



# Polydays 2012: Polymers and Light

Sunday,  
September 30

16:30-21:00

**Guided Tour**  
(Deutsches  
Technikmuseum  
Berlin)

**and Boat Trip**

Monday,  
October 1

<b>Registration</b>		from 8:00 0'101
<b>Opening</b>		9:00- 9:15 0'115
<b>Plenary Talk</b> <i>High resolution imaging technology for microelectronics</i> C. Grant Willson, University of Texas at Austin		9:15-10:00
<b>Coffee Break</b>		10:00-10:30
<b>Plenary Talk</b> <i>Lessons from nature about solar light harvesting: A little bit of coherence?</i> Gregory D. Scholes, University of Toronto		10:30-11:15 0'115
<b>Plenary Talk</b> <i>THz Spectroscopy: A Novel Experimental Tool to Study Water Network Dynamics</i> Martina Havenith, Ruhr-Universität Bochum		11:15-12:00 0'115
<b>Lunch</b>		12:00-13:30
<b>Sessions</b>		13:30-15:00
<b>Solar I</b> 0'307 Silvia Janietz Dieter Neher Kay Saalwächter	<b>Characterization I</b> 0'310 Friedrich Kremer Michael Maskos Nikolaus Ernsting	
<b>Coffee Break</b>		15:00-15:30
<b>Sessions</b>		15:30-17:00
<b>Solar II</b> 0'307 Rudolf Zentel Michael Jäger Kamalakaran Kailasam	<b>Characterization II</b> 0'310 Andreas Thünemann Jens Weber Sebastian Seiffert	
<b>Short oral presentation of selected posters</b>		17:10-18:00 0'115
<b>Poster Session</b>		18:00-19:00
<b>BBQ</b>		19:00-21:00

Tuesday,  
October 2

<b>Gerhard Kanig-Lecture</b> <i>Electroactive polymers in energy conversion</i> Jean M. J. Frechet, King Abdullah University of Science and Technology		9:00-10:00 0'115
<b>BVP Awards</b> Kurt Ueberreiter-Award: Jing Cui Georg Manecke-Award: Daniel Zehm		10:00-10:30 0'115
<b>Coffee Break</b>		10:30-11:00
<b>Plenary Talk</b> <i>Azo polymers for bio-surface switching and the photo-mechanical effect</i> Christopher J. Barrett, McGill University Montreal		11:00-11:45 0'115
<b>Plenary Talk</b> <i>Advanced molecular design of functional materials</i> Takuzo Aida, University of Tokyo		11:45-12:30 0'115
<b>Lunch</b>		12:30-13:45
<b>Plenary Talk</b> <i>Exploring structure and function of natural polymeric materials with synchrotron radiation</i> Peter Fratzl, Max Planck Institute of Colloids and Interfaces		13:45-14:30 0'115
<b>Sessions</b>		14:30-16:00
<b>Solar III</b> 0'307 Uwe Bunz Michael Sommer Stefan Schiller	<b>Lithography</b> 0'310 Bernd Strehmel Armin Götzhäuser Christian Neuber	
<b>Coffee Break</b>		16:00-16:30
<b>Sessions</b>		16:30-18:00
<b>Optomechanics</b> 0'307 Andreas Fery Svetlana Santer David Bléger	<b>Display</b> 0'310 Peter Strohrriegel Hartmut Krüger Joachim Stumpe	

<b>Sessions</b>		<b>Mo, October 1, 13:30-15:00</b>	
<b>Solar I</b>		0'307	<b>Characterization I</b>
			0'310
SILVIA JANIETZ	Tailor-made absorber polymers for efficient organic solar cells	FRIEDRICH KREMER	Infrared - transition moment orientational analysis
DIETER NEHER	Charge generation and extraction in polymer-based solar cells	MICHAEL MASKOS	Characterization of shape switching of polymers induced by light
KAY SAALWÄCHTER	NMR investigations of crystallinity and supramolecular organization in polymers for photovoltaics applications	NIKOLAUS ERNSTING	Oscillation of DNA recognition observable on fluorescence shift?

<b>Sessions</b>		<b>Mo, October 1, 15:30-17:00</b>	
<b>Solar II</b>		0'307	<b>Characterization II</b>
			0'310
RUDOLF ZENTEL	Blockcopolymer - nanocrystal hybrids for optoelectronic applications	ANDREAS THÜNEMANN	Polymer characterization using hard X-rays for revealing solution and solid state structures
MICHAEL JÄGER	Modular polymer-based architectures for efficient multiple charge-separation: Redox-active polymers and decoration with luminescent ruthenium complexes	JENS WEBER	Characterization of nanoporous polymers by X-ray scattering
KAMALAKANNAN KAILASAM	Polymeric heptazine networks for photocatalytic water splitting	SEBASTIAN SEIFFERT	Smart Microgel Capsules and Model Colloids Tailored by Photocrosslinking in Droplet-Based Microfluidics

<b>Sessions</b>		<b>Tue, October 2, 14:30-16:00</b>	
<b>Solar III</b>		0'307	<b>Lithography</b>
			0'310
UWE BUNZ	Use of alkene metathesis for the synthesis of pentacene-containing materials	BERND STREHMEL	Ultrafast photopolymers for lithographic printing applications
MICHAEL SOMMER	Conjugated polymers via step growth and chain growth polymerizations	ARMIN GÖLZHÄUSER	Carbon nanomembranes engineered from molecular monolayers
STEFAN SCHILLER	Defined nanostructured & supramolecular precision biopolymer architectures as photonic building blocks	CHRISTIAN NEUBER	Tailored star block copolymer architecture for high performance chemically amplified resists

<b>Sessions</b>		<b>Tue, October 2, 16:30-18:00</b>	
<b>Optomechanics</b>		0'307	<b>Display</b>
			0'310
ANDREAS FERY	Correlation between local pressure and fluorescence in mechanoresponsive polyelectrolyte brushes	PETER STROHRIEGL	Lithographic patterning of semiconducting polymers
SVETLANA SANTER	Polymer films with optically controlled shape and actuation on a nanometer scale	HARTMUT KRUEGER	Polymers as universal matrix for highly efficient phosphorescent OLEDs and display applications
DAVID BLÉGER	Photo-shrinkable rigid-rod polymers as building blocks for photodynamic materials	JOACHIM STUMPE	Active and passive polarization elements for LC Displays