projects.

Science is an incredible thing!

*Bogumiła Kaniewska*



2025

4

Branches

886

Doctoral students

21

Faculties

32

Postgraduate  
programs

1091

Postgraduate students

149

Degree programs

2044

Foreign students

207

Specializations

2199

Administrative staff

264

Student clubs

2997

Academic staff

4621

Scientific publications

704

Ongoing scientific  
and research  
projects with budgets  
> PLN 622 million

13 491

Enrolled students

28 715

Full-time and part-time  
students

AMU IN NUMBERS



# AMU RANKINGS

## „PERSPEKTYWY” RANKING (2025)

**3<sup>rd</sup>** University in Poland  
**6<sup>th</sup>** Higher education institution in Poland

## TIMES HIGHER EDUCATION

World University Rankings (2025) **1001-1200**

World University Rankings by subject (2025):

Law	301+
Arts & Humanities	301–400
Education Studies	301-400
Social Sciences	501-600
Psychology	601+
Life Science	601-800
Computer Science	801-1000
Physical Sciences	1001+

Impact Ranking (2025) **601-800**

Partnerships for the Goals (SDG 17)	101-200
Gender Equality (SDG 5)	201-300
Reduced Inequalities (SDG 10)	301-400
Climate Action (SDG 13)	301-400
Quality Education (SDG 4)	601-800

Interdisciplinary Science Rankings (2025) **301-350**

## SHANGHAI RANKING

Academic Ranking of World Universities (ARWU) (2025) **901-1000**

Global Ranking of Academic Subjects (GRAS) (2024)

Natural Sciences:

Geography	201-300
Atmospheric Sciences	301-400
Ecology	301-400
Mathematics	301-400

Social Sciences:

Education	301-400
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## QS RANKING

World University Rankings (2026) **741-750**

World University Rankings by Subject (2025):

Broad Subjects:

Arts and Humanities	=381
Natural Sciences	401-450

Narrow Subjects:

Linguistics	151-200
Archaeology	201-260
Modern Languages	251-300
Education and Training	401-450
Physics and Astronomy	401-450
Biological Sciences	551-600
Chemistry	551-600

QS Sustainability Ranking (2025) **434**

QS Europe University Rankings (2025) **=258**

QS Europe University Rankings - Eastern Europe (2025) **15**

UI GREEN METRIC (2024) **277**

## US BEST NEWS

Best Global Universities (2025-2026) **=926**

Best Global Universities by Subject (2025-2026):

Arts and Humanities	112
Social Sciences and Public Health	=384
Environment / Ecology	=445
Geosciences	=445
Physical Chemistry	=478
Mathematics	483
Chemistry	=614
Material Science	=635
Physics	=638
Plant and Animal Science	=476





## PEOPLE & SOCIETY

**People are at the forefront  
of our work – both  
the members of the academic  
community and the people  
to whom we address  
our initiatives.**

**Commitment, cooperation  
and mutual relationships  
allow our university to study,  
discover and interpret scientific  
phenomena, as well as share  
the discoveries with the public.**



# IVERMECTIN

— A MIRACLE DRUG WITH NEW POTENTIAL

It all started with a handful of land from a Japanese golf course. The microorganisms that lived in the soil caught the attention of microbiologist Satoshi Ōmura. One strain of bacteria, the *Streptomyces avermitilis*, was found to produce a substance that was an effective anti-parasitic.

Samples were sent to Merck laboratories. There, biochemist William Campbell managed to isolate the active substance – avermectin – and modify its structure to create an even more effective compound called ivermectin. Ivermectin was a breakthrough in treating parasitic diseases. The drug saved millions of lives. The inventors of ivermectin received the Nobel Prize in 2015. Today, this miracle drug is on the WHO List of Essential Medicines.

Some scientists believe that certain antiparasitic drugs can be used to target cancerous cells. Nevertheless, until recently, the potential of ivermectin as an anticancer agent remained understudied.

Professor Adam Huczyński, head of the AMU Department of Medical Chemistry, noticed that ivermectin has the potential to fight cancer. His doctoral student Michał Sulik set out to chemically modify the structure of this drug so that new compounds could be developed and their properties tested. Working with ivermectin is quite a challenge. To selectively modify the complex structure of the drug and purify the obtained compounds, researchers need intuition, experience and knowledge about the chemistry of naturally occurring substances.

The project was carried out in cooperation with scientists from the Medical University of Warsaw. Researchers developed a new generation of compounds that fight cancerous cells while sparing healthy ones. The results have been demonstrated *in vitro*. The new drug, its method of production and the potential use as an innovative anticancer agent have just been patented in Poland.

Ivermectin appears to be quite the miracle drug. Not only does it combat parasites, but it can also change the future of cancer treatments, which remain one of science's biggest challenges.



Michał Sulik





# HITTING RESISTANT BACTERIA WITH ENZYBIOTICS

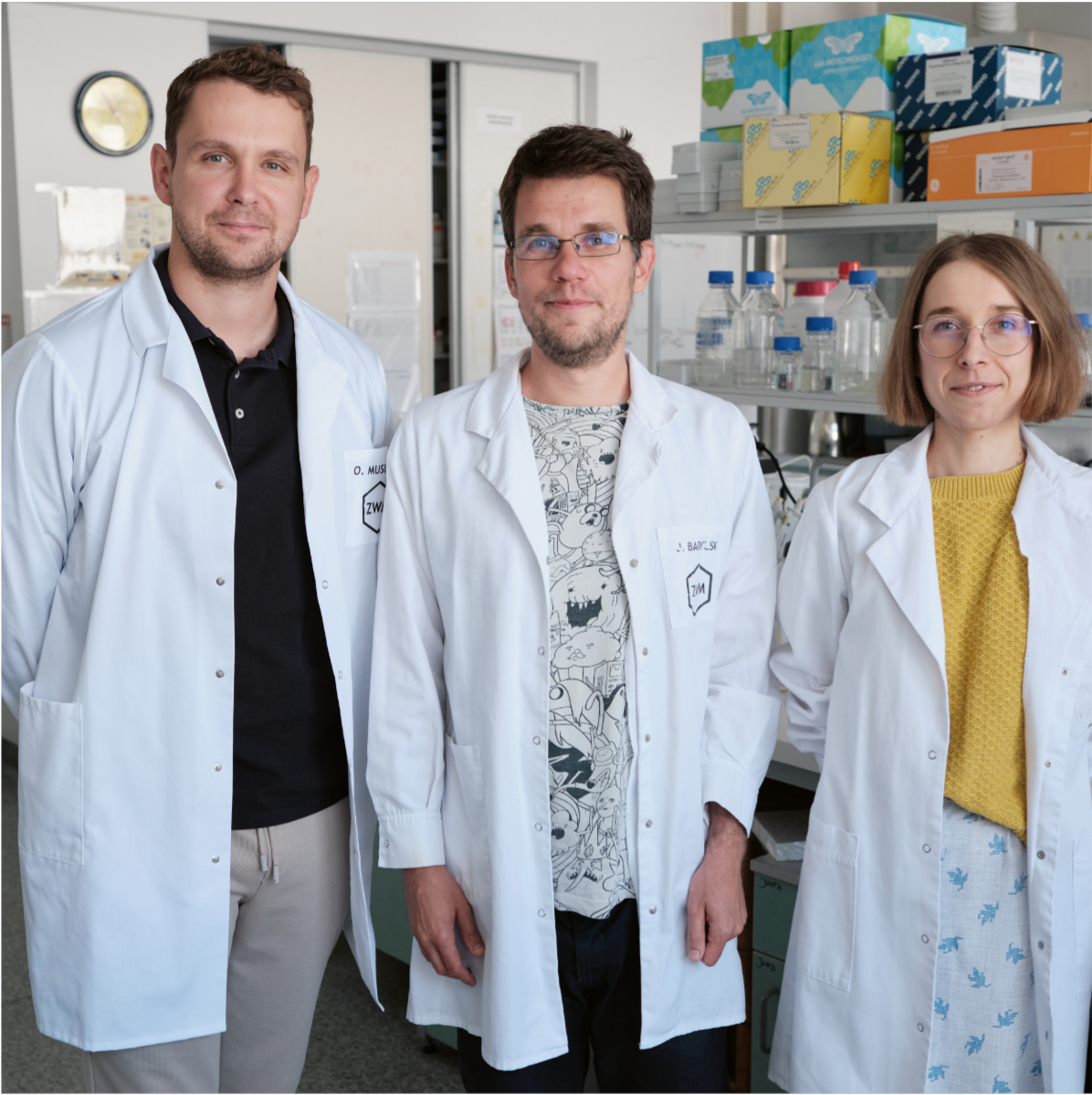
A team of scientists from the AMU Faculty of Biology has developed a new method for obtaining next-generation antibacterial substances called enzybiotics. The research is part of the EcoZyBiotics project, financed by the LEADER grant from the Polish National Centre for Research and Development NCBiR. The Poznań biologists are tackling an important global challenge, namely that more and more bacteria are resistant to antibiotics. The consequences of antibiotic resistance affect not just humans, but animals as well.

Enzybiotics, enzymes that destroy undesirable microbes, provide an alternative to the antibacterial substances we use today. Lab results show that enzybiotics are effective, but they are difficult to obtain. Traditional methods are not just time-consuming, but not very reliable as well, particularly if the substance we want to identify is unlike the substances we currently use.

AMU researchers have developed an innovative and efficient strategy for isolating enzymes using bacteriophages, i.e. viruses that prey on bacteria. Bacteriophages can be found all around us: in the water, soil, even inside our own bodies. They are not harmful to people. They attack bacteria by invading the cell of the microorganism and kill it by bursting out from inside the cell like aliens from the movie "Aliens". Prof. Barylski's team developed a method to isolate the enzymes that bacteriophages use to digest the wall of the bacterial cell. This technology is based on simultaneous sequencing of thousands of bacteriophage genomes and advanced bioinformatic analysis. This approach allows researchers to identify dozens or even hundreds of potential enzybiotics in a clinical, veterinary or environmental sample.

Several new enzymes have been discovered in the course of the project. One enzybiotic, particularly effective against the *Rothia* species of bacteria, was already submitted for patenting. The project is carried out by AMU Prof. Jakub Barylski with a team of PhDs: Martyna Węglewska, Oskar Musidlak, Grzegorz Nowicki, Szymon Chowański, Karolina Walkowiak-Nowicka and Sophie Baldysz.

The new technology will be shared with the Polish biotechnology industry. Some results have already been implemented in cooperation with the ACTERYON company, and the project software has been developed in cooperation with Milk&Sugar Web Solutions.



From left: Dr. Oskar Musidlak, AMU Prof. Jakub Barylski, Dr. Martyna Węglewska







Team and participants of the project SCIENTIFICALLY INCLUDED

# SCIENTIFICALLY INCLUDED

Who doesn't like chocolate? This is why AMU researchers invited a group of children from the 'Harmonia' school in Pobiedziska to take part in a magical journey, tracing what happens to a cocoa seed before it becomes a cup of hot chocolate. The event was a creative workshop organized by three AMU faculties, each with a different perspective. The children wandered around five islands, learned the legends and stories about the discovery of chocolate, touched the leaves and fruits of the cacao tree, compared cocoa seeds to other exotic fruits, and looked at samples under an optical microscope and a stereo microscope. Researchers explained how the cocoa plant propagated, where it originally came from, and how it travels from overseas cocoa plantations to European stores. Participants also expanded their chocolate-related vocabulary and proposed new names for chocolate desserts and came up with ways to promote them.

The workshop was held during the Poznań Festival of Art and Science, PFNiS. Participants in the first edition of the project were neurodiverse children. AMU staff from three faculties and one office volunteered to organize the project. Together, they came up with the idea for this year's workshop. The volunteers were trained by an expert in counseling and teaching youth with special educational needs.

The project "Scientifically included" invites collaborators who want everyone to have equal access to the beauty and value of science, are open to the needs of other people, and are supportive of mutual learning. Let's prove that there are no barriers to science!

The project was carried out by: Dr. Joanna Morawska and Dr. Adam Wronkowski from the Faculty of Human Geography and Planning, Prof. Marlena Lembicz and Dr. Natalia Jędrzejczak from the Faculty of Biology, AMU Prof. Karolina Ruta-Korytowska and AMU Prof. Marta Wrześniewska-Pietrzak from the Faculty of Polish and Classical Philology, and Anna Schmidt-Fiedler from the Office of Social Innovation and Sustainable Development. Partners of this project include: the Poznań Palm House and the 'Harmonia' Montessori Primary School in Pobiedziska.







From left: AMU Prof. Sylwia Jaskulska, Dr. Karolina Kuryś-Szyncel, AMU Prof. Barbara Jankowiak, AMU Prof. Emilia Soroko

# CHALLENGES OF YOUNG ADULTHOOD

Together with an international team, Professor Barbara Jankowiak studied the developmental tasks forming the so-called emerging adulthood, a stage of life described by Jeffrey Arnett as the period between adolescence and adulthood. Emerging adulthood is increasingly considered to be a distinct stage of life. The goal of the project was to understand what challenges are associated with this period.

AMU Prof. Sylwia Jaskulska and Dr. Karolina Kuryś-Szyncel from the Faculty of Educational Studies and AMU Prof. Emilia Soroko from the Faculty of Psychology and Cognitive Science also participated in the project.

The results were interpreted in light of Havighurst's theory, which proposes that each life stage is associated with certain challenges, and that these challenges result from a tension between biological aging, cultural pressure and individual identity. In this approach, a developmental task is defined as a period when an individual faces a crisis, which they then resolve by acquiring new skills. Although challenges result from external and internal pressures, it is up to the individual to decide if they want to face them.

129 students from Spain, Portugal, Japan, South Korea, Poland and the United States took part in the study. The methodology of the study allowed researchers to identify developmental tasks that had not been described before. One such task was social solidarity and openness to diversity, understood as taking conscious action for the common good and supporting marginalized communities. Another important area was lifelong learning, expansion of knowledge and self-reflection. These skills are crucial because the contemporary world offers unrestricted access to information while requiring cognitive and emotional flexibility. The third type of task was the development of psychological resilience. Here, participants valued self-awareness and the ability to activate protective mechanisms to cope with both stressful events from the past and potential challenges of the future.

The list of developmental tasks of emerging adulthood could find applications in education and career counseling.





# IMAGES OF SENIORS TODAY AND IN THE PAST

Dr. Kinga Kowalewska from the AMU Faculty of Modern Languages studied the image of elderly people in the public spaces of two European cities. The researcher wanted to learn how old age and the elderly are depicted in images and language, and what this implies for the social perception of seniors.

"Old age" is a complex and multidimensional phenomenon that can be interpreted from a biological, psychological, legal or cultural perspective. In her research, Dr. Kowalewska looked at the image of elderly people in two large cities: Warsaw and Berlin. The study investigates how the existence of older citizens is depicted in public space and how the visual and linguistic message associated with aging shape the social perception of seniors. The project was funded by the OPUS 2021 grant from the Polish National Science Centre NCN. For three years, the researcher documented the visual communication on the topic, collecting posters, advertisements and pictograms throughout the year in the most populated areas of both cities. The proposed research matrix can be a tool for the analysis and classification of data on the image of seniors and their visibility in public spaces.

The researcher noted that, until recently, the image of seniors was dominated by three stereotypes: a grandparent in a family, an elderly patient, or a person suffering from social exclusion. However, these trends are changing, thanks to pro-age and body positivity campaigns, as well as the changing demographic structure of society. The study takes into consideration the differences between the social and economic status of seniors in Poland and Germany.

Dr. Kowalewska is currently working on the results of the study, which will help us understand how seniors are perceived by society. The results of the study ought to be interesting to market analysts and decision-makers involved in initiatives and programmes that support the older generations. They can be used to support pro-age initiatives and to improve the status of seniors in an aging society on a local, national and international level.

Dr. Kinga Kowalewska







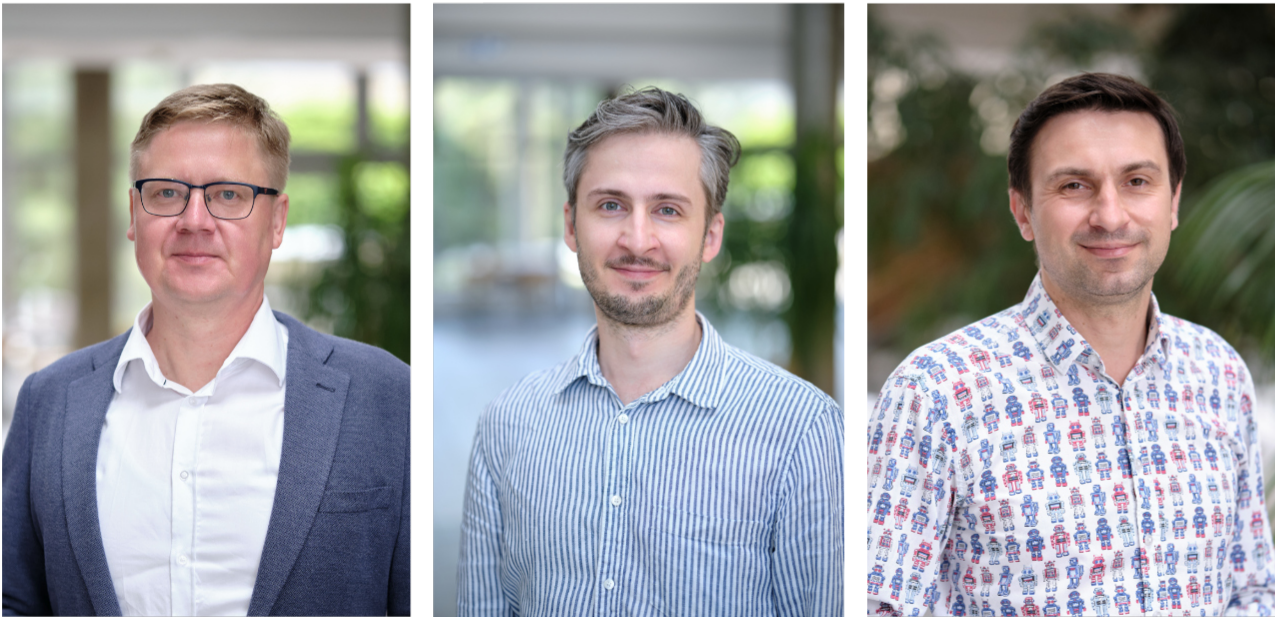
# GENERATIONAL DIFFERENCES IN PERCEPTION OF CLIMATE CHANGE

Climate change is more and more visible. Extreme weather, heat waves, droughts, flash floods and wildfires have become part of everyday life in many regions of Europe. Younger generations are strongly affected by the effects of climate change. Many young people feel angry, helpless, and disillusioned by the apathy of the authorities. Meanwhile, seniors take a different approach to climate change: they are less anxious and more emotionally distanced.

Scientists from Denmark, Germany, Greece and Poland working as part of the EPICUR consortium of European universities studied these generational differences to better understand the social attitudes and emotions towards the climate crisis. At the heart of the project is encouraging young people to become civic researchers. This is why high school students from several countries helped gather data on how different generations of Europeans feel about climate change.

Together with the researchers, young people took an active part in all stages of the pilot project: proposing survey questions, collecting data, interpreting results, and discussing feedback on the form and content of the study. Research teams from each university involved in the project met with the students during meetings and workshops organized at each stage of the project. The AMU team included: Dr. Agnieszka Budzyńska from the Faculty of Biology, Prof. Jarosław Jańczak and Dr. Jakub Jakubowski from the Faculty of Political Science and Journalism, Dr. Marcin Markowicz from the Faculty of English and Anna Schmidt-Fiedler from the Social Innovation and Sustainable Development Office.

Projects like these provide younger generations with hands-on experience in scientific research, allow them to voice their opinion and show that their knowledge, sensitivity and opinion matter. The initiative lays the foundations for participatory research on a European scale, promotes civic learning, and develops good practices for cooperation with young people. The pilot study tested a number of cooperation methods, reviewed study design and implementation, and proposed factors that should be taken into account in future activities of this type at the level of knowledge and organization.



From left: Dr. Agnieszka Budzyńska, Anna Schmidt-Fiedler, Prof. Jarosław Jańczak, Dr. Marcin Markowicz, Dr. Jakub Jakubowski







Dr. Łukasz Mikołaj Sokołowski

# LEGAL ASPECTS OF PREVENTING FOOD WASTE

In the European Union alone, approximately 58 million tons of food are wasted each year. This is the equivalent of 132 kg of food wasted annually per person. At the same time, 37 million people living in the EU cannot afford to eat a full meal at least every other day. Preventing food waste is, therefore, a key contemporary challenge.

Dr. Łukasz Mikołaj Sokołowski, assistant professor at the Department of Agricultural, Food and Environmental Protection Law, addressed this topic in his research. Although the problem has had a serious social, environmental and economic impact for years, food waste has only recently become the subject of interest of the European Union and the Polish legislator. This subject is still relatively new in law studies, which makes it an important area of research. The aim of the project is to find out whether EU and national legal regulations prevent food waste and to what extent. The results may be used to propose changes in existing law or shape the common agricultural policy.

Preliminary research suggests that there is a lack of legal instruments that would be sufficient to counteract food waste. Some activity on the topic is seen at the EU level, shaping the assumptions of future policies and the legal framework for preventing food waste. However, Member States establish their own regulations, which means that initiatives remain out of sync, and there are no comprehensive solutions to the problem. Poland is one of the first countries to adopt special regulations: the Act on Counteracting Food Waste. However, there are questions regarding the narrow scope of the act, ambiguities in its interpretation, and the lack of support for entities undertaking projects that prevent food waste. It should be emphasized that the legal regulations themselves might contribute to food waste.

Since the most food is wasted by consumers, and the impact of the law is limited at that level, it is important to consider topics such as education and social engagement. That is why it is necessary to launch awareness campaigns, support local initiatives and involve everyone in the process of change.







From left: AMU Prof. Monika Obrębska and Dr. Barbara Konat

## AFFECTIVE LANGUAGE IN POLITICAL DISCOURSE

Researchers from the AMU Faculty of Psychology and Cognitive Science, AMU Prof. Monika Obrębska and Dr. Barbara Konat, together with students Nadia Dembska (psychology) and Ewelina Gajewska (cognitive science) have conducted a series of experiments in which they analyzed the impact of the language of emotions on social perception. Their recent study, published in "Journal of Language and Social Psychology", discusses the social media communication of politicians.

Nearly a thousand participants took part in the study. They were asked to judge politicians on the basis of fabricated tweets about helping refugees from Ukraine. The texts carried different emotional loads: some were positive (kind speech), some were negative (hate speech), and some were neutral. Three politicians representing different ends of the political spectrum were selected for the study: Krzysztof Bosak, Robert Biedroń and Rafał Trzaskowski. The researchers decided to focus on male politicians to limit the number of variables. However, they pointed out that research involving female politicians would be a valuable follow-up to the study. The results of the experiment are surprising. Although we might think that harsh speech helps politicians gain popularity, in fact, the participants preferred those who spoke kindly.

– In politics, we see aggressive language as an effective tool for building popularity. But our results showed that kindness improves the image of politicians – comments Prof. Monika Obrębska.

Posts that carried a positive emotional load improved people's perceptions of the politician's honesty, professionalism and sympathy. Hate speech significantly worsened the politician's image, especially in the eyes of people with moderate views. Interestingly, the effect of positive statements was stronger than the impact of negative statements. This contradicts the popular belief about the dominant influence of the language of aggression (the so-called negativity bias).

– We decided to study the role of affective language in political discourse due to the growing impact of hate speech on social communication. Hate speech is becoming a political tool, which stands in the way of dialogue and understanding – explains Prof. Obrębska.





Dr. Katarzyna Jankowiak

# FOREIGN LANGUAGE DISABLES STEREOTYPES

A research group led by Dr. Katarzyna Jankowiak from the AMU Faculty of English examined how language affects our susceptibility to gender stereotypes. Studies have shown, for instance, that bilinguals are less susceptible to stereotypical thinking in their second, rather than their native, language.

The project "Thinking stereotypically: Neural correlates of stereotype processing in native and foreign languages" is funded by the OPUS grant from the Polish National Science Centre NCN and involves AMU Prof. Joanna Pawelczyk and Dr. Marcin Naranowicz from the Faculty of English, as well as psychologist Dr. Dariusz Drązkowski.

The researchers knew that stereotypes are activated automatically when we speak our native tongue. They decided to investigate if that same mechanism works in a foreign language.

They conducted a series of EEG studies on a group of bilinguals, yielding interesting results. It seems that foreign language inhibits the activation of stereotype knowledge, allowing participants to be more open and rational when processing information. Interestingly, it also turned out that using a foreign language makes it easier to accept situations that violate societal expectations regarding gender. According to the researchers, speaking a foreign language can help women overcome negative self-stereotypes, for instance during job interviews in male-dominated industries (including IT). It can also limit prejudice on the part of recruiters.

The study has also confirmed that women are more sensitive to stereotyping than men. This is because they constantly feel judged, and therefore become more sensitive to stereotypes and self-stereotyping. Speaking in a foreign language can act as a psychological shield against stereotypes.

The project can find applications in education, psychology, the legal system or politics, where gender stereotypes can have a real impact on decision-making.







AMU Prof. Agnieszka Jakuboszczak

# MENOPAUSE

## IN EIGHTEENTH-CENTURY MEDICINE AND EXPERIENCE

How did women experience menopause centuries ago, and how did contemporary medicine explain it? AMU Prof. Agnieszka Jakuboszczak analyzes 18th-century treatises, diaries and letters to tell the story of the female body and its social significance.

Prof. Agnieszka Jakuboszczak from the AMU Faculty of History studies the everyday life of women who lived between the 16th and the 18th century. She is interested in familial and social relationships, as well as the perception of the female body at different times in a woman's life. In her 2021 article "On critical age. Menopause in selected medical texts from the 18th century", published in the Historical Almanac, Jakuboszczak discusses how menopause was understood and described in medical texts more than 200 years ago. The term menopause dates back to the 19th century. However, even before that, the moment when a woman's flow had ceased was considered to be her entrance to the so-called critical age. The absence of menstruation was interpreted as a medically dangerous state of fluid retention in the body, with contemporary textbooks recommending measures that were supposed to unlock the flow. At the same time, isolated voices suggested that a woman in this period of life gains more freedom because she no longer worries about unwanted pregnancies.

The interest in menstruation and female fertility stemmed from the fact that women were believed to shoulder full responsibility for bearing children – including their gender. Infertility was stigmatized, and a woman's mature age often caused concern, as in the case of Maria Leszczyńska, whose menstrual cycle was examined before her marriage to Louis XV to determine whether she would be able to bear an heir.

Prof. Jakuboszczak also analyzes women's testimonies in the form of letters, diaries or other records. These texts demonstrate that menopause caused fear and anxiety about health and disease, particularly cancer. The women consulted doctors, kept diaries, shared symptoms and emotions.

Research based not only on medical sources, but also on women's voices makes it possible to improve our understanding of both the history of medicine and the social roles assigned to women.





Dr. Marlena Kaźmierska

# ENDOMETRIOSIS AS A CHRONIC DISEASE

Despite a growing number of publications on the topic, awareness of endometriosis remains low, even among doctors. The disease can develop over several years while remaining undiagnosed, leading to severe pain, infertility, decreased quality of life and social exclusion.

The research and PhD thesis of Dr. Marlena Kaźmierska (under the supervision of Prof. Agnieszka Cybal-Michalska), "The experience of endometriosis as a chronic disease in the biographies of female students", shows the complexity of this disease and its impact on the lives of young women. Although as many people suffer from endometriosis as from diabetes, the topic of living with the disease is largely absent from scientific literature, culture and social dialogue. Meanwhile, the disease has a destructive impact on the lives of those affected by it and, in a broader context, their families, society and the state.

In the US, it is estimated that endometriosis negatively impacts productivity, as affected patients miss more work due to the pain. – This disease affects the entire society, which means that the decision-makers should be keen to combat it effectively, especially as it reduces fertility – argues the researcher. Endometriosis is caused by endometrial cells growing outside the uterus, which leads to inflammation and tumors. Symptoms are often minimized, and the average time it takes to diagnose the illness is 8-12 years. Treatment requires interdisciplinary care and is expensive. Dr. Kaźmierska, who has endometriosis herself, emphasizes that some women spend years looking for help, feeling misunderstood and lonely.

The researcher also works with the "Pokonać Endometriozę" Foundation, co-creates educational campaigns, organizes meetings, and develops information materials for schools, teachers and parents. As a menstrual educator, she took part in a nationwide pilot programme run by the Ministry of National Education, which focused on menstrual education and combating period poverty in 500 schools.

Endometriosis can look differently for different people, depending on the resources available to them, strategies for coping with the disease, and experiences with diagnosis and treatment.







**Prof. Katarzyna Zawadzka**

## HOW TO LEARN FASTER AND REMEMBER FOR LONGER?

The human memory is a fascinating mechanism, and understanding how it works is extremely important. This is particularly true today, as we face the challenges posed by increasing lifespans and the widespread use of artificial intelligence. Now more than ever, mastering the secrets of effective learning and memorization is crucial.

Effective learning does not begin when we open a book. It begins when we understand why we learn at all. – The goal is to be able to recall relevant information in the future – explains Prof. Katarzyna Zawadzka from the Faculty of Psychology and Cognitive Science. Remembering is nothing more than searching your memory to find an image you have previously created. The more clues lead to the image, the easier it will be to recall the information within it.

How do we create a strong memory image? First, make sure to regularly practice the material. Recalling the information at different times and in a variety of contexts will enrich the image in your memory. Reading the textbook after class or discussing a lesson with others enhances the memory image.

Second, testing your own knowledge is an important strategy. Tests are often associated with grading and judgement, but a well-designed test can support memorization. Even trying to recall the answer and then checking if you were correct strengthens your memory image. Moreover, if the test contains feedback, it allows you to fill in gaps in your knowledge and connect new information with what you already remember.

Third, you need some variation. When you learn, ask yourself questions and try to look at the issue from a variety of perspectives. For example, in Finnish, the word “lattia” means floor. It is easier to learn the word if you put it in different contexts, such as: “the dog is lying on...”, “someone is sweeping...”. This is how you establish different pathways to the same concept.

These three strategies – repetition, testing, and variation – work whether you're learning a foreign language or studying for a geology class. Research shows that the more effort and awareness we put into learning, the more lasting its effects will be.





AMU Prof. Katarzyna Klafkowska-Waśniowska

# DIG\_INFLOW

## – DATA, INFORMATION AND DIGITAL PLATFORMS

The dig\_INFlow project focuses on research and teaching activities related to the digital single market and the free flow of information in the European Union. Its objective is to deepen our understanding of online information flows and the creation of a secure, transparent, and trustworthy digital environment in the EU.

The project responds to the growing need to raise public awareness of the legal framework and policies governing access to information in the era of digital transformation. Using education, research and outreach, dig\_INFlow promotes knowledge about the legal and economic foundations of the digital single market, emphasizing the importance of protecting EU fundamental rights in the context of free data flow.

The project implemented numerous initiatives in cooperation with domestic and foreign experts, reaching the students and doctoral students at Adam Mickiewicz University, as well as high schoolers from Poznań and students enrolled at the AMU Open University:

- the teaching programme has been expanded with modern content on EU digital law and policies, including optional courses and workshops;
- an interdisciplinary seminar for doctoral students was organized and the development of young researchers was supported through their participation in a webinar and a hybrid seminar on computational methods in legal sciences;
- workshops for high school students were prepared and conducted in cooperation with the Poznań City Council (Smart City team) and the Poznań Supercomputing and Networking Center PCSS. The results of the project include open-access teaching materials, including lesson plans, an interview on the development of Poznań as a smart city, and worksheets for teaching about the data flows necessary to implement the smart cities concept.

Over the three years of the project, more than 650 participants took part in workshops, classes and seminars. The project resulted also in a network of contacts. This and the teaching materials available online, including the bilingual Handbook on Users' Rights in the Digital Single Market (Poznań, 2025), could make a significant contribution to the education of future professionals and the development of a framework for local and European cooperation for sustainable digital transformation.







**AMU Prof. Marcin Ignaczak**

## ARCHEOLOGY OF POZNAŃ

### THE LOST LIFE OF THE CITY

– We wanted to show that archaeological discoveries are not just an interesting topic for experts, but also a living story about the city, its inhabitants and its past – says AMU Prof. Marcin Ignaczak, head of the project. Thanks to exhibitions, multimedia presentations and meetings with scientists, the results of the research have become accessible to everyone.

The idea behind the project was to introduce the residents of Poznań to the fascinating world of local archaeology, which is deeply rooted in the city. The project focused on two unique locations: Ostrów Tumski, the cradle of the Polish state, and Kolegiacki Square, the beating heart of both medieval and contemporary Poznań. In recent years, these places have been sites of groundbreaking archaeological discoveries which have been made available to the public through exhibitions, videos and 3D models.

The presented discoveries were and remain unique in the field of archaeology in Poland and Europe. Some of the monuments and artifacts that were highlighted as part of the project include: the goldsmith's workshop at the royal palace, the former location of one of the tallest church towers in Poland, the "pearl cap", the only ornamental headdress made of pearls found in Europe, and some of the earliest records of modern medicine.

Part of the project involved meetings with residents, during which they were shown scientific posters, exhibitions of historical artifacts, videos and multimedia presentations. Visitors could also interact with objects from the past, including pottery, metal fragments and household items.

Some of the most interesting artifacts and monuments were documented on project websites: <https://projektkolegiata.web.amu.edu.pl/> and <https://ostrowtumski.web.amu.edu.pl/>.

– We don't want to just talk about the past. We want to emphasize the role that locals play in discovering it. By participating in the process of research and promotion, residents not only express their concern for shared heritage, they also participate in civic society. The archaeology of Poznań is not just a science; it is a tradition co-created by those who live here and want to understand their roots – says Prof. Ignaczak.





**Dr. Regina Lissowska-Postaremczak**

# THEATRE AND GENTRIFICATION IN EUROPE

As part of the ERC Consolidator grant, AMU is working with an international scientific consortium studying the relationship between theatre and dynamic urban changes in five European cities: London, Paris, Berlin, Warsaw and Istanbul.

The THEAGENT (Theatre and Gentrification in the European City) project is carried out by scientists from four European universities: Austrian Academy of Sciences, American University of Paris, University of London and Adam Mickiewicz University in Poznań.

Combining ethnographic and archival research, the team analyses the complex and often contradictory relationship between theatrical practices and urban transformation in 21st century Europe. Case studies will show how theatre and performance participate in the transformation of European cities, reflecting topics such as migration and memory, as well as reproducing and producing the image of the city.

The project looks at theatre not just as a type of stage art, but also as a social practice and an important thread in urban fabric. THEAGENT is an interdisciplinary initiative, combining the perspective of theatre studies with expertise in the field of urban studies, city sociology and public management.

Researchers are investigating how theatres can influence local communities, shape urban identity, and impact cultural policy in the context of gentrification. According to the authors of the project, theatre is crucial for understanding the cultural policy of contemporary urbanization. Similarly, the global city and its consumption-based production economies are crucial to understanding contemporary theatre.

AMU is represented by Dr. Regina Lissowska-Postaremczak from the Faculty of Anthropology and Cultural Studies, while AMU Prof. Agnieszka Jelewska is the project manager. In addition to scientific research, THEAGENT involves educational and promotional activities: webinars, debates, exhibitions and publications. The goal is to involve various communities, including artists, officials, urban activists and residents, in the conversation about the role of theatre in the city.





A butterfly with brown and white markings is perched on a pink flower. The background is a soft-focus field of similar pink flowers. A semi-transparent green rectangular overlay covers the left side of the image, serving as a background for the text.

**Nature and the environment  
are key areas of research  
and activity at AMU.  
Our scientists are not  
indifferent to the challenges  
of modern times such as  
the climate crisis, loss  
of biodiversity, or pollution  
of natural resources.**

ENVIRONMENT



# SAVING THE QUEEN OF POLISH FORESTS

Dr. Paweł Matulewski from the Faculty of Geographical and Geological Sciences studies the so-called blue rings in the wood of the European red pine. These changes in the wood pattern are caused by unusually cold seasons. The scientist's project can help understand the climate of past centuries and improve forest management in the age of climate change.

Blue rings are an inconspicuous but extremely valuable source of information about climate history. This phenomenon has been extensively studied in coniferous trees, especially ones that grow in cold climates and work is underway to document this phenomenon in the European red pine (*Pinus sylvestris* L.). The unusual wood color is caused by a mix of dyes: safranin and astra blue. Its presence suggests that the lignification process, which is when plant cells are converted into wood, was disturbed in some way. For scientists, this is a clear signal that the tree was struggling with difficult environmental conditions.

This phenomenon is particularly interesting to Dr. Matulewski from the Anthropocene Research Laboratory. His research project, funded by the Polish National Science Centre NCN as part of the SONATA grant, focuses on the analysis of blue rings found in the trunks and roots of pines growing in Poland and northern Scandinavia. The goal is to understand how trees respond to climate change and to investigate historical periods of cold weather, going back as far as 800 years.

Preliminary research conducted in the Brodnica Lake District showed that blue rings often occur in roots because that part of the plant is more sensitive to environmental changes than the trunk. A comparison between the roots and the trunk of the tree can provide new information about the physiological reactions of pines and their survival strategies.

The project also has an applied aspect. The European red pine covers as much as 67% of wooded areas in Poland. Projects like this can predict how this species will react to the changing climate. This is valuable knowledge for foresters and people responsible for the management of protected areas. What's more, dendrochronological data can also be used in research in the field of history and archaeology by helping verify historical accounts of weather anomalies.

Dr. Paweł Matulewski







From left: AMU Prof. Beata Messyasz, AMU Prof. Maciej Gąbka, Dr. Mateusz Draga

# IN THE NAME OF CLEAN LAKES

Climate change and human activity have an increasing impact on fragile freshwater ecosystems. Eutrophication, a process during which excess nitrogen and phosphorus drives the intensive development of algae and cyanobacteria in water, is a significant threat to lakes and rivers. The result? Water becomes turbid, aquatic life disappears, and biodiversity declines drastically.

To counteract this, AMU scientists joined the international CleanLake project (M-ERA.NET). The international team is developing modern water treatment methods, aiming to improve water quality and effectively stop eutrophication, giving lakes a real chance for regeneration. A key element of the solutions they have developed is a composite material based on zeolites, porous minerals obtained from industrial by-products such as ash.

This new technology permits selective capture of organic nitrogen and phosphorus compounds. The project investigates whether it is possible to make zeolites from waste materials, and how can they be used in innovative environmental solutions:

- cleaning paths: specially designed buffer zones located on the edges of lakes and filled with granulated zeolite. They are designed to stop pollutants from reaching surface waters. A pilot study is being carried out at Lake Kierskie in Poznań;
- multifunctional water platforms: platforms that are used as both filters for water and breeding sites for water birds;
- underwater platforms: water purification systems that can simultaneously serve as artificial habitats for fish and small organisms or as training sites for divers.

After the end of their life cycle (approx. one season) all products will be recycled. The material, saturated with nitrogen and phosphorus compounds, will be converted into fertilizer with controlled nutrient release.

The project is carried out by AMU Prof. Maciej Gąbka, AMU Prof. Beata Messyasz and Dr. Mateusz Draga, as part of a consortium including Cracow University of Technology, Technische Universität Bergakademie Freiberg, Vilnius Gediminas Technical University and PROTE Sp. z o.o.







Dr. Adam Kubiak

# PHOTOCATALYSIS, WATER PURIFICATION AND ANTIBIOTIC RESISTANCE

We might not realize it, but trace amounts of drugs, such as antibiotics, painkillers and hormones, are increasingly found in sewage and surface waters. This is related to large-scale use of pharmaceuticals, as well as improper disposal of household medicines. As a result, small amounts of active chemicals end up in wastewater treatment plants every day. Unfortunately, traditional purification methods that are effective against organic pollutants cannot eliminate complex pharmaceutical molecules. These substances flow into rivers and lakes. They may even end up in groundwater and drinking water! This affects aquatic organisms by disrupting their development and impacting their endocrine system. Antibiotics are particularly dangerous, because they contribute to antibiotic resistance, which is one of the main health threats of the 21st century.

In response to this challenge, Dr. Eng. Adam Kubiak from the Faculty of Chemistry launched a project that focuses on the development of a modern treatment system based on photocatalysis, a process in which a light-activated material called a photocatalyst accelerates the decomposition of harmful chemical compounds. The key material will be titanium oxide (IV) (TiO<sub>2</sub>), modified through molecular imprinting so that it interacts only with selected pharmaceuticals. However, the process requires a precise adjustment of the light source because photocatalysis occurs only at certain wavelengths.

During the project, the researcher will create a flow reactor with energy-saving LED lighting, the spectrum of which will be adapted to the processed material. The device will use support structures of biological origin, e.g. porous carbon materials obtained from biomass. This approach supports the idea of a circular economy and reduces the environmental footprint of the technology. The project combines modern material chemistry, precise light control and a sustainable approach to the environment, offering a real solution to one of the less visible but very important ecological problems of the modern world.







From left: Marcelina Przybył, M.A., AMU Prof. Joanna Świetlik, Dr. Marta Magnucka

# PLASTIC ON TAP?

Plastic pipes can be a source of microplastics. Although drinking water from household taps meets all quality standards, research conducted at AMU shows that it is still worth studying – especially in the context of microplastics.

Scientists: AMU Prof. Joanna Świetlik, Dr. Marta Magnucka and Marcelina Przybył, M.A. from the Faculty of Chemistry focused on two issues. First, they studied the amount and type of microplastics in the waters collected and treated at various water supply stations, which allowed them to assess the effectiveness of water treatment technologies. Second, they analyzed the quality of water transmitted through the municipal water networks, comparing the results for different types of pipe materials, particularly pipes made of plastic such as polyethylene (PE) and polyvinyl chloride (PVC).

It turned out that plastic pipes, valued for their durability, low price and resistance to corrosion, are a potential source of contamination. The researchers analyzed fragments of pipes that were in use between 4 and 45 years, demonstrating that plastics used to transport drinking water degrade over time. Since water in the pipes is treated with disinfectants protecting against microbial contamination, it can cause microscopic cracks and peeling on the internal surfaces of the pipes. Small flakes of plastic detach over time and cause secondary water contamination with micro- and nanoplastics.

The research provided valuable information on the effectiveness of current water treatment technologies and the scale of the problem of secondary pollutants. It is also an important guide to the optimization of water safety plans, an obligation which is imposed on distributors of drinking water by the EU Directive 2020/2184.

The researchers note that consistent monitoring of the content of micro- and nanoplastics in water, recommended recently in EU regulations, is a step towards an even safer and more conscious water policy in cities.

Results of this research have been published in such journals as the "International Journal of Hygiene and Environmental Health", "Water Emerging Contaminants & Nanoplastics", and "WIREs Water".







Dr. Sylwia Pustkowiak

# DIET OF THE RED MASON BEE

Dr. Sylwia Pustkowiak, assistant professor at the AMU Faculty of Biology, participated in a study on the impact of diet on the development of the red mason bee (*Osmia bicornis*). Together with scientists from the Institute of Horticulture of the National Research Institute, Marie Curie-Skłodowska University in Lublin and the Jan Kochanowski University in Kielce, Dr. Pustkowiak co-wrote an article published in the prestigious journal "Arthropod-Plant Interactions".

The researchers examined how the homogenization of agricultural landscape (i.e. the dominance of one type of crop, such as rapeseed) affects the availability of food for bees and, consequently, the development of their offspring. Monocultures limit pollen diversity, which can lead to nutritional stress and affect the so-called phenotypic traits of insects - the visible characteristics of an organism that are influenced by genes and the environment, such as body size and wing shape.

The study analyzed the composition of pollen collected by red mason bees and assessed how it affects the development of bee offspring, more specifically the size and symmetry of the wings of adult bees. Although the hives were located in the middle of a rapeseed field, it turned out that the pollen gathered by the bees was not homogeneous. Instead, oak tree pollen (*Quercus*) accounted for a significant part of the pollen mixture.

Research also showed that pollen composition affected the size of bee wings, but not their asymmetry. This confirms previous observations that the size of the wings is a better indicator of nutritional stress than wing symmetry.

The publication is an important contribution to the debate on the impact of modern agriculture on wild pollinators and the importance of biodiversity protection in agricultural landscapes. The research received funding from the Ministry of Science and Higher Education as part of activities of the Institute of Horticulture of the National Research Institute in Skierniewice.





# DEATH IN WINTER, LIFE IN SPRING

## WHAT DETERMINES THE SURVIVAL OF BEES?

Winter is an extremely difficult period for honeybees (*Apis mellifera*). The death of one bee can determine the fate of the entire colony. Professor Adam Głazaczow from the AMU Faculty of Biology analyzed factors affecting the winter mortality of bees and their consequences. The research was conducted for over three decades in an apiary in Central Europe, in the years 1991-2023.

– Winter is a critical period in the life cycle of bees. Lower temperatures may result in food shortages and increase susceptibility to pathogens. We have little data on the mortality of individual bees; we usually start paying attention only once the entire colony collapses. Therefore, together with Dr. hab. Szymon Smoliński, we analyzed the individual mortality of female worker bees on the basis of long-term observations conducted in one of the apiaries in Central Europe – explains Prof. Głazaczow.

The results show that although the dynamics of winter mortality were similar in subsequent years, there was no clear association with factors such as average temperatures in spring, autumn and winter, or with the number of bees infected with the *Varroa destructor* parasite in autumn. However, a more detailed cause-and-effect analysis revealed that higher mortality was associated with lower winter temperatures and higher incidence of *Varroa* infections in the fall. The population of parasites depended on the temperatures in spring.

Surprisingly, the winter mortality of bees did not directly affect the honey harvest. Honey production was related to the number of bees in spring, which, as it turned out, was not correlated to bee mortality in winter. The colonies were able to partially compensate for winter losses as long as their overall condition and resources were sufficient.

The research sheds new light on the factors affecting bee survival in winter. Researchers emphasize the importance of temperature throughout the seasons and the number of parasite infections as potential predictors of colony health and productivity. Studies like these also show how important long-term field observations are for understanding the complex relationships between weather, diseases and the life of bee colonies.



AMU Prof. Adam Głazaczow







Dr. Adam Gorczyński

# REVOLUTION IN ENERGY STORAGE

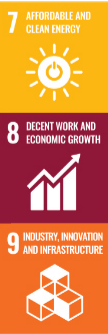
In the age of technological development, electromobility and widespread digitalization the demand for electricity is constantly growing. It is estimated that by 2050 as much as 86% of the global electricity supply will come from renewable sources such as the sun or wind. However, these resources have one major drawback: they are dependent on the weather and time of day. This is why energy storage systems are key for the transformation of the energy industry. These systems store excess energy and release it when energy production is low.

These are the challenges at the heart of the LEADER (ENER-POM) project implemented by Dr. Adam Gorczyński from the Faculty of Chemistry in cooperation with partners from Poznań University of Technology and the AMU Center for Advanced Technologies. The aim of the project is to create innovative hybrid materials that will enable the construction of next-generation batteries and supercapacitors: cheaper, safer and more efficient than the solutions used today.

As part of the ENER-POM project, scientists are looking for alternative solutions: sodium, magnesium, zinc or aluminum would replace lithium in batteries, and innovative hybrid materials based on Polyoxymethylene (POM) and covalent organic skeletons COF would replace traditional electrodes. The synergistic combination of these structures is expected to create high-capacity energy storage with longer viability while reducing costs and environmental impact.

The research and development work is expected to result in functional prototypes of energy storage devices such as batteries and supercapacitors that would operate in realistic conditions. Achieving this goal can significantly contribute to the development of the clean energy sector, reduce CO2 emissions and make Europe independent of raw materials from countries with an unstable geopolitical situation.

ENER-POM is not just a research project – it is a response to the needs of industry, the environment and society.







Prof. Katarzyna Marcisz

# DISCO INFERNO

- STUDIES OF PEAT BOGS IN WESTERN GREENLAND

Professor Katarzyna Marcisz and her team are conducting pioneering research on the island of Disko in western Greenland, discovering new traces of climate change. Together with Dr. Sambor Czerwiński (University of Gdańsk) and Dr. Luke Andrews (Liverpool John Moores University), they are among the few people in the world who managed to collect peat samples from this hard-to-reach area.

The Greenfire project is part of research on the impact of climate change on peatlands. Researchers are interested in the changing hydrological conditions and how the increasing number of wild fires affect the areas. So far, Prof. Marcisz has studied peatlands in Poland, Estonia, Norway and Siberia. Now, she is focusing on Greenland, where peatlands and their history are still relatively understudied.

Although wildfires in Greenland are rare, the risk is increasing due to global warming. Large peatland fires were recorded in western Greenland in 2016 and 2017. In 2023, wildfires in Canada caused aerosols and carbon particles to spread as far as western Greenland. What is more, the peatlands are located on the border of the permafrost. As it melts at an increasing pace, the permafrost releases carbon dioxide, significantly changing the structure of these ecosystems. For this reason, the study is part of the Sustainable Development Goals related to climate action.

The team worked at the Arctic Station (University of Copenhagen) and was funded by the INTERACT program. The peat cores were collected using a bread knife. The researchers discovered that the humble bread knife is the best tool for collecting smaller peat core samples during previous research stays in Norway and western Siberia.

The study itself focuses on the analyses of peat properties, plant macrofossils, charcoal and testate amoebae. It is supported by laboratories from Basel, Utrecht and Aberdeen. Radiocarbon dating of peat has shown that the Disko peat bogs are young ecosystems, only about 100 years old. Outside of scientific interest, one of the reasons for the study was the popular song "Disco inferno".







**The university is not merely a space for research and teaching, but also a complex structure that requires transparency, responsibility and constant self-reflection. We carefully examine our own practices, improving management mechanisms to support community development, build trust, and establish long-term foundations for smart decisions.**

**ORDER IN THE  
ORGANIZATION**





Dr. Łukasz Rogowski

# OPEN SPACE

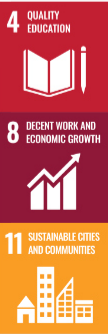
- AMU INFRASTRUCTURE RESEARCH

This is the first extensive study of university infrastructure in Poland, carried out by the AMU Faculty of Sociology and the Student Club of Persons Studying Sociology. The project involved consultations organized on all AMU campuses in Poznań, interviews conducted with building administrators, a university-wide survey and research walks. As a result, researchers identified four key functions of a modern university: to educate, to socialize, to create bonds and to protect the environment.

Among the needs reported by students were access to spaces for eating and preparing food, availability of rooms for individual and group work, and quiet zones. Students emphasized that green areas are importance both for relaxation and to maintain thermal comfort at the campus. The study helped us realize that the campus does not end at the university walls. The boundaries between the university and the city are fuzzy, as they expand into surroundings, such as parks, cafes and cultural sites. This makes the campus-city relationship particularly important.

The project also suggested that university spaces should look less like schools, for instance by making the layout more flexible and the classroom space more conducive to independent thinking as well as cooperation. One idea that was suggested in the context of sustainable development was to introduce a green budget for initiatives that would support a sense of responsibility of the student community by helping them to take care of shared spaces.

Not only did the study suggest practical changes, but it also proved to be an opportunity for student participation. Students actively participated in the research process, helping design the study and analyze its results. The results of the project have had a real impact on the planned infrastructure changes at AMU, for instance, the establishment of rest zones or student kitchens. They also launched further discussions on the role of the university as an open, friendly and socially responsible space.







From left: Dr. Weronika Dopierała-Kalińska, AMU Prof. Hanka Błaszowska, Prof. Katarzyna Dziubalska-Kołaczyk, AMU Prof. Agnieszka Kielkiewicz-Janowiak

# LANGUAGE OF GENDER EQUALITY AT AMU

AMU published a booklet entitled "The Language of Gender Equality at Adam Mickiewicz University in Poznań. Recommendations for the academic community ". This is the first booklet that addresses the topic of inclusive language and its importance for equality in academia.

The idea for the publication came from a team of researchers from different faculties and was implemented as part of the Gender Equality Plan. The group involved in its development consisted of AMU Prof. Agnieszka Kielkiewicz-Janowiak, AMU Prof. Hanka Błaszowska and Dr. Weronika Dopierała-Kalińska; the work was coordinated by the Vice-Rector for Research Prof. Katarzyna Dziubalska-Kołaczyk. The authors of the recommendations, as well as a wide range of consultants involved in the project, indicated that the publication responds to current national and EU regulations and the real needs of the AMU community.

The recommendations focus on the meaning and grammatical legitimacy of feminine forms in Polish, highlighting the historical tradition of feminine forms in Polish. Prof. Dziubalska-Kołaczyk points out that female forms of professions and titles were present in the Polish language for centuries until they have been replaced by masculine forms believed to be more prestigious in communist Poland. The authors of the publication emphasize that language plays a key role in building a sense of belonging and visibility in academic spaces for men, women, and non-binary people.

There are practical recommendations regarding the use of inclusive forms in Polish, such as "pracownicy i pracowniczki" (male and female employees), "doktorant/ka" (a male or female doctoral student) or "osoba studiująca" ("a person who studies"), and tips on how to communicate with diversity in mind. Importantly, the publication does not impose a single model of communication or preference for grammatical forms but rather encourages mutual respect and openness to the linguistic needs of the community.

In addition to practical solutions for everyday use, the publication presents the linguistic, historical and sociological background behind them. The authors hope that it will serve the entire academic community as a reference point and inspiration for building more conscious, open communication.







**Dominika Mroczek-Dąbrowska**

# HEARING NEEDS

- COMMUNICATING WITH PEOPLE WITH HEARING IMPAIRMENTS AT THE UNIVERSITY

Dominika Mroczek-Dąbrowska, a member of AMU administrative staff, is the author of the publication "Communication with people with hearing impairments at the university. A guide for employees and students". The booklet was created as part of the Fund\_Akcja! competition (Poznań Science and Technology Park) and is the first initiative of its kind at our university.

The goal of the guide is to promote knowledge about the needs and challenges faced by people with hearing impairments in an academic environment. The publication also contains practical tips for effective verbal and non-verbal communication in locations and circumstances relevant to academic activities.

The author emphasizes that she was inspired to compile the guidelines by her conversations with hearing-impaired students, whom she supported at various stages of their academic path. Thanks to these experiences, she could better understand their needs, as well as the difficulties and communication barriers they face.

The booklet includes examples of good practices, a set of useful non-verbal messages, and an explanation of why Polish can be a foreign language for d/Deaf people. The guide dispels many myths and stereotypes, especially those concerning the availability of writing (such as books or articles) for people with hearing impairments.

The publication was forwarded to the AMU Student Offices and Main Offices of the AMU Faculties, as well as distributed among students. It has been warmly received by the staff. Employees of Student Offices emphasized that there is a real demand for this type of support.

Dominika Mroczek-Dąbrowska is a graduate of the AMU Faculty of Law and Administration and the Wielkopolska Center for Medical Education. She is a lawyer, court mediator, social dialogue specialist, translator and teacher of sign language, member of the AMU Mediators Team. She teaches non-verbal communication and sign language at the AMU Open University. Her everyday work focuses on ensuring accessibility of communication in cultural and academic institutions.





# ADMINISTRATIVE INSPIRATIONS



**From left: Karolina Domagalska-Nowak, Joanna Dembińska, Klaudia Łęcka, Katarzyna Wala, Anna Schmidt Fiedler, Hanna Janonis-Kubicka**

The broadly understood AMU administrative staff consists of over 2000 employees. In November 2024, the first ever survey of this group of employees was conducted at our university. The goal was to understand their needs, as well as develop solutions and recommendations that could improve the working conditions, professional atmosphere and operations at the university. To encourage an open and constructive exchange of views and ideas, we organized a series of moderated table talks on the following topics:

- Career and Development
- Work-Life Balance
- Well-being at work
- Work atmosphere
- Motivation
- Hyde Park

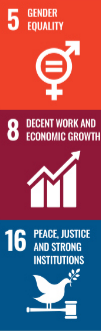
The interviews were attended by 54 people who volunteered to participate in the study. They chose tables and discussed topics of interest, identifying several key areas for improvement: trust, respect, community, communication, inequalities and work organization.

Participants shared good practices and postulated several solutions as well as recommendations:

- implement a new management culture based on participation and regulations,
- enable horizontal promotions,
- simplify procedures,
- support feedback culture,
- mitigate inequalities both in terms of pay and access to training and benefits,
- introduce clear criteria and procedures for professional development and promotion,
- promote a culture of mutual respect and kindness,
- create physical and virtual spaces conducive to getting to know each other and building a community.

The results of the study were presented in February during the fifth annual AMU Administration Forum. Arrangements for the implementation of individual recommendations are currently underway.

The project is held under the patronage of AMU Rector Prof. Bogumiła Kaniewska and AMU Chancellor Dr. Marcin Wysocki and was implemented by a team consisting of: Anna Schmidt-Fiedler, Katarzyna Wala (Office of Social Innovation and Sustainable Development), Joanna Dembińska, Hanna Janonis-Kubicka, Klaudia Łęcka (Staff Recruitment and Professional Development), Dr. Karolina Domagalska-Nowak, Magdalena Sadowska (AMU Administration Forum), Magdalena Ziółek ("Życie Uniwersyteckie").







Organizers of the Administration Forum

# ADMINISTRATION FORUM

This annual event is gaining increasing importance and recognition in academic circles. Organized by AMU employees, the Forum provides space for integration and exchange of experience between staff, as well as strengthens the role of administration in the functioning of the university.

The Program and Organizational Committee chaired by Dr. Karolina Domagalska-Nowak is responsible for the program and organization of the meeting.

The idea for the AMU Administration Forum was conceived several years ago, inspired by the initiative of the National Forum of Dean's Offices. The first meetings were organized locally and addressed mainly to employees of AMU Student and Main Offices. Over time, the event opened to the entire AMU administrative community and became an important day on the university calendar. An important goal of the event is to create space for dialogue and to share different perspectives on the same issues.

The forum attracts more and more participants every year. This year's fifth edition, held under the slogan "Trust and Cooperation", attracted over 700 participants, making it a major undertaking. The program included 8 lectures and 29 workshops. Nine speakers and 9 panelists were invited. The activities were aimed at the development of both professional and soft skills. In addition to topics related to communication and cooperation, participants discussed issues related to artificial intelligence. Special guests included Dorota Wellman and Marta Klepka, and the Forum was opened by a lecture on trust as the foundation of teams, delivered by Prof. Henryk Mruk.

Today, the AMU Administration Forum is not only an educational event, but also a space for community building. As emphasized by the AMU Rector Prof. Bogumiła Kaniewska, the Forum is one of the most important initiatives of recent years, demonstrating just how important the administrative sector is in a functional university.





# UNI4EQUITY: AGAINST VIOLENCE IN ACADEMIA

Uni4Equity is a three-year international project funded by Horizon Europe that empowers universities to identify, map and respond to sexual harassment in the workplace. The initiative responds to the need to build a safe and equitable academic environment, free from violence and discrimination.

This year, as part of the project, a survey was conducted among the academic community to identify strategies that are already in place at the university for identifying and mapping sexual harassment in the workplace and educational environment and responding to it. Since evidence-based methodology supports educational interventions, preventive workshops were organized as part of the project. In cooperation with six partner countries, researchers conducted reviews of university protocols, organized awareness campaigns, and established collaboration with external stakeholders.

Thanks to international cooperation, the involvement of an interdisciplinary research team and application of research results, Uni4Equity builds a solid foundation for measures to prevent violence. The project is unique in terms of its subject matter as well as the scope of research and activity.

The work is coordinated by the University of Alicante (Spain), while seven partner institutions from Europe are involved in the project: Adam Mickiewicz University in Poznań (Poland), CESIE (Italy), APLICA (Spain), University of Burgenland (Austria), University of Antwerp (Belgium), University of Verona (Italy) and University of Maia (Portugal).

The Polish team consists of scientists from the AMU faculties of Educational Studies, Political Science and Journalism. The principal researcher is AMU Prof. Sylwia Jaskulska. The team includes AMU Prof. Iwona Chmura-Rutkowska, Prof. Barbara Jankowiak, AMU Prof. Katarzyna Waszyńska and AMU Prof. Iwetta Andruszkiewicz.

From left: AMU Prof. Sylwia Jaskulska, AMU Prof. Iwetta Andruszkiewicz, AMU Prof. Iwona Chmura-Rutkowska, AMU Prof. Barbara Jankowiak, AMU Prof. Katarzyna Waszyńska







Awarded projects

# IDEAMU CONTEST

The IDEAMU competition for social and green innovations at AMU is addressed to the entire academic community. Ideas for projects could take a variety of forms, from awareness campaigns to workshops, and from publications and guidelines to events.

As many as 34 inspiring projects were submitted to this year's edition. Each was an expression of commitment, concern for the environment and shared spaces, or the need to build a community. The participants showed great sensitivity, knowledge and ingenuity. The jury did not have an easy task. Ultimately, they awarded three main prizes (PLN 7,000 each) and two special prizes for student initiatives.

The winners are:

- "University spring flower exchange and faculty herbal garden" – a project by AMU Prof. Mirosław Makohonienko (Faculty of Geographical and Geological Sciences), who proposed organizing a plant exchange and building a herbal garden for university staff;
- "Waste workshops. How to use metal waste for chemical experiments?" – workshops by Dr. Małgorzata Bartoszewicz and Dr. Grzegorz Krzyśka (Faculty of Chemistry) demonstrating how to recover raw materials from batteries and how to teach green chemistry;
- "Garden in the Garden District" – a project by AMU Prof. Agnieszka Jeran (Faculty of Sociology) and Dr. Monika Zielona-Jenek (Faculty of Psychology and Cognitive Science), who proposed the construction of an inter-faculty social garden at the AMU Ogrody campus that would support integration and biodiversity.

Special prizes were awarded to:

- "Pro-ecological workshops for the AMU community" – project by Szymon Chmielarz (Faculty of Biology),
- "The topic of waste – not a wasted opportunity" – workshops by Weronika Piechaczyk (Faculty of Psychology and Cognitive Science).

The growing interest in the competition is both encouraging and inspiring. It shows that the academic community wants to work for the benefit of the environment and broadly understood well-being, introduce green and socially responsible innovations, and share knowledge and passion with others. The jury was chaired by Prof. Zbyszek Melosik. The competition was organized by the Office of Social Innovation and Sustainable Development.







## KALEIDOSCOPE: POPULARISATION OF SCIENCE, INTEGRATION, ACTIVATION



### The first European Science Fair took place on June 3-6, 2025,

at the Poznań International Fair. The aim of the event, organized by the Ministry of Science and Higher Education, Adam Mickiewicz University and the MTP Group, was to promote Polish science, support innovative start-ups and strengthen relations between science and the economy. The program included several debates and panels attended by about 70 experts representing universities, research institutes, public administration and business.



### Academia for cities

– the slogan of a panel discussion held on June 6th as part of the European Science Fair. The meeting showed how the university shapes the character of the city. Poznań – Poland's most academic city – relies on the potential of its universities, which undertake numerous initiatives for sustainable development and social responsibility. The panel was attended by representatives of Poznań public universities, the City Hall, the Council of Seniors and the Youth City Council.



### Childhood without violence

– a nationwide campaign organized by the "Dajemy Dzieciom Siłę" Foundation in partnership with AMU. AMU Prof. Jacek Pyżalski and AMU Prof. Daria Hejwosz-Gromkowska shared their knowledge as part of a conference, and the team from the AMU Legal Clinic participated in workshops for schools that were organized by the Regional Police Headquarters. The campaign finale took place on November 19th, the International Day for the Prevention of Violence against Children. On that day, the AMU Auditorium was illuminated in red.



### Chemistry goes round and round

– an interactive competition for secondary school students from the Wielkopolska region organized by the AMU Student Club of Chemists as part of the Fund\_Akcja! initiative. After an online qualifying round, eight teams competed in a tournament, answering theoretical questions, participating in experiment demos, using the wheel of fortune, and asking for lifelines to questions. The winning team represented High School No. 2 in Poznań. The aim of the project was to popularize chemistry and promote science through play and cooperation.





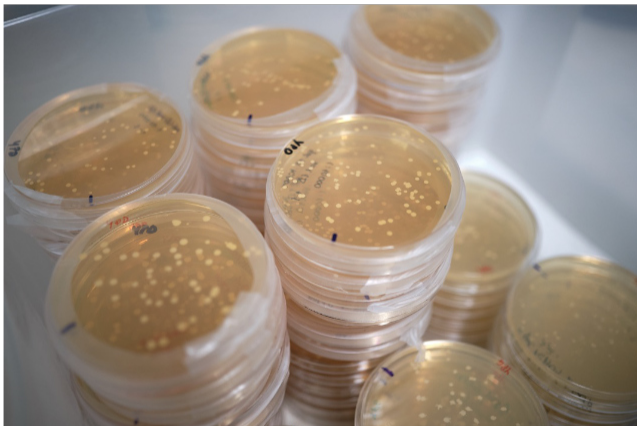
**Saving the mussels of the Malta Lake**

was an initiative carried out by experts from the AMU Faculty of Biology, Prof. Renata Dondajewska-Pielka and Prof. Piotr Klimaszyk, and their students. Malta Lake is regularly drained, and fish are removed from the reservoir, putting thousands of mussels at risk of death. Students involved in nature conservation manually moved the mollusks to a safer location, protecting the valuable swan mussel (*Anodonta cygnea*) and the local ecosystem. These animals play an important role by filtering the water in the reservoir.



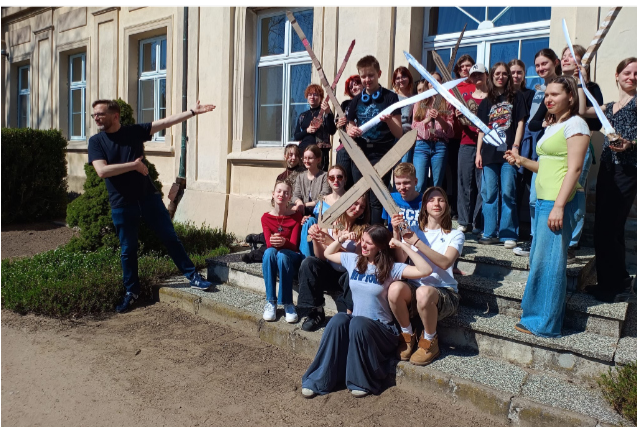
**World Water Day and World Meteorology Day**

are organized at AMU by the Faculty of Geography and Geology together with the Polish Geophysical Society. The event is aimed at young people, showing them that science is a tool for real change. Every year, several hundred secondary school students from the region take part in the event. This year, scientists took their audience on a journey through the world's largest and deepest river canyons, explained how our climate is changing and how to protect waters.



**A tardigrade and some yeast in space**

– on July 15th, 2025, Polish astronaut Sławosz Uznański-Wiśniewski returned from the Axiom-4 mission on the ISS where he was supervising the Yeast TardigradeGene experiment. During the project implemented by AMU, the University of Szczecin, and the University of Silesia, a tardigrade gene responsible for resistance to extreme conditions was introduced into some yeast. The results of this research will be used to assess whether such yeasts can function as biofactories on Mars, the Moon, or during prolonged journeys in space. We will know the results in two years.



**Kilted Tales and Unicorn Trails**

– a project aimed at high school students by Dr. Tomasz Skirecki from the Faculty of English. It combines learning English with creative exploration of the culture, history, geography and folklore of Scotland. Students at the St. Mary Magdalene High School in Poznań participated in workshops organized in the school and took part in scavenger hunts and competitions organized on the premises of Dom Pracy Twórczej in Ciqżeń. The competing teams were named after Scottish clans. A similar project on the culture of Ireland is being prepared.



**Eisteddfod AMU**

is a festival of Welsh culture that has been organized since 2014 by students and lecturers of the Department of Celtic Studies at the AMU Faculty of English. The festival is meant to encourage creative competition and reflection on linguistic identity, as well as highlight the importance of minority languages for cultural diversity and heritage. The organizers prepared musical performances, writing, translation, and art competitions, as well as educational activities open to members of local communities and high school students.



**ERICA: Environmental monitoring through civic engagement**

– a project that involves the public in monitoring the environment in areas where fossil fuels are extracted. The AMU team operates in the Konin region, where residents are testing simple tools for measuring groundwater purity. The project will create an e-learning platform for adults, training residents in environmental monitoring, supporting education, and developing practical environmental skills.



**Neolithic “Polish pyramids” discovered in Wielkopolska!**

A team of AMU archaeologists led by Dr. Danuta Żurkiewicz and AMU Prof. Iwona Sobkowiak-Tabaka has discovered megalithic tombs dating back 5,500 years in Wyskoć (Kościan municipality). The structures had been built by members of the Funnelbeaker culture and used for the burial of leaders and people important to the community. The earth mounds are up to 200 meters long, with the largest boulders facing east. The tombs were surrounded by gifts: stone tools, pottery and ornaments.



**The 1000th anniversary of Bolesław Chrobry’s coronation**

was celebrated by the AMU Faculty of Archaeology with a series of events promoting knowledge about the origins of the Polish state. Two scientific conferences co-organized with the Poznań City Hall and the Museum of the First Piasts at Lednica were attended by experts in medieval history. Students could join interactive classes about the Piast dynasty, take part in demonstrations of the jobs and everyday tasks from that period, as well as historical reenactments. The highlight of the celebrations was an art competition. Submitted works were featured in a special publication.





### The painting exhibition “Responsibility”

was organized in the spring by AMU Faculty of Biology as part of the Poznań Festival of Art and Science PFNiS. The works were submitted by Katarzyna Jackowska who works at our university, together with artists from the "Nowa Wena" school of art. The submitted works presented individual reflections on human responsibility in various aspects of life, both personal and social. The event was organized by Katarzyna Jackowska and Dr. Alicja Warowicka.



### Interdisciplinary Centre of Experimental Archaeology,

headed by AMU Prof. Marcin Danielewski, is a place where scientists and students can empirically study the past through technologies used by extinct civilizations. The centre features reconstructions of items as well as historic crafts and techniques. In addition to research, the goals of the centre involve promotion of knowledge and education. This is why archaeology enthusiasts, schools, and residents of Poznań have been invited to participate.



### Wielkopolska for the Planet

– a competition organized by the Marshal of the Wielkopolska Region, won by Dominika Aniot, M.Sc., Eng. from the NanoBioMedical Center. She was recognized for her research on solid-state lithium electrolytes, which are safer than liquid solutions because they eliminate the risk of leaks and spontaneous combustion in batteries. The stabilization of the hexagonal phase of lithium borohydride with the addition of lithium bromide ensures high ionic conductivity at room temperature, enabling the production of safer and more efficient batteries.



### DACHL-Eulen

– a knowledge contest aimed at secondary school students from the Wielkopolska Region, organized by Dr. Elżbieta Dziurewicz from the AMU Institute of Applied Linguistics. The competition was launched in 2019 and covers topics related to the history, geography, politics and culture of German-speaking countries. To date, five editions of the competition have been held for approximately 300 students. Workshops for teachers are held during the competition.



### Identifying the needs and interests of senior citizens

from Poznań and Puszczykowo in terms of participation in cultural and educational events was the aim of research conducted by a group of students from the Faculty of Sociology under the supervision of Prof. Agnieszka Jeran. The study was conducted using group interviews with people who had a variety of experiences and interests. Participants evaluated the existing range of events, formulated proposals for changes, and shared ideas for their own initiatives. The result of the work is a summary report.



### “An idea for a meeting place for the Rataje district in Łacina”

– a competition that awarded a distinction to a project proposed by a student at the AMU Faculty of Human Geography and Planning Zuzanna Romanowska with Julia Kopańska and Mikołaj Marciniak from the Poznań University of Technology. The jury particularly appreciated their analysis of public consultation results, attention paid to greenery, and the use of environmentally friendly and functional spatial solutions favoring natural materials, permeable paths, and native species of trees and shrubs resistant to climate change.



### “Socio-economic policy in light of national security”

– the latest monograph published by the AMU Research Centre for Public Engagement of Women. Authors of the publication, AMU Prof. Iwetta Andruszkiewicz, Eliza Kania and Joanna Łebkowska show how contemporary threats – from the climate crisis and growing social inequalities to geopolitical tensions caused by the war in Ukraine – affect the functioning of societies and create a need for new comprehensive solutions in public policy.



### The 23rd Gala of the Poznań Literary Award

was organized in partnership with AMU on May 23rd, 2025 in the Lubrański Hall of Collegium Minus. The winner of the Adam Mickiewicz Award for the volume "Autobiografia, t. 1: Wiara. 1975–1990" (Autobiography, vol. 1: Faith. 1975–1990) published by Znak Literanova, as well as his entire body of work was Michał Witkowski, a writer, journalist, and author of nine books. The Stanisław Barańczak Scholarship Award went to Anna Adamowicz for the volume of poems "Stłuc. Kręgosłup Tytanii Skrzydło", published by Wydawnictwo Warstwy.



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