

Program of International Workshop Photonic of Functional Nanomaterials

	Monday 06.05.2013	Tuesday 07.05.2013	Wednesday 08.05.2013	Thursday 09.05.2013
8:40	Opening Remarks Andrey Rogach			
9:00	Invited Yury Rakovich	Invited Oliver Schmidt	Invited D.D. Sarma	Invited Zee Hwan Kim
9:30	Hilmi Volkan Demir	Yang Yang Li	Bingsuo Zou	Sun Handong
9:50	Yan-Cheng Lin	Zhiyong Fan	Robert Pansu	Hongbing Fu
10:10	Rui Chen	Amitava Patra	Haizheng Zhong	Ni Zhao
10:30	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00	Invited Din Ping Tsai	Invited Prashant Kamat	Invited Lian-Mao Peng	Invited Vasudevanpillai Biju
11:30	Invited Ben Zhong Tang	Invited Kok Wai Cheah	Shengyi Yang	Deng Renren
12:00	Qihua Xiong	Taro Toyoda	Timothy T.Y. Tan	S. Carregal-Romero
12:20	Kai Wang	Xueqing Xu	Kin Hung Fung	Stephen Kershaw
12:40	Lunch	Lunch	Group Photo	Lunch
			Boat Trip	
14:00	Invited John Pendry	Invited Naomi Halas		Invited Xiaogang Liu
14:30	Lin Jiang	Eric Wei-Guang Diao		Sur Chattopadhyay
14:50	Yu Luo	Qing Shen		Xie Xiaoji
15:10	Weihai Ni	K.W. Sun		Dorleta Jimenez de Aberasturi
15:30	Coffee Break	Coffee Break		Coffee Break
16:00	Invited Peter Norldlander	Poster Session		Invited Jochen Feldmann
16:30	Invited Alexander Govorov			Tze Chien Sum
17:00	Qiang Zhang			Closing Remarks Andrey Rogach
17:20	Xiao Ming Zhang			
17:40	Duan Bo			
18:00				

Monday 06.05.2013

- 8:40-9:00 **Andrey Rogach** (*City University of Hong Kong, Hong Kong*)
Opening Remarks
- 9:00-9:30 **Yury Rakovich** (*CFM San Sebastian, Spain*)
Quantum Dots for Bioenergetics: Exploration of Energy Transfer from Semiconductor Nanocrystals to Photosynthetic Biological Complexes.
- 9:30-9:50 **Hilmi Volkan Demir** (*Bilkent University, Turkey / NTU Singapore*)
Exciton Transfer Dynamics in Hybrid Organic Nanocomposites of Colloidal Quantum Dots.
- 9:50-10:10 **Yan-Cheng Lin** (*National Chiao Tung University, Taiwan*)
Photoluminescence and Time-resolved Carrier Dynamics in Thiol-capped CdTe Nanocrystals under High Pressure.
- 10:10-10:30 **Rui Chen** (*Nanyang Technological University, Singapore*)
Energy Transfer as an Effective Tool to Achieve Functional Nanomaterials.
- 10:30-11:00 **Coffee Break**
- 11:00-11:30 **Din Ping Tsai** (*National Taiwan University, Taiwan*)
Fabrication of Plasmonic Functional Metamaterials and its Applications.
- 11:30-12:00 **Zhong Ben Tang** (*Hong Kong University of Science & Technology, Hong Kong*)
Luminogenic Polymeric Materials Constructed from Tetraphenylethene Building Blocks: Aggregation-induced Emission, Two-Photon Absorption, Optical Limiting and Light Refraction.
- 12:00-12:20 **Qihua Xiong** (*Nanyang Technological University, Singapore*)
Laser Cooling of a Semiconductor by 40 K.
- 12:20-12:40 **Kai Wang** (*Huazhong University of Science and Technology, China*) Laterally Emitted Surface Second Harmonic Generation in a Single ZnTe Nanowire.
- 12:40-14:00 **Lunch**
- 14:00-14:30 **John Pendry** (*Imperial College, UK*)
Understanding Singular Plasmonic Structures.
- 14:30-14:50 **Lin Jiang** (*Soochow University, China*)
Advance Plasmonic Properties Based on Multiplexed One-dimensional Arrays of Au Nanoparticles.
- 14:50-15:10 **Yu Luo** (*Imperial College London, UK*)
Plasmonic Light Harvesting Structures: the Nonlocal and Quantum Tunnelling Effects.
- 15:10-15:30 **Weihai Ni** (*Suzhou Institute of Nano Tech and Nano Bionics, China*)
Colloidal Chemistry in an Optical Trap.
- 15:30-16:00 **Coffee Break**
- 16:00-16:30 **Peter Nordlander** (*Rice University, USA*)
Plasmonics: From Fano Interference to Quantum Effects and Light Harvesting.
- 16:30-17:00 **Alexander Govorov** (*University of Ohio, USA*)
Optically-active Hybrid Nanostructures: Exciton-Plasmon Interaction, Fano Effect, and Plasmonic Chirality.
- 17:00-17:20 **Qiang Zhang** (*Harbin Institute of Technology, China*)
Plasmonic Nanostructures with Fano Resonances and their Unusual Optical Force Effect.
- 17:20-17:40 **Xiao Ming Zhang** (*Harbin Institute of Technology, China*)
Tractor Beams to Pull Plasmonic Nanoparticles of Arbitrary Shape: A Numerical Study Based on DDA.
- 17:40-18:00 **Duan Bo** (*Nanyang Technological University, Singapore*)
SERS-Active Nanoparticles for Sensitive and Selective Detection of Heavy Metal Ions.

Tuesday 07.05.2013

- 9:00-9:30 **Oliver Schmidt** (*IFW Dresden, Germany*)
Photonics with Deformable Nanomembranes.
- 9:30-9:50 **Yang Yang Li** (*City University of Hong Kong, Hong Kong*)
Metallic Rugate Structures for Near-perfect Absorbers in Visible and Near-infrared Regions.
- 9:50-10:10 **Zhiyong Fan** (*Hong Kong University of Science and Technology, Hong Kong*)
Three-dimensional Nanostructures for Cost-effective Solar Energy Harvesting.
- 10:10-10:30 **Amitava Patra** (*Indian Association for the Cultivation of Science, India*)
Luminescent Nano Materials for Photonic Applications.
- 10:30-11:00 **Coffee Break**
- 11:00-11:30 **Prashant Kamat** (*University of Notre Dame, USA*)
Quantum Dot Solar Cells. Emerging Strategies and Challenges.
- 11:30-11:50 **Kok Wai Cheah** (*Hong Kong Baptist University, Hong Kong*)
Novel Plasmonic Materials and Devices.
- 12:00-12:20 **Taro Toyoda** (*The University of Electro-Communications, Japan*)
Photovoltaic Characteristics of CdS/CdSe Quantum Dot-sensitized Solar Cells Coupled to Inverse Opal TiO₂ Electrodes together with Photoexcited Carrier Dynamics.
- 12:20-12:40 **Xueqing Xu** (*Guangzhou Institute of Energy Conversion, China*)
Characterization of CuInS₂ Sensitized Nanocrystalline TiO₂ Films Fabricated via SILAR.
- 12:40-14:00 **Lunch**
- 14:00-14:30 **Naomi Halas** (*Rice University, USA*)
Frontiers of Plasmonics: New Materials, Interactions, and Applications.
- 14:30-14:50 **Eric Wei-Guang Diao** (*National Chiao Tung University, Taiwan*)
Formation of Novel TiO₂ Nanostructures for Highly Efficient Dye-sensitized Solar Cells.
- 14:50-15:10 **Qing Shen** (*The University of Electro-Communications, Japan*)
Improvement of Charge Separation and Suppression of Charge Recombination in ZnO/P3HT Hybrid Solar Cells by Locating Dye at ZnO/P3HT Interfaces.
- 15:30-15:30 **K.W. Sun** (*National Chiao Tung University, Taiwan*)
Enhancing the Performance of Si Solar Cells Using Nanophosphors with Metal-enhanced Fluorescence.
- 15:30-16:00 **Coffee Break**
- 16:00-19:00 **Poster Session**

Wednesday 08.05.2013

- 9:00-9:30 **D.D. Sarma** (*IISc Bangalore, India*)
Photoluminescence from Semiconductor Nanocrystals.
- 9:30-9:50 **Bingsuo Zou** (*Beijing Institute of Technology, China*)
Optical Properties of Mn(II) Ions Doped II-VI Semiconductor Nanostructures.
- 9:50-10:10 **Robert Pansu** (*CEA Grenoble, France*)
The Poisson Distribution of Quenchers in the Fluorescent Dynamics of Nanoparticles.
- 10:10-10:30 **Haizheng Zhong** (*Beijing Institute of Technology, China*)
Colloidal I-III-VI Semiconductor Nanocrystals for Light-emitting Applications.
- 10:30-11:00 **Coffee Break**
- 11:00-11:30 **Lian-Mao Peng** (*Peking University, China*)
Light Emission and Detection with Carbon Nanotubes.
- 11:30-11:50 **Shengyi Yang** (*Beijing Institute of Technology, China*)
Polymer Solar Cells Based on Carbon Nanotubes Decorated with Colloidal Quantum Dots.
- 11:50-12:10 **Timothy T.Y. Tan** (*Nanyang Technological University, Singapore*)
Lanthanide-based Nanomaterials in Nanomedicine.
- 12:10-12:30 **Kin Hung Fung** (*The Hong Kong Polytechnic University, Hong Kong*)
Effects of Broken Time-reversal Symmetry on Periodic Resonator Arrays.
- 12:30-12:45 **Group Photo**
- 13:00 **Boat Trip**

Thursday 09.05.2013

- 9:00-9:30 **Zee Hwan Kim** (*Korea University, Korea*)
Nano-Plasmonics for Single-Molecule Photochemistry and Chemical Microscopy.
- 9:30-9:50 **Sun Handong** (*Nanyang Technological University, Singapore*)
Micro-Resonators: WGM Lasing and Sensing Applications.
- 9:50-10:10 **Hongbing Fu** (*Chinese Academy of Sciences, China*)
Slab-nanocrystals of H-aggregation Organic Semiconductors for Low-threshold Nanolasers.
- 10:10-10:30 **Ni Zhao** (*Chinese University of Hong Kong, Hong Kong*)
Fast, Air-Stable Infrared Photoconductors Based on Water-soluble HgTe Quantum Dots.
- 10:30-11:00 **Coffee Break**
- 11:00-11:30 **Vasudevanpillai Biju** (*AIST, Japan*)
Multifunctional Engineered Nanomaterials: Bioimaging Applications Vs Toxicity.
- 11:30-11:50 **Deng Renren** (*National University of Singapore, Singapore*)
Upconversion Nanoparticles Based Energy Transfer for Sensitive Bio-detection.
- 11:50-12:10 **S. Carregal-Romero** (*Institute of Physics and WZMW, Germany*)
Light-Addressable and Degradable Silica Capsules for Cytosolic Release.
- 12:10-12:40 **Stephen Kershaw** (*City University of Hong Kong, Hong Kong*)
Emerging Quantum Dot Mid-IR Emitter and Detector Technologies.
- 12:40-14:00
Lunch
- 14:00-14:30 **Xiaogang Liu** (*National University of Singapore, Singapore*)
Rare-earth Nanocrystals: A New Class of Luminescent Bioprobes.
- 14:30-14:50 **Sur Chattopadhyay** (*National Yang Ming University, Taiwan*)
Bio-inspired Artificial Photonics Nanostructures for Efficient Antireflective Surfaces and Surface Enhanced Raman Scattering Platform.
- 14:50-15:10 **Xie Xiaoji** (*National University of Singapore, Singapore*)
Gold Nanoparticle-based Colorimetric Assays.
- 15:10-15:30 **Dorleta Jimenez de Aberasturi** (*Universität Marburg, Germany*)
How Nano- and Microparticles Can Improve the Properties of Ion-selective Ligands.
- 15:30-16:00 **Coffee Break**
- 16:00-16:30 **Jochen Feldmann** (*Ludwig-Maximilians-Universität München, Germany*)
Photocatalysis with Semiconductor Nanocrystals
- 16:30-16:50 **Tze Chien Sum** (*Nanyang Technological University, Singapore*)
Ultralow Two-Photon Pumped Lasing Threshold from Seeded CdSe/CdS Nanorod Heterostructures.
- 16:50-17:10 **Andrey Rogach** (*City University of Hong Kong, Hong Kong*)
Closing Remarks