

Program 12th SolTech Conference 2023

October 3rd

from Registration

12:30

13:30 **Welcome + Opening**

Frank Würthner

14:00 **KeyNote 1: Gerald J. Meyer**, University of North Carolina at Chapel Hill, USA

CHASE: Solar Energy Conversion with Molecular-Semiconductor Hybrids

14:50 **Student Highlights**

1. **Philipp Ramming**, T. Siegert, S. Biberger, C. Witt, N. Leupold, R. Moos, H. Grüninger, F. Panzer and A. Köhler (UBT)
Perovskite Research Highlights
2. **Marina I. Schönherr**, P. I. Scheurle, A. Mähringer and D. D. Medina (LMU)
Electrically Conducting Three-Dimensional Iron-Catecholate Porous Metal-Organic Frameworks
3. **Ayse Günay-Gürer**, Y. Reva, J. Bikash, D. Langford, A. Cadranel, D. M. Guldi (FAU)
Visible Light Absorbing CNDs: Study of Structure and Photochemical Properties
4. **Hagen Übele**, M. J. Feil and K. Krischer (TUM)
Pulsed CO₂ Reduction on Polycrystalline Copper with Operando Plasmonic Interface Analysis
5. **Merle Arrowsmith**, M. Eyßelein and H. Braunschweig (JMU)
Incorporating CO₂ into Boron, Oxygen-Heterocycles

15:50 Coffee Break

“SolTech Meets Industry”

16:30 **KeyNote 2: Marco Bosch**, BASF SE Ludwigshafen, Germany

BASF’s Net Zero Accelerator

17:20 **KeyNote 3: Christoph Kowitz**, Wacker Chemie AG München, Germany

Making Wacker Chemie AG climate-neutral by 2045

18:10 Break

18:30-20:30 **Welcome Reception & Poster Session 1**

October 4th

- 9:00** **KeyNote 4: Bettina V. Lotsch**, MPI Solid State Research Stuttgart, Germany
2D Molecular Frameworks for Solar Energy Conversion and Storage: From Design to Function
- 9:50** **Philipp H. Kirchner**, Frank Würthner and Florian Beuerle (JMU)
Heterogeneous Water Oxidation Catalysis in Porous Materials
- 10:10** **Dana D. Medina** (LMU)
TBA
- 10:30** **Coffee Break**
- 11:00** **Patrick Dörflinger**, Y. Ding, V. Schmid, M. Armer, R. C. Turnell-Ritson, B. Ding, P. J. Dyson, M. K. Nazeeruddin and V. Dyakonov (JMU)
Influence of an Organic Salt-Based Stabilizing Additive on Charge Carrier Dynamics in Triple Cation Perovskite Solar Cells
- 11:20** **Christopher Greve**, P. Ramming, M. Griesbach, A. Köhler, F. Panzer, E. M. Herzig and H. Grüninger (UBT)
A Halide Ion Highway – How BMIMBF₄ Changes Thermally Induced Halide Mixing in Hybrid Perovskites
- 11:40** **Altantulga Buyan-Arivjikh**, M. Schwartzkopf, S. Vayalil, S. V. Roth & P. Müller-Buschbaum (TUM)
Effect Of Perovskite Nanocrystal Nucleation Seeds on Microstructure and Crystallization Pathways in Organic-Inorganic Halide Perovskite Thin Films
- 12:00** **Tobias Siegert**, S. Biberger, M. Spies, K. Schötz, F.-J. Kahle, N. Leupold, R. Moos, H. Grüninger, A. Köhler and F. Panzer (UBT)
Improved Control of Perovskite Thin Film Formation by Reactive Spin Coating and Real Time In-Situ Feedback
- 12:20** **Lunch**
- 14:20** **KeyNote 5: Elena Selli**, Università degli Studi di Milano, Italy
TBA
- 15:10** **Tim F. Rieth**, I.D. Sharp (TUM)
Atomic Layer Deposition for Protective Coatings in Photoelectrochemistry
- 15:30** **Judith Zander**, J. Timm, M. Weiss and R. Marschall (UBT)
Light-Induced Ammonia Generation Over Defective Carbon Nitride
- 15:50** **Harishankar Balakrishnan**, Achim Hartschuh (LMU)
Optical Nanospectroscopy Investigations on Energy Conversion Materials
- 16:10** **Coffee Break**
- 16:40** **KeyNote 6: Vincent Artero**, Université Grenoble Alpes, France
Photoelectrochemical Technologies for Solar Fuels Production: From Materials to Prototypes
- 17:30** **Ilka Vincon**, A. Barfüßer, J. Feldmann and Q. Akkerman (LMU)
Unraveling the Adsorption of Metal Salts on Quantum Dots
- 17:50** Kilian Frank, **B. Nickel** (LMU)
Nucleation and Degradation of Energy Materials Decoded by X-Rays
- 18:10** **Break**
- 18:30-20:30** **Get-Together & Poster Session 2**

October 5th

- 9:00** **KeyNote 7: Paola Ceroni**, Università di Bologna, Italy
Light-Harvesting Antennae for Solar Energy Conversion
- 9:50** **Labeesh Kumar**, M. Goel, T. P. Gujar, M. Thelakkat (UBT)
Solution Processed CZTS for Photocatalysis in Visible Range
- 10:10** **Elena A. Mack**, Alejandro Cadranel, Leandro Lourenço, Tomas Torres Dirk M. Guldi (FAU)
Non-Covalent 0D-2D Phtalocyanine-Transition Metal Dichalcogenide Charge Transfer Heterostructures
- 10:30** **Coffee Break**
- 11:00** **Dominik M. Dankert, C. E. Fajman**, P. Müller-Buschbaum and T. F. Fässler (TUM)
Nonagermanide Clusters as Synthons for Macroporous Thin Films and Inorganic Hybrid Materials
- 11:20** **Christoph Oleszak**, M. M. Distel, C. L. Ritterhoff, B. Meyer, N. Jux (FAU)
Nanographene-Fused Porphyrins
- 11:40** **Phillip M. Greißel**, A. Mateo-Alonso and D. M. Guldi (FAU)
Charge Transfer Formation Competes with Singlet Fission in Twisted Molecular Nanoribbons
- 12:00** **Merle I. S. Röhr** (JMU)
Singlet Fission Beyond the Dimer Model
- 12:20** **Lunch**
- 14:20** **KeyNote 8: Lin X. Chen**, Northwestern University, USA
Ultrafast Functional Structural Dynamics in Solar Energy Conversion
- 15:10** **Giovanni M. Beneventi**, K. Schöll, F. Negri, A. Cadranel, N. Jux, D. M. Guldi (FAU)
Dual Emission and Ping-Pong Energy Transfer in Molecular Nanographenes and their Coordination Compounds
- 15:30** **Paul Mentzel**, M. Holzapfel, U. E. Steiner, C. Lambert (JMU)
Chalcogen Substituted Donor-Acceptor Dyads for the Investigation of Heavy Atom Dependent Magnetic Field Effects
- 15:50** **Coffee Break**
- 16:20** **Martin Schwade**, M. J. Schilcher, C. Reverón Baecker, M. Grumet, D. A. Egger (TUM)
Calculating Accurate Temperature-Dependent Electronic Properties of Semiconductors Using Dynamic Tight-Binding
- 16:40** **KeyNote 9: Johannes T. Margraf**, Fritz-Haber-Institut Berlin, Germany
Science-Driven Chemical Machine Learning
- 17:30** **Poster Awards & Closing Remarks**