

SCS
Swiss Chemical
Society

SCS Fall Meeting 2023

August 24-25, 2023,

University of Bern, vonRoll Campus

Program Highlights of the first day, Aug 24, 2023, 13:00 - 21:00h

- Helvetica opening session
- Three parallel sessions for PI presentations
- Lectures of our SCS Honorary Members 2022
- Distinguished Industrial Science Award lecture 2023
- Commercial exhibition
- SCS Summer Party and 1st part of the poster session
- General Assembly of the youngSCS

Program Highlights of the second day, Aug 25, 2023, 09:00 - 18:30h

- Plenary sessions with lectures of SCS Award winners 2023
- Nine parallel sessions with invited and sponsored lectures as well as PhD short talks
- 2nd part of the poster session during the lunch break
- Famous Fall Meeting 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
- Inorganic & Coordination Chemistry
- Medicinal Chemistry & Chemical Biology
- Organic Chemistry
- Physical Chemistry
- Polymers, Colloids & Interfaces

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UNIVERSITÄT
BERN

WELCOME TO THE 2023 FALL MEETING OF THE SWISS CHEMICAL SOCIETY (SCS)



Eva Hevia



Hans Peter Lüthi

On behalf of the Organizing Committee, the Members the Boards of all participating SCS Networks, and the Department of Chemistry, Biochemistry and Pharmaceutical Sciences of the University of Bern, we welcome you to the 2023 Fall Meeting!

This is the second time, after 2017, that we will be meeting at the Hochschulzentrum vonRoll, a wonderful venue for an event like ours. It is also the second time, since 2017, that the Fall Meeting is a two-day event. In the morning of the first day, the “Future of Chemical Education” meeting, organized by the SCS Division on Chemical Education, will take place. In the afternoon, we will have the Helvetica Session featuring two prominent speakers, followed by lectures of SCS honorary members and award winners. In between this fireworks of high-level presentations, nine young scientists will be presenting their research projects as part of the “Principal Investigators Session”. Finally, the stage will be open for the youngest participants who would like to present their posters already on day one. At the end of an intense day, we will be enjoying ourselves at the SCS Summer Party.

The structure of the second day corresponds to the traditional Fall Meeting Program: After the Welcome and Opening, we will be enjoying the 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 Session and the Commercial Exhibition.

In the afternoon, there is the second round of parallel sessions and Award Lectures. The two-day meeting ends with the announcement of the winners of the New Helvetica Prize and the Award Ceremony, honoring the best oral and best poster presenters.

The Fall Meeting 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. More than 400 students submitted an abstract. Overall, the presentations of senior lecturers included, there will be as many as 100 oral presentations. At the Poster Session, 317 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 them going along with us for a long time. We thank all the members of the Organizing Committee for setting up attractive session programs. We invite you to browse through the program and look forward to meeting you at what many of us still call the “vonRoll Areal”.

Prof. Eva Hevia
Chair of the organizing committee and local host
University of Bern

Dr. Hans Peter Lüthi
Chair of the scientific committee
SCS Foundation

PROGRAM OVERVIEW, FRIDAY, 25TH AUGUST 2023 (DAY TWO)Interactive program incl. all abstracts of the lectures, talks and posters on <https://fm23.scg.ch>

Time	Program Day Two	Location
08.30	Registration, Welcome Coffee Commercial Exhibition	Building 6 (B6) Building 8 (B8)
09.30	Grammaticakis-Neumann Award Lecture 2023 <i>Prof. Lea Nienhaus</i> , Florida State University «Generating Spin-Triplets at the Perovskite/Organic Interface»	B6.001
10.00	SCS Industrial Science Award Lecture 2023 <i>Dr. Uwe Grether</i> , F Hoffmann-La Roche AG «Small Molecules Targeting the Endocannabinoid System»	B6.001
10.30	Short Break	
10.45	Morning Parallel Session (Invited lecture + 5 short talks)	
	Analytical Sciences [AS-011] ... [AS-017]	B8.B101
	Catalysis Science & Engineering [CE-011] ... [CE-017]	B6.004
	Computational Chemistry [CC-011] ... [CC-017]	B6.102
	Chemistry and the Environment [EV-011] ... [EV-017]	B8.B102
	Inorganic & Coordination Chemistry [IC-011] ... [IC-017]	B6.003
	Medicinal Chemistry & Chemical Biology [MC-011] ... [MC-017]	B6.002
	Organic Chemistry [OC-011] ... [OC-017]	B6.001
	Physical Chemistry [PC-011] ... [PC-017]	B6.103
	Polymers, Colloids & Interfaces [PCI-011] ... [PCI-017]	B6.104
12.30	Lunch and Poster Session Commercial Exhibition	Building 8 Building 8
14.30	Afternoon Parallel Session	
	Analytical Sciences [AS-021] ... [AS-027]	B8.B101
	Catalysis Science & Engineering [CE-021] ... [CE-027]	B6.004
	Computational Chemistry [CC-021] ... [CC-027]	B6.102
	Chemistry and the Environment [EV-021] ... [EV-027]	B8.B102
	Inorganic & Coordination Chemistry [IC-021] ... [IC-027]	B6.003
	Medicinal Chemistry & Chemical Biology [MC-021] ... [MC-027]	B6.002
	Organic Chemistry [OC-021] ... [OC-027]	B6.001
	Physical Chemistry [PC-021] ... [PC-027]	B6.103
	Polymers, Colloids & Interfaces [PI-021] ... [PCI-027]	B6.104
16.15	Short Break	
16.30	SCS Industrial Award Lecture 2023 <i>Dr. Tomas Smejkal</i> , Syngenta Crop Protection AG «Stable cyclometallated catalysts for hydrogenation and directed C-H borylation»	B6.001
17.00	SCS Senior Industrial Award Lecture 2023 <i>Dr. Robin Fairhurst</i> , Novartis Pharma AG «Identification of spirocyclic inhibitors of the transcription factor HIF2 α : soluble ligands targeting a lipophilic binding site»	B6.001
17.30	Sandmeyer Award Lecture 2023 <i>Dr. Agnes Bombrun</i> , <i>Dr. Eric Eichhorn</i> , Givaudan Schweiz AG «Sustainable (-)-ambrox production: chemistry meets biocatalysis»	B6.001
18.00	Information Session and Ceremony of the Helvetica Prize 2023 David Spichiger, Richard Smith, Eva Hevia, Jérôme Waser	B6.001
18.10	Best Oral Presentation Awards (sponsored by Metrohm) Markus Steinke, Marketing Manager at Metrohm International Headquarters	B6.001
18.20	Best Poster Presentation Awards (sponsored by DSM-Firmenich) Representative of DSM-Firmenich	B6.001
18.30	End of the conference	

GENERAL INFORMATION

Date: August 24, 2023, 12.30 – August 25, 2023, 18.30

Location: University of Bern,
vonRoll Areal
Fabrikstrasse 6/8
3012 Bern

Website: <https://fm23.scg.ch>

Chairman

Prof. Eva Hevia

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Freiestrasse 3, CH - 3012 Bern

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vonRoll Facility Services

Universität Bern, Areal vonRoll

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Conference Secretariat

Swiss Chemical Society

David Spichiger, Céline Wittwer, Sarah Schmitz

Haus der Akademien, Laupenstrasse 7, Postfach, 3001 Bern

Tel.: +41 31 306 92 92

E-Mail: info@scg.ch

Organizing Committee

Core team

Prof. Eva Hevia, University of Bern (Chair of the Symposium)

Dr. Hans Peter Lüthi, SCS Foundation (Vice Chairman)

David Spichiger, Swiss Chemical Society (SCS Head Office)

Analytical Sciences (AS)

– Prof. Eric Bakker, University of Geneva

– Dr. Stefan Schürch, University of Bern

– Dr. Hanspeter Andres, Metas Bern

Catalysis Sciences & Engineering (CE)

– Prof. Martin Albrecht, University of Bern

– Dr. Vladimir Paunovic, ETH Zurich

Computational Chemistry (CC)

– Prof. Jeremy Richardson, ETH Zürich

Chemistry and the Environment (EV)

– Dr. Thomas Bucheli, Agroscope

– Dr. Jutta Hellstern, F. Hoffmann-La Roche, Basel

Inorganic & Coordination Chemistry (IC)

– Prof. Roger Alberto, University of Zurich

– Prof. Murielle Delley, University of Basel

Organic Chemistry (OC)

– Prof. Francesca Paradisi, University of Bern

– Prof. Konrad Tiefenbacher, University of Basel

Medicinal Chemistry & Chemical Biology (MC)

– Prof. Jean-Louis Reymond, University of Bern

– Prof. Nina Hartrampf, University of Zurich

– Prof. Dennis Gillingham, University of Basel

Physical Chemistry (PC)

– Prof. Malte Oppermann, University of Basel

– Prof. Natalie Banerji, University of Bern

Polymers, Colloids & Interfaces (PCI)

– Dr. Daniel Görl, EPFL Lausanne

– Prof. Bastian Brand, ZHAW

Admission and Registration

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

Fees for participants without a presentation

– SCS Members: free of charge

Registration is mandatory anyway

– Non-members: CHF 100

Pre-registered participants will get an invoice in advance to avoid waiting time at the check in desk. Participants who register after July 31 will have to pay the fees by credit card during the registration process.

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



Interactive Program and Abstract Search

The website allows you easy and interactive planning of your conference day.

Go to the Fall Meeting website and profit from the following functions:

– Interactive program overview with abstract preview

– Quick abstracts displayed as html files

– pdf-file download of single abstracts

– Extensive search functionalities

Coffee Breaks, Lunch and Smoking Areas

Refreshments will be served all day long. The lunch bag with beverage, offered on Friday between 12.30 and 14.00, is included in the conference fee.

The vonRoll mensa in the basement of building 8 offers a great selection of hot meals (not covered by the conference fee).

Smoking is prohibited in all buildings. Special smoking zones are available in front of the buildings at Fabrikstrasse 6 and 8.

Connection to the Internet

A wireless LAN (Wi-Fi) network 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 secured web page.

Swisscom also offers a public hotspot.

CONFERENCE VENUE

How to get to the vonRoll Areal

Fabrikstrasse 6 & 8, 3012 Bern



Public transport

SBB railway schedule on sbb.ch. Take Bern main station, west exit (Ausgang Welle/Länggasse)

a) PostBus 101 heading for Schlossmatt - Güterbahnhof stops.

Cross the railway bridge and enter the vonRoll Areal;

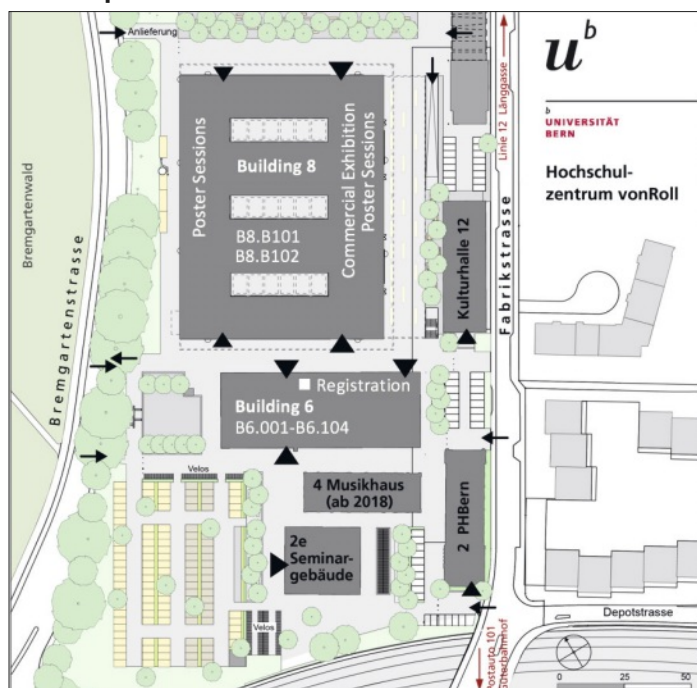
b) PostBus 101 BernMobil bus line 20, Länggasse stops. Walk down 400m Fabrikstrasse and you will find the vonRoll Areal on the right-hand side;

c) PostBus 101 Take a walk through the Länggasse and pass the building of the Department of Chemistry, Biochemistry and Pharmaceutical Sciences at Freiestrasse 3. Continue until you turn into Fabrikstrasse. Turn left for another 200 m meters. Total walk time: 15min.

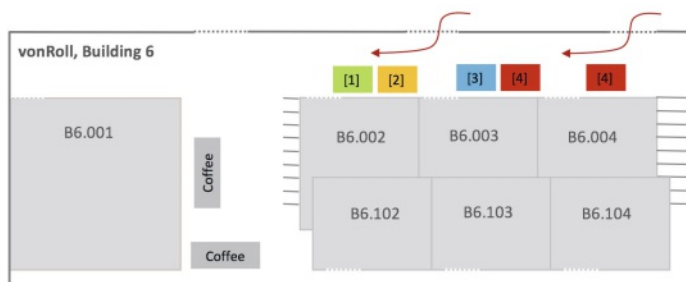
Car

Follow the highway A1 until Bern-Forsthaus. After the exit at the big crossroads turn left for another 50m. A public parking area is available just behind the vonRoll Areal on the right-hand side. Please note that there is no guarantee for free parking slots.

Site map vonRoll Areal



Registration Process



- [1] SCS members with member card
Registered participants with conference badge
- [2] Invited speakers, guests
Session chairs, jury members
- [3] SCS members without member card
Non-SCS members
- [4] Non-pre-registered participants
Onsite registration as SCS member

Commercial Exhibition



Exhibitors

1. Brunschwig
2. SpiroChem
3. Magritek
4. Merck
5. Büchiglas
6. IGZ Instruments
7. Macherey-Nagel
8. Sika
9. Bruker
10. VICI AG
11. TCG LifeSciences
12. Tracomme
13. Biotage
14. BioSolveIT
15. Metrohm
16. Thieme

Catering

Coffee Desk in Building 6

Catering Buffets in Building 8, Main corridor

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 monetary form, travel grant or free publication opportunities in the Junior Laureates issue of CHIMIA 4/2024.

We like to address our recognition and thanks to the Metrohm Foundation and to DSM-Firmenich., who are partnering the presentation award program for many years.



Best Oral Presentation Award

The award is sponsored by Metrohm.

The prize is given for the two 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: 25.08.2023, 18.10h in lecture hall 06-001.

Prize for the winner of each of the nine, parallel sessions

- Cash contribution of CHF 500
- Travel voucher of CHF 1000 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 and will be handed over by Dipl. Ing. Markus Steinke, Executive Vice President Marketing at Metrohm International Headquarters, Herisau

Covers of the 2020-2023 Junior Laureates Issues



Best Poster Presentation Award

The award is sponsored by 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: 25.08.2023, 18.20h in lecture hall 06-001.

Prize for the winner of each of the seven, poster session

- 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

- 1-2x cash contributions of CHF 200.

The prizes are sponsored by DSM-Firmenich and will be handed over by Dr. Jonathan Medlock, Laboratory Head of Process Research.



HELVETICA PRIZE OF THE SWISS CHEMICAL SOCIETY 2023

Helvetica and the Swiss Chemical Society are proud to award the 2023 winners of the Helvetica Prize of the Swiss Chemical Society for the best published papers of PhD/Postdocs 2022/23 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, Managing Editor of Wiley-VHCA will honor the winners that will then present their papers in a 3min short presentation.

1st Prize: **Marius D. R. Lutz** (ETH Zurich, Group of Prof. Bill Morandi)

«Synthesis and Reversible H₂ Activation by Coordinatively Unsaturated Rhodium NHC Complexes»

DOI: <https://doi.org/10.1002/hlca.202200199>

2nd Prize: **Xingxing Wu** (University of Basel, Group of Prof. Christof Sparr)

«X-Ray Crystallographic Studies of Quasi-Racemates for Absolute Configuration Determinations»

DOI: <https://doi.org/10.1002/hlca.202200117>

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 1x100.00 CHF. Cards with at least one full column or one full row take part in the draw of 2x 50.00 CHF.

The prize draw takes place on August 25, at 18:00h.

SPONSORS AND SUPPORTERS

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 Supporters



ENDOWMENTS OF PARALLEL SESSIONS



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

COMMERCIAL EXHIBITORS



CAREER SESSIONS



Award Lectures (plenary)

Building 6, lecture hall 001

Honorary Member 2022**«From academia to industry and back – A personal account»**

August 24, 2023, 16.00–16.45h

Karl-Heinz Altmann, ETH Zurich, has been professor of Pharmaceutical Biology at the Institute of Pharmaceutical Sciences at the ETH Zurich since 2003 after he started his career as R&D scientist in industry (Ciba and Novartis). He was awarded with numerous national and international awards that demonstrate his extraordinary, scientific achievements. Karl-Heinz always contributed actively to the SCS and the chemical community throughout his career, e.g., he chaired the SCS Division of Medicinal Chemistry & Chemical Biology for many years and managed prestigious initiatives like the Swiss Course of Medicinal Chemistry in Leysin.

**Honorary Member 2022****«From Molecular Spectra to Molecules in Motion, Quantum Chemical Kinetics, Laser Chemistry, and Parity Violation in Chiral Molecules»**

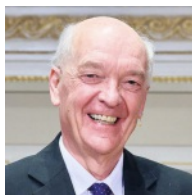
August 24, 2023, 16.45–17.30h

Martin Quack, ETH Zurich, became an SCS member in 1983 after he joined ETH Zurich as full professor of physical chemistry. His extraordinary achievements in research were honored with several national and international awards, in particular also with the Paracelsus Award in 2002, the most prestigious award of the SCS. Martin represents ETH and Physical Chemistry in the SCS Division of Fundamental Research for many years and, amongst many other tasks, he is/was responsible for the implementation and organization of the Heilbronner-Hückel Lectureships and the participation of the SCS in PCCP.

**Distinguished Industrial Science Award Lecture 2023****«A Search for Biologically Active Compounds for Potential Pharmaceutical and Agronomic Applications»**

August 24, 2023, 17.45–18.30h

Alain De Mesmaeker, retired from Syngenta, is honored for his exceptional research career in numerous research areas, always focused on scientific excellence, and for his ongoing commitment to human development and mentoring that has shaped and inspired multiple generations of scientists and leaders.

**Grammaticakis Neumann Award Lecture 2023****«Generating Spin-Triplets at the Perovskite/Organic Interface»**

August 25, 2023, 09.30–10.00h

Lea Nienhaus, Florida State University, is awarded for her nationally and internationally recognized research program in Light-Matter Interactions in Semiconductors probing the influence from the macroscale to nanoscale.

**SCS Industrial Science Award Lecture 2023****«Small Molecules Targeting the Endocannabinoid System»**

August 25, 2023, 10.00–10.30h

Uwe Grether, F. Hoffmann-La Roche Ltd. receives the prize for his tremendous impact on medicinal chemistry, focused on the discovery and characterization of small molecules that modulate the activity of the endocannabinoid system for the treatment of various important diseases, and thus for his direct impact on the preclinical and clinical drug discovery portfolio at Roche.

**SCS Industrial Science Award Lecture 2023****«Stable cyclometallated catalysts for hydrogenation and directed C-H borylation»**

August 25, 2023, 16.30–17.00h

Tomás Smejkal, Syngenta Crop Protection AG, is awarded for his high impact track record in process chemistry and technology that has truly enabled projects and have seen the journey from process research through development and ultimately to commercial scale implementation.

**SCS Senior Industrial Science Award Lecture 2023****«Identification of spirocyclic inhibitors of the transcription factor HIF2 α : soluble ligands targeting a lipophilic binding site»**

August 25, 2023, 17.00–17.30h

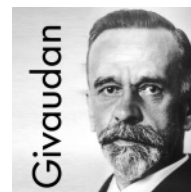
Robin Fairhurst, Novartis Pharma AG, receives the prize for his outstanding contributions to the discovery and optimization of several drug development candidates, many of which have reached the clinic and even the market.

**Sandmeyer Award Lecture 2023****«Sustainable (-)-ambrox production: chemistry meets biocatalysis»**

August 25, 2023, 17.30–18.00h

Agnes Bombrun, **Eric Eichhorn**, Givaudan Schweiz AG. The SCS honors Dr. Agnes Bombrun, Dr. Boris Schilling, Dr. Eric Eichhorn and Dr. Fridtjof Schröder from Givaudan Schweiz AG, and its project tema Ambrofix ((-)-Ambrox)

for their outstanding research contributions that led to the development of an innovative and even more importantly an industrially viable and sustainable process for AmbrofixTM ((-)-ambrox) using green chemistry and biotechnology.



Abstract codes

PS	Plenary Session
AS	Analytical Sciences
CE	Catalysis Sciences & Engineering
CC	Computational Chemistry
EV	Chemistry and the Environment
IC	Inorganic Chemistry
MC	Medicinal Chemistry & Chemical Biology
OC	Organic Chemistry
PC	Physical Chemistry
PCI	Polymers Colloids & Interfaces
PI	PI Session
[XY-001]...[XY-033]	Oral Presentations
[XY-101]...[XY-199]	Poster

PI SESSIONS

24. AUGUST 2023, 14.30–15.30H

PI Session 1
B6.002

- 14:30 **Metalloenzyme (electro)catalysis for hydrogen and ammonia production [PI-011]**
Ross Milton, University of Geneva
- 14:50 **Catalysis by Inorganic Materials: Control at the Surface by Tailored Interfaces and Electric Fields [PI-012]**
Murielle Delley, University of Basel
- 15:10 **A tale of two metals: switching selectivity towards CO₂ reduction in heptacoordinate complexes [PI-013]**
Albert Ruggi, University of Fribourg
F. Droghetti, M. Natali, A. Ruggi, M. Natali

PI Session 2
B6.003

- 14:30 **Manoeuvring chemical reactions one degree of freedom at a time [PI-021]**
Jutta Toscano, University of Basel
L. Xu, S. Willitsch
- 14:50 **In-situ optical spectroscopy to capture the birth of morphology [PI-022]**
Takuji Adachi, University of Geneva
- 15:10 **Molecules in motion: Capturing and controlling molecular dynamics through chirality [PI-031]**
Malte Oppermann, University of Basel
F. Zinna, J. Lacour, M. Chergui

PI Session 3
B6.004

- 14:30 **An efficient and compact plate-type reactor for large-scale biogas methanation [PI-023]**
Emanuele Moioli, Hitachi Zosen Inova
- 14:50 **Augmenting large language models with chemistry tools [PI-032]**
Andres Bran, EPFL Lausanne
S. Cox, O. Schilter, C. Baldassari, A. D. White, P. Schwaller
- 15:10 **Tailoring molecular fluorescence by polymerization-mediated charge transfer [PI-033]**
Yinyin Bao, ETH Zurich

THEMATIC PARALLEL SESSIONS

25. AUGUST 2023, 10.45–12.30H AND 14.30–16.15H

Analytical Sciences [AS]



Morning Session – B8.B101

Chair: Stefan Schürch, University of Bern

Session Endowment: Merck

- 10:45 **Analytical advancements to unravel the effects of organic matter on trace elements cycling in the Environment [AS-011]**
Julie Tolu, Eawag Dübendorf
- 11:15 **How to Overcome Analytical Challenges Commonly Encountered in the Analysis of Cr and Cr(VI) in Environmental and Biological Matrices [AS-013]**
Jelle Verdonck, KU Leuven
K. Poels, J. Vanoirbeek, E. Smolders, L. Godderis
- 11:30 **All Covalently Bound Ion-Selective Membranes for Increased Stability in Potentiometric Sensing [AS-014]**
Tara Forrest, University of Geneva
E. Bakker
- 11:45 **Rapid Pesticide Screening by Swab Spray Mass Spectrometry [AS-015]**
Thomas Muggli, University of Bern
S. Schürch
- 12:00 **Targeted phosphoproteomics to reveal mTOR pathway signalling dynamics in zebrafish [AS-016]**
Nikolai Huwa, Eawag Dübendorf
A. C. Blatter, R. Schönenberger, K. Groh
- 12:15 **ALPINAC – A non-target screening algorithm for high resolution mass spectra and its application to the detection of halogenated greenhouse gases [AS-017]**
Katharina Höveler, Empa Dübendorf
L. Constantin, M. Guillevic, P. Schlauri, M. K. Vollmer, S. Reimann

Afternoon Session – B8.B101

Chair: Hanspeter Andres, METAS

- 14:30 **In search of accuracy: The road to high-quality certified reference materials to achieve comparability of chemical measurements [AS-021]**
Lukas Rigger, Sigma-Aldrich Production GmbH
K. Breitruck
- 15:00 **Identifying Biomarkers and Habitability Indicators on Polygonal Structures using Laser Mass Spectrometry [AS-023]**
Luca Knecht, University of Bern
S. Gruchola, C. S. Cockell, P. Keresztes Schmidt, C. P. de Koning, M. Tulej, N. Thomas, A. Riedo, P. Wurz
- 15:15 **Detection of Nucleobases and other N-Heterocycles with Laser Desorption Ionisation Mass Spectrometry for In Situ Space Exploration [AS-024]**
Nikita Boeren, University of Bern
P. Keresztes Schmidt, C. P. de Koning, S. Gruchola, L. N. Knecht, M. Tulej, A. Riedo, P. Wurz
- 15:30 **Single-Molecule Peptide Identification using Fluorescence Blinking Fingerprints [AS-025]**
Salome Püntener, EPFL Lausanne
P. Rivera-Fuentes
- 15:45 **Droplet-based microfluidic platform for operando X-ray absorption spectroscopy of single-atom heterogeneous catalysts in organic synthesis [AS-026]**
Thomas Moragues, ETH Zurich
G. Giannakakis, C. Borca, T. Huthwelker, A. Bugaev, A. Clark, A. deMello, J. Pérez-Ramírez, S. Mitchell
- 16:00 **Can breath components be quantified with secondary-electrospray ionization coupled to mass spectrometry? [AS-027]**
Cedric Wüthrich, ETH Zurich
R. Zenobi, S. Giannoukos

Catalysis Sciences & Engineering [CE]
Morning Session – B6.004



Chair: Cecilia Mondelli, Sulzer & Vladimir Paunovic, ETHZ

Session Endowment: Casale SA

- 10:45 **Selectivity and stability of zeolite catalysts in methanol-to-hydrocarbons reaction [CE-011]**
 Nikolay Kosinov, TU Eindhoven
- 11:15 **Consequence of Alloying and metal-oxide interface in bimetallic PtGa Propane Dehydrogenation catalysts prepared via Surface Organometallic Chemistry on Carbon [CE-013]**
 Enzo Brack, ETH Zurich
 M. Plodinec, C. Copéret, M. G. Willinger
- 11:30 **Advancing Strategies for Methane Partial Oxidation to a Methyl Ester with Heterogeneous Catalysts [CE-014]**
 Andrea Blankenship, ETH Zurich
 Y. Ji, M. Ravi, M. A. Newton, J. A. van Bokhoven
- 11:45 **Sustainable Bio-Based Solvents with Acetal Functionalized Carbohydrate Core Produced from Renewable Biomass [CE-015]**
 Anastasiia Komarova, EPFL Lausanne
 J. Luterbacher
- 12:00 **Digitally-guided synthesis of single-atom heterogeneous catalysts by leveraging language models and protocol standardization [CE-016]**
 Manu Suvarna, ETH Zurich
 A. Vaucher, S. Mitchell, T. Laino, J. Pérez-Ramírez
- 12:15 **Green Chemicals: The Ultimate Win-Win Solution Amidst Europe's Energy Crisis [CE-017]**
 Abhinandan Nabera, ETH Zurich
 I. R. Istrate, A. J. Martín, J. Pérez-Ramírez, G. Guillén Gosálbez

Afternoon Session – B6.004

Chair: Martin Albrecht, University of Bern

- 14:30 **How to overcome challenges in Green Ammonia through a multidisciplinary research in catalysis [CE-021]**
 Pierdomenico Biasi, Casale SA
 C. Pizzolitto, R. Ostuni
- 15:00 **Understanding enzyme-nanoparticle interactions during bioelectrocatalytic hydrogen formation [CE-023]**
 Sophie Webb, University of Geneva
- 15:15 **Biocatalytic reduction of six-membered ring heterocyclic imines in continuous flow [CE-024]**
 Ana Benítez-Mateos, University of Bern
 D. Roura Padrosa, D. Lim, V. Marchini, H. Wu, F. Buono, F. Paradisi
- 15:30 **CO₂ Hydrogenation to Methyl Formate using CO₂ as the Sole Carbon Source [CE-025]**
 Roland Turnell-Ritson, EPFL Lausanne
 P. J. Dyson
- 15:45 **Selective olefin transfer hydrogenation of unsaturated carbonyls with ethanol using a PYA ruthenium(II) complex [CE-026]**
 Alicia Beaufils, University of Bern
 M. Albrecht
- 16:00 **Mixed-metal Ionothermal Synthesis of Metallophthalocyanine Covalent Organic Frameworks for CO₂ Capture and Conversion [CE-027]**
 Kyung Seob Song, University of Fribourg
 P. W. Fritz, D. F. Abbott, L. N. Poon, C. M. Caridade, V. Mougél, A. Coskun

Computational Chemistry [CC]
Morning Session – B6.102



Chair: Jeremy Richardson, ETH Zurich

Session Endowment: Arcondis

- 10:45 **Invited talk Computational Chemistry [CC-011]**
 Speaker tbd.
- 11:15 **Capturing tunnelling, wavepacket splitting and single vibronic level excitation effects on vibronic spectra with Hagedorn wavepackets [CC-013]**
 Zhan Tong Zhang, EPFL Lausanne
 J. Vaníček
- 11:30 **A local diabatisation method for two-state adiabatic conical intersections [CC-014]**
 Eva Vandaele, University of Zurich
 M. Mališ, S. Luber
- 11:45 **ADMRG-based Framework for Large-scale Quantum Many-body Calculations [CC-015]**
 Nina Glaser, ETH Zurich
 A. Baiardi, M. Reiher
- 12:00 **Heavy-atom tunneling in singlet oxygen deactivation in water [CC-016]**
 Imaad Ansari, ETH Zurich
 E. R. Heller, G. Trenins, J. O. Richardson
- 12:15 **Solvation Free Energies of Ion Dissociations in Dichloromethane: EnRoute to Accurate Computations [CC-017]**
 Adélaïde Savoy, ETH Zurich
 E. Paenurk, R. Pollice, P. H. Hünenberger, P. Chen

Afternoon Session – B6.102

Chair: Jeremy Richardson, ETH Zurich

- 14:30 **Computational chemistry in the life sciences industries [CC-021]**
 Anna Feldman-Salit, Arcondis Group, Allschwil
- 15:00 **Grand canonical ensemble approaches for modeling electrochemical problems at constant electrode potentials in CP2K [CC-023]**
 Ziwei Chai, University of Zurich
 S. Luber
- 15:15 **Transition Metal Binding Site Predictions for Drug Design Applications [CC-024]**
 Andrea Levy, EPFL Lausanne
 S. L. Dürr, U. Röthlisberger
- 15:30 **Augmented Memory: Capitalizing on Experience Replay to Accelerate De Novo Molecular Design [CC-025]**
 Jeff Guo, EPFL Lausanne
 P. Schwaller
- 15:45 **Disconnection-Aware Triple Transformer Loop with a Route-Penalty Score for Multistep Retrosynthesis [CC-026]**
 David Kreutter, University of Bern
 J. L. Reymond
- 16:00 **Geometric Constraints in Probabilistic Manifolds: A Bridge from Molecular Dynamics to Structured Diffusion Processes [CC-027]**
 Justin Diamond, University of Basel
 M. A. Lill

Chemistry and the Environment [EV] 
Morning Session – B8.B102

Chair: Jutta Hellstern, F. Hoffmann-La Roche

Session Endowment: Climeworks

- 10:45 **How Actionable Research in Chemistry can promote Sustainability [EV-011]**
Janet Hering, Eawag Dübendorf
- 11:15 **Safe and sustainable by design: A computer-based approach to redesign chemicals for reduced environmental hazards [EV-013]**
Joanke van Dijk, Empa, St Gallen
H. Flerlage, S. Beijer, C. Slootweg, A. van Wezel
- 11:30 **Europium recycling from e-waste using redox active ligands. [EV-014]**
Marie Perrin, ETH Zurich
V. Mougel
- 11:45 **Insights into the storage aging effects on dimer esters and other oligomers in beta-pinene secondary organic aerosol samples [EV-015]**
Julian Resch, University of Basel
K. Li, M. Kalberer
- 12:00 **Assessing melt effects on aerosol tracers in a firn core with non-target screening [EV-016]**
Carla Huber, Paul Scherrer Institut, Villigen
D. Salionov, F. Burgay, A. Eichler, T. M. Jenk, S. Bjelić, M. Schwikowski
- 12:15 **The Photo Transformation of C1 Compounds; Methanol, Formaldehyde and Formic Acid via Natural Water Components [EV-017]**
Morgan Vallieres, ETH Zurich
K. McNeill

Afternoon Session – B8.B102

Chair: Thomas Bucheli, Agroscope

- 14:30 **Climeworks – removing CO₂ from the Earth's atmosphere through direct air capture [EV-021]**
Cornelius Gropp, Climeworks
- 15:00 **An on-site sample preparation approach for plant eco-metabolomics and its application to agroecosystems in East Africa [EV-023]**
Jakob Lang, University of Zurich
S. E. Ramos, M. Smohunova, L. Reichert, F. Chidawanyika, C. Apel, L. Bigler, M. C. Schuman
- 15:15 **Tracing soil sorption and plant uptake by spinach (*Spinacia oleracea*) and radish (*Raphanus sativus*) of five antibiotics – experimental test with spiked soil [EV-024]**
Inna Nybom, ETH Zurich
S. van den Broek, T. D. Bucheli, C. S. McArdell, G. Garland
- 15:30 **Novel Identification of Human Pharmaceutical Metabolites in Untreated Wastewater by Wide Scope Suspect Screening [EV-025]**
Corina Meyer, Eawag Dübendorf
J. Hollender
- 15:45 **Exploring the Metabolomic Alterations in Diatom *Cyclotella meneghiniana* in Response to Hg(II) and MeHg Exposure [EV-026]**
João Santos, University of Geneva
W. Li, A. A. Keller, V. I. Slaveykova
- 16:00 **Interspecific biotransformation of micro-pollutants in fish from Swiss watercourses with different contamination levels [EV-027]**
Marco Franco, Eawag Dübendorf
J. Hollender, K. Schirmer

Inorganic & Coordination Chemistry [IC]
Morning Session – B6.003

Chair: Murielle Delley, University of Basel

- 10:45 **Rationally Designed Long-Wavelength Absorbing Metal Complexes as Photosensitizers for Photodynamic Therapy [IC-011]**
Gilles Gasser, Chimie ParisTech, PSL University
- 11:15 **Synthesis and Reactivity of a Stable Organoazide Iron Complex and its Relevance to C–H Bond Amination [IC-013]**
Wowa Stroek, University of Bern
M. Keilwerth, L. A. Malaspina, S. Grabowsky, K. Meyer, M. Albrecht
- 11:30 **Behavior of silver(I) ion binding with peptides inspired from Sile protein [IC-014]**
Alexandre Bianchi, University of Fribourg
K. M. Fromm
- 11:45 **Orientational self-sorting in octahedral palladium cages: scope and limitations of the cis-rule [IC-015]**
Jean de Montmollin, EPFL Lausanne
K. Severin
- 12:00 **Surface Morphology and Interfacial Electric Fields of Inorganic Materials [IC-016]**
Tzu Chin Chang Chien, University of Basel
M. F. Delley
- 12:15 **¹⁵N NMR Anisotropy on Transition Metal Imido Complexes: Link between Spectroscopy and Reactivity [IC-017]**
Yuya Kakiuchi, ETH Zurich
P. S. Karmakar, C. Copéret, I. A. Tonks

Afternoon Session – B6.003

Chair: Kay Severin, EPFL Lausanne

- 14:30 **Invited talk Inorganic Chemistry [IC-021]**
Speaker tbd.
- 15:00 **Synthesis and Anisotropic Magnetic Properties of LiCrTe₂ Single Crystals with a Triangular-Lattice Antiferromagnetic Structure [IC-023]**
Catherine Witteveen, University of Zurich
E. Nocerino, S. A. López-Paz, H. O. Jeschke, V. Y. Pomjakushin, M. Månsson, F. O. von Rohr
- 15:15 **Charge Transport via Redox Ligands in Quantum Dots [IC-024]**
Yan Vogel, Delft University of Technology
A. J. Houtepen, Y. B. Vogel
- 15:30 **Synthesis and antimicrobial activity of rhenium tricarbonyl complexes bearing medically relevant ligands and selected by computer-aided design [IC-025]**
Youri Cortat, University of Fribourg
N. Radakovic, M. Nedyalkova, F. Zobi, A. Pavic
- 15:45 **Alkali-Metal Silyl Zincates: Synthesis, Structure and Reactivity [IC-026]**
Sophia Belrhomari, University of Bern
E. Hevia
- 16:00 **Novel (C⁺C) Zwitterionic Gold(III) Complexes: Synthesis and Insight into the Mechanism of the Cycloauration Step [IC-027]**
Jorge González, University of Zurich
P. Tian, A. Arribas-Domínguez, F. López, J. L. Mascareñas, C. Nevado

Medicinal Chemistry & Chemical Biology [MC]**Morning Session – B6.002**

Chair: Jean-Louis Reymond, University of Bern

Session Endowment: Syngenta Crop Protection AG

- 10:45 **The synthesis of fluorescent cyclic peptides via gold(I)-catalyzed macrocyclization [MC-011]**
Xingyu Liu, EPFL Lausanne
W. Cai, B. Fierz, J. Waser
- 11:00 **LipMetE as a simple guide for half-life optimization [MC-012]**
Giuseppe Cecere, F. Hoffmann-La Roche Ltd
- 11:15 **A General Strategy to Access Hyperstable and Ultrashort Collagen Heterotrimers [MC-013]**
Tomas Fiala, ETH Zurich
V. Islami, P. Bittner, R. Heeb, C. Söll, R. Zenobi, H. Wennemers
- 11:30 **De novo design of talo-configured lactones as a new class of highly potent, selective, and orally bioavailable galectin-3 inhibitors [MC-014]**
Luboš Remeň, Idorsia Pharmaceuticals Ltd
C. Zumburn, C. P. Sager, A. Mac Sweeney, E. Hühn, J. Gatfield, M. H. Bolli
- 11:45 **Inhibition of Cell Motility by Cell-Penetrating Dynamic Covalent Cascade Exchangers - Integrins Participate in Thiol-Mediated Uptake [MC-015]**
Filipe Coelho, University of Geneva
S. Saidjalolov, D. Moreau, O. Thorn-Seshold, S. Matile
- 12:00 **Discovery of ligands for TRIM58, a novel tissue selective E3 ligase [MC-016]**
Klemens Hoegenauer, Novartis Pharma AG
- 12:15 **Rapid photoradiosynthesis and preclinical evaluation of theranostic radioimmunoconjugates using Lutetium-177 [MC-017]**
Simon Klingler, University of Zurich
J. P. Holland

Afternoon Session – B6.002

Chair: Dennis Gillingham, University of Basel

- 14:30 **TYMIRIUM® Technology: The Discovery of Cyclobutryfluram [MC-021]**
Torsten Luksch, Syngenta Crop Protection AG
O. Loiseleur
- 15:00 **A Locally Activatable Sensor for Robust Quantification of Organellar GSH [MC-023]**
Sarah Emmert, University of Zurich
G. Quargnali, S. Thallmair, P. Rivera-Fuentes
- 15:15 **Discovery of Novel Allosteric EGFR L858R Inhibitors for the Treatment of Non-Small-Cell Lung Cancer [MC-024]**
Antonio Ricci, F. Hoffmann-La Roche Ltd
U. Obst-Sander, G. Jaeschke
- 15:30 **PROTACs as a target deconvolution tool of Hedgehog Pathway Inhibitor 1 [MC-025]**
Meropi Bagka, University of Geneva
S. Hoogendoorn
- 15:45 **Leveraging historical small molecule data from the Novartis portfolio: From chemical series evolution to predictive modelling [MC-026]**
Maximilian Beckers, Novartis Pharma AG
N. Sutrm, N. Fechner, N. Stiefl
- 16:00 **Small Ribozymes in Gut Bacteriophages and Their Potential Role in Microbiome-Virome Interactions [MC-027]**
Kasimir Kienbeck, University of Zurich
L. Malfertheiner, S. Zelger-Paulus, S. Johannsen, C. von Mering, R. K. Sigel

Organic Chemistry [OC]**Morning Session – B6.001**

Chair: Francesca Paradisi, University of Bern

Session Endowment: Chemspeed

- 10:45 **Divergent Synthesis of Fluorinated Molecules Using Photoredox Catalysis [OC-011]**
Dmitry Katayev, University of Bern
- 11:15 **Semipinacol Rearrangement of Cyclopropenyl-carbinols for the Synthesis of Highly Substituted Cyclopropanes [OC-013]**
Vladyslav Smyrnov, EPFL Lausanne
J. Waser
- 11:30 **Controlling non-enzymatic terpene cyclizations [OC-014]**
Leonidas Syntrivanis, University of Basel
T. Klucznik, W. Beker, B. A. Grzybowski, M. D. Burke, K. Tiefenbacher
- 11:45 **Iodine atom transfer mediated radical addition - cyclization processes using alpha-boryl radicals [OC-015]**
Gaetano Geraci, University of Bern
Y. Lazib, F. Dénès, L. V. Müller, Z. Mäder, P. Renaud
- 12:00 **Frustrated Ion Pair-Enabled Cross-Electrophile Coupling of Unactivated Alkyl Electrophiles [OC-016]**
Sven Roediger, ETH Zurich
P. Boehm, B. Morandi
- 12:15 **Organocatalytic Synthesis of Triflones Bearing Two Non-Adjacent Stereogenic Centers [OC-017]**
Alena Budinská, ETH Zurich
H. Wennemers

Afternoon Session – B6.001

Chair: Angelo Frei, University of Bern

- 14:30 **Radical Dynamic Digital Twin [OC-021]**
Rolf Gueller, Chemspeed Technologies AG
- 15:00 **Catalyst Control over Threefold Stereogenicity: C–S Atropisomeric Sulfones [OC-023]**
Tanno Schmidt, University of Basel
S. Schumann, A. Ostertag, C. Sparr
- 15:15 **Electrochemically Catalyzed Nitration of Unsaturated Hydrocarbons [OC-024]**
Subrata Patra, University of Bern
D. Katayev
- 15:30 **Surfactant-driven Strategies for Sustainable C–H Activation: Progressing Towards Mild Reaction Conditions [OC-025]**
Pascal Hauk, Université de Strasbourg
J. Wencel-Delord, F. Gallou
- 15:45 **A General Strategy to Develop Fluorogenic Polymethine Dyes for Bioimaging [OC-026]**
Annabell Martin, University of Zurich
P. Rivera-Fuentes
- 16:00 **Directional ionic bonds [OC-027]**
Illia Hutskalov, University of Zurich
A. Linden, I. Corić

**Physical Chemistry [PC]
Morning Session – B6.103**

Chair: Natalie Banerji, University of Bern



Session Endowment: Mettler Toledo

- 10:45 **Mechanism and dynamics of fatty acid photodecarboxylase [PC-011]**
Ilme Schlichting, Max Planck Institute for Medical Research, Heidelberg
- 11:15 **The conservation of protein dynamics on an evolutionary timescale of nearly a billion years [PC-013]**
Philipp Heckmeier, University of Zurich
J. Ruf, C. Rochereau, P. J. Heckmeier, P. Hamm
- 11:30 **Fast Viral Dynamics Revealed by Microsecond Time-Resolved Cryo-EM [PC-014]**
Leonidas Syntrivanis, University of Basel
T. Klucznik, W. Beker, B. A. Grzybowski, M. D. Burke, K. Tiefenbacher
- 11:45 **ATP Synthesis in Giant Unilamellar Vesicles Formed by Double-Emulsion Microfluidics [PC-015]**
Olivia Eggenberger, University of Basel
R. Cochereau, P. Müller, J. Coats, R. P. Wehr, C. von Ballmoos, C. G. Palivan
- 12:00 **Two-level ordering in nano-rattles for optical properties [PC-016]**
Antoine Scalabre, University of Fribourg
K. M. Fromm
- 12:15 **Ultra-narrow room-temperature emission from single CsPbBr₃ perovskite quantum dots [PC-017]**
Alena Budinská, ETH Zurich
H. Wennemers

Afternoon Session – B6.103

Chair: Malte Opermann, University of Basel

- 14:30 **Environmental aspects and sustainability in the Chemical/Analytical and Biological/Life Science Laboratory [PC-021]**
Christoph Jansen, Mettler Toledo, Switzerland
- 15:00 **Using *in-situ* Terahertz Spectroscopy to investigate Charge Transport in In-plane Oriented Organic Mixed Ionic-Electronic Conductors [PC-023]**
Isabelle Holzer, University of Bern
D. Tsokkou, S. Guchait, B. Jismy, M. Brinkmann, N. Leclerc, N. Banerji
- 15:15 **Symmetry Breaking Charge Separation in a PDI-Based Molecular Cage [PC-024]**
Estefanía Sucre-Rosales, University of Geneva
E. Vauthey, T. Šolomek
- 15:30 **Calculation of accurate tunneling splittings [PC-025]**
Joseph Lawrence, ETH Zurich
J. Dusek, J. O. Richardson
- 15:45 **Rovibrational and Hyperfine Structure of the Molecular Hydrogen Ion from Spectroscopy of Rydberg-Stark Manifolds [PC-026]**
Ioana Doran, ETH Zurich
M. Beyer, N. Hölsch, F. Merkt
- 16:00 **Quantum-logic control of complex molecular ions for applications in molecular and chemical physics [PC-027]**
Perna Paliwal, University of Basel
M. Popov, S. Willitsch

**Polymers, Colloids &
Interfaces [PCI]
Morning Session – B6.104**

Chair: Bastian Brand, ZHAW



Session Endowment: Sika

- 10:45 **3D Printing of Living Structural Biocomposites [PCI-011]**
Matteo Hirsch, EPFL Lausanne
L. Lucherini, R. Zhao, A. Clarà Saracho, E. Amstad
- 11:15 **Porous Organic Polymers for Advanced Gas Separation Applications [PCI-013]**
Timur Ashirov, University of Fribourg
K. S. Song, A. Coskun
- 11:30 **Insights into the Dynamics of Supramolecular Materials from Semicrystalline Polyesters by Solid State NMR [PCI-014]**
Sophia Thiele, EPFL Lausanne
L. Piveteau, H. Frauenrath
- 11:45 **Developing Non-Native Cascade Reactions by Means of Catalytic Nanocompartments [PCI-015]**
Viviana Maffei, University of Basel
C. Schoenenberger, C. Palivan
- 12:00 **Comparison of the Protective Effect of Surfactants on Antibody Stability Against Different Interfaces [PCI-016]**
Dominik Zürcher, ETH Zurich
S. Caduff, L. Aurand, U. Capasso Palmiero, K. Wuchner, P. Arosio
- 12:15 **Unraveling the electrochemical doping in semiconducting polymers [PCI-017]**
Priscila Cavassin, University of Bern
I. Holzer, D. Tsokkou, O. Bardagot, J. Rehault, N. Banerji

Afternoon Session – B6.104

Chair: Daniel Görl, EPF Lausanne

- 14:30 **The Future of Polyurethane Adhesives [PCI-021]**
Sven Reimann, Sika Technology AG
- 15:00 **Block Copolymer Photonic Pigments for Optical Materials [PCI-023]**
Andrea Doderio, University of Fribourg
N. Schwarz, G. Bravetti, A. Escher, C. Weder, U. Steiner
- 15:15 **Structural Diversity in Superfluorescent Multicomponent Nanocrystal Superlattices comprising lead Halide Perovskite Nanocrystals [PCI-024]**
Ihor Cherniukh, ETH Zurich
G. Rainò, T. V. Sekh, C. Zhu, T. Stöferle, R. F. Mahrt, R. Erni, M. I. Bodnarchuk, M. V. Kovalenko
- 15:30 **Low-Temperature Chemical Recycling of Poly-methacrylates Synthesized by RAFT Polymerization [PCI-025]**
Hyun Suk Wang, ETH Zurich
N. P. Truong, Z. Pei, M. L. Coote, A. Anastasaki
- 15:45 **Precision Synthesis of Various Low-Bandgap Donor-Acceptor Alternating Conjugated Polymers via Living Suzuki-Miyaura Catalyst-Transfer Polymerization [PCI-026]**
Hwangseok Kim, ETH Zurich
- 16:00 **Restricting the Shape-Assisted Self-Assembly of Carpyridines to One Dimension [PCI-027]**
Lucía Gallego, University of Zurich
J. F. Woods, R. Butti, P. Szwedziak, A. Vargas Jentsch, M. Rickhaus

SCS FALL MEETING 2023, POSTER SESSIONS**Poster Presentation Title [Code]**

First line = Presenting Author

Second line = Coauthors

Analytical Sciences [AS]**Poster Session****Optimal sensitivity regime for ¹H detected relayed DNP [AS-101]**

Saumya Badoni, EPFL Lausanne

P. Berruyer, L. Emsley

N Spectroelectrochemical Investigation of the Nitrogenase-like Dark Operative Protochlorophyllide Oxidoreductase (DPOR) [AS-102]

Giada Bedendi, University of Geneva

A. Kulkarni, P. Maroni, R. D. Milton

N-doping Graphene at Ambient Conditions with N₂-DBD-Plasma and the role of neutral species [AS-103]

Alina Begley, ETH Zurich

G. Bartolomeo, D. Abbott, V. Mougel, R. Zenobi

Oxygen Isotope Analysis of Phosphate by Electrospray Orbitrap Mass Spectrometry for Assessing the Microbial Metabolism in the Environment [AS-104]

Nora Bernet, Eawag Dübendorf & ETH Zurich

C. A. Soldini, K. Kantnerová, C. Neubauer, F. Tamburini, T. B. Hofstetter

Nanoscale chemical analysis of Sb₂Se₃ solar cell using tip-enhanced Raman spectroscopy [AS-105]

Siiri Bienz, ETH Zurich

G. Spaggiari, D. Bersani, D. Calestani, G. Trevisi, N. Kumar, R. Zenobi

Broadband APT (BAPT): a Versatile APT Experiment with Improved J-Compensation and Optimal Suppression of Artifacts in C_{1s}-only Spectra [AS-106]

Peter Bigler, University of Bern

D. Chakif, I. Gjurroski, J. Furrer

An electrochemical approach for routine radioanalytical separations [AS-107]

Paul Dutheil, Paul Scherrer Institut, Villigen

M. Heule, H. Dominik, P. Steinegger, N. Walter, S. Mayer

Examination of Sampling Bags for Offline Breath Analysis using Secondary Electrospray Ionization (SESI) Mass Spectrometry [AS-108]

Mateusz Fido, ETH Zurich

S. Giannoukos, R. Zenobi

Can exhaled breath metabolomics replace rumen sampling in dairy cows? [AS-109]

Stamatios Giannoukos, ETH Zurich

Z. Islam, S. Räisänen, A. Schudel, F. Wahl, R. Zenobi, M. Niu

Achieving Data Reduction in Space by Applying Unsupervised Machine Learning to Mass Spectrometric Data [AS-110]

Salome Gruchola, University of Bern

M. Tulej, P. Keresztes Schmidt, N. J. Boeren, L. N. Knecht, A. Riedo, P. Wurz

Examining the Structure-Function Relationship of Enzymes using Temperature-Controlled Nano-electrospray Mass Spectrometry [AS-111]

Julian Harrison, ETH Zurich

A. Pruška, R. Zenobi

Nuclear Forensic Investigations of High Purity Depleted Uranium Ammunition [AS-112]

Michael Hofstetter, ETH Zurich

S. Röllin, P. Steinegger

Quantifying Total Mercury in Plankton by Cold Vapor Atomic Fluorescence Spectroscopy: Simple and Efficient Acid Digestion Procedure [AS-113]

João Santos, University of Geneva

L. Mehmeti, V. I. Slaveykova

Additive Electrochemical Oxidation of Ascorbic Acid and Glucose in Enzyme Based Blood Electrochemical Meters [AS-114]

Ritik Singhal, International School of Basel

K. Ravuri

Hyphenated MS-Methods as a Tool for Orthogonal Metabolite Annotation in On-Line Breath Analysis with SESI-HRMS [AS-115]

Albin Vadakkechira, ETH Zurich

C. Wüthrich, P. Fuchsmann, G. Vergères, R. Zenobi, S. Giannoukos

Development of an NMR Method for the Quantification of Phthalimidoperoxycaproic acid (PAP) in Tooth Whitening Products [AS-116]

Diego Zenhäusern, University of Bern

C. Melendez, J. Furrer, P. Vermathen, M. Vermathen

Computational Chemistry [CC]**Poster Session****Computational Study of the Mechanical Properties of Epoxy Resins and Carbon Nanotubes Doped with SiO₂ Nanoparticles [CC-101]**

Alejandro Bastos R., Central University of Venezuela

J. G. Parra, R. Hernández, J. Castillo, V. Mujica

Molecular Hypergraph Neural Network [CC-102]

Junwu Chen, EPFL Lausanne

A machine learning-based QSAR approach to predict biological removal of organic micropollutants during wastewater treatment [CC-103]

Jose Cordero, Eawag Dübendorf

K. Fenner

Perturbatively corrected ring-polymer instanton theory for accurate tunneling splittings [CC-104]

Jindřich Dušek, ETH Zurich

J. E. Lawrence, J. O. Richardson

Insights into the nature of host-guest interactions in emergent framework materials [CC-105]

Michelle Ernst, University of Zurich

G. Gryn'ova

Mirrors and reaction rates: how “quantum” is vibrational polariton chemistry? [CC-106]

Marit Fiechter, ETH Zurich

J. E. Runeson, J. E. Lawrence, J. O. Richardson

Redox-Based Defect Detection in Packed DNA: Insights from Hybrid Quantum Mechanical/Molecular Mechanics Molecular Dynamics and Feature Selection Studies [CC-107]

Sophia Johnson, EPFL Lausanne

M. Kılıç, P. Diamantis, O. Toth, U. Rothlisberger

Tunnelling in Complex Molecular Systems: Bridging Theory and Experiment [CC-108]

Gabriel Laude, ETH Zurich

J. O. Richardson

Explicit treatment of the time-dependent electromagnetic excitation in the nonadiabatic quantum dynamics in the adiabatic basis [CC-109]

Yebin Lee, EPFL Lausanne
J. Vaníček

Efficient high-order symplectic integrators for the variational Gaussian wavepacket dynamics [CC-110]

Roya Moghaddasi Fereidani, EPFL Lausanne
J. Vaníček

Autonomous Active Space Calculations through AutoCAS [CC-111]

Maximilian Mörchen, ETH Zurich
M. Reiher

Encoding Stereochemistry in Molecular Fingerprints [CC-112]

Markus Orsi, University of Bern
D. Probst, J. Reymond

Automated Reaction Network Exploration of Ozonation Processes in Water Treatment [CC-113]

Enric Petrus, Eawag Dübendorf
J. P. Unsleber, T. Weymuth, M. Reiher, U. von Gunten, T. B. Hofstetter

Data-Driven Discovery of Electrocatalysts for the CO₂ Reduction Reaction: Getting Into the Right Shape [CC-114]

Bojana Ranković, EPFL Lausanne
L. E. Zaza, R. Buonsanti, P. Schwaller

ChORISO: a highly curated organic reaction SMILES dataset [CC-115]

Victor Sabanza Gil, EPFL Lausanne
A. M Bran, M. Franke, P. Schwaller, J. Luterbacher

Frozen density embedding of CASSCF wavefunctions in CP2K [CC-116]

Lukas Schreder, University of Zurich
S. Lubner

Nonadiabatic reactions and tunnelling: beyond the golden-rule approximation [CC-117]

George Trenins, ETH Zurich
J. O. Richardson

Efficiently Charting Chemical Reaction Space with First-Principles Methods [CC-118]

Jan Unsleber, ETH Zurich
M. Reiher

Machine Learning-Driven Yield Prediction in Organometallic Cross-Coupling Reactions [CC-119]

Vivek Vijay, Mahatma Gandhi University
C. Rajalakshmi, A. Vijayakumar, V. I. Thomas

Prediction of Chemical Reaction Yields for C-O Cross-Coupling Reaction Using Machine Learning Technique [CC-120]

Abhirami Vijayakumar, Mahatma Gandhi University
C. Rajalakshmi, V. Vijay, V. I. Thomas

**Catalysis Sciences & Engineering [CE]
Poster Session****Catalytic polysaccharide hydrolysis using separable Brønsted acidic imidazolium salts and ionic polymers in water [CE-101]**

Kedar Abhyankar, EPFL Lausanne
R. J. Somerville, Z. Fei, P. J. Dyson

Controlled Modification of Cobalt Phosphide by Sulfur for Tuned Catalytic Properties in Hydrogenation [CE-102]

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

Co/Co Oxide Foam Catalysts for Sustainable Nitrate to Ammonia Electroreduction [CE-103]

Nandu Ashtaman Pillai Syamaladevi, University of Bern
A. Dutta, J. Drnec, P. Broekmann

Local structure of PdO/Al₂O₃ catalysts during aqueous phase reduction [CE-104]

Daniele Bonavia, European Synchrotron Radiation Facility, Grenoble
A. Ricchebuono, E. Vottero, R. Pellegrini, A. Piovano, E. Groppo, S. Checchia, D. Ferri

Inverted RDE for True OER Catalyst Degradation Assessment [CE-105]

Aline Bornet, University of Bern
P. Moreno-García, M. d. Gálvez-Vázquez, M. Arenz, P. Broekmann

Combinatorial neutron imaging for in-situ alkane adsorption analysis over C₁-C₄ coupling catalysts [CE-106]

Alessia Cesarini, ETH Zurich
M. Nikolic, P. Trtik, J. A. van Bokhoven, A. Borgschulte

Low-Cost CuX Catalyst from Blast Furnace Slag Waste for Low-Temperature NH₃-SCR [CE-107]

Lin Chen, Chongqing University/Paul Scherrer Institut, Villigen
S. Ren, Q. Liu, D. Ferri

A Surface Organometallic Chemistry Platform for Efficient Deoxygenation of Small Molecule Oxygenates [CE-108]

Christian Ehinger, ETH Zurich
B. Berger, X. Zhou, C. Copéret

Operando transient EPR spectroscopy of N₂O activation and reaction on Fe-zeolites [CE-109]

Davide Ferri, Paul Scherrer Institut, Villigen
F. Buttignol, J. Fischer, A. Garbujo, G. Jeschke, O. Kröcher

Cation effect on electrocatalytic nitrate reduction to ammonia [CE-110]

Jonas Forner, University of Bern
Y. Wang, A. Dutta, P. Broekmann

Boosting Nitrate to Ammonia Electroconversion through Hydrogen Gas Evolution over Cu-foam@mesh Catalysts [CE-111]

Jonas Forner, University of Bern, Y. Wang, A. Dutta, A. Iarchuk, C. Sun, S. Vesztergom, P. Broekmann

Design of organometallic complexes as precursors for catalysts with tuneable properties [CE-112]

Lindsey Frederiksen, EPFL Lausanne
P. J. Dyson

Aging of DeNO_x and DeN₂O catalysts for Nitric Acid plant [CE-113]

Alberto Garbujo, Casale SA
F. Oldani, R. Lanza, A. Lahougue, E. Rohart, P. Biasi

Evolution of active species in ethylene epoxidation over silver foil revealed by ambient pressure X-ray photoelectron spectroscopy [CE-114]

Man Guo, Paul Scherrer Institut, Villigen
J. A. Bokhoven, L. Artiglia

Titanium Surface Sites in Ziegler-Natta Pre-Catalysts from ^{47/49}Ti solid-state NMR Signatures [CE-115]

Christoph Kaul, ETH Zurich
A. Yakimov, Y. Kakiuchi, S. Sabisch, F. M. Bolner, J. Raynaud, V. Monteil, P. Berruyer, C. Copéret

Decoding Solid-State NMR Descriptors of Group(VI)-Metal and Ligand Nuclei using Machine Learning [CE-116]

Magdalena Lederbauer, ETH Zurich

Z. J. Berkson, Y. Kakiuchi, J. Roudin, M. Seidel, K. Jorner, C. Copéret

Metal-Like Molecule for Stable Oxygen-Evolution: Natural Mimic by Integrating Co₄O₄ Cubane into Polypyrrole [CE-117]

Shangkun Li, University of Zurich

Z. Zhang, G. R. Patzke

Novel Iridium-Based Electrocatalyst on Titanium Substrates for the Oxygen Evolution Reaction [CE-118]

Julia Lorenzetti, University of Bern

P. Moreno-García, A. Bornet, P. Broekmann, M. Arenz

¹⁸PYE⁺ / ¹⁸PYEH complex as self-regenerated NADH cofactor [CE-119]

Laura Monte, University of Bern

N. Lentz, F. Paradisi, M. Albrecht

Metal-ligand Cooperative Rhodium Complexes as Highly Active N₂O Hydrogenation Catalysts [CE-120]

Sven Thomas Nappen, ETH Zurich

M. Trincado, A. Thomas, H. Grützmacher

Understanding the catalytic pyrolysis mechanism of lignin constituents: the importance of functional groups [CE-121]

Zeyou Pan, ETH Zurich

X. Wu, A. Bodi, S. Bjelic, J. A. van Bokhoven, P. Hemberger

Tandem Carbon Capture and Catalysis over Amine-Functionalized Metal-Organic Frameworks for CO₂ Hydrogenation to Methanol [CE-122]

Fabio Peixoto Esteves, Paul Scherrer Institut, Villigen

J. A. van Bokhoven, M. Ranocchiari

Exploration of Novel Optically Active Resorcin [4]arene Capsule Derivatives for Enantioselective THT Cyclizations [CE-123]

Giacomo Persiani, University of Basel

D. Sokolova, K. Tiefenbacher

Novel triple mutant of an extremophilic glycosyl hydrolase enables the rapid synthesis of thioglycosides [CE-124]

Lauriane Pillet, University of Bern

D. Lim, N. Almulhim, A. Benítez-Mateos, F. Paradisi

Validation of the Iron Catalyst for green ammonia application [CE-125]

Cristina Pizzolitto, Casale SA

A. Biasin, M. Guiotto, P. Biasi

Pd single-atom heterogeneous catalyst for sustainable Sonogashira cross-coupling on scale [CE-126]

Dario Poier, ETH Zurich

D. Akl, E. G. Lucas, S. Mitchell, G. Guillén-Gosálbez, J. Pérez-Ramírez, R. Martí

Liquid product quantification *via* NMR in CO₂ electrocatalytic reduction over phosphate-derived nickel catalysts [CE-127]

Phil Preikschas, ETH Zurich

A. J. Martín, J. Pérez-Ramírez

Investigation and optimization of iridium complexes bearing O-functionalized PYE ligands for efficient formic acid dehydrogenation [CE-128]

Sabela Reuge, University of Bern

N. Lentz, M. Albrecht

Highly Efficient Hydrosilylation of Ketones and Aldehydes Catalysed by an Iron-Mesoionic Carbene Complex [CE-129]

Nathalie Rowlinson, University of Bern

W. Stroek, M. Albrecht

Sustainability at the center of novel technologies development [CE-130]

Annalisa Sacchetti, Casale SA

G. Caminada, P. Biasi, A. Casas, J. Garcia Serna

Investigation of Alumina-based Pt-Ga Systems for Non-Oxidative Propane Dehydrogenation Reaction [CE-131]

Kazutaka Sakamoto, ETH Zurich

M. Plodinec, A. Yakimov, E. Lam, P. Laveille, O. Safonova, C. Copéret

Covalent Functionalization of Transition Metal Phosphide Catalysts with Aryl Groups [CE-132]

Yu-Chun Shen, University of Basel

V. Wyss, M. F. Delley

Defined precursors for atomically dispersed catalysts [CE-133]

Rosie Somerville, EPFL Lausanne

J.-C. Schmidt, K. A. Abhyankar, P. J. Dyson

Flow Synthesis of L-Pipecolic Acid using a Lysine Cyclodeaminase [CE-134]

Kaja Stalder, University of Bern

A. I. Benítez-Mateos, F. Paradisi

A Novel Electrochemical Approach to Sustainable NO_x Reduction from Diluted Gas Streams [CE-135]

Kim Trösch, ETH Zurich

A. Singh-Morgan, V. Mougel

Mechanistic Investigations of “Ligand-Free” Kumada-Tamao-Corriu Cross-Coupling Reactions [CE-136]

Luca Vedani, University of Bern

A. M. Borys, E. Hevia

Electrocatalytic generation of metal hydrides promoted by concerted proton electron transfer mediators for the transformation of small molecules [CE-137]

Alessandro Walker, ETH Zurich

M. Inoue, V. Mougel

Protection of Methanol Synthesized From Methane via The Formation of Asymmetric Ethers [CE-138]

Johannes Wieser, ETH Zurich

J. A. van Bokhoven

The Surface Chemistry of Cobalt Sulfide in Thermo-Catalytic Oxygen Transfer Reactivity [CE-139]

Vanessa Wyss, University of Basel

M. F. Delley

Cobalt-Based CO₂ Hydrogenation: Link Between Particle Size, Oxidation State and Product Selectivity [CE-140]

Xiaoyu Zhou, ETH Zurich

G. Sunley, C. Copéret, G. Sunley

Design of selective, stable, and scalable ZnZrO_x catalysts for sustainable methanol synthesis from CO₂ [CE-141]

Tangsheng Zou, ETH Zurich

T. Pinheiro Araújo, J. Morales-Vidal, M. Agrachev, P. O. Willi, R. N. Grass, G. Jeschke, S. Mitchell, N. López, J. Pérez-Ramírez

Chemistry and the Environment [EV] Poster Session

Characterization of the main European mineral water brands based on the ion composition [EV-101]

Zsolt Bodor, Sapientia Hungarian University of Transylvania
K. Bodor, B. Tokos, Á. Keresztesi, R. Szép

Designing supramolecular liquid-crystalline materials from pyrenyl-dendrimers by encapsulation in metallacycles [IC-102]

Ralf Kaegi, Eawag Dübendorf
M. Philipp, T. D. Bucheli

Formation kinetics and hydrolysis properties of organic peroxides from monoterpene-derived Criegee intermediates with various organic acids [EV-103]

Kangwei Li, University of Basel
J. Resch, M. Kalberer

Direct Irradiation of Aromatic Methyl Thioether Compounds [EV-104]

Sahar Naim, ETH Zurich

Towards Streamlined Environmental Persistence Assays for Trace Organic Contaminants: Preliminary Findings from High-Throughput Biodegradation Testing [EV-105]

Sarah Partanen, Eawag Dübendorf
K. Fenner

Development of plant-volatile-based remote sensing for early detection of insect pest presence and crop protection [EV-106]

Sergio Ramos, University of Zurich
C. Geckeler, J. Lang, S. Mintchev, M. C. Schuman

Online Quantification of Oxidative Potential from Residential Wood Combustion (RWC) and Car Exhaust Aerosol [EV-107]

Battist Utinger, University of Basel
A. Barth, S. J. Campbell, M. Kalberer

The fate of heavy metals in industrial recycling facilities of e-waste [EV-108]

Jelle Verdonck, KU Leuven
K. Poels, J. Vanoirbeek, E. Smolders, L. Godderis

Inorganic Chemistry [IC] Poster Session

Cesium Distribution in Perovskites revealed by ¹²⁷I NQR [IC-101]

Marcel Aebli, ETH Zurich
N. Porenta, N. Aregger, M. Kovalenko

Acetylene-Based Layered Hybrid Perovskites [IC-102]

Ghewa AlSabeh, Adolphe Merkle Institute & EPFL Lausanne
L. Pfeifer, D. Kubicki, L. Merten, A. Hinderhofer, D. Moia, I. Moudrakovski, J. Maier, J. V. Milić, M. Grätzel

Nickel-Catalyzed Cyclopropanation of Unactivated Olefins [IC-103]

Maurice Andrey, ETH Zurich
S. A. Künzi, P. Chen

Dissolution-Precipitation Synthesis of Pyrochlore-Type Iron Hydroxy Fluoride for Low-Cost Lithium-Ion Batteries [IC-104]

Julian Baumgärtner, ETH Zurich
M. Wörle, C. P. Guntlin, F. Krumeich, S. Siegrist, V. Vogt, D. C. Stoian, D. Chernyshov, W. van Beek, K. V. Kravchyk, M. V. Kovalenko

Lead Halide Perovskite Nanocrystals passivated with guanidinium-based ligands [IC-105]

Yuliia Berezovska, ETH Zurich
C. Bernasconi, M. Bodnarchuk, D. Dirin, A. Guagliardi, M. Kovalenko

Nickelate-Catalysed Alkynylation of (Poly)Fluoroarenes [IC-106]

Andryj Borys, Universitat Bern
L. Vedani, E. Hevia

Introducing Isocyanide Ligands into the Cyclopentadienone Iron Complex Framework [IC-107]

André Bütikofer, ETH Zurich
P. Chen

Structural investigation of chelating agents and their mercury, lead and cadmium (II) complexes [IC-108]

Dib Chakif, University of Bern
I. Gjurroski, J. Furrer

Investigation of Iron(III) Schiff-Based Complexes for Carbon Dioxide Reduction [IC-109]

Daniel Civettini, University of Zurich

Redox-Transmetalation and Associated Bimetallics Based on an Al/Zn System [IC-110]

Fabian Dankert, University of Bern
E. Hevia

Intrinsic formamidinium tin iodide nanocrystals by suppressing the Sn(IV) impurities [IC-111]

Dmitry Dirin, ETH Zurich
A. Vivani, M. Zacharias, T. Sekh, I. Cherniukh, M. Aebli, A. Wiczorek, S. Siol, M. Kovalenko, M. Bodnarchuk

The Co-C Bond in the Gas Phase [IC-112]

Felix Fleckenstein, ETH Zurich
P. Chen

The electronic structure of molecular Pt clusters from solid-state ¹⁹⁵Pt NMR, one atom at the time. [IC-113]

Domenico Gioffrè, ETH Zurich
A. Yakimov, C. Copéret

Iron-mesoionic carbene complexes for catalytic intramolecular C-H amination: novel ligand synthesis [IC-114]

Luke Hudson, University of Bern
W. Stroek, M. Albrecht

Exploring Trans(amination) Reactions in Co(II) Chemistry [IC-115]

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

Dinitrogen cleavage by a multinuclear U(III) complex in absence of cations [IC-116]

Nadir Jori, EPFL Lausanne
M. Keener, R. Scopelliti, T. Rajeshkumar, L. Maron, M. Mazzanti

Alkali-Metal-Alkoxide Powered Zincation of Fluoroarenes Employing Zinc Bis-Amide Zn(TMP)₂ [IC-117]

Neil Judge, University of Bern
E. Hevia

Phosphine Oxide-Functionalized Terthiophene Redox Systems [IC-118]

Daniel Käch, ETH Zurich
A. C. Gasser, L. Wettstein, C. Schweinzer, M. J. Bezdek

Activation of Methyltrioxorhenium for Olefin Metathesis by a Frustrated Lewis Pair [IC-119]

Péter Kalapos, ETH Zurich
Y. Stöferle, P. Chen

Understanding the preparative green MOF-74 synthesis by time-resolved ATR-IR and XRD measurements [IC-120]

Iliia Kochetygov, Paul Scherrer Institut, Villigen
M. Ranocchiari, D. Ferri

Colloidal ternary telluride quantum dots for tunable phase change optics in the visible and near-infrared [IC-121]

Dhananjaya Kumaar, ETH Zurich

Metal Template Synthesis of Aromatic Preorganized Ligands for Tuning Stability Constants in Lanthanide Adducts [IC-122]

Giau Le-Hoang, University of Geneva

Exploiting Cobalt(II) Amide Complexes in Deprotonative Metalation of Fluoroaromatic Molecules [IC-124]

Alessandra Logallo, University of Bern

E. Hevia

Crystal growth of new van der Waals materials solid solutions (TM' , TM'') I_2 ($TM = Co, Fe, Ni$) with tuned magnetic properties [IC-125]

Anastasiia Lukovkina, University of Geneva

E. Giannini, F. von Rohr

Unlocking Cyclometalation: Catalytic Transmetalation Towards Cyclometalated Gold(III) Complexes [IC-126]

Jaime Martín, University of Zurich

E. Gómez-Bengoa, C. Nevado

Synthesis, Characterization and Reactivity of 7-Coordinate Molybdenum Alkyl Complexes Supported by β -Diketonates [IC-127]

Fabio Masero, ETH Zurich

V. Mougel

Cyclometalated ligand affords highly reducing U(III) complex [IC-128]

Dieuwertje Modder, EPFL Lausanne

R. Scopelliti, M. Mazzanti

Study of the Anticancer Activity of Polyoxometalates [IC-129]

Jaclyn Parris, University of Zurich

Salen-derived multi-metallic complexes [IC-130]

Jocelyn Pradegan, University of Fribourg

K. M. Fromm

Pulsed laser deposition of Ho_2O_3 Röntgen Thin Films [IC-131]

Sharath Rameshbabu, Empa Dübendorf

D. Bleiner

Efficient alcohol oxidation with novel manganese(III) complexes with bis(phenolate)-NHC ligands [IC-132]

Giacomo Rigoni, University of Bern

P. Nylund, M. Albrecht

Anticancer rhenium di- and tricarbonyl complexes and synthesis of new α -diimine rhenium dicarbonyl complexes [IC-133]

Kevin Schindler, University of Fribourg

J. Delasoie, J. Rossier, A. Crochet, A. Pavic, F. Zobi

Synthesis and Characterization of POM-Cubane Hybrids [IC-134]

Aaron Schultz, University of Zurich

Designing Advanced Battery Materials Beyond Lithium-Ion Technology [IC-135]

Zhi Wei Seh, A*STAR, Singapore

Towards the Experimental Determination of the Hydricity of Silanes [IC-136]

Laurent Sévery, CEA Saclay

A. Mifleur, T. Cantat

Defined patches of interwoven materials [IC-137]

Luise Sokoliuk, University of Basel

Inside or outside the box? Confinement-driven and surface catalysis with coordination cages [IC-138]

Atena Solea, EPFL Lausanne

M. D. Ward

Computational Design of Surface Capping Ligands for Structurally Soft Metal Halide Nanocrystals [IC-139]

Andriy Stelmakh, ETH Zurich

V. Morad, M. Svyrydenko, L. Feld, M. Aebli, A. Baumketner, M. Kovalenko

The ion-funnel-to-IVAC system for chemistry experiments with radionuclides having half-lives in the sub-second regime [IC-140]

Georg Tiebel, Paul Scherrer Institut, Villigen

R. Dressler, R. Eichler, C. M. Folden III, D. Herrmann, A. Kirkland, E. Tereshatov, A. Vögele, P. Steinegger

Tailoring Sodium Organometallic Reagents for Arena Functionalization [IC-141]

Andreu Tortajada, University of Bern

E. Hevia

Surface Functionalization of Carbon Substrates with Host-Guest Complexes for Electrocatalysis [IC-142]

Işık Tunçay, University of Zurich

L. Sévery, P. Adams, D. Tilley

Band-Edge Modification of Quantum Dots by Solvation [IC-143]

Yan Vogel, Delft University of Technology

A. J. Houtepen, Y. B. Vogel

Group-subgroup relation and superconductivity in ternary compounds with AIB_2 -type structure [IC-144]

Dorota Walicka, University of Geneva

F. O. von Rohr

Gas-Phase Adsorption Chromatography of Thallium on Dehydroxylated Fused Silica Surfaces [IC-145]

Jennifer Wilson, Paul Scherrer Institut, Villigen

K. Tsukada, M. Asai, Y. Ito, R. Eichler, A. Toyoshima, P. Steinegger, T. Sato

Ultrafast-sintered self-standing LLZO membranes for high energy density Li-garnet solid-state batteries [IC-146]

Huanyu Zhang, ETH Zurich

F. Okur, R. Dubey, M. Inniger, R. Wullich, D. T. Karabay, A. Parrilli, A. Neels, K. V. Kravchyk, M. V. Kovalenko

Medicinal Chemistry & Chemical Biology [MC] Poster Session**Antimicrobial peptide-peptoid hybrids to control multidrug resistant Gram-negative bacteria [MC-101]**

Etienne Bonvin, University of Bern

J. L. Reymond

Redesigning PAMAMs: Antimicrobial Inverse-Poly-amidoamine (i-PAMAM) Dendrimers [MC-102]

Etienne Bonvin, University of Bern

J. L. Reymond

Chemical synthesis of c-Myc transactivation domain using a synthesis/solubility tag [MC-103]

Héloïse Bürgisser, University of Zurich

R. Lescure, A. Jeandin, A. Premanand, E. T. Williams, N. Hartrampf

From screening to structure - Boosting NMR-based drug discovery with hyperpolarization and label-free structure determination [MC-104]

Matthias Bütikofer, ETH Zurich

F. Torres, G. Stadler, T. Segawa, H. Kadavath, R. Riek, J. Ort

Fluorescent labeling of cellular DNA for an exploration of in-situ chromatin structure [MC-105]

Wei Cai, EPFL Lausanne

Production of Semisynthetic Tubulin with Definable Post-Translational Modification [MC-106]

Po-Han Chang, EPFL Lausanne

E. Ebberink, S. Fernandes, C. Aumeier, B. Fierz

Inhibition of Cell Motility by Cell-Penetrating Dynamic Covalent Cascade Exchangers - Integrins Participate in Thiol-Mediated Uptake [MC-107]

Filipe Coelho, University of Geneva

S. Saidjalolov, D. Moreau, O. Thorn-Seshold, S. Matile

Unlocking the high-throughput potential of peptidomimetic diversification [MC-108]

Nathan De Sadeleer, EPFL Lausanne

A. Nielsen, S. Ballet, C. Heinis

Single-molecule studies elucidate the 5'exon binding mechanism for group II intron splicing [MC-109]

Besim Fazliji, University of Zurich

K. M. Egger, S. Zelger-Paulus, R. K. Sigel

Semi-Synthesis of Thioglycoside Derivatives of the Natural Product Antibiotic Fidaxomicin [MC-110]

Isabella Ferrara, University of Zurich

A. Altorfer, M. D. Salim, G. Chesnokov, S. Dittmann, S. Sievers, K. Gademann

Characterising RNA G-quadruplex structure [MC-111]

Carla Ferreira Rodrigues, University of Zurich

Z. Wang, S. Johannsen, R. K. Sigel

Developing Molecular Tools for the Study and Detection of Calcium-Sensing Receptor [MC-112]

Jérôme Fischer, University of Bern

D. Batora, L. Dick, R. Kaderli, J. Gertsch, M. Lochner

A chemical biology approach to decipher chromatin ubiquitylation by RNF168 [MC-113]

Pauline Franz, EPFL Lausanne

C. Delvaux de Fenffe, B. Fierz

Matched Pair Theranostics with ^{99m}Tc and ¹⁸⁸Re-DETA-N-Onartuzumab for the c-Met Receptor. [MC-114]

Jonas Genz, University of Zurich

S. Klingler, J. P. Holland

Development of novel 4-chloro-2-(2-phenoxyacetamido)benzoic acid based TRPM4 inhibitors [MC-115]

Christian Gerber, University of Bern

P. Grossenbacher, S. A. Singer, M. Lochner

Paving the way to provide the β -emitting ¹⁶¹Tb radionuclide for clinical studies: challenges and lessons learned [MC-116]

Pascal Grundler, Paul Scherrer Institut, Villigen

C. Favaretto, Z. Talip, U. Köster, J. Zeevaart, S. Geistlich, R. Schibli, N. P. van der Meulen

Discovery & synthesis of mucosal glycans for attenuating virulence in pathogens [MC-117]

Rachel Hevey, University of Basel

Deciphering the intricate structure and dynamic behavior of the minimal HDV-like ribozyme Drz-Mtgn-1 [MC-118]

Soumyadip Jana, University of Zurich

S. Johannsen, R. Sigel

Antibiotics conjugated small tag for bacterial labeling and monitoring of drug uptake/efflux [MC-119]

Krittapas Jantarug, University of Zurich

V. Tripathi, B. Morin, A. Iizuka, D. Bumann, N. Khanna, P. R. Fuentes

Stapled-Peptide PROTACs by Hypervalent Iodine Staples [MC-120]

Yuji Kamei, EPFL Lausanne

E. Delavictoire, B. Fierz, J. Waser

Synthetic Molecular Motor Activates Drug Delivery from Polymersomes [MC-121]

Maria Korpidou, University of Basel

A. Guinart, D. Doellerer, G. Pacella, M. C. Stuart, I. A. Dinu, G. Portale, C. Palivan, B. L. Feringa

Phospholipid Bicelles as Topical Delivery Systems for Porphyrinic Photosensitizers [MC-123]

Daja Kruppenacher, University of Bern

I. Gjuroski, S. Kässmeyer, P. Vermathen, J. Furrer, M. Vermathen

A HaloTag-based Gene Reporter System for Live-Cell Imaging and High-Throughput Screening [MC-124]

Henriette Lämmermann, University of Zurich

J. Nguyen, G. Turcatti, M. Chambon, F. Kuttler, J. Bortoli Chapalay, P. Rivera-Fuentes

Advancing RNA Research: A Novel Approach for High-Yield Synthesis and Labeling of Long RNA Strands [MC-125]

Niko Lindlar, University of Zurich

S. Zelger-Paulus, R. K. Sigel

Electron transfer processes in *Geobacter sulfurreducens* [MC-126]

Salem Majouri, University of Fribourg

M. Karamash, K. M. Fromm, B. Giese

Scaling-up enzyme immobilization: efficiency and productivity of two model systems [MC-127]

Valentina Marchini, inSEIT AG

D. Roura Padrosa

Design, synthesis and screening of herbicidal activity of new protoporphyrinogen oxidase-inhibitors (PPO) overcoming resistance issues. [MC-128]

Rebecca Mattison, Bayer AG

J. Frackenpohl, B. Bollenbach-Wahl, J. Freigang, I. Heinemann, H. Helmke, E. Gatzweiler, G. Lange, H. Jakobi

Characterization of the Glutathione Redox State of the Golgi Apparatus [MC-129]

Carla Miró-Vinyals, University of Zurich

S. Emmert, G. Grammbitter, P. Rivera-Fuentes

How Ring-Size, Stereochemistry and Substituents Modulate the Activity of a Nanomolar JAK1 Inhibitor [MC-130]

Kleni Mulliri, University of Bern

K. Meier, J. Reymond

Characterization of Amyloid β aggregation via Supercritical Angle Fluorescence and Raman microscopy and spectroscopy [MC-131]

Nathalia Münch, University of Zurich

S. Seeger

Assessing the cellular permeability of peptidic macrocycles in high-throughput [MC-132]

Alexander L. Nielsen, EPFL Lausanne

C. Bartling, K. Strømgaard, C. Heinis

Machine Learning Guided Exploration of Antimicrobial Peptide Chemical Space [MC-133]

Basak Olcay, University of Bern

M. Orsi, J. L. Reymond

Determination of Biomarkers in Liver Disease by In vivo and Ex vivo NMR [MC-134]

Chiamaka Onyia, University of Bern

P. Vermathen, M. Vermathen

CBP/p300 Degradors: When Cooperativity Overcomes Affinity [MC-135]

Leonardo Palaferri, University of Zurich
K. Gosselé, I. Cheng-Sánchez, E. Laul, A. Müller, Y. Li, A. Caflisch, C. Nevado

Advancing Type II DNA Topoisomerase Research through QM/MM Simulations and Development of Catalytic Inhibitors [MC-136]

Andrej Perdih, National Institute of Chemistry, Ljubljana
M. Janežič, M. Ogrizek, K. Bergant Loboda, B. Herlah, K. Valjavec, G. Wolber

Hemipiperazines: peptide-derived photoswitches with low-nanomolar toxicity [MC-137]

Zbigniew Pianowski, KIT Karlsruhe
S. Kirchner, A. Leistner, P. Gödtel, A. Seliwjorstow, Z. Pianowski

Sequence and Structure Selectivity of Human Lysyl Oxidase-Like 2 (LOXL2) [MC-138]

Laura Poller, ETH Zurich
M. C. Deen, T. Fiala, E. Schönbachler, R. Heeb, H. Wennemers

Exploring the Binding of natural Molybdenum Cofactor Derivatives to the *moaA* Riboswitch [MC-139]

Maria Reichenbach, University of Zurich
S. Gallo, R. K. Sigel

Site-Specific, Bioorthogonal Protein Labeling by Tetrazine Ligation using Endogenous β -Amino Acid Dienophiles Derived from Natural Product Biosynthesis [MC-140]

Daniel Richter, ETH Zurich
E. Lakis, A. L. Vagstad, S. Magyari, T. A. Scott, J. Piel

Fine-tuning the cytotoxicity of ruthenium(II) arene compounds to enhance selectivity against breast cancers [MC-141]

Jan Romano-deGea, EPFL Lausanne
S. A. Pereira, M. M. Saraiva, P. J. Dyson

Expanding the Chemical Space of Lasso Peptides: Enzymatic Maturation of Synthetic Peptide Precursors [MC-142]

Kevin Schiefelbein, University of Zurich
R. Striga, J. Lang, M. Schuster, O. Zerbe, Y. Li, N. Hartrampf

Amphipathic proline-rich cell penetrating peptides for mitochondria targeting [MC-143]

Adeline Schmitt, ETH Zurich
H. Wennemers

Triggered Release of a potent LPAAT- β inhibitor from inactive prodrugs to kill cancer cells [MC-145]

Céline Schuppisser, University of Bern
S. Yasmin, M. Poirier, G. T. Giuffredi, H. Personne, J. L. Reymond

Astrocyte-specific targeting and kinase inhibition of the TNFR1 pathway [MC-146]

Céline Schuppisser, University of Bern
R. De Ceglia, I. Zalachoras, A. Volterra, J. L. Reymond

Fragment Screening and Fast Nanomolar Detection on a Benchtop NMR Spectrometer Boosted by Photoinduced Hyperpolarization [MC-147]

Gabriela Stadler, ETH Zurich
T. F. Segawa, M. Bütikofer, V. Decker, S. Loss, B. Czarniecki, F. Torres, R. P. Riek

Development of a self-optimizing platform for flow-based peptide synthesis [MC-148]

Bálint Tamás, University of Zurich
P. L. Willi, N. Hartrampf

Drifting in the structure of cell-penetrating DNA- and RNA-binding nucleopeptides [MC-149]

Stefano Tomassi, University of Naples Federico II
C. Ieranò, S. Scala, A. Messere, S. Di Maro

Combinatorial design of nanoparticles for efficient delivery of therapeutic biomacromolecules through the blood brain barrier [MC-150]

Congyu Wu, FHNW Muttenz
N. Santacroce, E. Laprèvote, Y. Dudal, L. Suter-Dick, P. Shahgaldian

Chemically Enhanced Antisense Oligonucleotides: A Molecular Approach for Treating Autosomal Dominant Tubulointerstitial Kidney [MC-151]

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

RNA-PROTACs targeting aggregate prone RNA-Binding Proteins [MC-152]

Céline Weller, ETH Zurich
J. P. Becker, J. Hall

Installation of Electrophiles onto the C-terminus of recombinant ubiquitin and ubiquitin-like proteins [MC-153]

Kateryna A. Tolmachova, ETH Zurich
J. Farnung, J. W. Bode

**Organic Chemistry [OC]
Poster Session****Highly Reactive Hydrocarbon Soluble Alkylsodium Reagents for Benzylic Aroylation of Toluenes using Weinreb Amides [OC-101]**

David Anderson, University of Bern
E. Hevia

Studies Towards the Total Synthesis of Griseoviridin [OC-103]

Carolina Caso, ETH Zurich
A. Perera, K. H. Altmann

Ethynylbenziodoxolones and Cesium Oxalates under Blue Light: from Deoxyalkynylation to Lactonization [OC-104]

Diana Cavalli, EPFL Lausanne
S. G. E. Amos, F. Le Vaillant, J. Waser

Water-Soluble Cationic Porphyrins for MRI [OC-105]

Çetin Çelik, ETH Zurich
Y. Yamakoshi

Advancements in *Trypanosoma cruzi* Mucins: Synthesis of a pentasaccharide constituent of core 2 mucins and derivatives [OC-106]

Carmen Cori Calizaya, University of Basel
L. Altaieff, G. A. Kashiwagi, C. Gallo-Rodriguez

Synthesis of Analogs of (-)-Zampanolide and Structure-Activity Relationship Studies [OC-107]

Etienne Cotter, ETH Zurich
T. Brüttsch, D. Lucena-Agell, S. Berardozzi, F. DíazK. Altmann

The Lyrall Challenge [OC-108]

Julien Coulomb, DSM-Firmenich

Nickel Catalyzed Enantioselective C-H Benzylic Carbamoylation [OC-109]

Sergio Cuesta-Galisteo, University of Zurich
C. Hervieu, J. Schörgenhuber, C. Nevado

Geländer Molecules with Orthogonal Joints: Design, Synthesis, and Properties [OC-110]

Adriano D'Addio, University of Basel
M. Mayor

Iridium-Catalyzed Hydrogenation of Pyridines [OC-111]

Arthur Despois, EPFL Lausanne
N. Cramer

Exploring Regio-Selective Spin Interactions: Positional Isomerism and its Influence on Spin Communication in Light-Induced Multi-Spin Systems [OC-113]

Mélissa El Bitar Nehme, University of Zurich
P. Thielert, M. Mayländer, T. Quintes, M. Franz, S. Zimmermann,
P. Gilch, M. Rickhaus, S. Richert

Neutral Radical Chromophores based on Triple-Functionalized [4]Helicene Scaffolds [OC-114]

Bibiana Fabri, University of Geneva
T. Funaioli, G. Pescitelli, L. Frédéric, F. Zinna, L. Di Bari, J. Lacour

Catalytic *ipso*-Nitration of Organosilanes Enabled by Electrophilic *N*-Nitrosaccharin Reagent [OC-115]

Anthony Fernandes, University of Bern
I. Mosiagin, A. J. Fernandes, A. Budinská, L. Hayriyan, K. E. Yli-joki, D. Katayev

Iridium(III)-catalyzed intermolecular C(sp³)-H amidation for the synthesis of chiral 1,2-diamines [OC-116]

Andrea Geraci, University of Basel
U. Stojiljković, K. Antien, N. Salameh, O. Baudoin

Efficient C-N cross couplings via heterogeneous single-atom catalysis [OC-117]

Georgios Giannakakis, ETH Zurich
S. Fantasia, S. Mitchell, K. Puentener, J. Pérez-Ramírez

Photoredox Activation of Anhydrides and Acids for the Solvent-Controlled Switchable Synthesis of *gem*-Difluoro Compounds [OC-118]

Rahul Giri, University of Bern
D. Katayev

Exploring Conductance Phenomena in Single Molecule Break Junctions using Thiophene Macrocycles with Multiple Pathways [OC-119]

Salome Heim, University of Basel
S. van der Poel, M. Mayor, H. van der Zant

Visible-light-mediated Enantioselective Arylation of Remote C(sp³)-H Bonds via Hydrogen Atom Transfer and Sulfinyl-Smiles Rearrangement [OC-121]

Yawen Hu, University of Zurich
C. Hervieu, E. Merino, C. Nevado

Photouncaging Systems Actuated by Near-Infrared Light [OC-122]

Hana Janekova, University of Zurich
M. Russo, P. Štacko

Chiral arylsulfonylamides: *all-in-one* reagents for visible light-mediated asymmetric alkene aminoarylations [OC-123]

Mariia Kirillova, University of Zurich
C. Hervieu, Y. Hu, S. Cuesta-Galisteo, E. Merino, C. Nevado

Aziridines via 1,3,2-Diazaphospholene-Catalyzed *aza*-MIRC [OC-124]

Johannes Klett, EPFL Lausanne
N. Cramer

Bioinspired Synthesis of Tetraponerines and Analogues Thereof [OC-125]

Frederic Kölblin, ETH Zurich
J. W. Rackl, T. Egger, H. Wennemers

Functionalization of 1,3,6,8-Tetraazapyrene for fused Donor-Acceptor Ensembles [OC-126]

Isabelle Kolly, University of Bern
P. Zhou, R. Häner, S. X. Liu

Methylene C(sp³)-H activation enables stereoselective synthesis of Indidene natural products [OC-127]

Anton Kudashev, University of Basel
S. Vergura, O. Baudoin

Introducing Cinchona Alkaloid Appended Thiol(s) in Gold Nanocluster Chemistry [OC-128]

Subhradip Kundu, University of Geneva
D. Rosa-Gastaldo, A. Rosspeintner, M. Swierczewski, T. Bürgi

Enantioselective beta-arylation of alcohols via a multicatalytic relay [OC-129]

Bruno Lainer, Université de Strasbourg
P. Dydio

Protecting-Group-Free Synthesis of Selenoglycoconjugates in Water [OC-130]

David Lim, University of Bern
F. Paradisi

Studies Towards the Total Synthesis of Cervinomycin Natural Products [OC-131]

Rafael Lombardi, University of Basel
M. Wheatley, O. Baudoin

Mechanistic Investigation of the Rhodium-catalyzed Transfer Hydroarylation between Tertiary Alcohols and Ketones [OC-132]

Marius Lutz, ETH Zurich
S. Roediger, V. Gasser, M. A. Rivero-Crespo, B. Morandi

Streamlined Synthesis and Catalytic Performance of Chiral Cyclic (Alkyl)(Amino)Carbene Transition Metal Complexes Bearing α -Quaternary Stereogenic Centers [OC-133]

Adrien Madron du Vigné, EPFL Lausanne
N. Cramer

Interrupted Polonovski strategy for the functionalization of amino acids and peptides [OC-134]

Christine Marty, EPFL Lausanne
J. Waser

Synthesis and Reactivity of a Terminal 1 Alkynyl Triazene [OC-135]

Christeena Mathew, EPFL Lausanne

CpRu-Catalyzed Multicomponent Synthesis of Polyheterocycles Pyrazolidines Through Cycloadditions and Metal-Carbene Addition [OC-136]

Claire Montagnon, University of Geneva
J. Bultel, C. Besnard, J. Lacour

Synthesis of bicyclo [3.1.1]heptanes and cyclopenta(e)nes by photocatalyzed cycloaddition of carbonyl cyclopropanes. [OC-137]

Tin Nguyen, EPFL Lausanne
A. Bossonnet, J. Waser

***o*-Quinodimethane Atropisomers: Enantioselective Synthesis and Stereospecific Transformation [OC-138]**

Andreas Ostertag, University of Basel
J. Dong, C. Sparr

From Naked-Eye Detection of H-Bond Donors to Chiroptical Sensing of Enantiopure Reagents [OC-139]

Dávid Pál, University of Geneva
C. Besnard, A. I. Poblador-Bahamonde, G. Pescitelli, J. Lacour

Iron-catalyzed synthesis of alpha-azido amino acids: an easy access to versatile building blocks [OC-140]

Pierre Palamini, EPFL Lausanne
E. M. D. Allouche, J. Waser

Core Alkynylated FLIPPER for Fluorescence Membrane Tension Probes [OC-141]

Khurnia Krisna Puji Pamungkas, University of Geneva
I. Fureraaj, L. Assies, N. Sakai, E. Vauthey, S. Matile

Nonacethrene as a magnetic photoswitch: can one methyl group change the game? [OC-142]

Pauline Pfister, University of Zurich
D. Čavlović, C. Moreno Cruz, M. Juríček

Utilizing Sodium Amides in Deep Eutectic Solvents [OC-143]

Andrew Platten, University of Bern
E. Hevia

New neo-clerodane diterpenes from *Teucrium polium* subsp. *capitatum* [OC-144]

Morris Keller, University of Basel
S. Chabane, O. Danton, A. Prescimone, A. Boudjelal, M. Ham-burger, O. Poterat

Carboamination of propargylic alcohols via *in situ* tether formation [OC-145]

Mikus Purins, EPFL Lausanne
J. Waser

Cu(I)-BOX Catalyzed Asymmetric 3-Component Reaction for the Synthesis of Trifluoromethylated Propargylic Ethers and Anilines [OC-146]

Nieves Ramirez, EPFL Lausanne
J. Waser

Electronically flexible pyridylidene amide ligands for palladium-catalyzed α -arylation of ketones [OC-147]

Esaie Reusser, University of Bern
M. Albrecht

Donor-Acceptor Aminocyclobutane Monoesters: Synthesis and Silylium-Catalyzed (4+2) Annulation with Indoles [OC-148]

Emma Robert, EPFL Lausanne
V. Pirenne, M. D. Wodrich, J. Waser

Heteroleptic Covalent Organic Cages [OC-149]

Noah Rychener, University of Amsterdam
S. Meister, L. Sokoliuk, S. Fisher, H. Huang, T. Šolomek

Deciphering the Mechanism of Thiol-Mediated Uptake: μ Map Strategy for Labeling Transient TMU Partners [OC-150]

Saidbakhrom Saidjalolov, University of Geneva
F. Coelho, B. Lim, J. Gajić, D. Moreau, Y. Wu, N. Sakai, S. Matile

Chiral Boramidines: New Boron-Based Materials with Efficient Circularly Polarized Luminescence [OC-151]

Nidal Saleh, University of Geneva
J. Lacour, N. Saleh

An artificial hydrogen bond relay in a supramolecular capsule enables highly selective β -glycosylation [OC-152]

Dario Schmid, University of Basel
T. Li, F. Huck, G. M. Piccini, K. Tiefenbacher

Reaction-Agnostic Featurization of Bidentate Ligands for Bayesian Ridge Regression of Enantioselectivity [OC-153]

Alexandre Schoepfer, EPFL Lausanne
R. Laplaza, J. Waser, C. Corminboeuf

Cyanine Renaissance: Light-Operated Medicine [OC-154]

Peter Stacko, University of Zurich
H. Janekova, M. Russo

Studies towards the total synthesis of macplocimine A [OC-155]

Saiyyna Stepanova, ETH Zurich
M. Zechner, K. Altmann

Anion- π catalysis induced epoxide-opening ether cyclizations on different surfaces [OC-156]

Meiling Tan, University of Geneva
M. Gutiérrez López, N. Sakai, S. Matile

Construction of 4-membered rings through an intramolecular C(sp³)-H activation [OC-157]

Maria Tsitopoulou, University of Basel
A. Clemenceau, P. Thesmar, O. Baudoïn

Divergent Regio- and Enantioselective Synthesis of Spirocycles via Phenol-Directed Cobalt(III)-Catalyzed Dearomative Annulations with Alkynyl Triazenes [OC-158]

Bram Van Den Bossche, EPFL Lausanne
N. Cramer

Facile access towards trans-hydroxyoctahydroazulenone core and total synthesis of diterpenoids Randainin D and Shortolide C [OC-159]

Oleksandr Vyhivskyi, University of Basel
O. Baudoïn

Head-to-Tail dimerization of N-heterocyclic Diazoolefins [OC-160]

Tak Wong, EPFL Lausanne
P. Varava, K. Severin

Dynamic kinetic resolution of racemic amines with stereogenic nitrogen centers [OC-161]

Snizhana Zaitseva, University of Basel
V. Köhler

Enantioselective Synthesis of α Aminoboronic Acid Derivatives via Copper-Catalyzed N Alkylation [OC-162]

Giuseppe Zuccarello, California Institute of Technology
S. M. Batiste, H. Cho, G. C. Fu

C₆₀-Based Switchable Fluorescent Probes [OC-163]

Yue Ma, ETH Zurich
L. Persi, Y. Yamakoshi

Bis-cyclometallated iridium catalysts for ortho directed C-H borylation [OC-164]

Janis Zakis, Université de Strasbourg
A. Mesinis, L. Ackermann, J. Wencel-Delord, T. Smejkal

**Physical Chemistry [PC]
Poster Session****Crystallization of SrAl₁₂O₁₉ Nanocrystals from Amorphous Submicrometer Particles [PC-101]**

Jafar Afshani, University of Geneva
T. Bürgi, H. Hagemann

Enhancing Data Understanding: An Integrated Approach using multivariate statistical techniques in Time-resolved Spectroscopy, case of study: Trans-Cl- [Ru(X,X')-dimethyl-2,2'-bipyridine)(CO)₂Cl₂] [PC-102]

Sergio Aranda, University of Zurich
L. Tatarashvili, K. Oppelt, P. Hamm

Effect of solvation on excited state symmetry breaking using transient infrared spectroscopy [PC-103]

Evangelos Balanikas, University of Geneva
E. Vauthey

Composition-Driven Differences in Active Site Speciation and Behavior in Methane to Methanol Oxidation of Copper Exchanged Chabazite [PC-104]

Andreas Brenig, ETH Zurich
J. W. Fischer, V. L. Sushkevich, D. Klose, G. Jeschke, J. A. van Bokhoven

Can IR substitute X-rays? Quantitative analysis of vibrational spectra powered by machine learning [PC-105]

Aram Bugaev, Paul Scherrer Institut, Villigen
O. Usoltsev, A. Skorynina, D. Ferri, M. Nachtegaal

Phase transition detection of CO₂ through near infrared spectroscopy [PC-106]

Federico Cambiè, Paul Scherrer Institut, Villigen
M. Canossi, C. Pizzolitto, O. Kröcher, I. Alxneit, D. Ferri

Precision spectroscopy of transitions from the metastable 2³S₁ state of ⁴He to high np Rydberg states [PC-107]

Gloria Clausen, ETH Zurich
J. Agner, H. Schmutz, S. Scheidegger, F. Merkt

Properties of γ D-crystallin undergoing Liquid-Liquid Phase Separation studied by EPR and *In-situ* Raman spectroscopy [PC-108]

IDominik Gendreizig, University of Geneva
N. Barbosa, A. Kalarikkal, L. Galazzo, T. Adachi, E. Bordignon

Excited State Dynamics of Electron Injection and Hole Shift in a Dye-Sensitized Photocatalytic System [PC-109]

Chinju Govind, University of Geneva
D. Romito, V. Nikolaou, G. Charalambidis, S. Diring, A. Coutsolelos, F. Odobel, E. Vauthey

Influence of translational and rotational energy on the rate of ion-molecule reactions near 0 K: D₂⁺ + NH₃ and D₂⁺ + ND₃ [PC-110]

Raphaël Hahn, ETH Zurich
V. Zhelyazkova, D. Schlander, F. Merkt

Accessing Higher Vibrational States of He₂⁺ through Multi-Step Excitation [PC-111]

Maxime Holdener, ETH Zurich
F. Merkt

Precision Spectroscopy and Coherent Manipulation of a Single Molecular Nitrogen Ion [PC-112]

Richard Karl, University of Basel
A. Shlykov, M. Roguski, M. Sinhal, P. Paliwal, S. Willitsch

Analysis of the Infrared Spectrum of *trans-c*-2,3-di-deutero-oxirane and further isotopomers [PC-113]

Karen Keppler, ETH Zurich
S. Albert, Z. Chen, C. Manca Tanner, V. Schurig, J. Stohner, O. Trapp, G. Wichmann, M. Quack

High-Resolution Fourier Transform Infrared Spectrum of 1,3-Difluoroallene: a Candidate for the Detection of Molecular Parity Violation [PC-114]

Karen Keppler, ETH Zurich
S. Albert, M. Gottselig, E. Miloglyadov, J. Stohner, G. Wichmann, M. Quack

High-resolution spectroscopy of the ground and low-lying excited states of MgNe⁺ and MgXe⁺ [PC-115]

Carla Kreis, ETH Zurich
J. R. Schmitz, F. Merkt

A Pinch of Sodium: Rapid CO₂ Uptake with MgO-based CO₂ sorbents upon promotion with Na₂CO₃ seeds [PC-116]

Annelies Landuyt, ETH Zurich
I. Kochetygov, M. Krödel, P. M. Abdala, W. L. Queen, C. R. Müller

Determination of fundamental photophysical parameters of gold nanoclusters [PC-117]

Luis Enrique Llanes Montesino, University of Geneva
T. Bürgi, A. Rosspeintner

Using Instanton Theory to Study Quantum Effects in Photosensitization [PC-118]

Meghna Manae, ETH Zurich
J. O. Richardson

Laser cooling of trapped ions in strongly inhomogeneous magnetic fields [PC-119]

Christian Mangeng, University of Basel
Y. Yin, R. Karl, S. Willitsch

Studying rotational-state and conformational effects in chemi-ionisation reactions [PC-120]

Amit Mishra, University of Basel
L. Ploenes, P. Stranak, C. He, S. K. Kim, S. Willitsch

Single-cycle and multi-cycle terahertz pulse generation in beta barium borate (β -BBO) [PC-121]

Seyyed Mousavi, University of Zurich
A. Shalit

Real-time tracking of the ultrafast chirality and energy transfer in a chiral OLED complex with circularly-polarized luminescence [PC-122]

Livia Müller, University of Basel
F. Zinna, M. Oppermann

Unveiling the Impact of Trifluoroacetic Acid on Phase Transitions in Solid-State Synthesis of Cyclo Leu-Leu: Revelations and Implications [PC-123]

Ariel Perez Mellor, University of Geneva
D. Rosa Gastaldo, C. Besnard, N. Giamboni, D. Chernyshov, X. Wang, J. Brazard, R. Cerny, T. Adachi, T. Buergi

Production cross-section measurements of the medically relevant radionuclide thulium-167 using an 18-MeV medical cyclotron [PC-124]

Edoardo Renaldin, Paul Scherrer Institut, Villigen
G. Dellepiane, S. Braccini, N. P. van der Meulen, R. Eichler, Z. Talip

Influence of the collision Energy on the Reaction Rate of the D₂⁺ + H₂O Ion-Molecule Reaction near 0 K [PC-125]

David Schlander, ETH Zurich
R. Hahn, V. Zhelyazkova, F. Merkt

Characterisation of The Ground and Low-Lying Excited States of MgO⁺ by PFI-ZEKE Photoelectron Spectroscopy [PC-126]

Joel Schmitz, ETH Zurich
C. Kreis, F. Merkt

2D-Raman THz Spectroscopy of Ionic Liquids [PC-127]

Saurabh Shukla, University of Zurich
A. Shalit, P. Hamm

Unveiling the Origin of the Lowest-Energy Electronic Absorption Band of Crystal Violet: Insights into Torsional Disorder and Symmetry Breaking [PC-128]

Jihad Sissaoui, University of Geneva
D. Budkina, E. Vauthey

Probing the mechanism of facile water dissociation on oxygen covered Cu(111) by Reflection Absorption Infrared Spectroscopy (RAIRS) [PC-129]

Mateusz Suchodol, EPFL Lausanne
R. D. Beck

Ligand exchange kinetics in the first reduction step of CO₂ reduction catalyst: trans-(Cl)-[Ru(5,5'-dimethyl-2,2'-bipyridine)(CO)₂Cl₂] [PC-130]

Luka Tatarashvili, University of Zurich
S. Aranda, K. Oppelt, P. Hamm

High-resolution spectroscopy and multichannel quantum-defect-theory analysis of high Rydberg states of xenon. [PC-131]

Eirini Toutoudaki, ETH Zurich
H. Herburger, U. Hollenstein, F. Merkt

Investigating Bimolecular Symmetry Breaking Charge Separation in Highly Concentrated Perylene Solutions [PC-132]

Johannes Wega, University of Geneva
E. Vauthey

Progress in the Zurich experiment on parity violation in chiral molecules [PC-133]

Gunther Wichmann, ETH Zurich
G. Seyfang, M. Quack

Trapping and sympathetic cooling of conformationally selected ions [PC-134]

Lei Xu, University of Basel
J. Toscano, S. Willitsch

Cold ion chemistry within a Rydberg electron orbit: the effect of the molecular structure at the lowest collision energies [PC-135]

Valentina Zhelyazkova, ETH Zurich
F. B. V. Martins, S. Schilling, J. A. Agner, H. Schmutz, F. Merkt

Evaporation of polonium from LBE-cooled reactors [PC-136]

Ivan Zivadinovic, ETH Zurich
P. J. Steinegger, J. Neuhausen

Thermosublimatographic study of Te volatile species formed over LBE melts. [PC-137]

Vladislav Zobnin, Paul Scherrer Institut, Villigen
A. Ivan, J. Neuhausen, R. Eichler

**Polymers, Colloids & Interfaces [PCI]
Poster Session****Metalorganic Copolymers From Iron(II) Clathrochelates: Versatile Materials and Conspicuous Adsorbents of Lithium Ions, Iodine, and Organic Dyes [PCI-101]**

Bassam Alameddine, Gulf University for Science and Technology
N. Baig, S. Shetty

Revisiting Tröger's Base: Microporous Copolymers Via Sonogashira Cross-coupling and Thiol-Yne Click Reactions For Superior Iodine and Dyes Uptake [PCI-102]

Bassam Alameddine, Gulf University for Science and Technology
N. Baig, S. Shetty

One-dimensional carbon-based nanostructures via the droplet-assisted growth and shaping (DAGS) mechanism [PCI-103]

Rabab Azizi, University of Zurich
S. Seeger

Granular Elastomers for 3D Printing Applications [PCI-104]

Eva Baur, EPFL Lausanne
E. Amstad

Phenanthrene-based Light-Harvesting Supramolecular Polymers for photoredox catalysis [PCI-105]

Romain Brisse, University of Bern
A. Dutta, J. Réhaut, J. Jevric, I. Kolly, S. Langenegger, N. Banerji, P. Broekmann, S. Liu, R. Häner

Dynamic Synthesis of Bamboo-Shaped Silicone Nanorods to Control Water Repulsion and Collection [PCI-106]

Kangwei Chen, University of Zurich
S. Seeger

Self-assembly of cholane-pyrene oligomers [PCI-107]

Edouard Ehret, University of Bern
M. Thiede, S. M. Langenegger, R. Häner

Synthesis of hollow square macrocycle as nanochannels and hollow square helices [PCI-108]

Saqib Farooq, University of Fribourg
A. F. Kilbinger

Quantifying Förster-type energy transfer from single perovskite quantum dots to organic dyes [PCI-109]

Leon Feld, ETH Zurich
S. C. Boehme, V. Morad, Y. Sahin, D. Dirin, G. Rainò, M. V. Kovalenko

Tetraoxa [8]circulene-Based Porous Materials [PCI-110]

Patrick Fritz, University of Fribourg
A. Coskun

3D Printing of functional organoids at room temperature [PCI-111]

Rocío García Montero, EPFL Lausanne
E. Amstad

Scale-up strategy for lipidic mesophases production [PCI-112]

Rafaela Gazzì, University of Bern
P. Luciani, S. Aleandri

Hyperbranched polyarylethenes synthesized by successive C-H vinylation [PCI-113]

Anastasiia Gitlina, EPFL Lausanne
K. Severin

Switchable asymmetric water transport in dense nanocomposite membranes [PCI-114]

Luca Grillo, University of Fribourg
C. Weder

The key role of reaction engineering in catalytic recycling of HDPE and PP [PCI-115]

Shibashish Jaydev, ETH Zurich
K. Chikri, M. Usteri, A. J. Martín, G. Pagani, J. Pérez-Ramírez

Enabling reprocessability and flame retardancy of fiber reinforced epoxy composites via reactive approach [PCI-116]

Wenyu Klingler-Wu, Empa Dübendorf
V. Michaud, G. A. Barandun, S. Gaan

Silicone Nanofilament Coatings as Flexible Catalyst Supports for a Knoevenagel Condensation Reaction in Batch and Flow Systems [PCI-117]

Yuen-Yee Lau, University of Zurich
K. Chen, S. Liu, L. Reith, S. Seeger

Charge-Selectively Permeable Microcapsules [PCI-118]

Chuen-Ru Li, EPFL Lausanne
E. Amstad

Degradable Polymers via Catalytic Living ROMP [PCI-119]

Ankita Mandal, University of Fribourg
A. F. Kilbinger

A Handful of Sustainable Routes for Catalytic Ring-Opening Metathesis Polymerization [PCI-120]

Indradip Mandal, University of Fribourg
A. F. Kilbinger

Hierarchical Self-organization of Polymersomes and Janus Nanoparticles Mediated by DNA [PCI-121]

Voichita Mihali, University of Basel
C. Palivan

Insertion of dynamically self-assembling capsules into planar polymer membranes for specific guest uptake [PCI-122]

Moritz Muthwill, University of Basel
F. Sciortino, M. Bina, C. G. Palivan

Combating multidrug-resistant bacterial infections with peptide-loaded lipid-polymer hybrid nanoparticles [PCI-123]

Evangelos Natsaridis, FHNW Muttentz
R. Nicholas, D. Gaus, O. Tagit

Responsive supramolecular cross-links for healable double polymer networks [PCI-124]

Ilaria Onori, University of Fribourg
J. A. Berrocal, C. Weder

Modulating the Rate of Controlled Suzuki–Miyaura Catalyst-Transfer Polymerization by Boronate Tuning [PCI-125]

Hyunwoo Park, Seoul National University
J. Lee, S. Hwang, D. Kim, S. Hong, T. Choi

Unraveling the synthesis, structure, and properties of zirconia nanocrystals [PCI-126]

Rohan Pokratath, University of Basel
L. Laurent, S. Checchia, J. P. Mathew, S. J. Billinge, B. Abécassis, K. M. Jensen, J. De Roo

What we learnt from PEGylation of virus-like particles for vaccination [PCI-127]

Milad Radiom, ETH Zurich
S. Ganguillet, Y. Turgay, V. Lentsch, T. Keys, E. Causa, J. Kotar, P. Cicuta, R. Mezzenga, E. Slack

Surface functionalization strategies for optimal DNA biosensor performance [PCI-128]

Perrine Robin, EPFL Lausanne
A. Kavand, P. Skigin, L. Mayoraz, S. Marocco, J. Pagnoncelli, D. Staedler, I. Stefanini, S. Gerber-Lemaire

Cascade Cyclopolymerization of 5-Ethynyl-1,8-Nonadiyne Derivatives to Synthesize Low Band Gap Conjugated Polyacetylenes Containing a Fused Bicyclic Structure [PCI-129]

Hanseul Ryu, ETH Zurich
J. Sung, G. Kim, Y. Xu, R. H. Grubbs, T. Choi

Solution-processed phase-change memory from molecular telluride inks [PCI-130]

Florian Schenk, ETH Zurich
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Co-assembly of Shape Anisotropic Lead Halide Perovskite Nanocrystals into Functional Binary Superlattices [PCI-131]

Taras Sekh, ETH Zurich
I. Cherniukh, E. Kobiyama, T. Stöferle, R. Erni, G. Itskos, M. I. Bodnarchuk, M. V. Kovalenko

Lithium niobate nanoparticles functionalization with proteins for cancer active targeting [PCI-133]

Alessandra Spada, EPFL Lausanne
A. Gheata, S. Gerber

Supramolecular Assembly of Pyrene-DNA Conjugates into Columnar Vesicles [PCI-134]

Jan Thiede, University of Bern
I. Iacovache, S. Rothenbühler, S. M. Langenegger, B. Zuber, R. Häner

Unraveling Structure Formation in Tailor-Made Buriti Oil Emulsion during Simulated Digestion [PCI-135]

Rafael V M Freire, University of Fribourg
L. Hong, M. Peterek, S. Canarelli, S. Rezzi, S. Salentinig

Bio-Inspired Hierarchical Structure Formation in a Supramolecular Polymer [PCI-136]

Matthieu Wendling, EPFL Lausanne

Structural elucidation of shape-assisted self-assembled nanosheets from π -saddles [PCI-137]

Joseph Woods, University of Zurich
L. Gallego, C. Cuocci, G. Steinfeld, O. Blacque, B. Spingler, A. Vargas Jentzsch, M. Rickhaus

Size-Tunable Semiconducting 2D Nanorectangles from Conjugated Polyenyne Homopolymer Synthesized via Cascade Metathesis and Metallotropy Polymerization [PCI-138]

Namkyu Yun, ETH Zurich
C. Kang, S. Yang, S. Hwang, J. Park, T. Choi

Enhancing Volumetric Capacitance in pGBTBT Polymers through Ethylene Glycol Side Chain Variation and Blending Approaches [PCI-139]

Kaishuai Zhang, University of Bern
L. Bynens, N. Banerji, W. Maes

The complete program and all abstracts are available as interactive application on <https://fm23.scg.ch/>



FUTURE OF CHEMICAL EDUCATION (CHEMEDU'23)

Organized by the SCS Division of Chemical Education
24th August 2023, 08:30–13:00, vonRoll Areal

Within the framework of the Fall Meeting of the Swiss Chemical Society the Division of Chemical Education organises a symposium for those involved in teaching chemistry at different levels such as Sek I, Sek II, Universities of Applied Sciences (FH) and Universities. The major objective of this symposium are the challenges related to teaching chemistry in the first year of education at the university. Professors and teachers from Swiss universities and international experts will share their view, experience, strategies and solutions gained and developed while dealing with the chemistry courses for a large body of students, who just recently left the high schools and commenced their studies at the university.

Programm

08:30	Registraion and Welcome Coffee
09:00	Welcome Message and Opening of the Symposium
09:05	Prof. Paul Wyatt , University of Bistol «Encouraging student attendance and engagement in the post-Covid world»
09:45	Prof. Ilka Parchmann , Kiel University «Context-based learning co-developed»
10:25	short break
10:45	Prof, Michel Rickhaus , University of Geneva «Pity the reader - from simpler stories to greater understanding»
11:15	Dr. Stefan Dolder , Gymnasium and FMS Lebermatt «Chemistry a bunch of symbols? Developing an app to draw chemical structures and challenges of teaching chemical language in high school»
11:35	Prof. Antonio Togni , ETH Zurich «Do you speak chemistry? - Learning chemistry means learning its language»
12:15	Closing words and Lunch Break
13:00	Beginning of the SCS Fall Meeting 2023

Registration

- SCS-Members: free
- Non-SCS Members, regular participants: CHF 100.00
- Non-SCS Members, student participants: CHF 50.00

Contacts

Chairman and local Organizer

Dr. Jan Cvengros
ETH Zurich

Conference Secretariat

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 A large banner for the 'Ilmac' conference. The background is a dark blue and red gradient with a metallic, reflective surface. The text 'ilmac.' is prominently displayed in white. Below it, the tagline reads 'INSPIRING THE FUTURE OF CHEMISTRY AND LIFE SCIENCES.'

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