

**DUTCH** POLYMER DAYS - 20

**16 & 17 March 2020**

**Lunteren**

**PROGRAMME**

# MONDAY 16 MARCH 2020

- 09.30 - 10.15 **Registration & Coffee**
- 10.15 - 10.20 **OPENING: Prof. Rint Sijbesma (TU/e)**
- 10.20 - 11.00 **Vitrimers: Permanently crosslinked polymers with dynamic network topology**  
**Prof. Renaud Nicolaÿ (ESPCI Paris-PSL - FR)**
- 11.00 - 11.20 **Bringing static surfaces into motion with electro-active polymer coatings**  
Fabian Visschers (TU/e), Hubert Gojzewski, Julius Vancso (UT), Dick Broer and Danqing Liu (TU/e)
- 11.20 - 11.40 **Development of lignin-derived mesoporous carbons for adsorption of humic acid**  
Monika Jedrzejczyk, Julian Engelhardt (UM), Marko Djokic, Vitaliy Bliznuk, Kevin van Geem, An Verberckmoes, Jeriffa de Clercq (UGent) and Katrien Bernaerts (UM)
- 11.40 - 12.00 **Controlling distribution, shape and morphology of zeolitic imidazolate frameworks for enhanced mixed matrix membrane performance**  
Machiel van Essen, Esther Montrée, Luuk van den Akker, Zandrie Borneman and Kitty Nijmeijer (TU/e)
- 12.00 - 12.20 **Influence of polybutadiene type in a hybrid carbon black-silica filled rubber compound on aircraft tire performance indicators**  
Indria Indriasari, Wisut Kaewsakul, Jacques Noordermeer, Wilma Dierkes and Anke Blume (UT)
- 12.30 - 14.00 **Lunch**  
**Meeting PTN - NWO - KNCV - Group Leaders (room 13)**
- 14.00 - 17.00 **WORKSHOP A, B, C & D** (15.20 - 15.40 Tea Break)
- 17.15 - 18.15 **PTN Medema Lecture Award Winner 2020**  
**Responsive polymeric nanocapsules and multicompartments as cellular mimics**  
**Prof. Brigitte Voit (Leibniz IPF Dresden - DE)**
- 18.30 - 20.00 **Dinner**
- 20.00 - 22.00 **POSTER SESSION and WINE & CHEESE (EUROPE HALL)**

## TUESDAY 17 MARCH 2020

- 08.00 - 09.00 **Breakfast & Check out hotel rooms De Werelt**
- 09.00 - 09.20 **Ion-specific effects in aqueous phase separation of responsive co-polymers for the formation of sustainable membranes**  
Wouter Nielen, Josh Willott and Wiebe de Vos (UT)
- 09.20 - 09.40 **Elucidating the interplay between structure and dynamics of functional supramolecular assemblies in water for biomedical applications**  
Sandra Schoenmakers, René Lafleur, Xianwen Lou (TU/e), Svenja Ehrmann, Christoph Böttcher (FU Berlin), Anja Palmans and Bert Meijer (TU/e)
- 09.40 - 10.00 **Dynamics and spatial distribution of interfacial stereocomplexation to strengthen 3D printed poly(lactide) welds**  
Varun Srinivas, Tosca van Hooy-Corstjens, Sanjay Rastogi and Jules Harings (UM)
- 10.00 - 10.20 **Polyelectrolyte assembly orchestrated by a clock reaction**  
Christian Sproncken, Berta Gumi Audenis, Maurits van der Harst, Guido Panzarasa and Ilja Voets (TU/e)
- 10.20 - 10.40 **Coffee Break**
- 10.40 - 11.00 **Cooperative polymerisations in a chemical reaction-assembly network**  
Inge Bos, Camilla Terenzi and Joris Sprakel (WUR)
- 11.00 - 11.20 **Controlled shape transformation of polymersomes; exploiting morphology to introduce functionality**  
Imke Pijpers, Fenghua Meng, Loai Abdelmohsen and Jan van Hest (TU/e)
- 11.20 - 11.40 **Renewable vitrimers with superamphiphilic behavior**  
Chongnan Ye, Marco Caliari, Vincent Voet & Rudy Folkersma (NHL Stenden), and Katja Loos (RuG)
- 11.40 - 12.00 **A filament stretching rheometer for in-situ X-ray experiments: Combining rheology and crystalline morphology characterization**  
Jessica Pepe, Ruth Cardinaels, Gerrit Peters and Patrick Anderson (TU/e)
- 12.00 - 12.20 **Shrinking 3D printed hydrogels**  
Carl Schuurmans, Jiaying Gong, Anne Metje van Genderen, Roos Masereeuw, Yu Shrike Zhang and Tina Vermonden (UU)
- 12.30 - 13.30 **Lunch**
- 13.30 - 15.10 **WORKSHOP I, II & III** (15.10 - 15.30 Tea Break)
- 15.30 - 16.10 **Fractal emulsification of polymers and a story on polymer film stability**  
Prof. Jan Vermant (ETH Zürich - CH)
- 16.10 - 16.25 **CEREMONIES & CLOSURE: Prof. Katja Loos (RuG)**  
**Awards of the Best: Plenary & Workshop Lectures & Posters DPD-2020**

**DUTCH** POLYMER DAYS - 20

**WORKSHOPS**

**A, B, C & D**

**I, II & III**

**MONDAY 16 MARCH 2020**

**WORKSHOP A  
CHEMISTRY**

**LECTURE ROOM: EUROPA**

**chairperson: Ms. Sandra Schoenmakers (TU/e)**

14.00 - 14.20	Slowly digestible and resistant starch Yassaroh Yassaroh, Albert Woortman and Katja Loos (RuG)
14.20 - 14.40	Mechanically active polycarbonate via equilibrium solution polymerization Annelore Aerts, Camiel Kroonen, Rint Sijbesma and Hans Heuts (TU/e)
14.40 - 15.00	Photo induced morphing in polymer based artificial cilia Li Liu, Marc del Pozo Puig, Dick Broer and Albert Schenning (TU/e)
15.00 - 15.20	UV-curable biobased polyacrylates based on a multifunctional monomer derived from furfural Jules Stouten, Danny Vanpoucke, Guy Van Assche and Katrien Bernaerts (UM)
15.20 - 15.40	Tea Break
15.40 - 16.00	Photonic stimuli-responsive structural color micron-sized polymer actuators Alberto Belmonte Parra, Yera Ye Ussembayev, Tom Bus, Inge Nys, Kristiaan Neyts and Albert Schenning (TU/e)
16.00 - 16.20	Synthesis and self-assembly of well-defined strong anionic/hydrophobic diblock copolymers Anton Hofman and Marleen Kamperman (RuG)
16.20 - 16.40	Surface modification of ion exchange membranes for fouling control in reverse electrodialysis Diego Pintossi, Michel Saakes, Catarina de Carvalho Esteves, Zandrie Borneman and Kitty Nijmeijer (TU/e)
16.40 - 17.00	Juncus effucus biomass-derived hierarchical porous carbon anodes for high-performance lithium-sulfur batteries Qi Chen, Liqiang Lu, Jur van Dijken and Katja Loos (RuG)

**MONDAY 16 MARCH 2020**

**WORKSHOP B**  
**BIOMEDICAL**

**LECTURE ROOM: AFRIKA**

**chairperson: Mr. Carl Schuurmans (UU)**

14.00 - 14.20	<p>Polymeric micelles based on poly(N-2-hydroxypropyl methacrylamide) to deliver anti-cancer drugs Yan Wang, Dominique Thies-Weesie, Mies van Steenberg, Yang Shi, René van Nostrum and Wim Hennink (UU)</p>
14.20 - 14.40	<p>Synthesis and characterization of elastin inspired, polymer-peptide hybrid for tissue-engineering applications Anna Coenen, Jules Harings, Samaneh Ghazanfari, Katrien Bernaerts and Stefan Jockenhoevel (UM)</p>
14.40 - 15.00	<p>Polysaccharide-based hydrospacer for treating cartilage defects Marko Mihajlovic, Rienk Schuiringa, Margot Rijkers, Carl Schuurmans, Keita Ito and Tina Vermonden (UU)</p>
15.00 - 15.20	<p>Antifouling polymer brushes via oxygen-tolerant surface-initiated PET-RAFT Andriy Kuzmyn, Ai Nguyen, Lucas Teunissen, Jacob Baggerman and Han Zuilhof (WUR)</p>
15.20 - 15.40	<p>Tea Break</p>
15.40 - 16.00	<p>In vitro stability and In vivo profile of curcumin loaded mPEG-b-p(HPMA-Bz) polymeric micelles for cancer therapy Mahsa Bagheri, Marcel Fens, Robin-Bruno Capomaccio, Dora Mehn, Pascal Colpo, Michal Heger, René van Nostrum and Wim Hennink (UU)</p>
16.00 - 16.20	<p>Strong, self-healing, biodegradable imine vitrimers from starch Xiaohong Lan, Chongnan Ye, Laura Boetje, Jur van Dijken and Katja Loos (RuG)</p>
16.20 - 16.40	<p>Chemisorption of urea by polyphenylglyoxaldehyde Ciro Scarano, Sjaak Jong, Piet Driest, Rob Smakman, Karin Gerritsen, Wim Hennink and René van Nostrum (UU)</p>
16.40 - 17.00	<p>Enzyme-polymer bioconjugation, a strategy to improve the stability of enzyme-containing complex coacervate core micelles Riahna Kembaren, Marleen Kamperman, Mieke Kleijn and Jan Willem Borst (WUR)</p>

**MONDAY 16 MARCH 2020**

**WORKSHOP C**  
**PHYSICS & THEORY**

**LECTURE ROOM: AMERIKA**  
**chairperson: Ms. Inge Bos (WUR)**

14.00 - 14.20	Exploring the feasibility of 3D-printing electromagnetic suspensions Konstantinos Manikas, Georgios Vogiatzis, Markus Hütter and Patrick Anderson (TU/e)
14.20 - 14.40	Understanding temperature and time dependence of the mechanical properties of thermoplastic elastomers Simone Sbrescia, Michelle Seitz & Tom Engels (DSM) and Evelyne van Ruymbeke (UC Louvain)
14.40 - 15.00	Theory of the moisture uptake in polymer networks Stijn van Leuken and Remco Tuinier (TU/e)
15.00 - 15.20	Reveal the role of polar solvent treatment on the electrical conductivity of PEDOT:PSS by in situ GIWAXS Jingjin Dong, Katja Loos and Giuseppe Portale (RuG)
15.20 - 15.40	Tea Break
15.40 - 16.00	Structure quantification in transcrystalline morphologies Stan Looijmans, Lambèrt van Breemen, Dario Cavallo and Patrick Anderson (TU/e)
16.00 - 16.20	Systematic study of biopolymer plasticization - using Alginate/Polyol as a model system Suellen Pereira Espíndola, Jure Zlopaša, Ben Norder and Stephen Picken (TUD)
16.20 - 16.40	Effect of polyelectrolyte multilayer properties on membrane performance and stability Daniëlle Scheepers, Benjamin Chatillon, Zandrie Borneman and Kitty Nijmeijer (TU/e)
16.40 - 17.00	Hydrodynamic and surface-wetting effects on phase separation dynamics in melts Abheeti Goyal, Paul van der Schoot and Federico Toschi (TU/e)

**MONDAY 16 MARCH 2020**

**WORKSHOP D**  
**POLYMER TECHNOLOGY**

**LECTURE ROOM: AZIE**

**chairperson: Mr. Wouter Nielen (UT)**

14.00 - 14.20	<b>Catalyst-free dynamic polyester networks via neighboring carboxylic and sulfonic acid groups</b> Huiyi Zhang, Soumabrata Majumdar, Rolf van Benthem, Rint Sijbesma and Hans Heuts (TU/e)
14.20 - 14.40	<b>Surface modification of fumed silica by dry silanization for PP/POE-based dielectric nanocomposites</b> Xiaozhen He, Amirhossein Mahtabani, Rafal Anyszka, Wilma Dierkes and Anke Blume (UT)
14.40 - 15.00	<b>Engineering porous electrodes for redox flow batteries</b> Rémy Jacquemond, Kitty Nijmeijer and Antoni Forner Cuenca (TU/e)
15.00 - 15.20	<b>Engineering adhesion in PMMA-titanium co-molded joints</b> Giorgos Kafkopoulos, Julius Vancso and Joost Duvigneau (UT)
15.20 - 15.40	<b>Tea Break</b>
15.40 - 16.00	<b>Shining light on soft robotics</b> Marina Pilz da Cunha, Sebastiaan Ambergen, Michael Debije, Erik Homburg, Jaap den Toonder and Albert Schenning (TU/e)
16.00 - 16.20	<b>Next generation of sustainable membranes through polyelectrolyte complexation induced aqueous phase separation</b> Muhammad Irshad Baig, Elif Nur Durmaz, Joshua Willott and Wiebe de Vos (UT)
16.20 - 16.40	<b>Switchable topography of liquid crystal network coatings and its applications</b> Wei Feng, Danqing Liu and Dick Broer (TU/e)
16.40 - 17.00	<b>Sustainable Aqueous Phase Separation Membranes by Salinity Gradient Induced Polyelectrolyte Complexation</b> Elif Nur Durmaz, Muhammad Irshad Baig, Joshua Willott and Wiebe de Vos (UT)



**TUESDAY 17 MARCH 2020**

**WORKSHOP I**  
**CHEMISTRY**

**LECTURE ROOM: EUROPA**

**chairperson: Ms. Imke Pijpers (TU/e)**

13.30 - 13.50	<p>Exploiting transient asymmetric distribution of catalytic nanomotors to induce motility in coacervate-based protocells Shidong Song, Alexander Mason, Richard Post, Marco De Corato, Rafael Mestre, Amy Yewdall, Shoupeng Cao, Remco van der Hofstad, Samuel Sanchez, Loai Abdelmohsen and Jan van Hest (TU/e)</p>
13.50 - 14.10	<p>Incorporating proteins into polyelectrolyte complex membranes to create bioactive water filtration membranes Jéré van Lente, Wiebe de Vos, Mireille Claessens and Saskia Lindhoud (UT)</p>
14.10 - 14.30	<p>Super resolution microscopy of pH induced Casein micelle structural changes Sanam Foroutanparsa, Roderick Tas and Ilja Voets (TU/e)</p>
14.30 - 14.50	<p>A green approach for sustainable fatty acid starch esters Laura Boetje, Xiaohong Lan, Jur van Dijken and Katja Loos (RuG)</p>
14.50 - 15.10	<p>Packing enzymes in polyelectrolytes to prevent freeze-thaw damage and degradation in the bloodstream Lisa Timmers, José Rodrigo Magaña and Ilja Voets (TU/e)</p>

**TUESDAY 17 MARCH 2020**

**WORKSHOP II**  
**MATERIALS CHEMISTRY**

**LECTURE ROOM: AFRIKA**

**chairperson: Ms. Monika Jedrzejczyk (UM)**

13.30 - 13.50	<b>Minimizing star-star coupling in Cu(0)-mediated controlled radical polymerizations</b> Bas van Ravensteijn (TU/e), Raghida Bou Zerdan, Matthew Helgeson and Craig Hawker (UCSB)
13.50 - 14.10	<b>Complex coacervate-based fibers</b> Jianwu Sun and Marleen Kamperman (RuG)
14.10 - 14.30	<b>The forgotten pyrazines: 90-year-old chemistry towards functional polymers and new materials</b> Martien Würdemann and Katrien Bernaerts (UM)
14.30 - 14.50	<b>Hierarchically structured polymer matrices</b> Ujala Farooq, Julie Teuwen and Clemens Dransfeld (TUD)
14.50 - 15.10	<b>Multiphase complex coacervate droplets</b> Tiemei Lu, Wilhelm Huck and Evan Spruijt (RUN)

**TUESDAY 17 MARCH 2020**

**WORKSHOP III**  
**POLYMER TECHNOLOGY**

**LECTURE ROOM: AZIE**

**chairperson: Ms. Jessica Pepe (TU/e)**

13.30 - 13.50	Discrete element method for multi-material 3D food printing Dolf Klomp, Martien Hulsen and Patrick Anderson (TU/e)
13.50 - 14.10	Asymmetric polyelectrolyte multilayer membranes for micro-pollutant removal Jurjen Regenspurg, Esra te Brinke and Wiebe de Vos (UT)
14.10 - 14.30	Non-Newtonian fluid flow simulations of an external gear pump Vincent de Bie, Martien Hulsen and Patrick Anderson (TU/e)
14.30 - 14.50	Structural mediation of water and hydrogen bonded polymers for enhanced performance Milo Gardeniers, Jules Harings and Sanjay Rastogi (UM)
14.50 - 15.10	Transient 3D extrudate shape prediction for complex extrusion flows Michelle Spanjaards, Martien Hulsen and Patrick Anderson (TU/e)

# **DUTCH** POLYMER DAYS - 20

## **POSTER SESSION**

**MONDAY 16 MARCH 2020**

**LECTURE ROOM: EUROPA  
20.00 - 22.00 hrs**

# CHEMISTRY

C1	Abbasi, Sanaz	Preparation and performance study of electrospun SPEEK/PVDF blend membranes for hydrogen-bromine flow batteries (TU/e)
C2	Aerts, Annelore	Mechanical stress reporting using ion-paired complexes (TU/e)
C3	Altay, Yiğit	Dynamic assembly of micellar meso-structures (TU/e)
C4	Altomare, Aldo	Metal-free synthesis of PVDF-based block copolymers (RuG)
C5	Asadi, Vahid	Soft by design: Thermoplastic elastomers for 3D printing (WUR)
C6	Bakker, Sterre	Liquid crystalline particles as absorbents (TU/e)
C7	Boetje, Laura	A green approach for sustainable fatty acid starch esters (RuG)
C8	Bozorg, Maryam	New approach towards the synthesis of PVDF-based block copolymers and their potential for membrane production (RuG)
C9	Brió Pérez, Maria	Detachment of polymer brushes by exposure to humid air (UT)
C10	Casimiro, Anna	Towards isoporous membranes (TU/e)
C11	Chen, Wen	Magnetic stiffening in biocompatible hydrogels (RUN)
C12	Corbet, Christiaan	Discrete oligomeric naphthalene diimides to develop well-defined surfaces (TU/e)
C13	Dam, Annemieke van	Self-healing antifouling fluorinated polymer brushes (WUR)
C14	Deng, Linlin	The stability of single-chain polymeric nanoparticles as a function of medium complexity (TU/e)
C15	Dianatdar, Afshin	Oxidative chemical vapor deposition of polypyrrole (RuG)
C16	Érsek, Gábor	Contrast variation small-angle X-ray scattering study of polyacrylic nanoparticles (RuG)
C17	Fredrich, Sebastian	Epitaxial growth of azobenzene crystal actuators on oriented polyethylene films (TU/e)
C18	Ghanbari, Elmira	Unravelling the design rules for orthogonal self-assembly in binary bisamide gelators (TUD)
C19	Guzik, Aleksander	New polymeric surfactants for enhanced oil recovery (RuG)
C20	Hao, Jinmeng	Multi-responsive wrinkling surfaces with in situ synthesized plasmonic nanoparticles (UT)

# CHEMISTRY

- C21 Hofman, Anton Strong anionic/hydrophobic diblock copolymers: Synthesis and aqueous self-assembly (RuG)
- C22 Houben, Simon Nanoporous liquid crystalline composite membranes (TU/e)
- C23 Hurne, Simon van Dynamic Diels-Alder polymeric materials using furan/maleimide (WUR)
- C24 Jedrzejczyk, Monika Renewable thiol-yne 'click' networks based on modified lignin for adhesive resins applications (UM)
- C25 Joosten, Niki Liquid crystal membranes for water purification and ion recovery (TU/e)
- C26 Keller, Shauni A microfluidic tool for fine-tuning motion of soft micromotors (RUN)
- C27 Kloos, Joey Isoporous membranes based on liquid crystalline materials (TU/e)
- C28 Komil, Muhabbat Polymer brushes on supramolecular Ureidopyrimidinone-scaffolds by surface-initiated ATRP (TU/e)
- C29 Lewis, Reece Towards reversible complex coacervate core micelles (C3Ms) at constant pH (TUD)
- C30 Li, Chendan Fabrication of polyion complex vesicles via polymerization-induced dendrimer assembly (TU/e)
- C31 Liu, Jie OEG bisurea bolaamphiphiles: Chemical structure vs. supramolecular morphology (TU/e)
- C32 Liu, Xiaohong Liquid crystal elastomer microactuators with programmable shape changes (TU/e)
- C33 Luijk, Diederik van Controlling the mechanical activation of phosphate triesters in polymers (TU/e)
- C34 Maan, Annemarie Reversible antifouling polymer coatings (RuG)
- C35 Maaskant, Evelien High performance polymers from isoidide (WUR)
- C36 Maddala, Sai Investigations into the mechanism of biosilicification under in vitro conditions (TU/e)
- C37 Majumdar, Soumabrata Dynamic covalent network based on transesterification of phosphate triesters (TU/e)
- C38 Makurat, Max Layer-by-layer stabilization of large scale chemical vapour deposition synthesized graphene (UL)
- C39 Martino, Teresa de Compartmentalized cross-linked enzymatic nano-aggregates (c-CLEnA): Nanoreactors for efficient bio-catalysis in-flow (TU/e)
- C40 Orozco, Felipe Diels-Alder-based thermo-reversibly crosslinked polymers: Interplay of network mobility, kinetics and stereoisomerism (RuG)

# CHEMISTRY

- C41 Pelras, Théophile Synthesis and self-assembly of glucose-based block copolymers (RuG)
- C42 Raak, Roel van Tough liquid crystal elastomer membranes for gas transport (TU/e)
- C43 Sathyan, Anjana Single chain polymeric nanoparticles as catalyst carriers for prodrug activation (TU/e)
- C44 Schoustra, Sybren Imine-based dynamic covalent polymer networks (WUR)
- C45 Sebakhy, Khaled Nanoreactor templates to perfectly tune sizes and molecular weights of polymer nanoparticles via RAFT polymerization (RuG)
- C46 Silvianti, Fitrilia Synthesis of furan-based polyesters through enzymatic polymerization (RuG)
- C47 Srigengan, Shajeth Properties of oligomeric smectic reactive mesogens (TU/e)
- C48 Stouten, Jules The thermodynamics of the ring opening polymerization of substituted lactones elucidated (UM)
- C49 Tang, Wei Stabilin-2 mediated clearance of supramolecular polymer nanoparticles in zebrafish embryos (UL)
- C50 Teora, Serena Soft catalase-based hydrogel micromotors (RUN)
- C51 Teunissen, Lucas Novel designs for antifouling polymer brush structures (WUR)
- C52 Timmermans, Giles Flexible nanoporous liquid crystal polymer networks as matrixes for Förster resonance energy transfer (FRET) (TU/e)
- C53 Tol, Joost van der A polymeric nanoparticle approach towards crosslinked supramolecular materials (TU/e)
- C54 Tong, Ciqing Photopatternable, branched polymer hydrogels based on linear macromonomers for 3D cell culture applications (UL)
- C55 Veldhuisen, Thijs van The epoxy moiety as a versatile platform for post-polymerization functionalization: Sulfonium-functionalized nanogels (UT)
- C56 Veldhuizen, Hugo Understanding covalent organic framework crystallization by using Taylor-Couette flow during polymerization (TUD)
- C57 Westerveld, Larissa van Complex coacervate-based underwater adhesives (RuG)
- C58 Yassaroh, Yassaroh Physicochemical properties and digestibility of heat-moisture treated, stearic acid complexed starch (RuG)
- C59 Zhang, Weixin Polymer stabilized cholesteric liquid crystal siloxane for temperature responsive photonic coatings (TU/e)

# BIOMEDICAL

- |     |                      |  |
|-----|----------------------|--|
| B1  | Annala, Ada          | Self-assembling micellar nanoparticles for ocular delivery of dexamethasone (UU)   |
| B2  | Bartels, Paul        | Adhesive supramolecular biomaterials as the endocardium of an artificial heart (TU/e)  |
| B3  | Cheng, Huan          | Cellulosic sponges with Janus character: Preparation and applications in the treatment of hemorrhagic wounds (UT)                        |
| B4  | Hebels, Erik         | Native chemical ligation as a drug ligation strategy in CriPec <sup>®</sup> nanoparticles (UU)   |
| B5  | Khoonkari, Mohammad  | Exploring the physical properties of glioblastoma (RuG)  |
| B6  | Li, Rui              | Covalently immobilized antibacterial coating based on quaternary ammonium compounds kills gram-positive and gram-negative bacteria (RuG) |
| B7  | Men, Yongjun         | Polythioketal nanoparticles for cancer therapy (TUD)   |
| B8  | Paats, Jan-Willem    | Versatile single chain polymer nanoparticles for passing the blood brain barrier (UT)  |
| B9  | Schoenmakers, Sandra | Elucidating the microstructure of 1D supramolecular assemblies in water (TU/e)   |
| B10 | Toebe, Jelle         | Spatial control over catalyst positioning on biodegradable polymeric nanomotors (RUN)  |
| B11 | Zhong, Lin           | Injectable biodegradable microgels for delivery of therapeutic biologicals (UT)  |



# PHYSICS & THEORY

P1	Anthonijsz, Amira	Influence of (bio)polymer charge on thin-film stiffness (TUD)
P2	Manikas, Konstantinos	Structure characterisation of suspensions formed under uniform EM-field during 3D-printing (TU/e)
P3	Mols, Roy	Multi-process aging of glasses (TU/e)
P4	Opdam, Joeri	Drying of block copolymer micelles (TU/e)
P5	Pan, Xinglong	Mn dependent thermal transport in ultra-drawn polyethylene films (TU/e)
P6	Pereira Espíndola, Suellen	A systematic study of biopolymer plasticization - using alginate/polyol as a model system (TUD)
P7	Ritsema van Eck, Guido	Vapour sorption in solvophilic polymer brushes (UT)
P8	Sundaram, Vivek	Force-field parametrization and classical molecular dynamics study of diketopyrrolopyrrole (DPP) based polymers for photovoltaic applications (TU/e)
P9	Veldscholte, Lars	Coarse-grained molecular dynamics simulations to study vapour solvation in polymer brushes (UT)

# TECHNOLOGY

T1	Ahmadi, Hamid	Stereocomplex crystallization of PLA: Effect of low-temperature annealing (TU/e)
T2	Amiri Rad, Ahmad	Towards a macroscopic model for crack growth controlled failure in fiber reinforced thermoplastics (TU/e)
T3	Balakrishnan, Naveen	Dope dyeing of polylactic acid using natural colourants (UM)
T4	Berlo, Frank van	Modeling the flow of nonlinear viscoelastic polymers in a filament stretching rheometer (TU/e)
T5	Bie, Vincent de	The flow of a viscous fluid through an external gear pump (TU/e)
T6	Broek, Sten van den	A micromechanical analysis of pre-yield failure in short fiber reinforced polymers (TU/e)
T7	Carrozza, Mick	Modelling and simulation of the rheology of interfaces (TU/e)
T8	Chávez Thielemann, Hernán	Micro-mechanical modelling of $\alpha$ -iPP from morphological characteristics (TU/e)
T9	Di Sacco, Federico	Crystallization of PLLA thin and ultra-thin film on plain and nanostructured surfaces (RuG)
T10	Farooq, Ujala	Toughening of epoxy using thermoplastic multilayers: An interface/interphase study (TUD)
T11	Feng, Wei	Responsive liquid crystal network coatings for integrated functional devices (TU/e)
T12	Froyen, Arne	Electro-thermally responsive cholesteric liquid crystal device (TU/e)
T13	Gojzewski, Hubert	Interface in 3D-vat printed photopolymers and photopolymer composites (UT)
T14	Govers, Stefan	Surface segregation of silicon-containing block copolymers in coatings (TU/e)
T15	Hamdi, Marouen	Fundamental understanding of scratch and mar behavior of polymers (TUD)
T16	Heijden, Maxime van der	Optimizing the 3D microstructure of redox flow battery electrodes (TU/e)
T17	Hosseini, Seyed Mohammad	Morphological and rheological properties of reactive compatibilized PLA/SAN blend (TU/e)
T18	Houben, Menno	Permeation of supercritical CO <sub>2</sub> through glassy polyimide membranes (TU/e)
T19	Kafkopoulos, Giorgos	Engineering adhesion in PMMA-Titanium co-molded joints (UT)
T20	Klomp, Dolf	Multi contact hysteretic discrete element method for 3D food printing (TU/e)

# TECHNOLOGY

T21	Lemos Cosse, Renato	Production of continuous natural fibers reinforced wood plastic composites (WPC) by extrusion (RuG)
T22	Li, Jiaying	Polyelectrolyte complexation for the next generation of waterborne coating (UT)
T23	Li, Siyu	Self-assembly of silica/polyacrylate colloidosomes for water-borne coatings (TU/e)
T24	Liu, Xue	Bottom-up synthesis of monolayer amorphous carbon membrane (UL)
T25	Looijmans, Stan	Transcrystallization in compatibilized polypropylene blends (TU/e)
T26	Mangone, Carmela	Electrical measurements of piezoelectric and conductive polymers under dynamic conditions (UT)
T27	Milatz, Roland	Designer polydopamines for surface engineering (UT)
T28	Oymaci Akin, Pelin	Polydopamine membranes for forward osmosis (TU/e)
T29	Pepe, Jessica	A filament stretching rheometer for in-situ X-ray experiments (TU/e)
T30	Pozo Puig, Marc del	4D photonic microactuators (TU/e)
T31	Pyromali, Christina	Linear and nonlinear viscoelastic response of metallo-supramolecular polymeric networks (FORTH Hellas)
T32	Sol, Jeroen	Butterfly proboscis-inspired tight rolling tapered soft actuators (TU/e)
T33	Spanjaards, Michelle	3D extrudate shape prediction for complex extrusion flows (TU/e)
T34	Wang, Tao	Catalytic nanofiltration membranes for micropollutant removal (UT)
T35	Wismans, Martijn	Micromechanical modelling of complex composite systems for improved failure prediction (TU/e)
T36	Yin, Sida	Functional particles across the length scales for high-tech polymer systems (UT)
T37	Zhang, Pei	Liquid crystal photonic polymers for making patterned colour coatings (TU/e)
T38	Zhang, Shaokang	A virtual lab framework to determine the anisotropic properties of short fiber reinforced thermoplastics (TU/e)
T39	Zhang, Yunchong	Pickering emulsions as enabling templates for polymer composites (UT)