

Swiss Chemical Society (SCS)

SCS Fall Meeting 2025

September 4, 2025, 08.30 – 18.30h

University of Zurich, Irchel Campus

Program Highlights

- Two plenary sessions with lectures of SCS Awardees 2025
- Parallel sessions with keynote lectures and PhD presentations
- Poster session during lunch break
- Best oral and best poster presentation award ceremony
- Commercial exhibition

Topics of the Parallel Sessions

- Analytical Sciences
- Catalysis Science & Engineering
- Computational Chemistry
- Chemistry and the Environment, Chemical Ecology
- Inorganic & Coordination Chemistry
- Medicinal Chemistry & Chemical Biology
- Organic Chemistry
- Physical Chemistry
- Materials Chemistry



SCS
Swiss Chemical
Society



University of
Zurich^{UZH}

fm25.scg.ch

WELCOME TO THE SCS FALL MEETING 2025 OF THE SWISS CHEMICAL SOCIETY



Prof. Michal Juríček



Prof. Eva Freisinger

On behalf of the Organizing Committee, the Board Members of all involved SCS Networks, and the Department of Chemistry of the University of Zurich, we welcome you to the SCS Fall Meeting 2025!

Ever since we attended our very first Fall Meeting, we have looked forward to each new edition. This year's meeting is particularly special for us: for the first time, we have the honor of serving as co-chairs. We are excited to take on this role for the 9th Fall Meeting hosted at UZH and to be part of an event that is so important for chemists across Switzerland.

The Fall Meeting offers a unique platform to connect with colleagues and friends from across the country, bringing together researchers at all career stages—from students to principal investigators—to catch up, network, and exchange ideas. It is the most important platform for the next generation of chemists in Switzerland. For many, it is the first occasion to meet the community and to present their accomplishments outside the walls of their laboratories.

To make the most of these opportunities, the program is carefully structured to showcase a wide range of scientific activities and presentations throughout the day. After the Welcome and Opening, we will be enjoying Award Lectures, followed by the nine thematic parallel sessions, the platforms for students to present their research. During the Lunch Break the participants will have the opportunity to visit the Poster Sessions and the Commercial Exhibition. In the afternoon, there is the second round of parallel sessions and Award Lectures. The meeting ends with the announcement of the winners of the „Helvetica Prize of the SCS“, and the Award Ceremony, honoring the Best Oral and Best Poster Presenters. This is one of the best-endowed Award Programs of its kind, and the Ceremony is always one of the highlights of a very long and intense day.

This year, more than 400 students have submitted an abstract, and together with the contributions from senior lecturers there will be around 100 oral presentations. At the Poster Session, 350 posters will be open for discussion, creating this wonderful, sizzling atmosphere of vivid exchange between participants.

We gratefully acknowledge the generous support of our sponsors, many of whom have accompanied and supported us for many years. Our sincere thanks also go to the Department of Chemistry of the University of Zurich and to all members of the Organizing Committee for putting together such an attractive program of sessions. Finally, we extend our heartfelt thanks to all the student helpers from the University of Zurich.

We invite you to explore the program and hope you will enjoy this year's event as much as we do. We look forward to warmly welcoming you to our beautiful campus, an inspiring place for engaging talks, fruitful discussions, and the vibrant atmosphere that makes the Fall Meeting so special.

Prof. Michal Juríček, University of Zurich
Co-Chair of the Organizing Committee

Prof. Eva Freisinger, University of Zurich
Co-Chair of the Organizing Committee

PROGRAM OVERVIEW, THURSDAY, 4TH SEPTEMBER 2025

Interactive program incl. abstracts of all lectures, talks and poster abstracts on fm25.scg.ch

Time	Program Item
08.30	Registration and welcome coffee
09.15	Welcome and conference opening <i>Prof. Michal Juriček</i> and <i>Prof. Eva Freisinger</i> , University of Zurich, Co-Chairs of the SCS Fall Meeting 2025 <i>Prof. Roland K.O. Sigel</i> , Dean of the Faculty of Science, University of Zurich
Morning Plenary Session (Award Lectures) , Chair: Prof. Michal Juriček	
09.30	Swiss Green & Sustainable Chemistry Award Lecture 2025 <i>Prof. Jeremy Luterbacher</i> , EPFL Lausanne «Engineering high performance chemicals and materials using largely preserved natural structures»
10.00	Swiss Industrial Science Award Lecture 2025 <i>Prof. Myriem El Qacemi</i> , Syngenta Crop Protection AG «From Lab to Field: A Chemist's Journey Through Insecticide Research in Crop Protection»
10.30	Short break
Morning Parallel Sessions	
10.45	Invited Lecture (30 min) and Short Talks (15 min) Topics: Analytical Sciences, Catalysis Science & Engineering, Computational Chemistry, Chemistry and the Environment, Inorganic & Coordination Chemistry, Medicinal Chemistry & Chemical Biology, Organic Chemistry, Physical Chemistry, Materials Chemistry
Lunch Break and Poster Session	
12.30	Poster Sessions (same topics as the parallel lecture sessions) Commercial Exhibition Visit the booths and learn about the latest developments from our partners. Participate in the exhibitor challenge and get the chance to win 1x 100 and 2x 50 CHF in cash.
Afternoon Parallel Sessions	
14.30	Invited/Sponsored Lecture (30 min) and Short Talks (15 min) Topics: Analytical Sciences, Catalysis Science & Engineering, Computational Chemistry, Chemistry and the Environment, Inorganic & Coordination Chemistry, Medicinal Chemistry & Chemical Biology, Organic Chemistry, Physical Chemistry, Polymers, Colloids & Interfaces
16.15	Short break
Afternoon Plenary Session (Award Lectures) , Chair: Prof. Eva Freisinger	
16.30	Grammaticakis-Neumann Prize Lecture 2025 (online) <i>Prof. Julian G. West</i> , Rice University, Houston «Toward Privileged Cocatalytic Systems in Synthetic Organic Photocatalysis»
17.00	Sandymeyer Award Lecture 2025 <i>Dr. Stephan Bachmann</i> , F. Hoffmann-La Roche AG «Organometallic Chemistry at Scale - A Highly Atroposelective Negishi Coupling Enables the Commercial Manufacturing Process of Divarasib»
SCS Announcements and Ceremony Session	
17.45	SCS Announcements Helvetica Prize of the Swiss Chemical Society 2025 (best published papers of PhD/Postdocs 2024/25)
18.00	Best Oral Presentation Awards (sponsored by the Metrohm Foundation) Dipl. Ing. Markus Steinke, Metrohm AG Best Poster Presentation Awards (sponsored by dsm-firmenich) Dr. Jonathan Medlock, dsm-firmenich
18.30	Official end of the conference
18.45	General Assembly of the youngSCS 2025 Lead: Gaetano Geraci, President youngSCS

GENERAL INFORMATION

Date: September 4, 2025, 08.30–18.30h
 Location: Irchel Campus, University of Zurich
 Host: Department of Chemistry, University of Zurich
 Website: <https://fm25.scg.ch/>

Conference Secretariat

Swiss Chemical Society
 Haus der Akademien
 Laupenstrasse 7, Postfach
 3001 Bern
info@scg.ch

Organizing Committee

Chairs

– Prof. Michal Juríček, University of Zurich
michal.juricek@chem.uzh.ch
 – Prof. Eva Freisinger, University of Zurich
freisinger@chem.uzh.ch

Members of the Extended Organizing Committee

Analytical Sciences

– Dr. Ralf Kaegi, Eawag Dübendorf
 – Prof. Chan Cao, University of Geneva

Catalysis Sciences & Engineering

– Dr. Vladimir Paunovic, PSI/ETH Zurich
 – Prof. Florian Seebeck, University of Basel

Computational Chemistry

– Prof. Sandra Luber, University of Zurich
 – Prof. Kjell Jorner, ETH Zurich

Inorganic & Coordination Chemistry

– Prof. Ross Milton, University of Geneva
 – Prof. Alexandria (Ali) Deliz Liang, University of Zurich
 – Prof. Eva Hevia, University of Bern

Organic Chemistry

– Prof. Peter Stacko, University of Zurich
 – Prof. Michel Rickhaus, University of Geneva

Medicinal Chemistry & Chemical Biology

– Dr. Dennis Gillingham, University of Basel
 – Dr. Fides Benfatti, Syngenta

Physical Chemistry

– Prof. Malte Oppermann, University of Basel
 – Prof. Nathalie Banerji, University of Bern

Materials Chemistry

– Prof. Fabian von Rohr, University of Geneva
 – Prof. Bastian Brand, ZHAW Wädenswil

Chemistry and the Environment

– Dr. Thomas Bucheli, Agroscope
 – Dr. Claudio Screpanti, Syngenta
 – Dr. Jutta Hellstern, F. Hoffmann-La Roche AG

Participation Fees

Fees for presenters (poster or talk)

- SCS Members: free of charge (by convention the first name in the abstract authors' list)
- Non-members: CHF 250.00 (incl. VAT)

Fees for participants without a presentation

- SCS Members: free of charge. However, registration is mandatory.
- Non-members: CHF 100.00 (incl. VAT).

Pre-registered participants will get an invoice in advance to avoid waiting time at the check in desk. Participants who register after August 17 will have to pay the fees by credit card during the registration process.



If attending as an SCS member you have to bring your SCS membership-card with you! To become a member, please apply on scg.ch/membership.

Coffee Breaks and Lunch

Complementary refreshments will be served before the opening ceremony and during the breaks. Sandwiches, desserts and drinks will be served during the lunch break.

There is also the possibility to have lunch at your own expense in the cafeterias and restaurants on the Irchel campus next to the conference venue.

Program and Abstract Search

The website allows you an easy and interactive planning of your conference day. Profit from the following functions:

- Interactive program overview with abstract preview
- Quick abstracts display as html files
- pdf-file download of single abstracts
- Extensive search functionalities

Connection to the Internet

A wireless LAN (Wi-Fi) offers you access to the internet. Members of institutions participating to the Switch-Mobile project (all Swiss universities) will be able to connect by simply using their usual VPN client software. Other users will have to register first through a secure web page or can use the Swisscom hotspot.

The screenshot displays the SCS Fall Meeting 2025 website interface. At the top, the event title and date are shown. Below is a navigation menu with a search icon. The main content area is divided into a 'Schedule of SCS Fall Meeting' on the left and an 'Abstract Search' on the right. The schedule lists various sessions, including registration, talks, and breaks. The abstract search results show a list of abstracts with titles, authors, and keywords. Red boxes and arrows highlight specific features: a search box (1), a filter button (2), a search result (3), and a search result (4).

BEST PRESENTATION AWARDS

The organizers are proud of the very attractive presentation award program. More than CHF 42'000 CHF in total are given to the winners in cash, travel grants or free publication opportunities in the Junior Laureates issue of CHIMIA 4/2026.

We would like to address our recognition and thanks to the Metrohm Foundation and to dsm-firmenich, who have partnered the presentation award program for many years.

Best Oral Presentation Award

The award is sponsored by Metrohm.



The prize is given for the best short presentations of each parallel session. The main criteria are the scientific quality and originality of the research, plus the quality of the presentation.

Ceremony: 18.00h in the plenary lecture room.

Prize for the winner of each of the nine parallel sessions

- Cash contribution of CHF 500
- Travel voucher of CHF 1'000 to attend an international conference
- Invitation to present the research in the laureates' issue of CHIMIA. Value CHF 1'200.

Prize for the runners-up

- Cash contribution of CHF 400.

The prizes are sponsored by Metrohm Foundation and will be presented by Dipl. Ing. Markus Steinke, Executive Vice President Marketing at Metrohm International Headquarters, Herisau.

Best Poster Presentation Award

The award is sponsored by dsm-firmenich. **dsm-firmenich** ●●●

The prizes are given for the best posters of each parallel session. The main criteria are the scientific quality and originality of the research, plus the quality of the presentation.

Ceremony: 18.15h in the plenary lecture room.

Prize for the winner of each of the nine poster sessions

- Cash contribution of CHF 200.
- Travel voucher of CHF 750 to attend an international conference
- Invitation to present the research in the laureates' issue of CHIMIA. Value CHF 1'200.

Prizes for the runners-up

- cash contribution of CHF 200 (1–3 prizes, based on the number of presented posters in the respective session)

The prizes are sponsored by dsm-firmenich and will be presented by Dr. Jonathan Medlock, Principal Scientist EMEA, dsm-firmenich.

HELVETICA PRIZE OF THE SWISS CHEMICAL SOCIETY 2025



Helvetica and the Swiss Chemical Society are proud to award the winners of the Helvetica Prize 2025 of the Swiss Chemical Society for the best published papers of PhD/Postdocs 2024/25 in Helvetica Chimica Acta. The prize is endowed with CHF 1'000 for the winner and CHF 500 for the runner-up. The prize was implemented in 2019 to honor outstanding publications of young researchers in Switzerland.

Richard Smith, Executive Editor of Wiley-VHCA will honor the winners who will present their papers in a 3min short presentation.

Winners of the Best Presentation Awards 2024



Covers of the 2022–2024 Junior Laureates Issues

SPONSORS AND SUPPORTERS OF THE SCS FALL MEETING 2025

The SCS and the meeting organizers gratefully acknowledge the generous support of its main sponsors, session sponsors and exhibitors. Without their contributions, it would not be possible to organize this event on an annual basis.

SCS MAIN SUPPORTERS AND GENERAL SPONSORS



ENDOWMENTS OF PARALLEL SESSIONS



Analytical Sciences



Catalysis Science & Engineering



Chemistry and the Environment



Computational & Theoretical Chemistry



Inorganic & Coordination Chemistry



Medicinal Chemistry & Chemical Biology



Organic Chemistry



Physical Chemistry



Materials Chemistry

COMMERCIAL EXHIBITORS



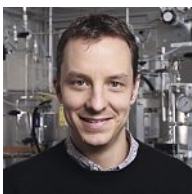
PLENARY SESSIONS

Award Lectures in the Plenary Sessions

Chairs: Prof. Michal Juriček and Eva Freisinger, University of Zürich, Co-Chairs of the SCS Fall Meeting 2025

Green & Sustainable Chemistry Award Lecture 2025

«**Engineering high performance chemicals and materials using largely preserved natural structures**» [PS-001]
September 4, 2025, 09.30h



Prof. Jeremy Luterbacher
EPFL Lausanne

Jeremy receives the prize for his development of an innovative technology towards depolymerizing lignin from biomass.

Swiss Industrial Science Award Lecture 2025

«**From Lab to Field: A Chemist's Journey Through Insecticide Research in Crop Protection**» [PS-002]
September 4, 2025, 10.00h

Dr. Myriem El Qacemi
Syngenta Crop Protection AG



Myriem is awarded for her outstanding contributions to synthetic chemistry and its links to broader life sciences.

Grammaticakis-Neumann Prize Lecture 2025

«**Toward Privileged Cocatalytic Systems in Synthetic Organic Photocatalysis**» [PS-003]
September 4, 2025, 16.30h

Prof. Julian G. West
Rice University, Houston, US



Awarded in recognition of his creative and innovative research program focused on harnessing the unique reactivity of free radical intermediates using innersphere photocatalysis to enable powerful, previously impossible reactions.

Sandmeyer Prize Lecture 2025

«**Organometallic Chemistry at Scale - A Highly Atroposelective Negishi Coupling Enables the Commercial Manufacturing Process of Divarasib**» [PS-004]
September 4, 2025, 17.00h

Dr. Stephan Bachmann
F. Hoffmann-La Roche AG



The award is given to F. Hoffmann-La Roche Ltd. namely Dr. Stephan Bachmann, Dr. Raphael Bigler, Dr. Dainis Kaldre, Dr. Dominique Kummler, Dr. René Lebl, Dr. David Linder, Dr. Ugo Orcel, Dr. Isabelle Prévot and Dr. Jörg Sedelmeier, in recognition of the team's outstanding achievements to enable the commercial manufacturing process of Divarasib.

Abstract codes

AS Analytical Sciences
CE Catalysis Sciences & Engineering
CC Computational & Theoretical Chemistry
EV Chemistry and the Environment
IC Inorganic Chemistry
MC Medicinal Chemistry & Chemical Biology
OC Organic Chemistry
PC Physical Chemistry
Mat Materials Chemistry
PS Plenary Session

[XY-011]...[XY-017] Morning parallel session lectures
[XY-021]...[XY-027] Afternoon parallel session lectures
[XY-101]...[XY-199] Posters presentations

Exhibitor Challenge



Visit our exhibition and participate in the exhibitor challenge.

Full cards with stickers from all our partners take part in the lucky draw of 1x 100.00 CHF.

Cards with at least one full column or one full row take part in the draw of 2x 50.00 CHF.

The drawing takes place on September 4, at 18.00h.

PARALLEL SESSIONS

Analytical Sciences [AS]

BACHEM

Session Endowment: Bachem

Chairs: Dr. Ralf Kaegi, Eawag Dübendorf
Prof. Chan Cao, University of Geneva

- 10:45 **On the Gas-Phase Structure of Biomolecular Ions Produced by Native Electrospray Ionization** [AS-011]
Renato Zenobi, ETH Zurich
- 11:15 **Development, Characterization and Field Assessment of a Submersible Dual-Readout Electrochemical pH Sensor for In Situ Environmental Monitoring** [AS-013]
Robin Nussbaum, University of Geneva
S. Jeanneret, T. Cherubini, E. Bakker*
- 11:30 **Structure elucidation of the siderophore phymabactin and characterization of siderophore-metal complexes produced by Paraburkholderia spp.** [AS-014]
Luca Bürgi, University of Zurich
D. Golaz, G. Pessi*, L. Bigler*
- 11:45 **Quantification of azides on the surface of nanoparticles: towards precision bioconjugation** [AS-015]
Elizaveta Maksimova, University of Basel
D. Salazar Marcano, J. De Roo*
- 12:00 **Visualizing Chemical Dynamics of On-surface Boronic Acid Condensation using Tip-Enhanced Raman Spectroscopy** [AS-016]
Naresh Kumar, ETH Zurich
Y. Xia, K. Greis, C. Xu, R. Zenobi
- 12:15 **Analytical Characterization of Stoichiometric Ho₂O₃ Thin Films Grown by Pulsed Laser Deposition** [AS-017]
Sharath Rameshbabu, University of Zurich
D. Pergolesi, A. Müller, C. Vockenhuber, T. Lippert, D. Bleiner*
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- 14:30 **Detecting and Differentiating Aggregates in the Production of GLP-Analogous Peptides** [AS-021]
Maximilian Zinke, Bachem AG
L. Fuhrer, P. Plattner
- 15:00 **Gaseous Species Formation in LA-ICP-MS: Influence of Sample Matrix, Laser Pulse Width, and Ablation Conditions** [AS-023]
Sarah Oberholzer, ETH Zurich
B. Umfaher, P. Becker, D. Günther*
- 15:15 **From Solution to Spectrometer: Tracking Gold-Diazenyl Intermediates and the Impact of Gas-Phase Events** [AS-024]
Florian Ruepp, ETH Zurich
J. Mehara, P. White, A. Y. Pereverzev, J. Roithová*
- 15:30 **Tracking protein misfolding and oligomerization in ALS: A temperature-controlled mass spectrometry approach** [AS-025]
Despoina Svingou, ETH Zurich
J. A. Harrison, R. Zenobi*
- 15:45 **Automated Structure Elucidation at Human-Level Accuracy via Multitask Multimodal Language Model** [AS-026]
Marvin Alberts, IBM Research
N. Hartrampf, T. Laino*
- 16:00 **Perturbatively Corrected Instanton Rate Theory** [AS-027]
Jindra Dušek, ETH Zurich
J. E. Lawrence, J. O. Richardson*

Catalysis Sciences & Engineering [CE]

CASALE

Session Endowment: Casale

Chairs: Prof. Vlad Paunovic, PSI / ETH Zurich
Prof. Florian Seebeck, University of Basel

- 10:45 **Enzyme discovery in non-canonical natural product pathways** [CE-011]
Lena Berra, University of Konstanz
- 11:15 **Non-oxidative dehydrogenation of alkanes over Cu(I)-exchanged Mordenite.** [CE-013]
Daniil Polyukhov, Paul Scherrer Institute PSI, Villigen
J. A. van Bokhoven, V. L. Sushkevich
- 11:30 **One-step Electrochemical Synthesis and Recovery via Joule-Stripping Strategy** [CE-014]
Robin Dürr, ETH Zurich
Y. Xu, F. Häfliger, D. F. Abbott, V. Mougel*
- 11:45 **Disentangling the Effects of Alloying and Interfacial Sites in PtCr-Catalyzed CO₂ Hydrogenation** [CE-015]
Chengbo Yao, ETH Zurich
W. Zhou, S. Dery, J. Grings, W. Wang, E. Brack, J. Paterson, J. Southouse, W. Zhou, S. Dery, J. Grings, W. Wang, E. Brack, J. Paterson, J. Southouse, C. Copéret*
- 12:00 **Oxygen Vacancy Dynamics in Indium Oxide Drive the Catalytic Activity and Stability during CO₂ Hydrogenation to Methanol** [CE-016]
Matthias Becker, ETH Zurich,
A. Fedorov, P. M. Abdala, C. R. Müller*
- 12:15 **Regulating the Long- and Short-Range Interaction in Cu-Based Single-Atom Catalysts for Oxygen Electroreduction** [CE-017]
Han Zhao, University of Zurich
C. Triana, G. Patzke*
-
- 14:30 **Present and Future of Environmental Catalysis in Industry** [CE-021]
Alberto Garbujo, Casale SA
P. Biasi, R. Ostuni, F. Buttignol, L. Villantieri, M. Bialkowski
- 15:00 **Polyethylene waste hydrolysis over bimetallic catalysts with favorable environmental footprint and economics** [CE-023]
Iris Nogueroles-Langa, ETH Zurich
S. D. Jaydev, C. Salah, J. Morales-Vidal, P. Sanz Ber-
man, Y. Ge, H. Eliasson, R. Erni, N. López, A. J. Martín,
G. Guillén-Gosalbez, J. Pérez-Ramírez*
- 15:15 **Carbene-supported dinickel complexes for efficient hydroxylation of benzene to phenol** [CE-024]
Giacomo Rigoni, University of Bern
S. Bertini, F. Bühler, M. Albrecht*
- 15:30 **Cooperative Alkene Isomerization Catalysed by a Molecular Nickel-Aluminate Complex** [CE-025]
Roel Bienenmann, University of Bern
L. Vedani, A. Borys, E. Hevia*
- 15:45 **Catalytic improvement of a metalloenzyme using hydrophobic non-canonical amino acids** [CE-026]
Sandro Fischer, University of Zurich
A. Natter Perdiguero, K. Lau, A. Deliz Liang*
- 16:00 **Organic Surface Functionalization of Transition Metal Phosphide to Enhance Catalysis** [CE-027]
Yu-Chun Shen, University of Basel
M. F. Delley*

Computational and Theoretical Chemistry [CC]

Session Endowment: Lonza

LonzaChairs: Prof. Sandra Luber, University of Zurich
Prof. Kjell Jorner, ETH Zurich

- 10:45 **Free energies from score-based generative models** [CC-011]
Tristan Bereau, Heidelberg University
- 11:15 **Bridging the Gap Between Variational and Perturbational DFT-based Methods for Calculating Excited States** [CC-013]
Andrey Sinyavskiy, University of Zurich, M. Mališ, S. Luber*
- 11:30 **Non-equilibrium Alchemical Transformation with Enveloping Distribution Sampling** [CC-014]
Shu-Yu Chen, ETH Zurich
E. Ruijsenaars, S. Riniker*
- 11:45 **Compressing Quantum States of Identical Particles with Neural Network States** [CC-015]
Lexin Ding, ETH Zurich
V. Barandun, M. Reiher*
- 12:00 **Broadening the Applicability of FDET-Based Methods through Bottom-Up Approximations of the Non-Additive Kinetic Potential** [CC-016]
Pierre-Olivier Roy Roy, University of Geneva
T. Wesolowski*
- 12:15 **Towards the new types of memory devices using molecular electronics** [CC-017]
Vladislav Slama, EPFL Lausanne
U. Röthlisberger*
-
- 14:30 **Process Development Fueled by Enabling Technologies** [CC-021]
Simon Wagschal, Lonza AG
- 15:00 **Generative molecular design with steerable and granular synthesizability control** [CC-023]
V́ctor Sabanza Gil, EPFL Lausanne
- 15:15 **Machine learning-guided design of rhenium tricarbonyl complexes for next-generation antibiotics** [CC-024]
Miroslava Nedyalkova, University of Fribourg
G. Demirci, Y. Cortat, M. Lattuada, F. Zobi
- 15:30 **Transformer Model for Structure Elucidation from Tandem Mass Spectroscopy data** [CC-025]
Laura Mismetti, IBM Research
M. Alberts, M. Graziani, T. Laino
- 15:45 **Feature Selection in Multivariate Linear Regression Models for Data-Efficient Reaction Optimization** [CC-026]
Alexandre Schoepfer, EPFL Lausanne
R. Laplaza, J. Waser*, C. Corminboeuf*
- 16:00 **Generative Machine Learning for Metal Complexes and Nanoclusters** [CC-027]
Luca Schaufelberger, ETH Zurich
R. Schlama, K. Jorner*

Chemistry and the Environment [EV]

Session Endowment: Syngenta

syngentaChairs: Dr. Thomas Bucheli, Agroscope ETH Zurich
Dr. Claudio Screpanti, Syngenta Crop Protection AG
Dr. Jutta Hellstern, Roche

- 10:45 **Looking for Ways out of the PFAS Mess** [EV-011]
Martin Scheringer, ETH Zurich
- 11:15 **Overview on PFASs Contamination in Swiss Soils** [EV-013]
Elvira Rudin, ETH Zürich / ZHAW
J. Glüge, B. Thalmann, M. Scheringer*
- 11:30 **The Food Contact Chemicals Priority List (FCCprio List)** [EV-014]
Helene Wiesinger, Food Packaging Forum Foundation
L. V. Parkinson, B. Geueke, A. Anguera Sempere, J. M. Boucher, E. Cabane, L. Zimmermann, J. Muncke
- 11:45 **³⁵Cl NQR as a Site-Specific Characterization Technique for Chlorinated Compounds** [EV-015]
Anna Nobile, ETH Zurich
C. Copéret
- 12:00 **Halogenated nitramines: a novel class of disinfection byproducts** [EV-016]
Juliana Laszakovits, ETH Zurich
C. Wiedenmann, D. Wahman, J. Fairey, K. McNeill
- 12:15 **Investigating Urban Halocarbon Emissions: A Seoul Tracer Release Experiment** [EV-017]
Michelle Müller, EMPA, Dübendorf / ETH Zurich
M. K. Vollmer, S. Henne, J. Yun, H. Choi, S. Park, L. Emmenegger, S. Reimann*
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- 14:30 **Plantino acid metabolism is central in response to pathogenic and beneficial bacteria** [EV-021]
Joelle Schläpfer, Agroscope,
C. Joller, K. Schläppi
- 15:00 **A polymer-based quantification of Tire wear particles (TWP) in atmospheric deposition samples using pyrolysis-gas chromatography-mass spectrometry (Py-GC-MS)** [EV-023]
Md Rahman, Empa, Dübendorf
C. Hügli, R. Kägi
- 15:15 **Passive Air Sampling and Bee Pollen Analysis Reveals Distribution of Current-Use Pesticides in Agricultural Landscapes** [EV-024]
Sergio Cirelli, University of Bern
C. Kast, K. Hornak, T. D. Bucheli, A. C. Chiaia-Hernández R.*
- 15:30 **Decoding pest dynamics in associated oilseed rape: insights from chemical and behavioral mechanisms** [EV-025]
Lea Bolis, Agroscope/University of Neuchâtel
I. Hiltpold, S. Rasmann, I. Hiltpold*, S. Rasmann*
- 15:45 **Proteolytic Activity and Substrate Specificity of Lake Geneva** [EV-026]
Josephine Meibom, EPFL Lausanne
N. Wichmann, M. Zumstein, T. Kohn*
- 16:00 **Water-basedide coupling with sustainable xylose acetals as co-solvents: A novel organic base-free strategy** [EV-027]
Esaie Reusser, HEIA Fribourg
A. Bajramaj, R. Marti*

Inorganic Chemistry [IC]

Session Endowment: Vigor



Chairs: Prof. Alexandria (Ali) Deliz Liang,
University of Zurich
Prof. Eva Hevia, University of Bern

- 10:45 **Exploiting Synergic Reactivities of S-Block Metal Nickelates for Bimetallic Catalysis** [IC-011]
Eva Hevia, University of Bern
- 11:15 **Synthesis and Applications of Donor Flexible Thioamide Ligands** [IC-013]
Taj Seaton, University of Bern
M. Albrecht*
- 11:30 **Wide variability in the kinetic and thermodynamic stability of Pd₆L_x-type coordination cages** [IC-014]
Jean de Montmollin, EPFL Lausanne
F. Fadaei-Tirani, K. Severin*
- 11:45 **Tailoring Sodium Ferrate Complexes to promote Arene Metalations** [IC-015]
Jennifer Kuziola, University of Bern
E. Hevia*
- 12:00 **The supramolecular chemistry of gold(I) cyclic trinuclear complexes: from nano onions to extended networks based on B-N linkages** [IC-016]
Atena Solea, EPFL Lausanne
D. Dermutas, F. Fadaei Tirani, L. Leanza, M. Delle Piane, G. L. Pavan, K. Severin*
- 12:15 **Polyoxometalate-Loaded Carboxymethyl Chitosan Nanoparticles with Anticancer Activity** [IC-017]
Jaelyn Parris, University of Zurich
G. Wiprächtiger, R. Hooshmandabbasi, G. R. Patzke*, C. Maake*
-
- 14:30 **Electronic structure distortions in chromium chelates impair redox kinetics in flow batteries** [IC-021]
David Reber, Empa, Dübendorf
J. R. Thurston, K. P. White, M. Kudisch, L. Kitsu Iglesias, J. Lorenzetti, F. Bernasconi, M. F. Toney, M. P. Marshak
- 15:00 **Catalytic and stoichiometric stepwise conversion of side-on bound dinitrogen to monia mediated by a uranium complex** [IC-023]
Mikhail Batov, EPFL Lausanne
H. T. Partlow, L. Chatelain, J. A. Seed, R. Scopelliti, I. Zivkovic, R. W. Adams, S. T. Liddle*, M. Mazzanti*
- 15:15 **A Gold(III)-Azide Platform for Nitrene Transfer and C-H Functionalization** [IC-024]
Marc Fernández-Sabaté, University of Zurich
J. Martín, M. J. Johansson, C. Nevado*
- 15:30 **Boron-to-Gold Transmetalation: A Unifying Platform for Gold(III) Cyclometalation** [IC-025]
Doriane Chauvin, University of Zurich
P. Font, B. Pires, J. Martín, X. Ribas*, C. Nevado*
- 15:45 **Noncovalent Immobilization of Open-Shell Organometallic Complexes on Carbon Nanotubes** [IC-026]
Sabrina Kleynemeyer, ETH Zurich
A. M. Wu, Y. Pan, M. J. Bezdek*
- 16:00 **²H Quadrupolar Coupling Constant: A Spectroscopic Ruler for Transition Metal-Hydride Bond Distances in Molecular and Surface Sites** [IC-027]
Domenico Gioffrè, ETH Zurich
C. Müller, S. R. Docherty, A. Yakimov, C. Copéret*

Medicinal Chemistry & Chemical Biology [MC]

Session Endowment: Chemspeed



Chairs: Dr. Fides Benfatti, Syngenta Crop Protection AG
Prof. Dennis Gillingham, University of Basel

- 10:45 **News and Activities of the DMCCB** [MC-011]
Fides Benfatti, President DMCCB
- 11:00 **Novel macrocyclic NLRP3 inhibitors** [MC-012]
Stefanie Mesch, F. Hoffmann-La Roche AG
J. Shannon, D. Miller, A. MacLeod, L. Bouché, H. J. Johnston, K. Matthews, A. Paehler, S. Best, W. Guba, T. Alanine, R. Halai, L. Charge, S. Garside, S. Thom, C. Incerti-Pradillos, C. McPherson, J. Carrillo, S. St-Gallay, S. Schlicht, P. Rigo, A. Hendrick, C. Lerner, M. A. Cooper, E. Z. Mrcsko, G. Jaeschke
- 11:15 **Chemical Synthesis and Chaperone Peptide Mediated Folding of Human Nerve Growth Factor by Expressed KAHA Ligation** [MC-013]
Nicolas Nötel, ETH Zurich
- 11:30 **MicroCycle: An Integrated and Automated Platform to Accelerate Drug Discovery** [MC-014]
Sophie Racine, Novartis Pharma AG
- 11:45 **Towards fully integrated ultrafast drug discovery by NMR** [MC-015]
Matthias Bütikofer, NexMR AG/ ETH Zurich
G. Stadler, W. Wüster, G. Fischetti, N. Schmid, A. Henrici, A. Ulianna, W. Dirk, F. Torres*, R. Riek*
- 12:00 **Development of a Late-Stage Derivatization Platform** [MC-016]
Simon Williams, Syngenta Crop Protection AG
D. Ahmadli, A. Kany, M. Mathis, J. Zakis, A. V. Iosub, T. Ritter, T. Smejkal, S. Jäckh
- 12:15 **Grafting Substrates-of-Interest to Cell-Penetrating Polydisulfides: a Covalent Bioconjugation for Traceless Intracellular Delivery** [MC-017]
Giacomo Renno, University of Geneva
M. Cognet, N. Rose, N. Sakai, S. Matile*
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- 14:30 **Turning Processes into Automation for High-Speed Innovation** [MC-021]
Ahmed Mahmoud, Chemspeed Technologies AG
- 15:00 **Evolving a human capsid protein for mRNA delivery** [MC-023]
Oliver Dennis, EPFL Lausanne,
L. Wiprächtiger, A. Steinauer*
- 15:15 **Discovery of novel IL-17 inhibitors by scaffold morphing strategy** [MC-024]
Juraj Velcicky, Novartis Pharma AG
M. R. Bauer, A. Schlapbach, G. Lapointe, A. Meyer, J. Rondeau, C. Burkhart, T. Knoepfel, N. Gommermann
- 15:30 **Design and Evolution of L/D-Microproteins Against XIAP to Induce Apoptosis of Cancer Cells** [MC-025]
Sára Mellemgaard, University of Copenhagen
R. Kerpic, D. Teze, M. Meldal*
- 15:45 **Discovery and Optimization of Macrocyclic Allosteric Inhibitors of the MET Kinase** [MC-026]
Annick Goergler, F. Hoffmann-La Roche AG
- 16:00 **Thiol-Selective Radiolabelling of Antibodies Using Light-Activated Tetrazoles** [MC-027]
Eda Nisli, University of Zurich
C. Berton, P. A. Cieslik, J. Genz, M. Nolf, H. Braband, J. P. Holland*

Organic Chemistry [OC]

Session Endowment:

Johnson&Johnson Innovative Medicine

Johnson&Johnson
Innovative MedicineChairs: Prof. Peter Stacko, University of Zurich
Prof. Michel Rickhaus, University of Geneva

- 10:45 **Accessing Unusual and Large-Ring Cyclodextrins Using Enzyme-Mediated Dynamic Combinatorial Chemistry [OC-011]**
Sophie Beeren, Technical University of Denmark
- 11:15 **Glucose-derived selective receptors of amino acids in aqueous environments. [OC-013]**
Bartosz Lewandowski, ETH Zurich
M. M. Most, L. B. Boll, P. Gödtel, Z. L. Pianowski
- 11:30 **Electron Donor-Acceptor Complex-Catalyzed Aromatic Nitration: Unveiling the Role of Polymeric Donors [OC-014]**
Anthony Fernandes, University of Bern
H. Lecomte, M. G. Metzger, Q. E. Ordan, K. N. Houk*, D. Katayev*
- 11:45 **Synthesis of phosphorothioates by photocatalytic sulfur transfer from thiosulfate [OC-015]**
Anton Budeev, University of Basel
C. Bon, C. Sparr*
- 12:00 **Organocatalyzed Stereoselective Macrocyclizations [OC-016]**
Jonas Rackl, ETH Zurich
L. B. Boll, H. Wennemers*
- 12:15 **Exploring communication between different pi systems through a metal centre [OC-017]**
Owen Kanisius, University of Geneva
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- 14:30 **Driving Sustainability in API Synthesis at Early-stage Development [OC-021]**
Trung Cao, Johnson&Johnson Innovative Medicine
- 15:00 **Breaking the Resolution Limits: Photouncaging on a Single-Molecule Level [OC-023]**
Katarzyna Hanc, University of Zurich
P. Rivera-Fuentes*, P. Stacko*
- 15:15 **Directed Pd-Catalyzed Carboamination of Conjugated Enynes [OC-024]**
Helena Solé-Àvila, EPFL Lausanne
D. K. Brownsey, H. Senelle, J. Waser*
- 15:30 **Catalytic C–N Bond Metathesis of Tertiaryamines [OC-025]**
Dominic Egger, ETH Zurich
C. Zachau, E. Studer, S. Makai, S. Kotesova, H. Park, Z. Lian, T. Choi, B. Morandi*
- 15:45 **Designing Electric-Field Catalysis Systems for Monoterpene Cyclizations [OC-026]**
Augustina Jozeliūnaitė, University of Geneva
S. Guo, N. Sakai, S. Matile*
- 16:00 **Beyond the Textbook: Is There Still Something to Learn from a Diels–Alder Reaction? [OC-027]**
Maruan Salim, University of Zurich

Physical Chemistry [PC]

Session Endowment: GMP

GMP
PHOTONICS & MICROTECHNOLOGYChairs: Prof. Natalie Banerji, University of Bern
Prof. Malte Oppermann, University of Basel

- 10:45 **Catalysis for molecular solar thermal systems: From surface science to the solid/liquid interface [PC-011]**
Joerg Libuda, Friedrich-Alexander-Universität Erlangen-Nürnberg
- 11:15 **Time-Resolved X-ray Absorption Spectroscopy to Probe Cobalt Dynamics in Fe₂O₃-CoPi Photoanodes During Photoelectrochemical Oxygen Evolution [PC-013]**
Cheshta Chopra, Paul Scherrer Institute PSI, Villigen
S. Grandi, S. Caramori, A. Bharade, E. Fabbri, M. Nachtegaal, T. J. Schmidt, G. Smolentsev*
- 11:30 **Transient IR spectroscopy - an ultimate tool for mechanistic studies - applied to catalytic CO₂ reduction by transition metal complexes [PC-014]**
Luka Tatarashvili, University of Zurich
N. von Fellenberg, P. Hamm*
- 11:45 **In The Heart of CH: Spectroscopic Insights into Proper C–H Hydrogen Bonds [PC-015]**
Anton Kliuchynskyi, University of Zurich
A. Biswas, A. Shalit, A. Kananenka*, B. Dereka*
- 12:00 **Excited Radical Ions in Organic Photocatalysis: A Photophysical Perspective [PC-016]**
Daniel Cruz Neto, University of Geneva
E. Sucre-Rosales, E. Vauthey*
- 12:15 **Thermoresponsive polymers in biological environments: Impact of ions, small molecules and macromolecules on critical temperature [PC-017]**
Anamarija Nikoletić, University of Basel / FHNW
C. Palivan*, O. Tagit*
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- 14:30 **Dynamic Studies of Au-doped Ag₂₉ Nanocluster [PC-021]**
Subhradip Kundu, University of Geneva, T. Bürgi*
- 14:45 **Speaker tba [PC-022]**
- 15:00 **Analysis of the High Resolution Infrared Spectrum of Monodeutero-oxirane [PC-023]**
Karen Keppler, ETH Zurich, S. Albert, Z. Chen, C. Manca Tanner, G. Seyfang, A. Brandenberger, M. Perrino, J. Stohner, G. Wichmann, M. Quack*
- 15:15 **Quantum-logic spectroscopy of forbidden rovibrational transitions in single molecular ions [PC-024]**
Aleksandr Shlykov, University of Basel
M. L. Diouf, R. Karl, M. Roguski, S. Willitsch*
- 15:30 **Beauty and complexity of calcium carbonate precipitation: optical microscopy and in situ Raman microspectroscopy characterization [PC-025]**
Natercia Barbosa, University of Geneva
T. Khakhula, F. Otálora, J. Brazard, J. García-Ruiz, T. Adachi*
- 15:45 **Using Spectro-Electrochemistry to Study Structure-Property Relationships in Organic Mixed Ionic-Electronic Conductors [PC-026]**
Christian Franz, University of Bern, N. Banerji*
- 16:00 **Near-Unity Single-Photon Chiral Transduction from a Single Gold Helicoid to a Perovskite Quantum Dot [PC-027]**
Taehee Kim, ETH Zurich
J. Han, R. Kim, M. Svyrydenko, S. Cho, M. Bodnarchuk, K. Nam, G. Rainò*, M. Kovalenko*

Materials Chemistry [MAT]

Session Endowment: Biotronik



Chairs: Prof. Maksym Yarema, ETH Zurich
Prof. Bastian Brand, ZHAW Wädenswil

- 10:45 **Controlling the order in colloidal crystals by progressively changing the shape of particles** [Mat-011]
Marco Lattuada, University of Fribourg
J. Smart
- 11:15 **Multifunctional Photonic Microparticles via Block Copolymer Self-Assembly: From Structural Color to Magnetically Responsive Optical Materials** [Mat-013]
Andrea Doderò, Adolphe Merkle Institute, Fribourg
G. Mazzotta, N. R. Schwarz, S. Bertucci, R. Schobinger, D. Peddis, D. Comoretto, U. Steiner*
- 11:30 **A Highly Conductive Halospinel Cathode for All-Solid-State Batteries** [Mat-014]
Julian Baumgärtner, ETH Zurich
D. Isler, D. Chernyshov, K. V. Kravchuk*, M. V. Kovalenko*
- 11:45 **Organic halide perovskite solar devices incorporating electroactive interlayers: computational insights and design principles from DFT** [Mat-015]
Andrea Vezzosi, EPFL Lausanne,
Slama, V. Carnevali, G. AlSabeih, M. Grätzel*, U. Röhliberger*
- 12:00 **Polymer Analysis from Cradle to Grave and Beyond** [Mat-016]
Oliver Skarsetz, TA instruments / Waters GmbH
- 12:15 **Ceremony MatChem PhD Award 2025** [Mat-017]
The program is sponsored by Sika and Vigor
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- 14:30 **Endowment lecture from Biotronik AG** [Mat-021]
Biotronik AG, Bülach, Switzerland
- 15:00 **Excited-state charge transfer interaction in a benzothiadiazole/benzodithiophene supramolecular assembly** [Mat-023]
Isabelle Kolly, University of Bern
P. Debnath, S. M. Langenegger, A. Cannizzo, R. Häner*, S. X. Liu*
- 15:15 **A Practical and Robust Approach to Determining the Experimental Minimal Formula of Metal-Organic Frameworks** [Mat-024]
Jikson Pulparayil Mathew, University of Basel
C. Simms, D. Salazar Marcano, E. Dhaene,
T. Parac-Vogt, J. De Roo*
- 15:30 **Exploring the Synthesis and Applications of Two-dimensional Polymers** [Mat-025]
Valentin-Răzvan Lupu, ETH Zurich / Empa Dübendorf
- 15:45 **Low-Temperature Depolymerization of Polymethacrylamides** [Mat-026]
Victoria Lohmann, ETH Zurich
G. Jones, A. Kroeger, N. Truong, M. Coote,
A. Anastasaki*
- 16:00 **Synthesis of large transition metal dichalcogenide single crystals with flat surfaces by selected vapor growth** [Mat-027]
Janek Tangermann, University of Geneva
F. O. von Rohr*

POSTER SESSIONS**Poster Presentation Title [Code]**

First line = Presenting Author, Affiliation

Second line = Co-authors

* Research Head(s)

Analytical Sciences [AS]**Poster Session****Exploring Collagen Triple Helices Using Native Mass Spectrometry: Insights into the Dynamics of Strand Exchange** [AS-101]

Sabine Anliker, ETH Zurich

T. Fiala, P. Bittner, H. Wennemers*, R. Zenobi*

Integrated Three-Electrode Flow Cell for Time-Resolved IR Pump-Probe Spectroscopy [AS-102]

Sergio Aranda-Ruiz, University of Zurich, E. Service, P. Hamm*

Quantification of Peroxides in Organic Aerosols using HPLC In-Column Derivatization with Chemiluminescent Detection [AS-103]

Julia Bechter, University of Basel, J. Resch, K. Li, M. Kalberer*

Investigating Enzymatic Phosphoryl Transfer Reactions by ESI-Orbitrap-MS Analysis of Oxygen Isotopes in (Organo-) Phosphates [AS-104]

Nora Bernet, Eawag & ETH Zürich, F. Tamburini, T. B. Hofstetter*

Nanoscale Structural Insights into Thermochromic VO₂ Thin Films using Tip Enhanced Raman Spectroscopy [AS-105]

Siiri Bienz, ETH Zurich

A. Rai, V. Hansen, R. Zenobi*, N. Kumar*

Stepwise Exploration of Human Choriotropic Gonadotropin Deglycosylation and Structural Stability by Native MS and Ion Mobility Spectrometry [AS-106]

Lyna Bourehil, ETH Zurich, D. Svingou, R. Zenobi*

LC-Inspector: a free and open-source tool for targeted mass spectrometry analysis [AS-108]

Mateusz Fido, ETH Zurich

E. Hoesli, E. Cappio Barazzone, R. Zenobi*, E. C. Slack*

Palladium-107 as a new forensic tracer in uranium material [AS-110]

Michael Hofstetter, ETH Zurich, S. Röllin, P. Steinegger*

Structural mass spectrometry resolves the complexities of early-state semaglutide oligomerization [AS-111]

Si Huang, ETH Zurich, Y. Zhou, T. Lui, R. Wu*, R. Zenobi*

Towards quantification of drugs in exhaled breath aerosol [AS-112]

Timon Käser, ETH Zurich, N. Li, L. Brockbals, A. Steuer, S.

Giannoukos, S. Läkämper, R. Zenobi*

Sources of Fractionation and their Impact on LA-ICPMS Applications [AS-113]

Dylan Käser, ETH Zurich

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

Dichalcogenide Fidaxomicin Derivatives to Probe Thiol-Mediated Uptake into Bacteria [AS-114]

Anastassia Kraimps, University of Zurich
T. Griesser, R. Wang, S. Dittman, J. Costafrolaz, E. Jung,
P. Viollier, S. Sievers, P. Sander, K. Gademann*

Assessment of Infrared Atomic Force Microscopy (AFM-IR) to detect Nanoplastic Particles [AS-115]

Nico Kummer, Eawag, Dübendorf
C. Hüglin, R. Kägi*

Ligand-substituted inorganic-organic hybrid materials for efficient urea-assisted electrocatalytic water splitting [AS-116]

Lingshen Meng, University of Zurich
G. Patzke*

Towards a sustainable bio-based route for production of Trabectedin scaffolds [AS-117]

Eléonore Moore, ETH Zurich
A. E. Fraley*

Impact of Topical Formulations on Skin Lipids analyzed by HR-MAS NMR Spectroscopy [AS-118]

Ritika More, University of Bern
S. Kaessmeyer, P. Vermathen*, M. Vermathen*

Hydration in Lipid-Cyclodextrin Interaction [AS-119]

Chaudhary Eksha Rani, EPFL Lausanne
L. Zhang, S. Roke*

Using Forward Linear Scattering for highly material-saving solubility measurements [AS-120]

Adélaïde Savoy, FHNW Muttenz
M. Kuentz*

In vitro Fossilization as Novel Sample Preparation for Quantitative Bioimaging of Mammalian Tissue in LA-ICP-MS [AS-121]

Tobias Schöberl, ETH Zurich
B. Aeschlimann, D. Günther*

Implementation of FT-FEIR Spectroscopy and site-specific application to biomolecules [AS-123]

Timo Stern, University of Zurich
J. Helbing*

Rapid Intact IgG Glycosylation Profiling by Temperature-Controlled Online Reduction ESI-MS [AS-124]

Congrui Tan, ETH Zurich
Y. Zhou, R. Zenobi*

Quantitative imaging of Dawsonite using LA-ICP-MS [AS-125]

Barbara Umfaher, ETH Zurich
P. S. Garofalo, D. Günther*

Exhaled Metabolome Analysis using SESI-HRMS Following a Low FODMAP diet [AS-126]

Albin Vadakkechira, ETH Zurich
K. Mallick, R. Guillod, G. Vergères, R. Zenobi, D. Pohl,
K. J. Burton-Pimentel, S. Giannoukos*

**Catalysis Sciences & Engineering [CE]
Poster Session****The Swiss Army Knife of Electrodes: Pillar [6]arene-Modified Electrodes for Molecular Electrocatalysis Over a Wide pH Range [CE-106]**

Jan Bühler, University of Zurich
H. Roithmeyer, S. Tilley*

Iron-catalyzed cooperative red-ox mechanism for the simultaneous conversion of nitrous oxide and nitric oxide [CE-107]

Filippo Buttignol, Casale SA
J. Fischer, A. Garbujo, P. Biasi, G. Jeschke, O. Kröcher,
D. Ferri*

Probing Pathways to Aromatics in PVC-model Pyrolysis by *Operando* Photoelectron Photoion Coincidence Spectroscopy (PEPICO) [CE-108]

Jovanni Cabana, Paul Scherrer Institute PSI, Villigen
Z. Zhang, Z. Pan, P. Kumar, X. Wu, A. Bodi, G. Garcia,
J. van Bokhoven, P. Hemberger*

Elucidating Complex Phenomena at Electrochemical Interfaces by Surface-Enhanced Infrared Spectroscopy [CE-109]

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

Tailoring iron speciation in zeolites through controlled one-pot synthesis for dual pollutant abatement [CE-110]

Gabriela-Teodora Dutca, Paul Scherrer Institute /EPFL
Lausanne
D. Ferri*, O. Kröcher*

Active Sites of Titania-Supported Rhenium-Based Catalysts for CO₂ Hydrogenation [CE-111]

Andri Florin, ETH Zurich
C. Ehinger, H. P. Nguyen*, C. Copéret*

Photocatalysis with Cu₂O particles for water splitting [CE-112]

Yongping Gan, University of Zurich
S. Bae, D. Tilley*

Descriptors toward higher alcohols and olefins formation in CO₂ hydrogenation on promoted iron catalysts [CE-113]

Yuzhen Ge, ETH Zurich
A. J. Martín, M. Suvarna, T. Zou, J. Pérez-Ramírez*

Structure-Activity Relationship for PtSn Propane Dehydrogenation Catalysts from Surface Organometallic Chemistry [CE-114]

Nestor Iwanojko, ETH Zurich
K. Sakamoto, E. Brack, D. Gioffrè, C. Copéret*

Enhancing Photocatalytic Hydrogen Production via Molybdenum Carbide-Modified Graphitic Carbon Nitride (g-C₃N₄) [CE-115]

Stefanie Kammereck, University of Zurich
G. Patzke*

Roadmap towards standardization of electrocatalytic CO₂ reduction [CE-116]

Seok Kim, ETH Zurich
F. Beiglböck, R. Hesamoddin, A. Senocrate, A. J. Martín, C. Battaglia, G. Guillén-Gosálbez, S. Haussener, P. Broekmann,
J. Pérez-Ramírez*

Value-Added Photocatalytic Oxidation of Biomass-Derived Platform Chemicals [CE-117]

Huong Le, University of Zurich
P. Adams, T. Moehl, D. Tilley*

{Co₄O₄} Cubanes in a conducting polymer matrix as bio-inspired molecular oxygen evolution catalysts [CE-118]

Shangkun Li, University of Zurich
Z. Zhang, W. Marks, G. Patzke*

Biocatalytic reduction of six-membered ring heterocyclic imines in continuous flow [CE-119]

David Lim, University of Bern
A. I. Benítez-Mateos, D. Roura Padrosa, V. Marchini, H. Wu, F. Buono, F. Paradisi*

Steam-induced decoking of MTO catalysts [CE-120]

Monika Mielniczuk, Paul Scherrer Institute PSI, Villigen
V. Paunovic, J. A. van Bokhoven*

¹rPYE⁺ as versatile and biocompatible organometallic NAD(P)H regeneration system [CE-121]

Laura Monte, University of Bern
R. Keller, F. Paradisi*, M. Albrecht*

Genetic incorporation of non-canonical amino acids for histidine substitution [CE-122]

Anton Natter, University of Zurich
S. Fischer, A. R. Lischke, A. Deliz Liang*

Genetic incorporation of non-canonical amino acids for histidine substitution [CE-123]

Anton Natter Perdiguero, University of Zurich
S. Fischer, A. R. Lischke, A. Deliz Liang*

Small Ru clusters stabilized by Ti single sites on silica for the hydrogenation of CO₂ to methane [CE-124]

Aurélien Neraud, ETH Zurich
W. Zhou, C. Copéret*

A new method for the simulation of catalyst deactivation in fluidized bed reactors [CE-125]

Mauro Pappagallo, Paul Scherrer Institute PSI, Villigen
E. Moiola*, O. Kröcher*

Impact of Offretite Dealumination on Methanol-to-Hydrocarbon Performance [CE-126]

Archana Ramakrishnan, Paul Scherrer Institute PSI, Villigen

Integrating In Silico and Experimental Approaches to Enhance Functionality of L-Tryptophan Decarboxylase for Sustainable Production of 5-Methoxytryptamines [CE-127]

Beatrice Rassati, University of Bern
A. Pavlova, O. Ben Mariem, J. Reusser, L. Robustini, I. Eberini*, F. Paradisi*

Base-free highly active transfer hydrogenation catalysts based on Ru complex with acyclic diamino carbene ligands [CE-128]

Gianluca Righetti, University of Bern
M. Albrecht*

Controlled Oxygen-Vacancy Formation for Improved Catalytic Activity [CE-129]

Anies Rösch, University of Basel
V. Wyss, M. F. Delley*

From Chemical Shift to Olefin Metathesis Catalysis: Orbital Origins of ⁹⁵Mo NMR Trends in Mo(VI) Precatalyst [CE-130]

Jérémy Roudin, ETH Zurich
C. Copéret*

Characterization of two novel tryptophanase A from *Ardenticatena maritima* and *Haloarcula japonica* [CE-131]

Evelyn Sgroi, University of Bern
F. Aziziyan, J. Reusser, L. Robustini, G. Frati, F. Paradisi*

Deploying an Interactive, Collaborative, and FAIR-oriented Data Processing Pipeline for Data Driven High-Throughput Catalysis Research [CE-132]

Kourosh Shariat, ETH Zurich
E. Lam, P. Laveille*

Engineering a High Conversion System for CO₂ Electroreduction to Formic Acid [CE-133]

Amrita Singh-Morgan, ETH Zurich
O. Manatschal, V. Mougel*

Making Carbon-Carbon Bonds from CO₂: Alkalimetal doping of Cobalt-based Hydrogenation Catalysts [CE-134]

Yannik Stiefel, ETH Zurich
W. Zhou, C. Hansen, C. Copéret*

Acidity of zeolites determined by in situ spectroscopy in the presence of solvents [CE-135]

Min Li Tan, Paul Scherrer Institute /EPFL Lausanne
O. Kröcher*, D. Ferri*

Impact of Acidity on Reaction Intermediates and Catalytic Performance in Methanol-to-Hydrocarbons Conversion over ZSM-22 Zeolite [CE-136]

Matteo Vanni, Paul Scherrer Institute PSI, Villigen

Efficient photoelectrochemical water oxidation of bimetallic phthalocyanine decorated BiVO₄ photoanode [CE-137]

yu wang, University of Zurich
G. Patzke*

Enhanced Photocatalytic Hydrogen Evolution Over Pt-loaded S-doped g-C₃N₄: Effects of Deposition Methods and Pt Distribution [CE-138]

Zeyi Zhang, University of Zurich
G. R. Patzke*

Interface-engineered WO₃/ZrO₂ Catalysts for Highly Effective Hydrogen-Free Polypropylene Upgrading to Gasoline [CE-139]

Sibei Zou, ETH Zurich
A. J. Martín, J. Pérez-Ramírez*

**Computational and Theoretical Chemistry [CC]
Poster Session****Fast and scalable retrosynthetic planning with a transformer neural network and speculative beam search [CC-101]**

Mikhail Andronov, IDSIA USI, Lugano
N. Andronova, M. Wand, J. Schmidhuber*, D. Clevert*

MiMiC: A Flexible Multiscale Simulation Framework for the Next-Generation HPC [CC-102]

Andrej Antalík, EPFL Lausanne, J. M. Olsen, U. Röthlisberger*

Tango*: Constrained synthesis planning using chemically informed value functions [CC-103]

Daniel Armstrong, EPFL Lausanne

Smart Labs: Enhancing Experimental Reproducibility and AI-driven Insights through Video Monitoring [CC-104]

Carlo Baldassari, IBM Research / EPFL, T. Laino*, J. Waser*

On the single-Hessian thawed Gaussian wavepacket dynamics for electronic spectroscopy [CC-105]

Davide Barbiero, EPFL Lausanne

Transfer Learning in Heterogeneous Catalysis: Overcoming Hurdles in Applying Machine Learning Algorithms [CC-106]

Victor Böttcher, ETH Zurich, C. Copéret*

Solution-state structure refinement of cyclic peptides leveraging NOE restraints in REST2 sampling [CC-107]

Patricia Brandl, ETH Zurich, L. Glazer, M. Ebert, S. Riniker*

AI-Driven Molecular Generation for GDB-20 [CC-108]

Ye Buehler, University of Bern, J.-L. Reymond*

De novo material design using diffusion generation and reinforcement learning [CC-110]

Junwu Chen, EPFL Lausanne, J. Guo, P. Schwaller, P. Schwaller*

Polypharmacology Browser PPB3: A Web-based Deep Learning Tool for Target Prediction Using ChEMBL Data [CC-111]

Maedeh Darsaraee, University of Bern, J.-L. Reymond

Ab initio Calculations for Fe₄ L-edge X-ray Adsorption Spectroscopy (XAS) [CC-113]

Nanchen Dongfang, University of Zurich, F. Totti, M. Iannuzzi

Bayesian Optimization of Surface Reaction Dynamics via Surrogate Molecular Representations [CC-114]

Edvin Fako, EPFL Lausanne, P. Schwaller

Computational design of single-atom catalysts for sustainable vinyl chloride synthesis [CC-115]

Andrea Ferrando, ETH Zurich
S. Mitchell, N. L. Alonso*, J. P. Ramirez*

Polaritonic chemistry: Modifying chemical reactivity with mirrors [CC-116]

Marit Fiechter, ETH Zurich, J. O. Richardson*

Evaluating vibronic spectra beyond the Herzberg-Teller approximation with Hagedorn wavepackets [CC-117]

Michele Gandolfi, EPFL Lausanne

REST2-AMP/MM: Integrating Enhanced Sampling with Machine Learning Potentials for Molecular Conformational Sampling [CC-118]

Igor Gordiy, ETH Zurich, R. Solazzo, S. Riniker*

Computational Design of Enzymes to Degrade Short-chain Per- and Polyfluoroalkyl Substances (PFAS) [CC-120]

Salomé Guilbert, EPFL Lausanne, U. Röthlisberger*, P. Schwaller*

Implementation of non-empirical DFT+U in the Gaussian and plane waves framework [CC-121]

Kota Hanasaki, University of Zurich, S. Luber*

Generative Modeling of Cyclic Conformers [CC-122]

Aline Hartgers, ETH Zurich, L. Schaufelberger, K. Jorner*

Efficient 3D Virtual Screening of Combinational Spaces [CC-123]

Sophia Hönig, BioSolveIT, R. Klein, M. Rarey, C. Lemmen

Lifelong Machine Learning Potentials for Reaction Network Explorations [CC-124]

Raphael Husstein, ETH Zurich, M. Reiher*

Substrate Decoration by Combining 3D Generative Modelling with High-throughput DFT Calculations for Reactivity Design [CC-125]

Zarko Ivkovic, ETH Zurich, K. Jorner*

Rotamer-dependent amino acid descriptors library [CC-126]

Lauriane Jacot-Descombes, ETH Zurich, K. Jorner*

Multiscale Modeling for DNA Oxidative Damage due to Endocrine Disrupting Chemicals: From Onset to Detection [CC-127]

Sophia Johnson, EPFL Lausanne
S. Guilbert, M. Venkatanarayanan, U. Rothlisberger*

Deepening insights into ceria (111) surface dynamics using machine learning on vacancy effects [CC-128]

Florian Keller, University of Zurich, M. Iannuzzi*

Autonomous Bifunctional Catalyst Design for the Morita-Baylis-Hillman reaction [CC-129]

Sarina Kopf, EPFL Lausanne
J. Guo, J. Martin, J. Schörgenhuber, P. Schwaller*, C. Nevado*

Improving the Δ SCF method for excited electronic states [CC-130]

Momir Malis, University of Zurich, A. Sinyavskiy, S. Luber*

Spin-Exchange via Temperature-Dependent Transition States [CC-131]

Debaarjun Mukherjee, ETH Zurich, J. O. Richardson*

Reinforcement learning environment for mechanism proposal in chemistry [CC-132]

Théo Neukomm, EPFL Lausanne

Modelling of Quantum-Controlled Molecular Collisions [CC-133]

Shimoni Patel, University of Basel, M. Meuwly*, S. Willitsch*

QM/MM RE-EDS: an efficient multiscale and multistate free-energy method [CC-135]

Domen Pregeljic, ETH Zurich, S. Riniker

Machine Learning-Based Yield Prediction in Transition Metal-Catalyzed Reactions using Graph Neural Networks [CC-136]

Chandralekha Rajalakshmi, CMS College Kottayam
S. Salim, V. I. Thomas*

Dielectric-dependent hybrid functional based on meta-GGA [CC-137]

Stefan Riemelmoser, EPFL Lausanne, X. Xu, A. Pasquarello*

Overcoming Injectivity Challenges in Chemical Reaction Properties via Tagged Physics-Inspired Representations [CC-138]

Juliette Schleicher, EPFL Lausanne
Y. Calvino Alonso, K. R. Briling, C. Corminboeuf*

CurryBO: How to Obtain General Chemical Conditions via Bayesian Optimization over Curried Functions [CC-139]

Stefan Schmid, ETH Zurich, E. M. Rajaonson, C. Ser, M. Haddadnia, S. Leong, A. Aspuru-Guzik, A. Kristiadi, K. Jorner*, F. Strieth-Kalthoff*

racer^{TS}: Rapid generation of transition-state conformer ensembles via constrained distance geometry [CC-140]

Stefan Schmid, ETH Zurich, H. Seng, T. Kläy, K. Jorner*

Efficient Atomic Feature Selection for Chemical ML Models with ECFP-Inspired Fingerprints [CC-142]

Giustino Sulpizio, ETH Zurich, K. Jorner

Atomic-Scale Insights into Water Arrangement and Oxygen Evolution Reaction on LaTiO₂N (100) Surface [CC-143]

Deqi Tang, University of Zurich, F. Creazzo, S. Luber*

Bandgap and Structural Investigation of α -FASnI₃ Perovskite [CC-144]

Mridhula Venkatanarayanan, EPFL Lausanne
V. Carnevali, A. Vezzosi, V. Slama, U. Röthlisberger*

Development of a phase-transferable machine learning potential for FAPbI₃ [CC-146]

Andrea Vezzosi, EPFL Lausanne
E. Vasey, V. Carnevali, V. Slama, U. Röthlisberger*

Quantum Energy Level Splittings from Path Integral [CC-147]

Yuchen Wang, ETH Zurich, L. Raso, J. O. Richardson*

Graph Theory-Based Analysis of Connectivity and Chirality in Silver and Gold Nanoclusters [CC-148]

Elena Zerbato, University of Geneva
K. Ahmed Ethmane, C. Besnard, A. F. Perez Mellor, T. Burgi*

Ab Initio MASH with Non-Aufbau ROKS method: Robust Excited States and Analytical Couplings [CC-149]

Ruiyi Zhou, ETH Zurich, J. O. Richardson

Efficient Hit Expansion and Hit-to-Lead Optimization in Ultra-Large Combinatorial Libraries [CC-150]

Christian Loeffeld, Alipheron AG, M. von Korff, T. Sander

Focused Sub-Libraries from Ultra-Large Combinatorial Spaces with the Hyperspace Explorer [CC-151]

Modest v. Korff, Alipheron AG, C. Loeffeld, T. Sander

Machine Learning-Guided Discovery of Electron Donor-Acceptor Complex Reactions [CC-152]

Paul Türtcher, University of Pennsylvania, A. F. Zahrt

**Chemistry and the Environment [EV]
Poster Session**

Environmental implications of soluble versus immobilized *Candida glabrata* ketoreductase for the production of chiral alcohols [EV-101]

Annie Allmark, Berner Fachhochschule BFH-HAFL
C. Fernández Regueiro, D. Roura Padrosa

Cobalt Depletion by Inorganic Sorbents [EV-102]

Elizaveta Artiushova, Paul Scherrer Institute PSI, Villigen
E. A. Maugeri*, R. Eichler*

Accelerating Environmental Fate Assessments: A Novel Read-Across Approach Using Activated Sludge to Predict Degradation Half-Lives in Soil [EV-103]

Claudia Coll, Eawag / Syngenta Crop Protection AG
J. Hafner, K. Zhang, N. Wichmann, C. Screpanti*, K. Fenner*

Iron-induced Reduction of Iodate in Secondary Organic Aerosol [EV-104]

Nicole Leemann, Paul Scherrer Institute PSI, Villigen
L. Iezzi, A. Mishra, M. Reza, R. Cruz Simbron, H. Finkenzeller, A. Roose, M. Löpfe, R. Volkamer, T. Berkemeier*, M. Ammann*

Insights into the Biosynthetic Pathway of Multihexose Benzoxazinoids in Maize (*Zea mays*) [EV-105]

Pierre Mateo, University of Bern
T. M. Cofer, V. C. Doan, E. R. Hartmann, C. A. Robert*

The heterogeneous reaction of HNO₃ and HCl with CaCO₃ in the context of stratospheric aerosol injection and its impact on stratospheric ozone [EV-106]

Célia Paolucci, Paul Scherrer Institute PSI, Villigen
S. Vattioni, B. Luo, T. Peter, L. Artiglia, A. Müller, C. Vockenhuber, M. Ammann*

Evaluation of scalability parameters in synthesis using agitator bead mills for mechanochemistry [EV-107]

Philippe Roth, WAB-GROUP®
K. Banderob

The three Is of sustainable agriculture [EV-108]

Claudio Screpanti, Syngenta Crop Protection AG

Using ¹⁸O-assisted phosphometabolomics to elucidate key enzymatic pathways regulating microbial phosphorus metabolism under stress [EV-109]

Cheng Shi, Eawag, Dübendorf
E. Evertz, F. Tamburini, T. Hofstetter

Assessing the Environmental Hazard of Synthetic Phenolic Antioxidants [EV-110]

Cleo Soldini, University of Zurich
C. Seller-Brison, K. Fenner*

High throughput mass spectrometry method development for dissolved organic matter characterisation [EV-111]

Alexander Strassberger, ETH Zurich
J. R. Laszakovits*

Hazard Assessment of Synthetic Antioxidants for Safe-by-Design Development [EV-112]

Franziska Weißbach, ETH Zurich
C. Seller-Brison, K. Jorner*, K. Fenner*

**Inorganic Chemistry [IC]
Poster Session****Structure and Bonding of Solvent-Free Neopentyl Sodium and its Applications for the Metalation of non-Activated Substrates [IC-101]**

David Anderson, University of Bern, E. Hevia*

Evidence of Transient Iron Carbide Species in Apparent σ -Bond Metathesis Reaction [IC-103]

Barnabé Berger, ETH Zurich, C. Copéret*

Toward predicting silver ion binding in proteins [IC-104]

Alexandre Bianchi, University of Fribourg, K. M. Fromm*

Nickel bidentate N-N-PYA complexes for cross electrophile couplings [IC-105]

Lars Burri, University of Bern, M. Albrecht*

Dark resonance energy transfer in palladium-based rotaxanes [IC-106]

Damien Chen, EPFL Lausanne, K. Severin*

Structure and Catalytic Properties of Homo- and Heterometallic Iron(II)-based Di(2-pyridyl)ketone Oxoclusters [IC-107]

Daniel Civettini, University of Zurich

C. A. Traiana, T. F. De Jong, R. N. Dürr, D. F. Abbott, S. Luber, V. Mougel, G. R. Patzke*

Au(III)-Catalysed Amidation of Aldehydes *via* Nitrene Transfer [IC-109]

Marc Fernández-Sabaté, University of Zurich

J. Martín, M. J. Johansson, C. Nevado*

NHC Metal Peptide Conjugates for Abiotic Catalysis [IC-110]

Francisca Figueiredo, University of Bern

M. Planchestainer, K. Lenzen, M. Albrecht*

Stronger B-N dative bonds in supramolecular self-assembly [IC-111]

Jacob Gome, EPFL Lausanne

K. Severin*

From N2-methylated Triazoles to β -diketiminato-like Complexes: A Route *via* Selective Triazolium Ring Cleavage [IC-112]

Luke Hudson, University of Bern, M. Albrecht*

Accessing one-pot Synthesis of Dihydropyridine Derivatives through a Nucleophilic Organosodium Compound [IC-113]

Jasmin Kocher, University of Bern

D. Sánchez-Roa, A. Tortajada, E. Hevia*

Synthesis and Application of Carborane Derivatives in Radiochemistry [IC-114]

Fan Liu, University of Zurich, C. Berton, J. Holland*

Probing the Metal-Binding Site of Hydrolytic Metalloenzymes through Genetic Code Expansion [IC-115]

Benjamin Manser, University of Zurich, A. Deliz Liang*

Investigations of the Formation of Cobalt-Based Metal-Oxo Cubanes [IC-116]

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

Tailoring Na/Zn Bimetallic Combinations for Dihydrogen Activation and Unsaturated Substrate Hydrogenation [IC-117]

Talia Mathers, University of Bern, D. Sanchez-Roa, E. Hevia*

Potassium Alkoxide Powered Ferration of Iodoarenes using an Fe(II) Alkyl Complex [IC-118]

Michel Misteli, University of Bern, N. Jin, E. Hevia*

Functionalised arene ruthenium complexes for photodynamic therapy [IC-119]

Chrysanthi Papadimou, University of Neuchâtel, B. Therrien*

Development of an Organic-compatible pH Meter and its Use for Overpotential Determination [IC-120]

Lok Nga Poon, ETH Zurich, V. Mougel*

Salen-derived heterometallic complexes [IC-121]

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

Metal- vs Ligand-Bound Hydride Storage on Iridium-PYA Complexes [IC-122]

Sabela Reuge, University of Bern, M. Albrecht*

Direct Access to Bridged Ni(I)-Imido Complexes from Amines: Synthetic Pathways and Prospects for Catalytic Nitrene Transfer [IC-123]

Nathalie Rowlinson, ETH Zurich, P. Müller, B. Morandi*

Synthesis of POM – Cubane Hybrids and their catalytic performance [IC-124]

Aaron Schultz, University of Zurich, G. Patzke*

Active Sites in Supported Tungsten Oxide Olefin Metathesis Catalysts Elucidated Through Probe Molecule-Enhanced ^{183}W -NMR Spectroscopy [IC-125]

Merlin Seidel, ETH Zurich

A. Yakimov, F. de Zwart, C. Copéret*

An Experimental Evaluation of the Hydricity of Hydrosilanes [IC-126]

Laurent Sévery, CEA Grenoble, N. Emmanuel, A. Mifleur, T. Cantat

Exploring Iron-Sulfur Clusters in Metallothioneins [IC-127]

Jana Stein, University of Zurich, M. Perinelli, E. Freisinger*

Synthesis, Structure, and Reactivity of Novel Heterobimetallic Ni(0) Amide Complexes [IC-129]

Ioannis Vagiakos, University of Bern, L. Vedani, E. Hevia*

A Biomimetic Model of Anaerobic Oxidation of Methane [IC-130]

Kaifeng Wang, University of Zurich, S. Amini, F. Zelder*

Controlled Chalcogenide Binding on Transition Metal Phosphide Surfaces [IC-131]

Gregor Wasser, University of Basel, M. F. Delley*

A Synthetic Pathway to 8Fe-8S Clusters, Using Stepwise Interconversions, Demonstrates Biomimetic Control of Topology [IC-132]

Micha Weber, ETH Zurich

L. Grunwald, H. Seng, M. Clémancey, H. Wang, M. Wörle, Y. Yoda, S. P. Cramer, G. Blondin, V. Mougel*

Ambiphilic Reactivity of Iridium Complexes with N-Heterocyclic Vinylidene Ligands [IC-133]

Tak Hin Wong, EPFL Lausanne, K. Severin*

Tuning Cobalt Oxo Cubanes: Effects of Counterions, and Solvents on Cluster Formation and Stability [IC-134]

Katrin Wuerzer, University of Zurich
W. Marks, T. Fox, J. Parris, N. Tavernier, M. Iannuzzi, G. R. Patzke*

Production of high specific activity, radionuclidically pure ¹⁶⁶Ho for Targeted Radionuclide Therapy [IC-135]

Chen Yan, University of Bern, E. Renaldin, U. Köster, R. Eichler, Z. Talip

Probing Polypropylene Ziegler-Natta Catalyst Surface Sites Using ¹⁵N-Labeled Pyridine [IC-136]

Umay Yıldırım, ETH Zurich, A. Yakimov, C. Copéret *

**Medicinal Chemistry & Chemical Biology [MC]
Poster Session****Synthesis of GDB Derived Bicyclic Diamines as Scaffolds for Medicinal Chemistry [MC-101]**

Giulia Baldoni, University of Bern, J.-L. Reymond*

Expanding the RNA packaging capacity in evolved nucleocapsids [MC-102]

Georges Barnikol, EPFL Lausanne
P. Oeser, A. E. Melgar Aguilar, J. Huber, T. Jamolli, S. Chafle, A. Steinauer*

Accessing therapeutic natural products via a bio-based approach [MC-103]

Anita Berg, ETH Zurich,
C. Papenfuhs, R. Hayder, A. E. Fraley*

Fast, efficient and chemoselective radio-ADC preparation through tetrazole photochemistry [MC-104]

Cesare Berton, University of Zurich
E. Nisli, P. Cieslik, J. Genz, J. P. Holland*

Volatile-mediated interaction between plant-associated beneficial microorganisms and phytopathogenic fungi [MC-105]

Sébastien Bruisson, University of Fribourg
A. Anand, N. D. Rappo, F. L'Haridon, L. Weisskopf*

Novel Oncocin–Peptoid Hybrids Show Potent Antibacterial Activity Against Multidrug-Resistant *A. baumannii* [MC-106]

Jacopo Bucchioni, University of Bern, M. Orsi, J. L. Reymond *

Evolving a human capsid protein for mRNA delivery [MC-107]

Oliver Dennis, EPFL Lausanne, L. Wiprächtiger, A. Steinauer*

Guanine by guanine: Decoding the BCL2 RNA G-quadruplex conformation landscape [MC-108]

Carla Ferreira Rodrigues, University of Zurich
S. Johannsen, R. K. Sigel*

Development of novel orthosteric-allosteric bitopic ligands to study adenosine A₁ receptor [MC-109]

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

Structural and Dynamic Insights into Minimal HDV-like Theta Ribozymes [MC-110]

Máté Fonyó, University of Zurich, S. Johannsen, R. K. O. Sigel*

Novel bio-based solvents for SPSS [MC-111]

Vincent Freiburghaus, University of Zurich
T. Nelis, J. Luterbacher*, N. Hartrampf*

Steps towards radioligandtherapy of prostate cancer in a mouse model [MC-112]

Jonas Genz, University of Zurich
S. Kichou, S. Prytuliak, J. P. Holland

Development and physicochemical characterization of novel anthranilic anilide-based TRPM4 channel inhibitors identified by SAR study [MC-113]

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

Exploring Actinomycetes as Biocontrol Agents for Late Blight Management in Potato and Tomato [MC-114]

Alisson Gillon, University of Fribourg
O. Abdelrahman, F. L'Haridon, L. Weisskopf*

Phosphorylation of alcohol sidechains to investigate PTM crosstalk of oncogenic MYC [MC-115]

Claire Grigglesome, University of Zurich, N. Hartrampf*

Producing the radionuclide ¹⁴⁹Tb for preclinical investigations [MC-116]

Pascal Grundler, Paul Scherrer Institute PSI, Villigen, A. N. Moiseeva, C. Favaretto, U. Köster, K. Johnson, N. P. van der Meulen*

tRNA modifications and their importance in the proto-ribosomal translation system [MC-117]

Kathrin Halter, LMU München, F. Müller, T. Carell*

pH-Dependent Cellular Uptake of CPPs – Guanidinium versus Oxyguanidinium Proline [MC-118]

Rahel Heeb, ETH Zurich, L. Massaad, H. Wennemers*

An enzymatic approach to fluorinated pharmaceuticals [MC-119]

Ida Hipfinger, ETH Zurich, A. E. Fraley

Diastereomeric Optimization of Indolicidin for the Discovery of Novel Antimicrobial Peptides [MC-120]

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

Synthesis and characterization of covalent inhibitor probes targeting transcription-coupled nucleotide excision repair [MC-121]

Jasmin Huber, ETH Zurich
L. Slappendel, D. P. Dempe, M. Zimmermann, S. J. Sturla*

Fold to Cleavage: Key Structural Elements of the Minimal HDV-like Ribozyme drz-Mtgn-1 [MC-122]

Soumyadip Jana, University of Zurich, S. Johannsen, R. K. O. Sigel*

Functionalization and Longevity of a Deuterated Silicon-Rhodamine Fluorophore for Application in Calcium Sensing Receptors and Adenosine Receptor Imaging [MC-123]

Arbias Kadriu, University of Bern
M. Flaßhoff, C. E. Gerber, M. Lochner*

Design, Synthesis and Biological Evaluation of Chemo-radiotheranostic Chimera Molecules Fusing Prostate Targeting ^{99m}Tc Complexes with Potential Antimitotic Drugs [MC-124]

Samy Kichou, University of Zurich
J. Genz, S. Prytuliak, H. Braband, J. Holland*

Theta Ribozymes: Making the Cut in tRNA Maturation [MC-125]

Kasimir Kienbeck, University of Zurich
L. Malfertheiner, S. Zelger-Paulus, S. Johannsen, C. von Mering*, R. K. Sigel*

Two-Color Timestamping of Gene Expression with a Chemigenetic Reporter System [MC-126]

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

Click-chemistry-aided quantitation and sequencing of oxidized guanines and apurinic sites uncover their transcription-linked strand bias in human cells [MC-127]

Lucie Lefevre, ETH Zurich
V. Takhaveev, N. Püllen, N. K. Singh, E. A. Aghajani, S. M. Huber, S. Schauer, H. L. Gahlon, A. R. Poetsch, S. J. Sturla*

Applying New Methods for Multi-Color Labeling of Catalytically Active RNAs [MC-128]

Niko Lindlar, University of Zurich, S. Zelger-Paulus, R. K. Sigel*

Binding or Unwinding? – The role of an RNA binding protein in ribozyme activity [MC-129]

Lennart Lindner, University of Zurich
S. Zelger-Paulus*, R. K. O. Sigel*

Total synthesis of a plant-derived glycoside that attenuates virulence in *Pseudomonas aeruginosa* [MC-130]

Haris Majstorović, University of Basel
A. Cudré-Mauroux, C. R. Cori, H. Huang, A. Persat, R. Hevey*

Ligand-directed bioconjugation of native protein with hypervalent iodine-based Ethynylbenziodoxolones (EBXs) Reagents [MC-131]

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

Synthetic Lipid-Linked Oligosaccharide for Structural Studies of Alg6 [MC-132]

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

Sustainable dipolar aprotic solvents [MC-133]

Tom Nelis, EPFL Lausanne
T. Sorgius, M. J. Jones, S. Zheng, J. S. Luterbacher*

Profiling Oxidative DNA Damage at Single-Nucleotide Resolution in Alzheimer's Disease Brains [MC-134]

Livia Pietrow, ETH Zurich
S. J. Sturla*, V. Takhaveev*

Collagen Cross-Linking: Structure and Sequence Selectivity of Lysyl Oxidase-Like 2 [MC-135]

Laura Poller, ETH Zurich
H. Wennemers*

Advancing DELSTAR: Sequencing PolyA Tails to Evaluate Binder Affinity of Enriched DNA-Encoded Library Members [MC-136]

Athira Prakash, University of Basel, D. G. Gillingham*

From stable to labile: Fine-tuning the off-target uptake of radiotracers [MC-137]

Stanislav Prytuliak, University of Zurich, C. Berton, J. Genz, J. P. Holland*

Synthesis of novel polycyclic diamine scaffolds derived from tropinone [MC-138]

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

Medicinal Chemistry Functionalization of Brexazine, a Chiral Tricyclic Diamine Mimetic from the GDB Chemical Space [MC-139]

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

RNA-Inhibitor Interactions using Multisite smFRET [MC-140]

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

Micromapping Thiol-Mediated Uptake [MC-141]

Saidbakhrom Saidjalolov, University of Geneva
F. Coelho, N. Sakai*, S. Matile*

Optimization and Synthesis of Fully Stereopure PS-2'MOE ASOs via the Reiterative COW Protocol – The Nusinersen Case Study - [MC-142]

Angel Santorelli Villamizar, ETH Zurich, M. Vincent, J. Hall

Ascaroside production in the extremophile *Halicephalobus mephisto* [MC-143]

Marie Schlemper-Scheidt, University of Neuchâtel, S. H. von Reuss*

Nuclear Delivery of Inositol Pyrophosphate Prometabolites Mediated by Short Cationic Peptides [MC-144]

Adeline Schmitt, ETH Zurich, N. Jork, H. Wennemers*, H. Jessen*

Chemoselective Probes for Natural Products Discovery [MC-145]

Simon Sieber, University of Zurich

Light-activated ortho-nitrobenzyl alcohols for the conjugation of ⁸⁹Zirconium-DFO to onartuzumab for tumor imaging [MC-146]

James Southwell, University of Zurich
C. Berton, S. Klingler, J. P. Holland*

Synthesis of a mucosal glycan library for investigating pathogen virulence [MC-147]

Victoria Susan, University of Basel
C. R. Cori, A. Storani, G. Minzer, R. Hevey*

Amino Acid Composition drives Peptide Aggregation: Predicting Aggregation for Improved Synthesis [MC-148]

Bálint Tamás, University of Zurich, M. Alberts, T. Laino*, N. Hartrampf*

Optimizing scandium-44 production and automated radiolabeling for potential clinical applications in nuclear medicine [MC-149]

Marie Théry, Paul Scherrer Institute PSI, Villigen, A. Moiseeva, C. Favaretto, P. V. Grundler, R. Schibli*, N. P. van der Meulen*

Bioconjugated metal complexes for cancer therapy: from synthesis to anticancer evaluation [MC-150]

Giovanni Tonon, Ca` Foscari University of Venice
T. Scattolin, C. Berton, F. Rizzolio, F. Visentin*, J. P. Holland*

Synthetic Chemistry Enabling Next-Generation Nucleic Acid Therapeutics: Design and Development of Novel Ionizable Lipids [MC-151]

Aleksej Turockin, Merck KGaA
S. Nogueira, A. Kemp, C. Muñoz, S. Kloos, A. Mehta*

Optimizing RNA-PROTAC Potency through Phosphorothioate Stereochemistry [MC-152]

Mathilde Vincent, ETH Zurich
C. Weller, O. Knechtle, M. Kästli, T. Haab, C. Brunner, J. Hall*

RNA-PROTACs to induce degradation of TDP-43 [MC-153]

Céline Weller, ETH Zurich, N. Han, E. Tantarini, V. Wiersma, F. Allain, M. Polymenidou*, J. Hall*

Sustainable Bioproduction of Tetrahydroisoquinoline Alkaloids: Mining and Engineering Gene Clusters from Uncultured Microbial Communities [MC-154]

Fabian Willenborg, ETH Zurich, E. Moore, A. E. Fraley*

Antisense therapy targeting uromodulin aggregation in rare kidney disease [MC-155]

Sebastian Sjöström, ETH Zurich, M. Mariniello, G. Schiano, J. Lake, A. Kokanovic, A. Hill, O. Devuyt*, J. Hall*

**Organic Chemistry [OC]
Poster Session****Selective Recognition of Sucrose by a Synthetic Peptide Receptor in Water [OC-101]**

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

Streamlining the Synthesis of Pyridones through Oxidative Amination of Cyclopentenones [OC-102]

Bence Botlik, ETH Zurich
M. Weber, F. Ruepp, K. Kawanaka, P. Finkelstein, B. Morandi*

Modular intramolecular trapping of aza-allenium salts enabled by late-stage nitrogen atom insertion [OC-103]

Yannick Brägger, ETH Zurich, E. Tufano, P. Gärtner, M. C. Amberg, L. Sorrentino, B. Morandi*

Oxidative amination by nitrogen atom insertion into carbon-carbon double bonds [OC-104]

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

Carboetherification of Cyclopropenes via a Stereoselective Tethering Strategy [OC-105]

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

Deoxygenation of Ketones and α -Ketoesters with a Bimetallic Iridium–Molybdenum Catalyst [OC-107]

Mattia Cioli, ETH Zurich, C. Ehinger, B. Berger, M. Candrian, J. De Jesus Silva, C. Copéret*

Functionalization and Derivatization of di-aza-di-oxa [8]circulenes [OC-108]

Adriano D'Addio, University of Copenhagen
J. Rüger, M. Pittelkow

UPy-based perylene diimide as supramolecular mechanophores [OC-109]

Linlin Deng, University of Fribourg, J. Clough*, C. Weder*

Enantiospecific Synthesis of Planar Chiral Rhodium and Iridium Indenyl Complexes [OC-110]

Jason Denizot, EPFL Lausanne, N. Cramer*

Design and synthesis of shortwave infrared-absorbing squaraine dyes [OC-111]

Elodie Didier, Empa, Dübendorf
J. Csuker, J. Ferreira Assunção, R. Hany, M. Bauer, F. Nüesch*

Solution NMR investigation of cyclic peptide inhibitors of *S. aureus* phosphoglycerate mutase [OC-112]

Lucija Glazer, ETH Zurich
E. Yanagi, H. Suga, S. Riniker*, M. Ebert*

Engineering Flipper Probes for Enhanced Membrane Anchoring via Peptide and Lipid Modifications [OC-113]

Nerea Gonzalez Sanchis, University of Geneva
S. Saidjalolov, F. Bayard, N. Sakai, S. Matile*

Breaking the Resolution Limits: Photouncaging on a Single-Molecule Level [OC-114]

Katarzyna Hanc, University of Zurich, P. Rivera-Fuentes*, P. Stacko*

Mechanochemical functionalization of in situ generated N-aryl and N-acyl pyridinium salts [OC-115]

Viktor Iaroshenko, Matej Bel University

Shape-assisted assemblies in solution [OC-116]

Nils Jansen, University of Geneva
R. Jamange, K. Zhang, L. Sturm, M. Rickhaus*

Organocatalytic Addition Reactions of Methoxythiomalonates to Nitroolefins [OC-117]

Frederic Kölblin, ETH Zurich, F. Stocker, H. Wennemers*

Nitration and nitroxylation using ^{15}N labeled reagents [OC-118]

Harry Lecomte, University of Bern, L. Condrau, A. J. Fernandes, D. Katayev*

Synthesis of Bicyclo [1.1.1]pentane Z-Substituted Enamides, Enol Ethers, and Vinyl Sulfides Using Iodine (III) Reagents [OC-119]

Najung Lee, EPFL Lausanne, J. Dechent, E. Grinhagena, J. Waser*

Azulene-incorporated 1,3,6,8-Tetraazapyrene derivatives for Optical pH Sensors [OC-120]

Xinyi Liu, University of Bern
U. Aschauer, S. Decurtins, R. Häner, S. Liu*

Total Synthesis of an Oxidized and Rearranged ent-Kaurenoid [OC-121]

Tristano Martini, ETH Zurich, J. Muschietti, N. Saab, E. M. Carreira*

Vicinal Difunctionalization Reactions of Densely Substituted Arenes via 1,2-Bis-Triazenylarenes [OC-122]

Christeea Matthew, EPFL Lausanne, K. Severin*

Construction of Multi-Spin Systems with Halogenated Phenalenyl Radicals [OC-123]

Marvin Metzelaars, University of Zurich

Olefination of Activated Alkyl Halides with Phosphonium Salts [OC-124]

Adriana Neves Vieira, ETH Zurich
S. Roediger, C. L. Brudy, M. Trabesinger, J. Hübscher, B. Morandi*

Carbon-to-Nitrogen Atom Swap Enables Direct Access to Benzimidazoles from Drug-Like Indoles [OC-125]

Ann-Sophie Paschke, ETH Zurich
Y. Brägger, B. B. Botlik, E. Staudinger, O. Green, B. Morandi*

Illuminating Biology with Molecular Photoswitches [OC-126]

Zbigniew Pianowski, Karlsruhe Institute of Technology KIT
P. Gödtel, A. Seliworjstow, V. Schäfer, Z. Pianowski*

Stem Cell-Compatible PEG Hydrogels Using KAT Ligation [OC-127]

Matilde Piras, ETH Zurich
S. Ponta, P. Fisch, K. Maniura, J. W. Bode*

Phenalenyl π -Radical Cascade Reactions for the Synthesis of Novel π -Conjugated Polymers [OC-128]

Noah Rychener, University of Zurich

Chemodivergent C-to-N atom swap from benzofurans to benzisoxazoles and benzoxazoles [OC-129]

Stefanie Schiele, ETH Zurich
A. K. Paschke, C. Pinard, F. Sandrini, B. Morandi*

Borane-catalyzed stereoselective synthesis of cyclic ethers via reductive cycloetherification of diketones [OC-130]

Nikolai Shcherbakov, ETH Zurich
N. Potin, J. Mas-Roselló*

CpX-Ir^{III}-Enabled Streamlined Access to Highly Efficient Chiral Monophosphorus Ligands Towards Generality-Oriented Asymmetric Catalysis [OC-131]

Vitalii Smal, EPFL Lausanne
A. Vorobei, D. Maye, N. Cramer*

Ligand-Enabled, Atroposelective Direct C–H Arylation of Thiazole N-Oxides [OC-132]

Vitalii Smal, EPFL Lausanne, N. Cramer*

Design and Relaxivity Modulation of Gd³⁺ MRI Probes Responsive to ¹O₂ [OC-133]

Sara Staudhammer, ETH Zurich
H. Yoshihara, A. Bornet, Y. Yamakoshi*

Substitution Effects on Benzylic Ether Self-immolative Linkers – A General Alcohol Caging Method [OC-134]

Maša Stopinšek, ETH Zurich, M. Deen, A. Nardelli, H. Wennemers*

Synthesis of curved Polycyclic aromatic macrocycles towards shape assisted self-assembly [OC-135]

Ludmilla Sturm, University of Geneva, S. F. Vaudano, M. Rickhaus*

Radical-Based Methodologies for Primary Amine Synthesis and C–H Activation, and Activity-Based Sensing Probes for Ammonia [OC-136]

Frederic Su, ETH Zurich
H. Lindner, T. Jankins, C. Yang, C. J. Chang*

Mechanochemical Nitration of Arenes and Alcohols Using Bench-Stable Organic Nitrating Reagent [OC-137]

Vasiliki Valsamidou, University of Bern
S. Patra, B. Kadriu, M. G. Metzger, L. Gremaud, D. Katayev*

Bending Peropyrene for Enhanced Singlet Fission [OC-138]

Paula Widmer, University of Zurich, C. Albrecht, M. Juricek*

Accessing CF₃-Cyclopropenes via Trifluoromethylation of Cyclopropenyl Benziodoxole (CpBx) Reagents [OC-139]

Wei Wu, EPFL Lausanne, T. M. Milzarek, J. Waser*

Controlling Supramolecular Stacking in π -Extended Carpyridine Systems Through Water Interclaration [OC-140]

Orane Domecq-Cazaux, University of Geneva
J. Woods, K. Zhang, M. Rickhaus*

Extending Scaffold Diversification through Atom Insertion to Previously Unexplored Drug Modalities [OC-141]

Eva Meeus, ETH Zurich, A. K. Paschke, F. Hoffmann, B. Morandi*

**Physical Chemistry [PC]
Poster Session**

Towards on-chip chemical computing: The oscillating Belousov-Zhabotinsky reaction in silicon micro-chips [PC-101]
Sandro Agostini, IBM Research, V. Zarth, A. W. Knoll, H. Wolf, P. Schwaller, P. Schwaller, H. Wolf*, A. W. Knoll*

Mechanistic Insights into SCN⁻ as an IR Probe in the Homogeneous Catalyst Ni(bpet)(SCN)₂ for CO₂ Reduction [PC-102]

Sergio Aranda-Ruiz, University of Zurich; C. K. Omlin, P. Hamm*

Surface hopping for open-quantum systems [PC-103]

Kasra Asnaashari, ETH Zurich, J. O. Richardson*

Characterizing volatile Po species formed in liquid-metal-cooled nuclear reactors [PC-104]

Marius Balizs, Paul Scherrer Institute PSI / ETH Zurich
P. Steinegger*, J. Neuhausen*

A high-purity para-H₂ source for the study of cold ion-molecule chemistry [PC-105]

Jakob Braun, ETH Zurich
R. Hahn, J. A. Agner, H. Schmutz, D. Zindel, F. Merkt*

Mind the spectral gap: Extending ultrafast spectroscopy to the deep ultraviolet with stretched hollow core fiber technology [PC-106]

Pieter Brongers, University of Basel
K. Barlow, D. Satpathy, C. Brahms, M. Oppermann*

Surface Functionalities, Speciation and Strength of Brønsted Acid Sites Revealed by a Combined ³¹P–¹⁰⁹Ag Molecular NMR Probe [PC-107]

Weicheng Cao, ETH Zurich, M. Seidel, C. Copéret*

Optical Electrometer: Measuring the charge of a single optically-trapped particle [PC-108]

Rene Frecot, ETH Zurich
M. Gleichweit, M. A. Mohajer, Y. Wang, L. Theytaz, J. Wessner, G. David, R. Signorell*

Sampling rare non-adiabatic reactions with Transition Path Sampling and MASH [PC-109]

Danial Ghamari, ETH Zurich, J. Richardson

Investigating phase transition of chiral liquids under high pressure – study of α and β pinene [PC-110]

Nicholas Giamboni, University of Geneva
A. Perez-Mellor, C. Besnard, T. Bürgi*

Determining the Gas-Phase Förster Radius Using the Constrained Peptide Linaclootide [PC-112]

Kim Greis, ETH Zurich, L. Bourehil, R. Zenobi*

Exploring Transport Mechanisms of In-plane Oriented Organic Semiconductors [PC-113]

Isabelle Heinzen, University of Bern
D. Tsokkou, E. Röck, S. Guchait, B. Jismy, V. Bouylout, M. Brinkmann, N. Leclerc, O. Bardagot, N. Banerji*

Stimuli-Responsive Prototissues via DNA-Mediated Self-Assembly of Polymer Giant Unilamellar Vesicles [PC-114]

Xinan Huang, University of Basel

Controlling spin lifetimes in lead-free halide perovskite semiconductors [PC-115]

Huygen Jöbsis, EPFL Lausanne, S. Feldmann*

Hydrogen Bond Cooperativity in Binary Liquids: A Spectroscopic and Molecular Dynamics Study of Formamide Mixtures [PC-116]

Tetiana Khakhula, University of Geneva
N. Piasentin, J. Brazard, F. L. Gervasio, T. Adachi*

Disentangling the Excited State Behaviour of Single- and Multi-Branched Donor-Acceptor Systems with Multidimensional Spectroscopies [PC-117]

Joseph Kölbl, University of Geneva, R. J. Fernández-Terán*

Investigation on Fission Product Release Behavior for GEN-IV Reactor Designs [PC-118]

Xuandong Kou, University of Bern / Paul Scherrer Institute

Solid-Supported Polymer Membranes: Deposition Method Influences Morphology and Properties [PC-119]

Manuel Kraus, University of Basel
M. S. Muthwil, M. Bina, M. Malekovic, I. A. Dinu*, C. G. Palivan*

Illuminating Complexity: Photophysics in Au₂₅ atomically precise nanoclusters [PC-121]

Luis Llanes Montesino, University of Geneva
G. Angulo, T. Bürgi*, A. Rosspeintner*

Formulation and characterization of functional microemulsions [PC-122]

Elisa Mégroz, University of Fribourg, S. Salentinig

One Ring to Rule Them All: Ultrafast Spectroscopy Study of Chiral Platina [n]helicenes with Circularly Polarized Emission [PC-123]

José Antonio Merkelj, University of Basel, L. Müller, M. Puppini, M. Fuchter, J. Crassous*, M. Oppermann*

Characterizing the ligand lability of a Nickel-based CO₂ & H⁺ reduction catalyst [PC-124]

Corina Omlin, University of Zurich
S. Aranda, P. Hamm*

Examining the Interaction Between Thiolate Protected Nanoclusters and Lipid Bilayers Using ATR Infrared Spectroscopy [PC-125]

Merve Örer, University of Geneva, T. Bürgi*

Dynamic Stereochemical Analysis via Enhanced Vibrational Circular Dichroism [PC-126]

Ariel Francis Perez Mellor, University of Geneva
F. Richter, C. Besnard, S. Gariglio, M. Oerer, S. Kundu, H. Altug, T. Burgi*, A. Perez Mellor*

Morphology by Design: Sustainable Hematite Nanoparticle Synthesis via Ionic Liquids [PC-127]

Diana Potes Vecini, University of Fribourg
A. Roduit, P. Fritz, M. Nedyalkova, M. Lattuada*

Controlled laboratory astrochemistry: Rotational-state-selected carbon reactions in space [PC-128]

Aswin Ravindran, University of Basel
L. Xu, T. Lejeune, S. Willitsch*, J. Toscano*

High-resolution two-photon Doppler-free UV spectroscopy of Xe with direct measurement of the AC-Stark shift [PC-129]

Matthew Rayment, ETH Zurich, R. Stech, F. Merkt*

Development of single-photon Doppler-free VUV/XUV spectroscopy experiment [PC-130]

Matthew Rayment, ETH Zurich,
J. A. Agner, H. Schmutz, F. Merkt*

Branching ratios and their reduced mass and collision-energy dependence in ion-molecule reactions near 0 K: H₂⁺, HD⁺ and D₂⁺ + CH₃F [PC-131]

David Schlender, ETH Zurich
R. Hahn, J. O. Richardson, T. P. Softley, F. Merkt*

From Kinetics to Molecular-Level Insights into Group 4 Metal Oxide Nanocrystal Synthesis [PC-132]

Carlotta Seno, University of Basel
C. Whitehead, D. Salazar Marcano, I. Chaon, J. De Roo

Ultrafast Fragment Screening with a Benchtop NMR Spectrometer and Fluorine NMR using Photoinduced Hyperpolarization [PC-133]

Gabriela Stadler, ETH Zurich
M. Stricker, S. Rüdiger, T. F. Segawa, M. Bütikofer, V. Decker, S. Loss, B. Czarniecki, S. Rüdiger, A. D. Gossert, F. Torres*, R. Riek*

Time resolved DLS microscopy : Acquisition of particle size distributions at high temporal resolution [PC-134]

Quentin Stucker, University of Geneva
N. Barbosa, O. Urquidi, J. Brazard, T. B. Adachi*

State-preparation and quantum control of polyatomic molecular ions [PC-135]

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

Long-Time Scale Molecular Dynamics of Large-Scale Simulations Enhanced by Machine Learning of Hydroxylated Tin Oxide with Mixed Additives for Solar Cell Devices [PC-136]

Auguste Tenoire, EPFL Lausanne
A. Vezzosi, V. Carnevalli, U. Röthlisberger*

Insights into Mn-based catalyst Activation in CO₂ Reduction using TRIR Spectroscopy in a 3-component system [PC-137]

Noah von Fellenberg, University of Zurich
L. Tatarashvili, P. Hamm*

Ground-State Structure and Excited-State Dynamics of a Donor-Acceptor Complex with Two Charge-Transfer Bands [PC-138]

Johannes Wega, University of Geneva, C. Rumble*, E. Vauthey*

High Resolution Spectroscopy of Vibrational Tunneling Doublets and Overtones of the Inversion in Aniline [PC-139]

Gunther Wichmann, ETH Zurich

S. Albert, P. Lerch, K. Keppler, M. Quack*

Hydrogen bonding to build viscoelasticity with amino acid surfactants [PC-140]

Ashley Williams, Paul Scherrer Institute PSI, Villigen, V. Lutz-Bueno

Precision Spectroscopy of the Fine-Structure in the $a^3\Sigma_u^+$ ($v = 0$) and $c^3\Sigma_g^+$ ($v = 4$) States of the Helium Dimer [PC-141]

Vincent Wirth, ETH Zurich, M. Holdener, F. Merkt

Universality of hydrogen-bonded linear networks formation in amino acids crystallization [PC-142]

Xicheng Yuan, University of Geneva

T. Khakhula, J. Brazard, T. Adachi, T. Adachi*

Chemi-ionization Dynamics of Carbonyl Sulfide (OCS) with Metastable Neon Investigated by Velocity Map Imaging [PC-143]

Xinyue Zhang, University of Basel

H. Chao, A. Mishra, L. Ploenes, P. Stranak, S. Willitsch*

Speciation of Tellurium evaporated from Lead-Bismuth Eutectic [PC-144]

Vladislav Zobnin, Paul Scherrer Institute PSI, Villigen

J. Neuhausen*, R. Eichler*

Understanding the photoinduced electron-transfer quenching of PDI radical anion [PC-145]

Estefania Sucre, University of Geneva

D. Cruz-Neto, E. Vauthey*

**Materials Chemistry [Mat]
Poster Sessio**

Synthesis and characterization of polysiloxanes with photoswitchable dielectric properties [Mat-102]

Malte Beccard, Empa, Dübendorf

T. R. Venkatesan, M. Bauer, D. M. Opris*

Disentangling Size and Yield of Cesium Lead Bromide Perovskite Nanocrystals with Cesium Precursor Engineering [Mat-103]

Yuliia Berezovska, ETH Zurich

V. Sekula, N. Romanyuk, D. Dirin, M. Kovalenko*

Exploration of Monocompound Hybrid Metal Halides as Scintillators for Fast Neutron Radiography [Mat-104]

Aditya Bhardwaj, ETH Zurich

K. Sakhatskyi, A. Sakhatska, P. Trtik, Y. Padniuk, Y. Wu, Y. Kominko, K. Han, Z. Xia, M. Strobl, A. L. Rogach, Z. Xia, S. Yakunin*, M. Kovalenko*

Bridgman Growth of Li_3InCl_6 Single Crystals Enables Investigation of the Crystal Structure – Ionic Conductivity Relationship [Mat-105]

Chris Černe, ETH Zurich, A. Kanak, J. F. Baumgärtner, K. V.

Kravchyk*, M. V. Kovalenko*

PEF/PET-starch hydrogels from recycled sources for shrimp farm's wastewater treatment [Mat-106]

Simon Cerqua, ZHAW Wädenswil

E. Bonora, P. Kongseng, S. Chantarak, C. Brändli*

On the Discrepancy between the Local and Average Electronic Structure in Hybrid Lead Halide Perovskites [Mat-107]

Ole Dressler, ETH Zurich, S. Sabisch, O. Ortikova, M.

Svrydenko, S. Elveren, L. G. Feld, L. Dubenska, M. Kovalenko*

Non-invasive Quality Assessment of Melt-grown CsPbBr_3 by Nuclear Quadrupole Resonance Spectroscopy [Mat-108]

Lidiia Dubenska, ETH Zurich

S. Sabisch, A. Kanak, M. Kotyrba, M. V. Kovalenko*

Organic surface coating for high-voltage cathodes in LPSCI-based all-solid-state lithium metal batteries [Mat-109]

Alexander Forster, University of Fribourg

J. Zhang, A. Coskun*, M. El Kazzi*

Substitution of Formamidinium Cation into Rb-based Non-perovskite Phases Probed by Solid-state NMR Spectroscopy [Mat-110]

Ummugulsum Gunes, EPFL Lausanne, M. A. Hope, Y. Zhang,

L. Zheng, L. Pfeifer, M. Grätzel, L. Emsley*

Metal-like Transport Behavior in In-plane Oriented Conjugated Polymers [Mat-111]

Isabelle Heinzen, University of Bern

D. Tsokkou, E. Röck, S. Guchait, B. Jismy, V. Bouylout,

M. Brinkmann, N. Leclerc, O. Bardagot, N. Banerji*

Living Polymerization of Levoglucosenone-Derived Enyne Monomers: Tunable Degradation Rates and Higher Glass Transition Temperatures [Mat-112]

Eunsong Jung, ETH Zurich

A. Rizzo, H. Ryu, M. Cho, T. Choi*

Unveiling Surface Chemistry of Ultrafast-Sintered LLZO Solid-State Electrolytes for High-Performance Li-Garnet Solid-State Batteries [Mat-113]

Matthias Klimpel, ETH Zurich / Empa Dübendorf

H. Zhang, K. Wiczerzak, R. Dubey, F. Okur, J. Michler,

L. Jeurgens, D. Chernyshov, W. van Beek, K. Kravchyk*,

M. Kovalenko*

Designer Sulfonium-based Capping Ligands for Lead Halide Perovskite Nanocrystals [Mat-114]

Oleksandr Kolomiets, ETH Zurich / Empa Dübendorf

A. Stelmakh, A. Rajan, S. Sabisch, G. Rainò, A. Baumketner,

M. Kovalenko*, M. Bodnarchuk*

Thermally Evaporated Cesium Lead Halide Perovskites: From Structural Control to Optical Gain Applications [Mat-115]

Yuliia Kominko, ETH Zurich, S. Yakunin, M. Kovalenko*

Reinforcing Protein-Based Materials with Amyloid Nanofibrils for Sustainable Applications [Mat-116]

Anna Koptelova, EPFL Lausanne, F. Stellacci*, T. Abitbol*

PFAS-free capacity boosters for energy dense redox flow batteries [Mat-117]

Julia Lorenzetti, Empa, Dübendorf, C. Kupferschmid, D. Reber*

Engineering Liquid Crystalline Photoresists for Xolography Applications [Mat-118]

Kaloyan Milanov, Rijksuniversiteit Groningen, F. Trigka, M. Lerch*

Self-Degrading Chromogenic Polymer [Mat-119]

Oindrila Mondal, Adolphe Merkle Institute, Fribourg
G. Formon, S. Rowan*, C. Weder*

Tuning Charge Transfer in Novel NDI–Pyrene Paracyclophanes: Role of Interchromophore Distance and Linker Structure [Mat-120]

Camila Negrete-Vergara, University of Bern
V. Slama, E. Zyaee, G. Graf, S. Decurtins, R. Häner, H. M. Frey,
T. Feurer, U. Röthlisberger*, S. X. Liu*

From waste to value: extraction of phytin from oilseed presscake [Mat-121]

Guido Panzarasa, ETH Zurich

RAdiolanthanide Production In Core (RAPIC) [Mat-122]

Sofia Pasolini, Paul Scherrer Institute PSI, Villigen
P. Steinegger, Z. Talip, E. A. Maugeri

Towards the development of an electric organ to power artificial muscles [Mat-123]

Carolina Pierucci, University of Fribourg
M. Rojas Cessa, N. Zahnd, M. Mayer*, A. Ianiro*

Understanding the Role of the Acid/Base Sites in the Supported Cu/ZnO Catalysts for the CO₂ hydrogenation to Methanol [Mat-125]

Ioana Popa, Paul Scherrer Institute PSI, Villigen
C. Pischetola, L. Artiglia, V. Sushkevich*, J. A. van Bokhoven*

Exploiting the LDH Memory Effect in the Carbon Dioxide to Methanol Conversion [Mat-126]

Ioana Popa, Paul Scherrer Institute PSI, Villigen
G. Carja, J. A. van Bokhoven, F. Krumeich, C. Pischetola*,
L. Artiglia*

Implementation of Safe and Sustainable by Design (SSbD) Vision for Materials Development: Case Study with Flame Retardant Vitrimers [Mat-128]

Rafael Reis, Eawag, Dübendorf
A. Sekar, C. Hervieu, S. Gaan, K. J. Groh, S. Gaan*, K. J. Groh*

Funktionalisierung von Silica-Oberflächen zur verbesserten Endothelzelladhäsion; Eine Grundlage für 3D-Modelle der Blut-Hirn-Schranke [Mat-129]

Karl Samietz, ZHAW Wädenswil, B. Brand*

Green Hydrogen Meets Biomass Upgrading: A Dual-Function PEC System Using Abundant Sb₂Se₃ and Copper [Mat-130]

Ramon Schnyder, University of Zurich, T. Moehl, D. Tilley*

Shedding Light on the Bulk and Surface Features of Alumina Polymorph combining TEM, IR and XRD [Mat-131]

Charles Sidhoum, ETH Zurich, C. Copéret*

Feasibility of Pyrochlore-type Iron(III) Hydroxy Fluorides as Cathode Materials in Li₆PS₅Cl All-Solid-State Batteries [Mat-132]

Jaka Šivavec, ETH Zurich
J. F. Baumgärtner, D. C. Stoian, M. Klimpel, W. v. Beek,
K. V. Kravchyk*, M. V. Kovalenko*

Improving local antibiotic therapy through the study of interactions and release mechanisms between CaSO₄ carriers and antibiotics [Mat-133]

Dan Stefanita, University of Fribourg, D. Terebenec, P. Wahl, A. Neels*

Hydrogenative Depolymerization of Polystyrene Initiated by KH/C [Mat-134]

Puyang Tian, ETH Zurich, A. Fedorov*

High dielectric permittivity polysiloxanes for solvent-free industrial processing [Mat-135]

Jana Wolf, EMPA, Dübendorf / ETH Zurich
P. M. Danner, D. M. Opris*

Light Responsive Peptide-Chromophore Conjugates [Mat-137]

Joseph Woods, ETH Zurich
H. Wennemers*

Buffer Layer Interface Repair Engineering for Artificial Photosynthesis of Antimony Selenide [Mat-138]

ZiYing Zhang, University of Zurich
T. Moehl, T. Moehl, D. Tilley*

Ultrafast-Sintered LLZO Membranes for high energy density ASSLB [Mat-139]

Huanyu Zhang, ETH Zurich / Empa Dübendorf
F. Okur, M. Klimpel, K. V. Kravchyk*, M. V. Kovalenko*

Polar Polymers as Electrolytes in Lithium Metal Batteries [Mat-140]

Can Zimmerli, Empa, Dübendorf
F. Okur, Y. Sheima, K. Kravchyk, D. Opris*, M. Kovalenko*

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