

# 16<sup>th</sup> Biennial Bayreuth Polymer Symposium



September 22 - 24, 2019  
Bayreuth, Germany

## Conference Program

For registration visit [www.bps-bayreuth.de](http://www.bps-bayreuth.de)

Sunday, September 22, 2019	
16:00 – 19:30	Registration (Building NW II)
	<b>General Session I</b> (Lecture Hall H 18)
17:45 – 18:00	Opening Remarks
18:00 – 18:30	<b>1 Krzysztof Matyjaszewski</b> , Carnegie Mellon University, Pittsburgh <i>“Macromolecular engineering by taming free radicals”</i>
18:30 – 19:00	<b>2 Katharina Landfester</b> , Max Planck Institute for Polymer Research, Mainz <i>“Polymeric modules for synthetic biology”</i>
19:00 – 19:30	<b>3 Ulrich Schubert</b> , Friedrich-Schiller-University Jena <i>“Engineering functional macromolecules for the 21<sup>st</sup> century: Tailor-made polymers and nanoparticles for applications in nanomedicine”</i>
19:30	<b>“BPS”</b> : Beer, Pretzels, Sausages (Foyer, Building NW II)

**Venue:** University of Bayreuth | Building NW II | Universitätsstr. 30 | D-95447 Bayreuth

## Monday, September 23, 2019

	<b>General Session II</b> (Lecture Hall H 18) Chair: Mukundan Thelakkat	
09:00 – 09:30	<b>4 Andreas Herrmann</b> , DWI - Leibniz-Institute for Interactive Materials, Aachen <i>"Interfacing DNA- and supercharged polypeptide precision polymers with living systems"</i>	
09:30 – 10:00	<b>5 Rachel Segalman</b> , University of California, Santa Barbara <i>"Polymeric ionic liquids for multivalent ion transport"</i>	
10:00 – 10:30	<b>6 Jürgen Groll</b> , University of Würzburg <i>"Polymer based biomaterial inks and bioinks"</i>	
10:30 – 11:30	<b>Introduction to Posters - Session I</b> Chair: Peter Stroehriegl	
11:30 – 12:30	<b>Poster Discussion I, II, and III</b>	
12:30 – 13:30	<b>Lunch Break</b> (Mensa)	
	<b>General Session III</b> (Lecture Hall H 18) Chair: Thomas Scheibel	<b>General Session IV</b> (Lecture Hall H 19) Chair: Markus Retsch
13:30 – 13:55	<b>7 Gregory Tew</b> , University of Massachusetts, Amherst <i>"Simple polymers that mimic natural proteins: From T-cell delivery to novel networks"</i>	<b>13 Il Do Kim</b> , Korea Advanced Institute of Science and Technology, Daejeon <i>"Nanofiber technology: Energy storage applications"</i>
13:55 – 14:20	<b>8 Laura De Laporte</b> , DWI - Leibniz Institute for Interactive Materials, Aachen <i>"Synthetic building blocks for regenerative materials"</i>	<b>14 Theo Dingemans</b> , University of North Carolina at Chapel Hill <i>"Mixing rods and discs: strong nanocomposites from aqueous hybrid liquid crystals"</i>
14:20 – 14:45	<b>9 Kristian Kempe</b> , Monash University, Parkville <i>"Macromolecular design of functional biocompatible polymeric materials using 2-oxazolines"</i>	<b>15 Zhi-Kang Xu</b> , Zhejiang University <i>"Mussel-inspired chemistry for advanced janus membranes"</i>
14:45 – 15:10	<b>10 Boaz Mizrahi</b> , Technion-Israel Institute of Technology, Haifa <i>"New directions in polymeric tissue adhesives"</i>	<b>16 Soumyadip Choudhury</b> , Technische Universität Chemnitz <i>"Exploring Inverse Vulcanization for Hybrid Organosulfur / CNT Networks As Cathode for Li-S Batteries"</i>
15:10 – 15:35	<b>11 Christopher Synatschke</b> , Max Planck Institute for Polymer Research, Mainz <i>"Supramolecular-covalent polymer hydrogels – combining the best of small and large molecules"</i>	<b>17 Hanying Li</b> , Zhejiang University <i>"Spatial distribution of the degree of crystallinity in polymer films"</i>
15:35 – 16:00	<b>12 Pol Besenius</b> , Johannes Gutenberg-University Mainz <i>"Peptide-polymer conjugates as a toolbox for viromimetic assemblies and thermoresponsive hydrogels"</i>	<b>18 Dirk Schubert</b> , Friedrich-Alexander-University Erlangen-Nuremberg <i>"Revealing novel power laws and quantization in electro-spinning considering jet splitting – towards predicting fiber diameter and its distribution"</i>
16:00 – 16:30	<b>Coffee Break</b>	
	<b>Special Session Microplastic and Sustainable Polymers</b> (Lecture Hall H 18) Chair: Andreas Greiner	
16:30 – 17:00	<b>19 Christian Laforsch</b> , University of Bayreuth <i>"Microplastics in the environment"</i>	
17:00 – 17:30	<b>20 Jes Vollertsen</b> , Aalborg University <i>"Analyzing for microplastics in environmental matrixes with <math>\mu</math>FTIR imaging"</i>	
17:30 – 18:00	<b>21 Seema Agarwal</b> , University of Bayreuth <i>"Environmental degradability of classified biodegradable polymers"</i>	
18:00 – 18:30	<b>22 Moshe Kol</b> , Tel Aviv University <i>"Tailor-made poly(lactic acid) based materials"</i>	
19:00 – 20:30	<b>Reception and Concert at Villa Wahnfried, Richard-Wagner-Str. 48, 95444 Bayreuth</b> <i>Bus transfer to Villa Wahnfried at 18:45, departure at Infopoint 6</i>	

## Tuesday, September 24, 2019

	<b>General Session V</b> (Lecture Hall H 18) Chair: Hans-Werner Schmidt	
09:00 – 09:30	<b>23 Edwin L. Thomas</b> , Rice University, Houston <i>“Characterization of sub-unit cell morphology in tubular network block copolymers”</i>	
09:30 – 10:00	<b>24 Christopher K. Ober</b> , Cornell University, Ithaca <i>“Metal organic cluster photo-resists for next generation EUV lithography”</i>	
10:00 – 10:30	<b>25 Edward T. Samulski</b> , University of North Carolina, Chapel Hill <i>“On the founding and science underlying Carbon's CLIP 3D printing”</i>	
10:30 – 11:30	<b>Introduction to Posters - Session II</b> Chair: Markus Retsch	
11:30 – 12:30	<b>Poster Discussion I, II, and III</b>	
12:30 – 13:30	<b>Lunch Break</b> (Mensa)	
	<b>General Session VI</b> (Lecture Hall H 18) Chair: Seema Agarwal	<b>General Session VII</b> (Lecture Hall H 19) Chair: Georg Papastavrou
13:30 – 13:55	<b>26 George Fytas</b> , Max Planck Institute for Polymer Research, Mainz <i>“Hypersonic phonon propagation and benefits to polymer science”</i>	<b>32 Shlomo Magdassi</b> , The Hebrew University, Jerusalem <i>“From Gutenberg Bible to 4D printing”</i>
13:55 – 14:20	<b>27 Kay Saalwächter</b> , Martin-Luther-University, Halle-Wittenberg <i>“Hierarchical sticker and sticky chain dynamics in self-healing butyl rubber ionomers”</i>	<b>33 Guillaume Delaitre</b> , Karlsruhe Institute of Technology, Karlsruhe <i>“Polymeric nanostructures with surface-reactive nanodomains”</i>
14:20 – 14:45	<b>28 Jürgen Senker</b> , University of Bayreuth <i>“Structure, disorder and function of supramolecular polymer additives – An NMR crystallographic study”</i>	<b>34 Eyal Zussman</b> , Technion - Israel Institute of Technology, Haifa <i>“Self-ordering in a mix of two oppositely weakly charged polyelectrolytes”</i>
14:45 – 15:10	<b>29 James Watkins</b> , University of Massachusetts <i>“Porous carbon and multi-layer graphene/carbon composite films for energy applications from brush block copolymer templates and simple precursors”</i>	<b>35 Stephen Schrettl</b> , University of Fribourg <i>“Tunable and responsive supramolecular polymer materials”</i>
15:10 – 15:35	<b>30 Ilja Gunkel</b> , University of Fribourg <i>“Controlling electrode wetting to overcome surface reconstruction limited conductivity in block copolymer Li battery electrolytes”</i>	<b>36 Rachel Yerushalmi-Rozen</b> , Ben-Gurion University of the Negev, Beer-Sheva <i>“Co-assembly in strongly interacting polymer-nanostructures systems”</i>
15:35 – 16:00	<b>31 Ralph Lange</b> , Stanford University <i>“Charge-altering releasable transporters (CARTs): polymers for mRNA-based therapeutics”</i>	<b>37 Nicolas Vogel</b> , Friedrich-Alexander-University Erlangen-Nuremberg <i>“Interfacial behavior and complex self-assembly of colloidal building blocks”</i>
16:00 – 16:30	<b>Coffee Break</b>	
	<b>General Session VIII</b> (Lecture Hall H 18) Chair: Andreas Greiner	
16:30 – 17:00	<b>38 Markus Biesalski</b> , Technical University of Darmstadt <i>“Stimulus-responsive barrier-coatings on paper using biogenic polymers”</i>	
17:00 – 17:30	<b>39 Andreas Walther</b> , University of Freiburg <i>“Polymer science concepts in the DNA World”</i>	
17:30 – 18:00	<b>40 Martin Möller</b> , DWI - Leibniz-Institute for Interactive Materials, Aachen <i>“Can a material perform as an engine?”</i>	
18:00 – 18:30	<b>Poster Awards, Concluding Remarks</b> Andreas Greiner and Hans-Werner Schmidt	
19:00	<b>Conference Dinner at Restaurant “Zur Sudpfanne”, Oberkonnersreuther Str. 6, 95448 Bayreuth</b> <i>Bus transfer to Restaurant “Zur Sudpfanne” at 18:45, departure at Infopoint 6</i>	