

NRC&NPD2021 conference program (updated 16.8.2021)

Plenary lectures & Opening/Closing ceremonies will take place in the Auditorium
Sessions of the Nordic Rheology Conference in blue background
Sessions of the Nordic Polymer Days in green background
Please note that all times are in Eastern European Summer Time (EEST, UTC+3)

Wednesday, August 18

EEST	Blue Hall	Green Hall	Red Hall
9:45-10:00	Opening ceremony		
10:00-10:40	Plenary 1 - Kiyohiko Igarashi: "Enzymatic degradation and synthesis of crystalline cellulose" Chair: Suvi Arola		
10:40-11:10	Break & Mingle		
	Session: Rheology of biopolymers Chair: Meri Lundahl	Session: Polymer synthesis Chair: Sami Hietala	Session: Sustainable polymers Chair: Teija Tirri
11:10-11:30	Tuukka Levä: "Immobilized Photosynthetic Cell Factories – Multicomponent Hydrogels from Nanocellulose and Alginate for Cell Entrapment"	Vikram Baddam: "Polycation stabilized nanoparticles obtained via PISA: salt induced higher ordered morphologies"	Linnea Cederholm: "δ-Lactones in a Circular Economy"
11:30-11:50	Prakash Baranivignesh: "Experimental investigation on the effect of fibre consistency on rheology of aqueous foams in pipe flow"	Jukka Niskanen: "1,2,3-triazole based poly(ionic liquids) as solid dielectric materials"	Jenevieve Yao: "Microwave-hydrophobized lignin/PLA blends for fused filament fabrication 3D printing"
11:50-12:10	Sylwia Wojno: "Phase transitions of cellulose nanocrystal suspensions via rheo-PLI and nonlinear oscillatory shear techniques"	Dirk Kuckling: "Backbone vs. side-chain: (light-) degradable polymers for triggered drug release"	Arianna Rech: "Waste-based biopolymer slurry for 3D printing with recycled materials"
12:10-12:30	Aayush Kumar Jaiswal: "Rheological Properties of High-Consistency Enzymatically Fibrillated Cellulose Suspensions"	Muhammad Waqas Ali: "Synthesis and Characterization of multi responsive hybrid microgels for controlled drug delivery with maximum drug loading capability"	Wenxiang Xuan: "Levulinic acid: Sustainable building-block for diverse plasticizer architectures"
12:30-13:30	Lunch break		
13:30-14:10	Plenary 2 (Carl Klason Rheology Award Lecture) - Anne-Marie Hermansson: "Structure related rheology of food and biopolymers systems" Chair: Mats Stading		
	Session: Food rheology Chair: Catherine T. Nordgård	Session: Biopolymers Chair: Bas van Bochove	Session: Sustainable polymers Chair: Jan Trifol Guzman
14:15-14:35	Mats Stading: "Boltus rheology of texture-modified food"	Vladimir Aseyev: "Regeneration of Cellulose from Ionic Liquids in a Form of Particles"	Nitin Valsange: "Preparation and investigation of biobased aliphatic polyesters based on a rigid spirocyclic dicarboxylate derived from levulinic acid"
14:35-14:55	Johanna Andersson: "Sound analysis of swallowing a shear-thinning fluid"	Jingwen Xia: "Phase-separation of Cellulose from Ionic Liquid upon Cooling: Preparation of Microsized Particles"	Charalampos Pronitis: "Biobased and Functional Polyamides and Polyhydroxyurethanes"
14:55-15:15	Mats Stading: "A mechanical model of the human throat for swallowing rheology"	Matti Leskinen: "Regeneration of cellulose beads from [DBNH][OAc]DMSO; a study on the bead formation process and effects of drying on cellulose structure"	Hossein Baniasadi: "Bio-based long-chain aliphatic polyamides"
15:15-15:45	Break & Mingle		
	NRC industry workshop Hosted by Fredrik Innings & Gustaf Mårtensson	Session: Biopolymers Chair: Tekla Tammelin	Session: Polymer composites & processing Chair: Pirjo Pietikäinen
15:45-16:05		Anish Gulati: "Behaviour of Tetrabutylammonium Carboxymethyl cellulose in organic solvents"	Dirk W. Schubert: "Novel theoretical self-consistent mean-field approach to describe mechanical properties of composites and polymer solutions"
16:05-16:25		Suvi Arola: "The role of ions and surface water in nanofibrillated cellulose networks"	Yingwei Ouyang: "Thermomechanical Reinforcement of Polyethylene/Polypropylene Blends for High Voltage Cable Insulation by Compatibilisation with a Styrenic Block Copolymer"
16:25-16:45		Bas van Bochove: "Photo-curing biopolymers for tissue regeneration; individually designed composites by stereolithography"	Linda Salminen: "Tough materials through ionic interactions"

Thursday, August 19

EEST	Blue Hall	Green Hall	Red Hall
9:55-10:00	Opening of the day		
10:00-10:40	Plenary 3 - Robert Luxenhofer: "An old pony is teaching us new tricks - Poly(2-oxazolines) and poly(2-oxazines): From self-assembly to drug-delivery and 3D printing" Chair: Heikki Tenhu		
10:40-11:10	Break & Mingle		
	Session: Rheology of sustainable materials Chair: Johanna Andersson	Session: General rheology Chair: Michael Hummel	Session: Functional polymers Chair: Kasper Diemel
11:10-11:30	Tuna Baydin: "Optimization and Improvement of the Thermal Stability of Fish Gelatin"	Olli-Ville Laukkanen: "Interfacial shear and dilatational rheology of polyelectrolyte microgel monolayers at the oil-water interface"	Justina Vaicekauskaite: "Field Concentration Use in Electroluminescent Devices"
11:30-11:50	Catherine T. Nordgård: "CLEX alginate gelling technology: a versatile tool for production of biomaterials"	Gustaf Mårtensson: "Production of satellites during impact of dense suspensions on a flat surface"	Ida Östergren: "3D-printing of Plastic Plasmonic Hydrogen Sensors"
11:50-12:10	Dipankar Ghosh: "Enhanced Mechanical Stability in Multi-component Supramolecular Gels Based on Enantiomers"	Roland Kádár: "Progress and challenges on relating 'nonlinear oddities' in oscillatory shear to structural buildup in nanostructured fluids"	Tony Tiainen: "Capture of CO2 by using acrylate based polymers with amine functionalities"
12:10-12:30	Deepika Malhotra: "Enhancing the mechanical compatibility of natural biomaterials with native human skin"	Dragana Arlov: "Developing an improved methodology to measure viscosity of hot-swelling starch"	Chonghui Li: "Magnetochromic elastomer with controllable instant color changes"
12:30-13:30	Lunch break		
13:30-14:10	Plenary 4 - Bernhard A. Wolf: "Large scale fractionation of polymers and advanced viscometric methods" Chair: Michael Hummel		
	Session: Rheology of biopolymers Chair: Mats Stading	Session: Advances in rheometry Chair: Roland Kádár	Session: Functional polymers Chair: Sami-Pekka Hirvonen
14:15-14:35	Antti I. Koponen: "The effect of consistency on the shear rheology of aqueous suspensions of cellulose micro- and nanofibrils"	Jörg Läger: "Rheo-optical tools for polymer applications"	Sami Hietala: "Poly(N-acryloyl glycinamide) microgels for encapsulation of catalysts"
14:35-14:55	Leevi Viitanen: "Effect of surfactants on the rheology of cellulose nanofiber suspensions"	Christian Fengler: "Low-field RheoNMR: In-situ correlation of local segmental mobility with mechanical properties during hydrogel synthesis"	Dominik L. Braunmiller: "Static and dynamic control of magnetic microgels"
14:55-15:15	Meri Lundahl: "Effect of carbon nanomaterials on the rheology and spinnability of cellulose solutions"	Henri G. Burhin: "A new and highly efficient method to measure the steady shear viscosity and wall slip of rubber compounds. Closed boundary rheometer (RPA)"	Nabanita Hazra: "Capillary Driven Self-Assembly of Ellipsoidal Composite Microgels at the Air/Water Interface"
15:15-16:45	Poster session & Social activities		

Friday, August 20

EEST	Blue Hall	Green Hall	Red Hall
9:55-10:00	Opening of the day		
10:00-10:40	Plenary 5 - Tiina Nypelö: "Wood-based hemicelluloses: What are the key properties to enable future applications?" Chair: Michael Hummel		
10:40-11:10	Break & Mingle		
	Session: General rheology Chair: Olli-Ville Laukkanen	Session: Biopolymers Chair: Vladimir Aseyev	Session: Functional polymers / Sustainable polymers Chair: Tony Tiainen
11:10-11:30	Katarina Dimic-Misic: "Limitations on rheological properties of particulate suspensions arising from addition of a mesoporous ancillary mineral: exemplified by pin coating of a functional gas filter layer"	Jon Trifol: "3D-printed thermoset biocomposites based on Forest Residues by Delayed Extrusion of Cold Masterbatch (DECMA)"	Sepideh Zokaei: "Electrically Conducting Elastomeric Fibers with High Stretchability and Stability"
11:30-11:50	Augusto Cannone Falchetto: "On the Rheology of Asphalt Mastic Containing Mining Filler"	Emile R. Engel: "Melt processing of cellulosic fibres with only water as plasticiser"	Xiaoya Li: "Nonionic antimicrobial hyperbranched polyesters with indole or isatin functionalities"
11:50-12:10	Arild Saasen: "Properties of Dense Barite Sediments from Water-Based Drilling Fluids Oscillatory Viscosity Measurements of Wet Barite Powder"	Roberta Teixeira Polez: "Cellulose nanofibers/lignin particles/tragacanth gum nanocomposite hydrogels for biomedical applications"	Smita V. Mankar: "Synthesis And Lea Of Vanillin-Based Spirocyclic Dial Toward Fiber And Packaging Applications"
12:10-12:30	Mahmoud Khalifeh: "Rheological Characteristics of Oil-Based and Water-Based Drilling Fluids"	Maryam Mousa: "Bio-based lactones – Exploring their free-radical polymerization and polymer properties"	Harald Silau: "Valorization of lignin for coating applications"
12:30-13:30	Lunch break		
13:30-14:10	Plenary 6 - Minna Hakkarainen: "Carbon dot/polymer composites for biomedical, environmental and packaging applications" Chair: Jukka Seppälä		
	Session: Non-Newtonian fluid mechanics Chair: Gustaf Mårtensson	Session: Biopolymers Chair: Vikram Baddam	Session: Polymer composites & processing Chair: Pirjo Pietikäinen
14:15-14:35	Janaki Umashanker: "The shear and extensional rheology of aqueous xanthan gum solution using the Giesekus multi-mode model"	Ville Rissanen: "Nanocellulose-Based Immobilization Matrices For Photosynthetic Cell Factories"	Angelica Avella: "Synergic effect of water in reactive melt crosslinking of thermoplastic/thermoset poly(e-caprolactone)/cellulose nanocrystals biocomposites"
14:35-14:55	Christos K. Georgantopoulos: "Qualitative modeling to predict the extrusion flow instabilities in polybutadiene sample: influence of die geometry"	Tuuli Virkkala: "Hemicellulose cross-linked nanocellulose as immobilization matrix for photosynthetic cell factories"	Muhammad A. Munawar: "Highly Oriented Electrospun Conductive Nanofibers of Biodegradable Polymers-Revealing the Electrical Percolation Thresholds"
14:55-15:15	Dragana Arlov: "Predicting pressure drop in pipes with tomato paste and concentrated orange juice. One successful and one failed prediction"	CANCELLED Nesibe Dogan: "Cellulose nanocrystal-based bio-nanocomposite matrix for cell-immobilization with continued-photosynthetic activity"	Ezgi Ceren Boz Noyan: "Processing and properties of polyethylene plastics packaging waste"
15:20-16:00	Closing ceremony		