

University of Zurich
Department of Chemistry
Winterthurerstrasse 190
CH-8057 Zürich



SCS
Swiss Chemical
Society

Thu, 11 September 2014, 9:30 - 18:45

Fall Meeting 2014

- 09.45 Welcome and conference opening
09.55 KGF-SCS Distinguished Industrial Investigator Award Lecture 2014, Dr. Hans Ulrich Blaser
«Looking Back on 35 Years of Industrial Catalysis»
10.30 Sandmeyer Award Lecture 2014, Dr. Harald Walter, Syngenta Crop Protection Münchwilen AG
«Sedaxane, isopyrazam and solatenol: Novel broad-spectrum fungicides inhibiting succinate dehydrogenase (SDH) – synthesis challenges and biological aspects»
11.15 Parallel Session I incl. award / invited lectures (8 Sessions)
12.45 Lunch and Poster Session
Commercial Exhibition
15.00 Parallel Session II (8 Sessions)
17.00 Paracelsus Award Lecture 2014, Prof. Richard R. Schrock, Massachusetts Institute of Technology
«The Olefin Metathesis Reaction - Approaching Fifty Years of Age»
18.00 Best Oral Presentation Awards (sponsored by Metrohm)
18.15 Best Poster Presentation Awards (sponsored by DSM)

<http://scg.ch/fallmeeting2014/>

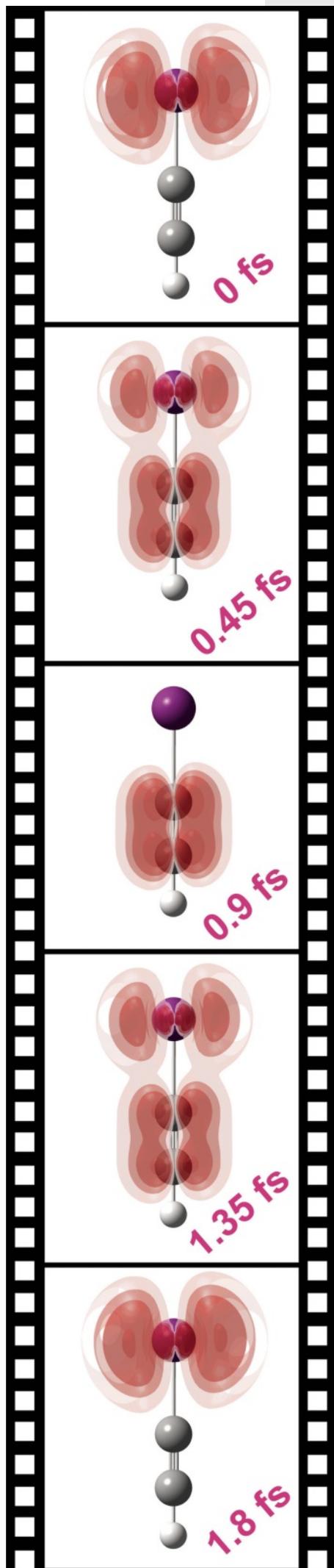


**Universität
Zürich**^{UZH}

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Picture description:
Time-evolution of the electron-hole density in HC21+
following ionization
Credit: H. J. Wörner group, ETH Zürich



WELCOME TO THE SCS FALL MEETING 2014



Philippe Renaud

On behalf of the Division of Chemical Research of the Swiss Chemical Society, we welcome you to the 2014 Fall Meeting. We also welcome the presenters of the nearly six-hundred scientific contributions (posters, contributed lectures, invited lectures). Given its popularity, the Fall Meeting represents a major event for chemical research in Switzerland, offering a unique opportunity for graduate students, post-doctoral fellows and senior scientists from academia and industry to share the results of their research.

This year, the event is hosted jointly by the ETH Zurich Department of Chemistry and Applied Biosciences and the University of Zurich, Department of Chemistry at the Irchel Campus.

As in previous years, we will have a number of invited lectures presented by distinguished scientists. This year's Paracelsus Award Lecture will be given by Nobel Laureate Prof. Richard R. Schrock (Massachusetts Institute of Technology). The KGF-SCS Distinguished Industrial Investigator and the Sandmeyer Award Lectures, delivered by Drs. Hans Ulrich Blaser (St. Gallen, formerly Ciba-Geigy, Novartis and Solvias) and Harald Walter (Syngenta Crop Protection Mönchwil AG) are also part of the plenary program. Other invited and award lectures, including the Grammaticakis-Neumann Award Lecture, will be delivered in the Parallel Sessions.

At the Commercial Exhibition, more than twenty companies will be presenting their products and services. At the same time, there will also be the Poster Session.

We are grateful to our sponsors for their continued support. This support is also an expression of the interest of industry in our research activities, many of which are carried out by young scientists. This year, we particularly welcome the Qatar Foundation and the Qatar Environment and Energy Research Institute (QEERI), who will present their ambitious programs in the areas of renewable energy and water processing.

We invite you to browse through the program and hope that the 2014 Fall Meeting will capture your interest. The newly introduced conference tool will allow you to access the titles and abstracts through the Web. The tool also allows you to search the entries by author name and topic.

We look forward to seeing you at the University of Zürich Irchel Campus on September 11! Your participation and your contribution to the scientific discussion will help to make the event a success for everybody involved.

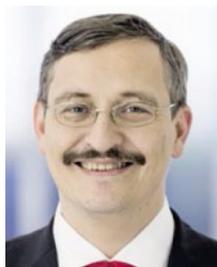
Prof. Philippe Renaud
Chairman of the Division of
Chemical Research

PD Dr. Hans Peter Lüthi
Chairman of the Organizing Committee



Hans Peter Lüthi

DEAR PARTICIPANTS OF THE FALL MEETING OF THE SWISS CHEMICAL SOCIETY



Michael O. Hengartner

It is a long-lasting and valuable tradition of the Swiss Chemical Society to invite young chemists to its annual Fall Meeting. Graduate students and postdoctoral fellows from all over Switzerland meet to discuss and present their latest research results.

I am very impressed by the fact that again almost 600 scientific contributions have been submitted for this year's conference.

The 2014 Zurich Fall Meeting of the Swiss Chemical Society is organized by a joint team of scientists from the ETH Zurich and the University of Zurich, a great example of a productive collaboration for the benefit of science. I am proud that the Swiss Chemical Society decided to hold its meeting on our University's Irchel Campus. I am confident that you will find this to be an excellent venue for this conference.

I welcome you to the University of Zurich and wish you an interesting and successful conference meeting with many high quality contributions, stimulating discussions, and a friendly atmosphere that will promote scientific collaboration as well as personal friendship.

Prof. Michael O. Hengartner
President of the University of Zurich

GENERAL INFORMATION

Date: September 11, 2014, 09.00–18.45
 Location: University of Zurich
 Irchel-Campus
 Winterthurerstrasse 190
 CH-8057 Zurich

Chairman

PD Dr. Hans Peter Lüthi
 Laboratory for Physical Chemistry
 ETH Zurich
 Wolfgang-Pauli-Strasse 10
 CH-8093 Zurich
 Tel.: +41 44 632 21 05
 luethi@phys.chem.ethz.ch

On-site Organization

Dr. Ferdinand Wild
 Chemistry Department
 University of Zurich
 Winterthurerstrasse 190
 CH-8057 Zurich
 Tel.: +41 44 635 46 46
 fwild@aci.unizh.ch

Conference Secretariat

Swiss Chemical Society
 David Spichiger and Sarah Schmitz
 Schwarztorstrasse 9
 CH-3007 Bern
 Tel.: +41 31 310 40 90
 info@scg.ch

Organizing Committee

Chairmen

- PD Dr. Hans Peter Lüthi, ETH Zurich (Chairman)
- Prof. Philippe Renaud, University of Bern (co-Chairman)
- Dr. Ferdinand Wild, University of Zurich (co-Chairman)

Analytical Sciences

- PD Dr. Stefan Schürch, University of Bern

Catalysis Science and Engineering

- Dr. Davide Ferri, PSI Villigen

Computational Chemistry

- Prof. Jürg Hutter, University of Zurich
- Prof. Markus Reiher, ETH Zurich

Inorganic Chemistry

- Prof. Thomas R. Ward, University of Basel
- Prof. Kay Severin, EPF Lausanne

Medicinal Chemistry and Chemical Biology

- Dr. Yves Auberson, Novartis (Medicinal Chemistry)

Organic Chemistry

- Prof. Cristina Nevado, University of Zurich
- Prof. Andreas Pfaltz, University of Basel

Physical Chemistry

- Prof. Hans Jakob Wörner, ETH Zurich
- Prof. Stefan Willitsch, University of Basel

Polymers, Colloids and Interfaces

- Prof. Christian Hinderling, ZHAW

Admission

Presenters (Poster and/or Talk)

- SCS Members: free of charge (she/he, whose name is underlined in the abstract)
- Non-members: CHF 250.00 (+VAT)

Participants

- SCS Members: free of charge
- Non-members: CHF 50.00 (+VAT). Pre-registered participants will receive an invoice in advance to avoid waiting at the check-in desk. Pre-registration is possible until August 28, 2014.

If attending as a SCS member you must bring your SCS membership-card with you!

Pre-registration as participant on <http://chemistrycongresses.ch> is possible until August 28, 2014.

SCS Membership

A SCS membership offers many benefits. For information please see the SCS webpage. To join the society you can register *via* the online form.

After the registration as a member, your login data can be used for the SCS Conference Tool as well.

new!

Conference Tool

The new tool provides a wide range of new functionalities and offers an easy and interactive planning of your conference day.

Go to <http://chemistrycongresses.ch>, login with your SCS login details and profit from the following functions:

- Interactive program overview with abstract preview
- Quick abstracts display as html-file
- pdf-file download of abstracts directly to user's mailbox
- Extensive search functionality

Title	Status	Main Author	University	Type	Room	Slot	Topic	Event	Delete
KGF-SCS Distinguished Industrial Investigator Award Lecture 2014: Looking Back on 35 Years of Industrial Catalysis	Pending	Hans-Ulrich Blaser	St. Gallen (formerly Ciba-Gigly, Novartis and Solvias)	Award- or Invited Lecture	G.30 (Plenary Sessions & Inorganic & Coordination Chemistry)	KGF-SCS Distinguished Industrial Investigator Award Lecture 2014 (09:45)	Plenary Session	SCS Fall Meeting 2014	Delete
Panofelus Award Lecture 2014: The Olefin Metathesis Reaction - Approaching Fifty Years of Age	Pending	Richard R. Schrock	Massachusetts Institute of Technology	Award- or Invited Lecture	G.30 (Plenary Sessions & Inorganic & Coordination Chemistry)	Panofelus Award Lecture 2014 (17:00)	Plenary Session	SCS Fall Meeting 2014	Delete
Sandmeyer Award Lecture 2014: Sedaxane, Isopyrazinone and related: Novel broad-spectrum fungicides inhibiting succinate dehydrogenase (SDH) - synthesis challenges and biological aspects	Pending	Harald Walter	Syngenta Crop Protection Munchwilen AG	Award- or Invited Lecture	G.30 (Plenary Sessions & Inorganic & Coordination Chemistry)	Sandmeyer Award Lecture 2014 (10:30)	Plenary Session	SCS Fall Meeting 2014	Delete
KGF-SCS Industrial Investigator Award Lecture 2014:	Pending	Wolfgang Novartis		Award- or	G.18 (Medicinal	Afternoon	Medicinal	SCS	Delete

Coffee Breaks and Lunch

Refreshments will be served before the Opening Ceremony and during the breaks. Lunch: Sandwiches and drinks will be served during the lunch break.

There is the option to buy lunch at your own expense at the cafeterias and restaurants located in the vicinity of the meeting venue.

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.

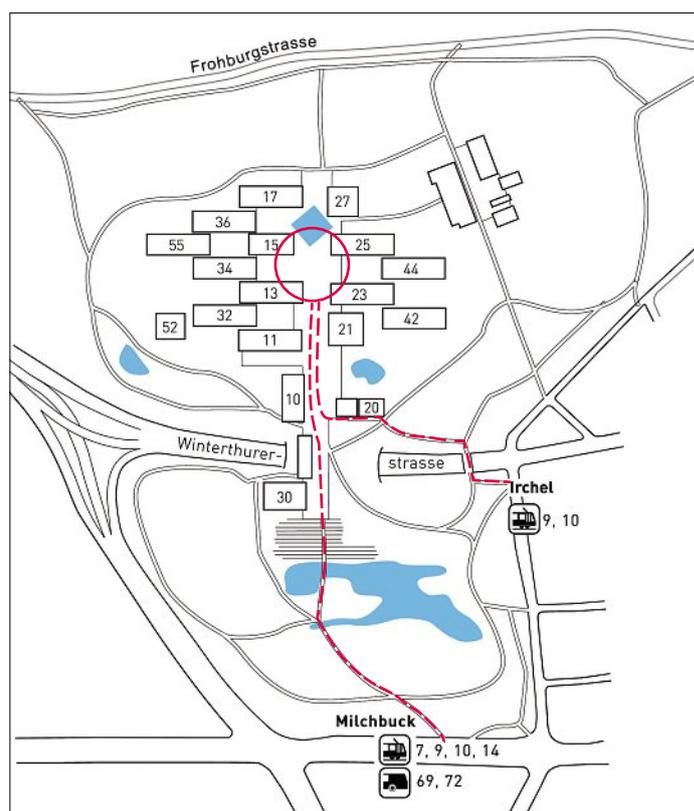
HOW TO GET TO THE IRCHEL CAMPUS

The campus is easily accessible by public transportation (tram lines 7, 9, 10 and 14).

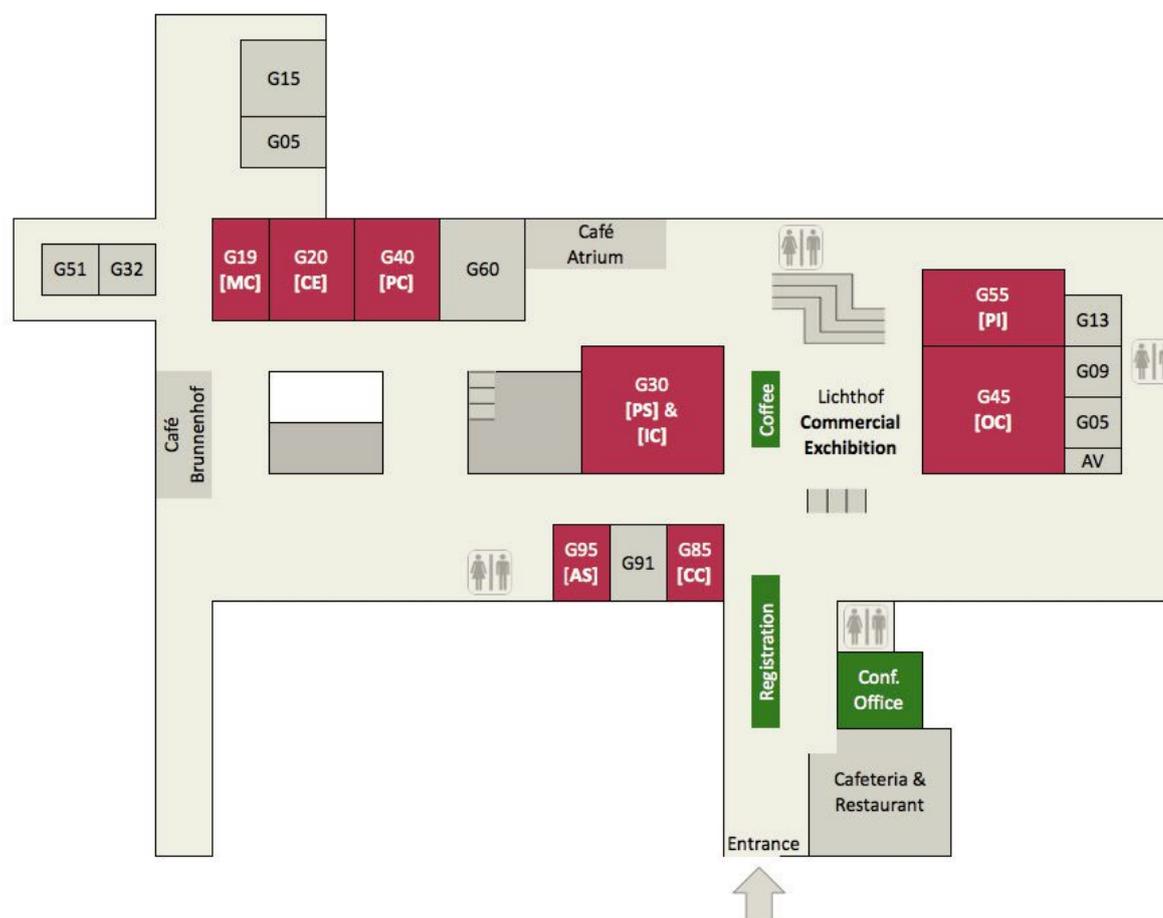
Go to www.sbb.ch and select *Zürich, Universität Irchel* or *Zürich, Milchbuck* as destination.

Departures from main station with InterCity, direction Zurich:

Basel	08:07
Bern	08:02
Fribourg	07:34
Geneva	06:14
Neuchatel	07:27
Lausanne	06:47
St.Gallen	07:48



SITE MAP IRCHEL CAMPUS



The Fall Meeting 2014 is hosted and supported by:



University of
Zurich^{UZH}

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

MAIN SPONSORS

Main Sponsors and Supporters

The SCS and the meeting organizers gratefully acknowledge the generous support of its main sponsors. Without their contributions, it would not be possible to organize the event for free for members and for a reasonable entry fee for non-members.



Best Oral Presentation Award



The prize is sponsored by Metrohm.

The prize is given for the two best presentations of each parallel session. The main criteria are the scientific quality and originality of the research, plus the quality of the presentation. Ceremony: 18.00 in the 'Big Auditorium' (G30).

Prizes for Winners

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

Prizes for Runners-up

- Cash contribution of CHF 400.

Best Poster Presentation Award



The prize is sponsored by DSM.

The prizes were given for the best posters of each parallel session. The main criteria are the scientific quality and originality of the research, plus the quality of the presentation. Ceremony: 18.15 in the 'Big Auditorium' (G30).

Prizes for Winners

- Cash contribution of CHF 500.
- Travel voucher of CHF 750 to attend an international conference.

Prizes for Runners-up

- 1× runner-up prize for Analytical Sciences and Computational Chemistry Session,
- 2× runners-up prizes for Polymers, Colloids and Interfaces, Catalysis Sciences, Inorganic Chemistry and Physical Chemistry Session,
- 3× runners-up prizes for Medicinal Chemistry and Organic Chemistry Session
- Cash contribution of CHF 300.



Winners 2013, EPFL Lausanne



Winners 2013, EPFL Lausanne



The Qatar Environment and Energy Research Institute (QEERI)

is a member of Qatar Foundation for Education, Science and Community Development. QEERI plays a key role in addressing two of Qatar's national priorities: energy and water security. It seeks to address these grand challenges by undertaking long-term and multidisciplinary research and development in areas of solar energy, energy storage, smart grids, water desalination and reuse, and aquifer recharge. Join us on our exciting journey to help Qatar progress from a carbon-based to a knowledge-based economy.



معهد قطر لبحوث
البيئة والطاقة
Qatar Environment & Energy
Research Institute

عضو في مؤسسة قطر
Member of Qatar Foundation

One hundred new top scientists will join QEERI this year. Be one of them!
www.qeeri.org.qa



SESSION ENDOWMENTS

Plenary Session

Givaudan[®]

Givaudan Suisse SA

As the world's foremost fragrances and flavours business, Givaudan creates products that truly engage the senses, through innovating exquisite aromas and delicious tastes. Headquartered in Switzerland, Givaudan sources and develops ingredients for thousands of its customers' products and technologies, which are enjoyed every day by consumers around the world. Givaudan continually delivers new products and imaginative concepts, aided by a dedicated workforce of over 9,000 employees and operating in over 100 countries in all major markets, in both mature and developing regions.

[www.givaudan.com]

Computational Chemistry Session

IBM[®]

IBM Research GmbH

IBM has maintained a research laboratory in Switzerland since 1956, located on its own campus in Rüschlikon near Zurich since 1962. As the European branch of IBM Research, the mission of the IBM Research Zurich lab – in addition to pursuing cutting-edge research for tomorrow's information technology – is to cultivate close relationships with academic and industrial partners, be one of the premier places to work for world-class researchers and to help drive Europe's innovation agenda.

[http://www.zurich.ibm.com]

Catalysis Sciences & Engineering Session

CLARIANT[®]

Clariant International Ltd

As one of the world's leading specialty chemical companies, Clariant contributes to value creation with innovative and sustainable solutions for customers from many industries. Our portfolio is designed to meet very specific needs with as much precision as possible. At the same time, our research and development is focused on addressing the key trends of our time. These include energy efficiency, renewable raw materials, emission-free mobility, and conserving finite resources.

[www.clariant.com]

Inorganic & Coordination Chemistry Session



Contact Group for Research Matters (KGF)

The KGF coordinates research policies and matters of common interest to its member companies. It facilitates the interactions between its member companies and external partners, e.g., individuals or groups at Swiss research institutions, by acting as a homogeneous discussion partner or sounding board, providing harmonized opinions, recommendations, or action plans.

[www.kgf.ch]

Medicinal Chemistry & Chemical Biology Session

ACTELION

Actelion Ltd

Actelion Ltd. is a leading biopharmaceutical company focused on the discovery, development and commercialization of innovative drugs for diseases with significant unmet medical needs. The company has its corporate headquarters in Allschwil/Basel, Switzerland where it was founded in 1997.

[www.actelion.ch]

Organic Chemistry Session

syngenta

Syngenta Crop Protection AG

Syngenta is one of the world's leading companies with more than 28,000 employees in over 90 countries dedicated to our purpose: Bringing plant potential to life. Through world-class science, global reach and commitment to our customers we help to increase crop productivity, protect the environment and improve health and quality of life.

[www.syngenta.com]

Physical Chemistry Session

BRUKER

Bruker BioSpin

Bruker Corporation is the global market and technology leader in analytical magnetic resonance instruments including NMR, preclinical MRI and EPR. The Bruker BioSpin Group of companies develop, manufacture and supply technology to research establishments, commercial enterprises and multi-national corporations across countless industries and fields of expertise.

[www.bruker.com]

Polymers, Colloids & Interfaces

DOW[®]

Dow Europe GmbH

Dow (NYSE: DOW) combines the power of science and technology to passionately innovate what is essential to human progress. The Company is driving innovations that extract value from the intersection of chemical, physical and biological sciences to help address many of the world's most challenging problems such as the need for clean water, clean energy generation and conservation, and increasing agricultural productivity.

[www.dow.com]

COMMERCIAL EXHIBITION

Take the chance and visit our partners during the day and profit from their expertise to answer your questions. The exhibition will be located in the 'Lichthof' of the Irchel Campus, right after the registration and in front of the big auditorium and the coffee/lunch bench.



<http://www.advion.com/>



<http://www.agilent.ch/>



<http://www.borer.ch/>



<http://www.bruker.com/>



<https://www.brunschwig-ch.com/>



<http://www.buchi.ch/>



<http://www.buechiglas.ch/>



<http://www.cray.com/>



Fournisseur de réacteurs et de calorimètres

<http://www.equilabo.com/>



<http://www.faust.ch/>



<http://www.gmp.ch/>



Talent | Technology | Trust™

<https://grace.com/>



<http://igz.ch/>



<http://www.lot-qd.de/ch/>



<http://www.mdpi.com/>



<http://www.merckmillipore.ch/>



<http://metrohm.ch/>



<http://www.mt.ch/>



<http://ch.mlt.com/>



<http://www.perkinelmer.com/>



<http://www.portmann-instruments.ch/>



<http://www.alfa.com>



<http://www.shimadzu.ch/>



<https://www.thieme.de/>

Award Lectures
Overview

- 09:55 **Hans-Ulrich Blaser**, St. Gallen (formerly Ciba-Geigy, Novartis and Solvias) is awarded the KGF-SCS Distinguished Industrial Investigator Award 2014 for his outstanding contributions to the development of highly selective and efficient catalysts for the industrial production of bioactive chiral compounds and for the leading role he played in asymmetric catalysis in both industry and academia.
«**Looking Back on 35 Years of Industrial Catalysis**» [PS-002]; Lecture hall G30
- 10:30 **Harald Walter, Hans Tobler, Camilla Corsi** and **Denis V. Gribkov**, Syngenta Crop Protection Munchwilen AG are awarded the Sandmeyer Award 2014 for their successful and innovative efforts in discovering, developing, and producing new broad-spectrum agrochemical fungicides.
«**Sedaxane, isopyrazam and solatenol: Novel broad-spectrum fungicides inhibiting succinate dehydrogenase (SDH) – synthesis challenges and biological aspects**» [PS-003]; Lecture hall G30
- 11:15 **Andreas Natsch**, Givaudan Schweiz AG is awarded the KGF-SCS Industrial Investigator Award 2014 for his thorough investigation into the chemistry, biochemistry and microbiology of axilla malodor, culminating in the suppression of malodor causing processes and in the development of bacterial fragrance release from new families of odorant precursors.
«**The human scent: Chemicals, enzymes and genes and our ‘olfactive self’**» [OC-001]; Lecture hall G45
- 11:15 **Erwin Reisner**, University of Cambridge, UK is awarded the Grammaticakis-Neumann Award 2014 for his research combining synthesis, photochemistry, photophysics, and molecular photobiology to develop artificial photosynthesis.
«**Protein film photoelectrochemistry of the water oxidation enzyme Photosystem II**» [CE-001]; Lecture hall G20
- 16:15 **Werner Neidhart**, F. Hoffmann-La Roche AG is awarded the KGF-SCS Senior Industrial Investigator Award 2014 for his contributions to medicinal chemistry and the creation of multiple candidate drugs, particularly Endothelin antagonists Avosentan and Clazosentan and the marketed Bosentan/Tracleer.
«**Challenges & Rewards in Medicinal Chemistry Targeting Cardiovascular & Metabolic Diseases**» [MC-003]; Lecture hall G19
- 16:35 **Wolfgang Jahnke**, Novartis Institutes for Biomedical Research is awarded the KGF-SCS Industrial Investigator Award 2014 for his excellence in developing and applying biomolecular NMR spectroscopy and fragment-based lead discovery, resulting in crucial contributions to many drug discovery projects.
«**Contributions of biomolecular NMR to drug discovery**» [MC-004]; Lecture hall G19
- 17:00 **Richard R. Schrock**, Massachusetts Institute of Technology is awarded the Paracelsus Award 2014 for his seminal work in synthetic and mechanistic organo-transition metal chemistry.
«**The Olefin Metathesis Reaction - Approaching Fifty Years of Age**» [PS-004]; Lecture hall G30

Plenary Sessions – G30

Givaudan[®]

Chair: Prof. Dr. E. Peter Kündig

Session Endowment: Givaudan Suisse SA

- 09:55 **KGF-SCS Distinguished Industrial Investigator Award Lecture 2014: Looking Back on 35 Years of Industrial Catalysis [PS-002]**
Hans-Ulrich Blaser, St. Gallen (formerly Ciba-Geigy, Novartis and Solvias)
- 10:30 **Sandmeyer Award Lecture 2014: Sedaxane, isopyrazam and solatenol: Novel broad-spectrum fungicides inhibiting succinate dehydrogenase (SDH) – synthesis challenges and biological aspects [PS-003]**
Harald Walter, Syngenta Crop Protection Munchwilen AG
- 17:00 **Paracelsus Award Lecture 2014: The Olefin Metathesis Reaction - Approaching Fifty Years of Age [PS-004]**
Richard R. Schrock, Massachusetts Institute of Technology

Abstract codes

[XY-001]...[XY-009]	Award or invited lecture
[XY-011]...[XY-019]	Morning session lecture
[XY-021]...[XY-029]	Afternoon session lecture
[XY-031]...[XY-039]	Short poster presentations
[XY-101]...[XY-199]	Poster

AS	Analytical Sciences
CC	Computational Chemistry
CE	Catalysis Sciences & Engineering
IC	Inorganic Chemistry
MC	Medicinal Chemistry & Chemical Biology
OC	Organic Chemistry
PC	Physical Chemistry
PI	Polymers Colloids & Interfaces
PS	Plenary Session

Name = Presenting Author

Name = Research Leader

PARALLEL SESSIONS

**Analytical Sciences [AS]
Morning Session – G95**

Chair: Dr. Stefan Schürch

Session Endowment:

- 11:15 **Chemical Analysis by Mass Spectrometry in Space – Initial Results from the Comet Churyumov-Gerasimenko [AS-001]**
Kathrin Altweg, University of Bern
- 12:00 **Microscale probing and patterning of biological surfaces using nested hydrodynamic flow confinement and recirculation of sub-microliter volumes of liquid [AS-014]**
Govind Kaigala, IBM Research GmbH
- 12:15 **A Droplet Microfluidic ICP-MS Sample Introduction System [AS-015]**
Pascal Emilio Verboket, *Petra Dittrich*, ETH Zurich
- 12:30 **Electrostatic Spray Ionization Mass Spectrometry for Biochemical Analysis and Imaging [AS-016]**
Liang Qiao, *Hubert Girault*, EPFL Lausanne

Afternoon Session – G95

Chair: Dr. Marc Suter

- 15:00 **2D-algal arrays on-chip as a tool for environmental biosensing [AS-021]**
Coralie Sussillon, *Vera Slaveykova*, University of Geneva
- 15:15 **Quantification of ghrelin and des-acyl ghrelin in human plasma by using cubic selected reaction monitoring LC-MS [AS-022]**
Jonathan Sidibé, *Gérard Hopfgartner*, University of Geneva
- 15:30 **Laser based N₂O isotopomer analysis bridges the gap between pure culture studies and field applications [AS-023]**
Ellen Gute, EMPA Dübendorf
- 15:45 **Direct voltammetric As(III) sensing in natural waters on a gel integrated renewable gold nanoparticle microelectrode [AS-024]**
Romain Touilloux, *Eric Bakker*, University of Geneva
- 16:00 **Native ESI-MS: Buffer Concentration Effect on Protein-Ligand Binding Affinities [AS-025]**
Agni Faviola Mika Gavriilidou, *Renato Zenobi*, ETH Zurich
- 16:15 **Instrumentino: An open-source modular Python framework for controlling Arduino based experimental instruments [AS-026]**
Joel Koenka, *Peter Hauser*, University of Basel
- 16:30 **Capillary zone electrophoresis as a capable tool in endotoxin and carbohydrate analysis [AS-027]**
Blanka Bucsellá, *Franka Kálmán*, University of Applied Sciences and Arts Northwestern Switzerland, FHNW

**Computational Chemistry [CC]
Morning Session – G85**

Chair: Prof. Jürg Hutter



Session Endowment: IBM Research GmbH

- 11:15 **Light Matter Interaction: The role of quantum coherence in energy transfer [CC-001]**
Sabre Kais, Qatar Environment and Energy Research Institute, Doha, Qatar
- 11:45 **Reviving geminal wavefunction theory: Accurate description of strong electron correlation at mean-field computational cost [CC-013]**
Peter Limacher, Paul W. Ayers, McMaster University
- 12:00 **Four-Component Density Matrix Renormalization Group [CC-014]**
Stefan Knecht, Markus Reiher, ETH Zurich
- 12:15 **Implementation of exact and approximate methods for nonadiabatic quantum molecular dynamics induced by the interaction with the electromagnetic field [CC-015]**
Aurélien Patoz, Jiri Vanicek, EPFL Lausanne
- 12:30 **Towards Intramolecular SAPT [CC-016]**
Antonio Prlj, Clemence Corminboeuf, EPFL Lausanne

Afternoon Session – G85

Chair: Prof. Markus Reiher

- 15:00 **Full-dimensional quantum dynamics and spectroscopy of ammonia isotopomers [CC-021]**
Csaba Fábri, *Martin Quack*, ETH Zurich
- 15:15 **Learning the error: Augmenting legacy quantum chemistry with machine learning [CC-022]**
Raghunathan Ramakrishnan, University of Basel
- 15:30 **Unravelling the stabilization mechanism of Al-doped Li-ion conducting Garnets by first-principle simulations. [CC-023]**
Teodoro Laino, IBM Research GmbH
- 15:45 **Ab-initio Simulation of two-dimensional Networks on the Surface of Water [CC-024]**
Ralph Koitz, *Jürg Hutter*, University of Zurich
- 16:00 **Re-Engineering the B1 Domain of Streptococcal Protein G (GB1): Teaching an Old Dog New Tricks [CC-025]**
Esra Bozkurt, *Ursula Röthlisberger*, EPFL Lausanne
- 16:15 **Reactive Processes onto the Multidimensional Potential Energy Surface: Molecular Dynamics of the MbNO system [CC-026]**
Maksym Soloviov, *Markus Meuwly*, University of Basel
- 16:30 **Anion- π and cation- π interactions on the same aromatic surface [CC-027]**
Marie Humbert-Droz, *Stefan Matile*, University of Geneva

Catalysis Sciences & Engineering [CE]
Morning Session – G20
 Chair: Dr. Davide Ferri

CLARIANT

Session Endowment: Clariant International Ltd

- 11:15 **Grammaticakis-Neumann Award Lecture 2014: Protein film photoelectrochemistry of the water oxidation enzyme Photosystem II [CE-001]**
 Erwin Reisner, University of Cambridge, UK
- 11:45 **Interplay between complexity and universality in industrial catalysts [CE-002]**
 Pascal Raybaud, IFP Energies nouvelles
- 12:15 **C-H Activation on Tri-Coordinated Cr(III) Silica Surface Sites Initiates Ethylene Polymerization [CE-015]**
 Murielle F. Delley, *Christophe Copéret*, ETH Zurich
- 12:30 **Transient studies of methane steam reforming over ceria-promoted Rh/Al₂O₃ [CE-016]**

Afternoon Session – G20
 Chair: Dr. Jeremy Luterbacher

- 15:00 **Investigation of factors affecting the crystallisation of zeotype Sn-Beta with elemental mapping [CE-003]**
 Esben Taarning, Haldor Topsøe A/S
- 15:30 **Mesopore quality determines the lifetime of hierarchically-structured zeolite catalysts [CE-023]**
 Maria Milina, *Javier Pérez-Ramírez*, ETH Zurich
- 15:45 **1D and 2D Tuning of Cobalt-based Water Oxidation Catalysts [CE-024]**
 Fabio Evangelisti, *Greta Ricarda Patzke*, University of Zurich
- 16:00 **Structured Fe₂O₃-based Catalyst for Reduction of Nitroarenes under Mild Conditions [CE-025]**
 Oliver Beswick, *Liubov Kiwi-Minsker*, EPFL Lausanne
- 16:15 **NH₃ promoted formic acid decomposition over monolithic Au/TiO₂ catalyst: Rate enhancement without NH₃ oxidation [CE-026]**
 Manasa Sridhar, *Oliver Kröcher*, Paul Scherrer Institute, Villigen and EPFL Lausanne
- 16:30 **Lactic acid production from biomass: a new chemocatalytic process compared to fermentation by LCA analysis [CE-027]**
 Pierre Dapsens, *Javier Pérez-Ramírez*, ETH Zurich

Inorganic & Coordination Chemistry [IC]
Morning Session – G30
 Chair: Prof. Thomas Ward



Session Endowment: Contact Group for Research Matters (KGF)

- 11:15 **Nitrogenase: Mechanism and Applications [IC-001]**
 Markus W. Ribbe, University of California, Irvine (US)
- 12:00 **Functionalised Clathrochelate Complexes – New Building Blocks for New Supramolecular Structures [IC-014]**
 Matthew Wise, *Kay Severin*, EPFL Lausanne
- 12:15 **Iron Catalysts for Hydrogenation of Aldehydes: an Alternative to Precious Noble Metals [IC-015]**
 Simona Mazza, *Xile Hu*, EPFL Lausanne
- 12:30 **Synthesis, Structure and Reactivity of a Ruthenium Complex with an Unusual P₄Cl₂ Ligand [IC-016]**
 Mark Bispinghoff, *Hansjörg Grützmacher*, ETH Zurich

Afternoon Session – G30
 Chair: Prof. Kay Severin

- 15:00 **Supported alkene metathesis catalysts: from reaction intermediates to structure activity relationship [IC-021]**
 Victor Mougel, *Christophe Copéret*, ETH Zurich
- 15:15 **Performance and in situ characterization of ceria-based non-stoichiometric oxides for the conversion of solar energy using two-step thermochemical cycles [IC-022]**
 Matthäus Rothensteiner, Paul Scherrer Institute, Villigen, *Jeroen A. van Bokhoven*, ETH Zurich and Paul Scherrer Institute, Villigen
- 15:30 **The surprising lability of homoleptic and heteroleptic bis-(2,2':6',2'')-terpyridine) chromium(III) complexes [IC-023]**
 Jonas Schönle, *Catherine E. Housecroft*, University of Basel
- 15:45 **Peptide Conjugates of Dinuclear Arene Ruthenium Trithiolato Complexes [IC-024]**
 Federico Giannini, University of Bern, Georg Süss-Fink, University of Neuchatel
- 16:00 **Antimicrobial metal-containing Schiff base complexes [IC-025]**
 Sonja Kracht, Katharina Fromm, University of Fribourg
- 16:15 **Aspects of the vibrational optical activity (VOA) of tetranuclear Cobalt transition metal complexes [IC-026]**
 Patric Oulevey, Thomas Bürgi, University of Geneva
- 16:30 **X-ray structures of an octameric RNA duplex in the presence of six different divalent and trivalent metal ions reveal a particular innersphere binding to O4 of uracil [IC-027]**
 Michelle F. Schaffer, Roland K.O. Sigel, University of Zurich

**Medicinal Chemistry &
Chemical Biology [MC]
Morning Session – G19**
Chair: Prof. Jean-Louis Reymond



Session Endowment: Actelion Ltd

- 11:15 **Engineering of high affinity probes for the visualization and analysis of bivalent epigenetic marks in living cells [MC-011]**
Aurore Delachat, *Beat Fierz*, EPFL Lausanne
- 11:30 **Sphingosine-1-Phosphate Lyase Inhibitors as an Alternative Therapeutic Strategy to S1P-Receptor Agonists for the Treatment of Multiple Sclerosis [MC-012]**
Berndt Oberhauser, Novartis Pharma AG
- 11:45 **Disulfide-based prodrugs for improving the oral bioavailability of poorly water soluble drugs [MC-013]**
Tao Sun, *Jean-Christophe Leroux*, ETH Zurich
- 12:00 **Selective Aldosterone Synthase Inhibitors (ASI) - Design of an Orally Active Proof of Concept Compound [MC-014]**
Johannes Aebi, *Kurt Amrein*, F. Hoffmann-La Roche AG
- 12:15 **Ru(II) Complexes and Photodynamic Therapy: a Win-Win Combination [MC-015]**
Cristina Mari, *Gilles Gasser*, University of Zurich
- 12:30 **Discovery of novel and highly selective allosteric inhibitors of PAK1 [MC-001]**
Alexei Karpov, Novartis Pharma AG

Afternoon Session – G19
Chair: Dr. Heinz Fretz

- 15:00 **Discovery of a potent P2Y₁₂ receptor antagonist with an improved efficacy/safety profile [MC-021]**
Eva Caroff, Actelion Pharmaceuticals Ltd, Allschwil
- 15:15 **Transannular cyclization of the sesquiterpene lactone nobilin into cadinanolide derivatives [MC-022]**
Maria De Mieri, *Matthias Hamburger*, University of Basel
- 15:30 **From Synthesis in Flow to Integrated Dose-Response Screening in Flow [MC-002]**
Rainer E. Martin, F. Hoffmann-La Roche AG
- 15:45 **Designed Cell Penetrating Peptide Dendrimers Efficiently Internalize Cargo into Cells [MC-024]**
Emilyne Blattes, *Jean-Louis Reymond*, University of Berne
- 16:00 **Synthesis and fungicidal activity of quinolin-6-yloxyacetamides, a novel class of tubulin polymerization inhibitors [MC-025]**
Laura Quaranta, Syngenta Crop Protection AG
- 16:15 **KGF-SCS Senior Industrial Investigator Award Lecture 2014: «Challenges & Rewards in Medicinal Chemistry Targeting Cardiovascular & Metabolic Diseases» [MC-003]**
Werner Neidhart, F. Hoffmann-La Roche AG
- 16:35 **KGF-SCS Industrial Investigator Award Lecture 2014: «Contributions of biomolecular NMR to drug discovery» [MC-004]**
Wolfgang Jahnke, Novartis Institutes for Biomedical Research

Organic Chemistry [OC]



Morning Session – G45
Chair: Prof. Andreas Pfaltz

Session Endowment: Syngenta Crop Protection AG

- 11:15 **KGF-SCS Industrial Investigator Award 2014: The human scent: Chemicals, enzymes and genes and our 'olfactive self' [OC-001]**
Andreas Natsch, Givaudan Schweiz AG
- 11:45 **Highly Enantioselective Rh(I)-Catalyzed Activation of Cyclobutanones Enantiotopic C-C Bond. [OC-013]**
Laetitia Souillart, *Nicolai Cramer*, EPFL Lausanne
- 12:00 **Pd-catalyzed selective arylations of aldehydes [OC-014]**
Ivan Franzoni, *Clément Mazet*, University of Geneva
- 12:15 **New Synthetic Applications of Nitrous Oxide [OC-015]**
Gregor Kiefer, *Kay Severin*, EPFL Lausanne
- 12:30 **Pyridine Dearomatization Through Double Ru-Metal Carbene Insertions [OC-016]**
Florian Medina, *Jérôme Lacour*, University of Geneva

Afternoon Session – G45
Chair: Dr. Henning Jessen

- 15:00 **Sterol C(14)-demethylase inhibitors as fungicides for use in crop protection [OC-002]**
Sebastian Wendeborn, Syngenta Crop Protection AG
- 15:30 **Difunctionalization of Activated Alkenes via Radical Addition/Desulfonylation/1,4-Aryl Migration Cascade Reaction [OC-023]**
Wangqing Kong, *Cristina Nevado*, University of Zurich
- 15:45 **Total Synthesis of Aspidosperma Family Monoterpene Indole Alkaloids [OC-024]**
Olivier Wagnières, *Jieping Zhu*, EPFL Lausanne
- 16:00 **Syntheses and Applications of Acylboronates in Chemoselective Amide Formations [OC-025]**
Hidetoshi Noda, *Jeffrey W. Bode*, ETH Zurich
- 16:15 **Setting the Hook for Specific Single Walled Carbon Nanotubes (SWCNT) [OC-026]**
Ina Bodoky, *Marcel Mayor*, University of Basel
- 16:30 **Rational Design of a Gold Carbene Precursor Complex for a Catalytic Cyclopropanation Reaction [OC-027]**
David Ringger, *Peter Chen*, ETH Zurich

Physical Chemistry [PC]**Morning Session – G40**

Chair: Prof. Stefan Willitsch



Session Endowment: Bruker BioSpin

- 11:15 **Bruker: Session Endowment Talk [PC-001]**
Guest speaker from Bruker Physik GmbH
- 11:45 **Attosecond photoelectron spectroscopy [PC-013]**
Martin Huppert, *Hans Jakob Wörner*, ETH Zurich
- 12:00 **Submm wave spectroscopy in the range 72 to 100 GHz of meta- and ortho-D-phenol: Probing tunneling switching dynamics [PC-014]**
Ziqiu Chen, *Martin Quack*, ETH Zurich
- 12:15 **Control of chemical reactivity through spatial separation of molecular conformations [PC-015]**
Daniel Rösch, *Stefan Willitsch*, University of Basel
- 12:30 **Rydberg Spectroscopy of Zeeman-Decelerated Beams of Metastable Helium Molecules [PC-016]**
Paul Jansen, *Frédéric Merkt*, ETH Zurich

Afternoon Session – G40

Chair: Prof. Peter Hamm

- 15:00 **Probing a Conformational Change of a Photoswitchable Allosteric Protein with Ultrafast IR Spectroscopy [PC-021]**
Brigitte Stucki-Buchli, *Peter Hamm*, University of Zurich
- 15:15 **Light-induced charge transfer in the cytochrome bc₁ at high quantum yield [PC-022]**
Adrien Chauvet, *Majed Chergui*, EPFL Lausanne
- 15:30 **Orientation and excited-state dynamics of DNA probes at liquid/water interfaces [PC-023]**
Giuseppe Leonardo Licari, *Eric Vauthey*, University of Geneva
- 15:45 **Photoelectric conversion based on light induced proton pumps and proton-coupled electron transfer reactions [PC-024]**
Xiaojiang Xie, *Eric Bakker*, University of Geneva
- 16:00 **Long-lived Charged Carriers in Oligothiophene Nanowires [PC-025]**
Damien Rolland, *Holger Frauenrath*, EPFL Lausanne
- 16:15 **Charge-transfer dissociation at organic donor-acceptor interfaces probed with time-resolved electroabsorption [PC-026]**
Jelissa De Jonghe, *Jacques-E. Moser*, EPFL Lausanne
- 16:30 **Particle size and shape dependence of the ionic diffusivity in LiMnPO₄ cathode for lithium ion batteries [PC-027]**
Nam Hee Kwon, *Katharina Fromm*, University of Fribourg

Polymers, Colloids & Interfaces [PI]**Morning Session – G55**

Chair: Prof. Christian Hinderling



Session Endowment: Dow Europe GmbH

- 11:15 **Observation of single-molecules at interfaces: fundamentals and applications [PI-001]**
Aureli Honciuc, Zurich University of Applied Sciences, ZHAW
- 11:45 **Stimuli-Responsive (Bio)Hybrid Coiled Coil Peptide-Polymer Microgels [PI-013]**
Vitaliy Kolesov, *Harm-Anton Klok*, EPFL Lausanne
- 12:00 **Organic-Inorganic Nanocomposite Scintillators: HfO₂: Eu Luminescent Nanoparticles Embedded into Polymer Films [PI-014]**
Alessandro Lauria, *Walter Caseri*, ETH Zurich
- 12:15 **Modeling multiradicals in bulk crosslinking copolymerization [PI-015]**
Stefano Lazzari, ETH Zurich
- 12:30 **Short Poster Presentations: Polymers, Colloids & Interfaces [PI-016]**
Chaired by Christian Hinderling, Zurich University of Applied Sciences, ZHAW

Afternoon Session – G55

Chair: Prof. Dieter Schlüter

- 15:00 **Generating anisotropic microstructures in colloidal gels [PI-002]**
Jan Vermant, ETH Zurich
- 15:30 **Tunable aggregation of sterically demanding peryleneimides induced by the conjugation with rigid oligoproline scaffolds [PI-023]**
Urszula Lewandowska, *Helma Wennemers*, ETH Zurich
- 15:45 **Effect of hydrophobicity on nanoparticle formation: a case of ABC asymmetric triblock copolymers [PI-024]**
Evgeniia Konishcheva, *Wolfgang Meier*, University of Basel
- 16:00 **Tandem Ring Opening-Ring Closing Metathesis for Synthesis of Functional Metathesis Catalysts [PI-025]**
Amit Nagarkar, *Andreas Kilbinger*, University of Fribourg
- 16:15 **The role of peptides in the formation of silver nanoparticles [PI-026]**
Matthias Messerer, *Katharina Fromm*, University of Fribourg
- 16:30 **Particle Aggregation in Ionic Liquids [PI-027]**
Gregor Trefalt, *Michal Borkovec*, University of Geneva

POSTER SESSIONS

Name = Presenting Author

Name = Research Leader

Alphabetical ordered by presenting Author [XY-101]...[XY-199]

Analytical Sciences [AS] Poster Session

The Design of Selected Reaction Monitoring Method based on Empirical Spectra Library of Synthetic Peptides for Higher Sensitive Measurements [AS-101]

Bandar Alghanem, *Gérard Hopfgartner*, University of Geneva

HRMS dereplication, spectral networks and small molecule epigenetic modifiers: tools to decipher cryptic metabolic pathways in fungal microorganisms [AS-102]

Pierre-Marie Allard, *Jean-Luc Wolfender*, University of Geneva

Hyphenation of SPRI and MALDI MS for Interaction Analysis [AS-103]

Ulrike Anders, *Renato Zenobi*, ETH Zurich

MS-based isolation strategy for rapid targeted purification of antifungal compounds at the preparative scale [AS-104]

Antonio Azzollini, *Jean-Luc Wolfender*, University of Geneva

Evaluation of Hadamard Transform Atmospheric Pressure Ion Mobility-ESI-MS for the rapid profiling of isomeric natural products [AS-105]

Antonio Azzollini, *Jean-Luc Wolfender*, University of Geneva

Add-on Secondary Electrospray Ionizer for, delivering high ionization efficiency of vapors for the Analytical sector and for pre-existing API-M [AS-106]

Cesar Barrios-Collado, Pablo Martinez-Lozano Sinues, ETH Zurich

Exploring demultiplexing strategies for peptide identification in SWATH spectra: assessment of elution profile similarity [AS-107]

Aivett Bilbao, *Gérard Hopfgartner*, University of Geneva

Metabolite screening in plasma based on SWATH data acquisition in UHPLC-MS/MS analysis combined with a high resolution metabolomics library [AS-108]

Tobias Bruderer, *Gérard Hopfgartner*, University of Geneva

Analyzing Durable Anti-fungal Resistance Processes in Cereals by Metabolomics Using UHPLC-HR-MS [AS-109]

Rahel Bucher, *Laurent Bigler*, University of Zurich

Proton homodecoupling with enhanced resolution and sensitivity [AS-110]

Axelle Cotte, University of Geneva

Confined Thin Layer Cyclic Voltammetry for Halide Detection [AS-111]

Maria Cuartero, *Eric Bakker*, University of Geneva

Quantitation of Dystrophin in Quadriceps of Treated mdx Mice by LC-SRM/MS [AS-112]

Chantal Geiser, *Stefan Schürch*, University of Bern

Rapid and sensitive analysis of proteins with CE-SDS-LIF: mass spectrometric characterization of fluorescent labeled proteins [AS-113]

Miriam Goyder, HES-SO Valais, *Franka Kálmán*, University of Applied Sciences and Arts Northwestern Switzerland, FHNW

Quantification of La in CaMnO₃ by ICPMS for Analysis of PLD Films [AS-114]

Kevin Guex, *Detlef Günther*, ETH Zurich

Tandem mass spectrometric elucidation of the higher-order structure of sugar-modified nucleic acid duplexes [AS-115]

Yvonne Hari, *Stefan Schürch*, University of Bern

Method development for analysis of (oxygenised) volatile organic compounds in ambient air [AS-116]

Corinne C. Hoerger, *Stefan Reimann*, EMPA Dübendorf

Unraveling the requirements for immortality – Description of the alternative lengthening of telomeres type I cell phenotype using microarrays for mass spectrometry [AS-117]

Alfredo Ibanez, ETH Zurich

Investigation of Primaquine Metabolism and its Effects on the Metabolomic Distribution of Hepatocytes Using a Dedicated LC/MS Platform Including Automated Bligh & Dyer Extraction [AS-118]

Sandra Jahn, *Gérard Hopfgartner*, University of Geneva

Pattern-Based Sensing of Aminoglycosides [AS-119]

Ziya Kostereli, EPFL Lausanne

Probing localized chemical phases in thin film solar cells [AS-120]

Wan-Ing Lin, *Renato Zenobi*, ETH Zurich

Scanning Carbonate Samples for Radiocarbon Content with Laser Ablation Coupled to Accelerator Mass Spectrometry [AS-121]

Caroline Münsterer, *Detlef Günther*, ETH Zurich

RASPPberry, an automated sample preparation platform [AS-122]

Inken Plitzko, F. Hoffmann-La Roche AG

Quantification of bufadienolides in *Bryophyllum pinnatum* leaves and manufactured products by UHPLC-ESI-MS/MS [AS-123]

Olivier Potterat, *Matthias Hamburger*, University of Basel

At-line quantitative monitoring of the production of recombinant his-tagged proteins using fluorescence polarization [AS-124]

Denis Prim, *Jean-Manuel Segura*, University of Applied Sciences Western Switzerland Valais

Optimized strategy for an efficient Normal Phase MS-targeted isolation of natural products [AS-125]

Davide Righi, *Jean-Luc Wolfender*, University of Geneva

Excess Electron Transfer Through Phenanthrenyl Base Pairs Within DNA [AS-126]

Pascal Röthlisberger, *Christian Leumann*, University of Bern

Nucleoside phosphate monitoring in mammalian cell fed-batch cultivation using quantitative matrix-assisted laser desorption/ionization time-of-flight mass spectrometry [AS-127]

Robert Steinhoff, *Renato Zenobi*, ETH Zurich

Zoom feature for a chemical microscope based on tip-enhanced Raman spectroscopy [AS-128]

Jacek Szczerbiński, *Renato Zenobi*, ETH Zurich

¹H HR-MAS NMR based metabolic profiling of cells in response to treatment with a hexacationic Ruthenium complex [AS-129]

Martina Vermathen, University of Bern

Fluorescent Sol based Optical Ammonia Gas Sensor [AS-130]

Susanne Widmer, EMPA St. Gallen, *Lukas J. Scherer*, Radiometer Basel

All Solid State Membrane Electrodes Based on Ferrocene Functionalized PVC [AS-131]

Zdenka Jarolímová, *Eric Bakker*, University of Geneva

Influence of the target plate material and sample layer thickness on LDI ionization efficiency for C60 [AS-132]

Guido Paul Zeegers, *Renato Zenobi*, ETH Zurich

Ion-selective nanospheres as novel reagents in complexometric titrations [AS-133]

Jingying Zhai, *Eric Bakker*, University of Geneva

Application of SWATH acquisition method to the mass spectrometry-based proteomics study of monocyte-derived dendritic cells [AS-134]

Ying Zhang, *Gérard Hopfgartner*, University of Geneva

Instrumentino: An open-source modular Python framework for controlling Arduino based experimental instruments [AS-135]

Joel Koenka, *Peter Hauser*, University of Basel

Computational Chemistry [CC] Poster Session

Theoretical conformation analysis of a triazine-based, double-decker rotor molecule with three anthracene blades [CC-101]

Maike Bergeler, *Markus Reiher*, ETH Zurich

A Density-Dependent Dispersion Correction: Beyond the post-SCF and ground state density [CC-102]

Eric Brémond, *Clemence Corminboeuf*, EPFL Lausanne

Computational study of the reaction between O(³P) and NO(²I) at temperatures relevant to the Hypersonic Flight Regime [CC-103]

Juan Carlos Castro-Palacio, *Markus Meuwly*, University of Basel

Understanding Supported Metallic Nanoparticles: An Ab Initio Approach [CC-104]

Alex Comas-Vives, *Christophe Copéret*, ETH Zurich

Theoretical modeling of mesoporosity development in zeolites in alkaline media: Hierarchical ZSM-5 and ZSM-22 [CC-105]

Izabela Czekaj, *Javier Pérez-Ramírez*, ETH Zurich

Inter-system crossing with TDDFT: Jablonski diagrams from theory [CC-106]

Felipe Miraglia Franco de Carvalho, *Ivano Tavernelli*, EPFL Lausanne

Molecular scalar fields: From bonding descriptors to density functionals [CC-107]

Piotr de Silva, *Clemence Corminboeuf*, EPFL Lausanne

Monte Carlo Simulations of Bulk Liquid Water at Ambient Temperature and Pressure: Climbing the Jacob's Ladder of Density Functional Approximations [CC-108]

Mauro Del Ben, University of Zurich

Liquid-liquid equilibrium and thermodynamics modeling of systems containing jatropha oil + methanol + glycerol + biodiesel [CC-109]

Kusumaningtyas Ratna Dewi, Semarang State University

Local density fitting within a Gaussian and plane waves approach [CC-110]

Dorothea Golze, University of Zurich

Ab Initio Modeling of TiO₂-based Photo-catalysis for Water Reduction [CC-111]

Yeliz Guerdal, *Jürg Hutter*, University of Zurich

A new toolkit for fitting forcefield parameters used for Permanent Multipoles molecular simulations [CC-112]

Florent Hédin, *Markus Meuwly*, University of Basel

LFDFPT Calculations of Praseodymium doped binary Fluorides compared with Experimental Results [CC-113]

Benjamin Herden, *Claude A. Daul*, University of Fribourg

Computational Investigations of Potential Water Oxidation Catalysts [CC-114]

Florian Hodel, *Jürg Hutter*, University of Zurich

Computation of Molecular Parity Violation in View of Spectroscopic Experiments [CC-115]

Lubos Horny, *Martin Quack*, ETH Zurich

Interactive Visualization of PDB and CSD in 3D-Shape Space [CC-116]

Xian Jin, *Jean-Louis Reymond*, University of Bern

Excited state calculations with MPS-DMRG [CC-117]

Sebastian Keller, *Markus Reiher*, ETH Zurich

Free-radical copolymerization of acrylamides, acrylates and α -olefins [CC-118]

Rollin King, Bethel University

Adaptive Tensor Network Parameterizations of the Electronic Wave Function for Application in Strong-Correlation Problems [CC-119]

Arseny Kovyrshin, *Markus Reiher*, ETH Zurich

Adjusting the Local Arrangement of π -Stacked Oligothiophenes to Promote Charge Transfer [CC-120]

Hongguang Liu, *Clemence Corminboeuf*, EPFL Lausanne

Progress on DMRG-SCF Gradients for State-specific and State-averaged Cases [CC-122]

Yingjin Ma, *Markus Reiher*, ETH Zurich

Mechanism of ethylene polymerization by CrIII silicates via C-H activation: insights from DFT calculations [CC-123]

Francisco Nuñez Zarur, *Christophe Copéret*, ETH Zurich

Noncovalent interactions in isostructural cocrystals and salts:**A theoretical investigation**

[CC-124]

Nirmal Ram Jayaraman Selvaraj, *Tomasz Adam Wesolowski*, University of Geneva**Theoretical account of the electronic structure and properties of systems with two-open-shell f and d electrons**

[CC-125]

Harry Ramanantoanina, *Claude A. Daul*, University of Fribourg**The Subtle Effect of the Solvent on Competing Reaction Mechanisms Involving λ^3 -iodanes: From the Reaction Profile to the Minimal Energy Pathway on the Free Energy Surface**

[CC-126]

Oliver Sala, *Antonio Togni*, ETH Zurich**Chemoinformatics Meets Quantum Chemistry: A Strategy for Computational Molecular/Reaction Analysis Based on The Global Reaction Route Maps**

[CC-127]

Hiroko Satoh, National Institute of Informatics, Tokyo

Non-uniform Continuum Model for Solvatochromism Based on Frozen-Density Embedding Theory

[CC-128]

Sapana Shedde, *Tomasz Adam Wesolowski*, University of Geneva**Excess electrons in anatase: a hybrid DFT and RPA study**

[CC-129]

Clelia Spreafico, ETH Zurich

Exciton coupling in π -stacked chromophores: a challenge for electronic structure approaches

[CC-130]

Peter R. Tentscher, *Clémence Corminboeuf*, EPFL Lausanne**Dynamics of retinal chromophore in rhodopsin: from cis-trans isomerisation to activation**

[CC-131]

Siri Camee Van Keulen, *Ursula Röthlisberger*, EPFL Lausanne**Visualizing and quantifying interactions in the excited states using molecular scalar fields**

[CC-132]

Laurent Vannay, *Clemence Corminboeuf*, EPFL Lausanne**MD Simulations of Non-linear Hydrogen Transfer with Zero-point Energy Corrected MMPT Force Field**

[CC-133]

Zhen-Hao Xu, *Markus Meuwly*, University of Basel**Alchemical Coupling Approaches within Quantum Chemistry**

[CC-134]

K. Y. Samuel Chang, *O. Anatole von Lilienfeld*, University of Basel**On-the-fly ab initio semiclassical dynamics: Identifying degrees of freedom essential for emission spectra of oligothiophenes [1]**

[CC-135]

Marius Wehrle, EPFL Lausanne

Accelerating Quantum Instanton Calculations of Kinetic Isotope Effects

[CC-136]

Konstantin Karandashev, EPFL Lausanne

**Catalysis Sciences & Engineering [CE]
Poster Session****Efficient biphasic processing of sugars to furans over GaUSY/Amberlyst-36 in continuous mode**

[CE-101]

Christof Aellig, *Javier Pérez-Ramírez*, ETH Zurich**Alkane Hydroxylation Using an Artificial Metalloenzyme Based on the Biotin-Streptavidin Technology**

[CE-102]

Maxime Barnet, *Thomas R. Ward*, University of Basel**Pretreatment effect on supported Au_x(SR)_y clusters**

[CE-103]

Noelia Barrabes, *Thomas Bürgi*, University of Geneva**Fe₂O₃-TiO₂ Nanostructured Composite Photoanode for Water Splitting**

[CE-104]

Mario Bärtsch, *Markus Niederberger*, ETH Zurich**Activated Carbon Fibers as Efficient Structured Adsorbent for VOCs Removal**

[CE-105]

Guillaume Baur, *Lioubov Kiwi*, EPFL Lausanne**Secondary reactions during the decomposition of formic acid**

[CE-106]

Amaia Beloqui Redondo, *Jeroen A. van Bokhoven*, ETH Zurich and Paul Scherrer Institute, Villigen**Towards Ocean Based Biorefinery: N-Acetyl-D-Glucosamine (NAG) to Value-Added Polyols.**

[CE-107]

Felix D. Bobbink, *Paul Dyson*, EPFL Lausanne**Controlling the active phase distribution in shaped catalysts**

[CE-108]

Lars Borchardt, *Javier Pérez-Ramírez*, ETH Zurich**Membrane reactor concept for CO₂ methanation**

[CE-109]

Andreas Borgschulte, EMPA Dübendorf

Activation of Cu-mordenite for methane to methanol conversion: Effects of synthesis and multiple cycles on methanol production

[CE-110]

Selmi Erim Bozbag, *Jeroen A. van Bokhoven*, ETH Zurich and Paul Scherrer Institute, Villigen**Protecting nano-particles against sintering for application under demanding catalytic conditions**

[CE-111]

Andrew Chang-Yin Chien, Paul Scherrer Institute, Villigen, *Jeroen Anton van Bokhoven*, ETH Zurich and Paul Scherrer Institute, Villigen**The Mechanism of (catalytic) Lignin Pyrolysis: Linking Model Compounds to Lignin**

[CE-112]

Victoria Custodis, *Jeroen A. van Bokhoven*, ETH Zurich**Esterification of Lignin Monomers and Fatty Acids using Separable Solid Acids**

[CE-113]

Bahir Duraki, *Jeroen A. van Bokhoven*, ETH Zurich**Increased methanation activity of ruthenium nanoparticles through passivation of the silica support**

[CE-114]

Karol Furman, *Christophe Copéret*, ETH Zurich**Identifying short-lived phases and their rates of formation and disappearance from transient XAS spectroscopy**

[CE-115]

Urs Hartfelder, *Jeroen A. van Bokhoven*, ETH Zurich**Studying the structure-directing effect of aromatic-functionalized templates in zeolite synthesis**

[CE-116]

Manuel Hernandez-Rodriguez, *Javier Pérez-Ramírez*, ETH Zurich**Controlled growth and interfaces of supported iridium nanoparticles via surface organometallic chemistry**

[CE-117]

Florent Héroguel, *Christophe Copéret*, ETH Zurich**Microwave-assisted nonaqueous synthesis of WO₃ nanoparticles for crystallographically oriented photoanodes for water splitting [1]**

[CE-118]

Sandra Hilaire, *Markus Niederberger*, ETH Zurich

Organometallic Chemistry with Metal-Organic**Frameworks: Well-Defined Heterogeneous Catalytic Sites for Olefin Metathesis [CE-119]**

Rifat Kamarudheen, Paul Scherrer Institute, Villigen, *Jeroen A. van Bokhoven, ETH Zurich and Paul Scherrer Institute, Villigen*

Structure modification and carbon resistance improvement of modified Ni/Al₂O₃ catalysts for synthetic natural gas production [CE-120]

Anastasios Kampolis, *Oliver Kröcher, Paul Scherrer Institute, Villigen and EPFL Lausanne*

Hydrogenation of Arenes by Metal Nanoparticles Combined with Lewis Acidic Ionic Liquids [CE-121]

Alena Karakulina, *Paul Dyson, EPFL Lausanne*

Single particle spectroscopy on well-defined models systems prepared using nanotechnology to study size-effects in catalysis [CE-122]

Waiz Karim, *Jeroen A. van Bokhoven, ETH Zurich and Paul Scherrer Institute, Villigen*

Post-synthetic design of basic zeolites for bio-oil upgrading [CE-123]

Tobias Keller, *Javier Pérez-Ramírez, ETH Zurich*

Oxidative coupling of methane on flame-made Mn-Na₂WO₄/SiO₂: Influence of catalyst composition and reaction conditions [CE-124]

Rajesh Koirala, *Alfons Baiker, ETH Zurich*

Oxidative dehydrogenation of ethane (ODHE) with CO₂ over flame-made Ga-loaded TiO₂ [CE-125]

Rajesh Koirala, *Alfons Baiker, ETH Zurich*

In Situ Resonant X-Ray Emission Spectroscopy of Ce³⁺ Formation During CO Oxidation at Low Temperatures over Platinum Nanoparticles Supported on Ceria [CE-126]

René Kopelent, *Olga V. Safonova, Paul Scherrer Institute, Villigen*

Gas-phase selective oxidation of glycerol to dihydroxyacetone over iron zeolites [CE-127]

Giacomo Marco Lari, *Javier Pérez-Ramírez, ETH Zurich*

Electrocatalytic reduction of carbon dioxide by thiol-protected silver nanoclusters [CE-128]

Gastón Larrazábal, *Javier Pérez-Ramírez, ETH Zurich*

Rhodium doped ceria: Organics from sunlight, H₂O and CO₂? [CE-129]

Fangjian Lin, *Paul Scherrer Institute, Villigen*

Cobalt-based spinel catalysts for visible-light-driven water oxidation [CE-130]

Hongfei Liu, *Greta Ricarda Patzke, University of Zurich*

DRIFTS-HEROS study of CO oxidation on Pt catalysts [CE-132]

Valentina Marchionni, *Davide Ferri, Paul Scherrer Institute, Villigen*

Operando Monitoring of Surface Processes during Heterogeneous Asymmetric Hydrogenation of Ketones on Chirally-Modified Platinum Catalyst [CE-133]

Fabian Meemken, *Konrad Hungerbühler, ETH Zurich*

Engineering Single-Sites Inside Metal Organic Frameworks in the Search for New Water Oxidation Catalysts [CE-134]

Kim Meyer, *ETH Zurich, Jeroen A. van Bokhoven, ETH Zurich and Paul Scherrer Institute, Villigen*

Scalable Enantioselective Synthesis of Fmoc-β²-Serin and -Threonin by Organocatalytic Mannich Reaction [CE-135]

Daniel Meyer, *Roger Marti, School of Engineering and Architecture of Fribourg*

WO₃-CeO_x-TiO₂ catalyst prepared by one-step flame spray synthesis for NO_x reduction in the NH₃-SCR [CE-136]

Katarzyna Michalow-Mauke, *Oliver Kröcher, Paul Scherrer Institute, Villigen and EPFL Lausanne*

Effects of binders on the lifetime and selectivity of shaped hierarchical zeolites in MTH [CE-137]

Nina-Luisa Michels, *Javier Pérez-Ramírez, ETH Zurich*

Technical catalyst design: effective application of additives to enhance thermal conductivity [CE-138]

Nina-Luisa Michels, *Javier Pérez-Ramírez, ETH Zurich*

Metal Complexes with N-Heterocyclic Carbenes Bearing Redox Active Groups [CE-139]

Ewa Milopolska, *Thomas R. Ward, University of Basel*

Coupling of hydrogen and oxygen evolution electrocatalysts to photoelectrodes for the production of solar fuels. [CE-140]

Carlos G. Morales-Guio, *Xile Hu, EPFL Lausanne*

Towards heterogeneous asymmetric hydrogenation of olefins using phosphine-substituted metal-organic frameworks [CE-141]

Flavien L. Morel, *ETH Zurich, Jeroen A. van Bokhoven, ETH Zurich and Paul Scherrer Institute, Villigen*

Impact of feed impurities on catalyst design for chlorine recycling [CE-142]

Maximilian Moser, *Javier Pérez-Ramírez, ETH Zurich*

A Novel Non-hydrolytic Sol-gel Route to Blue Tungsten Oxide and its Electrochemical Stability [CE-143]

Emma Oakton, *Christophe Copéret, ETH Zurich*

Is a good Deacon catalyst a good oxychlorination catalyst? [CE-144]

Vladimir Paunovic, *Javier Pérez-Ramírez, ETH Zurich*

Catalytic Performance of Artificial Imine Reductases Based on Designed Variants of hCAII [CE-145]

Michela Pellizzoni, *University of Milan, Thomas R. Ward, University of Basel*

One-pot polyol synthesis of Pt/CeO₂ and Au/CeO₂ nanoparticles as catalysts for CO oxidation [CE-146]

Frank Pilger, *Christian Ludwig, EPFL Lausanne*

Towards in situ photoelectron spectroscopy on different formic acid decomposition catalysts [CE-147]

Christian Proff, *Jeroen A. van Bokhoven, ETH Zurich and Paul Scherrer Institute, Villigen*

Oxygen Reduction on Pt/SnO₂ Catalysts: a Model Electrode Study [CE-148]

Annett Rabis, *Thomas Schmidt, Paul Scherrer Institute, Villigen*

Development of artificial Metalloenzymes for Ring closing Metathesis based on the Biotin-(Strept)avidin Technology [CE-149]

Raphael Reuter, *Thomas R. Ward, University of Basel*

Extent-based Model Identification of Surface Catalytic Reaction Systems [CE-150]

Diogo Rodrigues, *Dominique Bonvin, EPFL Lausanne*

Reactivity of Active Sites on gamma-Alumina: Towards C-C Bond Formation [CE-151]

Martin Schwarzwälder, *Christophe Copéret*, ETH Zurich

Improved Performance of Artificial Metalloenzymes Based on the Biotin-Streptavidin Technology [CE-152]

Fabian Schwizer, *Thomas R. Ward*, University of Basel

Designer Ionic Liquids for Biomass Valorization [CE-153]

Sviatlana Siankevich, *Paul Dyson*, EPFL Lausanne

Room temperature Au nanoparticle deposition via control of TiO₂ surface chemistry [CE-154]

Georges Siddiqui, *Christophe Copéret*, ETH Zurich

Asymmetric transfer hydrogenation of imines: Structural effects within Noyori-Ikariya catalysts [CE-155]

Petr Šot, Petr Kačer, Institute of Chemical Technology, Prague, Czech Republic

Hydrogen from activated sewage sludge with a stacked microbial electrolysis cell [CE-156]

Marc Sugnaux, *Fabian Fischer*, HES-SO Valais

Selective hydrogenation of aromatic amino acids in aqueous solution catalyzed by nanoRu@hectorite [CE-157]

Bing Sun, *Georg Süß-Fink*, University of Neuchâtel

Selective CO Methanation over Ru-Ni/TiO₂: Effect of Ru and Ni Loading Amount [CE-158]

Shohei Tada, *Ryuji Kikuchi*, The University of Tokyo

Tuning electrocatalytic activity of Pt for oxygen reduction by structure modification [CE-159]

Sandra Temmel, Paul Scherrer Institute, Villigen and ETH Zurich, *Thomas Schmidt*, Paul Scherrer Institute, Villigen

DNP NMR Spectral Signatures of the Active Sites in Sn-Beta Zeolite and Reaction with Probe Molecules [CE-160]

Maxence Valla, *Christophe Copéret*, ETH Zurich

Mesoporous mixed oxides of cerium and zirconium modified with Au and Cu – synthesis, characterization and performance in glycerol oxidation [CE-161]

Jeroen A. van Bokhoven, ETH Zurich and Paul Scherrer Institute, Villigen

Chemoselective hydrogenation of functionalized nitroarenes over ligand-modified platinum nanoparticles [CE-162]

Gianvito Vilé, *Javier Pérez-Ramírez*, ETH Zurich

Selective hydrogenation of alkynes over CeO₂-based catalysts [CE-163]

Gianvito Vilé, *Javier Pérez-Ramírez*, ETH Zurich

Highly periodic catalyst nanostructures for the production of sustainable energy [CE-164]

Roche Marcel Walliser, *Edwin C. Constable*, University of Basel

Tuning Regioisomer Reactivity in Catalysis using Bifunctional Metal-Organic Frameworks with Mixed Linkers [CE-165]

Xiaoying Xu, ETH Zurich, *Jeroen A. van Bokhoven*, ETH Zurich and Paul Scherrer Institute, Villigen

Gold thiolated clusters Au₃₈(SR)₂₄ in oxidation reactions [CE-166]

Bei Zhang, *Noelia Barrabes*, University of Geneva

The structure of intermediates of cobaloxime H₂ evolving photo-catalyst refined by X-ray absorption spectroscopy with sub-microsecond time resolution [CE-167]

Grigory Smolentsev, Paul Scherrer Institute, Villigen, *Jeroen A. van Bokhoven*, ETH Zurich

Carbon-supported Ru as a Catalyst for Supercritical Water Gasification of Isopropanol for Methane Production [CE-168]

Gaël Peng, Paul Scherrer Institute, Villigen, *Frédéric Vogel*, University of Applied Sciences and Arts Northwestern Switzerland, FHNW

**Inorganic Chemistry [IC]
Poster Session**

Binding isotherms for modelling Lanthanide multiple complexation to polymeric scaffolds [IC-101]

Lucille Babel, *Claude Piguet*, University of Geneva

Solvation effects and their consequences on ligand-metal binding events [IC-102]

Karine Baudet, *Claude Piguet*, University of Geneva

From Welding to Cross-Coupling: How Iron Forms Bonds—the Story of a Mechanism. [IC-103]

Gerald Bauer, *Xile Hu*, EPFL Lausanne

Modifications of Vitamin B12 as a Drug Delivery System for CORMs [IC-104]

Ruben Beltrami, *Fabio Zobi*, University of Fribourg

Synthesis of Water Stable {M^(V)O₂}⁺-N-Heterocyclic Carbene Complexes (M = Re, ⁹⁹Tc) [IC-105]

Michael Benz, *Roger Alberto*, University of Zurich

Synthesis of C₂-Symmetric N₂P₂ Macrocycles and their Fe(II) Complexes [IC-106]

Raphael Bigler, *Antonio Mezzetti*, ETH Zurich

Macrocyclic Iron(II) Complexes in Asymmetric Transfer Hydrogenation [IC-107]

Raphael Bigler, *Antonio Mezzetti*, ETH Zurich

d⁶-Metal Complexes with Bifunctional Catechol-like Bipyridine Ligands [IC-108]

Laura A. Büldt, *Oliver S. Wenger*, University of Basel

Cyclometallated Ir(III) based Light-emitting Electrochemical Cells - A new Technology for Lighting Applications [IC-109]

Andreas Bünzli, *Catherine E. Housecroft*, University of Basel

Tin based P-type direct band-gap semiconductor material for application in solid-state dye-sensitized solar cells [IC-110]

Annika Büttner, *Catherine E. Housecroft*, University of Basel

Chromium-Lanthanide complexes: a fascinating class of compounds. Crystal structures and magnetic property investigations [IC-111]

Pierre-Emmanuel Car, *Greta Ricarda Patzke*, University of Zurich

Transition metal substituted polyoxometalates: crystal growth engineering and photocatalytic applications [IC-112]

Pierre-Emmanuel Car, University of Zurich

Synthesis, characterization and biological activity of novel ruthenium-thiazolylhydrazone complexes [IC-113]

Thomas Cheminel, University of Neuchatel

Novel Trifluoromethylated P-Stereogenic Oxazoline Ligands [IC-114]

Rima Drissi, Antonio Togni, ETH Zurich

Asymmetric Imine Aziridination with Ru/PNNP Catalysts [IC-115]

Joël Eglhoff, Antonio Mezzetti, ETH Zurich

Fluorine-Free Blue and Green Emitting Iridium(III) Complexes for Light Emitting Electrochemical Cells [IC-116]

Cathrin Ertl, Edwin C. Constable, University of Basel

Dissolution of nano-size ZSM-5 crystals in alkaline solution: Identification of structural differences between crystals [IC-117]

Daniel Fodor, Jeroen A. van Bokhoven, ETH Zurich

New Phenanthroline Copper Dyes and their Application in Dye Sensitized Solar Cells [IC-118]

Sebastian Fürer, Catherine E. Housecroft, University of Basel

Synthesis, characterization and cytotoxicity of (η^6 -p cymene) ruthenium(II) complexes of α -amino acids [IC-119]

Julien Furrer, University of Bern

Reducing Aggregation of Silicon Nanoparticles by Shell Designing. [IC-120]

Almudena Gallego, Marcel Mayor, University of Basel

Arene ruthenium metalla-assemblies: A mechanistic study [IC-121]

Amine Garci, Bruno Therrien, University of Neuchatel

C-H Activation with Iridium(I) on Bipyridine-Containing Periodic Mesoporous Organosilicas [IC-122]

Wolfram R. Grüning, Christophe Copéret, ETH Zurich

News on Quasi-One-Dimensional Antiferromagnetic Chain Compounds [IC-123]

Nora Hänni, Karl Krämer, University of Bern

Synthesis and reactivity of bis-IBioxMe₄ iridium complexes [IC-124]

Simone Hauser, Adrian Chaplin, University of Warwick

Novel Straightforward Synthesis of Biologically Relevant Metallocene Derivatives [IC-125]

Jeannine Hess, Gilles Gasser, University of Zurich

P-Stereogenic Open-Chain NPPN Fe(II) Catalysts for the Strecker Reaction of Azomethine Imines [IC-126]

Raffael Huber, Antonio Mezzetti, ETH Zurich

Towards Radionuclide Therapy with Doxorubicin Conjugated Tc-99m Compounds [IC-127]

Sebastian Imstpf, Roger Alberto, University of Zurich

Ceria- and Perovskite- Based Materials for Solar Thermochemical Two-Step CO₂-Splitting [IC-128]

Roger Jacot, Greta R. Patzke, University of Zurich

Coordination of metal ions by the two cysteine-rich domains of the plant metallothionein-3 from *Musa acuminata* (banana) [IC-129]

Jovana Jakovleska, Eva Freisinger, University of Zurich

Heteroleptic light-emitting copper(I) complexes with possible applications in LECs and OLEDs [IC-130]

Sarah Keller, Catherine E. Housecroft, University of Basel

Coordination polymer or discrete complex? – The change of assembly in ZN(OAc)₂ complexes combined with a series of substituted 4,2':6',4''-terpyridine ligands [IC-131]

Maximilian Klein, Edwin C. Constable, University of Basel

Carbonyl Isocyanide Complexes of Rhenium and Manganese: A Redox Struggle towards CORMs [IC-132]

Emmanuel Kottelat, Fabio Zobi, University of Fribourg

New dyes for dye sensitized solar cells application [IC-133]

Angelo Lanzilotto, Catherine E. Housecroft, University of Basel

Silica nanoparticles doped with well-defined TTF dppz ligated Yb(III) centers [IC-134]

Giuseppe Lapadula, Christophe Copéret, ETH Zurich

The Effect of Other Elements Along with Phosphorus on the Flame Retardance of Cellulose-based Cotton Textiles [IC-135]

Jia En Low, Joëlle Levalois-Grützmacher, ETH Zurich

Bi-functionalized ionic liquids as active reaction media [IC-136]

Valentin Manzanares, Paul Dyson, EPFL Lausanne

Anionic Bipyridyl Ligands for Applications in Metallasupramolecular Chemistry [IC-137]

Mathieu Marmier, Kay Severin, EPFL Lausanne

Facile Synthesis of [M(arene)₂]⁺ complexes (M = Re, ^{99m}Tc) [IC-138]

Giuseppe Meola, Roger Alberto, University of Zurich

Formic acid dehydrogenation catalyzed by non-precious metal based catalysts. [IC-139]

Mickael Montandon, Gábor Laurenczy, EPFL Lausanne

Direct Carbon Dioxide Hydrogenation in the Hydrogen Storage under the Formic Acid/Carbon Dioxide Cycle [IC-140]

Séverine Moret, Paul Dyson, EPFL Lausanne

Anionic Ir(III) Complexes for Light-Emitting Electrochemical Cells [IC-141]

Collin Morris, Catherine E. Housecroft, University of Basel

Coordinating anchoring ligands for surface functionalisation [IC-142]

Steffen Müller, Edwin C. Constable, University of Basel

Molybdenum/Tungsten-Oxide Nanomaterials for Gas Sensing [IC-143]

Michael Olah, Greta Ricarda Patzke, University of Zurich

Light-Induced Long-Range Electron Transfer Coupled to Two Proton Transfers [IC-144]

Andrea Pannwitz, Oliver S. Wenger, University of Basel

How do hexaruthenium assemblies interact with proteins? [IC-145]

Lydia Paul, Julien Furrer, University of Bern

The Impact of Structure and Bonding on The Reactivity of λ -3-Iodanes: Theoretical Study of Competing Reactions Mechanisms [IC-146]

Halua Pinto de Magalhães, *Antonio Togni*, ETH Zurich

Cyclodextrin, a Host to Welcome Organic Chlorinated Pesticide(s) [IC-147]

Vijay Kumar Rana, *Joëlle Levalois-Grützacher*, ETH Zurich

Metal ions and the mammalian CPEB3 ribozyme – a complicated relationship [IC-148]

Magdalena Rowińska-Żyrek, *Roland K. O. Sigel*, University of Zurich

Ir(III)/Quantum Dots diads: en route to semiconductor-based photochemical water oxidation [IC-149]

Albert Ruggi, University of Fribourg

Fluorescent Labels for Single Molecule Studies of RNA Structure and Folding [IC-150]

Anita G. Schmitz, *Roland K.O. Sigel*, University of Zurich

Chiral Ferrocenyl-Substituted N-Heterocyclic Carbenes in Asymmetric Catalysis [IC-151]

Lukas Sigrist, *Antonio Togni*, ETH Zurich

Accessing Modified Properties and Functions of Vitamin B₁₂ through Backbone Alterations [IC-152]

Marjorie Sonnay, *Felix Zelder*, University of Zurich

Hydrogen storage in formate-bicarbonate systems using new water-soluble ligands. [IC-153]

Katerina Sordakis, *Gábor Laurenczy*, EPFL Lausanne

Monothiolato-Bridged Dinuclear Arene Ruthenium Complexes: The Missing Link in the Reaction of Arene Ruthenium Dichloride Dimers with Thiols [IC-154]

David Stibal, *Georg Süss-Fink*, University of Neuchatel

Biologically Relevant or an Artifact? The Copper Binding Site in Wheat Metallothionein [IC-156]

Katsiaryna Tarasava, University of Zurich

Gas Phase Investigations on the β -Hydride Elimination Step in a Pd(II)-based System for the Polymerization of Polar Olefins [IC-157]

Augustin Armand Tchawou Wandji, *Peter Chen*, ETH Zurich

Layered ionic liquid-crystalline organisations built from nano-capsules [Mo₁₃₂O₃₁₂S₆₀(SO₄)_x(H₂O)_{132-2x}]^{(12+2x)-} and DODA⁺ cations [IC-158]

Emmanuel Terazzi, University of Geneva

Aqueous Synthesis of Multi-Functional Cyclopentadienyl Complexes: $[(\eta^5\text{-Cp}\{\text{COOR}\})_2\text{M}(\text{CO})_3]$ (M = Re, ^{99m}Tc) for Potential Theranostic Applications [IC-159]

Samer Ursillo, *Roger Alberto*, University of Zurich

Towards a better understanding of the gold-sulfur interface by spectroscopic investigation on monolayer protected gold-nanoclusters [IC-160]

Birte Varnholt, *Thomas Bürgi*, University of Geneva

Polyoxometalates: Structural diversities and efficient catalysts for artificial photosynthesis [IC-161]

Kim von Allmen, *Greta Ricarda Patzke*, University of Zurich

Flexible Co₃O₄/rGO Composite Aerogel as High-Performance Anode for Lithium-ion Batteries [IC-162]

Guobo Zeng, *Markus Niederberger*, ETH Zurich

Direct labeling of the btuB riboswitch for single-molecule FRET studies [IC-163]

Meng Zhao, *Roland K.O. Sigel*, University of Zurich

Medicinal Chemistry & Chemical Biology [MC] Poster Session

Unravelling the RNA binding of Rhenium(I)-dppz complexes [MC-101]

Elena Alberti, *Daniela Donghi*, University of Zurich

Labeling the bacterial outer membrane transporter LptD using an antimicrobial peptide by chemical cross-linking. [MC-102]

Gloria Andolina, *John A. Robinson*, University of Zurich

Two-Photon Uncaging as a More Versatile Alternative to Photodynamic Therapy [MC-103]

Philipp Anstaett, *Gilles Gasser*, University of Zurich

A Multi-fingerprint Polypharmacology browser for ChEMBL [MC-104]

Mahendra Awale, *Jean-Louis Reymond*, University of Bern

Guineensine as a Novel Inhibitor of Endocannabinoid Reuptake [MC-105]

Ruben Bartholomäus, *Karl-Heinz Altmann*, ETH Zurich

Synthesis and SAR of New des-THP Analogs of (-)-Dactyloide and (-)-Zampanolide [MC-106]

Tobias Brüttsch, *Karl-Heinz Altmann*, ETH Zurich

Miniaturized Assays for Point-of-Care Therapeutic Drug Monitoring [MC-107]

Elena-Diana Burghilea, University of Applied Sciences Western Switzerland, *Jean-Manuel Segura*, HES-SO Valais

Cell membrane association of the 295-311 fragment of the estrogen receptor α [MC-108]

Cillian Byrne, *Yves Jacquot*, Université Pierre et Marie Curie, Paris

Synthesis of Diphosphoinositol Polyphosphates [MC-109]

Samanta Capolicchio, *Henning Jessen*, University of Zurich

Structural patterns associated with the recruitment of holocalmodulin by ER α [MC-110]

Ludovic Carlier, *Yves Jacquot*, Université Pierre et Marie Curie, Paris

Tackling Antibiotic Resistance by Transcription Repressor Inhibitory Compounds [MC-111]

Mathieu Chellat, *Rainer Riedl*, Zurich University of Applied Sciences, ZHAW

Chitosan thiomers for antimicrobial applications [MC-112]

Matteo Croce, *Greta Ricarda Patzke*, University of Zurich

Antiprotozoal Compounds from *Drypetes gerrardii* [MC-113]

Maria De Mieri, *Matthias Hamburger*, University of Basel

Oligoprolines as Scaffolds for Tumor Targeting with Hybrid Bombesin Analogues [MC-114]

Stefanie Dobitz, *Helma Wennemers*, ETH Zurich

Repair of Protein Radicals by Antioxidants [MC-115]

Anastasia Domazou, *Willem H. Koppenol*, ETH Zurich

- New insights into the folding and NMR structure of the human RNA BCL2 G-quadruplex [MC-116]**
Alicia Dominguez-Martin, *Roland K.O. Sigel*, University of Zurich
- Dihydropyridomycins as New Antitubercular Agents: Synthesis and SAR Studies [MC-117]**
Maryline Dong, *Karl-Heinz Altmann*, ETH Zurich
- Enzymatic C-H bond cleavage probed by deuterium kinetic isotope effects [MC-118]**
Pascal Engi, *Florian Seebeck*, University of Basel
- FimH antagonists as novel approach for the prevention and treatment of Urinary Tract Infections [MC-119]**
Deniz Eris, *Beat Ernst*, University of Basel
- Impact of Sulforaphane on Cytotoxicity of PR-104A in Human Colon Cells [MC-120]**
Melanie Erzinger, *Shana Sturla*, ETH Zurich
- HPLC activity based profiling of Swartzia simplex and targeted MPLC isolation of its antifungal diterpenes [MC-121]**
Quentin Favre-Godal, *Jean-Luc Wolfender*, University of Geneva
- Catalytic carbene transfer allows the direct customization of cyclic dinucleotides [MC-122]**
Na Fei, *Dennis Gillingham*, University of Basel
- Antifungal and acetylcholinesterase inhibitors from Croton heliotropiifolius [MC-123]**
Marcos Ferreira Queiroz, *Jean-Luc Wolfender*, University of Geneva
- Investigating C(6')-butylamide tricyclo-DNA as a means for endosomal escape [MC-124]**
Klavdja Annabel Fignolé, *Christian Leumann*, University of Bern
- Close to near physiological conditions – A study under crowded conditions of group II intron ribozyme folding [MC-125]**
Erica Fiorini, *Roland K.O. Sigel*, University of Zurich
- Strategic targeting of multiple water-mediated interactions in the design of potent and selective MMP-inhibitors [MC-126]**
Thomas Fischer, *Rainer Riedl*, Zurich University of Applied Sciences, ZHAW
- Functionalized Proline-Rich Peptides as Selective Binders of c-diGMP [MC-127]**
Carlotta Foletti, *Helma Wennemers*, ETH Zurich
- Engineering an artificial carboxysome using capsid forming lumazine synthase [MC-128]**
Raphael Frey, *Donald Hilvert*, ETH Zurich
- Structural determination of the core region of the group II intron Sc.ai5γ and the role of the divalent metal ions in folding and structure [MC-129]**
Serranda Gashi, *Roland K.O. Sigel*, University of Zurich
- Single-molecule studies on a biologically relevant RNA G-quadruplex [MC-130]**
Helena Guiset Miserachs, *Roland K.O. Sigel*, University of Zurich
- Following inter- and intramolecular dynamics of single encapsulated RNA molecules by FRET spectroscopy [MC-131]**
Mélodie Hadzic, *Roland K.O. Sigel*, University of Zurich
- Synergistic folding and potency increase in an antimicrobial peptide pair against Pseudomonas aeruginosa [MC-132]**
Runze He, *Jean-Louis Reymond*, University of Bern
- Novel fluorescent agonists for the A₁ adenosine receptor [MC-133]**
Jennifer Hemmings, *Martin Lochner*, University of Bern
- Evaluation of Scoring Functions for QSAR within the S1 Selectivity Loop of MMP-13 [MC-134]**
Stefan Höck, *Rainer Riedl*, Zurich University of Applied Sciences, ZHAW
- Towards Phosphoanhydrides via P^{III} chemistry [MC-135]**
Alexandre Hofer, *Henning Jessen*, University of Zurich
- How ITC, Mutagenesis, and pKa Calculations Trace the Locus of Charge in Ligand Binding to a tRNA-Binding Enzyme [MC-136]**
Christoph Hohn, *François Diederich*, ETH Zurich
- Modified nucleoside triphosphates: synthetic tools for chemical biology [MC-137]**
Marcel Hollenstein, University of Bern
- Synthesis and Pairing Properties of 2'-Fluoro-Tricyclo-DNA [MC-138]**
Alena Istrate, *Christian Leumann*, University of Bern
- Site-selective Chemical Modification of the 5-HT₃ Receptor with Newly Developed Photo-Crosslinking Probes [MC-139]**
Thomas Jack, *Martin Lochner*, University of Bern
- Stereochemical bias introduced during RNA synthesis modulates the pharmacological properties of phosphorothioate siRNAs [MC-140]**
Hartmut Jahns, *Jonathan Hall*, ETH Zurich
- The influence of Mg²⁺ ions on single RNA tertiary contact seen at single molecule level [MC-141]**
Mokrane Khier, *Roland K.O. Sigel*, University of Zurich
- Betaines: the missing link in understanding fungal physiology and metabolism [MC-142]**
Sanja Kostić, *Florian Seebeck*, University of Basel
- Novel Kinase Inhibitors for PKA and PKB targeting the phosphate-loop [MC-143]**
Birgit Lauber, *François Diederich*, ETH Zurich
- Synthesis of Inhibitors and Probes for the Cellular Study of Glutamate Transporters [MC-144]**
Michele Leuenberger, *Martin Lochner*, University of Bern
- Modulation of Y-family DNA polymerase-mediated translesion synthesis by nucleotide analogs detected by a fluorescence-based method [MC-145]**
Stefano Malvezzi, ETH Zurich
- Probing DNA Structures and Dynamics with Fluorescent Nucleoside Analogs [MC-146]**
Guillaume Mata, *Nathan W. Luedtke*, University of Zurich
- Sphingoid Base Analogs as Biochemical Tools [MC-147]**
Denia Mellal, *Andreas Zumbühl*, University of Fribourg

- Discovery of Fucose/Galactose Heteroglycopeptide Dendrimers as Dual Biofilm Inhibitors Targeting *Pseudomonas aeruginosa* Lectins LecA and LecB [MC-148]**
Gaëlle Michaud, *Jean-Louis Reymond*, University of Bern
- New highlights on the interaction mechanism between coenzyme B₁₂ and the *btuB* riboswitch [MC-149]**
Anastasia Musiari, *Roland K.O. Sigel*, University of Zurich
- Chemical Basis for Modulating Human DNA Polymerase η -mediated Bypass and Extension Past the Major Cisplatin-DNA Adduct [MC-150]**
Arman Nilforoushan, *Shana Sturla*, ETH Zurich
- Thermosome – a cage protein for targeted delivery of macromolecules [MC-151]**
Martin Nussbaumer, University of Basel, *Nico Bruns*, University of Fribourg
- Site-specific post-synthetic oligonucleotide labeling for single-molecule studies [MC-152]**
Igor Oleinich, *Eva Freisinger*, University of Zurich
- Functionalization of second harmonic nanoparticles with inhibitors of prolyl-endopeptidases for cancer cells labelling and imaging [MC-153]**
Solène Passemard, *Sandrine Gerber*, EPFL Lausanne
- Development and Application of Diphosphoinositol Polyphosphate Analogs [MC-154]**
Igor Pavlovic, University of Zurich
- Identification of a peptide issued from the hinge region of the ER α and inducing apoptosis [MC-155]**
Yves Jacquot, Université Pierre et Marie Curie, Paris, *Guy Leclercq*, Université Libre de Bruxelles
- Structure-based Design of a New Lead Generation and Inhibition of the Antitrypanosomal Target Trypanothione Reductase [MC-156]**
Elke Persch, *François Diederich*, ETH Zurich
- Efficient in vitro encapsulation of charged molecules by engineered AaLS protein containers [MC-157]**
Zbigniew Pianowski, *Donald Hilvert*, ETH Zurich
- Discovery of a new class of neuropeptide S receptor antagonists [MC-158]**
Julien Pothier, Actelion Pharmaceuticals Ltd, Allschwil
- Development of a FRET-based high-throughput screen to identify antagonists of the Lin28/pre-let-7 interaction: a promising new target for cancer. [MC-159]**
Ugo Pradere, *Jonathan Hall*, ETH Zurich
- A modular LHC built on the DNA three-way junction [MC-160]**
Markus Probst, *Robert Häner*, University of Bern
- Unusual Dimeric Antitrypanosomal Flavonoids from Arrabidaea brachypoda [MC-161]**
Claudia Quitino da Rocha, Universidade Estadual Paulista (UNESP), Brazil, *Jean-Luc Wolfender*, University of Geneva
- Synthesis and biological evaluation of methylated tetra-benzazine derivatives [MC-162]**
Lea Radtke, *Karl-Heinz Altmann*, ETH Zurich
- Cell permeability of polycationic oligoprolines [MC-163]**
Philipp Raschle, *Helma Wennemers*, ETH Zurich
- Target Identification and Optimization of the Novel Notch Inhibitor I3 [MC-164]**
Viktoria Reinmüller, *Freddy Radtke*, EPFL Lausanne
- MMP-inhibitor development with 3D in vitro cell-based assays [MC-165]**
Rainer Riedl, *Rainer Riedl*, Zurich University of Applied Sciences, ZHAW
- Identification of sirtuins modulators: new scaffolds and overall strategy [MC-166]**
Lucie Ryckewaert, *Pierre-Alain Carrupt*, University of Geneva
- HPLC activity based profiling of *Conchocarpus fontane-sianus* and targeted MPLC isolation of its antifungal compounds [MC-167]**
Rodrigo Santana cabral, Instituto de Botânica SMA/SP Núcleo de Pesquisa em Fisiologia e Bioquímica, Brazil, *Jean-Luc Wolfender*, University of Geneva
- Exploration of Encapsulation Strategies for an Artificial Protein Cage O3-33 [MC-168]**
Eita Sasaki, *Donald Hilvert*, ETH Zurich
- Carbohydrate-based tRNA–Guanine Transglycosylase Inhibitors [MC-169]**
Elisabeth Schäfer, *François Diederich*, ETH Zurich
- Synthesis of multifunctional ligands for bioceramic coating; towards functional cell-engineered bone implants [MC-170]**
Vladislav Semak, *Sandrine Gerber*, EPFL Lausanne
- Studies on the Chemistry and Biology of Fragin [MC-171]**
Simon Sieber, *Karl Gademann*, University of Basel
- Switchable Proline Derivatives: Tuning the Conformational Stability of the Collagen Triple Helix by pH Changes [MC-172]**
Christiane Siebler, *Helma Wennemers*, ETH Zurich
- Fluorescent probes for the cellular study of the 5-HT₃A receptor - development of binding assays and in-vivo imaging [MC-173]**
Jonathan Simonin, *Martin Lochner*, University of Bern
- Drug monitoring and obstructive sleep apnoea diagnosis by in vivo breath analysis [MC-174]**
Pablo Martinez-Lozano Sinues, *Renato Zenobi*, ETH Zurich
- A New Route Towards Synthetic Collagen Based Materials: Oxime Criss-links To Stabilize Collagen Model Peptides [MC-175]**
Linde Smeenk, *Helma Wennemers*, ETH Zurich
- Visible-Light-Induced Annihilation of Human Tumor Cells with Platinum-Porphyrin Conjugates [MC-176]**
Bernhard Spingler, *Gilles Gasser*, University of Zurich
- Influence of RNA structure on RNA-protein binding [MC-177]**
Moritz Stoltz, *Jonathan Hall*, ETH Zurich
- Lipid self-assembly and its applications [MC-178]**
Kaori Sugihara, *Kaori Sugihara*, University of Geneva
- Benzimidazole-derived nucleosides in DNA synthesis as probes for O⁶-alkylguanine adducts [MC-179]**
Ursina Suter, *Shana Sturla*, ETH Zurich
- Chemical biology of Inositol polyphosphates [MC-180]**
Divyeshsinh Thakor, *Henning Jacob Jessen*, University of Zurich
- Sulfonamide Inhibitors of 2-Methylerythritol 2,4-Cyclodiphosphate Synthase (IspF) from *Arabidopsis thaliana* and *Plasmodium falciparum* [MC-181]**
Jonas Thelemann, *François Diederich*, ETH Zurich

Factors influencing the uptake of biotinylated ruthenium complexes for in vivo catalysis in E.coli [MC-182]Christian Trindler, *Thomas R. Ward*, University of Basel**New structure-activity relationship studies on bombesin-based tracers for tumor targeting [MC-183]**Ibai Valverde, *Thomas L. Mindt*, University of Basel Hospital**Investigation of the structure of LecA and multivalent ligands with crystallography and MD simulation [MC-184]**Ricardo Visini, *Jean-Louis Reymond*, University of Bern**Iron phosphate nanoparticles do not impair membrane integrity or metabolic activity in intestinal cell lines [MC-185]**Lea M von Moos, *Shana Sturla*, ETH Zurich**Metabolomic profiling of bovine cumulus cells and oocytes during in-vitro maturation of cumulus-oocyte complexes [MC-186]**

Jasmin Walter, University of Zurich

3-Alkoxy-pyrrolo[1,2-b]pyrazolines as novel selective androgen receptor modulators (SARMs) with unique physicochemical properties for transdermal administration [MC-187]

Sven Weiler, Novartis Institutes for Biomedical Research

Crystal Structure of an Oligoproline PPII-Helix [MC-188]Patrick Wilhelm, *Helma Wennemers*, ETH Zurich**A synthetic nucleotide analog enables polymerase-mediated amplification of DNA containing promutagenic O⁶-alkylguanine adducts [MC-189]**Laura Wyss, *Shana Sturla*, ETH Zurich**A unifying framework for protein amyloid self-assembly: from protein-protein interactions to large-scale structures [MC-190]**

Alessio Zaccone, University of Cambridge, Marco Lattuada, University of Fribourg

A new labelling strategy to visualize an RNA splicing process [MC-191]Susann Zelger-Paulus, *Roland K.O. Sigel*, University of Zurich**Probing Capsid Dynamics with Protein FRET [MC-192]**Reinhard Zschoche, *Donald Hilvert*, ETH Zurich**Organic Chemistry [OC]
Poster Session****Synthesis of Cyclopentenones by an Asymmetric Nickel-Catalyzed [3+2] Reductive Cycloaddition of Enoates with Alkynes [OC-101]**Joachim Ahlin, *Nicolai Cramer*, EPFL Lausanne**Mono-, Bis- and Penta-adducts of M₃N@C₈₀ (M = Y, Gd): Regioselective Addition Controlled by Endhedral Metal Clusters [OC-102]**

Safwan Aroua, ETH Zurich

Synthesis of functionalized pyridinium salts [OC-103]Johanna Auth, *Andreas Pfaltz*, University of Basel**Synthesis of Porphyrins for Surface Chemistry and Materials Science [OC-104]**Jesse Bergkamp, *Silvio Decurtins*, University of Bern**Towards the total synthesis of Augustamine [OC-105]**Lucile Bernet, *Christian Bochet*, University of Fribourg**Stabilization of Disfavored Conformations inside an Adaptive Self-Assembled Fe₄L₄ Coordination Capsule [OC-106]**Jeanne L. Bolliger, *Jonathan R. Nitschke*, University of Cambridge**Cleavage of Aromatic C—O Bonds using Metal Nanoparticles in Aqueous Media [OC-107]**Safak Bulut, *Paul Dyson*, EPFL Lausanne**Enantioselective Michael Addition of Isocyanacetate to Vinyl Selenone: Access to α -Quaternary Amino Acids [OC-108]**Thomas Buyck, *Jieping Zhu*, EPFL Lausanne**Broadband Dye-Zeolite L Composites for Luminescent Solar Concentrators [OC-109]**Pengpeng Cao, *Peter Belser*, University of Fribourg**Artificial Suzukiase Based on the Biotin-Streptavidin Technology [OC-110]**Anamitra Chatterjee, *Thomas R. Ward*, University of Basel**Studies Towards the Total Synthesis of (2R)-Hydroxy-Norneomajucin [OC-111]**Erika Crane, *Karl Gademann*, University of Basel**Metal Free Catalyst for Chemoselective Methylation of Amines Using CO₂ as a Methylating Agent [OC-112]**Shoubhik Das, *Paul Dyson*, EPFL Lausanne**Towards Zwitterionic Charge-Transfer Janus Dendrimers [OC-113]**Cagatay Dengiz, *François Diederich*, ETH Zurich**Towards a photochemically-promoted Native Chemical Ligation (PNCL) [OC-114]**Sebastian Dobarco, *Christian Bochet*, University of Fribourg**Outstanding Chiroptical Properties: A Signature of Enantiomerically Pure Allenic-Acetylenic Macrocycles and Monodisperse Acyclic Oligomers [OC-115]**Etienne Donckele, *François Diederich*, ETH Zurich**Concentration controlled synthesis of Daisy Chains A [c2] daisy chain with the potential application as a molecular potentiometer [OC-116]**Sylvie Drayss, *Marcel Mayor*, University of Basel**Abietane diterpenoids from roots of *Salvia leriifolia* [OC-117]**Samad Ebrahimi, *Matthias Hamburger*, University of Basel**Mono Thiomalonates in the Organocatalyzed Synthesis of 3,4-Dihydrocoumarins and 3,4-Dihydroquinolinones [OC-118]**Oliver Engl, *Helma Wennemers*, ETH Zurich**Photoionizable Porphyrin-Systems in Quantum Interference Experiments [OC-119]**Lukas Felix, *Marcel Mayor*, University of Basel**Electrophilic trifluoromethylation and the formation of quaternary stereogenic centers [OC-120]**Natalja Früh, *Antonio Togni*, ETH Zurich**Metal-Free Aryltrifluoromethylation of Activated Alkenes [OC-121]**Noelia Fuentes, *Cristina Nevado*, University of Zurich**Colorful Ion-Pair- π Interactions [OC-122]**Kaori Fujisawa, *Stefan Matile*, University of Geneva

- Chemical synthesis towards a highly symmetric sulfur containing fullerene - shaped molecule [OC-123]**
Markus Gantenbein, *Marcel Mayor*, University of Basel
- Palladium-catalyzed Sequential Carboxylative Cyclization-Cross-Coupling of Propargylic Amines with Aryl Halides [OC-124]**
Patricia García Domínguez, *Cristina Nevado*, University of Zurich
- Cellular uptake of substrate-initiated cell-penetrating poly(disulfide)s [OC-125]**
Giulio Gasparini, *Stefan Matile*, University of Geneva
- Synthesis of Cyano-Substituted Diaryltetracenes from Tetraaryl[3]cumulenes [OC-126]**
Przemyslaw Gawel, *François Diederich*, ETH Zurich
- Supramolecular helicates with enantiopure alleno-acetylenes [OC-128]**
Ori Gidron, *François Diederich*, ETH Zurich
- Retention of Absolute Configuration in Hydrogen Atom Transfer/Cyclisation Cascade [OC-129]**
Christian Gloor, *Philippe Renaud*, University of Bern
- Peptide-Catalyzed Stereoselective Conjugate Addition Reactions of Aldehydes to Maleimides [OC-130]**
Claudio Grünenfelder, *Helma Wennemers*, ETH Zurich
- Phosphoric Acid-catalyzed Desymmetrization of Bicyclic Bislactones Bearing an All Carbon Quaternary Stereogenic Center: Catalytic Enantioselective Syntheses of (-)-Rhazinilam and (-)-Leucomidine B [OC-131]**
Jean-Baptiste Gualtierotti, *Jieping Zhu*, EPFL Lausanne
- Cyclic Carbo-Isosteric Depsipeptides and Peptides as a Novel Class of Peptidomimetics and their Potential Biological Applications [OC-132]**
Stephanie Gueret, *Hans-Jörg Roth*, Novartis Pharma AG
- Study of Tris-(2-carboxyethyl)-phosphine oxide [OC-133]**
Jihane Haoues, University of Neuchatel
- Design, Synthesis and Physical Investigation of Bias-Dependant and Mechanically Driven Single Molecular Spin Switches [OC-134]**
Gero Harzmann, *Marcel Mayor*, University of Basel
- Synthetic Studies towards Fijiolide A [OC-135]**
Christoph Heinz, *Nicolai Cramer*, EPFL Lausanne
- Rotational restricted and functionalized CBP derivatives as host materials for phosphorescent organic light-emitting diodes [OC-136]**
Manuel Hellstern, *Marcel Mayor*, University of Basel
- Mechanistic insights into C-C coupling reactions mediated by Au(I)/Au(III) redox processes [OC-137]**
Manuel Hofer, *Cristina Nevado*, University of Zurich
- Ferrocene Comprising Macrocycle – Towards Rotational Restricted Molecular Wires [OC-138]**
Viktor Hoffmann, *Marcel Mayor*, University of Basel
- Screening of Chiral Phosphine-based Organocatalysts for the Asymmetric Morita-Baylis-Hillman Reaction by Mass Spectrometric Monitoring of the Back Reaction [OC-139]**
Patrick Isenegger, *Andreas Pfaltz*, University of Basel
- Stabilization of open-shell graphene fragment triangulene [OC-140]**
Michal Juricek, University of Basel
- Enantioselective Synthesis of Tröger's Bases via Cu(II)-catalyzed Double Aza-Michael Addition [OC-141]**
Takuya Kamiyama, *Jan Cvengros*, ETH Zurich
- Towards the Total Synthesis of Fidaxomicin [OC-142]**
Elias Kaufmann, *Karl Gademann*, University of Basel
- Supramolecular Zippers Dispersing Single-Walled Carbon Nano-Tubes (SWCNTs) [OC-143]**
Guojun Ke, *Marcel Mayor*, University of Basel
- Synthesis of chiral Ruthenium-cyclopentadienyl complexes and application to hydrative cyclisation of yne-enones [OC-144]**
David Kossler, *Nicolai Cramer*, EPFL Lausanne
- AFM tip functionalization by in situ click reaction [OC-145]**
Rakesh Kumar, *Yoko Yamakoshi*, ETH Zurich
- A Simple Method for the Alkylation of N-Heterocycles with Trialkylboranes [OC-146]**
Andrey Kuzovlev, *Philippe Renaud*, University of Bern
- Modular Synthesis, Orthogonal Functionalization and Properties of Novel Cationic [6]Helicene [OC-147]**
Maria Geraldine Labrador Beltran, *Jérôme Lacour*, University of Geneva
- Organocatalyzed Direct Vinylogous Double Michael Addition of Unactivated α -Angelica Lactone to Enones [OC-148]**
Roman Lagoutte, *Alexandre Alexakis*, University of Geneva
- Pushing Corannulene to New Extremes: Synthesis of New, Curved Polycyclic Aromatic Hydrocarbons [OC-149]**
Samuel Lampart, *Jay Siegel*, University of Zurich
- Triple-Channel Photosystems [OC-150]**
Santiago Lascano, *Stefan Matile*, University of Geneva
- Novel 1,2,3-Triazolium Ionic Liquids For Dye-Sensitized Solar Cells [OC-151]**
Genevieve Lau Pui Shan, EPFL Lausanne
- Keep It Simple! Using Asymmetric Monohydrogenation to Access Chiral Building Blocks [OC-152]**
Charlotte Laupheimer, *Andreas Pfaltz*, University of Basel
- Direct synthesis of a magnetic Palladium-containing ordered mesoporous carbon from a biosourced precursor. Application to Suzuki couplings [OC-153]**
Claude Le Drian, *Jean-Michel Becht*, Université de Haute-Alsace, Mulhouse, France
- Linear Multidentate Thioether Ligands for the Synthesis of Stable Au NP's with Increased Sizes [OC-154]**
Mario Lehmann, *Marcel Mayor*, University of Basel
- Oligoprolines as Scaffolds for Supramolecular Systems [OC-155]**
Bartosz Lewandowski, *Helma Wennemers*, ETH Zurich
- Synthesis of Alkynylated Heterocycles via Direct C-H Functionalization or Domino Reactions [OC-156]**
Yifan Li, *Jérôme Waser*, EPFL Lausanne
- Supramolecular Control over Surface Deposition of Porphyrins [OC-157]**
Kenan Li, *Marcel Mayor*, University of Basel
- Catalytic Enantioselective Synthesis and Utility of α -Quaternary Lactams [OC-158]**
Marc Liniger, *Brian M. Stoltz*, California Institute of Technology

SnAP Reagents for the One-Step Synthesis of Unprotected, Substituted, and Saturated N-Heterocycles from Aldehydes [OC-159]

Michael Umberto Lüscher, *Jeffrey W. Bode*, ETH Zurich

Preparation of chiral functionalized magnetite nanoparticle for catalytic purposes [OC-160]

Olimpia Mamula Steiner, School of Engineering and Architecture of Fribourg

Synthesis of Calix[n]pyrrole[m]furane: A potential new class of macrocyclic ligands [OC-161]

William Maupillier, *Reinhard Neier*, University of Neuchâtel

Anion- π Interactions in Organocatalysis [OC-162]

Jadwiga Gajewy, *Stefan Matile*, University of Geneva

Photo/Redox-Switchable Resorcin[4]arene Cavitands [OC-163]

Jovana Milic, *François Diederich*, ETH Zurich

Palladium-Catalyzed Oxy-Alkynylation of Olefins [OC-164]

Ugo Orcel, *Jérôme Waser*, EPFL Lausanne

Functionalized Low-Density Lipoprotein Nanoparticle as NIR Imaging Probe for Atherosclerosis with MMP2-specific Ligand Site [OC-165]

Sean Oriana, *Yoko Yamakoshi*, ETH Zurich

Access to β -Lactams by Enantioselective Palladium (0)-Catalyzed C(sp³)-H Alkylation [OC-166]

Julia Pedroni, *Nicolai Cramer*, EPFL Lausanne

Rh^{III}-Catalyzed C-H Activation Rapid Access to Complex Organic Molecules [OC-167]

Van-Manh PHAM, *Nicolai Cramer*, EPFL Lausanne

O-Trifluoromethylation of N,N-Disubstituted Hydroxylamines with Hypervalent Iodine CF₃ Reagents [OC-168]

Ewa Pietrasiak, *Antonio Togni*, ETH Zurich

Synthesis and Applications of Ring-modified Vitamin B12 Derivatives [OC-169]

Lucas Prieto, *Felix Zelder*, University of Zurich

Synthesis of (Carbo)nucleosides Analogues via Formal [3+2] Annulation [OC-170]

Sophie Racine, *Jérôme Waser*, EPFL Lausanne

The Synthesis and Properties of Porphyrin-based Molecular Dyads [OC-171]

Tristan Reekie, *François Diederich*, ETH Zurich

Stabilization of Genuine Non-Kekulé Diradical Triangulene in a Supramolecular Complex [OC-172]

Peter Ribar, University of Basel

A Molecular Dance Ribbon [OC-173]

Michel Rickhaus, *Marcel Mayor*, University of Basel

Design of Novel Lipidic Cubic Phases for Membrane Protein Crystallization [OC-174]

Livia Salvati Manni, *Ehud Landau*, University of Zurich

Understanding the role of ligands and additives in palladium mediated cross-coupling reactions using a combined computational and experimental approach [OC-175]

Italo Sanhueza, ETH Zurich, *Franziska Schoenebeck*, RWTH Aachen

Inhibition of P. falciparum SHMT: Improvement of the pharmacokinetic properties to reach high in vitro activity [OC-176]

Geoffrey Schwertz, *François Diederich*, ETH Zurich

Direct Electrophilic Trifluoromethylation of Quinolones and Pyridones [OC-177]

Remo Senn, *Antonio Togni*, ETH Zurich

Catechol Mediated Carbohydrogenation of Multiple Bonds [OC-178]

Sankar Rao Suravarapu, *Philippe Renaud*, University of Bern

Synthesis of Novel, Molecularly-Defined Pyridine-Based Hybrid Materials [OC-179]

Indre Thiel, *Christophe Copéret*, ETH Zurich

Synthesis and Fluorescence Properties of 5-Amino-4-Carboxamidthiazoles and Their Borate Complexes [OC-180]

Shuo Tong, *Jieping Zhu*, EPFL Lausanne

Fluorescent Amphiphilic Push-Pull Oligothiophenes as Planarizable and Polarizable Membrane Probes [OC-181]

Quentin Verolet, *Stefan Matile*, University of Geneva

Synthesis of functionalized polyether macrocycles [OC-182]

Mahesh Vishe, *Jérôme Lacour*, University of Geneva

Pd(0)-Catalyzed Enantioselective Synthesis of 1,5-Enynes. [OC-183]

Maria Victoria Vita, *Jérôme Waser*, EPFL Lausanne

Hierarchical self-assembly of nucleotide-appended oligopyrenotides into defined supramolecular objects [OC-184]

Yuliia Vyborna, *Robert Häner*, University of Bern

N-aminoacridinium cations: central building blocks for the synthesis of unprotected aziridines and pH-sensitive dyes synthesis [OC-185]

Antoine Wallabregue, *Jérôme Lacour*, University of Geneva

Towards a Perylene-Based Cyclophane with Charge-Transfer Capability [OC-186]

Kevin Weiland, *Marcel Mayor*, University of Basel

From the Blueprint of Chiral Cp-Ligands to the Landmark in Asymmetric Rh(III)-Catalyzed C-H Functionalization [OC-187]

Baihua Ye, *Nicolai Cramer*, EPFL Lausanne

**Physical Chemistry [PC]
Poster Session**

Ultra-Broadband Multidimensional Electronic Spectroscopy Setup [PC-101]

Andre Al Haddad, *Majed Chergui*, EPFL Lausanne

High resolution THz spectroscopy between 0.8 and 3 THz with a Synchrotron source and a Bruker interferometer. [PC-102]

Sieghard Albert, ETH Zurich, *Alexander Wokaun*, Paul Scherrer Institute, Villigen

Off-axis deflection and Rydberg-Stark deceleration of a supersonic beam of H₂ molecules on a printed circuit board [PC-103]

Pitt Allmendinger, *Frédéric Merkt*, ETH Zurich

Photoelectron spectroscopy of liquid phase benzene derivatives [PC-104]

Christopher Arrell, *Majed Chergui*, EPFL Lausanne

- (Benzene)₂ and (Benzonitrile)₂: Excitonic and Site Effects on the S₁/S₂ Splitting [PC-105]**
Franziska Balmer, *Samuel Leutwyler*, University of Bern
- Multichannel quantum defect theory (MQDT) assisted spectroscopy of H₂⁺ through the Rydberg spectrum of H₂. [PC-106]**
Maximilian Beyer, *Frédéric Merkt*, ETH Zurich
- Energytransfer of Eu²⁺ in SrAl₂O₄ codoped with Dy³⁺ [PC-107]**
Jakob Bierwagen, *Hans Hagemann*, University of Geneva
- Excited State Photophysics of Jet-Cooled 2-Aminopurine and 9-Methyl-2-Aminopurine [PC-108]**
Susan Blaser, *Samuel Leutwyler*, University of Bern
- High Resolution Analysis of the FTIR spectra and quantum dynamics of CHF₃: The 2ν₄ (A₁/E) Band [PC-109]**
Irina Bolotova, *Martin Quack*, ETH Zurich
- Effect of Ba and K addition and controlled spatial deposition of Rh in Rh/Al₂O₃ catalysts for CO₂ hydrogenation [PC-110]**
Robert Büchel, *Alfons Baiker*, ETH Zurich
- Plasmon tuning of gold nanoparticles array for surface enhanced Raman scattering [PC-111]**
Mahshid Chekini, *Thomas Bürgi*, University of Geneva
- Solvation Dynamics Around Photo-excited Transition Metal Complexes: A Molecular Dynamics Approach [PC-112]**
Akshaya Das, *Markus Meuwly*, University of Basel
- Structure of n-Alkanes [PC-113]**
Takuya Den, *Samuel Leutwyler*, University of Bern
- Ultrafast excited-state dynamics of flavonol anion: no intermolecular proton transfer [PC-114]**
Bogdan Dereka, *Eric Vauthey*, University of Geneva
- Signal Enhancement & Artifacts Suppression in Vibrational Circular Dichroism Spectroscopy with Femtosecond Lasers [PC-115]**
Biplab Dutta, *Jan Helbing*, University of Zurich
- Controlled Chemistry using Cold Atomic or Molecular Ions and Ultracold Atoms in Hybrid Traps [PC-116]**
Pascal Eberle, *Stefan Willitsch*, University of Basel
- Photo-induced fibril formation [PC-117]**
Lukas Frey, *Peter Hamm*, University of Zurich
- Photoprotection of an oxazine dye by quencher amino acids in model peptides [PC-118]**
Alexandre Fürstenberg, University of Geneva
- Observation and theory of electric-dipole-forbidden infrared transitions in cold molecular ions [PC-119]**
Matthias Germann, *Stefan Willitsch*, University of Basel
- Nanoparticle – polyelectrolyte composites investigated by ATR-IR spectroscopy: Enhanced IR absorption and electron transfer upon visible light illumination [PC-120]**
Harekrishna Ghosh, University of Geneva
- Quantifying a Molecular Orbital's Character using Resonant Photoemission [PC-121]**
Jakob Grilj, EPFL Lausanne, *Markus Gühr*, *Stanford University*
- First rotational interval of para H₂⁺ by Rydberg spectroscopy of H₂ in the range of 0.3-7 THz [PC-122]**
Christa Haase, *Frédéric Merkt*, ETH Zurich
- High-Resolution Absorption Spectroscopy in the Vacuum-Ultraviolet using Modulation Techniques [PC-123]**
U. Hollenstein, *Frédéric Merkt*, ETH Zurich
- Excited-state dynamics of chiral molecules at the liquid-liquid interface [PC-124]**
Cho-Shuen Hsieh, *Eric Vauthey*, University of Geneva
- Mass Accommodation Coefficients and Evaporation Rates of H₂O, HCl and HNO₃ on Atmospheric Ices in the Range 170 to 210 K [PC-125]**
Riccardo Iannarelli, *Michel J. Rossi*, Paul Scherrer Institute, Villigen
- Exciplex Formation in Bimolecular Photoinduced Electron-Transfer Investigated by Ultrafast Time-Resolved Infrared Spectroscopy [PC-126]**
Marius Koch, *Eric Vauthey*, University of Geneva
- Accurate Structure of n-Nonane by Femtosecond Rotational Raman Spectroscopy [PC-127]**
Philipp Kowalewski, *Samuel Leutwyler*, University of Bern
- Enhanced two-pulse orientation reveals anisotropy of molecular shape resonance [PC-128]**
Peter Kraus, Hans *Jakob Wörner*, ETH Zurich
- High-harmonic spectroscopy of attosecond charge migration in oriented molecules [PC-129]**
Peter Kraus, Hans *Jakob Wörner*, ETH Zurich
- Sub-70 Femtoseconds Time-resolved Fluorescence Made Easy [PC-130]**
Romain Letrun, *Eric Vauthey*, University of Geneva
- Nanostructured Metallic Aerogels: High Performance Electrocatalysts for Fuel Cell Reactions [PC-131]**
Wei Liu, Technische Universität Dresden, Germany
- Pressure induced transformations in molecular crystals [PC-132]**
Piero Macchi, University of Bern
- Raman Optical Activity (ROA) study on the conformation of (L)- ascorbic acid in aqueous solution [PC-133]**
Martin Magg, *Thomas Bürgi*, University of Geneva
- A Jet-CRDS Investigation of the ν₂+2ν₃ band of ¹³CH₄ [PC-134]**
Carine Manca Tanner, *Martin Quack*, ETH Zurich
- Rational design of technical dawsonite-based sorbents for post-combustion CO₂ capture [PC-135]**
Oliver Martin, *Javier Pérez-Ramírez*, ETH Zurich
- Development of scanning electrochemical microscopy methods for the examination of copper(I) complexes in dye sensitized solar cells [PC-136]**
Colin Martin, *Edwin C. Constable*, University of Basel
- Steps towards molecular parity violation: Population transfer experiments and absolute frequencies and quadrupole splittings of the lowest ro-vibrational levels (J = 1) of ν₁, ν₃±1, 2ν₄ and 2ν₄±2 in NH₃ [PC-138]**
Eduard Miloglyadov, *Martin Quack*, ETH Zurich
- Cold molecular ions on a chip [PC-139]**
Arezoo Mokhberi, *Stefan Willitsch*, University of Basel
- Tryptophan-to-heme electron transfer in ferrous myoglobins [PC-140]**
Roberto Monni, *Majed Chergui*, EPFL Lausanne

Excited-state dynamics of an environment-sensitive diketopyrrolopyrrole push-pull probe: major differences between the bulk solution phase and the dodecane/water interface [PC-141]

Sandra Mosquera Vazquez, *Eric Vauthey*, University of Geneva

A table-top high-harmonic-generation-based source for valence/core level photoelectron spectroscopy in liquid samples [PC-142]

Jose Ojeda, *Majed Chergui*, EPFL Lausanne

Ultrafast spectroscopic investigation of carrier dynamics in Dye sensitized and perovskite based photovoltaics [PC-143]

Arun Aby Paraecattil, *Jacques-E. Moser*, EPFL Lausanne

Absolute cross sections of electronic excitation of furan [PC-144]

Khrystyna Regeta, *Michael Allan*, University of Fribourg

Multibranching Effect of Dipolar Chromophores on (Non) Linear Photophysical Properties and Two-Photon Induced Polymerization [PC-145]

Arnulf Rosspeintner, *Eric Vauthey*, University of Geneva

Observation of dipole-dipole and dipole-quadrupole interactions between pairs of ultracold cesium Rydberg atoms [PC-146]

Heiner Sassmannshausen, *Frédéric Merkt*, ETH Zurich

Two-dimensional Raman-terahertz spectroscopy of water [PC-147]

Janne Savolainen, *Peter Hamm*, University of Zurich

Computational Study of Spectroscopic Properties of Different Borohydride Species [PC-148]

Daniel Sethio, *Hans Hagemann*, University of Geneva

Disorder-Suppressed Vibrational Relaxation in Vapor-Deposited High-Density Amorphous Ice [PC-149]

Andrey Shalit, *Peter Hamm*, University of Zurich

Reversible Isotope Exchange Reactions in $\text{Ca}(\text{BH}_4)_2$ [PC-150]

Manish Sharma, *Hans Hagemann*, University of Geneva

Nanohydration of a *Cis*-Amide: Water Wires and Bridges [PC-151]

Luca Siffert, *Samuel Leutwyler*, University of Bern

Modelling diffuse scattering of the disordered crystal structure of Na_2SiF_6 [PC-152]

Erik Stronks, University of Zurich

Time-Resolved High-Harmonic Spectroscopy of conical intersection dynamics [PC-153]

Andres Tehlar, *Hans Jakob Wörner*, ETH Zurich

Supersonic Jet UV Spectra and Nonradiative Relaxation of Methylated Cytosines [PC-154]

Maria Trachsel, *Samuel Leutwyler*, University of Bern

The Solvated Carbon-Fluorine Bond in Water Investigated by 2D IR spectroscopy [PC-155]

Halina Tran, *Peter Hamm*, University of Zurich

Alignment effects in the dissociative chemisorption of methane: the role of vibrational symmetry [PC-156]

Maarten van Reijzen, *Rainer Beck*, EPFL Lausanne

A high-flux femtosecond XUV beamline for time-resolved photoelectron spectroscopy [PC-157]

Aaron von Conta, *Hans Jakob Wörner*, ETH Zurich

Imaging Electronic Wave Packets Through Electron Rescattering and Holography [PC-158]

Samuel Walt, *Hans Jakob Wörner*, ETH Zurich

The β -phase of Pigment Red 170: Faulted stacking of 2D periodic molecular layers [PC-159]

Rangana Warshamanage, University of Zurich

Studying structure disorder in DL-Norvaline by single crystal diffuse scattering [PC-160]

Jun Xu, University of Zurich

Excited-state dynamics of multichromophoric arrays [PC-161]

Oleksandr Yushchenko, *Eric Vauthey*, University of Geneva

Continuous trap loading of Rydberg atoms and molecules using overlaid electric and magnetic traps [PC-162]

Matija Zesko, *Frédéric Merkt*, ETH Zurich

Placing Nanosheets on Graphene [PC-163]

Zhikun Zheng, *A. Dieter Schlüter*, ETH Zurich

Molecular dynamics simulations of ion pairing in water [PC-164]

Ganna Berezovska, Albert-Ludwigs University of Freiburg, *Markus Meuwly*, University of Basel

**Polymers, Colloids & Interfaces [PI]
Poster Session**

Formation of supramolecular polymers by chrysene oligomers [PI-031]

Caroline Bösch, *Robert Häner*, University of Bern

Microenvironment of the Interior of Dendronized Polymers [PI-032]

Chiara Gstrein, *A. Dieter Schlüter*, ETH Zurich

Poleable nanoparticles as fillers towards non-linear optically active actuators [PI-033]

Yee Song Ko, EPFL Lausanne, *Frank Nüesch*, EMPA Dübendorf

Functional Surface Engineering by Insertion of Membrane Protein into Solid-Supported Polymer Membranes [PI-034]

Justyna Kowal, *Wolfgang Meier*, University of Basel

Importance of particulate organic matter in singlet oxygen mediated photochemistry [PI-101]

Elena Appiani, *Kristopher McNeill*, ETH Zurich

Superficial Doping Allows Growth of Silicone Nanostructures on Hydroxyl-free Substrates [PI-102]

Georg Artus, *Stefan Seeger*, University of Zurich

Towards 2D-Polymers: Synthesis of a Rotor-shaped Monomer [PI-103]

Simon T. Cerqua, *A. Dieter Schlüter*, ETH Zurich

Tripeptides as Additives for the Controlled Formation of Palladium Nanoparticles [PI-104]

Stefano Corrà, *Helma Wennemers*, ETH Zurich

Engineering alginate-based hydrogels for cell micro-encapsulation [PI-105]

Virginia Crivelli, *Christine Wandrey*, EPFL Lausanne

Poly(m,p-phenylene) based Materials via Suzuki Polycondensation [PI-106]Bernd Deffner, *A. Dieter Schlüter*, ETH Zurich**Polar silicones to be used in dielectric elastomer actuators [PI-107]**Simon Dünki, EPFL Lausanne, *Dorina Opris*, EMPA Dübendorf**Radiolabeling of Functionalized Nanoparticles with fac-[^{99m}Tc(OH)₂(CO)₃]⁺ [PI-108]**Michael Felber, *Roger Alberto*, University of Zurich**Enzyme-catalyzed Atom Transfer Radical Polymerization of Heterocyclic Aromatic Vinyl Compounds [PI-109]**Csaba Fodor, *Nico Bruns*, University of Fribourg**Nano-Handling of Individual Dendronized Polymers [PI-110]**Lucie Grebikova, *Michal Borkovec*, University of Geneva**Self-Assembly of Magnetic Janus Dumbbells [PI-111]**Florian Guignard, *Marco Lattuada*, University of Fribourg**Hybrid bio-responsive nanocapsules [PI-112]**Dawid Kedracki, *Corinne Vebert*, University of Geneva**Gram-Scale Synthesis of Organic Two-Dimensional Polymer Crystals and Exfoliation into Nanometer-Thin Sheets [PI-113]**Max J. Kory, *A. Dieter Schlüter*, ETH Zurich**Enzyme Immobilization with Dendronized Polymer-Enzyme Conjugates for Localized Cascade Reactions [PI-114]**Andreas Kuchler, *Peter Walde*, ETH Zurich**pH-dependent Degradation Kinetics of Polylactic Acid [PI-115]**Stefano Lazzari, *Massimo Morbidelli*, ETH Zurich**Synthesis of oriented nano-wires on a microfluidic platform [PI-116]**Mario Lenz, *Petra Dittrich*, ETH Zurich**Poly (N-isopropylacrylamide-co-tris-nitrilotriacetic acid acrylamide) for a combined study of molecular recognition and distance constraints in protein binding and interactions [PI-117]**Juan Liu, *Wolfgang Meier*, University of Basel**Mass spectrometric analysis of the enzymatic polymerization of p-aminodiphenylamine (PADPA) in the presence of vesicles as templates [PI-118]**Sandra Luginbühl, *Peter Walde*, ETH Zurich**Synthesis of biocompatible PEG-based hydrogel by Potassium Acyltrifluoroborate (KAT) Amide-Formation [PI-120]**Dmitry Mazunin, *Jeffrey W. Bode*, ETH Zurich**Charging Behavior of Negatively Charged Particles in Presence of Multivalent Cations [PI-121]**Mohsen Moazzami Gudarzi, *Michal Borkovec*, University of Geneva**1,3-Diamidophospholipids and Analogous Lipids: Synthesis and Characterization [PI-122]**Dennis Müller, *Andreas Zumbühl*, University of Fribourg**Preparation of PDMS/AgNPs nanocomposites with enhanced electromechanical properties [PI-123]**Jose Enrico Quinsaot, *Dorina Opris*, EMPA Dübendorf**Characterization of Artificial Phospholipids and Interactions with Cholesterol [PI-124]**Radu Tanasescu, *Andreas Zumbühl*, University of Fribourg**Pseudomorphic transformation and simultaneous functionalization of silica microspheres [PI-125]**Michael Reber, *Dominik Brühwiler*, Zurich University of Applied Sciences, ZHAW**Assembly of BaTiO₃ Nanocrystals into Macroscopic Aerogel Monoliths with High Surface Area [PI-126]**Felix Rechberger, *Markus Niederberger*, ETH Zurich**Influence of the Potential Barrier on the Breakage of Colloidal Aggregates under External Shear Flows [PI-127]**Zhiqiang Ren, *Marco Lattuada*, University of Fribourg**Preparation of composite materials from aqueous nanoparticles mixed suspensions [PI-128]**Simonetta Rima, *Marco Lattuada*, University of Fribourg**Protein cage-polymer conjugates synthesized by atom transfer radical polymerization as a delivery platform for siRNA [PI-129]**Martin Rother, University of Basel, *Nico Bruns*, University of Fribourg**Functional Polymeric Resins for the Improved Detection of Drugs and Quantification of Neurotransmitters [PI-130]**Mark Schäfer, *Andreas Kilbinger*, University of Fribourg**Propeller-shaped macrocycles with three 1,8-diazaanthracene and three anthracene blades as monomers for topochemical 2D-polymerisation [PI-131]**Marco Servalli, *A. Dieter Schlüter*, ETH Zurich**Immobilization of Biomimetic Block Copolymer Membranes on Solid Supports [PI-132]**Smahan Toughraï, *Wolfgang Meier*, University of Basel**Forces Between Silica Particles in Ionic Liquids and Ionic Liquid-Water Mixtures [PI-133]**Valentina Valmacco, *Michal Borkovec*, University of Geneva**Morphological diversity of supramolecular polymers formed by amphiphilic pyrene oligomer [PI-134]**Mykhailo Vybornyi, *Robert Häner*, University of Bern**Strained Aramide Macrocycles for Ring-Opening Metathesis Polymerization [PI-135]**Aniket Walunj, *Andreas Kilbinger*, University of Fribourg**Building Polymer Light Harvesting Antennas [PI-136]**Christian Winiger, *Robert Häner*, University of Bern**Generalizable amide-promoted approach for high-quality multicomponent semiconductor nanocrystals [PI-137]**

Olesya Yarema, ETH Zurich

Linking self-assembly, rheology and critical behaviour in chemical and colloidal gels [PI-138]

Alessio Zaccone, University of Cambridge

Synthesis of Monolayer Metal-organic Sheets [PI-139]Zhikun Zheng, *A. Dieter Schlüter*, ETH Zurich

The complete program and all abstracts are available as interactive application on <http://chemistrycongresses.ch>