

# NEWSLETTER

No. 154 February 2025

- TWO OF THE 12 PRIZES OFFERED BY ROMANIA'S TECHNICAL SCIENCES ACADEMY WERE AWARDED TO TRANSILVANIA UNIVERSITY OF BRAŞOV
- TRANSILVANIA UNIVERSITY OF BRAŞOV WAS SELECTED BY GOOGLE TO REPRESENT ROMANIA IN "GOOGLE.ORG CYBERSECURITY SEMINARS" PROGRAMME
- THE FOURTH TRANSNATIONAL MEETING IN THE FRAMEWORK OF *EUROPIA*INTERNATIONAL COOPERATION PROJECT
- THE COMPETITION "CAPTURE THE FLAG (CTF) EMINESCU" IN ITS 4<sup>™</sup> EDITION
- THE PROJECT INES: INNOVATIVE TEACHING AND LEARNING METHODS FOR THE PREVENTION OF NEW DRUG ABUSE
- THE *MOBILE MINDS IN MOTION* PROJECT
- LAUNCH OF "LANGUAGE BUDDY", A PROJECT FOR STUDENTS AND YOUNG MIGRANTS/REFUGEES
- ARTIST TALKWITH ROMAN TOLICI AT THE MULTICULTURAL CENTRE
- CHRISTIAN LILLINGER AND SIAN BRIE AT CHAMBER JAZZ @ TRANSILVANIA UNIVERSITY
- IN MEMORIAM PROF. DR. ENG. MIHAI TOFAN (1934 2017)

# TWO OF THE 12 PRIZES OFFERED BY ROMANIA'S TECHNICAL SCIENCES ACADEMY WERE AWARDED TO TRANSILVANIA UNIVERSITY OF BRAŞOV

At the end of the year, in a solemn plenary session, Romania's Technical Sciences Academy awarded the 2024 prizes, considering the outstanding publications issued between 2021 and 2022. Our colleagues who enjoy membership therein had an excellent performance, and succeeded in bringing home two of the 12 prizes, which emphasises the first-rate scientific results achieved by our university, already visible in the national rankings of the highereducation institutions. Thus, the team consisting of Prof. Dr. Cornel Samoilă, full member, together with his colleagues, Prof. Dr. Doru Ursuțiu and Assoc. Prof. Dr. Laura Floroian, was rewarded with "Traian Negrescu" prize for scientific excellence in the field of materials science. They were awarded this prize for the book "Functionalization of Surfaces for Medical and Electronic Applications", issued under the Publishing House of Transilvania University of Brasov, and cited in WorldCat.



The second prize was awarded to the team consisting of Prof. Dr. Sorin Vlase, full member, together with Prof. Dr. Marin Marin and Dr. Eracle Nicolescu, with the article "New Analytical Methods Used in Finite Element Analysis of Solid Mechanics", which brought them "Gheorghe Silas" prize for excellence in the field of mechanics.

Our colleagues are well known for the intensive scientific activity conducted together with their collaborators within the Department of Mechanical Engineering, which materialised in a significant number of scientific papers published in prestigious international journals, with a remarkable impact factor. The aforementioned authors are among the top 2% of the world's most prolific researchers according to the current rankings.

Given these achievements, we are confident that our university will keep ascending in the national and international hierarchies of the best educational institutions for scientific research, and will achieve ever-better results in the international rankings. This once again confirms that Transilvania University of Braşov is one of the best-performing Romanian universities in the technical field.





Prof. Habil. Dr. Eng. Călin ITU Prof. Habil. Dr. Eng. Maria Luminița SCUTARU Director of the Mechanical Engineering Department

## TRANSILVANIA UNIVERSITY OF BRAȘOV WAS SELECTED BY GOOGLE TO REPRESENT ROMANIA IN "GOOGLE.ORG CYBERSECURITY SEMINARS" PROGRAMME



This programme is a global initiative aimed at education and skills development in the field of cybersecurity. UNITBV, as project coordinator, and the West University of Timişoara, project partner, will train 100 students to provide cybersecurity services to 125 organizations within the local community. Through this programme, Transilvania University of Braşov will receive a grant of 500,000 dollars.

The Dean of the Faculty of Electrical Engineering and Computer Science, Assoc. Prof. Dr. Eng. Titus Bălan, appreciated the programme as an exceptional opportunity for the students to access state-of-the-art tools, work on real projects, and gain hands-on experience in cybersecurity. The Rector of Transilvania University of Brașov, Prof. Dr. Eng. Ioan Vasile Abrudan, emphasised that the university is honoured to represent Romania in this

international programme and contribute to the development of a cybersecurity culture.

The programme will be conducted in two phases. The former will focus on the education in the field of cybersecurity, covering various topics such as awareness and detection of threats, network security, ethical hacking, SOC operations, and security audits. In the latter, the students will implement the cybersecurity services during internships in various local organizations and will receive scholarships to engage in real cybersecurity projects under several mentors' guidance.

Along with Transilvania University of Braşov, the Faculty of Automation and Computers within the Technical University of Cluj-Napoca was selected as well in the framework of same programme, and will benefit from the same amount in this regard.

Soon, the conditions for the students to enroll in the programme will be announced, and a platform will be made available to the local organizations of Braşov and Timişoara, through which they will be able to request the cybersecurity services offered through the *Cybersecurity Seminars* programme.

Synthesis made by Assoc. Prof. Dr. Victor BRICIU

Compartment for Marketing and Image
Source: www.unitbv.ro/stiri-si-evenimente

# THE FOURTH TRANSNATIONAL MEETING IN THE FRAMEWORK OF *EUROPIA* INTERNATIONAL COOPERATION PROJECT

Between 30 and 31 January 2025, Transilvania University of Brașov hosted the fourth transnational meeting of the project EUROPIA – *On-Wheels Summer School for the Socio-Cultural Evolution of the European Values, Principles, Identity and Awareness*, an Erasmus+ KA 220 project dedicated to promoting the European values and identity through education and international academic cooperation.



The event took place in the University's Training Hub, bringing together representatives of the partner institutions: University of Warsaw (Poland) – the project coordinator, Public University of Navarra (Spain), University of Zagreb (Croatia), University of Belgrad (Serbia), Transilvania University of Braşov (Romania) and Pax Rhodopica Foundation (Bulgaria).



The discussions focused on the testing of the training materials and the educational platform, on the organization of the dissemination conferences and on the improvement of the project's digital content. At the same time, the partners assessed

the quality of the implementation and established the strategic directions for the promotion of the obtained results.

EUROPIA aims to create an innovative framework for the higher-education in the field of the European studies, facilitating the understanding of the common values and principles. A distinctive element of the project is the creation of the conceptual framework for an itinerant summer school which offers students the opportunity to explore the European history, politics and identity in an interdisciplinary environment.



The meeting in the city of Braşov was an important step for strengthening the partnership and preparing the final events of the project, including its final conference (Pamplona, 26-28 May 2025).

More details about the initiative, its objectives and activities can be found on the official project website, www.europiaproject.eu.

Assoc. Prof. Dr. Arabela BRICIU Project manager on behalf of UNITBV, Faculty of Sociology and Communication

#### THE COMPETITION "CAPTURE THE FLAG (CTF) EMINESCU" IN ITS 4TH EDITION

The Faculty of Electrical Engineering and Computer Science within Transilvania University of Brașov organised the 4<sup>th</sup> edition of CTFESCU (CTF Eminescu) competition, a *Capture the Flag*-type event, which has become a tradition at IESC, taking place every year by 15 January, the Day of National Culture, dedicated to the poet Mihai Eminescu. The CTF competition is aimed at the students passionate about cybersecurity, and brought together participants eager to test and improve their skills in this field, offering them exciting challenges and the opportunity to demonstrate their knowledge.



During the competition, the participants had to solve challenges in several fields of cybersecurity: cryptography, web application exploitation, reverse engineering, OSINT, steganography, exploitation of artificial intelligence models.

The 2025 competition was attended by 31 students. We congratulate all participants for their dedication and effort, and address special

congratulations to the students in the *CyberSecurity* master's programme, who were on the podium at this edition: Răzvan Răduţoiu − 300 €, Daniel Calaver − 200 €, Teodora Mitrache − 100 €.

```
loc 1C7D:
                                 eax, 0
sub_18CE
rax, aEnterTheFlag; "Enter the flag:
rdi, rax ; format
                   mov
call
lea
                   mov
mov
call
                                  eax,
                                  _printf
rdx, cs:stdin
                                                               ; stream
                                  rax, [rbp+s]
esi, 100h
rdi, rax
                                  _fgets
rax, rax
                   test
                   jΖ
                                  short loc 1CE1
              rax, [rbp+s]
rdi, rax
_strlen
rdx, rax
rax, [rbp+s]
rsi, rdx
lea
mov
call
mov
lea
                                                   loc_1CE1:
                                                                  rax, aErrorReadingIn
rdi, rax ; s
mov
mov
call
                rdi.
               sub 1A80
```

The prizes were provided with the support of the sponsor *Eviden Romania* and of the partners in *Braşov CyberHub*, which organizations actively contribute to promoting the education in the field of cybersecurity among young people.

We thank the students for their participation and look forward to the next edition of CTFESCU competition!

Prof. Dr. Eng. Titus Constantin BĂLAN Eng. Robert-Nicolae ȘOLCĂ Faculty of Electrical Engineering and Computer Science

## THE PROJECT INES: INNOVATIVE TEACHING AND LEARNING METHODS FOR THE PREVENTION OF NEW DRUG ABUSE



The new generation drugs or new psychoactive substances (NPS) are a group of mainly synthetic compounds, which are not yet under legal control, are sold under attractive names, and their escalation on the market has reached alarming

proportions. These compounds are characterised by pharmacological and toxicological properties with particularly serious consequences on the consumers' health; and in many instances, their effects are still unknown.

INES is an imaginary name for a pupil entering the "tunnel", but who, by getting involved in innovative, inclusive educational actions conducted in school, succeeded in getting out of it, changing his/her life. Therefore, INES is an example of success, a positive and powerful image of the chance for a change, for the limitation of the drug abuse in schools.

In this context, between 2021 and 2024, Transilvania University of Braşov participated in the ERASMUS+ project INES: Innovative teaching and learning methods for the prevention of new drug abuse. The project was coordinated by Alma Mater University of Bologna, Italy; and the partnership involved three universities (Alma Mater University, Bologna, Italy, Porto University, Portugal, Transilvania University of Braşov, Romania), three high schools (Gaetano Salvemini High School, Bologna, Italy, João Gonçlaves Zarco High School, Matosinhos, Portugal, Mircea Cristea Technical College, Braşov, Romania) and Swingtree software company, Brussels, Belgium.

The INES project was thought so as to develop a complex framework underlying the collaboration between high-school teachers and pupils, the academic environment, as well as other actors, in order to identify, adapt and use open educational strategies and resources in the daily didactic process, with a view to addressing the NPS problem. The project results are available on INES platform. They include: a European curriculum that supports the approach to the NPS topic; short, open

courses, addressed to teachers and pupils within preuniversity education; open educational resources, intended for the didactic personnel to design and implement the teaching/learning activities on the NPS subject; a collaborative textbook including learning content, teaching strategies, the structure of an educational game, all developed during the project implementation period teachers. bv pupils, representatives of the academic environment and other institutions; the book with the title "INES - An interdisciplinary and collaborative research - action experience to integrate the New Psychoactive Substances topic into upper secondary school curricula. The book is published in *open-access* system, presents the project, the results of the experimental didactic activities, as well as organizational, technical and didactic recommendations for the transfer of the project results into various educational experiences. The project platform also offers access to an educational game that enables an enjoyable, interactive acquisition of the basics of NPS.



The project provided a collaborative environment between pupils and teachers, pupils among themselves, teachers among themselves, pre-university and academic teaching personnel, as well as the members of the company that developed the educational game. There were face-to-face, but also a great many online meetings, both formal, project management, working meetings and informal meetings that created a pleasant, friendly atmosphere and strengthened the group.

Prof. Dr. Dana PERNIU Prof. Dr. Camelia DRĂGHICI Faculty of Product Design and Environment

#### THE MOBILE MINDS IN MOTION PROJECT

In late January, Transilvania University of Braşov, together with European University Foundation (Luxembourg), Erasmus Student Network (Belgium), Selcuk University (Türkiye), University of Porto (Portugal), University of Alcalá (Spain) and Vytautas Magnus University (Lithuania) organised the first meeting within the *Mobile Minds in Motion* project (code: Erasmus+ Key Action 2 - 2024-1-R001-KA220-HED-000256449).





The *Mobile Minds in Motion* project, with a 35-month duration (December 2024 - October 2027) and a budget of 400,000 €, aims for a healthier and more inclusive mobility experience, by promoting prevention and awareness on the importance of mental health.

The *Mobile Minds in Motion* (MMM) project acknowledges that the study abroad experience through the Erasmus+ programme is often perceived as transformative. However, it can raise significant mental health challenges. Many students face culture shock, homesickness, academic pressure, and feelings of loneliness or anxiety, which can deeply affect their emotional wellbeing.

The purpose of the MMM project is to provide the students and academic teaching personnel with the necessary tools and knowledge in order for them to train and cope with the mental health issues related to the unique experiences of studying abroad. By promoting open dialogue and destigmatizing mental health issues, the project aims at creating a supportive environment for all Erasmus+ participants.

MMM focuses on three main objectives:

- 1. Higher awareness: Removal of the stigma around the mental health issues faced by students, by promoting open conversations
- 2. Development of prevention strategies: Creation of tools and materials to help students cope with emotional and psychological demands during the study mobilities abroad
- 3. Supply of sustainable resources: Provision of the students and personnel with practical and sustainable resources, such as a self-assessment tool for the students and comprehensive guides for the international relations officers (IRO) and counsellors

With a view to achieving these objectives, several research and mapping activities will be performed, such as surveys and focus groups to explore the mobile students' mental health experiences and to identify prevention strategies; activities aimed at the creation of learning aids, of a self-assessment tool for the students, potentials-centred materials for the academic personnel to effectively assist the mobile students; resource testing activities through webinars and workshops. Furthermore, the project includes awareness campaigns, webinars, national events and online campaigns to disseminate the results and foster a community aware of mental health.



The project partners aim to build an online community through a platform where the students and stakeholders can share experiences, access support and continue the conversation on mental health.

Lect. Dr. Adrian Alexandru MOŞOI Faculty of Psychology and Education Sciences

### LAUNCH OF "LANGUAGE BUDDY", A PROJECT FOR STUDENTS AND YOUNG MIGRANTS/REFUGEES



The Faculty of Psychology and Education Sciences together with the Integration Centre for Migrants of Brașov launched "Language Buddy", a project dedicated to students and to the migrant and refugee youth (12–17 years) of Brașov. The project aims to facilitate access for young people from migrant and refugee families to non-formal Romanian language learning activities, while giving students the opportunity to develop their pedagogical and intercultural skills.

"Language Buddy" is a model simultaneously applied in eight European countries (Greece, Italy, Romania, Bulgaria, Spain, Portugal, Malta and Austria), based on intercultural exchange and the students' training in innovative teaching techniques. By getting involved in this project, the young migrants and refugees will strengthen their Romanian language knowledge, and the students will practice their mentoring skills, thus fostering an inclusive and supportive environment in the community of Braṣov.



On 13 and 14 January, two information sessions in this regard were attended by 122 students of Transilvania University of Braşov. Seventy of them have already registered to become mentors within the project. Starting in February 2025, these students will take a special training course, covering topics such as intercultural pedagogy, non-formal learning methods, intercultural communication and dialogue in education, digital tools, art as a tool for intercultural dialogue and organization of the mentoring sessions through the "Language Buddy" electronic platform. Starting in September 2025, the students will apply their new knowledge, offering linguistic and cultural support to the migrant and refugee youth of Brasov.



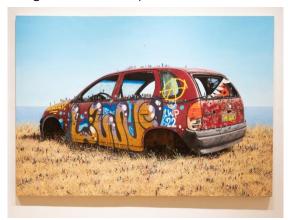
During the meeting, the participants highlighted the importance of the project in the context of the migrant community of Brașov, emphasising the need for educational initiatives dedicated to the children and young people in this category. A high interest in the opportunities for active involvement could be noticed especially among the ones aspiring to become teachers, who appreciate the experience acquired through their participation as valuable and relevant for their future teaching career.

Overall, the participants' feedback reflected a real commitment to the initiative and a desire to contribute to the migrant children's educational integration. Their active interest and questions confirm the relevance of the project and the need for well-structured resources to support the educational process in a multicultural context.

Assoc. Prof. Dr. Daniela POPA Faculty of Psychology and Education Sciences

#### ARTIST TALKWITH ROMAN TOLICI AT THE MULTICULTURAL CENTRE

On Thursday, 23 January 2025, the Multicultural Centre hosted a meeting with the artist Roman Tolici, moderated by Adrian Lăcătuș, within and starting from the *New Hope* exhibition.



The discussion started from the theme and title of the exhibition, with Roman Tolici speaking about the relation between hope and fear of death, respectively action, but also about the way that the *new hope* in his works of art is projected into a very distant future, which allows the artist to initiate a critical, ironic and interrogative relationship with his own present, but also with earlier creations that are reintegrated into the paintings of the latest series: "Working on this series I kept picturing in mind the Egyptian pyramids that I had never seen, but we all know them and feel them in a way, I dare say, similar. We (...) go and visit them as tourists without caring, in principle, about the reasons, dramas, tragedies behind them. Unfortunately or fortunately, I believe the same thing will befall our civilization which, whether we like it or not, will disappear at some point. We are left with the hope that it will be replaced by another civilization, better or worse, but another one. It would be more terrible if it were not replaced by anything, if it were practically doomed to perish; and, unfortunately, we are not far from such a risk. In general, life is so fragile, and nature, in its complexity, doesn't seem to take personal dramas into account.



If something doesn't work, self-destructs or fails to outlive a certain context, nature finds ways to put something else in its place; and, all in all, we end up no longer crying for anything. We don't cry for the dinosaurs, for example, we don't find what happened to them unnatural. Accordingly, this series of canvases is a kind of my own healing from the dramatization of the moment we find ourselves in now, which often seems a dramatic moment of change, of possible extinctions." (Roman Tolici)



Beyond his vision and apart from the themes of his creations, Roman Tolici also spoke about the way he works, about the photos he chooses when beginning a new painting; and at the end, he answered questions from the audience in the hall.

Anca PAPANA

Multicultural Centre of Transilvania University

#### CHRISTIAN LILLINGER AND SIAN BRIE AT CHAMBER JAZZ @ TRANSILVANIA UNIVERSITY

On Friday, 31 January, the Multicultural Centre hosted a new Chamber Jazz concert, the fourth of the 2024-2025 season, an event organised in partnership with Goethe Institute of Romania and the German Cultural Centre of Braşov.



Christian Lillinger (drums) and Sian Brie (guitar) began their collaboration in 2016 with a demo starting from Sian's compositions. Inspired by the visual art movement of gesturalism, the duo's music transposes, through the physical act of performance, their own subjectivity and emotions, conveyed as spontaneous, intuitive creations. In this regard, music turns into the expression of the sensitivity and idiosyncrasies arising from the two artists' interaction.

Christian Lillinger, known for his innovative approach to percussion, is one of the most interesting drummers of the contemporary jazz and experimental music stage. With a career including over 110 albums, of which 23 released under his own name, Christian has redefined the limits of his instrument, interweaving technical precision and unlimited creativity. Distinguished with prestigious awards such as SWR Jazzpreis and German Jazz Prize, he has collaborated with internationally renowned artists and has been present on the stages of the most important festivals, from Donaueschinger Musiktage to Elbphilharmonie Hamburg.

After studying at the National University of Music of Bucharest, where he was initiated into jazz and free jazz by the pianist Mircea Tiberian, Sian Brie moved to Berlin. There he had the opportunity to meet and collaborate with important musicians of the Berliner stage, such as Christian Lillinger, Horst Nonnenmacher or Manuel Miethe. After one year, Sian Brie left for London, a city where he met the musicians with whom he would form the experimental band UMAMI, namely John Edwards, Mark Sanders and Dawid Frydryk. Together with UMAMI, Sian Brie has given a series of concerts in Romania, the most recent being on the stage of Cluj Radio Hall and Apollo 111 Theatre of Bucharest. He is a co-founding member of the experimental music band And then This!, which also includes Diana Miron, Laurentiu Cotac and Daniel Stanciu.



Over time, he has collaborated with artists such as Maurice de Martin, Michael Griener, Aram Shelton, Anthony Gutierrez or Peter Ajtai.

Anca PAPANA

Multicultural Centre of Transilvania University

#### IN MEMORIAM – PROF. DR. ENG. MIHAI TOFAN (1934 – 2017)



Mihai Tofan was a distinguished professsor, a man of great culture and erudition, and a reputed specialist in the Romanian academic environment.

Born in Constanța in the year 1934, he

moved with his family to Braşov, where he attended "Johannes Honterus" National College between 1952 and 1955. After graduating from high school, he registered for the Faculty of Mechanics within the Polytechnic Institute of Braşov, from where he transferred, in 1957, to the Polytechnic Institute of Bucharest, which he graduated from in 1960. He spent seven years in manufacturing, and then he filled, by competition, the position of Assistant Professor at the Polytechnic Institute of Braşov.

He climbed all the steps of a successful teaching career and became a Professor in 1995. He was awarded the doctor's degree by the Petroleum-Gas University of Ploiești in 1967. He had devotedly

served Transilvania University of Brasov, conducting his activity in various forms, for almost 50 years, within the University. During this long activity, he wrote courses, monographs and numerous articles. A few titles worth mentioning are Mechanics-Statics, Kinematics, Deformations of Structures. He enjoyed membership in several scientific organizations such as: AGIR, ARTENS, ARMR, SMRTA. He taught the courses of Mechanics, Finite Element Method, Dynamics of Rigid Systems, Numerical Methods. He supervised many engineers who were awarded the doctor's degree in sciences in the field of Mechanical Engineering. For his entire career and commitment to the educational and scientific activities, he was appreciated and esteemed by both colleagues and students. Professor Mihai Tofan will remain a role model for many of us.

> Lect. Dr. Eng. Janos TIMAR Faculty of Mechanical Engineering Photo source: www.agir.ro