

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