

DFG SPP 1613 Summer School, September 25-28, 2016, Hotel Teikyo Berlin-Schmoeckwitz - Program

Sunday, 25th September

18:00–19:30 Arrival, welcome

19:30–20:30 Dinner

Monday, 26th September

07:30-08:30	Breakfast	
General Introduction		
08:30-09:00	Prof. Dr. Wolfgang Jaegermann	Introduction into the scientific questions of the SPP 1613
09:00-10:00	Prof. Krishnan Rajeshwar	In a Solid-State Materials Wonderland: A 40-Year Odyssey
Fundamentals of Photoelectrochemical Junctions		
10:00-11:00	Prof. Laurence Peter	An Introduction to Semiconductor Photoelectrochemistry
11:00-11:30	Coffee Break	
11:30-12:30	Prof. Hans Joachim Lewerenz	Photoelectrochemical Water Splitting: From Concepts to Solar Fuel Generating Devices
12:30-13:30	Prof. Anders Nilsson	Operando X-ray Studies of Photo- and Electrocatalysis
13:30-14:30	Lunch	
Novel Photoabsorbers		
14:30-15:30	Prof. Dr. Michael Graetzel	Mesoscopic Photosystems for the Generation of Fuels from Sunlight
15:30-16:30	Prof. Bruce Parkinson	Solar Fuels: Progress and Prospects
16:30-17:00	Coffee Break	
17:00-18:00	Prof. Frank Osterloh	Solar Water Splitting with Particle Photocatalysts
18:00-18:30	Prof. Dr. Fatthakova	Nanostructuring concepts in the design of electrodes for photo/electrochemical water splitting

18:30-19:30	Dinner	
Industrial Perspectives		
19:30-20:30	Dr. Gilles Dennler	Accelerated discovery of new energy materials by high throughput ab-initio computations and experimental validation
20:30-21:30	Dr. Guenter Schmid	Single Step Direct Electrocatalytic Reduction of CO ₂ Towards CO and Hydrocarbons

Tuesday, 27th September

07:30-08:30	Breakfast	
Advanced Electrocatalysts		
08:30-09:30	Prof. Dr. Marc Koper	Multiple proton-coupled electron transfer for electrochemical generation of fuels
09:30-10:00	Prof. Dr. Dau	Investigating mechanisms in (electro)catalysis of water oxidation
10:00-11:00	Prof. Dr. Beatriz Roldan Cuenya	Size, shape and chemical state effects in the electroreduction of CO ₂ over nanostructured Cu and Ag catalysts
11:00-11:30	Coffee break	
Device Development I		
11:30-12:00	Dr. Finger/Prof. Dr. Fiechter	Integrated photovoltaic-electrochemical water splitting modules as a tool for optimization of catalyst materials, upscaling and module geometries
12:00-13:00	Prof. Ib Chorkendorff	Water splitting and the making of renewable chemicals
13:00-14:00	Lunch	
14:30-19:00	Excursion: Boat trip	
19:00-20:15	Dinner	
20:15-	Open discussion/Poster session	

Wednesday, 28th September

07:30- 08:30	Breakfast	
Device Development II		
08:30- 09:30	Dr. John Turner	Semiconductor Systems and Catalysis for Photoelectrochemical Water Splitting
09:30-10:30	Prof. Kevin Sivula	Emerging materials for the photocathode/photoanode tandem cell
10:30-11:00	Coffee break	
11:00-12:00	Prof. Jae Sung Lee	Materials and Systems for stand-alone Solar Fuel Production
12:00-13:00	Lunch	
Theory and Modeling		
13:00-14:00	Prof. Geoffroy Hautier	Finding the Needle in a Haystack: A High-Throughput Computational Approach to Materials Discovery
14:00-15:00	Prof. Dr. Alexander Auer	Bridging heterogenous and homogenous catalysis - <i>in theory</i> similarities and differences from surfaces to molecule
15:00	Coffee/Departure	