

Full programme; (♦) overarching perspectives, (◆) circularity & sustainability, (◇) energy storage and electronics, (◆) health & biomedical; (◆) new concepts and insights

27 May, 2024

Plenary programme; room Arthur A

10:00	10:10			
10:10	10:55	<i>The 2024 PTN Medema Award Lecture</i> A personal journey through my polymer world	E.W. Meijer	Eindhoven University of Technology
11:00	11:45	Deconstructing Polymers Synthesized by Controlled Radical Polymerization; <i>invited plenary Circularity & Sustainability</i>	A. Anastasaki	ETH Zürich

11:45	12:30	Lunch break & Poster Sessions (room Arthur B)		
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Parallel session 1: circularity & sustainability; room Arthur A

12:30	12:55	Design of polymers for a circular economy; <i>invited keynote lecture</i>	Z. Tomović	Eindhoven University of Technology
13:00	13:15	Controlled phase separation within covalent adaptable networks	V. Asadi Alghalandis	Wageningen University
13:15	13:30	Designing Synthetic Catch Bonds for Dynamic Networks	R. Wink	Eindhoven University of Technology
13:30	13:45	Polyester-Based Polyelectrolyte Complexes: Combining Thermo - and Saloplastic properties	J. Engelhardt	Wageningen University

Parallel session 2: health & biomedical; room Pellinore

12:30	12:55	The Effects of UVC Disinfection on Commonly Used Medical Plastics; <i>invited keynote lecture</i>	H. De Brouwer	SABIC
13:00	13:15	Towards biocompatible immobilized antibacterial coatings active by electrostatic forces caused by salt-strengthened quaternary ammonium compounds	R. Li	University of Groningen
13:15	13:30	Dynamic polymeric materials: enable cellular communication via a synthetic matrix	E. De Korver	Eindhoven University of Technology
13:30	13:45	Uniform networks as a strategy for constructing mechanically robust hydrogel scaffolds for applications in 3D printing and tissue engineering	L. Pitet	University of Hasselt

Parallel session 3: new concepts & insights; room Dagonet

12:30	12:55	Two short stories: A stick-on-demand linerless adhesive & small molecule organic eutectics as candidates to replace plastics; <i>invited keynote lecture</i>	S. Bon	University of Warwick
13:00	13:15	C-Terminal Peptide Modification: Merging the Passerini Reaction with Chemo-Enzymatic Synthesis	J. Hanssens	Maastricht University
13:15	13:30	To be specified		
13:30	13:45	To be specified		

13:45	14:05	Break & Poster Sessions (room Arthur B)		
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Parallel session 4: circularity & sustainability; room Arthur A

14:05	14:30	A journey around circularity in polymers, from renewable resources to recycling; <i>invited keynote lecture</i>	S. Calloil	Institut Charles Gerhardt, Montpellier
14:35	14:50	Combining dynamic chemistries towards sustainable materials	S.J.D Maessen	Eindhoven University of Technology
14:50	15:05	Solvent-Free Synthesis of Acetal-Containing Polyols for Use in Recyclable Polyurethanes	P. Schara	Eindhoven University of Technology
15:05	15:20	Circularity Assessment as complementary methods for the circular and sustainable redesign of multi-material industrial footwear	C. De Garcia Saravia Ortiz	Maastricht University

Parallel session 5: health & biomedical; room Pellinore

14:05	14:30	3D printing hydrogels containing reversibly covalently bound therapeutic peptides; <i>invited keynote lecture</i>	D. Haddleton	University of Warwick
14:35	14:50	Fabrication of mechanically robust hydrogels for 3D printing and injection: The role of the thiol-yne/ene chemistry and the network topology	M. Ebrahimi	Maastricht University/ Hasselt University
14:50	15:05	Functional Materials for High Resolution 3D Bioprinting in Kidney Engineering	M. Neumann	University of Utrecht
15:05	15:20	Tailoring of physical properties in macroporous synthetic polymer based cryogels	L. Gerrits	Radboud University

Parallel session 6: energy storage & electronics; room Dagonet

14:05	14:30	On the Importance of Chemical Precision in Polymer/Organic Electronics; <i>invited keynote lecture</i>	W. Maes	Hasselt University
14:35	14:50	Stabilizing Lithium Metal Anodes by a Self-Healing Polythiourea Protective Layer	Y. Zhang	University of Groningen
14:50	15:05	Self-Healing All-Solid-State Polymer Electrolytes Integrated with Metal-Organic Frameworks for High-Performance Lithium Batteries	Y. Zhang	University of Groningen
15:05	15:20	Hot-pressed saloplastic anion exchange membranes from non-stoichiometric PSS/PDADMAC complexes	H. Brink	University of Twente

15:20	15:40	Break & poster session (room Arthur B)		
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Plenary programme; room Arthur A

15:40	16:25	Polypeptide-based Nanomedicine Unveiling Tropism and Biological Barrier Crossing Capabilities; <i>invited plenary lecture Health & biomedical</i>	M.J. Vicent	Centro de Investigación Príncipe Felipe, Madrid
16:25	17:10	<i>To be specified; invited plenary lecture industrial perspectives</i>	L. Kurelec	SABIC

- 18:30 - Shuttle service to Brightlands Chemelot Campus – Maastricht (conference diner)
- 18:30 – 19:00 Boarding Boat Rederij Stiphout, Maaspromenade 58, 6211 HS Maastricht
- 19:00 - Departure conference diner cruise

Full programme; (♦) overarching perspectives, (♦) circularity & sustainability, (♦) energy storage and electronics, (♦) health & biomedical; (♦) new concepts and insights

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Plenary programme; room Arthur A

09:00	09:45	To be specified; KNCV plenary lecture	R. Lang	Johannes Kepler University Linz
09:45	10:30	To be specified; invited plenary lecture <i>energy storage & electronics</i>	U. Schubert	University of Jena

10:30	10:50	Break & Poster Sessions (room Arthur B)		
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Parallel session 7: circularity & sustainability; room Arthur A

10:50	11:15	New cellulose chemistry from a sustainability perspective: renewability is not enough; <i>invited keynote lecture</i>	M.A.R. Meier	Karlsruhe Institute of Technology
11:20	11:35	Biomimicry meets Agriculture: Designing Nature-Inspired Adhesives for Green Pest Control	A. Arunachalam	University of Groningen
11:35	11:50	Towards sustainable and on-demand adhesives: Catalyst-free preparation of ligninbased covalent adaptable networks with superior bonding and recyclability	J. Liu	Maastricht University
11:50	12:05	Thermo-reversible nano-adhesives based on the Diels-Alder reaction	J. Guo	University of Groningen

Parallel session 8: energy storage & electronics; room Dagonet

10:50	11:15	Two examples representative for the daily research practice @ Envalior: 1) The elucidation of the role of additives in PPS to maximize Hydrogen Fuel Cell power output, and, 2) An effort to measure the Surface Resistance of moulded Electric Vehicle components stored at elevated temperature and humidity (85C/85%RH); <i>invited keynote lecture</i>	R.R. Janssen	Envalior
11:20	11:35	Improved nanofiltration through inverted membrane structures	T. Watt	University of Twente
11:35	12:00	Upscaled Approach to Energy Storage by Multiphysics Dynamic Modelling; <i>invited keynote lecture</i>	A. Lyulin	Eindhoven University of Technology

Parallel session 9: new concepts & insights; room Pellinore

10:50	11:15	Folding single polymer chains into functional single chain polymeric nanoparticles; <i>invited keynote lecture</i>	A. Palmans	Eindhoven University of Technology
11:20	11:35	Nano-Chemical Analysis of Chirality in Polymers	X. Li	Wageningen University
11:35	11:50	Effects of Confinement on Nucleation and Crystallization in Poly(butylene succinate) and Poly(butylene adipate) within Nanoporous Alumina Templates	M. Safari	Maastricht University/ POLYMAT, San Sebastian
11:50	12:05	Crystal Lattice Analysis: Nanostructure prediction in phase-separated materials	B. Van den Berselaar	Eindhoven University of Technology

12:05	13:00	Lunch break & Poster Sessions (room Arthur B)
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Parallel session 10: circularity & sustainability; room Arthur A

13:00	13:25	15 Years of Renewable Plastics Development: Lessons Learned; <i>invited keynote lecture</i>	G.J.M. Gruter	Avantium / University of Amsterdam
13:30	13:45	"Soft Compleximers": Towards dynamic polymer networks based on hydrophobic ionic complexation with thermally distinct glass transition and ionic bonding/debonding equilibrium.	M. Soumabrata	Wageningen University
13:45	14:00	Thermomechanical Insights into Compleximers: Unraveling the Temperature- Dependent Behavior of Ionic Cross-links	S. Van Lange	Wageningen University
14:00	14:15	Properties of novel polyethylene based ionomers as recyclable alternative to crosslinked materials	J. Vachon	SABIC

Parallel session 11: new concepts & insights; room Dagonet

13:00	13:25	Architectural Control of Configurational Entropy in A/B Block Copolymer Self-Assembly: The Case of Core-Shell Bottlebrushes; <i>invited keynote lecture</i>	M. Mahanthappa	University of Minnesota, Minneapolis
13:30	13:45	Tuning suspension rheology using capillary forces in water continuous systems	L. Ruiz	Wageningen University
13:45	14:00	3D printing: characterizing inter-layer adhesion	P. Van Heugten	Eindhoven University of Technology
14:00	14:15	Rheological Insights into the Degradation Behavior of PP/HDPE Blends	H. Seyed Khabbaz	Maastricht University

Parallel session 12: health & biomedical; room Pellinore

13:00	13:25	<i>To be specified; invited keynote lecture</i>	R. Hoogenboom	University of Ghent
13:30	13:45	Electrifying Softness: Advancing Biomechanical Integration with Conductive Hydrogels	A. Mukherjee	University of Groningen
13:45	14:00	Enhancing mechanical properties and processability through architectural differences in photopolymerized thiol-ene hydrogels	M. Arreguin Campos	Maastricht University/ Hasselt University
14:00	14:15	Facile Synthesis of Rapamycin-loaded PEG-b-PLA Nanoparticles and Their Application in Immunotherapy	Y. Li	Eindhoven University of Technology

14:15	14:40	Break & Poster Sessions (room Arthur B)
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Parallel session 13: circularity & sustainability; room Arthur A

14:40	15:05	Plastic additives in mechanical recycling: A case study of flame retardants in PET recycling; <i>invited keynote lecture</i>	A. Gooneie	Maastricht University
15:10	15:25	Shaping the Future – Emerging Trends and Technologies in Functionalized Polyolefins	S. Wojciech	Gdansk University of Technology
15:25	15:40	Recyclable Covalent Adaptable Polystyrene-Networks using Boronates and TetraAzaADamantanes	S. Van Hurne	Wageningen University

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Parallel session 14: new concepts & insights; room Pellinore

14:40	15:05	Understanding and improving polymer materials with mechanochemistry; <i>invited keynote lecture</i>	R. Göstl	DWI, RWTH Aachen University
15:10	15:25	Modeling insights into the flow-induced crystallization of isotactic polypropylene for sustainable packaging	N. Sigalas	Eindhoven University of Technology
15:25	15:40	Shining light on the effect of molecular weight distribution on time and spatially resolved structure evolution during extrusion based additive manufacturing; Lost in space?	R. Bröker	Maastricht University

Parallel session 15: new concepts & insights; room Dagonet

14:40	15:05	A look inside the biodegradation black box in the marine environment; <i>invited keynote lecture</i>	L. Amaral-Zettler	NIOZ Royal Netherlands Institute for Sea Research/ University of Amsterdam
15:10	15:25	Introduction of biodegradability via CKA based radical ring opening polymerization in acrylate emulsions	T. Praveen	Eindhoven University of Technology
15:25	15:40	All-Dry Synthesis and Applications of Poly(Allyl Methacrylate) Thin Films	Y. Di	University of Groningen

Plenary programme; room Arthur A

15:50	16:35	The destructive and constructive aspects of polymer mechanochemistry; <i>invited plenary lecture new concepts/insights</i>	C. E. Diesendruck	Technion – Israel Institute of Technology
16:35	16:45	<i>Conclusions and closing remarks</i>		