

## CONFERENCE PROGRAMME

21.11.2017 (Tuesday)

<b>12:00–14:00</b>	<b>Registration of participants</b>
<b>13:00–14:00</b>	<b>Refreshments (snack-bar)</b>
<b>14:00–15:30</b>	<b>Session I – Inauguration</b> Bogusław Królikowski, Dariusz M. Bieliński, Urszula Ostaszewska, Barbara Nemeth
14:00–14:30	Opening of the Conference Director of the Institute for Engineering of Polymer Materials and Dyes, Dean of the Faculty of Chemistry Lodz University of Technology
14:30–15:00	W1 <i>Elastomer nanocomposites with high barrier properties – Preparation, characterization and properties</i> Ulrich Giese
15:00–15:30	W2 <i>Elastomer composites with the effects of electromagnetic shielding</i> Ivan Hudec
<b>15:30–16:00</b>	<b>Coffee break</b>
<b>16:00–18:00</b>	<b>Session II – Fillers and their functionalisation</b> Anna Boczkowska, Zbigniew Florjańczyk
16:00–16:20	R1 <i>Novel filler systems for elastomeric actuators and generators</i> Jyrki Vuorinen
16:20–16:40	R2 <i>Controlled functionalization of <math>sp^2</math> carbon allotropes for the reinforcement of diene elastomers</i> Vincenzina Barbera
16:40–17:00	R3 <i>New approach for an alternative filler-rubber coupling</i> Rafał Anyszka
17:00–17:20	R4 <i>Ion-irradiated elastomers reinforced with graphene filler</i> Jacek Jagielski
17:20–17:30	K1 <i>High electrical conductive PDMS/CNT composites</i> Marvin C.V. Omelan
17:30–17:40	K2 <i>Nanocellulose as reinforcing filler in rubber composites</i> Irina Weilert
17:40–17:50	K3 <i>Selected properties of elastomers' compositions based on natural rubber and butadiene-styrene rubber containing dispersed carbon black and/or terpolymer acrylonitrile-butadiene-styrene</i> Ewa Głowińska
17:50–18:00	K4 <i>Novel bio-based functional additives for natural rubber materials and selected properties of vulcanizates obtained with their using</i> Marcin Włoch
<b>18:00–19:00</b>	<b>Poster Session</b> Mariusz Siciński, Andre Hamerski
<b>19:00–20:00</b>	<b>Dinner</b>

22.11.2017 (Wednesday)

<b>9:00–11:00</b>		<b>Session III – Modification of elastomers and rubber</b> Aleksandra Smejda-Krzewicka, Ulrich Giese
9:00–9:20	R5	<i>Low temperature plasma in polymer technology</i> Mariusz Siciński
9:20–9:40	R6	<i>Properties of Graphene Elastomer Composites</i> Christian Karl
9:40–10:00	R7	<i>Nanocomposites based on elastomers with carbon nanotubes – properties and applications</i> Anna Boczkowska
10:00–10:20	R8	<i>Mechano-adaptive rubbers by active filler morphology</i> Tamil Selvan Natarajan
10:20–10:30	K5	<i>Selected properties of vulcanizates filled with plasma-chemically modified fillers</i> Tomasz Gozdek
10:30–10:40	K6	<i>Properties of ceramizable silicon composite containing carbon fibers and copper(I) oxide</i> Mateusz Imiela
10:40–10:50	K7	<i>Laser texturing of elastomer composites</i> Michał Okraska
10:50–11:00	K8	<i>Polymeric compositions with increased inflammability</i> Piotr Kobęda
<b>11:00–11:30</b>		<b>Coffee break</b>
<b>11:30–13:00</b>		<b>Session IV – Sponsor Panel</b> Marek Olkusz, Jacek Babula
11:30–12:30		Session of General Sponsor WERBA together with partner BARBE
11:30–11:50	R9	<i>With WERBA through life</i> Barbara Nemeth, Werba
11:50–12:10	R10	<i>BARBE Group</i> Wolfgang Ruschig, Barbe
12:10–12:30	R11	<i>White fillers</i> Marek Gardavsky, Werba
12:30–13:00		Other Sponsor Session
12:30–12:40	K9	<i>Application of advanced thermal analysis techniques for elastomers characterization</i> Krzysztof Hodor, Netzsch
12:40–13:00	R12	<i>Tuning Coloured Special Elastomer Compounds By New Processing Additives</i> Robert Kobel-Bryk, Struktol
<b>13:00–14:00</b>		<b>Lunch</b>
<b>14:00–18:00</b>		<b>Free Excursion</b>
<b>20:00–24:00</b>		<b>Conference Gala Dinner sponsored by WERBA</b>

23.11.2017 (Thursday)

- 9:00–11:00**      **Session V – Renewable resources and recycling**  
Elżbieta Piesowicz, Ivan Hudec
- 9:00–9:20      R13 *New elastomeric composites containing reclaimed rubber granules*  
Aleksandra Smejda-Krzewicka
- 9:20–9:40      R14 *New anidegradants for elastomers*  
Janusz Datta
- 9:40–10:00      R15 *Furan aromatic multiblock ester copolymers from renewable resources*  
Inez Kowalczyk
- 10:00–10:20      R16 *Curing reaction kinetics, morphology development and properties of polyisoprene foams*  
Denis Rodrigue
- 10:20–10:30      K10 *Evaluation of lignin as a stabilizing additive in natural rubber formulations*  
Gelsa Adriana Carpenedo
- 10:30–10:40      K11 *Elastomer recycled material for high speed shock absorption*  
Cezary Dębek
- 10:40–10:50      K12 *Block copolymers based on post-consumer PET-G foils containing polycaprolactone exhibiting elastothermoplastic properties*  
Daria Pawlikowska
- 10:50–11:00      K13 *Novel aliphatic-aromatic block copolymers containing biodegradable segments designed for medical applications*  
Izabela Irska
- 11:00–11:30**      **Coffee break**
- 11:30–13:30**      **Session VI – Design and testing**  
Janusz Datta, Jyrki Vuorinen
- 11:30–11:50      R17 *Design of the rubber compensator using finite element method and experimental research*  
Przemysław Jaszak
- 11:50–12:10      R18 *Micro-indenter method for determination of viscoelastic properties of elastomers*  
Joseph Ludwig
- 12:10–12:30      R19 *Volatile Organic Compounds (VOCs) in coating materials*  
Grażyna Kamińska-Bach
- 12:30–12:50      R20 *Volatile organic compounds (VOCs) in the rubber - during vulcanization and using of rubber products*  
Dominik Kowalczyk
- 12:50–13:10      R21 *Some aspects of rubber fatigue*  
Mohan Ranganathan
- 13:10–13:20      K14 *Application of MCC-IMS spectroscopy in analysis of rubber*  
Dominik Pietrzak
- 13:20–13:30      K15 *New elastomer blends with increased resistance to flame*  
Anna Olejnik
- 13:30–14:00**      **Summary and closing of the conference**
- 14:00–15:00**      **Lunch**

## LIST OF POSTERS

- P1** *Analysis of the network of cured carboxylated acrylonitrile-butadiene rubber* – Piotr Kobęda
- P2** *Natural fillers of polymeric materials* – Anna Olejnik
- P3** *Polymer nanocomposites with carbon nanoparticles based on post-consumer PET-G foil* – Inez Kowalczyk
- P4** *The rubber-spec EPDM for thermoplastic vulcanisates (TPV)* – Elżbieta Piesowicz, ZUT, Szczecin, Poland
- P5** *The influence of poly(tetramethylene oxide) chain's length on the morphology, mechanical and thermal properties of copolymers based on post-consumer PET-G foils (PET-G-block-PTMO)* – Elżbieta Piesowicz
- P6** *Functional properties of Ethylene-Propylene Copolymer (EPC)/ Silica Oxide (SiO<sub>2</sub>) nanocomposites* – Daria Pawlikowska
- P7** *Effect of the ratio of acrylonitrile units and type of plasticizer on thermomechanical properties of nitrile rubber vulcanizates (NBR)* – Andrzej Marchel
- P8** *Synthesis and characterization of novel block copolymers based on post-consumer PET-G foil* – Izabela Irska
- P9** *Graphene nanoplates as a filler modifying the properties of elastomeric composites* – Anita Gostyńska
- P10** *Composites of ethylene-norbornene copolymer reinforced with cellulose fibers* – Stefan Cichosz
- P11** *Application low-temperature plasma in modification of multiwalled carbon nanotubes* – Katarzyna Klajn
- P12** *Coal sorbent obtained in tires recycling* – Cezary Dębek
- P13** *Magnetorheological elastomer, example of use in a linear vibration damper with variable characteristics* – Cezary Dębek
- P14** *Use of waste toner in the rubber technology* – Cezary Dębek
- P15** *Processability of furan-ester multiblocked copolymers based on plant-derived monomers* – Magdalena Kwiatkowska
- P16** *The influence of rubber granulates on environment – the leaching of heavy metals from rubber granulates into water* – Aneta Stępkowska
- P17** *Metal nanoparticles with bactericidal activity in rubber products* – Katarzyna Bator
- P18** *Comparison of usefulness of methods of predicting the lifetime of elastomers* – Michał Lewandowski
- P19** *Influence of bio-based polyurethanes elastomers chemical structure on the selected mechanical and thermomechanical properties* – Ewa Głowińska
- P20** *Effect of glycolysate used as plastification agent on the selected properties of dynamically vulcanized thermoplastic elastomers based on EPDM/PP blends* – Agata Dzierbicka
- P21** *Novel partially bio-based multifunctional additives for the natural rubber composites* – Marcin Włoch
- P22** *Synthesis, chemicals structure and selected properties of poly(ether-urethane)s synthesized using bio-based polyol* – Aleksandra Cwiklińska
- P23** *RPA 2000 – fast, precise quality control analysis of TPEs* – Roman Malczyk
- P24** *Application of oligomeric plasticizers based on vegetable oils in PVC plastigels* – Ewa Langer
- P25** *PDMS nanocomposites with high electrical conductivity* – Marvin C.V. Omelan
- P26** *Cellulose Nanocomposites* – Irina Weilert