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## UNIVNET 2022

# INNOVATIVE MACHINES, TECHNOLOGIES AND MATERIALS IN CIRCULAR ECONOMY ENVIRONMENT

September 26 - 27 - 28, 2022  
Hotel Kaskáda Brno, Czech Republic

1<sup>st</sup> Call for Papers - conference proceedings will be sent for indexing to Web of Science, SCOPUS and IEEE Xplore database.



Under the patronage of

**Dr.h.c. prof. Ing. Ľubomír Šooš, PhD.,**

Dean of Faculty of Mechanical Engineering, Slovak Technical University in Bratislava, Slovakia;  
and

**Doc. Ing. Jiří Hlinka, PhD.,**

Dean of Faculty of Mechanical Engineering, Brno University of Technology, Czech Republic.

[www.univnet.elfa.sk](http://www.univnet.elfa.sk)

**Dear Ladies and Gentlemen,**

we would like to invite you to the **11<sup>th</sup> year of the international conference**, which traditionally continues the previous successful years organized by Faculty of Mechanical Engineering of Slovak Technical University in Bratislava and Faculty of Mechanical Engineering of Technical University of Košice. These events have become a place of mutual exchange of views, experiences and new scientific knowledge of experts dealing with environmental, technical, economic and legislative aspects of environmental protection. The main focus of UNIVNET 2022 will be "Innovative machines and technologies in circular economy environment".

A friendly atmosphere, a high level of professionalism and off-site meetings and conversations in the social part of the conference will be beneficial for every council participant. Active participation is possible in the form of scientific and professional lectures as well as by exhibiting and presenting companies. We believe that an attractive council venue will contribute to the warm atmosphere.

UNIVNET 2022 Organizing Committee

## Main Topics

- ▲ ***Environmental Engineering***
- ▲ ***Critical metals and raw materials recycling***
- ▲ ***Recycling Machines and Technologies***
- ▲ ***Environmental Measurement and Monitoring***
- ▲ ***Circular Economy***
- ▲ ***Clean Technologies***
- ▲ ***Environmental, Economics and Energetics Aspects Waste Treatment***
- ▲ ***Eco-design***
- ▲ ***Software Products for Environmental Studies***
- ▲ ***Raw materials and Raw Energies***

## Important Deadlines

<b>Registration</b>	<b><a href="http://www.univnet.elfa.sk">www.univnet.elfa.sk</a></b>
Submission of draft paper according template 4-6pp	22 <sup>th</sup> August, 2022
Notification of acceptance and comments of reviewers	27 <sup>th</sup> August, 2022
Submission of full corrected paper (Camera ready paper)	4 <sup>th</sup> September, 2022
Final council program and last info	15 <sup>th</sup> September, 2022

## Language and Proceedings

**Council language: English, Slovak, Czech. All papers must be submitted in English.**

All papers must be presented either in oral session or in poster session. If a paper, included into the proceedings, fails to be presented in any way at the conference, paper won't be published in IEEE Xplore database, SCOPUS and WoS. Pay to publish is not allowed. Please, use paper template from conference webpage to publish your contribution. Papers will be checked within the context of plagiarism. If paper plagiarism exceeds 20 percent, paper won't be added to proceedings and indexed. Please, check your paper originality.

**Registration at [www.univnet.elfa.sk](http://www.univnet.elfa.sk)**

## Scientific and Program Committee

- ▲ Dr.h.c. prof. Ing. Ľubomír Šooš, PhD., Slovak Technical University in Bratislava, Slovakia (Committee Chair)
- ▲ Dr.h.c. mult. prof. Ing. Miroslav Baďida, PhD., Technical University of Košice, Slovakia (Committee Co-chair)
- ▲ prof. Ing. Pavol Ochotnický, PhD., University of Economy in Bratislava, Slovakia
- ▲ prof. Ing. Rudolf Sivák, PhD., University of Economy in Bratislava, Slovakia
- ▲ prof. Ing. Marcela Pokusová, PhD., Slovak Technical University in Bratislava, Slovakia
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- ▲ Ing. Róbert Szabó, PhD., Slovak Technical University in Bratislava, Slovakia
- ▲ Ing. Ján Pribula, Automotive Industry Association of Slovak Republic
- ▲ prof. Dr. habil. Ing. Hubert Debski, University of Lublin, Poland
- ▲ prof. Dr. habil. Ing. Beata Kowalska, University of Lublin, Poland
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- ▲ prof. Dipl. Ing. Dr. Eberhard Schmidt, University of Wuppertal, Germany
- ▲ prof. Ing. Mirjana Miloradov, PhD., University of Novy Sad, Serbia
- ▲ prof.i.R. Dipl. Ing. Dr. Mikuláš Luptacik, University of Vienna, Austria
- ▲ Ing. Marek Patsch, PhD., University of Žilina, Slovakia
- ▲ Prof. Dr. Ing. Dr.h.c. Bernd Friedrich, IME Metallurgische Prozesstechnik und Metallrecycling, Germany
- ▲ Ing. Alois Studenic, EUCS Ingenieurbüro GmbH, Austria
- ▲ Prof. DSc. Stanislav Legutko PhD. MSc. Eng., Poznan University of Technology, Poland
- ▲ prof. Dr. Ing. Jiří Marek, PhD., DBA, VUT Brno, Czech Republic
- ▲ Assoc. Prof. Jaroslav Katolicky, PhD., VUT Brno, Czech Republic

## Organizing Committee

- ▲ doc. Ing. Lýdia Šobotová, PhD., Technical University of Košice, Slovakia (Chair)
- ▲ Ing. Iveta Onderová, PhD., Slovak Technical University in Bratislava, Slovakia (Co-chair)
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- ▲ Ing. Tjbor Dzuró, PhD., Technical University of Košice, Slovakia
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- ▲ Ing. Lucia Ploskuňáková, Slovak Technical University in Bratislava, Slovakia
- ▲ Ing. Štefan Fejedelem, elfa, ltd., Košice, Slovakia

## Preliminary Program

September 26, 2022	September 27, 2022	September 28, 2022
14:00 - 18:00 Registration	08:00 - 09:00 Registration	09:00 - 12:00 Plenary Session
14:00 - 18:00 Welcoming	09:00 - 09:15 Opening Speech	12:00 - 12:30 Evaluation & Closing
18:00 - 20:00 Welcome Dinner	09:15 - 12:00 Plenary Session	12:30 - 14:00 Lunch
	12:00 - 14:00 Lunch	14:00 - 18:00 Free program at conference venue
	14:00 - 17:00 Plenary Session	
	18:30 Gala Dinner	

**Registration at [www.univnet.elfa.sk](http://www.univnet.elfa.sk)**

## Fees and Payment Information

<i>Payment done</i>	<i>Until 31<sup>th</sup> August, 2022</i>	<i>1<sup>st</sup> September, 2022, and after</i>
Contribution with active participation	350 €	400 €
Contribution with student/IEEE participation	300 €	350 €
Participation with no contribution	300 €	350 €
Accompanying person	100 €	100 €
Company presentation	500 €	500 €

**Fee includes:** VAT, participation, refreshment, materials and proceedings, technical background, social program. Fee doesn't include accommodation! Contributions without payment can't be published in proceedings or sent for publishing to any other scientific database.

Payment for the conference is possible by a bank transfer or in cash at council venue. Please notice that all the bank and transfer fees should be paid by the sender so that the UNIVNET organizing committee receives the exact amount of money as stated in the registration conditions. As your personal payment identification, write: UNIVNET 2022 / your name(s) into the message for receiver of the payment.

**Bank:** Tatrabanka, a.s., Košice, Slovakia  
**Account owner:** elfa, s.r.o., Park Komenského 7, 040 01 Košice, Slovakia  
**IBAN:** SK85 1100 0000 0029 2688 4443  
**SWIFT:** TATR SK BX  
**Variable symbol:** 2628092022  
**Message (important!):** UNIVNET 2022 / Name and surname of participant(s)

## Council Venue and Accommodation

**Hotel Kaskáda Brno**, the hotel settings are in harmony with the surrounding countryside, further emphasizing the uniqueness of the location. The terrace-like premises are situated on two opposite sides. The golf course is on one side, and there are stylish, barrier-free bungalows with typical green roofs in a pure architectural style on the other side.

### Attractions and tips for trips

VIDA science amusement park - located in Brno with a permanent interactive exhibition that presents dozens of scientific phenomena in four basic areas - Planet, Civilization, Man and Microworld. Near the Cascade Hotel you will find the Brno Dam or the beautiful summer swimming pool Riviera. Brno Reservoir - swimming, water sports, summer events, the famous Ignis Brunensis fireworks show. Experience Brno a little differently. Discover the beauty of the Moravian Karst nature reserve. Visit the quiet environment of the PLA for diverse hiking and cycling. Interesting architecture and history, this is one of the other tips. Villa Tugendhat is a famous villa of Greta and Fritz Tugendhat from 1929-1930, designed by architect Ludwig Mies van der Rohe, is an installed monument of modern architecture. As the only monument of modern architecture in the Czech Republic, it is inscribed on the UNESCO World Heritage List. Do you want to enjoy romance under the stars? Take a trip to the Brno Observatory and Planetarium - you will learn a lot of interesting things from astronomy, but we also do not avoid geology, chemistry, physics, mathematics, geography and much more. Are you a lover of history and secrets? Come and spend pleasant moments at our hotel and visit the nearby Vevří Castle from the 13th century.

Venue Address: **Hotel Kaskáda, Kuřim, Na Golfu 1772, 664 34 Kuřim, Czech Republic**

**Reservations: +420 541 511 700, reservation.kaskada@tmr.sk**

## Contacts

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