

**Physical Chemistry [PC]**  
**Morning Session – PER 21, A120**  
 Chair: Malte Oppermann, University of Basel

**METTLER TOLEDO**

Session Endowment: Mettler Toledo

- 10:45 **Chiroptical probes to track spin & light polarization in space & time in emerging semiconductors [PC-011]**  
 Sascha Feldmann, EPFL Lausanne
- 11:15 **Excited-State Symmetry Breaking and its Origins: Insights from Ultrafast Transient Two-Dimensional Infrared Spectroscopy [PC-013]**  
 Ricardo Fernández-Terán, University of Geneva  
 E. Balanikas, J. Kölbl, R. J. Fernández-Terán\*, E. Vauthey\*
- 11:30 **Real-time tracking of the ultrafast chirality and energy transfer in a chiral OLED complex with circularly-polarized luminescence [PC-014]**  
 Livia Müller, University of Basel  
 F. Zinna, G. Pescitelli, M. Puppini, M. Oppermann\*
- 11:45 **Capturing site-selective chemical dynamics via time-resolved X-ray photoelectron spectroscopy [PC-015]**  
 Andre Al Haddad, Paul Scherrer Institut PSI, Villigen  
 S. Oberli, J. Knurr, L. Paoloni, A. Sarracini, K. Schnorr, A. Picon, C. Bostedt\*
- 12:00 **Magnetic Deflection of Neutral Sodium Solvent Clusters:  $\text{Na}(\text{H}_2\text{O})_n$ ,  $\text{Na}(\text{NH}_3)_n$ ,  $\text{Na}(\text{MeOH})_n$ , and  $\text{Na}(\text{DME})_n$  [PC-016]**  
 D. Borgeaud dit Avocat, ETH Zurich  
 J. V. Barnes, E. Simmen, B. L. Yoder, R. Signorell
- 12:15 **Competition between product channels in ion-molecule reactions near 0 K:  $\text{D}_2^+ + \text{CH}_3\text{F}$  and  $\text{D}_2^+ + \text{H}_2\text{O}$  [PC-017]**  
 David Schlender, ETH Zurich; R. Hahn, F. Merkt\*
- 12:30 5x 3min poster pitches

**Afternoon Session – PER 21, A120**  
 Chair: Natalie Banerji, University of Bern

- 14:30 **Holographic Microscopy and Machine Learning – Transforming Cellular Assays [PC-021]** Tatjana Strom, Mettler Toledo GmbH  
 A. Ferrer, H. Muhr\*
- 15:00 **Multifunctional hybrid systems via self-organization of Janus nanoparticles and polymersomes for bio-applications [PC-023]**  
 Voichita Mihali, University of Basel  
 M. Skowicki, P. Jasko, C. Palivan\*
- 15:15 **Innovative pH-Responsive Rhamnolipid Nanomaterials: Advanced Antimicrobial Solutions [PC-024]**  
 Parth Kadakia, University of Fribourg  
 J. Valentin, S. Salentinig\*
- 15:30 **Rational Design of Dinitroxide Polarizing Agents for Dynamic Nuclear Polarization to Enhance Overall NMR Sensitivity [PC-025]**  
 Ran Wei, EPFL Lausanne  
 A. Venkatesh, G. Casano, Y. Rao, H. Lingua, H. Karoui, M. Yulikov, O. Ouari\*, L. Emsley\*
- 15:45 **Improved super-resolution imaging with cucurbituril-encapsulated fluorophores [PC-026]**  
 Liza Briant, University of Geneva  
 A. Fürstenberg\*
- 16:00 **Insights into the Bonding Nature of Arsenic, Phosphorus, and Sulphur Ylides: an answer from quantum crystallography [PC-027]**  
 Yaser Balmohammadi, University of Bern  
 L. A. Malaspina, S. Grabowsky

**Materials Chemistry [Mat]**  
**Morning Session – PER 21, G120**  
 Chair: Fabian von Rohr, University of Geneva

**Vigor**

Session Endowment: Vigor

- 10:45 **Materials Chemistry and the Future of Human Civilization [Mat-011]**  
 Nicola Spaldin, ETH Zurich
- 11:15 **End-functionalized high dielectric permittivity polysiloxanes for solvent-free processing [Mat-013]**  
 Jana Wolf, EMPA  
 P. M. Danner, J. von Szczepanski, D. M. Opris\*
- 11:30 **A Dye-Sensitized Sensor for Oxygen Detection under Visible Light [Mat-014]**  
 Lionel Wettstein, ETH Zurich  
 J. Specht, V. Kesselring, L. Sieben, Y. Pan, D. Käch, F. Krumeich, D. Baster, M. El Kazzi, M. Bezdek\*
- 11:45 **Supramolecular Modulation for Hybrid Perovskite Photovoltaics [Mat-015]**  
 Ghewa AISabeh, EPFL Lausanne / AMI  
 M. Almalki, S. Kasemthaveechok, M. A. Ruiz-Preciado, P. Zimmermann, D. Dekker, M. Galerne, E. Moulin, F. T. Eickemeyer, M. Graetzel\*, J. V. Milic\*
- 12:00 **All-Perovskite Multicomponent Nanocrystal Superlattices [Mat-016]**  
 Taras Sekh, ETH Zurich/Empha  
 I. Cherniukh, G. Rainò, E. Kobiyama, T. Sheehan, W. A. Tisdale, T. Stöferle, R. Erni, G. Itkos, M. I. Bodnarchuk\*, M. V. Kovalenko\*
- 12:15 **hybrid hole-selective protection layer towards long-term stability of low-cost metal oxide in solar water oxidation [Mat-017]**  
 Sanghyun Bae, University of Zurich  
 D. Tilley\*

**Afternoon Session – PER 21, G120**  
 Chair: Bastian Brand, ZHAW Wädenswil

- 14:30 **Gloveboxes – Operation, Maintenance, and Common Misunderstandings [Mat-021]**  
 Martin Eck, Vigor Gas Purification Technologies
- 15:00 **Epitaxial Core/Shell Nanocrystals of (Europium-Doped) zirconia and hafnia [Mat-023]**  
 Carlotta Seno, University of Basel  
 N. Reichholf, F. Salutari, M. Spadaro, Y. P. Ivanov, G. Divitini, A. Gogos, I. Herrmann, J. Arbiol, P. F. Smet, J. De Roo
- 15:15 **Tetraoxa[8]circulenes - A Platform for Polymers and Frameworks [Mat-024]**  
 Patrick Fritz, University of Fribourg  
 A. Coskun\*
- 15:30 **Soft actuators based on stimuli-responsive composite hydrogels [Mat-025]**  
 Matilde Folkesson, Adolphe Merkle Institute, Fribourg  
 C. Weder\*, J. A. Berrocal\*
- 15:45 **Constructing Diverse Colloidal Suprastructures for Biomedical Advancements [Mat-026]**  
 Minghan Hu, ETH Zurich  
 S. Pané, B. Nelson, H. Thérien-Aubin, H. J. Butt, A. DeMello, L. Isa, M. Hu\*
- 16:00 **Crystal growth and anisotropic magnetic properties of incommensurately modulated  $\text{K}_{0.87}\text{CrSe}_2$  [Mat-027]**  
 Felix Eder, University of Geneva  
 C. Witteveen, J. F. Woods, R. Butti, P. Szwedziak, A. Vargas Jentzsch, M. Rickhaus, E. Giannini\*, F. O. von Rohr\*