

# Scientific Program

## Sunday, March 26, 2017

- 02.00 pm     **Registration**  
– 04.00 pm
- 03.00 pm     **Come Together**
- 04.00 pm     **Opening**
- 04.10 pm     **Wolfgang Zinth** (invited)  
*Solar Energy Conversion in the Bacterial Reaction Center*
- 04.55 pm     **Wolfgang Lubitz** (invited)  
*Light-Induced Water Splitting in Photosynthesis*
- 07.00 pm                             **- Dinner-**

## Monday, March 27, 2017

- 09.00 am     **Alexander Ruban** (invited)  
*Regulation of Light-Harvesting in Nature*
- 09.45 am     **Leonas Valkunas**  
*Modeling of Self-Regulation Ability of Light-Harvesting Antenna*
- 10.10 am     **Jevgenij Chmeliov**  
*Multiple Quenching States in Single LHCIIs and PSII Supercomplexes*
- 10.35 am     **Gabriela Schlau-Cohen** (invited)  
*Dynamics of Photosynthetic Light-Harvesting: From Conformational Changes to Excitation Energy Transfer*
- 11.00 am                             **- Coffee break -**

- 11.20 am **Nicoletta Liguori**  
*Different Carotenoid Conformations Have Distinct Functions in Light-Harvesting Regulation in Plants*
- 11.45 am **Christopher Duffy**  
*Carotenoids in Light-Harvesting: Towards a General Molecular Theory*
- 12.10 am **Vytautas Balevičius Jr.**  
*Identification and Explanation of Recurring Motive in Chlorophyll-Xanthophyll Configuration in Light-Harvesting Complexes*
- 12.45 pm **- Lunch -**
- 02.00 pm **Alastair Gardiner** (invited)  
*Adaptation of the Purple Bacterial Intra-Cytoplasmic Membrane to Growth at Different Light Intensities*
- 02.25 pm **David Swainsbury**  
*Engineering Calcium-ion Binding into the RC-LH1 Core Complex of Rhodospirillum rubrum*
- 02.50 pm **Ali Samiepour**  
*Monograin Membranes as Artificial Thylakoid Membranes*
- 03.15 pm **Amitava Patra**  
*Light-Harvesting in Nanoscale Systems*
- 03.40 pm **- Coffee break -**
- 04.00 pm **Linn Leppert**  
*Band Edge Engineering of Hybrid Halide Perovskites for Solar Cell Applications – Insights from Density Functional Theory and Beyond*
- 04.25 pm **Julian Adolphs**  
*Theory of Hole-Burning and Difference Fluorescence Line-Narrowing Spectra of Pigment-Protein Complexes*
- 04.50 pm **Thomas Renger**  
*Light-Harvesting in Photosystem II Cores: From Structure to Function*
- 05.15 pm **- Poster session -**  
– 07.00 pm
- 07.15 pm **- Dinner -**

## Tuesday, March 28, 2017

- 09.00 am **Leif Hammarström** (invited)  
*Molecular and Biomimetic Approaches to Artificial Photosynthesis*
- 09.45 am **Annemarie Huijser**  
*A New Photophysical Insight into High Turn-Over Numbers for H<sub>2</sub> Generation by Bimetallic Photocatalytic Complexes*
- 10.10 am **Yutaka Amai**  
*Porphyrin-biocatalyst Hybrid System with Visible-light Induced Carbon-carbon Bond Formation from CO<sub>2</sub> as a Feedstock*
- 10.35 am **Jens Uhlig**  
*Shedding Light on Dark Excited States in a Hydrogen Generating Photocatalyst Using Ultrafast X-ray Spectroscopy*
- 11.00 am **- Coffee break -**
- 11.20 am **Kai Zhang** (invited)  
*Nanostructured Organic Semiconductors for Visible Light-promoted Photocatalysis*
- 11.45 am **Samantha Hood**  
*Entropy, Disorder and Delocalisation Enable Charge Separation in Organic Solar Cells*
- 12.15 pm **- Lunch -**
- 01.45 pm **- Excursion to Rosenau Castle -**
- 05.00 pm **POSTER Session**  
– 07.00 pm
- 07.15 pm **- Dinner -**

## Wednesday, March 29, 2017

- 09.00 am **Alan Aspuru-Guzik** (invited)  
*Has Nature Evolved Coherent Exciton Evolution?*
- 09.45 am **Johannes Neugebauer** (invited)  
*First-Principles Calculations of Optical Properties of Light-Harvesting Complexes*
- 10.10 am **Ulrich Kleinekathöfer**  
*Protein Arrangement Effects and Dephasing Times in Cryptophyte Light-Harvesting Complexes*
- 10.35 am **Frank Müh**  
*Electrostatic Asymmetry in the Reaction Center of Photosystem II*
- 11.00 am **- Coffee break -**
- 11.20 am **Maxim Pshenichnikov**  
*Lab-on-a-chip Approach to Self-Assembling of Artificial Light-Harvesting Systems*
- 11.45 am **Jakub Pšenčík** (invited)  
*Pigment Organization in Chlorosomes from Green Photosynthetic Bacteria*
- 12.10 am **Lisa Günther**  
*Revealing Light-Harvesting Nanotubes in Individual Chlorosomes*
- 12.45 pm **- Lunch -**
- 02.00 pm **Tomáš Polívka**  
*The S1 State of Carotenoids Explored by Femtosecond Raman Spectroscopy*
- 02.25 pm **Kai-Hong Zhao** (invited)  
*Structures and Functions of Far-red Fluorescing Phycobiliproteins*
- 02.50 pm **Dorota Kowalska**  
*Plasmon-Induced Absorption of Blind Chlorophylls in *C. Merolae* PSI-LHCI Assembled on Silver Nanowires*
- 03.15 pm **Martin Streiter**  
*Fluorescence Excitation Spectroscopy Revealing the Dynamics of Single-Molecule Stokes Shifts*
- 03.40 pm **- Coffee break -**
- 04.00 pm **Dorthe M. Eisele**  
*Supramolecular Self-assembly for Light-Harvesting: Utilizing Counterions for Directing Hierarchical Assembling*
- 04.25 pm **Cvetelin Vasilev**  
*Energy Transfer in Artificial Light-Harvesting Assemblies Studied by Fluorescence Life-Time Imaging*

04.50 pm **Andrew Gall**  
*A Novel Approach to Super-Resolution Microscopy*

05.15 pm **- POSTER Session -**  
– 07.00 pm

07.15 pm **- Dinner special -**

## Thursday, March 30, 2017

09.00 am **Francis C. Spano** (invited)  
*Expanded Theory of H- and J- Molecular Aggregates*

09.45 am **Richard Hildner**  
*Emitting Species of Poly(3-hexylthiophene): A Single-Molecule Study*

10.10 am **Martin Vacha** (invited)  
*Light-Harvesting from Single-Molecule Perspective: Selective Turn-on of Energy Transfer by Localized Plasmon and Role of Aggregation in Photophysics of Polyfluorenes*

10.35 am **George Knee**  
*Structure-Dynamics Relationship and Quantumness in Efficient Energy Transport in Light-Harvesting Complexes*

11.00 am **- Coffee break -**

11.20 am **Björn Kriete**  
*Halogen Substitution Driven Self-Assembly of Amphiphilic Carbocyanine Dyes*

11.45 am **Marcin Szalkowski**  
*Wavelength-Dependent Energy Transfer from Photosynthetic Complexes to Graphene Electrodes*

12.10 pm **Thomas Basché** (invited)  
*Formation of WSCP-linked Gold Nanoparticle Dimers and Plasmonic Enhancement of the Chlorophyll Emission*

12.35 pm **- Closing remarks -**

12.45 pm **- Lunch -**

01.30 pm **- Shuttle to Lichtenfels Station -**