20240520

NORDIC POLYMER DAYS 2024 - Program

12.6.
Wednesday

Registration opens at 11:30

Chair:

12:00-12:05 (A110)
Welcome and Opening Words

12:05-12:45 Plenary (A110)
Polymerisation-induced self-assembly
- Steven P. Armes

	A110 **Polymer chemistry**	**A129** **Circular economy and polymers**
	Chair:	Chair:
12:50-13:10	Vikram Baddam :Polymerization induced self-assembly of cationic block copolymers via RAFT dispersion polymerization	Ezgi Boz Noyan:Mechanical recycling of post-consumer rigid polyethylene packaging waste
13.10-13:30	Askican Hacioglu:Tuning the Solubility of Poly(2-oxazoline)s via Thionation	Nina Forsman:Recycling of hydrophobized cellulosic materials
13:30-13:50	Florian Kaps:Versatile lipopolymer synthesis enabled by electron-deficient alkyne-lipids	Arianna Rech:Understanding and counteracting thermo-oxidative degradation during mechanical recycling of PA 6,6

13:50-14:50
Lunch

Chair:

14:50-15:30 Plenary (A110)
Carbon has higher value in materials than in incineration
- Jaakko Tuomainen

15:30-17:00
Poster session

18:00 -
Get-together party at the University Main Building

13.6.
Thursday

Chair:

9:00-9:40 Plenary (A110)
Poly(ionic liquid) nanostructures via polymerization induced self-assembly
- Jiayin Yuan

	A110 Polymer materials for 3D printing	A129 Functional polymers	A127 Sustainable polymers and bioeconomy
	Chair: Olli-Ville Laukkanen	Chair:	Chair:
09:50-10:10	Robert Luxenhofer:3D printing with poly(2-oxazoline) based hydrogels	Rassmus Andersson:Exploration of poly(1-oxoheptamethylene) as host material for solid polymer electrolyte in lithium metal batteries	Onsi Hanafi:Biobased polyamides from 2,5-furandicarboxylic acid
10:10-10:30	Andrew Kerr:Assessing thermoresponsive BAB triblock copolymers as bioink additives	Fevzihan Basarir:Edible and Biodegradable Wearable Capacitive Pressure Sensors: A Paradigm Shift Towards Sustainable Electronics with Bio-Based Materials	Yidong Zhang :Synthesis of Crystalline Nanomaterials Based on Molecular Assembly of Debranched Wood Xylan
10:30-10:50	Coffee		
10:50-11:10	Larissa Kessler:Influence of plasticizers on the fabrication of drug loaded microfiber scaffolds via melt electrowriting	Sedigheh Borandeh:Homogenous and Heterogeneous Double-Quaternized Chitosan as Antiviral Agents	Ruijie Wu:Fabrication of Lignin Fibers for High-Fidelity Digital Light Processing Printing
11:10-11:30	Maksims Jurinovs:Plant-oil based elastomers for sustainable 3D printed soft-robotics	Matheus Mendes de Oliveira:GnP-reinforced interpenetrated polymer networks	Else Verdonck:Advanced and Sustainable Polymers and Composites for a Better Future
11:30-11:50	Sergejs Gaidukovs:3D Printed biopolymer 4D TENG devices		Anu Muthukamatchi:Characterization and Performance Evaluation of Elastomers for Carbon Capture and Storage Infrastructure: A Focus on CO2 Transportation
11:50-13:00	Lunch		

Chair:

13:00-13:40 Plenary (A110)
Plastics, biobased polymers, and chemical recycling
- Jukka Niskanen

	A110 Sustainable polymers and bioeconomy	A129 Polymer chemistry	A127 Polymer characterization
	Chair: Jukka Niskanen	Chair:	Chair:
13:50-14:10	Lauri Välinen:Chemical recycling of biobased polyesters and polyamides	Olivia Wilson:Synthesis of bio-based and degradable polymer colloids	Kourosh Hasheminejad:Dissipative particle dynamics simulations of self-assembling layered polymer coatings
14:10-14:30	Hossein Baniasadi:Photocurable cellulose composites with polyethylene glycol and graphene oxide for sustainable energy storage and conversion	Anna-Lena Ziegler:Tuning the characteristics of poly(2-phenyl-2-oxazine)-based inverse thermogels	Maria Panoukidou:Runaway Transition in Irreversible Polymer Condensation with Cyclisation
14:30-14:50	Adrian Eliasson:Glycerol modification of cellulose, can we fake thermoplasticity?	René Steinbrecher:Fully Photo-switchable and Thermo-responsive Polyacrylamides	Luciana Tavares:Effect of ion beam irradiation on pure polymer and hybrid polymer/inorganic nanocomposite dielectric for improved capacitor properties
14:50-15:10	Coffee		

Chair: Jukka Niskanen

15:10-15:50 Plenary (A110)
Renewability and sustainability in traditional polyacrylamide applications
- Susanna Holappa

	A110 Sustainable polymers and bioeconomy	A129 Polymer chemistry	A127 Functional polymers
	Chair: Jukka Niskanen	Chair:	Chair:
16.00-16:20	Mikael Skrifvars:Recent developments of all-cellulose composites – concepts, properties, and applications	Anne-Catherine Lehnen:Shape matters: The influence of amphiphilic balance and anisotropy of antimicrobial bottle brush copolymers towards their biological activity	Jaana Vapaavuori:Light-responsive shape memory copolyamides – steps towards textile robots capable of complex movements
16:40-17:00	Tijana Todorovic :Polysaccharides as wood-adhesive components	Niklas Warlin:Bis-Ureas as Organocatalysts for Ring Opening Polymerization	William Greenbank:Polymer-nanocomposite capacitors – the role of surface chemistry in achieving high energy densities.
19:00 - 22:00	Dinner at Suomenlinna		

14.6.
Friday

Chair: Sami Hietala

9:00-9:40 Plenary (A110)

Wood to food: lignin-derived functionalities of wood hemicelluloses

- Kirsi S. Mikkonen

	A110 Functional polymers	A129 Polymer characterization	A127 Sustainable polymers and bioeconomy
	Chair:	Chair: Pirjo Pietikäinen	Chair:
09:50-10:10	Isabell Tunn:Temperature induced gelation in spider silk-like proteins	Matti Leskinen:Interaction of cellulose and water upon drying and swelling by 13C CP/MAS NMR	Maria Morits:Identification of the main parameters affecting film formation and barrier properties of dispersion coatings
10:10-10:30	Xi Wang:Gel-Free Textile-Based Electrodes for Enhanced Surface Electromyography: Towards Efficient Home-Based Health Applications	Giulia Simão de Sousa:Evaluation of thermo-oxidative degradation of cross-linked polyethylene pipes	Minh Thao Ho:Upcycling wood hemicelluloses into functional food products
	10:30-10:50 Coffee		
11:00-11:20	Harri Setälä :Control and adjustment of properties of cellulose derivatives by two-step chemical modifications: thermoplasticity, reactivity, solubility and LCST.	Dmitry Tolmachev :Tunable Biomaterials Based on Spidroins: Influence of Alcohol on Intrinsically Disordered Proteins	

Chair:

11:20-12:00 Plenary (A110)

Biopolymer interactions and their exploitations:

from single molecules to microdevice assisted hydrogel molding- *Bjørn Stokke*

12:00-12:05 (A110)

Closing Words

Lunch

POSTERS

1	Kanan Aliyev	Challenging of a novel equation describing the viscosity of polymer solution as a function of the concentration- utilizing and reanalyzing experimental data from the literature
2	Oskar Backman	The effect of carbohydrates on the mechanical properties of lignin/polylactic acid (PLA) composites
3	Justyna Bała	Synthesis of polymer nanobrushes via organocatalyzed ATRP with biocompatible photosensitizer – riboflavin
4	Alexander M. Bier	Optimization of Fiber Laydown during the Fiber Spinning Process by Utilizing the Coanda-Effect
5	Sedigheh Borandeh	Homogenous and Heterogeneous Double-Quaternized Chitosan as Antiviral Agents
6	Anna Borisova	Toughening Brittle Kraft Lignin Coating on Mismatched Substrate with Spider Silk-Inspired Protein as an Interfacial Modulator
7	Margitta Büchner	Application of the B.E.R.I.T. method – Elongational rheology for bioinks to predict cell survival
8	Virginia Celestre	Towards synthesis of poly(ethylene terephthalate) from enzymatically degraded mixed poly (ethylene terephthalate) waste
9	Ashish Chahal	Development of cellulose-based film for active food packaging applications
10	Yuquan Chi	Poly(2-oxazoline) based star block copolymer as scaffolds for drug delivery
11	Nele Dammann	Enhanced mechanical and thermal properties of polyamide-1010 and biochar composites via melt blending
12	Niklas Eng	Overcoming Recycling Challenges: Precision in Plastics Identification and Quantification with DSC
13	Niklas Eng	Investigating Ageing Effects in Polymer Powders for Enhanced Additive Manufacturing
14	Jakob Falcke	Simple approach predicting water uptake kinetics from Biopolymers from easily accessible experiments
15	Robin Halamicek	Spent coffee grounds as a compost additive to improve the degradation behavior of biopolymers
17	Karolina Kowalczyk	Thermochromic features of modified polydiacetylene-based nanostructures in an alginate matrix
18	Jan-Philipp Kruse	Stereolithography Printing of Cellulose Derivatives
19	Isabella Laurén	Injectable and Printable Nanocellulose-Crosslinked Quaternary Chitosan Blends for Potential Wound Healing
20	Sofia Lindström	Recyclable silicone elastomer achieved by a simple method
21	Maryam Madani	Physical, chemical, and antimicrobial assessment of quaternary ammonium functionalized CNC for reinforcing PLA-Gelatin electrospun fibers
22	Saba Nemati Mahand	Cationic Ring Opening Polymerization and characterization of ROS-responsive Thioether-based poly(2-oxazoline)
24	Zoe Paganelli	Investigating the effects of biochar incorporation on polyamide-12 matrix properties through in-situ polymerization
25	Aisha Salah	3D Printing of UV Cross-linkable Composites
26	Mikko Salomäki	Polydopamine Film Synthesis via Cu(0)-Induced Oxidation for Application in Biodegradable Charge Storage Devices
27	Anni Seisto	Tailoring hydrophobicity and strength in spider silk-inspired coatings via thermal treatments
28	Liliia Simagina	The effect of poly(2-oxazoline)/poly(2-oxazine)-based copolymer architecture on self-assembly and drug loading
29	Laura Äkräs	Quantifying Climate-Friendliness: Carbon Footprint of Biocomposites through Life Cycle Assessment