Tuesday, June 14th 2022

8:15 - 08:45	**Costantino Creton -** Molecular interpretation of macroscopic fracture of soft materials: where and how do bonds break ?				
08:45 - 9:15	**David Haddleton -** Cobalt(II) mediated catalytic chain transfer polymerisation: glossy magazines to stress free 3D printing				
9:15 - 9:20	**C. Defontaine** (TA Instruments)				
9:20 - 9:50	**Rachel A. Segalman -** Design of polymer electrolytes with superionic ion transport				
09:50 - 10:20	**Geoffrey W. Coates -** New approaches to sustainable polymers				
10:20 - 10:35	Group Photo (Main Amphitheater)				
10:35 - 11:05	Coffee break				
11:05 - 11:30	**U. Schubert** Polymer research 4.0: from systematic pharmapolymers to AI-assisted nanoparticle libraries for nanomedicine	**M. Monteiro** Unique asymmetric nanostructures by the TDMT method	**M. Ouchi (*)** Precision syntheses of sequence-controlled vinyl polymers and the properties derived from monomer unit sequence regulation	**F. Boulmedais** Polyelectrolytes nanocoatings: from inert to functional biomaterials	**Z. Li (*)** Synthesis of chemically recyclable polyesters via organocatalyst catalyzed ROP
11:30 - 11:45	**G. Gregory** CO_2-derived polycarbonate-block-polyether electrolytes for all-solid-state batteries	**N. Giacoletto** Substituent effects on the photoinitiation ability of coumarin-based oxime-ester photoinitiators for free radical photopolymerization	**A. Mueller** Tapered block and multiblock copolymers of styrene and dienes via statistical anionic copolymerization: Shaping the gradient	**J. Pirkin-Benameur** A first step towards self-oscillating membranes : UF membranes with chemically fueled self-oscillating permeability	**P. Le Bellec** PTHF-stat-oxirane copolymers with tunable thermal properties
11:45 - 12:00	**J. Raynaud** Inorganic/organic boron- & nitrogen-based polymers & networks for energy storage	**F. Hatton** Epoxy-functional diblock copolymer nanoparticles by RAFT aqueous emulsion polymerisation	**M. Soete** Rewritable macromolecular data storage with automated read-out	**R. Richter** A case study of reversibly cross-linked polymer brushes: morphology and function of the nuclear pore permeability barrier	**B. Martin Vaca** Methylidene-substituted lactones and cyclic carbonates for the preparation of degradable copolymers
12:00 - 12:15	**H. Yeo** Systematic investigation of block copolymer electrolytes for lithium-ion batteries	**P. Maksym** Additional external regulations of light-induced classical and controlled free-radical polymerization	**R. Aksakal** Sequence-defined mikto-arm star-shaped macromolecules: absolute molecular control	**O. Borisov** Stimuli-responsive polymer brushes in nanopores: a selective permeation barrier for nanocolloids	**L. Pitet** Streamlined synthesis of fully biobased block polymers in a continuous flow reactor
12:15 - 12:30	**D. Gigmes** Hybrid silica-polymer electrolytes for lithium metal batteries	**F. Dumur** NIR organic dyes as innovative tools for reprocessing/recycling of plastics: benefits of the photothermal activation in the near-infrared range	**M.-N. Antonopoulou** Concurrent control over sequence and dispersity in multiblock copolymers	**A. Fonseca** Electrospinning of hydroxypropyl cellulose esters with long aliphatic chains	**J. Matson** Practical considerations in ring-opening metathesis polymerization: Anchor group, solvent, and additives
12:30 - 14:00	Lunch Break & Poster Session 2				
14:00 - 14:25	**S. Rowan** Exploring dynamic covalent polymers as adaptive materials	**K. Tanaka (*)** Polymer dynamics in an interfacial region with a solid	**S. Perrier** Precision polymer chemistry for bionano applications	**S. Förster** Bistability, Remanence, and Read/Write-Memory realized in a Stimuli-Responsive Polymer	**G. Floudas** How macromolecules penetrate narrow pores
14:25 - 14:40	**D. Montarnal** Recent developments and future challenges in vitrimer materials.	**M. Leiske** Zwitterionic amino-acid-derived polymers - smart materials with cellular specificity and therapeutic activity	**P. Woisel** Supramolecular polymeric systems featuring visible read-out memory function(s)	**J. Maiz** Quasielastic neutron scattering investigation in an all-polymer nanocomposite based on poly(tetrahydrofuran) single chain nanoparticles	**H. Houck** Shining light on poly(ethylene glycol): from polymer modification to 3D laser printing of water erasable microstructures… and beyond?
14:40 - 14:55	**S. Engelen** Bio-based vinylogous urethane vitrimers as circular materials	**H. Soria-Carrera** Polyoxometalate-polypeptide hybrids: POMlymers	**R. Szweda** One-pot, reagent fueled approach towards large-scale synthesis of sequence-defined polymers	**L. Bureau** Adsorption and friction properties of polyelectrolyte mixtures deposited onto negatively charged surfaces	**N. Ayres** Stimuli responsive polymer gels using disulfide and diselenide exchange reactions to induce reversible softening and stiffening
14:55 - 15:10	**S. Schoustra** Raman spectroscopy reveals microphase separation in imine-based covalent adaptable networks	**A. Zelikin** Chemical mimicry for natural macromolecular transformations	**Q. Qin** Chiral sequence-defined oligomers for molecular recognition and self-assembly at the solid-liquid interface	**A. Hemmerle** Characterization of polymers at surfaces and interfaces on the beamline SIRIUS (SOLEIL synchrotron)	**R. Murphy** Three-dimensional hydrogel constructs derived from polypeptides
15:10 - 15:25	**D. Berne** Catalyst-free covalent adaptable networks using synergistically retro-aza-Michael reaction and transesterification activated by CF_3 inductive effects.	**H. Ulrich** Investigating structural finetuning of benzenetrispeptide – towards supramolecular polymer bottlebrushes in water	**C. Synatschke** Controlling cell-material interactions through responsive supramolecular assemblies	**O. Sysova** Bio-sourced photoresist for deep-UV photolithography	**H. Bianco-Peled** Shear thinning polysaccharides hydrogels physically cross-linked with nanogels
15:25 - 15:40	**R. Ricarte** Generalized Rouse theory for modeling the linear viscoelastic behavior of unentangled vitrimer melts	**N. Sen (W. Binder)** Lipid-polymer conjugates inhibit amyloid fibrillation	**C. Lefay** A versatile and straightforward process to turn plastics into antibacterial materials	**M. Bravo** Effect of chitosan MW and DA on complexation kinetics and morphology of chitosan/DNA complexes	**M. Cosgrave** Diblock polypeptide hydrogels as bioinks for 3D printing in tissue engineering
15:40 - 16:10	Coffee break				
16:10 - 16:35	**T. Deming** Switchable coacervates of amino acid side-chain functionalized homopolypeptides	**M. Stenzel** Polymer-coated nanocellulose for drug delivery and as bacterial antiadhesive	**E. Chen** Spatiotemporal and sequence control in precision synthesis of cyclic block copolymers	**H.-A. Klok** Expanding the scope of surface-initiated polymerization	**T. Reineke (*)** Tunable multifunctional macromolecules via parallel experiment and computation: from DNA delivery vehicles to sustainable polymers
16:35 - 16:50	**S. Schubert** Gene delivery by tailored amphiphilic polypeptides: The impact of polyplex surfing and membrane interactions	**J. Nicolas** Water-soluble polymer prodrugs to switch from intravenous to subcutaneous cancer therapy for irritant/vesicant drugs	**C. Mertens** Multifunctional sequence-defined oligomers through automated synthesis	**P. Wilson** Precision synthesis using nanoscale electrochemistry	**M.-C. Arno** Controlled living polymerisation of water-soluble monomers towards the fabrication of soft cellular scaffolds
16:50 - 17:05	**H. Iatrou** Poly(L-histidine)-containing polymers for nanoparticles featuring gold nanoshells with tunable NIR absorption and photothermal therapies	**J. Becker** Glycopolymers with defined stereochemistry for targeted drug delivery	**T. Schutz** Design of new mass tags allowing MS/MS sequencing of digital polymers	**E. Benetti** Topology and dispersity: additional parameters regulating the properties of bioinert and functional polymer interfaces	**V. Lapinte** Multi-approach of polyoxazoline hydrogels
17:05 - 17:20	**M. Concilio** Oxazoline-based antimicrobial copolymers against S. aureus: from their synthesis to their application in an in vivo insect model	**J. Baillet** Development of novel nanoparticle constructs for the controlled presentation and delivery of COVID-19 subunit vaccines	**J. van Herck** Automated polymer synthesis platform based on inline benchtop NMR and online GPC	**A. Kuzmyn** Bioactive polymer brush-based coatings by SI-PET-RAFT	**B. Couturaud** In situ drug encapsulation or drug conjugation in cancer application using polymerization-induced self-assembly (PISA)
17:20 - 17:35	**J. Gaitzsch** Fine-tuning vesicle functionality through asymmetry, chirality and biodegradability	**A. Eissa** Macromolecular engineering of polymer scaffolds for in vitro 3D tissue models	**S. Ye** Machine learning-assisted development of a versatile polymer platform with full-color emission tunability	**E. Hancox** Heterotelechelic homopolymers mimicking high χ – low N diblock copolymers with sub-2 nm domain size	**J. Bernard** The nanoprecipitation process or the simplicity in making complex colloids
17:35 - 17:50	**A. Neitzel** Polyelectrolyte complex coacervation across a broad range of charge densities	**A. Heise** Polypeptides for the design of functional nanoparticles	**G. Sanoja** Controlling network architecture and mechanical properties through kinetics of polymerization	**S. Guldin** Block copolymer assembled materials architectures for biosensing applications	**M. Thomas** Virus-like polymersomes from supramolecular interactions between complementary nucleobase-containing block copolymer nano-objects prepared via polymerization-induced self-assembly

18:00 - 20:00	Wine & Cheese & Poster Session 3