



**Transilvania
University
of Brasov**

NEWSLETTER

No. 101 September 2020

- IDEA AWARD OBTAINED BY THE STUDENTS IN THE FACULTY OF MECHANICAL ENGINEERING
- THE STUDENTS OF THE FACULTY OF PRODUCT DESIGN AND ENVIRONMENT AT THE 9TH EDITION OF "GLASSBERRIES DESIGN AWARDS"
- THE FIFTH EDITION OF THE INTERNATIONAL CONFERENCE "NEW TRENDS ON SENSING - MONITORING - TELEDIAGNOSIS FOR LIFE SCIENCES"
- AN INITIATIVE WITH DEMONSTRATIVE-DIDACTIC AND SCIENTIFIC-RESEARCH PURPOSE AT THE FACULTY OF SILVICULTURE AND FOREST ENGINEERING
- PARTNERSHIP FOR DEVELOPING THE NEW HUB OF KNOWLEDGE AND INNOVATION EIT MANUFACTURING
- JUNIOR RESEARCHER PROGRAMME 2020 CONFERENCE
- THE THIRD EDITION OF THE INTERNATIONAL SUMMER SCHOOL "FOOD SAFETY AND HEALTHY LIVING"
- PARTNERSHIP AND PARTICIPATION IN THE SUMMER SCHOOL OF PSYCHOANALYSIS, 14TH EDITION
- SUCCESSFUL ALUMNI - HANNA PETER
- SUCCESSFUL ALUMNI - ALEXANDRU PANDI

IDEEA AWARD OBTAINED BY THE STUDENTS IN THE FACULTY OF MECHANICAL ENGINEERING

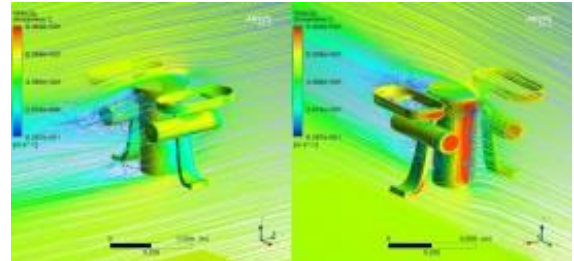


Between November 2019 and July 2020, an international project dedicated to the students in engineering and design took place under the coordination of *International Design and Engineering Education Association (IDEEA)*. The IDEEA project, initiated by companies in the automotive industry in North America, is in its second edition, this year's final taking place at Bergische Universität Wuppertal.

The IDEEA initiative aims to train young engineers and designers in the field of technologies relevant for mobility, product development and 4.0 industry, encouraging students to experiment, solve and develop new methods, visions in design, promoting collaborative design and engineering in global teams.

In fact, students at 22 universities (only three in Europe) attended the event; they formed 13 teams with members from three different continents, at a distance of at least five hours on the time zone. Each team was supervised by two professors - mentors from the participating universities. The entire activity of the teams was organized, led and achieved by students, the mentors having only the role of ensuring the communicative support with the project staff. This year's theme was the conception, design and design of a utility drone.

Canada, India, Korea, China and Romania, as well as the mentors Prof. Dan Centea (McMaster Canada) and Prof. Silviu Butnariu (UNITBV).



On 20 and 21 July, the final presentations of the students' projects took place, and on 23 July, 2020, the awards ceremony. There were several sections: *Best Product Innovation, Best Design (1 and 2), Best Engineering (1 and 2), Best Production Readiness, Best Collaboration, Best Presentation, Best Product Award (1, 2 and 3)*, with a total of 11 awards. Of the 13 competing teams that participated in the final presentations, only four managed to win a prize.

The team that included UNITBV students was among the awarded ones, occupying the second place in *Best Engineering*. The students are: Ioana-Alexandra Roșu, Ionuț Carp, Gheorghe Dron, Mihai Trandafir – the Faculty of Mechanical Engineering, master's degree programme Simulation and Testing in Mechanical Engineering, 1st study year



The project presented by our team proposed the creation of a drone for the monitoring and mapping of oil spills, as well as the protection of marine life through real-time warning (*Oil Spill Drone*).

Prof. Dr. Eng. Silviu BUTNARIU
Faculty of Mechanical Engineering

22 Participating Universities



The C3 team, which included our students, completed the competition with students from

THE STUDENTS OF THE FACULTY OF PRODUCT DESIGN AND ENVIRONMENT AT THE 9TH EDITION OF "GLASSBERRIES DESIGN AWARDS"

It is the third consecutive year in which the students in Industrial Design – both Romanian and English study programmes within Transilvania University of Braşov were invited to participate in the prestigious design competition in the field of glass packaging, together with the students from eight other universities in Portugal and Poland.



The *Glassberries Design Awards* competition, organized by the Portuguese company BA Glass, is in its 9th edition. The theme proposed for this year is inspired by the lifecycle of glass and enhances its characteristics: solid identity, fostering of creativity and innovation, adequacy for Sustainable Development.



The challenge for the students, this year, is to create a glass container for the sparkling wine segment, with an emphasis on the design of the package.



This year's participants are the 4th-year students Diana Asmarandei, Alexandru-Florin Barbu, Oana Marcu and Ioana Ciocan.



Our students' projects, realized under the coordination of Prof. Dr. Eng. Lucian Bârsan, were selected for the final phase, the evaluation of the works and the establishment of the winners being scheduled for November 2020, in Porto.

Prof. Dr. Eng. Codruța JALIU, Dean
Faculty of Product Design and Environment

THE FIFTH EDITION OF THE INTERNATIONAL CONFERENCE "NEW TRENDS ON SENSING - MONITORING - TELEDIAGNOSIS FOR LIFE SCIENCES"

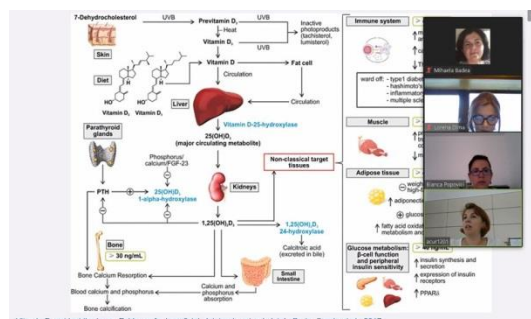
Between 3 and 4 July 2020, Transilvania University of Braşov, by several representatives of the Faculty of Medicine, the Faculty of Food and Tourism and the Faculty of Electrical Engineering and Computer Science, coordinated the organization of the fifth edition of the international conference *New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences* (NT-SMT-LS 2020), conducted in online format.

This year, other universities in the country and abroad - Carol Davila University of Medicine and Pharmacy in Bucharest, Università Degli Studi di Milano (Italy), Université de Perpignan Via Domitia (France) and the Polytechnic University of Bucharest - but also the sponsors Synevo Romania and PalmSens (Netherlands) supported the event.



This edition of the conference was directly linked to the NOMARES workshop - *New materials for electrochemical recognition of inorganic and biological species* organized by the Polytechnic University of Bucharest, and to BIOATLAS International Conference, organized by Transilvania University of Braşov. During the conference, 123 papers were presented - plenary, keynote presentation, oral presentations and posters. The participants came from different universities, research institutes or companies in Romania (Braşov, Bucharest, Cluj-Napoca, Iaşi, Galaţi) or other countries (Italy, France, Slovenia, Portugal, Norway, USA, Egypt, Russia, etc.). The research results were also presented for the field of tele-medicine / tele-education, personalized nutrition, modern determinations of environmental samples, food, pharmaceuticals and biological samples, the involvement of advanced information technologies (artificial intelligence, robotics) in the management of emergency situations, in the

monitoring of medical conditions and public health programs to increase the quality of life.



Moreover, during the conference, the young researchers were awarded in several categories:

- *Young Scientist Paper Award* - Simone Biella (Università Degli Studi di Milano, Italia), Mariana Gois Ruivo da Silva (University of Ljubljana, Slovenia);
- *Poster Award* - Adrian Blidar ("Iuliu Haţieganu" University of Medicine and Pharmacy in Cluj-Napoca), Cristina Adochite (Transilvania University of Braşov), Andreea Cernat ("Iuliu Haţieganu" University of Medicine and Pharmacy in Cluj-Napoca), Veronica Anastasoae (the Polytechnic University of Bucharest);
- *Oral Presentation Award* - Natalia Festinger (University of Lodz, Polonia), Jelena Topić Božič (University of Nova Gorica, Slovenia), Daniel Calaver (Transilvania University of Braşov), Oana Lazar (Polytechnic University of Bucharest).

This online experience has shown that scientific events can go forward with the benefits of this format, facilitating exchanges of information and research results from different groups, and identifying new opportunities for collaboration. Using the knowledge gained this year, the tradition will continue with the sixth edition of the international conference, at the organization of which we look forward to receiving proposals for collaboration from other faculties / research centres within UNITBV on topics in the field of (tele) monitoring applied in life sciences.

Prof. Dr. Mihaela BADEA
Faculty of Medicine

AN INITIATIVE WITH DEMONSTRATIVE-DIDACTIC AND SCIENTIFIC-RESEARCH PURPOSE AT THE FACULTY OF SILVICULTURE AND FOREST ENGINEERING

In the last ten years, the Faculty of Silviculture and Forest Engineering of Transilvania University of Braşov, represented by the Silviculture team, participated in numerous experimental-demonstrative projects in state and regime forest ranges of Romania. This was the case in Bârzava-Arad, Sălişte-Sibiu, Fărcaşa-Neamţ, Scorniceşti-Olt etc., where the works aimed to install and present innovative forestry-technical models, by comparison and even in antithesis with the usual way of working in the forests of Romania, imposed by the national technical norms for Silviculture.

A step forward in the presentation of another way of working in the experimental-demonstration surfaces was the recent installation (in 2016), in the Sturza forests in Bucov-ARGEŞ, of the first marteloscope for the transformation of the stands of trees into irregular forest of Romania. It was recently completed (July 2020) by the installation of two small marteloscopes in a stand owned by SC Tornator SRL din Braşov, administered by the private Forest Range (O.S.P.) Oituz-Bacău.



a) *One of the marteloscopes at O.S.P. Oituz
Before the intervention*



b) *After the works of July 2020*

These are part of a research-development project, with a didactic-demonstrative component, launched this year, and they aim to present a different way of working, not specific to our forestry practice, but possible to apply without special limitations in current activities; furthermore, they are meant to represent a necessary reference for the field staff of the forestry unit.

The two marteloscopes will be used to “engage and train” the colleagues at O.S.P. Oituz in the practice of applying cultural operations (cleaning and thinning) in young, very thick and naturally regenerated beeches, the optimal management of which is a real technical and economic challenge for forestry specialists.

The marteloscopes can also be a practical reference system for the students of our faculty who, for six years, have been participating in productive practice activities, lasting two months (August-September), at O.S.P. Oituz.

Prof. Dr. M.Sc. Eng. Valeriu-Norocel NICOLESCU
Faculty of Silviculture and Forest Engineering

PARTNERSHIP FOR DEVELOPING THE NEW HUB OF KNOWLEDGE AND INNOVATION EIT MANUFACTURING

Since June 2020, the *EIT Manufacturing* knowledge and innovation community has been officially represented in Romania by a new hub managed by a consortium formed by Iceberg+ and Transilvania University of Braşov. This hub supports the creation of skills and excellence in the field of manufacturing, including the complete digitization of industrial processes, encouraging sustainable production.

EIT Manufacturing is a partnership of over 50 organizations, with support and backing from the European Institute of Innovation and Technology (EIT), an independent EU body set up to support innovators to turn the best ideas into products, services and workplaces for Europe. EIT was created in 2008 to boost Europe's innovative capacity. EIT is an integral part of Horizon 2020, the EU's Framework Program for Research and Innovation 2014-2020, a unique initiative, the only one that fully integrates fields such as business, education and research. This institute supports the development of dynamic pan-European partnerships between universities, research laboratories and companies - innovation communities.

EIT Manufacturing Hub Romania aims to act as a point of interaction between EIT Manufacturing and the local actors in the Romanian ecosystem, also increasing the involvement and participation of local stakeholders by organizing information events and by promoting calls for EIT Manufacturing projects and opportunities.



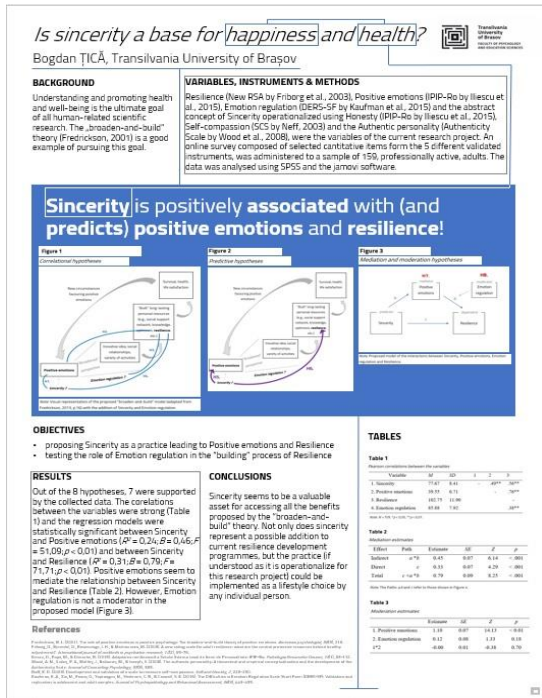
This initiative will be coordinated by Iceberg, an innovation and technology transfer consulting company with extensive experience in European and national projects, focused on innovation and digital transformation; and Transilvania University of Braşov - as the largest university in the Central Region of Romania - will participate in the management of EIT Manufacturing Hub Romania, given that nine of its 18 faculties focus on engineering studies, and a significant part of their activity is dedicated to applied research in the field of manufacturing processes within the Research and Development Institute of the University.

Synthesis made by Victor BRICIU,
Marketing and Image Office

Source: <http://www.adrcentru.ro/proiecte-regionale/eitmanufacturing-romania/>
Credit for graphics: eit.europa.eu/ro

JUNIOR RESEARCHER PROGRAMME 2020 CONFERENCE

I did not count the hours invested in the elaboration of my bachelor's thesis; however, if I had done it, the number would certainly have been of many hundreds.



Nevertheless, the actual presentation of the paper in the bachelor's final exam is short and it seems that no matter how successful it is and no matter how many appreciations it receives, the 10 minutes of presentation are not enough for highlighting the hundreds of working hours. If the whole process had culminated in the actual presentation and that had been all, I would have been a little disappointed, feeling that maybe it all ended too quickly and too suddenly. Fortunately, my bachelor's degree coordinator, Assoc. Prof. Dr. Ana-Maria Cazan "urged" me to continue and to participate in the conference organized by Junior Research Programme, and more than that, even as a presenter. So, I built as soon as possible (but also carefully and well) a presentation poster and, by writing an abstract one minute before the registration deadline, I officially expressed my desire to attend the conference organized by jSchool to present my research results. A few days later, I was informed that, given the large number of registrations and the limited time of the conference, my work was not chosen. Afterwards, I received

another email informing me that a team had withdrawn and that my abstract was next in their hierarchy. Following the acceptance of the invitation to fill the vacancy, I also received the conference programme. The scheduling amused and scared me a little at the same time. Around me on the list I could see only doctors and research teams and somewhere, lost among them, my name "Mr. Bogdan Țică". At first, I wondered what I was actually doing on that list, but I was there, so I prepared my speech and introduced myself (online), a little excited, at the beginning of the conference.



Almost to my surprise, my place was right there, among those researchers. In a relaxed, welcoming and encouraging atmosphere, each person (or team) presented their research and then answered the questions of the participants or moderators for almost 20 minutes. My work was also appreciated and I stopped explaining and answering questions only because the limited time did not allow me to continue.

For me, the presentation experience was and still is special. I'm glad I was encouraged to participate and I'm glad I had the opportunity to be on the list of presenters. Junior Research Programme allowed me to genuinely feel that the whole process of writing the bachelor's thesis was worth it, also giving me the opportunity to contemplate and taste a little of a world in which, who knows, maybe I truly belong.

Bogdan Țică, 3rd year Psychology, Faculty of Psychology and Education Sciences

THE THIRD EDITION OF THE INTERNATIONAL SUMMER SCHOOL “FOOD SAFETY AND HEALTHY LIVING”

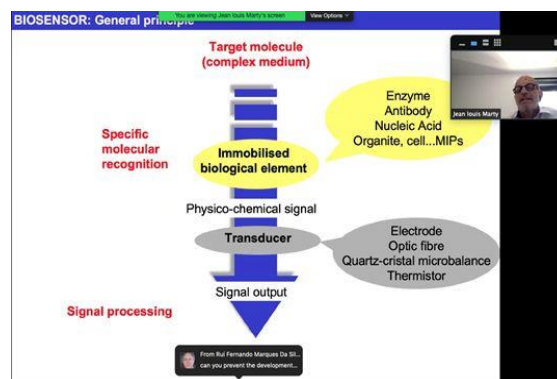
Between 5 and 8 July 2020, the third edition of the International Summer School– *Food Safety and Healthy Living* (FSHL 2020) took place online, perfectly fitting into the objective of the CEEPUS project of the same name, coordinated by Transilvania University of Braşov.



As co-coordinators of this event, we also mention “Carol Davila” University of Medicine and Pharmacy, Bucharest (Romania), Universit teea Degli Study di Milano (Italia) and University of Perpignan via Domitia (France). Mention must be made of the support from Synevo Romania, one of the most important institutions involved in the clinical laboratory, but also PalmSens BV (Netherlands). Seventy students (at bachelor’s, master’s and doctoral programmes) from different universities in Romania (Braşov, Bucharest, Galaţi, Cluj-Napoca, T rgu Mureş), Poland (Lodz, Warsaw), Slovenia (Ljubljana, Nova Gorica) and Italy (Milan) benefited from the experience of 26 academic personalities from different countries (Romania, Italy, France, Slovenia, Portugal, USA, Egypt, Russia) who presented multidisciplinary topics in the field of nutrition, food chain control, food safety for a healthy life.

Topics on monitoring the composition of foods and food supplements using classical analytical methods, high specificity biosensors, analyses of biologically active (antioxidant) or toxic (mycotoxin) compounds were presented. Recommendations for a specific diet adapted to age or pandemic periods, biochemical mechanisms in the case of intermittent fasting and recommendations for laboratory tests for a diagnosis of lactose intolerance or milk allergy, but also a practical guide for accurate nutrition - were made. The

importance of artificial intelligence in the management of various diseases or nutritional plans was highlighted. New topics related to obtaining / beneficial effects / toxicity of nanoparticles were introduced this year.



After interesting discussions on the benefits of beta-glucan consumption, presentations on the possibility of using certain plants to treat or prevent certain diseases were included in the programme. At the end of the event, the students appreciated the quality and novelty of the presentations and awarded prizes to the professors: Award for the best professor, Award for the most interesting topic, Award for the best group of professors, Award for young professors participating in the academic team.

UNITBV students stood out by asking questions and making remarks on the courses they attended, receiving the Award for the most active team of students, the Award for the most active undergraduate student - Roxana Zahiu (bachelor’s degree programme Clinical Laboratory, 3rd study year), but also the Award for the most active graduate student - Lupu Simina (master’s degree programme Management of Preventive Strategies and Health Policies, 1st study year).

Taking into account the reactions of the participating students and professors, we can consider this first experience for organizing the summer school using the online format as a success. For certain, these special experiences will remain in our memory for a long time and will be a good reason to organize the 4th edition of the summer school next year.

Prof. Dr. Mihaela BADEA
Faculty of Medicine

PARTNERSHIP AND PARTICIPATION IN THE SUMMER SCHOOL OF PSYCHOANALYSIS, 14TH EDITION



The Faculty of Psychology and Education Sciences was the partner of the Romanian Society of Psychoanalysis in organizing online the 14th edition of the Summer School of Psychoanalysis with the theme "Psychoanalytic Thinking" between 2 to 5 July 2020. The lecturers were members of the Romanian Society of Psychoanalysis with expertise in the field of psychotherapy inspired by Freud and developed over time by many psychoanalytic schools.

As an expression of the interest in the good training of the future specialists in the field, the organizers of the summer school offered 10 students of the Faculty of Psychology and Education Sciences the opportunity to participate in the proceedings. We dare say they benefited the most from the lectures and discussions in the supervision groups organized by the specialists, as well as from the debate in the psychoanalytic grid of the feature film "Love and Death" (1975, directed by Woody Allen).

Their reactions testify to the usefulness of the experience they lived:

"In the section dedicated to students, we received information related to the training in psychoanalysis and to the organization of the school of psychoanalysis in Romania. I received this information with interest, enriching my information related to lifelong learning and complementary training in psychotherapy."

"The theoretical presentations in plenary, the theoretical and clinical discussion groups, the film screenings brought me a greater understanding of the profession of psychotherapist, but also a greater knowledge of psychoanalytic methods and practice."

"For me, it was a very challenging and highly interesting experience. I liked case studies the most, because they were a foray into reality."

"It was a special opportunity to enrich my therapeutic approach, the level was very deep ... I think it is very opportune for graduate students to know more about this unique approach that opens up so many paths."

Following the traditional format of the Society's summer schools, the next edition, where we hope to meet directly, will also be organized in collaboration with the Faculty of Psychology and Education Sciences. We are convinced that this event will help strengthen the relationship between the academic world and that of practitioners, for the benefit of the students who are preparing to become psychotherapists, as well as of the professors who are training them.

Prof. Dr. Mariela PAVALACHE-ILIE, Dean of the
Faculty of Psychology and Education Sciences
Dr. Rita TEODORU, Psychoanalyst Psychotherapist

■ CONTENTS

SUCCESSFUL ALUMNI - HANNA PETER



Hanna Peter is a graduate of the Faculty of Technological Engineering, specialization of *Industrial Product Design Engineering* (class of 2005). After graduation, Hanna Peter started her professional activity as a design engineer at Schaeffler Romania, the subsidiary of Braşov. In parallel, she continued her studies, also at Transilvania University of Braşov, attending the courses of *Advanced Modelling and Drawing Techniques* master's programme, within the Faculty of Technological Engineering.

Upon completion of her master's degree, she moved on to the next stage of her career at Schaeffler Romania, as head of office in the Product Design department. Her results were very good and the confidence from the staff of Schaeffler Group headquarters in Germany gradually increased; consequently, in five years, under the leadership of Ms. Peter, the team of 16 designers and specialists in technical calculation turned into a solid organization. with multiple responsibilities in

research and development and with over 100 employees. Today, the organization is known as *Engineering Center Schaeffler Romania*.

As the project in Braşov was a success, she was offered to continue her work at the group's headquarters in Herzogenaurach, Germany. Since 2011, Ms. Peter continues her professional activity in the central department of Research and Development Resource Management. Her main activity is to define the development strategy of the over 35 Schaeffler locations where research and development activities are carried out.

Some thoughts transmitted by Hanna Peter could become benchmarks for the younger generation: "Don't expect to have everything handed to you. You must be curious, take the hardships as challenges, fight, get to know foreign countries and faculties, benefitting from student mobility programmes, take advantage of the beautiful student years, have fun, but most importantly - learn. Industrial design is not only engineering, but also art. Wherever art is present, it takes passion. And wherever your path leads in life, you need perseverance, knowledge and passion."

Assoc. Prof. Dr. Daniela CIOBANU
ALUMNI Officer,
Faculty of Product Design and Environment

■ CONTENTS

SUCCESSFUL ALUMNI - ALEXANDRU PANDI

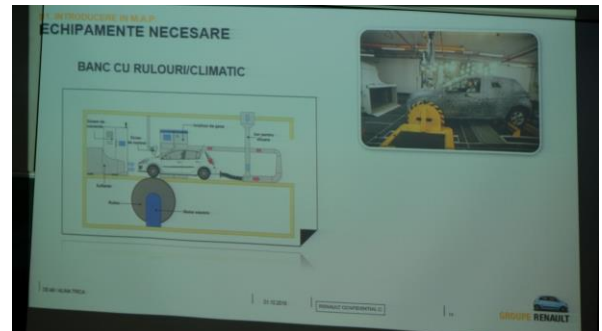


Alexandru Pandi stood out during his student years through his practical works and the desire to make public his research results, winning thus numerous awards, such as the First Prize at the Student Scientific Communication Session of Transilvania University in Braşov with the paper "Considerations on the Distillation curve of Gasoline - Ethanol Mixtures" (authors: Venetia Sandu, Daniel Minisan, Ioana Moldoveanu and Alexandru Pandi) and the Second Prize with the paper "Considerations on the Distillation curve of Diesel - Ethanol Mixtures" (authors: Daniel Minisan, Ioana Moldoveanu, Alexandru Pandi) both presented in May 2007.

After graduating from the Faculty of Mechanical Engineering, Department of Road Vehicles - English (class of 2008), Alexandru Pandi was employed by *Dacia Groupe Renault*, Mioveni, county of Argeş, in the Automobile Manufacturing and Testing Department. As proof of his professional skills, in 2011 he transferred to *Renault Technologie Roumanie*, Titu Technical Centre, county of Dâmboviţa, within the Automobile Testing and Development Centre.

Between 2015 and 2018, he completed a specialization internship at Renault S.A. France,

Lardy Technical Centre in Essonne. After his return from France, he was promoted as Head of Department within the Automobile Testing and Development Centre, while continuing the activity of support for the research-development study results, for example with the paper presented on 5 November 2018 in the framework of a university conference, entitled "Presentation of the calibration activity (MAP-Mise Au Point) within Renault group Romania".



Lecturer Janos TIMAR
ALUMNI Officer,
Faculty of Mechanical Engineering

■ CONTENTS