



IRTG 1404

Self-organized Materials for Optoelectronics





JOHANNES GUTENBERG
UNIVERSITÄT MAINZ

IRTG 1404 Meeting in Berlin 2015

July 5th-July 9th Harnack-Haus der Max-Planck-Gesellschaft Ihnestr. 16-20 - 14195 Berlin

Schedule



July 5 (Sunday)

Arrival and check-in at Harnack Haus

July 6 (Monday)

8:00 – 9:00	Breakfast and registration
9:00 – 12:00	Excursion with the Korean participants
12:00-13:30	Lunch
13:30- 13:50	Welcome remarks
	Prof. R. Zentel, Prof. HJ. Butt, Prof. K. Char, Prof. K.S. Lee
13:50-14:10	Prof. Do Yeung Yoon "History, Results and Perspective for Korean-German Cooperation"
Session I	
14:10-16:10	Talks (Chairman: R. Zentel)
	Prof. Byeong-Hyeok Sohn "Self-Assemblies of Functionalized Diblock Copolymer Micelles for Photonic Applications"
	Prof. Katja Heinze "Transition Metal Complexes for Optoelectronics"
	Prof. Tae-Lim Choi "In Situ Nanoparticlization of Conjugated Polymers"
	Prof. Wolfgang Tremel "Ordered Hybrid Structures for the Engineering of Sound and Light"
16:10-16:40	Coffee break
16:40-18:10	Talks (Chairman: T.L.Choi)
	Prof. Rudolf Zentel "From Optoelectronics to Concept for Coating of Anode- or Cathode Materials"
	Prof. Ji Young Chang "Preparation of Compressible Microporous Network Polymers"
	Florian Mathias "Reactivity Studies of Unsymmetrically Substituted PPV Monomers and their Role in the Synthesis of Functional Block Copolymers via ROMP"
	Ana Fokina "Carbazole-based Polymers for Hybrid QD@Polymer LEDs"
Evening	Welcome reception with barbeque

July 7 (Tuesday)

Session II

9:00-10:30 Talks (Chairman: F. Laquai)

Prof. Ullrich Scherf "Microporous Polymer Networks - Introducing Functionality and

Generating Thin Films or Nanoparticles"

Dr. Mohammad Nazeeruddin "Progress in Perovskite Photovoltaics"

Prof. Jang-Joo Kim "Electrical Doping in Amorphous Organic Semiconductors"

10:30-11:00 Coffee break

11:00-12:30 Talks (Chairman: Tae Dong Kim)

Prof. Klaus Meerholz "Organic Memories"

Dr. Frédéric Laquai "Triplet State Formation in Polymer Solar Cells"

Prof. Katharina Landfester "Upconversion in Nanoconfinement: Possibilities and

Challenges"

12:30-14:00 Lunch

Session III

14:00-16:00 Posters and coffee

16:00-17:30 Talks (Chairman: R. Berger)

Prof. Dieter Neher "Chain Aggregation and Orientiation in Active Layers of High

Performance Polymer Devices"

Prof. Kookheon Char "My Fond Memories through IRTG Collaborations on Self-

Organized Materials for Optoelectronics"

Prof. Kwang-Sup Lee "Charge and Energy Transfer Behaviors of Quantum Dot-Based

Hybrid Materials"

Evening Dinner cruise (Departure from Harnack-Haus at 18:10)

July 8 (Wednesday)

Session VI

9:00-10:30 Talks (Chairman: K.S. Lee)

Dr. Denis Andrienko "Effect of Mesoscale Ordering on the Density of States of Polymeric Semiconductors"

Prof. YounJoon Jung "Threading Dynamics of Ring Polymer Melts"

Prof. Thomas Basché "Energy and Charge Transfer in Quantum Dot-Dye Complexes"

10:30-11:20 Posters and coffee

11:20-12:20 Talks (Chairman: J.J. Kim)

Dr. Rüdiger Berger "Perovskite Solar cells on a Nanometer Scale"

Prof. Tae Dong Kim "Molecular Strategies of Donor-Acceptor Small Conjugated Molecules and Polymers for Organic Photovoltaics"

12:20-14:00 Lunch

Session V

14:00-15:30 Alumni talks (Chairman: K. Char)

Dr. Wanki Bae "Next-Generation Displays with Quantum Dot-Conjugated Polymer Nanohybrid Solution"

Prof. Jochen Gutmann "Fast Forward to Applied Systems. How to Integrate Optoelectronics into Textiles"

Prof. Prem Prabhakaran "Development of New Functional Materials for Two-photon Lithography"

15:30-16:00 Coffee break

16:00-18:15 Student talks (Chairman: B.-H. Sohn)

Kerstin Niederer "Multifunctional Polyethers via Copolymerization of a New Catechol-acetonide Glycidyl Ether Monomer with Ethylene Oxide or Glycidol"

Jongkuk Ko "Advanced Morphology Control of Organic Photovoltaics by using Mutual Diffusion of n-type and p-type Molecules"

Jens Wehner "Multiscale Simulation of Exciton Diffusion in Organic Materials via GW/BSE"

Break (15 minutes)

Changki Moon "Molecular Orientation Induced by Coulomb Interaction in the Vacuum Deposited Film"

Hannah Huesmann "Synthesis and Assembly of Metal Oxide Nanoparticles"

 $Sungsoo\ Kim\ ``Tunable\ Pt\ Nanostructures\ Synthesized\ from\ Self-Assembled\ Diblock$

Copolymers to Tailor Reduced Graphene Oxide Films"

18:15-18.30 Final discussion among the PIs: Perspectives for a new IRTG

Evening: Restaurant "Alter Krug Dahlem"

July 9 (Thursday)

9:00 – 9:45 Final discussions and farewell

City-tour and museums for the interested participants

July 10 (Friday)

Final Departure