# Seminar Schedule "Physical Organic & Supramolecular Chemistry" Summer Term 2016

#### Thursday, May 12, 2016

#### Singlet Oxygen

Jingjing Gao

Cytochrome P-450: two-state-reactivity as a new mechanistic paradigm

Yunfei Zhou / Haruki Saito Wu

Reaction Dynamics of Reactive Intermediates: Synergy of Theory and Experiment

Paul Richter

High-Pressure Chemistry: Activation Volumes

Ivan Ilic

#### Thursday, May 19, 2016

#### Non-classical Cations, Superacids, Superelectrophiles

Patrick Voßnacker / Tobias Bens

#### Stable Carbenes

Jan Joswig / Sabrina Weihe

Square-planar Carbon

**Andrew Walter** 

Fullerenes, Carbon Nanotubes and Graphene

Birte Gruber

#### Thursday, May 26, 2016

#### Femtosecond Spectroscopy

Anja Gründler

#### Thursday, June 2, 2016

Evidence for Short-Lived Intermediates from Neutralization-Reionization Mass Spectrometry

Kai Sonderhoff

## Evidence for Short-Lived Intermediates from Matrix-Isolation Spectroscopy

Stefanie Kieninger / Marlon Winter

#### Origin of Homochirality

Tyler Gully

#### Non-Linear Effects in Asymmetric Catalysis

Constantin Stuckhardt

#### **Topological Chirality**

Michael Jakob

#### Chiroptical Methods

Peleg Bar-Sapir

#### Three Dimensional Aromaticity

Felix Witte / Merlin Kleoff

## Woodward Hoffmann Rules: Correlation Diagrams for Electrocyclic Ring Opening Reactions

Kajsa Lood / Milena Perovic

#### Thursday, June 9, 2016

#### Reactions with Coarctate Transition Structures

Kurt Hoffmann / Patrick Pröhm

#### Describing Catalysis by Michaelis-Menten Kinetics

Konstantin Simon / Lisa-Marie Eschner

#### **Organocatalysis**

Anna Timofeeva / Jennifer Anders

#### Perfluorinated Solvents

Lars Hoffmann / Sven Helle

#### Thursday, June 16, 2016

#### The Discovery of Crown Ethers

Quan Wang

#### Templated Synthesis: Catenanes, Rotaxanes, molecular Knots

Corinna Saar

#### Molecular Sensors

Antonia Herzog / Maximilian Roca Jungfer

#### Thursday, June 23, 2016

## Self-Assembly and Self-Organization: Creating Complexity from Simple Building Blocks

Frederik Bader / Vico Adjedje

#### Multivalency and Cooperativity

Tejmaya Basnetchettri

#### Mesoscale Self-Assembly

Shu Wang / Dengkun Wang

### Thursday, June 30, 2016

#### Self-Sorting

Meghna Dabur / Yogita Joshi

#### Molecular Recognition of Anions

Bence Hartmayer

#### Fluorescent Resonance Energy Transfer (FRET)

Jeroen Goedhart

#### Thursday, July 7, 2016

## Container Molecules, Molecular Capsules and Molecular Tennis Balls Jonathan Schneider

Origin of Life: Self-Replication and Autocatalysis?

Richard Pilz

#### Molecular Machines

Ahed Almalla

#### Thursday, July 14, 2016

#### Switchable Rotaxanes on Surfaces

Sarah Kastner

## Europium- and Terbium-Containing Luminescent Complexes: Replacement for Radioimmunoassays?

Philipp Bohr

### Catalytic Antibodies

Antreas Vorkas

Helix Bundles: Mechanism of Protein Folding

Björn Harms

### Thursday, July 21, 2016

## Aquaporins and Ion Pumps

Ekaterini Kalaitzis / Brian Sachini

### Artificial Photosynthesis

Suzan de Almeida Dias Miranda

## Reinventing Chemistry

Oliver Etzold