Fri, 4 September 2015, 09.00 – 18.30

SCS Fall Meeting 2015

09.45 Welcome and conference opening
09.55 Sandmeyer Award Lecture 2015
  Dr. Stefan Abele, Actelion Pharmaceuticals Ltd
  «Daring the Challenge and Thinking Big: the Value of Early Process Research»
10.25 KGF-SCS Senior Industrial Science Award Lecture 2015
  Dr. Michelangelo Scalone, F. Hoffmann La Roche
  «The Importance of Catalysis in the Synthesis of Active Pharmaceutical Intermediates»
11.15 Morning Parallel Session (6 slots in 8 sessions)
12.45 Lunch and Poster Session, Commercial Exhibition
15.00 Afternoon Parallel Session (8 slots in 8 sessions)
17.15 KGF-SCS Distinguished Industrial Science Award Lecture 2015
  Dr. Jürg Zimmermann, Novartis Pharma AG
  «Evolution in Medicinal Chemistry»
18.00 Best Oral Presentation Awards (sponsored by Metrohm)
18.15 Best Poster Presentation Awards (sponsored by DSM)

http://scg.ch/fallmeeting/2015/
Welcome to the SCS Fall Meeting 2015

On behalf of the Division of Chemical Research of the Swiss Chemical Society, we warmly welcome you to the SCS Fall Meeting 2015 which will be hosted by the EPFL on its Lausanne Campus. With more than 520 scientific contributions (posters, contributed lectures, invited lectures), it is a major event for chemical researchers in Switzerland and brings together all the actors of the chemistry scene, from the starting graduate student to the seasoned senior scientist, from both academia and industry. As in the past meetings, there will be a jury to select the best oral and poster presentations for which prizes, sponsored by Metrohm and DSM, will be awarded.

Following our longtime tradition, we will have a series of invited lectures presented by distinguished scientists. This year's Sandmeyer Award Lecture will be given by Dr. Stefan Abele (Actelion Pharmaceuticals Ltd). The KGF-SCS Distinguished Industrial Investigator and Senior Industrial Investigator award lectures will be delivered by Drs. Jürg Zimmermann (Novartis Pharma AG) and Michelangelo Scalone (F. Hoffmann La Roche). Other invited and award lectures, including the Grammaticakis-Neumann Award Lecture, will be delivered in the Parallel Sessions.

The Poster Session is planned in the early afternoon, but you are welcome to visit the area at any time, in particular during the lunch and coffee breaks. Do not forget to visit the Commercial Exhibition where more than fifteen companies will be presenting their products and services.

We are very grateful to the companies and institutions who support this meeting. This support is also an expression of the interest of industry in our research activities, many of which are carried out by young scientists. The organization of such a large meeting would not be possible without the help from many people and the logistic support provided by the EPFL; we would like to thank them for their contribution to the success of this event.

We invite you to browse through the program and hope that the 2015 Fall Meeting will capture your interest. The 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 EPFL on September 4! Your contribution and your presence are what make this event a continuously growing success!

Prof. Christian Bochet
Chairman of the Division of Chemical Research

Prof. Sandrine Gerber
Chair of the Organizing Committee

To the Participants of the Fall Meeting of the Swiss Chemical Society

As you are aware, chemistry and chemical engineering are of immense value to the Swiss economy, as well as to human wellbeing. Some of the world’s top chemical and pharmaceutical companies and university chemistry departments are based in Switzerland. The Swiss Chemical Society is the organ that helps to connect and inform chemists and chemical engineers working across Switzerland and its annual Fall Meeting remains the major networking event of the year. Students, postdocs and researchers from all over Switzerland and beyond meet to present and discuss their latest research.

As you would expect, this meeting is only made possible thanks to the hard work of many people, who take on the various tasks in addition to their regular duties and obligations. In particular, I would like to express my thanks to the Institute of Chemical Sciences and Engineering (ISIC) administration and all the ISIC staff in our various platforms and research groups who have done so much to make the event a success. This includes personnel based at the new ISIC Valais campus in Sion.

I hope you enjoy the Fall Meeting hosted at the EPFL. Despite the frenetic pace of the day, if you get a chance take a look at the SwissTech Congress Center on the EPFL campus, which displays a 300 m² dye-sensitized solar cell façade. Although this technology was inspired by biology, it was invented by a physical chemist at EPFL, Prof. Michael Grätzel, and the technology now goes beyond chemistry to the realms of architecture and art. It is a wonderful demonstration of how chemists can change the world! I hope you will be inspired by the solar façade and, of course, by the seminars, posters, discussions, new ideas and contacts discovered at the Fall Meeting.

Prof. Paul J. Dyson
Director of the Institute of Chemical Sciences and Engineering (ISIC) at the EPFL
## Program Overview

Interactive program incl. all abstracts on [http://chemistrycongresses.ch](http://chemistrycongresses.ch)

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<td>Registration and poster installation</td>
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<td>09.45</td>
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<tr>
<td></td>
<td>Prof. Sandrine Gerber, Chair SCS Fall Meeting</td>
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<td></td>
<td>Prof. Paul Dyson, EPFL Lausanne</td>
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<td>Prof. E. Peter Kündig, SCS President</td>
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<tr>
<td>09.55</td>
<td>Sandmeyer Award Lecture 2015 [PS-001]</td>
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<td></td>
<td>Dr. Stefan Abele, Actelion Pharmaceuticals Ltd</td>
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<td>«Daring the Challenge and Thinking Big: the Value of Early Process Research»</td>
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<td>10.25</td>
<td>KGF-SCS Senior Industrial Science Award Lecture 2015 [PS-002]</td>
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<td>«The Importance of Catalysis in the Synthesis of Active Pharmaceutical Intermediates»</td>
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<td>11.15</td>
<td><strong>Morning Parallel Session</strong></td>
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<td></td>
<td>Inorganic &amp; Coordination Chemistry</td>
<td>[IC-011], [IC-014] … [IC-016] CE 3</td>
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<td>Polymers, Colloids &amp; Interfaces</td>
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<td>12.45</td>
<td>Lunch and Commercial Exhibition</td>
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<td><strong>Poster Session</strong></td>
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<td>Inorganic &amp; Coordination Chemistry</td>
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<td>Inorganic &amp; Coordination Chemistry</td>
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<td>Physical Chemistry</td>
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<td>Exhibitor Apéro</td>
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<td>17.00</td>
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<td>17.15</td>
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<td>Dr. Jürg Zimmermann, Novartis Pharma AG</td>
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<td></td>
<td>«Evolution in Medicinal Chemistry»</td>
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<td>18.00</td>
<td>Best Oral Presentation Awards (sponsored by Metrohm)</td>
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<td>Presented by Dr. Markus Tobler, CEO Metrohm Schweiz AG</td>
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<td>18.15</td>
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<td>Presented by Dr. Thomas Netscher, principal scientist at DSM</td>
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<td>18.30</td>
<td>End of the conference</td>
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**General Information**

**Date:** September 4, 2015, 09.00–18.30  
**Location:** École Polytechnique Fédérale de Lausanne EPFL  
CE and BS Building  
CH-1015 Lausanne

**Chair and local Organizer**

Prof. Sandrine Gerber  
École Polytechnique Fédérale de Lausanne EPFL  
Institute of Chemical Sciences and Engineering  
ISIC-GE, Station 6  
CH-1015 Lausanne  
Tel.: +41 (0)21 693 93 72  
sandrine.gerber@epfl.ch

**Co-Chair and President of DFR**

Prof. Christian Bochet  
University of Fribourg  
Department of Chemistry  
9 Ch. du Musée  
CH-1700 Fribourg  
Tel.: +41 (0)26 300 87 58  
christian.bochet@unifr.ch

**Conference Secretariat**

Swiss Chemical Society  
David Spichiger and Sarah Schmitz  
Haus der Akademien 7, Postfach  
CH-3001 Berne  
Tel.: +41 (0)31 306 92 92  
info@scg.ch

**Organizing Committee**

Chairpersons  
- Prof. Sandrine Gerber, EPF Lausanne (Chair)  
- Prof. Christian Bochet, University of Fribourg (co-Chair)

Analytical Sciences  
- Dr. Stefan Schürch, University of Bern  
- Dr. Hanspeter Andres, Federal Institute of Metrology METAS

Catalysis Science and Engineering  
- Prof. Paul Dyson, EPF Lausanne  
- Prof. Kevin Sivula, EPF Lausanne

Computational Chemistry  
- Prof. Clémence Corminboeuf, EPF Lausanne  
- Prof. Tomasz Wesolowski, University of Geneva

Inorganic Chemistry  
- Prof. Kay Severin, EPF Lausanne  
- Prof. Lothar Helm, EPF Lausanne

Medicinal Chemistry and Chemical Biology  
- Dr. Yves Auberson, Novartis Pharma AG

Organic Chemistry  
- Prof. Philippe Renaud, University of Bern  
- Prof. Nicolas Winssinger, University of Geneva

Physical Chemistry  
- Prof. Stefan Willitsch, University of Basel  
- Prof. Frédéric Merkt, ETH Zurich

Polymers, Colloids and Interfaces  
- Prof. Holger Frauenrath, EPF Lausanne  
- Prof. Markus Niederberger, ETH Zurich

**Admission**

**Presenters (Poster and/or Talk)**
- SCS Members: free of charge (she/he, whose name is underlined in the abstract)  
- Non-members: CHF 250

**Participants**
- SCS Members: free of charge  
- Non-members: CHF 50. Pre-registered participants will receive an invoice in advance to avoid waiting at the check-in desk. Pre-registration is possible until August 20, 2015.

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

Pre-registration as participant on [http://chemistrycongresses.ch](http://chemistrycongresses.ch) is possible until Aug 20, 2015.

**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: [http://scg.ch/membership/](http://scg.ch/membership/)

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

**Conference Tool**

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

Go to [http://chemistrycongresses.ch](http://chemistrycongresses.ch), login with your SCS login 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 users mailbox  
- Extensive search functionality

**Coffee Breaks and Lunch**

Complementary 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) offers you access to the internet. Members of institutions participating to the Switch-Mobile project (all Swiss universities) will be able to connect by simply using their usual VPN client software. Other users will have to register first through a secure web page or can use the Swisscom Hotspot.
**CONFERENCE VENUE AT EPFL LAUSANNE**

**Conference Location**

The meeting will be held on the first floor of the BS and CE buildings. Participants are kindly requested to use exclusively the East entrance on the first floor of BS building. The nearest tramway station is UNIL-Sorge (upper-right corner on the map). The way from the tramway station and from the parking lot to the entrance of the conference premises will be marked out with signs.

**Transportation**

By train: the easiest way to access the location by public transportation is via Renens, VD. Go to [www.sbb.ch](http://www.sbb.ch) and select Ecublens VD. UNIL-Sorge via Renens VD as destination:

More information on how to get to EPFL campus, timetables and interactive maps are available on the webpage at [http://map.epfl.ch](http://map.epfl.ch).

By car: on the motorway, follow Lausanne-Sud, exit at UNIL-EPFL, drive West for 1.7 km and then turn right at the sign EPFL. Limited space will be available at the parking of the building Odyssea and of the Rolex Learning Center (see EPFL campus map). One-day parking permits will be sold on the parking lot and at the entrance of the BS building for CHF 5.

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**SITE MAP, CE AND BS BUILDINGS**

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<td>Inorganic &amp; Coordination Chemistry</td>
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<td>Medicinal Chemistry &amp; Chemical Biology</td>
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<td>Physical Chemistry</td>
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<td>Polymers, Colloids &amp; Interfaces</td>
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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.

Presentation Awards 2015

Best Oral Presentation Award

The prize is given for the best presentations in 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 plenary lecture hall CE 6.

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.

The prize is sponsored by Metrohm.

Best Poster Presentation Award

The prizes are given for the best posters in 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 plenary lecture hall CE 6.

Prizes for Winners

• Cash contribution of CHF 500.
• Travel voucher of CHF 750 to attend an international conference.
• Invitation to present the research in the laureates’ issue of CHIMIA. Value CHF 1’200.

Prizes for Runners’ up

• Cash contribution of CHF 300.

The prize is sponsored by DSM.
About QEERI

Qatar Environment and Energy Research Institute (QEERI) is a member of Qatar Foundation for Education, Science and Community Development and is under the umbrella of Hamad Bin Khalifa University. As a national research institute, QEERI plays a leading role addressing the national Energy and Water Security Grand Challenges through Research and Development (R&D).

Aligned with the Qatar National Vision 2030’s strategy of transforming the State into a diverse and sustainable knowledge-based economy, QEERI’s water R&D program is developing innovative technologies in water desalination and treatment; water quality and reuse; aquifer recharge; climate change and atmospheric science; and water conservation. QEERI’s energy R&D focuses on solar Photovoltaics (PV), energy storage, grid integration and energy efficiency.

www.qeeri.org.qa
Session Endowments

Plenary Session

EPFL Lausanne, School of Basic Sciences
The School of Basic Sciences is responsible for teaching and research in chemistry, mathematics, physics and related domains. A growing emphasis has been developing in fields at the interface between traditional disciplines, both within and outside of our School. Our interaction with the School of Life Sciences is particularly strong, as evidenced by jointly appointed professors, collaborative projects and shared infrastructure. To carry out our mission, we possess state-of-the-art research facilities, support services and infrastructure. [http://sb.epfl.ch]

Catalysis Sciences & Engineering Session

Clariant International Ltd
Clariant, a world leader in specialty chemicals, employed a total workforce of 17,003 in 60 countries and recorded sales of CHF 6.116 billion in 2014. Based on the four Business Areas Care Chemicals, Catalysis, Natural Resources, and Plastics & Coatings Clariant contributes to value creation with innovative and sustainable product solutions for its customers. Our research and development activities do not only focus on specific customer needs but also address the key trends of our time such as resource and energy efficiency or renewable raw materials. [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 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 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 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 multinational corporations across countless industries and fields of expertise. [www.bruker.com]

Polymers, Colloids & Interfaces

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 CE building, right in front of the lecture halls and the coffee and lunch desks.

http://www.advion.com
http://www.agilent.com
http://www.borer.ch
https://www.brunschwig-ch.com
http://www.buchi.ch
http://www.buechiglas.ch/
http://www.equilibre.com
http://igz.ch
http://www.lot-qd.de
http://www.merckmillipore.ch
http://metrohm.ch
http://www.perkinelmer.com
http://www.qeeri.org.qa
http://www.setaram.com
http://www.tcichemicals.com
https://www.thieme.de

CONFERENCE SUPPORTERS

http://biazzi.com
http://www.chemistryviews.org
http://www.scm.com
Award Lectures Overview

09:55 **Stefan Abele, Jacques-Alexis Funel and Gunther Schmidt** from Actelion Pharmaceuticals Ltd, Roger Marti, Hochschule für Technik und Architektur Fribourg, Christian Müssner, Mischa Schwanning, Swissi Process Safety, a member of TÜV SÜD Group, are awarded the Sandmeyer Award 2015 for the conception and successful scale-up of Diels–Alder reactions and organocatalysis leading to enantiomerically pure 5-phenylbicyclo[2.2.2]oct-5-en-2-one, a key intermediate for the production of an L/T calcium channel antagonist.

**Stefan Abele** will give the award lecture with the title «Daring the Challenge and Thinking Big: the Value of Early Process Research» [PS-001] ; Lecture hall CE 6.

10:25 **Michelangelo Scalone**, F. Hoffmann La Roche, is awarded the KGF-SCS Senior Industrial Science Award 2015 for his outstanding contributions to the design of new, short and cost-efficient syntheses for many development projects by applying asymmetric catalytic reactions, and for his longtime success and expertise in leading the Center of Excellence Catalysis at Roche.


11:15 **Prof. Natalie Banerji**, University of Fribourg, is awarded the Grammaticakis-Neumann Award 2015 for her research combining synthesis, photochemistry, photophysics, and molecular photobiology to develop artificial photosynthesis.


17:15 **Jürg Zimmermann**, Novartis Pharma AG, is awarded the KGF-SCS Distinguished Industrial Science Award 2015 for the groundbreaking discovery of protein kinase inhibitors, which had a tremendous impact on the research and therapy of cancer and other diseases. The discovery and development of Imatinib (Gleevec) has revolutionized the therapy of certain forms of leukemia, and also had a tremendous impact on research projects both in industry and academia.


Plenary Sessions – CE 6

Chair: Prof. Dr. E. Peter Kündig

Session Endowment: EPFL, School of Basic Sciences

09:55 **Daring the Challenge and Thinking Big: the Value of Early Process Research (Sandmeyer Award Lecture 2015)** [PS-001]

Stefan Abele, Actelion Pharmaceuticals Ltd.

10:25 **The Importance of Catalysis in the Synthesis of Active Pharmaceutical Intermediates (KGF-SCS Senior Industrial Science Award Lecture 2015)** [PS-002]

Michelangelo Scalone, F. Hoffmann La Roche AG

17:15 **Evolution in Medicinal Chemistry (KGF-SCS Distinguished Industrial Science Award Lecture 2015)** [PS-003]

Jürg Zimmermann, Novartis Pharma AG

Abstract codes

[XY-001]...[XY-009] Award lectures, plenary sessions
[XY-010]...[XY-019] Morning session lectures
[XY-020]...[XY-029] Afternoon session lectures
[XY-101]...[XY-199] Posters

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

Name (regular font) = Presenting Author
Name (italic font) = Research Leader
**Parallel Sessions**

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<td><strong>Morning Session – CE 105</strong></td>
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<td>Chair: Tomasz Wesolowski, University of Geneva</td>
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No session endowment

11:15 MIR Spectroscopy beyond trace levels - environmental and industrial applications [AS-011]
      Lukas Emmenegger, EMPA Dübendorf

12:00 Detection and identification of non-covalent interactions with SPRI-MALDI MS [AS-014]
      Ulrike Anders, Renato Zerob, ETH Zurich

12:15 Quick and easy NMR titration using slice-selective experiments to study concentration gradients in agarose gels [AS-015]
      Yavor Mitrev, Damien Jeannerat, University of Geneva

12:30 High-speed, high-resolution, multi-elemental imaging of geological samples [AS-016]
      Marcel Burger, Detlef Günther, ETH Zurich

**Afternoon Session – CE 5**
Chair: Stefan Schürch, University of Bern

15:00 Electromembrane extraction: a new technical development. [AS-021]
      Nicolas Drouin, Julie Schappler, University of Geneva

15:15 Drug quantification in blood within microstructures for Point-of-Care Therapeutic Drug Monitoring [AS-022]
      Elena-Diana Burghlea, Jean-Manuel Segura, HES-SO Valais

15:30 Thin Layer Ionophore-Based Membranes for Multianalyte Detection [AS-023]
      Maria Cuartero, University of Geneva

15:45 Multistage Transversal Modulation Ion Mobility Spectrometry: Reducing the Voltage Required for High Resolution IMS for pre-existing mass spectrometers. [AS-024]
      Miriam Macia, SEADM S.L., Guillermo Vidal-de-Miguel, ETH Zurich

16:00 Fourier optical beam shaping of femtosecond laser pulses for high resolution depth profile analyses by LA-ICPMS [AS-025]
      Debora Käser, Detlef Günther, ETH Zurich

16:15 High resolution laser ablation depth-profiling mass spectrometry [AS-026]
      Andreas Riedo, Peter Warz, University of Bern

16:30 Single-walled Carbon Nanotubes (SWCNTs) for Bioanalyte Sensing [AS-027]
      Justyna Kupis-Rozmyslowicz, Ardemis Anoush Boghossian, EPF Lausanne

16:45 Variable Q1 windows for MS acquisition and predicted LC retention time ranges for LC-SWATH-MS analysis [AS-028]
      Tobias Bruderer, Gérard Hopfgartner, University of Geneva

**Session endowment: QEERI**

11:15 Challenges of Electronic Structure Calculations: Hamiltonian Gadgets with Reduced Resource Requirements [CC-011]
      Sabre Kais, Qatar Environment and Energy Research Institute, Doha, Qatar

11:45 Addressing the selection bias: Genetically optimized molecular data sets to train machine learning models of atomization enthalpies [CC-013]
      Nicholas Browning, Ursula Röthlisberger, EPF Lausanne

12:00 Tunneling and Parity Violation in Trisulfane (HSSSH): An Almost Ideal Molecule for Detecting Parity Violation in Chiral Molecules [CC-014]
      Csaba Fabri, Martin Quack, ETH Zurich

12:15 Molecular Dynamics with inter-system crossing and nonadiabatic effects [CC-015]
      Felipe Franco de Carvalho, EPF Lausanne/CECAM

12:30 Local density fitting within a Gaussian and plane waves approach [CC-016]
      Dorothea Golze, Jürg Hutter, University of Zurich

**Afternoon Session – CE 105**
Chair: Jiri Vanicek, EPF Lausanne

15:00 Interactive Similarity Maps for Visualization of High Dimensional Chemical Spaces [CC-021]
      Mahendra Awale, Jean-Louis Reymond, University of Bern

15:15 Addressing the Rare Event Sampling problem with the PINS and SA-MC Methods : studying Structure and Dynamics of the Myoglobin protein [CC-022]
      Florent Hédin, Markus Meuwly, University of Basel

15:30 Accelerating Quantum Instanton Calculations of Kinetic Isotope Effects [CC-023]
      Konstantin Karandashev, Jiri Vanicek, EPF Lausanne

15:45 First principles based crystal structure prediction from alchemical coupling [CC-024]
      Alisa Solovyeva, University of Basel

16:00 Beyond Static Structures: Putting Forth REMD as a Tool to Solve Problems in Computational Organic Chemistry [CC-025]
      Riccardo Petraglia, Clemence Corminboeuf, EPF Lausanne

16:15 Interface effects in the case of dry reforming – CO2 activation on Ni-supported γ-Al2O3 and Ni-γ-Al2O3 [CC-026]
      Martin Quack, ETH Zurich

16:30 Response time of quantum-chemical calculations during real-time reactivity explorations [CC-027]
      Alain C. Vaucher, Markus Reiter, ETH Zurich

16:45 Orthogonality of embedded wave functions for different states in Frozen-Density Embedding Theory [CC-028]
      Alexander Zech, Tomasz Adam Wesolowski, University of Geneva
Session Endowment: Clariant International Ltd

11:15 Reversible Electrocatalysis by Enzymes of Relevance to Renewable Energy Conversions [CE-011]
Fraser Armstrong, University of Oxford

11:45 Earth-abundant Electrocatalysts for Solar Fuels Production [CE-013]
Carlos G. Morales-Guio, Xile Hu, EPF Lausanne

12:00 Halogen chemistry on rutile-type catalysts [CE-014]
Maximilian Moser, Javier Pérez-Ramírez, ETH Zurich

12:15 Intermediates in the Photochemical Dehydrogenation of Borane-Amines [CE-015]
Muhammad Sohail, Qatar Environment & Energy Research Institute (QEERI)

12:30 Challenges in photocatalytic water reduction with nickel containing polyoxometalates [CE-016]
René Moré, Greia Ricarda Pützke, University of Zurich

Afternoon Session – CE 2
Chair: Javier Pérez-Ramírez, ETH Zurich

14:45 Development of MTPROP® catalysts: Basis for the realisation of the Methanol-To-Propylene process [CE-020]
Markus Tonigold, Clariant AG

15:15 Synthetic Chemistry to Reduce CO₂ Emissions [CE-022]
Matthew Kanan, Stanford University

15:45 Incorporation of ruthenium catalytic centers in phosphine-functionalized metal-organic frameworks [CE-024]
Flavien Lucas Morel, ETH Zurich, Jeroen A. van Bokhoven, ETH Zurich, Ville Villigen

16:00 NMR Signatures of the Active Sites in Sn-β Zeolite [CE-025]
Alex Comas-Vives, Christophe Copéret, ETH Zurich

16:15 Active and spectator Ce⁴⁺ species in a ceria-based platinum catalyst during low-temperature CO oxidation [CE-026]
René Kopelent, Olga V. Safonova, Paul Scherrer Institute, Villigen

16:30 Generation of NH₃-SCR active catalysts from decomposition of supported FeVO₄ [CE-027]
Adrian Marberger, Paul Scherrer Institut, Oliver Kröcher, Paul Scherrer Institute, Villigen and EPF Lausanne

16:45 Direct conversion of cellulose into HMF [CE-028]
Sviatlana Siankevich, Paul Dyson, EPF Lausanne

Session Endowment: Contact Group for Research Matters (KGF)

11:15 The Magic of Polynitrogen-based Chemistry [IC-011]
Manfred Scheer, Universität Regensburg

12:00 Chemoselective Alkene Hydrosilylation Catalyzed by Nickel Pincer Complexes [IC-014]
Ivan Buslov, Xile Hu, EPF Lausanne

12:15 Chiral (NH)₂P₂ Macrocyclic Iron(ii) Complexes: Design and Application in the Highly Enantioselective Transfer Hydrogenation of Ketones [IC-015]
Raphael Bigler, Antonio Mezzetti, ETH Zurich

12:30 Cobalt Complexes of Tetradeutate, Bipyridine-Based Macrocycles for Highly Active Hydrogen Evolution in Aqueous Photocatalysis [IC-016]
Evelyne Joliat, Roger Alberto, University of Zurich

Afternoon Session – CE 3
Chair: Marinella Mazzanti, EPF Lausanne

15:00 Two Synthetic Approaches for one target: Single Molecule Magnet Behaviour [IC-021]
Pierre Emmanuel Car, University of Zurich

15:15 Self-assembly of 3d-5f Molecular Magnets from Pentavalent Uranyl [IC-022]
Lucile Chatelain, Marinella Mazzanti, EPF Lausanne

15:30 On the Synthesis, Biological Evaluation and Use of Metalloacenyl Derivatives [IC-023]
Jeannine Hess, Gilles Gasser, University of Geneva

15:45 Vibrational spectroscopy on functionalized and chiral monolayer protected gold clusters [IC-024]
Birte Varnholt, Thomas Bürgi, University of Geneva

16:00 Carbene insertion into a P–H bond: Parent phosphinidene-carbene adducts from PH₃ [IC-025]
Mark Bispinghoff, Hansjörg Grützmacher, ETH Zurich

16:15 Design and Synthesis of Perfluororous Ionic Liquids [IC-026]
Valentin Michael Manzanares, Paul Joseph Dyson, EPF Lausanne

16:30 Going to Extremes: From Fluorine-Free Blue to Stable Red Emitting Iridium Complexes for LEECs [IC-027]
Cathrin D. Ertl, Edwin C. Constable, University of Basel

16:45 Application of ferrocene derivatives for stimuli-responsive polymers and for biosensor [IC-028]
Michela Di Giannantonio, Katharina Fromm, University of Fribourg
Session Endowment: Actelion Ltd
11:15  SCS Division of Medicinal Chemistry: What does the DMCCB do? [MC-011]
Yves Auberson, Novartis Pharma AG
11:30  Discovery and optimisation of a CREBBP Bromodomain ligand. [MC-012]
Michael Brand, Robert S. Paton, University of Oxford
11:45  LC-MS/MS for determination of brain uptake and target mediated differential PK of PDE10A PET tracer candidates [MC-013]
Gobbi Luca, F. Hoffmann-La Roche AG
12:00  Synthetic Nucleotides Reduce Human DNA Polymerase η-mediated Synthesis Over a Cisplatin DNA Cross-link Adduct [MC-014]
Arman Niforoushain, Shana Starla, ETH Zurich
12:15  Discovery of G Protein-Coupled Bile Acid Receptor 1 (GPBAR1, TGR5) Agonists as Antiinflammatory Agents [MC-015]
Klemens Hoegenauer, Novartis Pharma AG
12:30  From pre-miRNA labeling to the identification of small molecule modulators of microRNA biogenesis: application to the cancer associated pre-let-7/lin28 interaction. [MC-016]
Ugo Pradere, Jonathan Hall, ETH Zurich

Afternoon Session – CE 6
Chair: Jean-Louis Reymond, University of Bern

15:00  Fluoroquinolone containing inhibitors of bacterial topoisomerases with a novel mode of action [OC-021]
Cornelia Zumbrunn, Actelion Pharmaceuticals Ltd.
15:15  Siglec-8 – A Novel target For Asthma. [MC-022]
Blijkje Suzanne Kroezen, Beat Ernst, University of Basel
15:30  SMN2 splicing modifier for the treatment of Spinal Muscular Atrophy (SMA) [MC-023]
Hasane Ratni, F. Hoffmann-La Roche AG
15:45  From bulk to single molecule - Point mutations reveal specific intra domain interactions essential for group II intron ribozyme folding [MC-024]
Erica Fiorini, Roland K.O. Sigel, University of Zurich
16:00  Photoaffinity labeling in Chemoproteomic: Cyanopindolol and a small molecule mediated reprogramming of mESCs as successful case study. [MC-025]
Maud Patoor, Laure C. Bouchez, Novartis Pharma AG
16:15  Refining the understanding of the catalytic mechanism of DNAzymes [MC-026]
Marcel Hollenstein, University of Bern
16:30  Strigolactones and their potential role in modern agriculture [MC-027]
Mathilde Lachia, Syngenta Crop Protection AG
16:45  Guineensine as a Novel Inhibitor of Endocannabinoid Reuptake [MC-028]
Ruben Bartholomäus, ETH Zurich, Jürg Gertsch, University of Bern

Session Endowment: Syngenta Crop Protection AG
11:15  Total Synthesis of Mandelalide A [OC-011]
Tobias Brüttsch, Karl-Heinz Altmann, ETH Zurich
11:30  First Enantioselective Total Synthesis of Terengganensine A [OC-012]
Cyrril Piemontesi, Jieping Zhu, EPF Lausanne
11:45  Synthesis of Cyclopentenones by an Asymmetric Nickel-Catalyzed [3+2] Reductive Cycloaddition of Enoates with Alkenes [OC-013]
Joachim Ahlin, Nicolai Cramer, EPF Lausanne
12:00  Catalytic One-Step Synthesis of Unprotected Piperazines, Morpholines and Thiomorpholines using SnAP Reagents [OC-014]
Michael U. Luescher, Jeffrey W. Bode, ETH Zurich
12:15  Organocatalytic Atroposelective Aldol Condensation [OC-015]
Achim Link, University of Basel, Christof Sparr, ETH Zurich
12:30  Lewis Acid Catalyzed Electrophilic Trifluoromethylolation of Silyl Ketene Acetals: Access to Quaternary α-Trifluoromethylated Esters and Lactones [OC-016]
Dmitry Katayev, Antonio Togni, ETH Zurich

Afternoon Session – CE 1
Chair: Philippe Renaud, University of Bern

15:00  DAST-mediated Cyclization of a,a-Disubstituted-a-acylaminoketones: Efficient and Divergent Synthesis of Unprecedented Heterocycles [OC-021]
Aurelien Bigot, Syngenta Crop Protection AG
15:15  Design, synthesis and properties of ‘Photochomimic Torsional Switches’ (PTS) [OC-022]
Giuseppe Sforazzini, EPF Lausanne
15:30  Dancing Ladders - Inducing and Distorting Helical Chirality in Achiral Polycyclic Systems [OC-023]
Michel Rickhaus, Marcel Mayor, University of Basel
15:45  Access to dihydrofurans with a fully substituted C2 stereocenter by Pd-catalyzed intermolecular asymmetric Heck reaction [OC-024]
Gustavo Manuel Borrajo-Calleja, Clement Mazed, University of Geneva
16:00  Domino Reaction to Functionalize Heterocycles: A Complementary Method to C-H Functionalization [OC-025]
Yifan Li, Jérôme Waser, EPF Lausanne
16:15  Pyridylidene-Mediated Dihydrogen Activation Coupled with Catalytic Imine Reduction [OC-026]
Johanna Auth, Andreas Pfälitz, University of Basel
16:30  Disclosing a Novel Way for Poly(disulfide)s to Enter Cells [OC-027]
Giulio Gasparini, Stefan Matile, University of Geneva
16:45  Halogen Bonding Supramolecular Capsules [OC-028]
Oliver Dumele, François Diederich, ETH Zurich
**Afternoon Session – CE 4**
Chair: Natalie Banerji, University of Fribourg

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<td>Vibrational Optical Activity (VOA) of Chiral Ionic Liquids (CILs) [PC-021]</td>
<td>Patric Oulevey, Thomas Bürgi, University of Geneva</td>
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<td>Characterization of Gd(III) chelators and combination of paramagnetic NMR with Gd(III)-nitroxide DEER in studies of biomacromolecules [PC-022]</td>
<td>Luca Garbuio, Maxim Yulikov, ETH Zurich</td>
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<td>Experimental study of the ion-molecule reaction ( \text{H}_2^+ + \text{H}_2 \rightarrow \text{H}_3^+ + \text{H} ) at low collision energies [PC-023]</td>
<td>Pitt Allmendinger, Frédéric Merkt, ETH Zurich</td>
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<td>Sebastian Brickel, Markus Meunly, University of Basel</td>
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<td>Cold Chemistry on a multi-functional ion trap chip [PC-025]</td>
<td>Arezoo Mokhberi, Stefan Willitsch, University of Basel</td>
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<td>(Benzonitrile), and (meta-Cyanophenol): Influence of a Hydroxy Group on the Excitonic Splitting [PC-026]</td>
<td>Franziska Balmer, Samuel Leutwyler, University of Bern</td>
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<td>Aqueous Catholyte for Rechargeable Li-O2 and Li-Water Batteries [PC-027]</td>
<td>Nam Hee Kwon, Katharina M. Fromm, University of Fribourg</td>
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<td>Quantifying Equilibrium Binding Affinity using 2D IR Spectroscopy and Non-native Amino Acids [PC-028]</td>
<td>Klemens Lucas Koziol, Peter Hamm, University of Zurich</td>
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**Afternoon Session – BS 160**
Chair: Markus Niederberger, ETH Zurich

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<td>Andrew deMello, ETH Zürich</td>
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<td>Ionel Adrian Dinu, Wolfgang Meier, University of Basel</td>
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<td>Mykhailo Vybornyi, Robert Häner, University of Bern</td>
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<td>Sonja Kracht, Katharina Fromm, University of Fribourg</td>
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<td>Self-assembled 2-D WSe2 Thin Films for Photo-electrochemical Hydrogen production [PCI-027]</td>
<td>Xiaoyun Yu, Kevin Sivula, EPF Lausanne</td>
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Poster Sessions

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Nano-SIMS to study the distribution of metal based anti-cancer compounds in vitro [AS-102]
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Target plate material resistivity influences LDI efficiency [AS-105]
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Mario Francesco Mirabelli, Renato Zenobi, ETH Zurich
Quantification of Trace Elements in Brass and Silicate Glasses by Portable Laser Ablation Sampling and Subsequent ICPMS [AS-110]
Peter Velicasani, Detlef Günther, ETH Zurich
Nucleoside phosphate monitoring in cell cultures using MALDI TOF MS [AS-111]
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Alena Krüger, Stefan Schürch, University of Bern

| Binding of Metallocenes to Short Oligonucleotides [AS-115] | Rahel Eberle, Stefan Schürch, University of Bern |
| Elucidation of the gas-phase structure of a sugar-modified DNA analogue [AS-116] | Yvonne Hari, Stefan Schürch, University of Bern |
| Carbonate-Selective Potentiometric Solid Contact Electrode [AS-118] | Dajing Yuan, Eric Bakker, University of Geneva |
| Efficient normal phase MS directed purification of natural products at the preparative scale [AS-119] | Davide Righi, Jean-Luc Wolfender, University of Geneva |
| Ion-selective Nanospheres as Heterogeneous Indicator Reagents in Complexometric Titrations [AS-120] | Jingying Zhai, Eric Bakker, University of Geneva |
| Charged Solvatochromic Dyes as Signal Transducers in Fluorescent and Colorimetric Ion Selective Nanosensors [AS-121] | Xiaojiang Xie, University of Geneva |
| Quantifying the detection capabilities of LA-ICPMS [AS-122] | Alex Ulianov, François Bussy, University of Lausanne |
| The ICPMS signal as a doubly stochastic Poisson process [AS-123] | Alex Ulianov, University of Lausanne |
| Online analysis of mass spectra of hydrocarbons [AS-124] | Luc Patiny, EPF Lausanne |
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| Unraveling the requirements for immortality – Phenotype characterization of the Δtlc1 Type II ALT survivors. [AS-127] | Alfredo J. Ibanez, ETH Zurich |
| UV-fs-LA-ICPMS of La0.4Ca0.6MnO3 PLD thin Films [AS-128] | Kevin Guex, Detlef Günther, ETH Zurich |
| Dopant-induced conformational changes of proteins in the gas phase evaluated by Transversal Modulation Ion Mobility Spectrometry [AS-129] | Nicole Andrea Meyer, Renato Zanobi, ETH Zurich |
| Comprehensive detection of obstructive sleep apnea in humans and drug monitoring in mice by real-time breath analysis [AS-130] | Pablo Martinez-Lozano Sinues, ETH Zurich |
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Miriam Arrell, HES-SO Valais

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Majid Ghahraman Afshar, Eric Bakker, University of Geneva

Ion-exchange nanosphere doped hydro-gel as buffer for electrochemical AS(III) detection in weakly buffered environmental media [AS-133]
Romain Touilloux, Eric Bakker, University of Geneva

Ion-selective fluorescent and pH independent nanosensors based on functionalized polyether macrocycles [AS-134]
Zdenka Jarolimová, Eric Bakker, University of Geneva

Solve complex and challenging mass spectrometry problems directly from the browser [AS-135]
Luc Patiny, EPF Lausanne

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Jury members: Tomasz Wesołowski, University of Geneva, Jiri Vanicek, EPF Lausanne, Matthew Wodrich, EPF Lausanne

Averaged Molecular Dynamics Trajectories in Frozen-Density Embedding Theory [CC-101]
Andrey Laktionov, EPF Lausanne, Tomasz Adam Wesołowski, University of Geneva

Andrea Missana, Andreas Hauser, University of Bern

Computational Investigations of a β-Class Carbonic Anhydrase from Desulfovibrio vulgaris [CC-103]
Esa Bozkurt, Ursula Rüthlisberger, EPF Lausanne

Intramolecular symmetry-adapted perturbation theory - a tool for elucidating the weak intramolecular interactions [CC-104]
Ewa Pastorczak, Jérôme Gonthier, EPF Lausanne

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Laurent Vannay, Clemence Corminboeuf, EPF Lausanne

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Matej Repic, EPF Lausanne

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Pablo Lopez Tarifa, Ursula Rüthlisberger, EPF Lausanne

Computational Rationalization of the selectivity of Ru(II) and Os(II) anticancer agents in HIS/HER binding to the histone components of the Nucleosome Core Particle [CC-108]
Thibaud von Erlach, Ursula Rüthlisberger, EPF Lausanne

Investigation of the Posttranslational Modifications Expressed in Polyteonamide B by Molecular Dynamics Simulations [CC-109]
Amnick Reneyve, Sereina Riniker, ETH Zurich

Mechanistic Study of Denitrfication in Truncated Hemoglobin using Adiabatic Reactive Molecular Dynamics [CC-110]
Akshaya Kumar Das, University of Basel, Markus Meuwly, University of Basel

Assembly of a diverse 10M GDB Fragment Set [CC-111]
Ricardo Visini, Jean-Louis Reymond, University of Bern

DFT study of the influence of guest-host interactions on the high-spin/low-spin energy difference in Co(bpy)₃²⁺@Y [CC-112]
Andrea Missana, Andreas Hauser, University of Geneva

Accounting for electronic polarization in subsystem DFT calculations [CC-113]
Emilie Chalaye-Cheminou, Tomasz Adam Wesołowski, University of Geneva

Study of Excited State Geometries of Organic Chromophores [CC-114]
Marie Humbert-Droz, University of Geneva

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Yeliz Gurdal, University of Zurich

Exploiting dispersion-driven aggregators as a route to new one-dimensional organic nanowires [CC-116]
Adrien Nicolai, Clemence Corminboeuf, EPF Lausanne

Statistical Averaging over Molecular Dynamics Ensembles in frozen-density embedding theory [CC-117]
Andrey Laktionov, EPF Lausanne, Tomasz Adam Wesołowski, University of Geneva

Molecular binding mechanism of a potent ruthenium-arene anticancer agent to the nucleosome core particle (NCP) [CC-118]
Giulia Palermo, Ursula Rüthlisberger, EPF Lausanne

EVLQVE: a new genetic algorithm toolbox for protein engineering [CC-119]
Marta A. S. Perez, Ursula Rüthlisberger, EPF Lausanne

The role of dispersion-correction in the description of metal-ligand bonds in density functional theory [CC-120]
Martin Peter Bircher, Ursula Rüthlisberger, EPF Lausanne

The role of Mg²⁺ ions in adenylate cyclase [CC-121]
Siri Van Keulen, Ursula Rüthlisberger, EPF Lausanne

The reactivity of hypervalent λ⁵⁻⁴iodanes explored using ab initio (meta-)dynamics [CC-122]
Olivier Sala, ETH Zurich

The new second-generation ETH DMRG program for quantum chemical applications [CC-123]
Stefan Knecht, Markus Reiher, ETH Zurich

Bohmian Mechanics with virtual particles [CC-124]
Oliver Thorsten Unke, Markus Meuwly, University of Basel
A Force Field Approach to Reproduce Grotthuss Mechanism in Reactive Systems [CE-125]  
Zheng-Hao Xu, Markus Mewes, University of Basel

New computational approaches for liquids and energy-related compounds [CC-126]  
Sandra Luber, Jürg Hutter, University of Zurich

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Ganna Grynova, Clemence Corminboeuf, EPF Lausanne

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Hailua Magalhães, ETH Zurich

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Stefan Heinen, Hans Peter Lüthi, ETH Zurich

Thermal stability predictions as a tool for inherently safer process design [CC-130]  
Nadia Baati, Thierry Meyer, EPF Lausanne

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Jury members: S. David Tilley, University of Zurich, Jeremy Luterbacher, EPF Lausanne, Martin Albrecht, University of Bern

Effect of the Pd-state in perovskite-type $A(B,Pd)O_3$ $\Delta$ (A = La, Y; B = Mn, Fe, Co) oxidation catalysts in terms of CH$_4$-oxidation activity [CE-101]  
Armin Eysssler, EMPA Dübendorf

Hydrogen Storage in Formic Acid/Carbon Dioxide Systems - Solvent Effects: Heat of Mixing and pH of the Reaction Media [CE-102]  
Cornel Fink, Gábor Laurenczy, EPF Lausanne

Insights into the Ionic Liquid-Promoted Electrochemical Reduction of CO$_2$ [CE-103]  
Geneviève Lau, EPF Lausanne

$Ni,P$ nanoparticles as Janus catalyst for electrochemical water splitting [CE-104]  
Lucas-Alexandre Stern, Xile Hu, EPF Lausanne

Aerogels for CO$_2$ Capture [CE-105]  
Marco Roman Holzer, Andreas Züttel, EPFL Valais/Wallis

Selective dehydrogenation of formic acid over sub-nanometric gold particles supported on silica [CE-106]  
Amaia Beloqui-Redondo, ETH Zürich

Esterification of 2-Methoxyphenol and Octanoic Acid over Silver-Indium Materials [CE-110]  
Gaston O. Larrazábal, Javier Pérez-Ramírez, ETH Zurich

Novel catalysts for the oxybromination of methane [CE-127]  
Vladimir Paunovic, Javier Pérez-Ramírez, ETH Zurich

Highly selective basic zeolites for the dehydrogenation of ethanol to acetaldehyde [CE-111]  
Giacomo Marco Lari, Javier Pérez-Ramírez, ETH Zurich

Stability of tin-containing zeolites in continuous biomass conversions [CE-112]  
Giacomo Marco Lari, Javier Pérez-Ramírez, ETH Zurich

Structure-performance relationships of hybrid nanocatalysts for selective hydrogenation [CE-113]  
Gianvito Vilé, Javier Pérez-Ramírez, ETH Zurich

CO activation on Ruthenium Nanoparticles: Ab Initio calculations under reaction conditions. [CE-114]  
Lucas Foppa, Alexis Comas-Vives, ETH Zurich

Impact of defect chemistry in zeolite desilication [CE-115]  
Marlyene Boltz, Javier Pérez-Ramírez, ETH Zurich

Improving the Oxygen Evolution Kinetics of a Nanostructured Composite Hematite Photoanode [CE-116]  
Mario Bärtisch, ETH Zurich, Jan Augustynski, University of Warsaw

Dehydrogenation and Polymerization on Cr(III) Silicates Are Rate-Determined by an Analoguous Mechanistic Step [CE-117]  
Murielle F. Delley, Christophe Copéret, ETH Zurich

Improved Solution Finding in Industrial Waste Incineration Scheduling Through Implementation of Multi-Objective Strategies [CE-118]  
Oliver Weder, Konrad Hungerbühler, ETH Zurich

Handling forecast uncertainty in industrial waste incineration scheduling [CE-119]  
Ralph Bannerman, Konrad Hungerbühler, ETH Zurich

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Robbie Warringham, Javier Pérez-Ramírez, ETH Zurich

Integration of Hierarchical Waste Incineration Scheduling Levels for Improved Industrial Performance [CE-121]  
Samuel Perren, Konrad Hungerbühler, ETH Zurich

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Sung Min Kim, Christophe Copéret, ETH Zurich

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Ta-Chung Ong, Christophe Copéret, ETH Zurich

Design of mild base catalysts for the deoxygenation of bio-oil by aldol condensation [CE-125]  
Tobias Keller, Javier Pérez-Ramírez, ETH Zurich

Fast pyrolysis of lignin: Relating the Structure with Product selectivity [CE-126]  
Victoria Custodis, Jeroen A. van Bokhoven ETH Zurich/PSI Villigen
Encapsulated Polarizing Agents for Application in Dynamic Nuclear Polarization Surface Enhanced NMR Spectroscopy [CE-128] Wei-Chih Liao, Christophe Copéret, ETH Zurich

Opportunities of catalysis for tuning selectivity during lignin catalytic fast pyrolysis [CE-129] Zhiqiang Ma, Jeroen A. van Bokhoven ETH Zurich/PSI Villigen

Electrocatalytic water oxidation with Co$_3$M$_2$CN metal carbodiimides [CE-130] Rafael Müller, Greta Ricarda Patzke, PSI Villigen

Hierarchical Pd/ZSM-5 catalysts for methane oxidation in the presence of steam [CE-132] Andrey W. Petrov, Jeroen A. van Bokhoven, PSI Villigen

Structural analysis of individual Fluid Catalytic Cracking catalyst particle studied by synchrotron-based ptychographic X-ray-computed tomography [CE-133] Julio C. da Silva, PSI Villigen, Jeroen A. van Bokhoven, ETH Zurich/PSI Villigen

Exploring the self-regenerating function of perovskite-type oxides on catalytically active nickel [CE-134] Patrick Steiger, PSI Villigen

Time-resolved measurements of the terahertz conductivity in noble metal-on-TiO$_2$ nanoparticles for photocatalytic applications [CE-135] Arno Schneider, PSI Villigen, Jacques-E. Moser, EPF Lausanne

Dual-phase Zn-modified ceria nanocrystals: establishing a correlation between the structural characteristics, oxygen storage capacities and catalytic activities [CE-136] Fangjian Lin, PSI Villigen

From mechanism to catalyst design: Highly active formic acid decomposition catalysts under SCR-relevant conditions [CE-137] Manasa Sridhar, PSI Villigen, Oliver Kröcher, PSI Villigen and EPF Lausanne

In situ X-ray Absorption Spectroscopy of Ce$_{0.5}$Zr$_{0.5}$O$_{2-δ}$ at 1773 K [CE-138] Matthias Rothensteiner, PSI Villigen, Jeroen A. van Bokhoven, ETH Zurich/PSI Villigen

Investigating the influence of CO and ceria on CH$_4$ abatement on Pd-based TWC using modulation excitation spectroscopy [CE-139] Valentina Marchionni, PSI Villigen

Tuning reactant selectivity in the direct aldol-Tishchenko reaction using space constraints in multifunctional MOFs [CE-140] Xiaoying Xu, PSI Villigen, Jeroen A. van Bokhoven, ETH Zurich/PSI Villigen

Synthesis of hollow ZSM-5 nano-reactors containing copper-metal oxide nanoparticles [CE-141] Jin Hee Lee, PSI, Jeroen A. van Bokhoven, ETH Zurich/PSI Villigen


Towards cheap and sustainable energy sources by exploiting self-organized catalyst micro- and nano structures [CE-143] Roche Marcel Walliser, Edwin C. Constable, University of Basel

Dynamic kinetic resolution of allylic acetates [CE-144] Valentin Köhler, University of Basel

Heterogenization of chiral Ru(II) catalysts on mesoporous silica via the arene ligand [CE-145] Jaroslav Aubrecht, University of chemistry and technology, Prague, Petr Kačer, Institute of Chemical Technology, Prague, Czech Republic

Synthesis of highly active ruthenium catalyst for transfer hydrogenation of ketones [CE-146] Nelly Hérault, Katharina Fromm, University of Fribourg

TiO$_2$ and Ag-doped TiO$_2$ nanocontainers as photocatalysts for CO$_2$ reduction [CE-147] Fabio Evangelisti, Greta Ricarda Patzke, University of Zurich

Doped Manganese Oxides as Water Oxidation Catalysts [CE-149] Michael Olah, Greta R. Patzke, University of Zurich

Optimization of Ceria-Based Materials for Solar Thermochemical Two-Step CO$_2$-Splitting [CE-150] Roger Jacot, University of Zurich, Aldo Steinfeld, ETH Zurich

Screening of Lewis Acidic Chlorometallate Ionic Liquids Combined with Nanoparticle Catalysts for Aromatic Hydrogenation Activity [CE-151] Alena Karakulina, Paul Joseph Dyson, EPF Lausanne

Continuous flow synthesis of metal-organic frameworks utilizing microwave irradiation [CE-152] Daniel Antti Stieitz, ETH Zürich, Jeroen A. van Bokhoven, ETH Zurich/PSI Villigen

Cationic co-doped TiO$_2$ nanoparticles as efficient visible-light active photocatalyst: experimental and theoretical study [CE-153] Darinka Primc, ETH Zürich

Design and technical development of iron zeolite catalysts for the gas phase oxidation of glycerol to dihydroxyacetone [CE-154] Giacomo Marco Lari, Javier Pérez-Ramírez, ETH Zurich

Zinc-rich copper catalysts promoted by gold for methanol synthesis [CE-155] Oliver Martin, Javier Pérez-Ramírez, ETH Zurich

Evidence on the direct formation of methane from H$_2$O and CO$_2$ by thermochemical cycles using Ni- and Rh-doped ceria [CE-156] Fangjian Lin, PSI Villigen
Towards stabilization of active methanation catalysts: Effect of boron promotion [CE-157]
Anastasios Kampolis, Oliver Kröcher, PSI Villigen

Superior durability of flame-made WO₃/CeOₓ-TiO₂ DeNOₓ catalysts [CE-158]
Katarzyna Anna Michalow-Mauke, Oliver Kröcher, PSI Villigen

Photo-catalytic evolution of dihydrogen from water by Ni@MOF: a nickel catalyst encapsulated inside MIL-125-NH₂ (Ti) [CE-159]
Kim Meyer, PSI Villigen, Jeroen A. van Bokhoven, ETH Zurich/PSI Villigen

Metal-support interaction of platinum nanoparticles supported on yttria stabilized zirconia catalysts for environmentally important reaction systems [CE-160]
Rima J Isaifan, Qatar Environment and Energy Research Institute (QEERI), Elena A Baranova, University of Ottawa

Homogeneous Catalytic Hydrogen Storage and Release in the Formic Acid-Carbon Dioxide Couple using Ruthenium Pre-Catalysts [IC-101]
Antoine van Muyden, Gábor Laurenczy, EPF Lausanne

Self-sorting of Pd-based coordination cages: the importance of subtle steric effects [IC-102]
Giacomo Cecot, Kay Severin, EPF Lausanne

Small Molecule Activation at siloxide “ate” complexes of f elements [IC-103]
Julie Andrez, EPF Lausanne

A viable hydrogen storage and release system based on formate and bicarbonate salts: mechanistic insights into the hydrogen release step. [IC-104]
Katerina Sordakis, Gábor Laurenczy, EPF Lausanne

Multi-Electron Redox Reactions Promoted by f-Elements Complexes [IC-105]
Marta Falcone, Marinella Mazzanti, EPF Lausanne

Carboxylic acid-functionalized clathrochelate complexes as scaffolds for supramolecular metalloidligands [IC-106]
Mathieu Marmier, Kay Severin, EPF Lausanne

Selective Hydrogen Production from Formic Acid: Development of Homogeneous Iron Catalysts in Aqueous Solution [IC-107]
Mickael Montandon-Clerc, Gábor Laurenczy, EPF Lausanne

Supramolecular cages from clathrochelates and stabilized imines [IC-108]
Suzanne Maria Jansze, Kay Severin, EPF Lausanne

Nickel Complexes as Catalysts for Silane Dehydrogenation and Hydrogenative Cleavage Reactions of Oligosilanes. [IC-109]
Bruno Pribanic, Hansjörg Grützmacher, ETH Zurich

Synthesis of New Polarization Matrices for Dynamic Nuclear Polarization [IC-110]
Daniel L. Silverio, Christophe Copéret, ETH Zurich

The Mechanism of C-H activation by Transition Metal Siloxides [IC-111]
Deven Paul Estes, Christophe Copéret, ETH Zurich

Catalytic Dehydrogenation of Amino Boranes – Formation of Condensed Borazine Compounds [IC-112]
Fabian Müller, Hansjörg Grützmacher, ETH Zurich

Cycloaddition Reactions of Diazoalkane Ruthenium Complexes with Chiral PNNP Ligands [IC-113]
Joel Egloff, Antonio Mezzetti, ETH Zurich

Synthesis and Application of N-Trifluoromethyl N-Heterocyclic Carbene Ligands and Their Complexes [IC-114]
Pascal Engl, Antonio Togni, ETH Zurich

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Raffael Huber, Antonio Mezzetti, ETH Zurich

Low temperature synthesis of nickel silicide: from preparing colloidal nanoparticles to coating silicon [IC-116]
Tsung-Han Lin, Christophe Copéret, ETH Zurich

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Víctor Mougé, Christophe Copéret, ETH Zurich

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Wei Cheng, ETH Zurich

Marco Taddei, PSI Villigen, Jeroen Anton van Bokhoven, ETH Zurich

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Giuseppe Meola, Roger Alberto, University of Zurich

Target Specific Multimodality Nanoparticles for (Nano) Medical Applications [IC-121]
Michel Wulffémin, Henrik Brabant, University of Zurich

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Robin Güttinger, Pierre-Emmanuel Car, University of Zurich

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Andreas M. M. Büntzli, University of Basel

Porphyrin-decorated polypyrindines for dye sensitized solar cells [IC-124]
Angelo Lanzilotto, Edwin C. Constable, University of Basel

Asymmetric copper(1)-based dyes to combine with sterically demanding anchoring ligands for dye-sensitized solar cells, [IC-125]
Annika Büttner, Edwin C. Constable, University of Basel

Going to Extremes: From Fluorine-Free Blue to Stable Red Emitting Iridium Complexes for LEECs [IC-126]
Cathrin D. Ertl, Edwin C. Constable, University of Basel
Anionic Ir(III) Complexes for Light-Emitting Electrochemical Cells [IC-127]  
Collin D. Morris, Catherine E. Housecroft, University of Basel

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Frederik J. Malzner, Edwin C. Constable, University of Basel

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Jingming Zhao, Thomas R. Ward, University of Basel

Strong, Chemically Robust Photoreductants [IC-130]  
Laura A. Bülkt, University of Basel, Oliver S. Wenger, Basel

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Maximilian Klein, Edwin C. Constable, University of Basel

Tuning the in vitro cell cytotoxicity of dinuclear ruthenium trithiolato complexes: Influence of the arene ligand [IC-134]  
Lennart Geiser, University of Bern

Synthesis, reactivity and cytotoxicity of dithiolato diruthenium complexes [(η⁶-p-cymene)₂Ru₂(μ₂-SR)₂X₂], X = Cl, I [IC-135]  
Lennart Geiser, University of Bern

Did the presence of a guest in the cavity of an arene ruthenium metalalprism modify its reactivity towards biomolecules? [IC-136]  
Lydia Paul, Julien Furrer, University of Bern

Synthesis of metal oxide precursors for the generation of oxides or similar nanomaterials for Na-ion battery cathode production [IC-137]  
Benoît Baichette, Katharina Fromm, University of Fribourg

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Noémie Voutier, Katharina Fromm, University of Fribourg

Sn/C composite anode material for lithium ion batteries [IC-139]  
Sivarajakumar Maharajan, Katharina Fromm, University of Fribourg

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Timothée Lathon, Claude Piquet, University of Geneva

Synthesis of heteroaryl meso substituted porphyrins, and their coordination with ruthenium complexes [IC-141]  
Balazs Brem, University of Neuchâtel, Luminita Silaghi-Dumitrescu, Babes-Bolyai University

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Minghui Yuan, Bruno Therrien, University of Neuchatel

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Sebastiano Guerra, University of Neuchatel, Claude Piquet, University of Geneva

Water-soluble organometallic assemblies containing photoswitchable ligands [IC-144]  
Thomas Cheminé, Bruno Therrien, University of Neuchatel

Efficient Triplet Blue Emitters Based on Neutral Gold(III) Complexes [IC-145]  
Alexander Szemkuti, Koushik Venkatesan, University of Zurich

Investigating the structure of the metallothionein 2 protein from the plant Cicer arietinum [IC-146]  
Alma Salim, Eva Freisinger, University of Zurich

Highly Homoperfluorinated Ionic Liquids for NMR Field Probes for Magnetic Field Monitoring in MRI [IC-147]  
Anna Christina Looser, Roger Alberto, University of Zurich

Photocatalytic Proton Reduction with Molecular Ru and Co Complexes Immobilized on Hydrophobic Silica [IC-148]  
Cyril Bachmann, Roger Alberto, University of Zurich

Unique histidine-rich metallothioneins – “cracking the code” [IC-149]  
Jelena Habjanic, Eva Freisinger, University of Zurich

Tackling the structure of the metal binding domains of a plant metallothionein 3 [IC-150]  
Jovana Jakovleska, Eva Freisinger, University of Zurich

Characterization of Mg²⁺ binding sites in the CPEB3 ribozyme studied by NMR spectroscopy [IC-151]  
Kenneth Adea, Roland K.O. Sigel, University of Zurich

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Kim Dimuth von Allmen, Greta R. Patzke, University of Zurich

B₈ derivatives with a modified corrin structure [IC-153]  
Lucas Prieto, Felix Zelder, University of Zurich

Influence of hetero-biaryl-ligands on the photophysical properties of [Re₈NCS(CO)₆diimine]-type photosensitizers. [IC-154]  
Mathias Lukas Mosberger, Roger Alberto, University of Zurich

Covalently labeling of the btuB riboswitch with fluorophores for the studies at the single molecule level [IC-155]  
Meng Zhao, Roland K.O. Sigel, University of Zurich

N-Heterocyclic Carbones - Stabilizing Ligands for Various Oxidation States of Rhenium and Technetium [IC-156]  
Michael Benz, Henrik Braband, University of Zurich

Pyrphyrin and Phenphyrin Scaffold Revisited: Physico-Chemical Properties and Photocatalysis [IC-157]  
Stephan Schnidrig, Roger Alberto, University of Zurich

A General Approach of Reduced Graphene Oxide Nanocomposite Aerogels with Multifunctional Electrode Materials towards Advanced Lithium-ion Batteries [IC-158]  
Guobo Zeng, Markus Niederberger, ETH Zurich

Phosphine oxidation catalyzed by zerovalent cobalt complexes using nitrous oxide as oxidant [IC-159]  
Thomas Lucien Gianetti, Hansjörg Grützmacher, ETH Zurich
Multitopic precursors for oxide materials’ synthesis [IC-160]
Alba Finelli, Katharina M. Fromm, University of Fribourg

Stability and reactivity of dinuclear thiolo-bridged arene ruthenium complexes and their interactions with biological ligands [IC-161]
David Sibil, Georg Süss-Fink, University of Neuchatel

Using Oxidative Quenching of a Copper Photosensitizer for Light-Driven Hydrogen Production [IC-162]
Johannes Windisch, Roger Alberto, University of Zurich

Peptide Backbone Vitamin B_{12} Derivative: a Biomimetic Model [IC-163]
Marjorie Sonnay, Felix Zelder, University of Zurich

Medicinal Chemistry & Chemical Biology [MC] Poster Session

Jury members: Leonardo Scapozza, University of Geneva, Cornelia Zumbrunn, Actelion, Christian Heinis, EPF Lausanne, Georg Jaeschke, F. Hoffman-La Roche

Siglec-8 – A Novel Target For Asthma [MC-101]
Blijkje Suzanne Kroeven, Basel, Beate Ernst, University of Basel

Chemically defined chromatin and protein engineering via EPL to study histone ubiquitination on the single molecule level [MC-102]
Andreas Linus Bachmann, EPF Lausanne

Engineering of a specific probe for the visualization and analysis of bivalent epigenetic marks in living cells [MC-103]
Aurore Delachat, Beate Fierz, EPF Lausanne

The Power of the ‘SCS’: Improving the Pharmacological Properties of Peptide Therapeutics [MC-104]
Christopher Kourra, Nicolai Cramer, EPF Lausanne

An “in vivo” temperature dependence study of the protoporphyrine IX delayed fluorescence lifetime while measuring the oxygen partial pressure. [MC-105]
Emmanuel Louis Arthur Gerelli, Georges Wagnières, EPF Lausanne

HP1α dynamic binding to different compaction states of chromatin [MC-106]
Louise Bryan, Beate Fierz, EPF Lausanne

Tackling Malaria by Inhibiting the SHMT Enzyme [MC-107]
Geoffrey Schwertz, François Diederich, ETH Zurich

Investigation of an engineered AaLS-13 capsid and Identification of the encapsulation pathway for GFP (+36) by high mass MALDI MS analysis [MC-108]
Katharina Root, Renato Zenobi, ETH Zurich

Fluorine Scan at the Active Sites of Rhodesain and Human Cathepsin L: Enhanced Binding Affinity by Stacking of Fluorinated Phenyl Rings on Flat Dipeptide Fragments [MC-109]
Maude Giroud, François Diederich, ETH Zurich

O'-Alkylguanine Post-lesion DNA synthesis by Y-family DNA polymerase ζ characterized with synthetic nucleosides [MC-110]
Michael Heinrich Räz, Shana Sterla, ETH Zurich

Structural Characterization of Oligoproline [MC-111]
Patrick Wilhelm, Helma Wennemers, ETH Zurich

Cell Penetrating Peptides Based on an Oligoproline Scaffold [MC-112]
Philipp Raschle, Helma Wennemers, ETH Zurich

Oligoprolines as Scaffolds for Tumor Targeting with Hybrid Bombesin Analogues [MC-113]
Stefanie Dobitz, Helma Wennemers, ETH Zurich

Impact of minor groove alkylation on transcription by RNA polymerase II [MC-114]
Stefano Malvezzi, Shana Sterla, ETH Zurich

Novel azobenzene-derived visible light photoswitches for biological applications [MC-115]
Zhigniew Pianowski, Karlsruher Institut für Technologie (KIT)

Bacterial Resistance to Silver: The Role of SiE Protein [MC-116]
Valentin Chabert, Katharina Fromm, University of Fribourg

The use of phosphorylated peptides to explore the folding properties of the protein tau required for AT8 antibody recognition [MC-117]
Yves Jacquot, Université Pierre et Marie Curie, Paris, Guy Lippens, University of Lille 1

Pollen induced asthma - could small molecules in pollen exacerbate the protein-mediated allergic response? [MC-118]
Alen Bozicevic, Matthias Hamburger, University of Basel

Search for alternatives to copper in organic farming: Fungicidal activity of a Juncus effusus medulla extract and its active constituent, dehydroeffusol, against downy mildew and apple scab [MC-119]
Justine Ramseyer, Matthias Hamburger, University of Basel

Natural and semisynthetic antitrypanosomal sesquiterpene lactones from Anthemis nobilis [MC-120]
Maria De Mieri, Matthias Hamburger, University of Basel

Antagonizing Bacterial Adhesion – Hit Identification by a Dynamic Combinatorial Chemistry Approach [MC-121]
Priska Frei, Beate Ernst, University of Basel

It’s better to bend than to break [MC-122]
Said Rabbani, Beate Ernst, University of Basel

Development of small molecular tools for the cellular study of adenosine A1 receptors [MC-123]
Jennifer Hemmings, Martin Lochner, University of Bern

Fluorescent probes for the cellular study of the 5-HT3A receptor – synthesis and evaluation of near-infrared probes [MC-124]
Jonathan Simonin, Martin Lochner, University of Bern

Peptide dendrimer as siRNA transfection reagent [MC-125]
Marc Heitz, Tamis Darbre, University of Bern

Excess Electron Transfer in DNA Containing a Pyrenyl Donor and Multiple Stable Phenanthrenyl Base-Surrogates [MC-126]
Pascal Röthlisberger, Christian Leumann, University of Bern

Antimicrobial Cyclic Peptides with L,D- architecture Targeting Pseudomonas aeruginosa [MC-127]
Runze He, Jean-Louis Reymond, University of Bern
Synthesis of a Geminal Difluorinated Tricyclic Nucleoside Analog [MC-128]
Sibylle Frei, Christian Leumann, University of Bern

Synthesis of photo-crosslinking probes and their application for the site-selective chemical modification of the 5-HT3 receptor [MC-129]
Thomas Jack, Martin Lochner, University of Bern

Design of 3D Protein Fingerprint and its Application to Map the Protein Data Bank [MC-130]
Xian Jin, Jean-Louis Reymond, University of Bern

QPD-BA, A Precipitating Dye For Monitoring Hydrogen Peroxide In Living Cells [MC-131]
Eric Lindberg, Nicolas Winssinger, University of Geneva

Protein Glycoconjugation by bioorthogonal click chemistry [MC-132]
Takuya Machida, Nicolas Winssinger, University of Geneva

Platinum-Porphyrin Conjugates as Highly Phototoxic Agents against Human Cancer Cells [MC-133]
Bernhard Spingler, University of Zurich

RNA internal loop: suitable binding site for metallointercalators? [MC-134]
Elena Alberti, Daniela Donghi, University of Zurich

Secrets of in vitro RNA folding and splicing revealed by fluorescent RNA labels [MC-135]
Ilija Vukadin, Roland K.O. Sigel, University of Zurich

RNA and Oxaliplatin: Investigation of Possible Platinum Binding Sites [MC-136]
Marianthi Zampakou, Daniela Donghi, University of Zurich

Studies on the mode of action of cationic β-hairpin antibiotics [MC-137]
Matthias Urfer, John A. Robinson, University of Zurich

Towards in vivo splicing of group II intron a5γ [MC-138]
Maya Gulotti-Georgiev, Roland K.O. Sigel, University of Zurich

Characterization of group II introns retrohoming site at the single molecule level [MC-139]
Mokrane Khier, Roland K.O. Sigel, University of Zurich

Correlation between structure and antimicrobial activity of chitosan-alkyl thiomers – a biological study [MC-140]
Simona Conti, Greta Ricarda Patzke, University of Zurich

Peptide Shuttle System to Deliver PNAs to their Place of Action [MC-141]
Susann Zelger-Paulus, Roland K.O. Sigel, University of Zurich

Roles of the continuous internal water pathway in G-protein-coupled receptors activations [MC-142]
Shuguang Yuan, Actelion Pharmaceuticals Ltd., Horst Vogel, EPF Lausanne

Molecular Mechanism of Ruthenium and Gold Anticancer Agents in the AllostERIC Regulation of the Nucleosome Core Particle (NCP) [MC-143]
Giulia Palermo, Ursula Röthlisberger, EPF Lausanne

Bicyclic peptide that selectively inhibits MMP-2 [MC-144]
Maola Khan, Christian Heinis, EPF Lausanne

Roberto Buratto, Geoffrey Bodenhausen, EPF Lausanne

Comparison of 18F-labeled alpha and gamma-conjugated folate derivatives for tumor imaging using positron emission tomography (PET) [MC-146]
Sylvan David Boss, Simon Mensah Ametamey, ETH Zurich

Human Biomonitoring Bridging Gaps between Medicine and Environment [MC-147]
Basem Shomar, Qatar Environment and Energy Research Institute (QEERI)

Palladium-mediated Suzuki-Miyaura coupling: an efficient method for the formation of therapeutically relevant protein conjugates [MC-148]
Anaëlle Dumas, Université Paris-Sud

Enzyme catalyzed sulfur-carbon bond formation by ergothioneine biosynthetic sulfoxide synthase [MC-149]
Kristina Goncharenko, Florian Seebeck, University of Basel

Electrostatic Effect Of Halogenation On The Thermodynamic Stability Of Rapid Insulin Analogs [MC-150]
Krystel El Hage, Markus Meuwly, University of Basel

Preventing aggregation of porphyrinic photosensitizers using a biodegradable triblock copolymer [MC-151]
Ilche Gjuroski, Julien Furrer, University of Bern

Why are Vesicles of the Artificial 1,3-Diamidophospholipid Pad-PC-Pad Mechanosensitive? [MC-152]
Dennis Müller, Andreas Zumbühl, University of Fribourg

Addressing the tempormandibular joint disorder [MC-153]
Etienne Stulder, Andreas Zumbühl, University of Fribourg

Computer-aided drug design unveils the structural requisites for selective GPBAR1 activation [MC-154]
Francesco Saverio Di Leva, University of Naples Federico II

NMR investigation of the human RNA BCL2 G-quadruplex: restricting folding dynamics [MC-155]
Alicia Domínguez-Martin, Roland K. O. Sigel, University of Zurich

Metal ion dependency and multimerization behavior of biologically relevant human RNA G-quadruplexes [MC-156]
Helena Guiset-Miserachs, Roland K.O. Sigel, University of Zurich

Structure - antimicrobial activity relationships of chitosan-alkyl thiomers [MC-157]
Matteo Croce, Greta Ricarda Patzke, University of Zurich

Real-time Characterisation of a Large, Catalytic and Dynamic RNA by Single Molecule Microscopy. [MC-158]
Mélodie C.A.S. Hadzic, Roland K.O. Sigel, University of Zurich

Pore size matters - A crowding study of ribozyme folding and activity [MC-159]
Richard Börner, Roland K.O. Sigel, University of Zurich

The binding mechanism between a B12-specific RNA and its ligand coenzyme B12 [MC-160]
Sofia Gallo, Roland K.O. Sigel, University of Zurich
**Organic Chemistry [OC]**

**Poster Session**

Jury members: Martin Lochner, University of Bern, Amalia Poblador Bahamonde, University of Geneva, Jieping Zhu, EPF Lausanne, Jérôme Waser, EPF Lausanne

1-Alkynyltriazenes as Functional Analogues of Ynamides [OC-101]
Florian Gérard Perrin, Kay Severin, EPF Lausanne

Convergent Synthesis of Glycopeptide Dendrimer Biofilm Inhibitors based on the Chloroacetyl-Thioether-Cysteine (ClaC) Ligation [OC-102]
Gaelle Michaud, Jean-Louis Reymond, University of Bern

Mechanism, Optimization and Scope studies of Rh(II) Catalyzed One-Step Multi-Component Macrocyclization Reactions [OC-103]
Daniele Poggiali, Jérôme Lacour, University of Geneva

Synthesis and application of tetrafluoroethylation reagents based on hypervalent iodine [OC-104]
Jiri Vaclavik, Antonio Togni, ETH Zurich

[4+2]-Annulations of Aminocyclobutanes [OC-106]
Daniele Perrotta, Jérôme Waser, EPF Lausanne

Synthesis of chiral Ruthenium-cyclopentadienyl complexes and application to formal [4+2] cyclizations of ynone [OC-107]
David Kossler, Nikolai Cramer, EPF Lausanne

Synthesis, Characterization and Application of Stereodefined Functionalized Imidazolium Salts [OC-108]
Felix D. Bobbink, Paul Dyson, EPF Lausanne

Rhodium(III)-Catalyzed C-H Activation Rapid Access to Versatile Organic Molecules [OC-109]
Manh Van Pham, Nikolai Cramer, EPF Lausanne

Chiral Cyclopentadienyl-Iridium Complexes as Catalysts for Cycloisomerizations of N-tethered 1,6-Enynes [OC-110]
Michael Christian Dieckmann, Nikolai Cramer, EPF Lausanne

Annulation of strained Rings, a Usefull Tool for the Synthesis of Nucleoside Analogues [OC-111]
Sophie Racine, Jérôme Waser, EPF Lausanne

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