

SCS FALL MEETING 2024, POSTER SESSIONS**Poster Presentation Title [Code]**

First line = Presenting Author

Second line = Coauthors

Analytical Sciences [AS]**Poster Session****Mechanistic understanding of electric field enhancement in gap-mode tip-enhanced Raman spectroscopy [AS-101]**

Siiri Bienz, ETH Zurich

C. Hsu, K. Greis, R. Zenobi*, N. Kumar*

Mapping of surface functionality of (bio-based) polymers in relation to weathering (environmental decay) [AS-102]

Tobias Borgmeyer, EPFL Lausanne

M. J. Rossi, C. Ludwig*

Gas-phase fluorescence spectroscopy and ion mobility-mass spectrometry for investigating time-resolved unfolding mechanisms of cytochrome c after desolvation [AS-103]

Linus Busse, ETH Zurich

L. Benzenberg, R. Zenobi*

Combining NIR spectroscopy and chemometrics for the online determination of process temperature and spectra prediction [AS-104]

Federico Cambiè, PSI/EPFL Lausanne

I. Alxneit, D. Ferri, O. Kröcher

Automated Prediction of Ground State Spin for Transition Metal Complexes and Benchmarking Physics-based Representations [AS-105]

Yuri Cho, EPFL Lausanne

R. Laplaza, S. Vela, Y. C. Alonso, K. Briling, C. Corminboeuf *

A flow-electrolysis approach for the separation and analysis of plutonium [AS-106]

Paul Dutheil, Paul Scherrer Institute PSI, Villigen

F. Köhler, M. Heule*, P. Steinegger*

Examining the volatile organic compound profile of wild-type and gnotobiotic honey bees by high-resolution mass spectrometry [AS-107]

Mateusz Fido, ETH Zurich

S. Moriano Gutierrez, J. Lan, R. Zenobi, P. Engel, E. Slack

Defining factors that influence chemical transformation rates in gut microbiota cultures grown ex vivo [AS-108]

Jacob Folz, ETH Zurich

R. Fernández, M. Stevanoska, G. Aichinger, S. J. Sturla*

Comprehensive Characterization of PLGA and Liposomal β -Carotene Nanocarriers in Simulated Gastrointestinal Fluids [AS-109]

Roman Fortunatus, Adolphe Merkle Institute, University of Fribourg

S. Balog, P. Taladriz-Blanco, B. Rothen-Rutishauser, A. Petri-Fink

Could mineralised textiles be considered as time capsules? [AS-110]

Clémence Iacconi, HEIA-FR, HES-SO

L. Hendriks, E. Desplanques, L. Robbiola, C. Portmann, N. Haghipour, L. Bertrand

Towards Streamlined Environmental Persistence Assays for Trace Organic Contaminants: Findings from High-Throughput Method Optimization and Biodegradation Testing [AS-111]

Chiel Kaal, Eawag, Dübendorf

S. Partanen, N. Müller, K. Fenner*

Cost-Effective Method for Trace Elements Analysis in Solids by LA-N₂-MICAP-MS [AS-112]

Dylan Käser, ETH Zurich

T. Van Acker, B. Hattendorf, D. Günther*

Quantification of substances in exhaled breath using secondary electrospray ionization beyond MS measurements. [AS-113]

Timon Käser, ETH Zurich

S. Giannoukos, R. Zenobi*

Tracking Coordination Environment and Reaction Intermediates in Homo- and Heterogenous Epoxidation Catalysts via Ti L_{2,3}-edge NEXAFS [AS-114]

Lukas Lätsch, ETH Zurich

S. A. Guda, V. Romankov, C. Wartmann, J. Dreiser, A. Berkessel,

A. A. Guda, C. Copéret*

Development of a Total N-Nitrosamines Analyzer and Its Optimization for Real Water Applications [AS-115]

Woongbae Lee, EPFL Lausanne

M. Lee, F. Breider, U. von Gunten*

A quantitative targeted GC-MS approach to characterize lactose malabsorption [AS-116]

Kashish Mallick, ETH Zurich

C. Blaser, G. Pimentel, A. Vadakkechira, R. Guillod, G. Vergères,

R. Zenobi, D. Pohl, S. Giannoukos, K. J. Burton-Pimentel

Nanoscope mechano-imaging in polymers [AS-117]

Hrshikesan Pattam, Adolphe Merkle Institute, University of Fribourg

J. Clough*

First insights in untangling bulk ¹⁴C dates in painted artwork through Compound Specific Radiocarbon Analysis [AS-118]

Lionel Rumpf, HEIA Fribourg

L. Hendriks*, S. Szidat*

Bee bread collected by honey bees (*Apis mellifera*) as a terrestrial pesticide biomarker to complement water studies [AS-119]

Samira Stalder, Agroscope

M. Fracheboud, A. Stalder, B. Droz, A. C. Chiaia-Hernandez*, C.

Kast*

High resolution Imaging of Dawsonite using LA-ICP-TOFMS [AS-120]

Barbara Umfahrer, ETH Zurich

P. S. Garofalo, D. Günther*

Discovering breath metabolic profiles associated with lactose metabolism using secondary electrospray ionization mass spectrometry [AS-121]

Albin Vadakkechira, ETH Zurich

K. Mallick, R. Guillod, G. Vergères, R. Zenobi, D. Pohl, K. J.

Burton-Pimentel, S. Giannoukos*

Tracking cyanobacterial toxins and their biotransformation in Swiss surface waters [AS-122]

Xuejian Wang, Eawag, Dübendorf

S. Wullschleger, E. M.-L. Janssen*

Computational Chemistry [CC] Poster Session

Heavy-atom tunnelling in singlet oxygen predicted with ab-initio instanton theory [CC-101]

Imaad Ansari, ETH Zurich

G. Trenins, J. O. Richardson, E. R. Heller*

Cooperative free energy: correlation, solvation, and conformation in protein-ligand-protein ternary complexation [CC-102]

Shu-Yu Chen, ETH Zurich

R. Solazzo, M. Fouche, H. Roth, B. Dittrich, S. Riniker*

Structure Determination of Single Crystal Quartz by Hirshfeld Atom Refinement [CC-103]

Kanghyun Chu, University of Bern

Y. Balmohammadi, S. Grabowsky*

Predicting Off-targets from ChEMBL Data Using the Polypharmacology Browser [CC-104]

Maedeh Darsaraee, University of Bern

J. Reymond, J. Reymond*

Studying ion and water flow through aerolysin nanopores using molecular dynamic simulations [CC-105]

Jingze Duan, University of Geneva

L. Perrin, C. Cao

Accurate tunnelling splittings with second-order instantons [CC-106]

Jindřich Dušek, ETH Zurich

J. E. Lawrence, J. O. Richardson*

Performance of the new non-decomposable approximant for the non-additive kinetic potential for embedded radical [CC-107]

Tanguy Englert, University of Geneva

T. A. Wesolowski*

Data augmentation leads to near quantitative single-step round-trip accuracy in transformer-based retrosynthesis models [CC-108]

Yves Grandjean, University of Bern

D. Kreutter, J. Reymond*

Structure-based machine learning models to predict environmental biodegradation half-lives and their uncertainty [CC-109]

Jasmin Hafner, University of Zurich/Eawag

J. Cordero, A. Scheidegger, K. Fenner*

Spin-flip TDDFT within the Sternheimer formalism [CC-110]

Luis Hernandez Segura, University of Zurich

S. Lubner*

Reaction prediction in the low-data regime with transition state descriptors [CC-111]

Lauriane Jacot-Descombes, ETH Zurich

J. Landis, K. Jorner*

Sampling strategies for expectation values within the Herman--Kluk approximation [CC-112]

Fabian Kröniger, EPFL Lausanne

C. Lasser*, J. Vaníček*

Multiscale simulations of hybrid halide-perovskite photovoltaic devices [CC-113]

Nikolaos Lempesis, EPFL Lausanne

V. Carnevali, L. Agosta, V. Sláma, A. Vezzosi, U. Röthlisberger*

MiMiC Framework for Multiscale Simulations: Current Status and Recent Advancements [CC-114]

Andrea Levy, EPFL Lausanne

A. Antalík, U. Röthlisberger*

Nonadiabatic dynamics simulations in periodic condensed phase systems and challenges with hybrid-based Δ SCF [CC-115]

Momir Mališ, University of Zurich

E. Vandaele, S. Lubner*

Abraham solvation parameters model in the frame of graph convolutional neutral networks [CC-116]

Miroslava Nedyalkova, Fribourg University

A. Paluch, M. Lattuada

Molecular dynamics simulation of aerolysin nanopore using high-resolution cryo-EM structure [CC-117]

Louis Perrin, University of Geneva

J. Anton, I. Iacovache, J. F. Bada Juarez, L. A. Abriata,

M. J. Marcaida Lopez, M. Dal Peraro, B. Zuber, C. Cao*

Reactivity prediction of highly flexible catalysts using conformationally enriched machine learning [CC-118]

Stefan Schmid, ETH Zurich

C. Ser, M. Skreta, A. Aspuru-Guzik*, K. Jorner*

Cost-Informed Bayesian Reaction Optimization [CC-119]

Alexandre Schoepfer, EPFL Lausanne

J. Weinreich, R. Laplaza, J. Waser*, C. Corminboeuf*

Assessing the performance and accuracy of Delta Self-Consistent Field (Δ SCF) method within Restricted-Open Kohn–Sham formalism [CC-120]

Andrey Sinyavskiy, University of Zurich

M. Mališ, S. Lubner*

Predicting Reaction Properties using SMILES/CGR [CC-121]

Giustino Sulpizio, ETH Zurich

K. Jorner*

Striking the right balance of encoding electron correlation in the Hamiltonian and wavefunction ansatz [CC-122]

Kalman Szenes, ETH Zurich

M. Reiher

Computational insights into organic halide perovskite solar devices [CC-123]

Andrea Vezzosi, EPFL Lausanne

N. Lempesis, V. Carnevali, V. Sláma, U. Röthlisberger*

Ligand-based 3D Pharmacophore Search for Drug Analogues in Ultra-Large Combinatorial Libraries [CC-124]

Modest von Korff, Alipheron AG

T. Sander

3-Dimensional descriptors of molecular lipophilicity of macrocycles [CC-125]

Franz Waibl, ETH Zurich

F. Dey, S. Riniker*

Stochastic Sampling around Ring-Polymer Instanton [CC-126]

Yu-Chen Wang, ETH Zurich

J. Richardson

Microkinetic Molecular Volcano Plots for Enhanced Catalyst Selectivity and Activity Predictions [CC-127]

Thanapat Worakul, EPFL Lausanne

R. Laplaza, S. Das, M. Wodrich, C. Corminboeuf*

**Catalysis Sciences & Engineering [CE]
Poster Session**
Controlled Sulfur-Doping of Transition Metal Phosphides Enhances their Catalytic Properties [CE-101]

Nina Arnosti, University of Basel
V. Wyss, M. F. Delley*

Insight into structure-activity relationships of SiO₂-supported bimetallic Pd-Fe catalysts for CO₂ hydrogenation to methanol [CE-103]

Angelo Bellia, ETH Zurich
P. M. Abdala, C. R. Müller*

Air Compatible Alkali Metal Amide Catalysed Hydroamination of Heterocumulenes [CE-104]

Sophia Belrhomari, University of Bern
E. Hevia*

Mechanochemically derived iron atoms on defective boron nitride for stable propylene production [CE-105]

Gian Marco Beshara, ETH Zurich
I. Surin, M. Agrachev, H. Eliasson, T. Otroshchenko, F. Krumeich, G. Jeschke, R. Erni, E. V. Kondratenko, J. Pérez Ramírez*

Hydrogenation of CO₂ over Carbon-Supported NiGa and PdGa Catalysts: Influence of Ga-Precursor Choice on Catalytic Performance [CE-107]

Enzo Brack, ETH Zurich
M. Plodinec, C. Copéret*

The new Debye beamline at SLS2.0: a versatile platform for operando X-ray chemical and structural analysis with multimodal X-ray absorption spectroscopy and scattering [CE-108]

Adam Clark, Paul Scherrer Institute PSI, Villigen
S. Hitz, M. Nachttegaal

A scalable dynamic flow reactor for challenging continuous processes [CE-109]

Kim-Long Diep, HEIA Fribourg
E. Buchs, M. Moser, F. Steinemann, A. Georg, M. Dabros, R. Marti*

Electrochemical nitrate to ammonia reduction with a dendritic MoO_x catalyst [CE-110]

Robin Dürr, ETH Zurich
Y. Xu, D. F. Abbott, T. N. Huan, V. Mougel*

Shedding Light on the Synergistic Effects in Multi-Metal Solid Catalysts by Advanced Operando Spectroscopy [CE-112]

Nina Genz, Paul Scherrer Institute PSI, Villigen
F. Meirer, B. Weckhuysen

Convergent active site evolution of platinum single-atom catalysts for acetylene hydrochlorination and implication for toxicity minimization [CE-113]

Vera Giulimondi, ETH Zurich
M. Vanni, S. Damir, T. Zou, S. Mitchell, F. Krumeich, A. Ruiz-Ferrando, N. López, J. Gata-Cuesta, G. Guillén-Gosálbez, J. Smit, P. Johnston, J. Pérez-Ramírez*

Doped NiO yields ultra-low overpotential electrocatalysts in alkaline media – towards practical anion exchange membrane electrolyzers [CE-114]

Aswin Gopakumar, Institut Català d'Investigació Química (ICIQ)
J. Lloret-Fillol*

Precursors of Ethylene Oxide and CO₂ in Ethylene Epoxidation: In-Situ AP-XPS Study Revealing Absence of OMC Species on Ag foil [CE-115]

Man Guo, Paul Scherrer Institute PSI/ETH Zurich
N. Dongfang, M. Iannuzzi, J. A. Bokhoven, L. Artiglia*

Graphitic carbon nitride (g-C₃N₄) modified by ionic liquids for an improved water-splitting performance [CE-116]

Stefanie Kammereck, University of Zurich
G. R. Patzke*

Formation and Stability of μ₂-Peroxo on Titanosilicates, Anatase, and Rutile: Implications for Zeotype Catalysts [CE-117]

Christoph Kaul, ETH Zurich
L. Lätsch, I. Müller, T. De Baerdemaeker, A. Parvulescu, K. Seidel, H. Teles, N. Trukhan, C. Copéret*

Glycosyl Benzoates as Novel Donors for Glycosynthases [CE-118]

David Lim, University of Bern
S. de Lorenzo, L. Pillet, F. Paradisi*

Metal-Organic Framework-based catalysts for CO₂-to-methanol process [CE-119]

Anna Liutkova, Paul Scherrer Institute
F. A. Peixoto Esteves, E. Poghosyan, M. Ranocchiari*

Enhancing catalyst effectiveness in chemical polyolefin recycling [CE-120]

Antonio Martín, ETH Zurich
S. D. Jaydev, D. García, K. Chikri, J. Pérez-Ramírez*

Ligand-replaced asymmetric inorganic-organic hybrids for highly active biomass assisted electrocatalytic water splitting [CE-121]

Lingshen Meng, University of Zurich
G. Patzke

Structure - catalytic performance relationship of modified SAPO-34 for methanol-to-olefins (MTO) reaction [CE-122]

Monika Mielniczuk, Paul Scherrer Institute / ETH Zurich
F. J. Dubray, J. A. van Bokhoven*

Flexibilisation of methanol synthesis from CO₂ by alternating carbon capture and utilization [CE-123]

Emanuele Moiola, Paul Scherrer Institute PSI, Villigen
A. Pappagallo, H. Petremand

The path to a versatile and biocompatible organometallic NAD(P)H regeneration system using an ¹⁸PYE⁺ complex [CE-124]

Laura Monte, University of Bern
N. Lentz, F. Paradisi*, M. Albrecht*

Optimizing Enzymatic Cascades for Halogenated L-Pipecolic Acid Production [CE-125]

Arpita Mrigwani, University of Bern
F. Paradisi*

High-Loading Pd-Phthalocyanine Covalent Organic Framework based SACs for Cross-Coupling Reactions [CE-126]

Murad Najafov, University of Fribourg
K. Song, S. Pollitt, F. Gándara, M. Nachttegaal *, A. Coskun*

Highly Efficient Homogeneous Catalyst For N₂O Hydrogenation and the Key Role of Water: Proton shuttling and H₃O₂- structures [CE-127]

Sven Nappen, ETH Zurich
A. Thomas*, H. Grützmacher*, M. Trincado

Ti-doping in silica-supported Ru methanation catalysts [CE-128]Aurélien Neraud, ETH Zurich
W. Zhou, C. Copéret***SiO₂-Supported CoPt_{1-x} Nanoalloys for the Dry Reforming of Methane [CE-129]**David Niedbalka, ETH Zurich
L. Thommen, P. M. Abdala, C. R. Müller***Controllable production of single-walled and multi-walled carbon nanotubes in CH₄ catalytic pyrolysis using Fe-Mo/MgO [CE-130]**Zeyou Pan, Paul Scherrer Institute PSI, Villigen
J. van Bokhoven***Unraveling the Promoting Effect of Diamine-Modified Metal-Organic Frameworks on the Ruthenium-Catalyzed CO₂ Hydrogenation to Methanol [CE-131]**Fabio Peixoto Esteves, ETH Zurich/ PSI
J. A. van Bokhoven, M. Ranocchiaro***Insights into reduction of activated double bonds in flow using ene-reductases [CE-132]**Lauriane Pillet, University of Bern
M. R. Busch, D. Roura Padrosa, C. Fernández Regueiro, F. Paradisi***Phosphine activity descriptors for palladium single-atom heterogeneous catalysts in cross-couplings [CE-133]**Dario Poier, HEIA Fribourg / ETH Zurich
O. Loveday, E. Lucas, M. Usteri, D. Stoian, G. Guillén-Gosálbez, N. López, S. Mitchell, R. Marti*, J. Pérez-Ramírez***Manganese complexes bearing bidentate PYE ligands for formic acid dehydrogenation [CE-134]**Sabela Reuge, University Bern
N. A. Lentz, M. Albrecht***Defects in Metal Oxides and their Effects on Catalysis [CE-135]**Anies Rösch, University of Basel
V. Wyss, M. F. Delley***Data-driven tools for enzyme immobilization - auxiliary enzymes are case study [CE-136]**David Roura Padrosa, inSEIT AG
C. L. Fernández Regueiro, V. Marchini**Promotional Effects of Si Addition to Alumina-based Pt-Ga Systems on Catalyst Stability for Propane Dehydrogenation Reaction [CE-137]**Kazutaka Sakamoto, ETH Zurich
M. Plodinec, E. Lam, C. Copéret***Directed Evolution and Modification of an Artificial Hydroxylase Based on a Thermostable Human Carbonic Anhydrase [CE-138]**Elias Salvisberg, University of Basel
I. Morita, K. Zhang, A. Faraone, R. P. Jakob, T. Maier, A. Vorobieva, B. Correia, T. R. Ward***Organic Groups on a Transition Metal Phosphide Catalyst Tune Hydrogenation Reactions [CE-139]**Yu-Chun Shen, University of Basel
M. F. Delley***Atomically dispersed palladium-platinum catalysts from defined precursors [CE-140]**Rosie Somerville, EPFL Lausanne
J. Schmidt, E. Lam, D. Stoian, P. J. Dyson***High-Pressure Grazing Incidence Cell for *In Situ* XAS Characterization of Nanoparticles on Planar Substrates under CO₂ Hydrogenation Conditions [CE-141]**Sumant SumantPhadke, Paul Scherrer Institute PSI, Villigen
J. Coroa, I. Abbas, J. Yin, D. Grandjean, E. Janssens, O. V. Safonova***The role of metal nanostructure in ceria-supported catalysts for ammonia oxidation to nitrous oxid [CE-142]**Ivan Surin, ETH Zurich
Q. Yang, F. Krumeich, T. Otroshchenko, V. A. Kondratenko, E. V. Kondratenko, J. Pérez-Ramírez***Ru-NHC Complexes for the Hydroesterification of Alkenes [CE-144]**Roland Turnell-Ritson, EPFL Lausanne
R. Descroches, P. J. Dyson***Understanding and controlling activity and selectivity patterns of Pd₁@C₃N₄-catalyzed Suzuki-Miyaura couplings [CE-145]**Marc-Eduard Usteri, ETH Zurich
G. Giannakakis, A. Bugaev, J. Pérez-Ramírez, S. Mitchell, J. Pérez-Ramírez*, S. Mitchell***Epoxidation of Olefins by Cobalt Sulfide and its Parallels to Oxygen Evolution Reaction Electrocatalysis [CE-146]**Vanessa Wyss, University of Basel
I. A. Dinu, L. Marot, C. G. Palivan, M. F. Delley***Directed dual charge pumping tunes the d-orbital configuration of Pt cluster boosting hydrogen evolution kinetic [CE-147]**

Zeyi Zhang, University of Zurich

Design of technical ZnO/ZrO₂ catalysts for green methanol synthesis [CE-148]Tangsheng Zou, ETH Zurich
T. P. Araújo, M. Agrachev, X. Jin, F. Krumeich, G. Jeschke, S. Mitchell, J. Pérez-Ramírez***Are Pt-based catalysts always necessary for hydrogen and oxygen recombination reactions? [CE-149]**Zohreh Akbari, EPFL Valais
A. Züttel***Elucidating the mechanism of Fe incorporation in in situ synthesized Co-Fe oxygen-evolving nanocatalysts [CE-150]**Thi Ha My Pham, EPFL Valais
T. Shen, V. Tileli***Chemistry and the Environment [EV] Poster Session****Bridging the Gap Between Laboratory and Environmental Photochemistry [EV-101]**Sofia Ambrogetti, ETH Zurich
J. Laszakovits, S. Partanen, K. McNeill***Ozonation of 4 pesticides: substitution effect on ozone reactivity and adsorbability of transformation products on granular activated carbon [EV-102]**Lucie Bertolaso, EPFL Lausanne
C. Gachet Aquillon, M. Chipps, N. Revens, B. Jefferson, P. Jarvis, P. Campo, I. Carra, U. von Gunten***Insights into Rhine Industrial Contamination: A Data Mining Approach to High-Frequency Measurements [EV-103]**Teofana Chonova, Eawag, Dübendorf
S. Ruppe, I. Langlois, D. Griesshaber, M. Loos, M. Honti, K. Fenner*, H. Singer*

EQS Derivation of a Widely Used Type I Pyrethroid: Tefluthrin [EV-104]

Breanne Holmes, Eawag, Dübendorf
M. Junghans

Legacy and current pesticide residues from agricultural soil and drainage water challenge risk assessment models [EV-105]

Karel Hornak, Agroscope
S. Mangold, N. Bartolomé, I. Hilber, T. Bucheli*

Determining the proteolytic fingerprint of Lake Geneva to investigate the mechanism of virus inactivation in lake water [EV-108]

Josephine Meibom, EPFL Lausanne
N. Wichmann, M. Zumstein, T. Kohn*

Urban Halocarbon Measurements in Switzerland [EV-109]

Michelle Müller, Empa
M. K. Vollmer, P. Schlauri, P. Rubli, L. Emmenegger, S. Reimann*

Insights into reaction mechanisms for the ozonation of primary amines applying nitrate formation kinetics, $\delta^{15}\text{N-NO}_3^-$ and ^{18}O -labeling [EV-110]

Jiwoon Ra, Eawag, Dübendorf
U. von Gunten*

Reactions of N,O- and N,S-azoles with ozone: kinetics and mechanisms [EV-111]

Simon Rath, Eawag / EPFL
U. von Gunten*

New versus Naturally Aged Greenhouse Cover Films: Degradation and Micro-Nanoplastics Characterization under Sunlight Exposure [EV-112]

Patricia Taladriz-Blanco, Adolphe Merkle Institute
C. Sorasan, L. Rodriguez-Lorenzo, B. Espiña, R. Rosal, P. Taladriz-Blanco*

Leveraging modern assessment methods to shed light on the environmental impact of a century of military activities in Switzerland [EV-113]

Chloé Udressy, Eawag, Dübendorf
J. Hollender, R. Kägi, A. Gassner, T. B. Hofstetter*

Participation in the intergovernmental science-policy panel on chemicals, waste and pollution prevention [EV-114]

Zhanyun Wang, Empa

**Inorganic Chemistry [IC]
Poster Session****Simple Yet Complex: Azides and Azidometallates [IC-101]**

Semih Afyon, Belenos Clean Power Holding Ltd.

Neopentyl Sodium as a Tool for Metalation of Non-Activated Alkenes [IC-102]

David Anderson, University of Bern
E. Hevia*

Towards the Elucidation of Ni-Catalyzed Cyclopropanation: MeNiGaL – a Ni(0) Methyl Complex Based on a Ni-Ga Double-Decker Complex [IC-103]

Maurice Andrey, ETH Zurich
A. Bütikofer, R. Wolf, S. A. Küenzi, P. Chen*

Functionalized Terthiophenes as Multi-Electron Electrolytes for Energy Storage [IC-104]

Máté Bezdek, ETH Zurich
D. Käch

Toward predicting silver ion binding in proteins [IC-105]

Alexandre Bianchi, University of Fribourg
F. Marquenet, L. Manciocchi, M. Spichty, K. M. Fromm*

Synthesis and Reactivity of Triazolylidene-Group 10 Metal Complexes via Oxidative Addition of 5-Halo-Triazolium Salts [IC-106]

Fabienne Bühler, University of Bern
G. Rigoni, M. Albrecht*

Cyclopentadienone Monoisocyanide Iron Complexes: Synthesis and Catalytic Performance in Transfer Hydrogenation [IC-107]

André Bütikofer, ETH Zurich
D. Svoboda, P. Chen*

Towards Understanding Electrochemical Interfaces: An interplay of chemical interactions and electric fields [IC-108]

Tzu-Chin Chang Chien, University of Basel
M. F. Delley*

A palladium-based coordination cage for selective lithium binding [IC-109]

Damien Chen, EPFL Lausanne
K. Severin*

Aluminum Transfer at Zinc and Copper [IC-110]

Fabian Dankert, University of Bern
E. Hevia*

Palladium-based cages of low symmetry [IC-111]

Jean de Montmollin, EPFL Lausanne
R.-J. Li, A. B. Solea, D. W. Chen, P. Gorrea Acín, F. Fadaei-Tirani, R. Scopelliti, K. Severin*

N-heterocyclic carbene tailoring allows tuning of iron-catalysed C–H amination [IC-112]

Luke Hudson, University of Bern
M. Albrecht*

Uncovering the Super Basic and Nucleophilic Reactivities of Co(II) Amide $\text{Co}(\text{TMP})_2$ [IC-113]

Na Jin, University of Bern
A. Logallo, E. Hevia*

Structure and reactivity of a rhenium(VII)-methylidyne complex [IC-114]

Péter Pál Kalapos, ETH Zurich
P. Chen*

Metal template synthesis of aromatic tridentate ligand for studying the stability of lanthanide complexes in solution and solid state [IC-115]

Giau Le-Hoang, University of Geneva
L. Guenée, Q. Sommer, C. Piguet*

Bio-Inspired Molecular Oxygen Evolution Catalysts with $\{\text{Co}_4\text{O}_4\}$ Cubanes Embedded in a Conducting Polymer [IC-116]

Shangkun Li, University of Zurich
Z. Zhang, W. Marks, X. Huang, H. Chen, D. Stoian, R. Erni, C. Triana, G. Patzke*

Design and characterization of new sensors based on functionalized organometallic cages for the selective detection of sugars and other analytes [IC-117]

Alaa Maatouk, University of Neuchatel
T. Rossel, B. Therrien*

Mechanistic Investigations of Metal-Oxo Cubane Formation [IC-118]

Walker Marks, University of Zurich
K. F. Würzer, G. R. Patzke*

Chemical and Redox Non-Innocence in Low Valent Molybdenum β Diketonate Complexes: Novel Pathways for CO₂ and CS₂ Activation [IC-119]

Fabio Masero, ETH Zurich
V. Mougel*

Revisiting Early-Stage Coordination Chemistry: Exploring the Phosphorus Analogue of Hydroxylamine [IC-120]

Sven Nappen, ETH Zurich
H. Grützmacher*

Exploring New Methathesis Routes to Access Calcium Organometallics [IC-121]

Andrew Platten, University of Bern
E. Hevia*

Probing of BDFEs of surface Pd-H across solvent environments and applications thereof [IC-122]

Lok-Nga Poon, ETH Zurich
V. Mougel*

Salen-derived heterometallic complexes [IC-123]

Jocelyn Pradegan, University of Fribourg
A. Crochet, K. M. Fromm*

Synthesis and Understanding of Donor Flexible Thioamide Ligands [IC-124]

Taj Seaton, University of Bern
M. Albrecht*

Hetero- and homometallic complexes based on (iso)-nicotinic acid [IC-125]

Claudia Tringali, University of Fribourg
K. M. Fromm*

New Frontiers in Organocaesium Chemistry: Advances with Caesium Amides [IC-126]

Alex Truong, University Bern
D. E. Anderson, E. Hevia*

Atomically precise surface chemistry of zirconium and hafnium metal oxo clusters beyond carboxylate ligands [IC-127]

Ajmal Roshan Unniram Parambil, University of Basel
R. Pokratath, M. Parammal, D. Van den Eynden, E. Dhaene, A. Prescimone, P. Shahgaldian*, J. De Roo*

Speciation and Profiling of Bulky Chiral Cyclopentadienyl Cobalt Complexes [IC-128]

Bram Van Den Bossche, EPFL Lausanne
N. Cramer*

Synthesis and Catalytic Applications of Highly Reduced Heterobimetallic Nickelates [IC-129]

Luca Vedani, University of Bern
A. M. Borys, E. Hevia*

Controlled Heteroelement-Transfer onto Transition Metal Phosphide Surfaces [IC-130]

Gregor Wasser, University Basel
M. F. Delley*

The coordination chemistry of di(2-pyridyl) ketone: Structural versatility and synthetic strategies of the Co²⁺/Zn²⁺ chemistry with the ligand di(2-pyridyl) ketone [IC-131]

Katrin Würzer, University of Zurich
W. R. Marks, G. R. Patzke*

Reactivity of Diazoolefins [IC-132]

Bastiaan Kooij, EPFL Lausanne
K. Severin*

**Medicinal Chemistry & Chemical Biology [MC]
Poster Session**

Stereochemistry of Cell Penetrating Peptides [MC-101]

Yasien Amer, University of Bern
J. Reymond*

Synthesis of GBD Derived Bicyclic Diamine as Interesting Scaffold for Medicinal Chemistry [MC-102]

Giulia Baldoni, University of Bern
J. Reymond*

Natural product drug discovery pipeline reveals ellagic acid to reduce forgetting in *Caenorhabditis elegans* through specific Musashi inhibition [MC-103]

Tamara Balsiger, University of Basel
R. Hagmann, K. Huynh, P. Solis, M. Hamburger, A. Papassotiropoulos, R. Teufel, A. Stetak*, E. Garo*

A versatile "Synthesis Tag" (SynTag) for the chemical synthesis of aggregating peptides and proteins [MC-104]

Héloïse Bürgisser, University of Zurich
E. Williams, R. Lescure, A. Premanand, A. Jeandin, N. Hartrampf*

Synthesis and activity of novel acylfulvene analogs appended with covalent reactive groups [MC-105]

Dan Dempe, ETH Zurich
L. Slappendel, O. Schärer, S. Sturla*

3D dynamic hydrogel matrix for cultivation of intestinal organoids [MC-106]

Yves Erdin, University of Basel
P. Fluechter, C. Schneider, M. Nash, Z. Korb*

Catalytic improvement of a metalloenzyme using hydrophobic tuning with non-canonical amino acids [MC-108]

Sandro Fischer, University of Zurich
A. Natter Perdiguero, A. Deliz Liang*

Development of novel bitopic and bifunctional ligands to study adenosine A1 receptors [MC-109]

Maren Flaßhoff, University of Bern
T. Sarvanathan, A. Pearce, G. Ladds, M. Lochner*

Development and physicochemical characterization of novel anthranilic anilide-based TRPM4 channel inhibitors identified by extensive SAR-study [MC-110]

Christian Gerber, University of Bern
D. Ross-Kaschitza, B. Augustynek, P. Grossenbacher, S. A. Singer, C. Peinelt, M. Lochner*

Discovery of indolicidin diastereomers as antimicrobial agents [MC-111]

Xiaoling Hu, University of Bern
M. Orsi, J. L. Reymond*

A Deep Learning Model for Predicting the Thermal Stability of Collagen Triple Helices [MC-112]

Kiseop Im, ETH Zurich
I. Warm, H. Wennemers*, T. Fiala*

Chemical Probe to Visualize Bacterial Physiology: A ratio-metric pH Sensor for Gram-positive and Gram-negative Bacteria [MC-113]

Dorothea Kossmann, University of Zurich
A. Iizuka, N. Khanna*, P. Rivera-Fuentes*

A HaloTag-based Gene Expression Reporter System for Live-Cell Imaging [MC-114]

Henriette Lämmermann, University of Zurich
J. Nguyen, J. Tamez Fernández, F. Kuttler, J. Bortoli Chapalay,
M. Chambon, G. Turcatti, P. Rivera Fuentes*

Engineering a Zinc-Dependent Phosphotriesterase with a Non-Canonical Histidine Derivative [MC-115]

Benjamin Manser, University of Zurich
A. Deliz Liang*

Ligand-directed bioconjugation on native protein with hypervalent iodine-based Ethynylbenziodoxolones (EBXs) reagents [MC-116]

Christine Marty, EPFL Lausanne
X. Ji, C. Heinis*, J. Waser*

Synthesis of modified carbohydrates as glyco-donors aiming complex glycans synthesis and glycopeptides [MC-117]

Matheus Meirelles, University of Bern
K. P. Locher*, J. Reymond*

Protein Engineering with Genetic Code Expansion [MC-118]

Anton Natter Perdiguero, University of Zurich
P. A. Lugon, A. D. Liang*

Examining the interaction between thiolate protected metal clusters and lipid bilayers [MC-119]

Merve Örer, University of Geneva
T. Bürgi*

Similar Structure, Different Effects: Investigation of Pt(II) Complexes as DNA-Targeting Antibiotics against Gram-positive Bacteria [MC-120]

Cagri Özsan, University of Bern
A. Schäfer, M. L. Fulgencio, A. Frei *, M. Wenzel*

Evaluating Lysyl Oxidase Activity with Turn-On Fluorescent Probes [MC-121]

Laura Poller, ETH Zurich
H. Wennemers*

Nano-carrier Encapsulated Chlorin e6 and its Derivatives as Photosensitizers for Dermal Application: Investigating their Incorporation into Lipid Carriers and Skin Penetration [MC-122]

Jirachaya Pongnoppa, University of Bern
J. Furrer, S. Kaessmeyer, H. Roess, G. Vorburger Schmidt, M. Vermathen*

Synthesis of novel bicyclic diamine scaffolds derived from tropinone. [MC-123]

Austia Puckett, University of Bern
J.-L. Reymond*

Single-Molecule Peptide and Protein Identification using Fluorescence Blinking Fingerprints [MC-124]

Salome Püntener, University of Zurich
K. Bielec, P. Rivera-Fuentes*

Synthesis of Chiral Tricyclic Piperazine Scaffolds from the GDB Database [MC-125]

Leon Rebhan, University of Bern; J.-L. Reymond*

Peptide-stabilized gold nanoparticles [MC-126]

Alžbeta Runová, ETH Zurich
H. Wennemers*

Beyond static structures: The dynamic impact of Introna B on fungal ribozymes [MC-127]

Abdul Rahman Sadiq, University of Zurich
S. Zelger-Paulus*, R. K.O. Sigel*

Amphipathic proline-rich cell penetrating peptides for mitochondria targeting [MC-129]

Adeline Schmitt, ETH Zurich
H. Wennemers*

Click-chemistry-enabled elucidation of transcriptional effects of DNA oxidation at a genome-wide level [MC-130]

Navnit Singh, ETH Zurich
V. Takhaveev, M. Rulka, N. Püllen, S. J. Sturla*

Development of lysine-targeting DNA Probes to disrupt XPG-mediated Nucleotide Excision Repair for cancer therapy. [MC-131]

Laura Slappendel, ETH Zurich
D. P. Dempe, J. Huber, O. Schärer, S. J. Sturla*

Assessing gut microbiota's role in phytoestrogen bio-activation [MC-132]

Maja Stevanoska, ETH Zurich
K. Beekmann, S. Sturla*, G. Aichinger*

Potent Inducers of Paraptosis Through Electronic Tuning of Michael Acceptors [MC-133]

Juan Tamez-Fernández, University of Zurich
J. Nguyen, P. Rivera-Fuentes*

Non-invasive in vivo Determination of Potassium in Human Muscle by 39K MR Spectroscopy on a 7T MR Scanner. A Feasibility Exercise Study. [MC-134]

Marc Thiede, University of Bern
E. Rösli, H. H. Primasová, B. Vogt, P. Vermathen*

Probing the Penetration of Encapsulated Photosensitizers into Skin Models [MC-135]

Tyrone Wyss, University of Bern
S. Kaessmeyer*, H. Roess, G. Vorburger, I. Gjuroski, J. Furrer, M. Vermathen*

Photosensitizers in Targeted Photodynamic Therapy of Colorectal Cancer [MC-136]

Yueying YANG, University of Neuchatel and cnam
M. Saho, N. Lagarde, B. Therrien*, M. Sylla*

A Drug-like Library of Structurally Diverse Spirocyclic Saturated N-Heterocycles [MC-137]

Elia Boschi, ETH Zurich
D. Mazunin, D. Wechsler, A. Topp, T. Killian, A. Müller, C. Kroll, W. Haap*, J. Bode1*

**Organic Chemistry [OC]
Poster Session****Enantioselective Total Synthesis of (+)-Aberrarone [OC-101]**

Willi Amberg, ETH Zurich
E. M. Carreira*

Fluorescent Membrane Probes for Increased Partitioning in Membranes [OC-102]

Felix Bayard, University of Geneva
X. Chen, N. Sakai, S. Matile*

Selective Recognition of Sucrose in Water by a Synthetic Receptor [OC-103]

Lena Beiersdörfer, ETH Zurich
M. Li, D. Zetschok, H. Wennemers*

Oxidative amination of unactivated alkenes via nitrogen atom insertion into carbon-carbon double bonds [OC-104]

Yannick Brägger, ETH Zurich
B. Morandi*, A. K. Paschke, N. Nasiri, B. B. Botlik, F. Felician

Catalytic Difunctionalization of Cyclopropenes via a Tethering Strategy [OC-105]

Duncan Brownsey, EPFL Lausanne
A. Schöpfer, J. Waser*

Catalyst Control Over Pentavalent Stereocenters [OC-106]

Anton Budeev, University of Basel
J. Dong, D. Häussinger, C. Sparr*

Reversing the Diastereoselectivity of the Organocatalyzed Conjugate Addition Reactions to Nitroolefins – From Reaction Development to Formal Synthesis of Upadacitinib [OC-107]

Alena Budinska, ETH Zurich
A. Berg, M. Heinke, H. Wennemers*

Organic Dye Photocatalyzed Synthesis of Functionalized Lactones and Lactams via a Cyclization-Alkynylation Cascade [OC-108]

Diana Cavalli, EPFL Lausanne
J. Waser*

Length-Dependant Uptake and Inhibition of Cell-Penetrating Poly(disulfide)s [OC-109]

Michaël Cognet, University of Geneva
F. Coelho, N. Sakai, S. Matile*

Iridium-Catalyzed Hydrogenation of Pyridines [OC-111]

Arthur Despois, EPFL Lausanne
N. Cramer*

Paracyclophenylenes as functional units and building blocks for SWCNTs [OC-112]

Jia Ding, University of Basel
M. Mayor*

Traceless photoremovable self-immolative amino acid linker [OC-113]

Maël Djaïd, University of Fribourg
C. Bochet*

Nitration Processes Using Bench-Stable Nitrating Reagents [OC-114]

Anthony Fernandes, University of Bern
V. Valsamidou, D. Katayev*

Bambusurils: Kinetically-Controlled Synthesis of Functionalized Anion-Binding Macrocycles [OC-115]

Tomas Fiala, ETH Zurich
J. Frei, T. Herentin, W. Nijskens, V. Sindelar

Fe(II)-catalyzed α C–H amidation of N-heterocycles [OC-116]

Andrea Geraci, University of Basel
O. Baudoin*

Solvent-Controlled Switchable Divergent Synthesis [OC-117]

Rahul Giri, University Of Bern
D. Katayev*

Eco-friendly anaerobic oxidation of aryl diazoesters with heterocyclic N-oxide under ball milling: Synthesis of 1,2-dicarbonyl systems [OC-118]

Souvik Guha, HEIA Fribourg
L. Gremaud*

Electric-Field Induced Asymmetric Enamine Catalysis [OC-119]

Shenyi Guo, University of Geneva
A. Jozeliunaite, M. Gallardo Villagran, M. Gutiérrez López, N. Sakai, S. Matile*

Enantioselective access to planar-chiral macrocyclophanes via Pd-catalyzed C–H arylation [OC-120]

Soohee Huh, University of Basel
E. Linne, O. Baudoin*

Aromatic Ring-Opening Metathesis [OC-121]

Valeriia Hutskalova, University of Basel
C. Sparr*

Towards shape-assisted self assemblies in solution [OC-122]

Nils Jansen, University of Geneva
M. Rickhaus*

Mechanistic studies on photochemical reactions: Is the Hammond postulate valid for *meta* effect induced photo-solvolysis of benzylic esters? [OC-123]

Gaël Jarjoura, University of Fribourg
C. G. Bochet*

Bifunctional Group Transfer [OC-124]

Mathias Kissling, University of Bern
R. Giri, E. Zhilin, S. Patra, A. J. Fernandes, D. Katayev*

Sodium-mediated Nucleophilic Amination of Pyridines [OC-125]

Jasmin Kocher, University of Bern
A. Tortajada, E. Hevia*

Pd-Catalyzed Dynamic Kinetic Resolution of Pillar[5]arenes [OC-126]

Antoine Konter, University of Geneva
C. Mazet*

Sustainable Beckmann Rearrangement using Bead-Milling Technology: The Route to Paracetamol [OC-128]

Rémy Mariaux, HEIA Fribourg
R. Geib, E. Colacino, L. Gremaud*

Chemical Surface Modifications [OC-129]

Jesús Mirón García, University of Basel
M. Mayor*

Mechanochemistry Drives Alkene Difunctionalization via Radical Ligand Transfer and Electron Catalysis [OC-130]

Subrata Patra, University of Bern
D. Katayev*

Ficini Reaction with Acrylates for the Stereoselective Synthesis of Aminocyclobutanes [OC-131]

Emma Robert, EPFL Lausanne; J. Waser*

Further Investigations on Excited State Potential Energy Surfaces: Can the Hammond Postulate be Applied to Photochemical Reactions? [OC-132]

Nicolas Rosa De Sousa, University of Fribourg
C. G. Bochet*

Investigating the Formation of Iodonitrene from Hypervalent Iodine Oxidants and Ammonia [OC-133]

Florian Ruepp, ETH Zurich
B. Morandi*

Axially-Chiral Boramidines for Detailed (Chir)Optical Studies [OC-134]

Nidal Saleh, University of Geneva
J. Lacour*

Chemoselective Approaches for the Discovery of Natural Products [OC-135]

Simon Sieber, University of Zurich

Photocatalytic Generation of Cyclopropenium Cations**[OC-136]**Vladyslav Smyrnov, EPFL Lausanne
J. Waser***Enamine Synthesis *via* Regiocontrolled 6-*endo-dig* and 5-*exo-dig* Tethered Carboamination of Propargylic Alcohols****[OC-137]**Helena Solé-Àvila, EPFL Lausanne
M. Puriñš, L. Eichenberger, J. Waser***Sodium catalysed borylation of arenes with Iminoboranes****[OC-138]**Clarence Tan, University of Bern
A. Tortajada, E. Hevia***Tailoring sodium organometallic reagents for catalytic deuteration and isomerization reactions****[OC-139]**

Andreu Tortajada, University of Bern; E. Hevia*

Photoswitching neutral homoaromatic hydrocarbons**[OC-140]**Trung Tran Ngoc, University of Zurich
N. Grabicki, E. Irran, O. Dumele, J. F. Teichert***1,4-Pd Shift-Enabled Synthesis of Fused 4-Membered Rings****[OC-141]**Maria Tsitopoulou, University of Basel
A. Clemenceau, P. Thesmar, O. Baudoin***Mechanochemical Nitration of Arenes and Alcohols Using Bench-Stable Organic Nitrating Reagent****[OC-142]**

Vasiliki Valsamidou, University of Bern

D. Katayev*

Under Control: π -Radical Cascades of Triangulene**[OC-143]**Paula Widmer, University of Zurich
L. Valenta, M. Mayländer, S. Richert, T. Šolomek*, M. Juríček***Towards the polymerization of Centrohexaindane****[OC-144]**

Lara Wild, University of Geneva

K. Zhang, R. Jamagne, M. Rickhaus*

Site-Selective Deuteration of (hetero)arenes Catalyzed by Supported Ir Nanoparticles**[OC-145]**

Chengbo Yao, ETH Zurich

C. Copéret*

Repurposing Myoglobin into an Abiological Asymmetric Ketoreductase**[OC-146]**Xiang Zhang, NCCR Catalysis, Switzerland
D. Chen, J. Stropp, R. Tachibana, Z. Zou, D. Klose, T. R. Ward***Synthesis and Self-Assembly of Contorted Aryl Amines****[OC-147]**

Kai Zhang, University of Geneva

N. Jansen, M. Rickhaus*

Access to Cyclic Borates by Cu-Catalyzed Borylation of Unactivated Vinylcyclopropanes**[OC-148]**

Cheng Zhang, University of Geneva

C. Mazet*

Pnictogen-Bonding Catalyzed Hydrogenation Reaction and Ion Transports in Vesicles**[OC-149]**

Qingxia Zhang, University of Geneva

G. Renno, N. Sakai, S. Matile*

Unlocking Molecular Design via Dihalogenation of Unsaturated Hydrocarbons**[OC-150]**

Egor Zhilin, University of Bern

R. Giri, D. Katayev*

An Evolved Artificial Radical Cyclase Enables the Construction of Bicyclic Terpenoid Scaffolds via an H-Atom Transfer Pathway**[OC-151]**

Dongping Chen, University of Basel

X. Zhang, A. A. Vorobieva, R. Tachibana, A. Stein, R. P. Jakob,

Z. Zou, D. A. Graf, A. Li, T. Maier, B. E. Correia*, T. R. Ward*

Physical Chemistry [PC]**Poster Session****Surface Immobilization of Magnetic Polymeric Giant Unilamellar Vesicles****[PC-101]**

S. narjes Abdollahi, University of Basel

D. Messmer, V. Mihali, C. Palivan*

Supramolecular Modulation for Hybrid Perovskite Photovoltaics**[PC-102]**

Ghewa AISabeh, EPFL/AMI

M. Graetzel*, J. V. Milic*, S. Kasemthaveechok, M. A. Ruiz-

Preciado, P. Zimmermann, D. Dekker, M. Galerne, E. Moulin,

F. T. Eickemeyer, S. Kasemthaveechok

Understanding the activation mechanism of Ru-based catalyst for CO₂ reduction via Ultrafast Transient-IR**[PC-103]**

Sergio Aranda Ruiz, University of Zurich

L. Tatarashvili, P. Hamm*

Polymer assembly as artificial cell for compartmentalizing lactate enzymatic reaction**[PC-104]**

Arianna Balestri, University of Basel

C. Palivan*

Charge-carrier dynamics in chiral gold nanoclusters**[PC-105]**

Tristan Blandenier, University of Basel

M. Oppermann*, T. Bürgi

Extending ultrafast spectroscopy to the deep ultraviolet with stretched hollow core fiber technology**[PC-106]**

Pieter Brongers, University of Basel

C. Brahms, M. Oppermann*

Use of NMR to study cubic phases for drug delivery in topical photodynamic therapy**[PC-107]**

Joel Bruegger, University of Bern

I. Gjuroski, P. Vermathen, J. Furrer, M. Vermathen*

Deciphering the oxygen evolution reaction mechanism on 3d transition metal oxides by using pump-probe X-ray absorption spectroscopy**[PC-108]**

Cheshta Chopra, Paul Scherrer Institute PSI, Villigen

E. Fabbri, M. Nachtegaal, T. J. Schmidt, G. Smolentsev*

Precision spectroscopy of Rydberg states in ⁴He and ³He**[PC-109]**

Gloria Clausen, ETH Zurich

F. Merkt*

pH-Responsive Nanocarriers Formed *via* an Improved Synthesis of PMOXa-*b*-PDPA Amphiphilic Block Copolymers**[PC-110]**

John Coats, University of Basel

A. Nikoletic, L. Heuberger, M. Korpidou, C. Schönenberger,

C. Palivan*

Second harmonic imaging of osmotic gradients**[PC-111]**

Nelson Correa Rojas, EPFL Lausanne

Z. Li, M. Eremchev, A. Roux*, S. Roke*

High-resolution liquid cell architecture for microsecond time-resolved cryo-EM [PC-112]

Wyatt Curtis, EPFL Lausanne

J. Hruby, S. V. Barrass, M. Drabbels*, U. J. Lorenz*

High-field optically induced NMR hyperpolarization in solids [PC-113]

Federico De Biasi, EPFL Lausanne

M. Visegrádi, M. Levien, G. Karthikeyan, M. A. Hope, Y. Qiu, P. J. Brown, M. R. Wasielewski, O. Ouari, L. Emsley*

Advancing polymer-based catalytic nanocompartments in localized drug production and delivery [PC-114]

Ionel Dinu, University of Basel

M. Korphidou, C. G. Palivan

Colloidal-ALD for hybrid QD@oxide core@shell structures to photocatalyze organic reactions [PC-115]

Marco Fabbiano, EPFL Lausanne

O. Segura Lecina, P. B. Green, R. Buonsanti*

Multiscale probing of interactions in aqueous ionic solutions [PC-116]

Mischa Flór, EPFL Lausanne

A. Bouchez, V. Vorobev, S. Roke*

The effect of pH on enzyme catalyzed lipolysis at the oil/water interface [PC-117]

Matteo Frigerio, University of Fribourg

S. Salentinig, M. Leser

Photoinduced Charge Transfer and Symmetry Breaking in Pyrrolopyrrole Based Quadrupolar Molecules [PC-118]

Chinju Govind, University of Geneva

E. Balanikas, R. F. Teran, G. Sanil, D. T. Gryko, E. Vauthey*

Using Gas-Phase FRET to Study the Structure of Diabetes-Related Polypeptides [PC-119]

Kim Greis, ETH Zurich

S. Huang, R. Wu, L. Benzenberg, R. Zenobi*

Gas-phase study of rotational-state and conformational effects in chemi-ionization reactions under single-collision conditions [PC-120]

Chao He, University of Basel; A. Mishra, L. Ploenes, P. Stranak, J. Kim, S. K. Kim, S. Willitsch*

Two-dimensional organic frameworks investigated by in-situ time-resolved spectroscopy [PC-121]

Isabelle Holzer, University of Bern

R. Guntermann, K. Muggli, T. Bein, N. Banerji*

The influence of the bipolaron formation rate on the charge transport properties of chemically doped oligoetherized polythiophene [PC-122]

Maximilian Horn, University of Bern

E. G. Röck, C. Kousseff, N. Banerji*, I. McCulloch*

Doping of Polythiophenes and Polythienothiophenes with Alkyl or Glycol Sidechains [PC-123]

Basil Hunger, University of Bern

D. Tsokkou, M. Horn, E. Röck, N. Banerji*

Structural Dynamics of SARS-CoV-2 Spike Proteins Revealed by Microsecond TimeResolved Cryo-EM [PC-124]

Subha Jana, EPFL Lausanne

M. Drabbels, U. J. Lorenz*

Precision Spectroscopy and Coherent Manipulation of a Single Molecular Nitrogen Ion [PC-125]

Richard Karl, University of Basel

A. Shlykov, M. Roguski, M. Diouf, S. Willitsch*

Detecting metal hyperfine couplings with chirped radio-frequency pulses in Electron Nuclear Double Resonance [PC-126]

Daniel Klose, ETH Zurich

J. Stropp, N. C. Nielsen, N. Wili

A soft X-ray absorption spectroscopy setup for liquid samples at SwissFEL [PC-127]

Jonas Knurr, EPFL Lausanne

K. Schnorr, A. Al Haddad, C. Bostedt*

Beyond Excited-State Symmetry Breaking in Donor–Acceptor–Donor Systems: Torsional Disorder, Redox Dependence and Synthetic Modifications [PC-128]

Joseph Kölbl, University of Geneva

R. J. Fernández-Terán*

Investigations on Fission Product Release Behavior for GEN-IV Nuclear Reactor Designs [PC-129]

Xuandong Kou, University of Bern

R. Eichler, E. Maugeri, R. Eichler*, E. Maugeri*

Synthesis and Properties of Ag₂₉ Nanocluster [PC-130]

Subhradip Kundu, University of Geneva

K. Ethmane, D. Canto, V. Muñoz, L. Llanes Montesino, A.

Rosspeintner, L. Lawson Daku, M. Pupier, J. Viger-Gravel*,

T. Bürgi*

Understanding the mechanism of voltage-sensitive SH fluorescent probes [PC-131]

Zhi Li, EPFL Lausanne

N. A. Correa Rojas, M. Eremchev, S. Roke*

Resolving the intrinsic heterogeneity of the splicing process of a group II intron through multiple pairwise labelling [PC-132]

Matteo Lisibach, University of Zurich

A. R. Sadiq, S. Zelger-Paulus*, R. K. O. Sigel*

One Ring to Rule Them All: Ultrafast Spectroscopy Study of Chiral Platina[n]helicenes with Circularly Polarized Emission [PC-133]

José Merkelj, University of Basel

L. M. Müller, M. Puppini, J. Crassous, M. J. Fuchter, M. Opper-
mann***Real-time tracking of the ultrafast chirality and energy transfer in a chiral OLED complex with circularly-polarized luminescence [PC-134]**

Livia Müller, University of Basel

F. Zinna, G. Pescitelli, M. Puppini, M. Oppermann*

How we can tackle the dielectric response around spherical polymer surface [PC-135]

Miroslava Nedyalkova, University of Fribourg

P. Loche, M. Lattuada

Controlled laboratory astrochemistry: Rotational-state-selected carbon reactions in space [PC-136]

Aswin Ravindran, University of Basel

L. Xu, T. Lejeune, S. Willitsch, J. Toscano*

New apparatus for single-photon Doppler-free VUV/XUV spectroscopy [PC-137]

Matthew Rayment, ETH Zurich

J. A. Agner, H. Schmutz, F. Merkt*

Conservation of wavefunction reflection parity in methane-surface scattering [PC-138]

Christopher Reilly, EPFL Lausanne

D. J. Auerbach, R. D. Beck*

Production of holmium radioisotopes for Targeted Radionuclide Therapy [PC-139]

Edoardo Renaldin, PSI
H. Zhang, S. Braccini, U. Köster, N. P. van der Meulen, R. Eichler, Z. Talip*

Photoinduced Dynamics of Symmetric π -Extended Aryl Acetylide Platinum Complexes with Isocyanides or Acyclic Diaminocarbenes: Symmetric or not? [PC-141]

Atzin Ruiz-Lera, University of Geneva
J. López-López, Y. Nguyen, T. Teets, R. Fernández-Terán*

Two level ordering in nano-rattles for optical properties [PC-142]

Antoine Scalabre, Fribourg University
K. M. Fromm*

Can increasing the size and flexibility of a molecule reduce decoherence? [PC-143]

Alan Scheidegger, EPFL Lausanne
N. V. Golubev, J. Vanicek*

Extraction and characterization of oleosomes from wheat germ. [PC-144]

Abinaya Subramaniyan, University of Fribourg
S. Salentinig*

Understanding the ultrafast charge transfer process in naphthalene diimide (NDI) based polymers and copolymers [PC-145]

Estefanía Sucre-Rosales, University of Geneva
S. Ye, Y. Bao, E. Vauthey*

State-preparation and quantum control of polyatomic molecular ions [PC-146]

Nanditha Sunil Kumar, University of Basel, Switzerland
P. Paliwal, M. Popov, S. Willitsch*

Comparing membrane potential imaging using water and FM4-64 dye as a probe [PC-147]

Iwona Swiderska, EPFL Lausanne
S. Lee, Z. Li, N. A. Correa, S. Roke*

Testing the ion funnel-to-IVAC system for fast chemistry experiments with superheavy elements [PC-148]

Georg Tiebel, Paul Scherrer Institut PSI/ETH Zurich
A. Bukowski, T. Cook, R. Dressler, R. Eichler, C. M. Folden III, J. Garcia, I. Haynes, D. Herrmann, Y. Ito, A. Kirkland, J. Mildon, T. Sato, E. Tereshatov, A. Vögele, V. Zakusilova, P. Steinegger*

Solvation Shifts the Band-Edge Position of Colloidal Quantum Dots by nearly 1 eV [PC-149]

Yan Vogel, ETH Zurich
L. Pham, M. Stam, R. Ubbink, M. L. Coote, A. Houtepen

Controlling Symmetry-Breaking Charge Separation in Pyrene Bichromophores [PC-150]

Johannes Wega, University of Geneva
K. Zhang, J. Lacour*, E. Vauthey*

Isotopic chirality and high resolution infrared spectroscopy of PFCl₂ [PC-151]

Gunther Wichmann, ETH Zurich
V. Horka-Zelenkova, A. Sieben, S. Albert, K. Keppler, G. Seyfang, J. Stohner, M. Quack*

Interfacial Inversion, Interference, and IR Absorption in Vibrational Sum Frequency Scattering Experiments [PC-152]

Li Zhang, EPFL Lausanne
S. Pullanchery, S. Roke*

In vivo ¹H MR Spectroscopy of bile acids from human gallbladder—Detection and quantification of metabolites after a lipid load [PC-153]

Yue Zhang, University of Bern
D. Kröll, G. Stirnimann, R. Wiest, P. Vermathen*

Single-photon superradiance in individual cesium lead halide quantum dots [PC-154]

Chenglian Zhu, ETH Zurich / EMPA
S. C. Boehme, L. G. Feld, A. Moskalenko, D. D. Dirin, R. F. Mahrt, T. Stöferle, M. I. Bodnarchuk, A. L. Efros, P. C. Sercel, G. Rainò*, M. V. Kovalenko*

Evaporation of Po from LBE-cooled reactors [PC-155]

Ivan Zivadinovic, Paul Scherrer Institute PSI, Villigen
J. Neuhausen*, P. Steinegger*

Tellurium speciation in vapors over Lead-Bismuth eutectic melts [PC-156]

Vladislav Zobnin, PSI / UniBern
J. Neuhausen*, R. Eichler*

**Materials Chemistry [Mat]
Poster Session**

Multicolor Emission with Photo-Switchable Cationic Pyridine-Pyrene (PyPy) for OLED [Mat-101]

Boopathi Achuthan, University of Fribourg
K. M. Fromm*

Electroactive naphthalimide and naphthalenediimide interlayers for inverted perovskite solar cells [Mat-102]

Konstantina Armadorou, EPFL Lausanne
G. AlSabeih, M. Najafov, F. T. Eickemeyer, L. Pfeifer, W. Niu, J. Milić*, M. Grätzel*

Diels-Alder Cycloaddition Polymerization for Porous Poly-phenylenes with Exceptional Gas Uptake Properties [Mat-104]

Timur Ashirov, University of Fribourg
P. W. Fritz, T. Yildirim*, A. Coskun*

From Chicken Feathers to Antimicrobial Peptides for Smart, Self-Disinfecting Nanocoating [Mat-105]

Amira Ben Mansour, HEIA Fribourg
J. Horner, S. Jansod, R. Marti*

Dynamically-bound Guanidinium-based Ligands for Lead Halide Perovskite Nanocrystals [Mat-106]

Yuliia Berezovska, ETH Zurich
S. Sabisch, C. Bernasconi, M. Bodnarchuk, D. Dirin, M. Kovalenko*

Optically actuated metallosupramolecular systems comprising opto-chemical transducers [Mat-107]

Luca Bertossi, Adolphe Merkle Institute, Fribourg
C. Weder*

A Colloidal Nanofactory for Solid-Liquid-Solid Nanoparticles [Mat-108]

Coline Boulanger, EPFL Lausanne
D. Arenas Esteban, K. Kumar, J. Leemans, P. P. Albertini, R. Buonsanti*, S. Bals*

Organic Additive Approach for the Interfacial Stabilization in Sulfide-based All-Solid-State Batteries [Mat-109]

Leonie Braks, University of Fribourg
A. Coskun*

Magnetic Metallocarbon Membranes – Towards a new semiconductor class [Mat-110]

Christian Bünzli, University of Basel
M. Mayor*

Novel synthesis and ligand design for lead-free halide perovskites. [Mat-111]

Ole Dressler, ETH Zurich
D. Dirin, M. Kovalenko*

Phonon-driven wavefunction localization promotes room-temperature, pure single-photon emission in large organic-inorganic lead-halide quantum dots [Mat-112]

Leon Feld, ETH Zurich
S. C. Boehme, S. Sabisch, N. Frenkel, N. Yazdani, V. Morad, C. Zhu, M. Svyrydenko, R. Tao, M. Bodnarchuk, G. Lubin, M. Kazes, V. Wood, D. Oron, G. Raino*, M. V. Kovalenko*

Designing inherently degradable epoxy resins around a carbohydrate core [Mat-113]

Maxime Hedou, EPFL/HEIA Fribourg
T. Nelis, L. Manker, M. Jones, R. Martinent, T. Borgmeyer, J. Staal, A. Demongeot, V. Michaud, F. Maréchal, J. Luterbacher*, R. Marti*

Sensitized triplet-triplet annihilation in nanostructured polymeric scintillators allows for pulse shape discrimination [Mat-114]

Xueqian Hu, Adolphe Merkle Institute
D. Rigamonti, I. Villa, L. Pollice, M. Mauri, A. Dal Molin, M. Tardocchi, F. Meinardi, C. Weder*, A. Monguzzi*

Supramolecular assembly induced fluorescence based on acridone oligomers [Mat-115]

Isabelle Kolly, University of Berne
S. M. Langenegger, R. Häner*, S. Liu*

Bronze-type niobium tungsten oxides: intricate structures for battery research [Mat-116]

Frank Krumeich, ETH Zurich
M. Wörle

Iron-carbohydrate complexes treating anaemia: understanding the dynamic Interactions with human blood serum [Mat-117]

Leonard Krupnik, Empa
B. F. Silva, J. Avaro, V. Lütz-Bueno, J. Kohlbrecher, A. Alston, R. Digigow, B. Flühmann, E. Philipp, P. Wick*, A. Neels*

Tuning crystal growth of 2D Covalent Organic Frameworks with acid catalysts [Mat-118]

Iris Landman, Northwestern University, Evanston, USA
A. Natraj, C. Pelkowski, W. R. Dichtel*

Triplet-Triplet Annihilation Upconversion with a New Class of UV Emitters [Mat-119]

Davide Lardani, Adolphe Merkle Institute, Fribourg
X. Hu, A. Monguzzi, C. Weder*

Chemical stability of gold-silica core-shell nanoparticles in biological media [Mat-120]

Wang Sik Lee, Adolphe Merkle Institute, Fribourg
P. Taladriz-Blanco, H. Lee, L. Hirschi-Ackermann, B. Rothen-Rutishauser, A. Petri-Fink*

Accelerated Reversible Conversion of Li_2S_2 to Li_2S by Spidroin Regulated Li^+ Flux for High-performance Li-Sulfur Batteries [Mat-121]

Mingliang Liu, University of Fribourg
A. Coskun*

Controlling the Magnetic Properties of the van der Waals Multiferroic Crystals $\text{Co}_{1-x}\text{Ni}_x\text{I}_2$ [Mat-122]

Anastasiia Lukovkina, University of Geneva
E. Giannini*, S. A. López-Paz, C. Besnard, L. Guenee, F. O. von Rohr*

S-Mediated Interactions in Hybrid Perovskite Photovoltaics [Mat-123]

Weifan Luo, University of Fribourg
S. Kim, J. Milić*

Shape-controlled synthesis of cubic hematite ($\alpha\text{-Fe}_2\text{O}_3$) particles [Mat-124]

Miroslava Nedyalkova, University of Fribourg
D. Potes Vecini, M. Lattuada*

Photoacid-induced supramolecular network disassembly [Mat-125]

Marta Oggioni, University of Fribourg
D. Kiebal, C. Weder*

Templated Synthesis of Atomically Precise Silver Nanoclusters in Programmable Three-Dimensional DNA Materials [Mat-126]

Lara Perren, ETH Zurich
K. Woloszyn, J. Janowski, Y. P. Ohayon, R. Sha*, S. Vecchioni*

Synthesis and cytotoxicity of mesoporous bioactive glass nanoparticles [Mat-127]

Florence Piffaretti, ZHAW Zurich University of Applied Sciences
L. Müller, S. Lehmann*, D. Brühwiler*

***In situ* light-responsive hydrogels to study cell behavior [Mat-128]**

Maria Porteiro Figueiras, University of Fribourg
P. Taladriz-Blanco, B. Rothen-Rutishauser*, A. Petri-Fink*

Acid-assisted synthesis of large crystals of the room-temperature ferromagnet 1T-CrTe_2 [Mat-129]

Kai Röseler, University of Geneva
C. Witteveen, C. Besnard, F. O. von Rohr*

Combining Solar Hydrogen Production and value-added Oxidations: Reforming of HMF on unbiased Photoelectrochemical Devices [Mat-130]

Ramon Schnyder, University of Zurich
D. Tilley*

Improving local antibiotic therapy through the study of interactions and release mechanisms between CaSO_4 carriers and antibiotics [Mat-131]

Dan Stefanita, Empa, Dübendorf
S. L. Thomä, E. Gautier, P. Wahl*, A. Neels*

Controlled microstructure of cellulose nanofiber sponges through simultaneous stirring and freezing [Mat-132]

Flavio Augusto von Philipsborn, ZHAW Zurich/University of Zurich
C. Adlhart*

Functionalization within a supramolecular triaxially woven framework [Mat-133]

Joseph Woods, EHT Zurich
A. Herdlitschka, B. Lewandowski, H. Wennemers*

Reprocessability and flame-retardancy epoxy vitrimers via phosphonated approach and their application in FRPCs [Mat-134]

Wenyu Wu Klingler, Empa Dübendorf
S. Gaan

Sb₂S₃ Particle Based Photoanodes for Oxygen Evolution Reaction [Mat-135]

David Yong Sam, University of Zurich
D. Tilley*

Enhanced Photoelectrochemical Performance of Sb₂Se₃ via Solvent-Based Hole Transport Layer Incorporation for Improved Crystalline Growth and Interface Charge Carrier Transport [Mat-136]

ZiYing Zhang, University of Zurich
D. Tilley*

Perfluoroarene-based layered tin halide perovskites in hybrid photovoltaics [Mat-137]

Mengqiong Zhu, University of Fribourg
J. Kim, J. Seo, A. Abate, J. V. Milic*

Triphenylphosphine Oxide: A Versatile Covalent Functionality for Carbon Nanotubes [Mat-138]

Yanlin Pan, ETH Zurich
D. Baster, D. Käch, J. Reger, L. Wettstein, F. Krumeich, M. El Kazzi, M. J. Bezdek*

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