

21-23 MAY, 2025

INSTITUTE OF NATURAL  
AND SYNTHETIC POLYMERS  
FCHPT STU

POLYMER INSTITUTE SAS

2025  
**PMA & SRC  
CONFERENCE**

**PROGRAM**



Congress Center of  
the Slovak Academy of  
Sciences  
Smolenice Castle



**SRC**  
Slovak Rubber Conference

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SLOVENSKÝ PLASTIKÁRSKY KLASTER

10.30 – 10.40	MOSNÁČEK Jaroslav TIŇO Radko CHODÁK Ivan HUDEC Ivan	OPENING CEREMONY	
Chairperson	TIŇO Radko		
10.40 – 11.00	Opening Lecture	HÍVEŠ Ján vice-rector for Science and Research STU Bratislava	Research activities of the Slovak University of Technology in Bratislava
11.00 – 11.20	Opening Invited Lecture	MARUŠÁK Viktor secretary general Association of the Automotive Industry in Slovakia	Current Status and Perspective of the Automotive Industry in Slovakia
11.20 – 11.40	Invited Lecture	DOBEŠ Libor managing director Autoklastr Ostrava	Recycling of plastic materials in the automotive sector
11.40 – 12.10	Invited Lecture	KEBÍSEK Ivan Engineering Director Yanfeng International Automotive Technology Tech Center Trenčín	Personalized and Intelligent Travel Experience in Smart Cabin
12.10 – 12.40	Invited Lecture	WANG De-Yi IMDEA Materials Institute, Madrid	Recent progress on flame-retardant polymers in automotive: From Fundamental to application
12.40 - 14.00	Lunch		
Chairperson	MOSNÁČEK Jaroslav		
14.00 – 14.30	Invited Key Lecture	HOMOLA Tomáš Masaryk University Brno	Plasma Meets Polymers: Advanced Surface Engineering of Plastics
14.30 – 15.00	Invited Lecture	TIŇO Radko STU Bratislava	Possibilities of using low-temperature plasma in the treatment of heritage objects made of plastics
15.00 – 15.30	Invited Lecture	TICHÝ PETR Plasmatrete Austria GmbH	HydroPlasma - Efficient and Sustainable Cleaning Solution for the Highest Cleanliness Requirements
15.30 – 16.00	Invited Lecture	DIAN Marek Yanfeng International Automotive Technology Tech Center Trenčín	Validation of Automotive Interiors Plastic Parts
16.00 – 16.30	Coffee Break		
16.30 – 18.00	Poster Session		
19.00 – 20.00	CONCERT „KUŠTÁROVCI“		
20.00 – 22.00	CONFERENCE GALA EVENING		

## LIST OF POSTERS

1. **PETKOVÁ Mária**  
The colour stability of packaging materials
2. **HRICOVÁ Marcela**  
Masterbatches for biodegradable packaging
3. **KRUŽELÁK Ján**  
Rubber compounds with biopolymer component
4. **KRUŽELÁK Ján**  
EMI absorption shielding of rubber composites based on ferrites and carbon fillers
5. **WOO CHANGSU**  
Development of Integrated Design System for Automotive Rubber Components
6. **SEDNIČKOVÁ Michaela, NÓGELLOVÁ Zuzana**  
Low-density polyethylene composites with modified montmorillonite
7. **MONTÁG Peter**  
Recycling of polyurethane - Industry point of view
8. **PREŤO Jozef, HRONKOVIČ Ján**  
Possibilities for devulcanization of rubber crumb from tires using mechanical and chemical processes
9. **DŽUGANOVÁ Michaela**  
Lignin and devulcanized rubber crumb for next-generation rubber composites
10. **SMETANOVÁ Anna**  
Development of complex testing methodology of tyre abrasion
11. **VYKYDALOVÁ Anna**  
Effect of a Multicomponent Halogen-Free Flame Retardant on the Properties of Polyethylene for the Cable Industry
12. **PEIDAYESH Hamed**  
Electrical Conductivity Behavior of Rubber Composites with Varying Crosslink Density Under Cyclic Mechanical Deformation

Chairperson	CHODÁK Ivan		
8.30 – 9.00	Invited Key Lecture	ALEXY Pavel	Plastics and Bioplastics in The Circular Economy
9.00 – 9.20	Opening Lecture Plan-C	REINGRUBER Iris	Plan-C   the project for Moving Plastics and Machine Industry towards Circularity   at a glance
9.20 – 9.40	Contributed Lecture	ENACHE Andra-Cristina	Circular Chemistry as the Key to a Circular Economy: Transforming PET Waste into Sustainable Materials
9.40 – 10.00	Contributed Lecture	KAŠČAK Jakub	Optimizing filament production for FFF technology: Presentation of current results in the area of circular economy support
10.00 – 10.20	Contributed Lecture	TIRPÁK Slavomír	A mixture of hemp hemicellulose and Nonoilten biodegradable plastic and its composting possibilities in condition of home composting
10.20 – 10.50	Coffee Break		
Chairperson	KNAPČÍKOVÁ Lucia		
10.50 – 12.00	Workshop Moving PLastics and mACHine iNdustry towards Circularity (Plan-C)		
12.00 – 13.00	Lunch		
13.00 – 17.00	Trip to Driny Cave		
Chairperson	ALEXY Pavol		
17.00 – 17.30	Invited Key Lecture	LANDL Richard	Characterization of materials in polymer and rubber industry
17.30 – 18.00	Invited Lecture	EKKEHARD Füglein	Characterization of polymers using various methods of thermal analysis
18.00 – 18.20	Contributed Lecture	TINÁK Milan	Debonding and sealing solutions for E-mobility
18.20 – 18.40	Contributed Lecture	VACH AGÓCSOVÁ Sára	Biobased biodegradable blends for tissue engineering with enhanced 3D printability and mechanical properties
18.40 - 19.00	Contributed Lecture	OSWALD Eduard	Bio based polymer composites
19.00 – 19.30	Dr. h.c. Ing. Štefan Rosina Awards		
19.30 – 21.00	DINNER & WINE TASTING		

Chairperson	MAJERSKÝ Juraj		
8.30 – 9.00	Invited Key Lecture	BREJCHA Jiří	Current trends and issues in tyre recycling
9.00 – 9.20	Contributed Lecture	PEIDAYESH Hamed	End-of-life Tires as Secondary Raw Materials for Sustainable Environment
9.20 – 9.40	Contributed Lecture	KRATINA Ondřej	The influence of material composition on self-heat buildup of rubber until blowout
9.40 – 10.00	Contributed Lecture	ČADEK Drahomír	Natural-based antioxidants for rubber compounds
10.00 –10.20	Contributed Lecture	PŮSCHL Marek	Effect of the Carbon Black Type and Load on Fatigue Properties and Thermal Expansion of theRubber
10.20 – 10.45	Invited Lecture	PLEVÁK Zdeno BELOBRAD Juraj	Rubber Valley Puchov & Otrokovice, Material Development
10.45 – 11.15	Coffee Break		
Chairperson	HUDEC Ivan		
11.15 – 11.40	Invited Lecture	MAJERSKÝ Juraj	State of plastics legislation in the eu / smart production cell
11.40 – 12.05	Invited Lecture	KOLLÁR Miroslav	Computer optimisation of plastic parts design
12.05 – 12.30	Invited Lecture	MALÍČKOVÁ Lucia	Computational Modelling and High Performance Computing Driven Innovation in the Development of Polymeric Materials in the Context of the European Competence Centre Framework
12.30 – 13.00	Invited Lecture	OREL Daniel	Real possibilities of using artificial intelligence in plastic injection technology
13.00 - 13.10	HUDEC Ivan CHODÁK Ivan	CONFERENCE CLOSING CEREMONY	
13.10 – 14.00	Lunch		

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