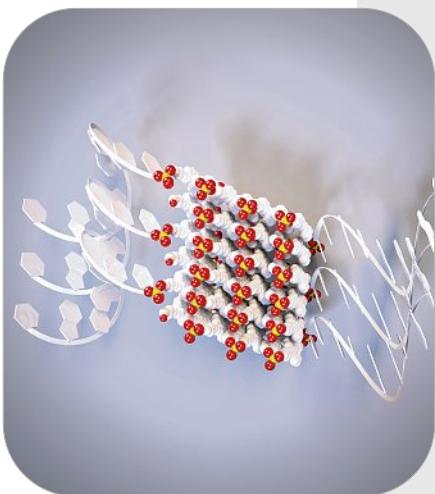




University of Bern
VonRoll-Areal, Building 6+8
Fabrikstrasse 8
3012 Bern, Switzerland



SCS
Swiss Chemical
Society



SCS Fall Meeting 2017

Mon, 21. August 2017, 13:00 – 21:00

- *Helvetica* Session to celebrate the 100th anniversary
- Future leaders on stage: SCS postdoc colloquium
- Future leading companies on stage: start-up colloquium
- SCS award lectures
- Poster sessions, commercial exhibition
- Beer & Brezel Party and SCS VIP event

Tue, 22. August 2017, 09:00 – 18:30

- SCS award lectures
- Lectures by invited speakers
- PhD short presentations in 7 parallel sessions
- Symposium on PAT & Industry 4.0
- Poster sessions with more than 400 posters
- Poster and oral presentation awards
- Commercial exhibition

<http://scg.ch/fallmeeting/2017>

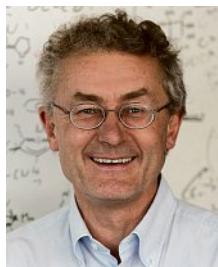


Pictures: DNA-grafted supramolecular polymers. Pictures
by Yuliia Vyborna, Robert Häner group, Department of
Chemistry and Biochemistry, University of Bern

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b
UNIVERSITÄT
BERN

WELCOME TO THE 2017 FALL MEETING OF THE SWISS CHEMICAL SOCIETY (SCS)



Roger Alberto

On behalf of the Division of Fundamental Research of the Swiss Chemical Society, we welcome you to the SCS Fall Meeting 2017, hosted by the Department of Chemistry and Biochemistry of the University of Bern. We also welcome the presenters of the over five-hundred scientific contributions comprising posters, contributed and invited lectures. Whereas the invited, sponsored and award lectures are delivered by senior scientists, most of the poster and short talk presenters are graduate students and post-doctoral fellows.

This year, our SCS event was extended to one and a half days, and hopefully this new and attractive framework will be a success. First of all, it allows us to promote and strengthen the poster sessions while giving more room for discussions and exchange during both days. It also includes the VIP Event and the Beer & Brezel Party on Monday late afternoon/evening. The meeting will start Monday afternoon with a highlight, featuring the 'Helvetica Session'. During both days, many distinguished Award Lectures will follow. These include three KGF-SCS Industrial Awards, Grammaticakis-Neumann and Sandmeyer lectures and they are scheduled around the seven parallel sessions of our SCS Divisions. Furthermore, we do hope that the new Colloquia, 'Future Leaders on Stage' and 'Future Leading Companies on Stage' will receive your great attention. Already the subscription was a success and so, four parallel sessions could be planned for the former one. Certainly, you shouldn't miss the best Presentation Award Ceremony at the end of the meeting, where again the prizes will be handed out for best oral and poster contributions.

We are very grateful to our sponsors for their continued support, which is an expression of the interest of industry in our research activities. Furthermore, during the ChemEdu Symposium, which will run in parallel to our meeting, bridges can be built between research and education. For the first time, also the Swiss PAT community will meet during the SCS Fall Meeting.

Finally, we invite you to browse through the program and we do hope that the meeting will capture your interest. It is your participation, which will make the event a success.

We look forward to meeting you on Monday and Tuesday, 21.–22. August 2017 at the vonRoll Campus of the University of Bern.

Prof. Roger Alberto
Chairman of the Division of
Fundamental Research

Prof. Silvio Decurtins
Chairman of the Organizing Committee

WELCOME TO THE UNIVERSITY OF BERN



Christian Leumann

Dear Participants

As rector of the University, it is my pleasure to welcome you here in Bern for the Fall Meeting 2017 of the Swiss Chemical Society (SCS). I personally appreciate this very much as I am myself a chemist, having participated on numerous occasions in this meeting in the past.

The more senior participants will remember that in earlier days the Fall Meetings of the SCS were regularly held in Bern and were organized by the Institutes of Chemistry, the precursor organizations of today's Department of Chemistry and Biochemistry of our University.

Unfortunately, Bern lost the privilege of hosting this meeting in the late nineties due to an ever growing number of participants, overextending the space capacities of our department. It is therefore a great pleasure for me that the Fall Meeting 2017 has come home into our new campus at the Von Roll Areal. Maybe that this is the start for a revival of an old tradition.

The Fall Meeting is dedicated to young scientists from industry and academia that present their latest research results to a broader audience. With this, it is an ideal networking platform. At the same time, this meeting also showcases the excellent and cutting edge research activities in chemistry in Switzerland.

I would like to take the opportunity to thank the local organizers and Prof. Silvio Decurtins with his team at the SCS for organizing this event. To all participants of the meeting, I wish a very warm welcome in Bern and an inspiring meeting that will send you home with lots of good memories and new ideas.

Prof. Christian Leumann
Rector

PROGRAM OVERVIEW, MONDAY, 21ST AUGUST 2017 (DAY ONE)

Interactive program incl. all abstracts of the lectures, talks and posters on <http://scg.ch/fallmeeting>

Time	Program Day One	Location
12.30	Registration, Welcome Coffee Poster installation in building 8	Building 6 (B6) Building 8 (B8)
13.00	Helvetica Session, celebrating the 100 th anniversary of <i>Helvetica Chimica Acta</i> http://scg.ch/fallmeeting/program/helvetica Prof. Harry Anderson , University of Oxford «Flow of Energy & Charge in Porphyrin Nanostructures» Prof. Luisa De Cola , Université de Strasbourg «Nanomaterials for Imaging and Therapy»	B6.001
14.20	Short Break	
14.30	‘Future Leaders on Stage’, SCS Postdoc Colloquium (6 x 15 min short presentations + discussion) http://scg.ch/fallmeeting/program/flos Session Organic Chemistry and Natural Products Session Medicinal Chemistry & Chemical Biology Session Inorganic Chemistry, Coordination Chemistry and Catalysis Session Physical Chemistry, Theoretical Chemistry and Materials	B6.001 B6.002 B6.003 B6.004
16.15	Afternoon Break (sponsored by Wiley-VHCA) Poster installation in building 8	
16.45	‘Future Leading Companies on Stage’, SCS Start-up Colloquium (4 × 15min short presentation) http://scg.ch/fallmeeting/program/flcos Topadur Pharma AG : Innovative medication for the treatment of severe wounds enabling significant improvements to patients’ quality of life Dr. Reto Naef , Founder and president of the board SpiroChem AG (ETH Spin-off): Specialized in the design and commercialization of novel building blocks for use in drug discovery Dr. Florent Beaufils , Chief Operating Officer CyanoGuard AG (University of Zurich Spin-off): «Making Cyanide Visible»; Technology for naked-eye detection of cyanide in water, food extracts and blood samples Dr. Benedikt Kirchgässler , Executive director	B6.001
17.45	Short Break	
18.00	SISF-SCS Senior Industrial Award Lecture 2017/I Dr. Emmanuel Pinard , F. Hoffmann-La Roche Ltd «Highlights from a 20-year journey of Medicinal Chemistry at Roche»	B6.001
18.30 – 21.00	Beer, Brezel & Weisswurst Party and Poster Session Analytical Sciences [AS-101] ... [AS-121] Catalysis Science & Engineering [CE-101] ... [CE-170] Inorganic & Coordination Chemistry [IC-101] ... [IC-182] Medicinal Chemistry & Chemical Biology [MC-101] ... [MC-159] Organic Chemistry [OC-101] ... [OC-174] Physical Chemistry [PC-101] ... [PC-149] Polymers, Colloids & Interfaces [PI-101] ... [PI-148]	Building 8 Ground Floor
	Commercial Exhibition	Ground Floor
19.00 – 20.30	Fall Meeting VIP Event Aperitif riche for invited guests from industry, academia and government Award Ceremonies of the SISF-SCS Industrial Awards 2017 and the Grammaticakis-Neumann Award 2017	B8, Cafeteria
21.00	End of day one	

PROGRAM OVERVIEW, TUESDAY, 22ND AUGUST 2017 (DAY TWO)

Interactive program incl. all abstracts of the lectures, talks and posters on <http://scg.ch/fallmeeting>

Time	Program Day Two	Location
09.00	Registration, Welcome Coffee Commercial Exhibition	Building 6 (B6)
09.45	SISF-SCS Industrial Award Lecture 2017 Dr. Richard Sedrani , Novartis Pharma AG «Discovery and Development of the mTOR Inhibitor Everolimus»	B6.001
10.15	Grammaticakis-Neumann Award Lecture 2017 Prof. Robert R. Knowles , Princeton University, New Jersey, USA «Excited State Proton-Coupled Electron Transfer in Organic Synthesis»	B6.001
10.45	Short Break	
11.00	Morning Parallel Session (6 or 7 slots) Analytical Sciences [AS-011] ... [AS-017] Catalysis Science & Engineering [CE-011] ... [CE-017] Inorganic & Coordination Chemistry [IC-011] ... [IC-017] Medicinal Chemistry & Chemical Biology [MC-011] ... [MC-017] Organic Chemistry [OC-011] ... [OC-017] Physical Chemistry [PC-011] ... [PC-017] Polymers, Colloids & Interfaces [PI-011] ... [PI-017] (Computational Chemistry: will take place in Basel on the occasion of the Symposium for Theoretical Chemistry (STC))	B8.B102 B6.102 B6.003 B6.002 B6.001 B6.103 B6.104
11.00	Symposium on PAT & Industry 4.0, part I	B8.B101
12.45	Lunch and Poster Session Analytical Sciences [AS-101] ... [AS-121] Catalysis Science & Engineering [CE-101] ... [CE-170] Inorganic & Coordination Chemistry [IC-101] ... [IC-182] Medicinal Chemistry & Chemical Biology [MC-101] ... [MC-159] Organic Chemistry [OC-101] ... [OC-174] Physical Chemistry [PC-101] ... [PC-149] Polymers, Colloids & Interfaces [PI-101] ... [PI-148]	Building 8
	Commercial Exhibition	Building 8
15.00	Afternoon Parallel Session Analytical Sciences [AS-021] ... [AS-027] Catalysis Science & Engineering [CE-021] ... [CE-027] Inorganic & Coordination Chemistry [IC-021] ... [IC-027] Medicinal Chemistry & Chemical Biology [MC-021] ... [MC-027] Organic Chemistry [OC-021] ... [OC-027] Physical Chemistry [PC-021] ... [PC-027] Polymers, Colloids & Interfaces [PI-021] ... [PI-027]	B8.B102 B6.102 B6.003 B6.002 B6.001 B6.103 B6.104
15.00	Symposium on PAT & Industry 4.0, part II	B8.B101
16.45	Short Break	
17.00	SISF-SCS Senior Industrial Award Lecture 2017/II Dr. Thomas Netscher , DSM Nutritional Products Ltd «New Synthetic Methodologies and Total Synthesis of Natural Products, Specifically Vitamins and Isoprenoid Derived compounds»	B6.001
17.30	Sandmeyer Award Lecture 2017 Dr. Daniel Fishlock , F. Hoffmann-La Roche AG «Efficient Industrial Synthesis of Idasanutlin via a Cu(I)-catalyzed [3+2] Asymmetric Cycloaddition»	B6.001
18.00	Best Oral Presentation Awards (sponsored by Metrohm) Dr. Markus Steinke, Marketing Manager at Metrohm International Headquarters	B6.001
18.15	Best Poster Presentation Awards (sponsored by DSM) Dr. Roman Imhof, Global Research Center Head Chemistry, DSM Nutritional Products Ltd.	B6.001
18.30	End of the conference	

GENERAL INFORMATION

Date: August 21, 2017, 12.30 – August 22, 2017, 18.30
 Location: University of Bern,
 vonRoll Areal
 Fabrikstrasse 6/8
 3012 Bern
 Website: <http://scg.ch/fallmeeting/2017>

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 E-Mail: info@scg.ch

Organizing Committee

Core team

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 PD Dr. Hans Peter Lüthi, ETH Zurich (Vice Chairman)
 Prof. Roger Alberto, University of Zurich and DFR President
 David Spichiger, Swiss Chemical Society (SCS Head Office)

Analytical Chemistry

- Dr. Stefan Schürch, University of Bern
- Dr. Hanspeter Andres, Metas Bern

Catalysis Sciences & Engineering

- PD Dr. Peter Broekmann, University of Bern
- Prof. Matthias Arenz, University of Bern

Inorganic & Coordination Chemistry

- Prof. Roger Alberto, University of Zurich
- Prof. Katharina Fromm, University of Fribourg

Organic Chemistry

- Prof. Pablo Rivera-Fuentes, ETH Zurich
- Prof. Christof Sparr, University of Basel

Medicinal Chemistry & Chemical Biology

- Prof. Jean-Louis Reymond, University of Bern
- Dr. Yves Auberson, Novartis Pharma AG

Physical Chemistry

- Prof Stefan Willitsch, University of Basel
- Prof. Andreas Züttel, EPF Lausanne

Polymers, Colloids & Interfaces

- Dr. Matthias Schultz, Givaudan
- Prof. Raffaele Mezzenga, ETH Zurich

Computational Chemistry (at STC in Basel)

- Prof. Markus Meuwly, University of Basel
- Prof. Anatole von Lilienfeld, University of Basel
- Prof. Jürg Hutter, University of Zurich

Admission and Registration

Fees for presenters (poster or talk)

- SCS Members: free of charge (by convention, the first name in the abstract author list).
- Non-members: CHF 250.00 (+VAT)

Fees for participants without a presentation

- SCS Members: free of charge

- Non-members: CHF 50.00 (+VAT) per day. Pre-registered participants will get an invoice in advance to avoid waiting time at the check in desk. Pre-registration is possible until August 14, 2017 on the website.

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



Interactive Program and Abstract Search

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

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

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

The screenshot shows the homepage of the SCS Fall Meeting 2017 website. At the top, it displays the event details: "SCS Fall Meeting 2017" (August 21-22, 2017, University of Bern). Below this is a navigation bar with links for Home, Program, Abstracts, Location, Contact, Registration, and Sponsors. A search bar is also present. The main content area features a "Schedule of SCS Fall Meeting 2017". This schedule includes a table with rows for "Start Date", "Organic Chemistry", and "Hours". It lists various sessions such as "Registration / Welcome Coffee", "SSP-SCS Invited Lecture 2017", "Gremmelsheim-Niemeyer Award Lecture 2017", and "Short Break". Each session has a "Plenary lecture" or "Invited lecture" duration of 60 minutes. To the right of the schedule, there are sections for "Links" (listing SCS Head Office, SCS Foundation, SCS Fall Meeting 2016, SCS Fall Meeting 2017, SCS Fall Meeting 2014, and SCS Membership), "Contact" (with SCS Head Office details), and a "Links" section with several chemical structures and formulas. At the bottom of the page, there is a footer with copyright information and a link to the Terms of Use.

Coffee Breaks, Lunch and Smoking Areas

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

The break on Monday afternoon is sponsored by Wiley-VHCA. The morning coffee on Tuesday is supported by the MDPI Open Access Journal Polymers.

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

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

Connection to the Internet

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

Swisscom also offers a public hotspot.

CONFERENCE VENUE

How to get to the vonRoll Areal

Fabrikstrasse 6 & 8, 3012 Bern



Public Transport

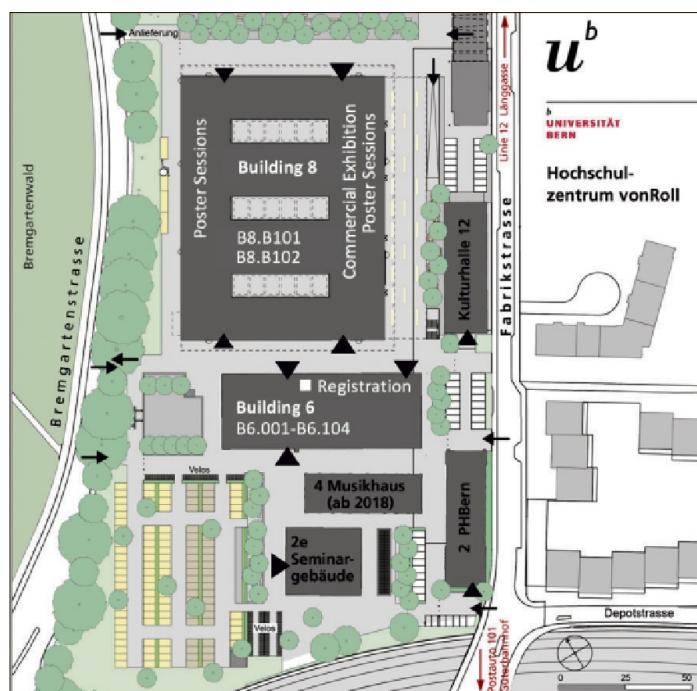
SBB railway schedule on sbb.ch. Take Bern main station, west exit (Ausgang Welle/Länggasse)

- PostBus 101 heading for Schlossmatt - Güterbahnhof stop. Cross the railway bridge and enter the vonRoll Areal.
- BernMobil bus line 12, Länggasse stop. Walk down 400 m Fabrikstrasse and you will find the vonRoll Areal on the right-hand side.
- Take a walk along the Länggasse and pass the building of the Department of Chemistry and Biochemistry at Freiestrasse 3. Continue until you turn into Fabrikstrasse. Turn left for another 200 m meters. Total walk time: 15min.

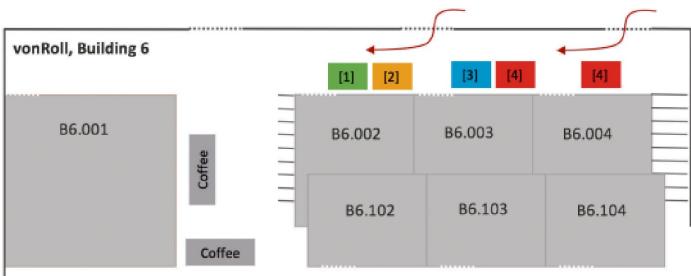
Car

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

Site map vonRoll Areal

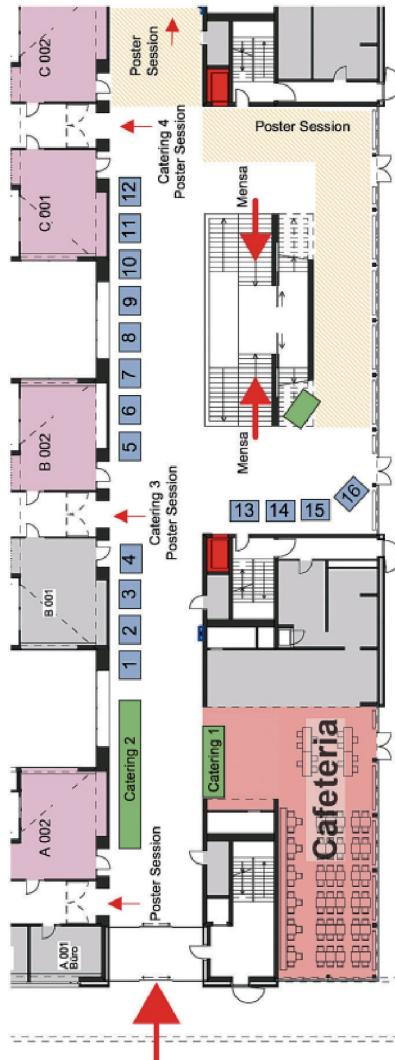


Registration Process



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

Commercial Exhibition



Exhibitors

1. abcr GmbH
2. Advion
3. Georg Thieme Verlag
4. Shimadzu Schweiz
5. Thermo Fisher Scientific
6. Chemie Brunschwig
7. Mettler Toledo
8. IGZ Instruments
9. ChemAxon
10. ThalesNaInc.
11. TCI Europe N.V.
12. SpiroChem
13. MERCK
14. Magritek
15. BÜCHI Labortechnik AG
16. Swiss Chemical Society / CHIMIA

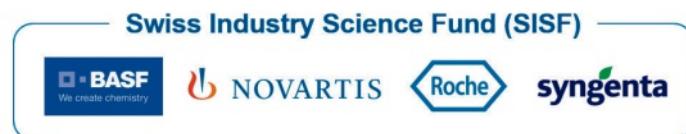
Catering

Coffee Desk in Building 6
Catering Buffets in Building 8, Main corridor
Catering Buffets in Building 8, Back corridor
Refreshments in Building 8, Atrium
VIP-Lunch Buffet in Building 8, Lounge

MEETING 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 offer free participation for SCS members and only moderate charges for non-members.

General Contribution to the Organization



Swiss Academy of Sciences
Akademie der Naturwissenschaften
Accademia di scienze naturali
Académie des sciences naturelles



Sponsoring of the Helvetica Session



Sponsoring of the Future Leaders on Stage Session



Sponsoring of the PAT Symposium



Morning Coffee Sponsor



Partners



BEST PRESENTATION AWARDS

The organizers are proud of the very attractive presentation award program. Almost CHF 50'000 CHF in total are given to the winners in monetary form, travel grant or free publication opportunities in the Junior Laureates issue of CHIMIA 4/2018.

We would like to express our recognition and thank the Metrohm Foundation and DSM Nutritional Products Ltd., that are partnering the presentation award program since many years.

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 lecture hall B6.001.

Prize for the winner of each of the eight parallel sessions

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

Prizes for the runners-up

- Cash contribution of CHF 400.

The prizes are sponsored by Metrohm and will be presented by Dr. Markus Steinke, Marketing Manager at Metrohm International Headquarters.



Ceremony of the Best Oral Presentation Award at UZH 2016.

Best Poster Presentation Award

The prize is sponsored by DSM.



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

Ceremony: 18.15 in lecture hall B6.001.

Prize for the winner of each of the seven poster sessions

- Cash contribution of CHF 300.
- Travel voucher of CHF 750 to attend an international conference.

Prizes for the runners-up

- Runners-up prizes for all seven sessions
- 2x cash contribution of CHF 200.

The prizes are sponsored by DSM Nutritional Products and will be presented by Dr. Roman Imhof, Global Research Center Head Chemistry, DSM Nutritional Products Ltd.



Ceremony of the Best Poster Presentation Award at UZH 2016.

ENDOWMENTS OF PARALLEL SESSIONS ON TUE, 22 AUG 2017

The following companies generously support the Fall Meeting 2017 and sponsor one of the sessions on Tuesday, 22 August 2017. Each company will give a scientific lecture about their latest research as opening lecture of each afternoon session at 15.00h.



Analytical Sciences



Catalysis Science & Engineering



Inorganic & Coordination Chemistry



Medicinal Chemistry & Chemical Biology



Organic Chemistry



Physical Chemistry



Polymers, Colloids & Interfaces



Plenary Sessions

COMMERCIAL EXHIBITORS

Take the opportunity to visit the commercial exhibition and take advantage of the expertise of the exhibitors. The exhibition will be located in Building 8 of the vonRoll Areal, where the poster sessions and the social events of the Fall Meeting take place.



<http://www.abcr.de>



<http://www.advion.com>



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



<https://www.chemaxon.com/>



<http://igz.ch/>



<http://www.merck.ch>



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



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



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



<https://spirochem.com/>



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



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



<http://www.thermoscientific.com/chromatography>



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



<https://www.buchi.com/>

Award Lectures (plenary)

Building 6, lecture hall 001
Chair: Dr. Alain De Mesmaeker

KGF-SCS Senior Industrial Award Lecture 2017/I
«Highlights from a 20-year journey of Medicinal Chemistry at Roche»

August 21, 2017, 18.00–18.30h

Dr. Emmanuel Pinard, F. Hoffmann-La Roche Ltd, Basel, is awarded for his very successful research on several therapeutic targets as enzymes (Bace1, COMT), ion channels (NMDA), GPCRs (Orexin, Vasopressin) and transporters (GlyT1) that address high unmet central nervous system disorders such as Parkinson's Disease, Stroke, Schizophrenia, Depression, Autism and Spinal Motor Atrophy.



KGF-SCS Industrial Award Lecture 2017
«Discovery and Development of the mTOR Inhibitor Everolimus»

August 22, 2017, 09.45–10.15h

Dr. Richard Sedrani, Novartis Pharma AG, Basel, is awarded for his achievements in many important projects as research chemists, team leader, project leader and unit head that resulted in the discovery and development of the mTOR inhibitor Everolimus, which is the active ingredient of several successfully marketed drugs: Certican® / Zortress®; Afinitor®, Xience™.



Grammaticakis-Neumann Award Lecture 2017
«Excited State Proton-Coupled Electron Transfer in Organic Synthesis»

August 22, 2017, 10.15–10.45h

Prof. Robert Knowles, Princeton University, is awarded for expanding the methodology in organic synthesis by new processes founded upon visible light mediated Proton-Coupled Electron Transfer (PCET).



KGF-SCS Senior Industrial Award Lecture 2017/II
«New Synthetic Methodologies and Total Synthesis of Natural Products, Specifically Vitamins and Isoprenoid Derived Compounds»

August 22, 2017, 17.00–17.30h

Dr. Thomas Netscher, DSM Nutritional Products, Ltd, Kaiseraugst, is honored for his achievements in advancing synthetic methodology and total synthesis of natural products, specifically vitamins and isoprenoid derived compounds.

**Sandmeyer Award Lecture 2017****«Efficient Industrial Synthesis of Idasanutlin via a Cu(I)-catalyzed [3+2] Asymmetric Cycloaddition»**

August 22, 2017, 17.30–18.00h

Dr. Stefan Hildbrand, Dr. Gösta Rimmmer, **Dr. Daniel Fishlock**, Dr. Pankaj Rege, Dr. Carsten Peters, Dr. Christian Mössner, Dr. Ralph Diodone and Dr. Markus Schantz, F. Hoffmann-La Roche, are awarded for the development of an efficient industrial synthesis of Idasanutlin (a MDM2 antagonist for treatment of cancer) via a Cu(I)-catalyzed [3+2] asymmetric cycloaddition.

Abstract codes

AL	Award Lecture
AS	Analytical Sciences
CE	Catalysis Sciences & Engineering
FLCoS	Future Leading Companies on Stage
FLoS	Future Leaders on Stage
Helv	Helvetica Session
IC	Inorganic Chemistry
MC	Medicinal Chemistry & Chemical Biology
OC	Organic Chemistry
PAT	PAT & Industry 4.0 Symposium
PC	Physical Chemistry
PI	Polymers Colloids & Interfaces
[XY-011]...[XY-019]	Morning session lecture
[XY-021]...[XY-029]	Afternoon session lecture
[XY-101]...[XY-199]	Poster

Future Leading Companies on Stage (FLCoS)

Mon, 21. August 2017, 16.45–17.45, B6.001
Chair: Dr. Hans Peter Lüthi

Do you plan a career in academia or industry, or do you plan to be your own boss and establish your own company? Four representatives of successful spin-offs and start-ups will report on their ventures and will talk about their way from the business idea to its realization.

Meet successful entrepreneurs and learn about how to start your own company.

**16.45h: Topadur Pharma AG,
Dr. Reto Naef**

<http://www.topadur.com>

Innovative medication for the treatment of severe wounds enabling significant improvements to patients' quality of life.
Founded in 2015



**17.00h: SpiroChem AG,
Dr. Florent Beaufils**

<https://spirochem.com>

Specialized in the design and commercialization of novel building blocks for use in drug discovery.
Founded in 2011 (ETH Spin-off)



**17.15h: CyanoGuard AG,
Dr. Benedikt Kirchgässler**

<http://www.cyanoguard.ch>

Technology for naked-eye detection of cyanide in water, food extracts and blood samples
Founded in 2016 (University of Zurich Spin-off)



FUTURE LEADERS ON STAGE**PARALLEL SESSIONS, 21. AUGUST 2017, 14.30–16.15H**

Session Endowment: Mettler Toledo

**Organic Chemistry and Natural Products
B6.001**

Chairs: Prof. Christoph Sparr, Prof. Pablo Rivera-Fuentes

METTLER TOLEDO

- 14:30 Azetidin-1-yl substituents to tune the photochemistry of photoactive molecules [FLoS-OC-01]**
 Giovanni Bassolino, ETH Zurich
 P. Rivera-Fuentes
- 14:45 Copper-Catalyzed Electrophilic Alkyne Transfer: Accessing Important Building Blocks for Synthetic and Medicinal Chemistry by Reversing the Logic of Bond Disconnection [FLoS-OC-02]**
 Durga Hari, EPF Lausanne
 L. Schouwey, V. Barber, J. Waser
- 15:00 A synthetic strategy based on the hydrophobic effect to build molecular interlocked structures [FLoS-OC-03]**
 Fabien Cougnon, University of Geneva
 K. Caprice, F. B. Cougnon
- 15:15 Keteniminium chemistry: a useful tool for the synthesis of small rings and aromatic derivatives [FLoS-OC-04]**
 Amandine Kolleth, Syngenta Crop Protection AG
 A. Lumbroso, S. Catak, S. Sulzer-Mossé, A. De Mesmaeker
- 15:30 On the Generation and the Properties of the F₃C Radical [FLoS-OC-05]**
 Nico Santschi, ETH Zurich
 B. J. Jelier, T. Nauser, D. Günther
- 15:45 Gram-scale Biomimetic Synthesis of Psigualid B [FLoS-OC-06]**
 Christopher Newton, EPF Lausanne
 D. Tran, M. Wodrich, N. Cramer

**Inorganic Chemistry, Coordination Chemistry and Catalysis
B6.003**

Chair: Prof. Roger Alberto, Prof. Fabio Zobi

- 14:30 Controlled deposition of metal oxide layers by non-hydrolytic sol-gel for tailored acid sites generation and beyond [FLoS-IC-01]**
 Florent Héroguel, EPF Lausanne
 L. Silvioli, Y. Du, J. Luterbacher
- 14:45 Modeling Heterogeneous Catalysts by First Principles [FLoS-IC-02]**
 Aleix Comas-Vives, ETH Zurich
 L. Foppa, M. C. Silaghi, K. Larmier, W. Liao, S. Tada, E. Lam, R. Verel, C. Copéret
- 15:00 Toward a useful catalytic transformation of N₂O using group 9 organometallic complexes [FLoS-IC-03]**
 Thomas Gianetti, ETH Zurich
 R. E. Rodriguez-Lugo, S. P. Annen, H. Grützmacher
- 15:15 Triazolylidene iron(II) piano-stool complexes: synthesis and catalytic hydrosilylation of carbonyl compounds [FLoS-IC-04]**
 Chloë Johnson, University of Bern
 M. Albrecht
- 15:30 Understanding of self-organization process in monolayer protected gold nanocluster [FLoS-IC-05]**
 Giovanni Salassa, University of Geneva
 T. Bürgi
- 15:45 High-Pressure Synthesis and Characterization of β-GeSe — A Six-Membered-Ring Semiconductor in an Uncommon Boat Conformation [FLoS-IC-06]**
 Fabian von Rohr, University of Zurich
 R. J. Cava

**Medicinal Chemistry & Chemical Biology
B6.002**Session jointly organized with Life Science Switzerland, LS²

Chairs: Prof. Dr. Jean Gruenberg, Prof. Dr. Urs Greber

- 14:30 An artificial virus for nucleic acid delivery [FLoS-MC-01]**
 Thomas Edwardson, ETH Zurich
 D. Hilvert
- 14:45 Total Synthesis, Target Evaluation and Structure-Activity Studies of Mycolactone and its Analogs [FLoS-MC-02]**
 Matthias Gehringer, ETH Zurich
 R. Bieri, P. Gersbach, N. Scherr, M. Ruf, K.-H. Altmann, G. Pluschke
- 15:00 Development of orally available peptide macrocycles by phage display [FLoS-MC-03]**
 Xudong Kong, EPF Lausanne
 C. Heinis
- 15:15 Bottom-up construction of a primordial organelle [FLoS-MC-04]**
 Shiksha Mantri, ETH Zurich
 D. Hilvert
- 15:30 Screening Approaches to Understand Cellular Lipid Homeostasis [FLoS-MC-05]**
 Cameron Scott, University of Geneva
 S. Vossio, J. Gruenberg
- 15:45 Oligonucleotide therapy for treatment of erythropoietic protoporphyrinia [FLoS-MC-06]**
 François Halloy, ETH Zurich
 P. Ćwiek, S. Egloff, D. Schümperli, J. Hall

**Physical Chemistry, Theoretical Chemistry and Materials
B6.004**

Chair: Prof. Natalie Banerji, Prof. Ulrich Lorenz

- 14:30 High-Performance Thermoelectric Nanocomposites from Nanocrystal Building Blocks [FLoS-PM-01]**
 Maria Ibáñez, ETH Zurich
 M. V. Kovalenko
- 14:45 ²⁰⁷Pb NMR of Perovskite Ferroelectrics at Variable Temperatures using Frequency-Swept Pulses [FLoS-PM-02]**
 Claudia Avalos, EPF Lausanne
 B. J. Walder, J. Viger-Gravel, L. Emsley
- 15:00 Versatility of perovskite semiconductors as detectors for visible and high energy photons [FLoS-PM-03]**
 Sergii Yakunin, ETH Zurich
 D. N. Dirin, Y. Shynkarenko, V. Morad, I. Cherniuh, O. Nazarenko, M. V. Kovalenko
- 15:15 Towards hybrid trapping of cold molecules and cold molecular ions [FLoS-PM-04]**
 Dongdong Zhang, University of Basel
 D. Haas, C. von Planta, S. Willitsch
- 15:30 Solvent Relaxation and its Influence on Photochemical Reactions [FLoS-PM-05]**
 Tatu Kumpulainen, University of Geneva
 A. Rosspeintner, E. Vauthey
- 15:45 Reactive Hexayne Precursors for Microfluidic Production of Carbon Microcapsules [FLoS-PM-06]**
 Bjoern Schulte, EPF Lausanne
 V. Croué, E. Bomal, E. Amstad, H. Frauenrath

THEMATICALLY, PARALLEL SESSIONS**22. AUGUST 2017, 11.00–12.45H AND 15.00–16.45H**
**Catalysis Sciences &
Engineering [CE]
Morning Session – B6.102**
 Chair: Prof. Peter Broekmann
CLARIANT

- Session Endowment: Clariant International Ltd.
- 11:00 **Electrochemical Hydrogen Oxidation/Evolution Kinetics – New Insights into an Old Field [CE-011]**
 Hubert Gasteiger, Technical University of Munich
- 11:30 **Magic at the interface: model multicomponent electrodes with controlled interfacial geometry for the electrocatalytic reduction of CO₂ [CE-013]**
 Gastón Larrazábal, ETH Zurich
 T. Shinagawa, A. J. Martín, J. Pérez-Ramírez
- 11:45 **Design of ionic polymer catalysts for the synthesis of carbonates from CO₂ and epoxides [CE-014]**
 Felix Bobbink, EPF Lausanne
 A. P. Van Muyden, P. J. Dyson
- 12:00 **Surface structure and reactivity of perovskite oxynitride materials [CE-015]**
 Ulrich Aschauer, University of Bern
- 12:15 **Microstructural self-regeneration of LaSrTiNiO_{3-δ}: fast recovery from sulfur poisoning [CE-016]**
 Patrick Steiger, EPF Lausanne
 D. Burnat, A. Heel, O. Kröcher, D. Ferri
- 12:30 **Directed Evolution of Artificial Metalloenzymes: Genetic optimization of the catalytic activity [CE-017]**
 Martina Ribar Hestericová, University of Basel
 T. Heinisch, T. R. Ward

Afternoon Session – B6.102

Chair: Prof. Matthias Arenz

- 15:00 **Zeolites for Clean Air [CE-021]**
 Silke Sauerbeck, Clariant Produkte (Deutschland) GmbH
 T. Cotter
- 15:30 **Supported Crystalline Monodisperse Ga₂O₃ Nanoparticles with Tunable Size for the Catalytic Dehydrogenation of Propane [CE-023]**
 Pedro Castro-Fernández, ETH Zurich
 A. Fedorov, P. M. Abdala, C. R. Müller
- 15:45 **Rational design of Pd/Na-ZSM-5 catalysts for complete methane oxidation [CE-024]**
 Andrey Petrov, ETH Zurich
 D. Ferri, O. Kröcher, J. A. van Bokhoven
- 16:00 **Deactivation of Fluid Catalytic Cracking Catalysts, a Three-Dimensional View of Structural Changes [CE-025]**
 Johannes Ihli, Paul Scherrer Institute
 Y. Shu, M. Holler, M. Guizar Sicairos, A. Diaz, J. C. da Silva, D. Ferreira Sanchez, F. Krumreich, D. Grolimund, J. A. van Bokhoven, A. Menzel
- 16:15 **Rational design of sulfur-tolerant ruthenium catalysts for dry biomass derived CO methanation [CE-026]**
 Dzulija Kuzmenko, Paul Scherrer Institute
 C. Copéret, M. Nachtegaal, C. Copéret, T. Schildhauer
- 16:30 **Development of Coke- and sintering-resistant Ni/SiO₂-based dry reforming catalyst by depositing a thin layer of Al₂O₃ via ALD [CE-027]**
 Sung Min Kim, ETH Zurich
 A. Armutlulu, P. M. Abdala, D. Hosseini, C. R. Müller, C. Copéret, C. R. Müller

**Analytical Sciences [AS]
Morning Session – B8.B102**

Chair: Dr. Stefan Schürch

- Session Endowment: Mettler Toledo
- 11:00 **Targeted on-line breath analysis discriminates COPD patients vs. healthy controls and subjects suffering from asthma [AS-011]**
 Martin Gaugg, ETH Zurich
 Y. Nussbaumer-Ochsner, A. Engler, L. Bregy, T. Gaisl, P. Martinez-Lozano Sinues, M. Kohler, R. Zenobi
- 11:15 **Laser Ablation Time of Flight Mass Spectrometry using Ion Funnel for Trace Element Analysis in Solids [AS-012]**
 Lorenzo Querci, ETH Zurich
 D. Günther, V. Varentsov, B. Hattendorf
- 11:30 **Towards quantitative depth profiling of Sn/Cu solder bumps [AS-013]**
 Alena Cedeño López, University of Bern
 V. Grimaudo, P. Moreno García, A. Riedo, R. Wiesendanger, M. Tulej, P. Wurz, P. Broekmann
- 11:45 **Micro-device integrated platforms for Point-of-Care Therapeutic Drug Monitoring [AS-014]**
 Elena Bojescu, HES-SO Valais Wallis
 D. Prim, M. Pfeifer, J. M. Segura, J. M. Segura
- 12:00 **High precision spectroscopic measurement of N₂O clumped isotopic species [AS-015]**
 Kristýna Kantnerová, Empa/ETH Zurich
 B. Tuzson, L. Emmenegger, S. M. Bernasconi, J. Mohn
- 12:15 **Novel Chemiluminescence-based Method for the Quantification of the Total N-nitrosamines Concentration in Water [AS-016]**
 Florian Breider, EPF Lausanne
 U. von Gunten
- 12:30 **High-resolution depth profile analyses of Al/Cu and Ni/Cr superlattices with periodicities ≤ 100 nm by ns/fs-LA-ICPMS [AS-017]**
 Debora Käser, ETH Zurich
 J. Koch, C. Schneider, T. Lippert, D. Günther

Afternoon Session – B8.B102

Chair: Dr. Hanspeter Andres

- 15:00 **Advances in Stray Light Testing and Automated Performance Verification for UV/VIS Spectrophotometers [AS-021]**
 Hans-Joachim Muhr, Mettler-Toledo GmbH
- 15:30 **Microscale biopatterning on surfaces with hydrodynamically confined liquids on a scanning probe [AS-023]**
 Govind Kaigala, IBM Research – Zurich
 N. Ostromohov, J. Cors, D. Taylor, M. Bercovici
- 15:45 **Capillary DBDI and APPI as efficient ionization sources for direct interfacing between SPME and MS [AS-024]**
 Mario Mirabelli, ETH Zurich
 R. Zenobi
- 16:00 **Probing Site-specific Slow Motions of Side Chains in Proteins [AS-025]**
 Jayasubba Reddy Yarava, EPF Lausanne
 T. L. Marchand, A. Hofstetter, D. Cala, B. Busi, F. Francois, G. Pintacuda, L. Emsley
- 16:15 **Stability of extracellular enzymes in surface waters: Comprehensive structural and functional analysis by proteomics techniques and enzymology [AS-026]**
 Christine Egli, Eawag
 K. McNeill, E. M. Janssen

Inorganic & Coordination Chemistry [IC]
Morning Session – B6.003
Chair: Prof. Roger Alberto



Session Endowment: Cilag AG

- 11:00 **High-valent Metal-oxo and Imido Cores in Chemistry and Biology [IC-011]**
Ray Kallol, Humboldt-Universität zu Berlin
- 11:30 **Heptacoordinate Co(II) complex: a new architecture for photochemical hydrogen production [IC-013]**
Fiorella Lucarini, University of Fribourg
- 11:45 **Light-driven electron accumulation in a molecular pentad with potential inversion [IC-014]**
Julia Nomrowski, University of Basel
O. S. Wenger
- 12:00 **Gadolinium Complexes Exhibiting Ultra-fast Ligand Self-exchange in Ionic Liquids for Application in NMR Field Probes [IC-015]**
Anna Looser, University of Zurich
S. Gross, J. Nussbaum, C. Barmet, K. Prüssmann, R. Alberto
- 12:15 **Multicoordinated Precursors for Oxide Materials' Synthesis and Other Applications [IC-016]**
Alba Finelli, University of Fribourg
K. M. Fromm
- 12:30 **Replacing activity coefficients with explicit changes in solvent chemical potentials for unravelling intermolecular association processes [IC-017]**
Karine Baudet, University of Geneva

Afternoon Session – B6.003

Chair: Prof. Fabio Zobi

- 15:00 **A Cu-catalyzed Tandem Transformation of *ortho*-C–H Hydroxylation and N–N Bond Formation: An Expedite Synthesis of 1-(*ortho*-Hydroxyaryl) 1*H*-Indazoles [IC-021]**
Cheng-yi Chen, Janssen Pharmaceutica
F. He, G. Tang, H. Ding, Z. Wang, D. Li, R. Faessler
- 15:30 **Interaction of thiolato-bridged dinuclear arene ruthenium complexes with phospholipids and model membranes [IC-023]**
Hedvika Primasova, University of Bern
M. Vermathen, J. Furrer
- 15:45 **Solution grown caesium-formamidinium lead halide perovskites for detection of gamma photons [IC-024]**
Olga Nazarenko, ETH Zurich
S. Yakunin, V. Morad, I. Cherniukh, M. V. Kovalenko
- 16:00 **Nickel complexes containing oxygen-chelating meso-ionic carbenes as cheap and efficient hydrosilylation catalysts. [IC-025]**
Simone Bertini, University of Bern
M. Albrecht
- 16:15 **Metathesis Activity Encoded in Metallacyclobutane Carbon-13 NMR Chemical Shift Tensor. [IC-026]**
Christopher Gordon, ETH Zurich
K. Yamamoto, W. Liao, F. Allouche, R. A. Andersen, C. Raynaud, C. Copéret, O. Eisenstein
- 16:30 **Small Molecule Activation at Multimetallic Uranium Nitrides [IC-027]**
Marta Falcone, EPFL Lausanne

Medicinal Chemistry & Chemical Biology [MC]
Morning Session – B6.002
Chair: Dr. Yves Auberson



Session Endowment: Actelion Ltd / Idorsia Pharmaceuticals Ltd

- 11:00 **Annual report of the DMCCB and elections [MC-011]**
Yves Auberson, Swiss Chemical Society
- 11:15 **Discovery of Novel PET Tracers to Image Aggregated Tau in Alzheimer's Disease [MC-012]**
Luca Gobbi, F. Hoffmann-La Roche Ltd
M. Honer, H. Knust, M. Koerner, D. Muri, R. F. Dannals, D. F. Wong, E. Borroni
- 11:30 **Elucidating the structure-activity relationship of the pentaglutamic acid sequence of minigastrin with the cholecystokinin receptor subtype 2 [MC-013]**
Andreas Ritler, ETH Zurich
X. Deupi, H. Wennemers, R. Schibli, M. Béhé, T. Guy
- 11:45 **Discovery of Highly Potent, Selective and Orally Bioavailable Complement Alternative Pathway Inhibitors for Treatment of PNH [MC-014]**
Stefanie. Flohr, Novartis Pharma AG
J. Maibaum, E. L. Lorthois, F. Cumin, A. Vulpetti, A. Schubart, A. Risitano, N. Ostermann, K. Anderson, J. Eder
- 12:00 **Photocontrolled release of antibiotics and other bioactive molecules from supramolecular hydrogels with green light [MC-015]**
Zbigniew Pianowski, KIT Karlsruhe
J. Karcher, K. Schneider, Z. Pianowski
- 12:15 **Chemical ecology at work: plant defense alkaloids as source of inspiration for crop protection [MC-016]**
Fides Benfatti, Syngenta Crop Protection AG
- 12:30 **Divergent Synthesis and Identification of the Cellular Targets of Deoxyelephantopins [MC-017]**
Roman Lagoutte, University of Geneva
C. Serba, D. Abegg, D. G. Hoch, A. Goujon, S. Soleimanpour

Afternoon Session – B6.002

Chair: Prof. Jean-Louis Reymond

- 15:00 **From Gram Positives to Gram Negatives: Discovery of Novel Aryloxazolidinone-Linked Bacterial Topoisomerase Inhibitors (NBTIs) [MC-021]**
Georg Rüedi, Actelion/Idorsia
C. Zumbrunn, D. Ritz, T. Bruyère, H. H. Locher
- 15:15 **Peptide dendrimer as siRNA transfection reagent [MC-022]**
Marc Heitz, University of Bern
T. Darbre, J. L. Reymond
- 15:30 **Model Peptide Studies of Ag⁺ Binding Sites from the Silver Resistance Protein SiIE [MC-023]**
Valentin Chabert, University of Fribourg
K. M. Fromm
- 15:45 **Design of Potent and Drug-like Non-phenolic Inhibitors for Catechol O-Methyltransferase [MC-024]**
Rosa Rodríguez Sarmiento, F. Hoffmann-La Roche
C. Lerner, R. Jakob-Roetne, B. Buettelmann, A. Ehler, M. G. Rudolph
- 16:00 **Feasibility of breath exhalomics studies with infants and young children for early detection of cystic fibrosis inflammation and infection [MC-025]**
Tobias Bruderer, University Children's Hospital Zurich
A. Baghdasaryan, J. Wyler, M. Kohler, R. Zenobi, A. Möller

- 16:15 **Natural products as probes in pharmaceutical research: Nannocystin A, an inhibitor of the elongation factor 1a [MC-026]**
Philipp Krastel, Novartis Pharma AG
E. Schmitt, D. Hoepfner, M. Schierle, S. Roggo
- 16:30 **Kinase Templated Abiotic Reaction [MC-027]**
Jacques Saarbach, University of Geneva
E. Lindberg, S. Folliet, S. Georgeon, O. Hantschel, S. Soleimanpour

**Organic Chemistry [OC]
Morning Session – B6.001**
Chair: Prof. Christoph Sparr



- Session Endowment: Syngenta Crop Protection AG
- 11:00 **Access to heterocycles bearing emergent fluorinated substituents – as FAR as possible [OC-011]**
Frederic Leroux, University of Strasbourg
- 11:30 **Irreversible cysteine-selective labelling of a protein using modular electrophilic fluoroalkylation reagents [OC-013]**
Jiří Václavík, Czech Academy of Sciences
R. Zschoche, I. Klimáneková, V. Matoušek, P. Beier, D. Hilvert, A. Togni
- 11:45 **Enantioselective Total Synthesis of (+)-Peganumine A [OC-014]**
Cyril Piemontesi, EPF Lausanne
Q. Wang, C. Piemontesi, J. Zhu
- 12:00 **Exploration of Pd(0)-Catalysed C(sp³)–H Functionalisation Beyond Aryl Halides [OC-015]**
Julia Pedroni, EPF Lausanne
N. Cramer
- 12:15 **Stereoselective Organocatalyzed Synthesis of α-Fluoro β-Amino and α-Fluoro γ-Nitro Thioesters [OC-016]**
Elena Cosimi, ETH Zurich
H. Wennemers
- 12:30 **Decarboxylative Alkyynylation and Cyanation using Photoredox Catalysis and Hypervalent Iodine Reagents [OC-017]**
Franck Le Vaillant, EPF Lausanne
M. Wodrich, T. Courant, J. Waser, J. Waser

Afternoon Session – B6.001
Chair: Prof. Pablo Rivera-Fuentes

- 15:00 **New entries into amino-benzenorbornene chemistry [OC-021]**
Raphael Dumeunier, Syngenta Crop Protection AG
H. Tobler, S. Trah
- 15:30 **Enantioselective α-Arylation of O-Carbamates via Sparteine-Mediated Lithiation and Negishi Cross-coupling [OC-023]**
Titouan Royal, University of Basel
Y. Baumgartner, O. Baudoin
- 15:45 **Radical Deuteration of Alkyl Iodides Catalyzed by Thiol and Mechanistic Studies on Deoxygenation Reactions of Xanthates [OC-024]**
Valentin Soulard, University of Bern
G. Villa, D. Vollmar, P. Renaud
- 16:00 **Photocleavage of 1,2,4-oxadiazole-4-oxide: A powerful tool for organic synthesis. [OC-025]**
Jérémie Loup, University of Fribourg
C. G. Bochet
- 16:15 **Chalcogen Bonding in Catalysis [OC-026]**
Sebastian Benz, University of Geneva
J. López-Andarias, N. Sakai, S. Matile
- 16:30 **Transforming Olefins into Dinucleophiles [OC-027]**
Andrés García-Domínguez, University of Zurich
Z. Li, C. Nevado

**Physical Chemistry [PC]
Morning Session – B6.103**
Chair: Prof. Natalie Banerji



- Session Endowment: Bruker BioSpin
- 11:00 **Ultrafast electroabsorption spectroscopy study of carrier dynamics within hybrid lead halide perovskites [PC-011]**
Marine Bouduban, EPF Lausanne
A. A. Paraecattil, F. Giordano, J. Moser
- 11:15 **Unraveling the electronic states of the copper dimer using nonlinear optical spectroscopy [PC-012]**
Martin Beck, Paul Scherrer Institute
B. Visser, P. Bornhauser, G. Knopp, J. A. van Bokhoven, P. P. Radi
- 11:30 **Protein-nucleotide interactions studied by magnetic resonance [PC-013]**
Thomas Wiegand, ETH Zurich
R. Cadalbert, C. Copéret, A. Böckmann, B. H. Meier
- 11:45 **Electrolytes induce long-range orientational order and free energy changes in the H-bond network of bulk water [PC-014]**
Yixing Chen, EPF Lausanne
H. I. Okur, S. Roke
- 12:00 **High resolution analysis and quantum dynamics of fluoroform ^{12,13}CHF₃ [PC-015]**
Irina Bolotova, ETH Zurich
S. Albert, S. Bauerecker, E. Bekhtereva, Z. Chen, C. Fabri, H. Hollenstein, O. Ulenikov, M. Quack
- 12:15 **Spectroscopic behavior of a water-soluble conjugated polyelectrolyte in biological environment [PC-016]**
Lisa Peterhans, University of Fribourg
E. Alloa, Y. Sheima, L. Vannay, M. Leclerc, C. Corminboeuf, S. C. Hayes, N. Banerji
- 12:30 **Direct Local Solvent Probing by Transient Infrared Reveals the Mechanism of H-Bond Induced Nonradiative Deactivation [PC-017]**
Bogdan Dereka, University of Geneva

Afternoon Session – B6.103
Chair: Prof. Ulrich Lorenz

- 15:00 **Reaction monitoring using multiple NMR receivers [PC-021]**
Aitor Moreno, Bruker BioSpin AG
- 15:30 **Metal centres in EPR Spectroscopy [PC-023]**
Katharina Keller, ETH Zurich
G. Jeschke, M. Yulikov
- 15:45 **High Resolution ¹H NMR in Organic Solids at Natural Abundance [PC-024]**
Federico Paruzzo, EPF Lausanne
G. Stevanato, D. Mammoli, J. Schlagnitweit, M. Halse, L. Emsley
- 16:00 **Detecting structure and conformation of single DNA and RNA molecules by Escape-Time Electrometry [PC-025]**
Maria Bespalova, University of Zurich
M. Krishnan, F. Ruggeri
- 16:15 **Fluorophore guided RNA modeling [PC-026]**
Fabio Steffen, University of Zurich
R. K. Sigel, R. Börner
- 16:30 **A Proof-of-Concept for a Photoinitiated Single-Molecule Circuit [PC-027]**
Christopher Larsen, University of Basel
O. S. Wenger

Polymers, Colloids & Interfaces [PI]
Morning Session – B6.104
Chair: Dr. Matthias Schultz



Session Endowment: Dow Europe GmbH

- 11:00 **Efficient recycling of polylactic acid nanoparticle templates for the synthesis of hollow silica spheres [PI-011]**
Elia Schneider, ETH Zurich
- 11:15 **Vesicle Origami: Cuboid Phospholipid Vesicles Formed by Template-free Self-Assembly [PI-012]**
Frederik Neuhaus, University of Fribourg
A. Zumbühl
- 11:30 **Colloidal quantum-confined perovskites for ultra-pure green optoelectronics: synthesis and applications [PI-013]**
Jakub Jagielski, ETH Zurich
S. Kumar, C. Shih
- 11:45 **Fast and Minimal-solvent Production of Super-insulating Silica Aerogel Granulate [PI-014]**
Lukas Huber, Empa
Z. F. Fei, W. J. Malfait, S. Vares, M. M. Koebel
- 12:00 **Probing the 3D Lipid Monolayers at the Surface of Adiposome Organelle Models [PI-015]**
Halil Okur, EPF Lausanne
Y. Chen, N. Smolentsev, S. Roke
- 12:15 **The PHA Toolbox [PI-016]**
Nils Hanik, HES-SO Valais-Wallis
M. Bassas, A. Gonzalez, E. Carreño-Morelli, M. Zinn
- 12:30 **Understanding the Nanoscale Structure, Mechanics, Hydration, and Organic Interfaces of Calcium Sulfate Phases Using an Accurate Force Field [PI-017]**
Ratan Mishra, ETH Zurich
R. J. Flatt, H. Heinz

Afternoon Session – B6.104
Chair: Prof. Raffaele Mezzenga

- 15:00 **Two component polyurethane adhesives for advanced automotive manufacturing [PI-021]**
Sergio Grunder, Dow Europe GmbH
S. Schmatloch
- 15:30 **Single-molecule electrometry [PI-023]**
Francesca Ruggeri, University of Zurich
F. Zosel, B. Schuler, M. Krishnan
- 15:45 **Surface Functionalization of Metal Nanoparticles and the Effect of the Polymer Topology on the Colloidal Stability [PI-024]**
Jose Enrico Quinsaat, EPF Lausanne
F. A. Nüesch, D. M. Opris, T. Yamamoto
- 16:00 **High Temperature Copolyamides by Efficient Transamidation of Crystalline-Crystalline Polyamide Blends [PI-025]**
Julien Cretenoud, EPF Lausanne
S. Galland, C. J. Plummer, H. Frauenrath
- 16:15 **Introducing supramolecular polymers to DNA nanotechnology [PI-026]**
Yuliia Vyborna, University of Bern
R. Häner
- 16:30 **Mechanically triggered fluorescent changes in polymers [PI-027]**
Marc Karman, Adolphe Merkle Institute, University of Fribourg
E. Verde-Sesto, Y. C. Simon, C. Weder

Seminar on Process Analytical Technology (PAT) & Industry 4.0
Morning Session – B8.101
Chair: Dr. Tobias Merz, Lonza AG

NEW

Session Endowment: Lonza AG & Unscrambler® X Process Pulse II by CAMO Software AS

Process analytical technology (PAT) has been demonstrated as one of the key drivers for future plant automation. More and more smart sensors will be analyzing the critical quality attributes of your product and critical asset performance indicators will provide you with a clear picture of your overall plant fitness. All the collected information could result in a real-time release or ‘lights-out’ manufacturing strategy. For the first time, the Swiss PAT community will meet at the SCS Fall Meeting.

- 11:00 **Symposium on PAT & Industry 4.0 [PAT-001]**
Tobias Merz, Lonza AG
- 11:15 **Sensor Roadmap 4.0 – Prospects towards a uniform topology for process control and smart sensor networks [PAT-002]**
Michael Maiwald, BAM, Germany
P. Gräßer, L. Wander, S. Guhl, K. Meyer, S. Kern
- 11:45 **Machine Learning and Chemometrics: A contradictory approach or a good complement? [PAT-003]**
Frank Westad, CAMO Software AS
- 12:15 **Technological Challenges in the Production of Biopharmaceuticals [PAT-004]**
Henge Engelking, Lonza Ltd

Afternoon Session – B8.101

Chair: Dr. Tobias Merz, Lonza AG

- 15:00 **From process understanding to manufacturing process control with PAT [PAT-005]**
Christian Lautz, F. Hoffmann-La Roche Ltd
M. Betschart
- 15:30 **Real-time Insights: Inline Raman monitoring of distillation columns [PAT-006]**
Clemens Minnich, S-PACT GmbH
C. Uerpmann
- 16:00 **Online Proton-transfer-reaction and Resonance-enhanced multiphoton ionization mass spectrometry for monitoring the coffee roast process [PAT-007]**
Sebastian Opitz, Zurich University of Applied Sciences
M. Wellinger, S. Smirke, C. Yeretzian
- 16:30 Discussion

The following companies generously sponsor this first edition of the PAT symposium



Unscrambler X
Process Pulse

SCS FALL MEETING 2017, POSTER SESSIONS

Poster Presentation Title [Code]

First line = Presenting Author

Second line = Coauthors

Analytical Sciences [AS] Poster Session

Kinetics and identification of non-covalently interacting partners in a multiplex way with SPRI-MALDI MS [AS-101]

Ulrike Anders, ETH Zurich

F. Hibt, J. V. Schaefer, C. Frydman, D. Suckau, A. Plückthun, R. Zenobi

Towards fluorescence-based probes of gas-phase protein structure [AS-102]

Martin Czar, ETH Zurich

P. Tiwari, R. Zenobi

Bio-Oil Upgrading by Esterification; The Case of Guaiacol and Octanoic Acid over Heterogeneous Sulfonic Acid [AS-103]

Bahir Duraki, ETH Zurich

M. Ravi, J. A. van Bokhoven

Titanocene and Nucleic Acids: Analysis of a Fruitful Liaison [AS-104]

Rahel Eberle, University of Bern

S. Schürch

Identification of metabolite families in exhaled breath using secondary electrospray ionization MS and UHPLC-MS/MS [AS-105]

Lara Eiffert, ETH Zurich

M. T. Gaugg, N. Nowak, T. Bruderer, P. Martinez-Lozano Sinues, R. Zenobi

Effects of ^1H - ^1H homonuclear couplings in ^1H - ^{13}C HMBC spectra [AS-106]

Julien Furrer, University of Bern

P. Bigler, J. Furrer

Capillary gap sampler: low-volume and fast sampling platform directly coupled to ESI-MS [AS-107]

Sahar Ghiasikhou, ETH Zurich

R. Zenobi

Ablation Study for Depth Profiling of a Structured Multiphase System [AS-108]

Valentine Grimaudo, University of Bern

P. Moreno García, A. Cedeño López, A. Riedo, R. Wiesendanger, M. Tulej, P. Wurz, P. Broekmann

Instrumentation and methodology for comprehensive and quantitative inorganic nanoparticle measurements in real systems [AS-109]

Alexander Gundlach-Graham, ETH Zurich

L. Hendriks, B. Ramkorun-Schmidt, A. Praetorius, F. von der Kammer, R. Kägi, B. Hattendorf, D. Günther

Electronic and Optical Characterization of the Active Capillary Plasma Ionization Source [AS-110]

Luzia Gyr, ETH Zurich

F. D. Klute, J. Franzke, R. Zenobi

Extension of the linear dynamic range for nanoparticle sizing using single-particle ICPMS by matrix addition [AS-111]

Lyndsey Hendriks, ETH Zurich

A. Gundlach-Graham, D. Günther

Investigating the Polarity Range of Dielectric Barrier Discharge Ionization: Detection of Organic Microcontaminants in Water [AS-112]

Anna Huba, ETH Zurich

M. F. Mirabelli, R. Zenobi

Characterization of the ABC-transporter PglK and its Complexes with Nanobodies using High-Mass Matrix-Assisted Laser Desorption/Ionization-Mass Spectrometry [AS-113]

Martin Köhler, ETH Zurich

C. Neff, C. Perez, K. Locher, R. Zenobi

Chemical kinetics and microfluidic approaches for the analysis of protein properties in bioprocessing [AS-114]

Marie Kopp, ETH Zurich

A. Villois, P. Arosio

Breath Analysis Using Secondary Electrospray Ionization Mass Spectrometry – Steps Towards Absolute Gas-phase Concentrations of Metabolites [AS-115]

Nora Nowak, ETH Zurich

M. T. Gaugg, M. Guillevic, B. Niederhauser, C. Pascale, P. Martinez-Lozano Sinues, M. Kohler, R. Zenobi

Generalized Incremental Model Identification for Chemical Reaction Systems [AS-116]

Adrien Oulevey, EPF Lausanne

D. Rodrigues, J. Billeter, D. Bonvin

Nanospectral Imaging of a Two-dimensional Polymer Monolayer with Tip-enhanced Raman Spectroscopy [AS-117]

Feng Shao, ETH Zurich

W. Dai, Y. Zhang, W. Zhang, A. Schlüter, R. Zenobi

Characterizing capabilities of a 213 nm high resolution laser ablation inductively coupled plasma mass spectrometry imaging system [AS-118]

Jovana Teofilovic, ETH Zurich

G. Schwarz, J. Koch, B. Hattendorf, D. Günther

Understanding electrospray ionization mechanisms of biomolecules using laser-induced fluorescence [AS-119]

Prince Tiwari, ETH Zurich

M. F. Czar, R. Zenobi

Is Asymmetrical flow field-flow fractionation more than a sizing technique? [AS-120]

Isabelle Worms, University of Geneva

V. I. Slaveykova

Construction and initial characterization of an internal source matrix-assisted laser desorption/ionization Fourier-transform ion cyclotron resonance mass spectrometer [AS-121]

Guido Zeegers, ETH Zurich

M. F. Czar, R. Zenobi

Catalysis Sciences & Engineering [CE] Poster Session

Single ensemble catalysis: acetylene semi-hydrogenation on indium oxide [CE-101]

Davide Albani, ETH Zurich

M. Capdevila, G. Vilé, S. Mitchell, N. López, J. Pérez-Ramírez

Water Oxidation Catalysis by Molybdenum-doped Manganese Oxide [CE-102]

Esmael Balaghi, University of Zurich
G. R. Patzke

Cobalt-functionalised Metalorganic Frameworks as Hydroformylation Catalysts: A new Approach for an Old Problem. [CE-103]

Gerald Bauer, Paul Scherrer Institute
G. Capano, B. Smit, M. Ranocchiari

Single crystal studies to evaluate the structure sensitivity of the Oxygen Evolution Reaction (OER) under acidic conditions [CE-104]

Francesco Bizzotto, University of Bern
Y. Fu, G. K. Wiberg, M. Arenz

Characterizing the 3-Dimensional Structure of Hydrodesulfurization Catalyst Particles [CE-105]

Leonid Bloch, ETH Zurich
J. C. da Silva, J. A. van Bokhoven

Bulk and surface properties of Sr₂TaO₃N by density functional theory [CE-106]

Maria Bouri, University of Bern
U. Aschauer

Hydrodeoxygenation of bio-derived phenols over Pt Nanoparticle/Ionic Liquid Catalytic System under mild conditions [CE-107]

Lu Chen, EPF Lausanne
C. Fink, G. Laurenczy, P. J. Dyson

Mo-based catalysts for CO₂ (electro)reduction [CE-108]

Jean-Daniel Compain, ETH Zurich
D. Nater, C. Copéret

Development of continuous heterogeneously-catalyzed acylation processes for vitamin synthesis [CE-109]

Ferdy Coumans, ETH Zurich
S. Mitchell, J. Schütz, J. Medlock, J. Pérez-Ramírez

Catalyst Overcoating by Non-hydrolytic Sol-gel Technique [CE-110]

Yuan-Peng Du, EPF Lausanne

CO₂ Electro-reduction on three dimensional Cu skeleton catalysts [CE-111]

Abhijit Dutta, University of Bern
M. Rahaman, A. Zanetti, P. Broekmann

A novel synthesis approach towards Fe-based non-noble metal oxygen reduction catalysts with finely tunable composition [CE-112]

Kathrin Ebner, Paul Scherrer Institute
J. Herranz, T. Schmidt

Catalytic conversion of CO₂ to formate mediated by an aliphatic Pd-PCP pincer complex [CE-113]

Lukas Federer, Zurich University of Applied Sciences
C. Adlhart, C. Frech, C. Adlhart

CH₄ oxidation on a Pd-only three-way catalyst under fluctuating rich/lean conditions [CE-114]

Davide Ferri, Paul Scherrer Institute
M. Elsener, O. Kröcher, D. Ferri

Modulated excitation Raman spectroscopy of V₂O₅-TiO₂ and V₂O₅-WO₃-TiO₂ [CE-115]

Davide Ferri, Paul Scherrer Institute
A. Marberger, O. Kröcher, D. Ferri

Carbon Dioxide as Versatile Hydrogen Storage Vector [CE-116]

Cornel Fink, EPF Lausanne
G. Laurenczy

Furfural hydrogenation on P-promoted Ru/Al₂O₃ [CE-117]

Thibault. Fovanna, Paul Scherrer Institute
A. Villa, M. Nachtegaal, O. Kröcher, D. Ferri

Impact of degree of interaction and particle size on the efficiency of In₂O₃-based catalysts for CO₂ hydrogenation to methanol [CE-118]

Matthias Frei, ETH Zurich
C. Mondelli, D. Curulla-Ferré, J. A. Stewart, J. Pérez-Ramírez

Understanding the ammonia synthesis catalyst poisoning: laboratory experiments to enhance the reactors performances [CE-119]

Marco Furlan, Casale SA.
P. Biasi, J. D'Alessandri, M. Furlan, C. Ferrini

Structural Design, Computational Modeling, and Catalytic Pathways of Zn-Polyoxotungstate Catalysts [CE-120]

Robin Güttinger, University of Zurich
L. Ni, B. Spingler, K. Baldridge, G. R. Patzke

A manganese oxide-based electrode as an efficient water-oxidizing anode [CE-121]

Sima Heidari, University of Zurich
G. R. Patzke

Understanding the mechanisms of catalytic fast pyrolysis by unveiling reactive intermediates in heterogeneous catalysis [CE-122]

Patrick Hemberger, Paul Scherrer Institute
V. B. Custodis, A. Bodi, T. Gerber, J. A. van Bokhoven

Ionic Liquids – Catalysts for the Synthesis of Quinazoline-2,4-diones from 2-Aminobenzonitrile and CO₂ [CE-123]

Martin Hull, EPF Lausanne
S. M. Chamam, G. Laurenczy, S. Das, P. J. Dyson, P. J. Dyson

Heterogenization of Pd/Cu catalysts for Wacker Oxidation [CE-124]

Jerick Imbao, ETH Zurich / Paul Scherrer Institute
J. A. van Bokhoven, M. Nachtegaal

Exploration of activated copper sites for conversion of methane to methanol at low temperature [CE-125]

Amy Knorpp, ETH Zurich
A. B. Pinar, M. Ranocchiari, J. A. van Bokhoven

CO₂ Hydrogenation of Copper Nanoparticles Supported on Zirconium Modified Silica [CE-126]

Erwin Lam, ETH Zurich
K. Larmier, P. Wolf, C. Copéret

Hybrid palladium nanoparticles for direct H₂O₂ synthesis: the key role of the ligand [CE-127]

Giacomo Lari, ETH Zurich
B. Puertolas, M. Shahrokh, N. López, J. Pérez-Ramírez

Design of a technical Mg-Al mixed oxide catalyst for the continuous manufacture of glycerol carbonate [CE-128]

Giacomo Lari, ETH Zurich
A. B. de Moura, L. Weimann, S. Mitchell, C. Mondelli, C. Mondelli, J. Pérez-Ramírez

Enhanced electrochemical reduction of CO₂ over Cu-based catalysts modified with p-block elements [CE-129]

Gastón Larrazábal, ETH Zurich
T. Shinagawa, A. J. Martín, J. Pérez-Ramírez

Local Connectivity and Confining Environments of Sn-Sites in Sn-Chabazites Are Distinguishable Using DNP-NMR [CE-130]

Wei-Chih Liao, ETH Zurich

J. Harris, J. Di Iorio, A. Henry, T. Ong, A. Comes-Vives, R. Gounder, C. Copéret

Formation of Formic Acid via CO₂ Hydrogenation with Silica-Supported Transition Metal Pincer Complexes [CE-131]

Hung-Kun Lo, ETH Zurich

I. Thiel, C. Copéret

Synthesis-structure-function relationships K-CoMo catalysts supported on carbon nanofibers for higher alcohols synthesis [CE-132]

Ho Ting Luk, ETH Zurich

C. Mondelli, D. Curullà-Ferré, J. A. Stewart, J. Pérez-Ramírez

Effect of pretreatment on the production of phenol from lignin by catalytic fast pyrolysis over zeolites [CE-133]

Zhiqiang Ma, ETH Zurich

J. A. van Bokhoven

FeVO₄, CeVO₄ and ErVO₄-based catalysts for the selective catalytic reduction of NO with NH₃ [CE-134]

Adrian Marberger, Paul Scherrer Institute

D. Ferri, M. Elsener, C. Artner, A. Sagar, O. Kröcher

Continuous sol-gel synthesis of phosphated TiO₂ catalysts in a microreactor [CE-135]

O Martin, Zurich University of Applied Sciences

N. Bolzli, P. Riedlberger

Well-defined Silica-Supported Nickel Surface Sites for the Direct Conversion of Ethylene to Propylene [CE-136]

Ilia Moroz, ETH Zurich

A. Fedorov, C. Copéret

The role of the support in gold-based catalysts for ethanol oxidation [CE-137]

Sotiria Mostrou, ETH Zurich

J. A. van Bokhoven

In-situ Raman spectroscopy of metal carbodiimide (MNCN) catalysts for electrochemical water oxidation [CE-138]

Rafael Müller, University of Zurich

K. Lienau, N. Rockstroh, R. Tagliapietra, G. R. Patzke

Density functional theory study of anion ordering and chemical composition of different LaTiO₂N surface orientations [CE-139]

Silviya Ninova, University of Bern

U. Aschauer

DFT calculations of photocatalytic water splitting on NaTaO₃(113) and SrTaO₂N(001) surfaces [CE-140]

Hassan Ouhbi, University of Bern

U. Aschauer

Unravelling the chemical nature of anaerobic methane oxidation: the reaction profile maze [CE-141]

Dennis Palagin, Paul Scherrer Institute

V. L. Sushkevich, M. Ranocchiari, J. A. van Bokhoven

Design of efficient co-electrolyser systems for CO₂ reduction in gas phase [CE-142]

Alexandra Pătru, Paul Scherrer Institute

T. Binninger, B. Pribyl, T. Schmidt

Europium oxybromide catalysts for efficient bromine looping in natural gas valorization [CE-143]

Vladimir Paunović, ETH Zurich

R. Lin, M. Scharfe, A. P. Amrute, S. Mitchell, R. Hauert, J. Pérez-Ramírez

Location of active species in zeolites, the case of Cu-omega [CE-144]

Ana Pinar, Paul Scherrer Institute

C. Baerlocher, M. Ranocchiari, J. A. van Bokhoven

Understanding zeolite-binder interactions in shaped catalyst bodies [CE-145]

Begoña Puertolas, ETH Zurich

S. Mitchell, D. Johnstone, R. K. Leary, M. Ruoho, I. Utke, S. Gerstl, J. Pérez-Ramírez, S. Mitchell

Stabilization of Carbohydrates with Formaldehyde during Integrated Biomass Depolymerization [CE-146]

Ydna Questell-Santiago, EPF Lausanne

M. T. Amiri, L. Shuai, J. Luterbacher

Electrochemical reduction of CO₂ into C2/C3 alcohols on tailored designed copper catalysts [CE-147]

Motiar Rahaman, University of Bern

A. Dutta, A. Zanetti, P. Broekmann

Additive assisted electrodeposition of highly faceted Ag Microcrystals: An application towards electrochemical CO₂ reduction [CE-148]

Motiar Rahaman, University of Bern

C. Morstein, A. Dutta, P. Broekmann

Metal-Organic Frameworks, the Switch to the Improbable: Lewis Acidic Phosphonium Ions Catalyse Aldol-Tishchenko Reaction [CE-149]

Marco Ranocchiari, Paul Scherrer Institute

G. Bauer, X. Xu, D. Ongari, D. Tiana, B. Smit, M. Ranocchiari

Direct catalytic oxidation of methane to methanol: Methanol protection using phosphoric acid [CE-150]

Manoj Ravi, ETH Zurich

B. Dereka, J. A. van Bokhoven

Economic synthetic strategies for the optimization of cobalt oxides as water oxidation catalysts [CE-151]

Lukas Reith, University of Zurich

G. R. Patzke

A Diffusion and Surface Reaction Model for Highlighting Key Factors in the Enzymatic Hydrolysis of Lignocellulosic Biomass [CE-152]

Jessica Rohrbach, EPF Lausanne

J. Luterbacher

Mechanism of ethylene oxychlorination on RuO₂ and CeO₂ [CE-153]

Matthias Scharfe, ETH Zurich

M. Higham, M. Capdevila, N. López, J. Pérez-Ramírez

Using carbon-coated metal nanoparticles as support for magnetic reagents [CE-154]

Elia Schneider, ETH Zurich

Microfluidic Assay for Artificial Metalloenzyme Evolution [CE-155]

Fabian Schwizer, University of Basel

T. Heinisch, P. Rottmann, S. Panke, T. R. Ward

Well-defined iron sites on the silica surface: characterization and reactivity [CE-156]

Petr Šot, ETH Zurich

D. P. Estes, C. Copéret, J. A. van Bokhoven

Microstructural self-regeneration of LaSrTiNiO_{3-δ}: fast recovery from sulfur poisoning [CE-157]

Patrick Steiger, EPF Lausanne

D. Burnat, A. Heel, O. Kröcher, D. Ferri

Selective anaerobic methane oxidation into methanol over copper-exchanged mordenite [CE-158]

Vitaly Sushkevich, Paul Scherrer Institute

D. Palagin, M. Ranocchiari, J. A. van Bokhoven

Quantitative depolymerization of undensified technical lignin under mild conditions [CE-159]

Masoud Talebi Amiri, EPF Lausanne

L. Shuai, J. Luterbacher

Bimetallic nanoparticles for the valorization of biomass. The role of the stabilizer [CE-160]

Antoine Van Muyden, EPF Lausanne

P. J. Dyson

Investigation of the relationship between ionic liquid structure and its activity for electrochemical reduction of carbon dioxide [CE-161]

Dmitry Vasilyev, EPF Lausanne

P. J. Dyson

Asymmetric transfer hydrogenation of 1-aryl-3,4-dihydroisoquinolines using an iridium-amide complex [CE-162]

Bea Vaclavikova, University of Chemistry and Technology, Prague

A. Budinská, J. Václavík, V. Matoušek, M. Kuzma, L. Červený

Stabilization of single metal atoms on graphitic carbon nitride [CE-163]

Evgeniya Vorobyeva, ETH Zurich

Z. Chen, S. Mitchell, R. K. Leary, P. Midgley, J. M. Thomas, R. Hauert, E. Fako, N. López, J. Pérez-Ramírez

Ostwald ripening or single atom trapping: towards understanding particle sintering [CE-164]

Xing Wang, ETH Zurich

J. A. van Bokhoven, D. Palagin

Quantifying the impact of acidity on positronium formation and annihilation in zeolitic materials [CE-165]

Robbie Warrington, ETH Zurich

L. Gerchow, D. A. Cooke, P. Crivelli, J. Pérez-Ramírez

Mapping the birth and evolution of pores upon thermal activation of layered hydroxides [CE-166]

Robbie Warrington, ETH Zurich

S. Mitchell, R. Murty, R. Schäublin, P. Crivelli, J. Kenvin, J. Pérez-Ramírez

Selectivity control during the one-pot conversion of aliphatic carboxylic acids to linear olefins through tandem hydrogenation/dehydration [CE-167]

Jher Hau Yeap, EPF Lausanne

B. Rozmysłowicz, J. Luterbacher

Catalytic CO₂ hydrogenation to methanol over encapsulated Cu/ZnO based catalysts: Synthesis, characterization and *in situ* mechanism determination [CE-168]

Maxim Zabilskiy, Paul Scherrer Institute

M. Ranocchiari, J. A. van Bokhoven, J. A. van Bokhoven

Olefins from natural gas via oxychlorination catalysis [CE-169]

Guido Zichittella, ETH Zurich

N. Aellen, V. Paunović, A. P. Amrute, J. Pérez-Ramírez

Catalyst design for selective natural gas functionalization via oxyhalogenation chemistry [CE-170]

Guido Zichittella, ETH Zurich

N. Aellen, V. Paunović, A. P. Amrute, J. Pérez-Ramírez

**Inorganic Chemistry [IC]
Poster Session**

Labeling, mutations and truncated constructs: approach to solving the structure of the CPEB3 ribozyme through NMR spectroscopy [IC-101]

Kenneth Adea, University of Zurich

M. Rowinska-Zyreka, M. Skilandat, D. Donghi, S. Johannsen, R. K. Sigel

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

Cristina Alvariño, University of Neuchâtel

R. Deschenaux, B. Therrien

Rational design of tetrานuclear d-f complexes with ditopic Janus-type aromatic ligands [IC-103]

Mahsa Asadniaye Fardjahromi, University of Geneva

Exploitation of the allosteric relationship between RAPTA T and Auranofin on the Nucleosome Core Particle in the design of novel anti-cancer agents [IC-104]

Lucinda Batchelor, EPF Lausanne

G. Palermo, T. Von Erlach, Z. Adhireksan, L. De Falco Jr, U. Röthlisberger, C. A. Davey, P. J. Dyson

Bismesitylphosphinic Acid (BAPO-OH) as 4-Electron Photoreductant for the Preparation of various Cu Nanomaterials and related Cu complexes [IC-105]

Andreas Beil, ETH Zurich

G. Müller, H. Grützmacher

Chiral Macroyclic Terpyridine Complexes [IC-106]

Thomas Brandl, University of Basel

M. Mayor

Phosphine tuning for heteroleptic [Cu(N^N)(P^P)][PF₆] in light emitting electrochemical cells [IC-107]

Fabian Brunner, University of Basel

C. E. Housecroft, E. C. Constable

Combining an asymmetric acid functionalized anchoring ligands with symmetric ancillary ligands in bis(diimine) copper(I) dyes in dye-sensitized solar cells [IC-108]

Annika Büttner, University of Basel

E. C. Constable, C. E. Housecroft

Carbohydrate-functionalised transition metal–NHC catalysts [IC-109]

Joseph Byrne, University of Bern

M. Albrecht

The Intricate Structural Chemistry of M^{II}_{2n}L_n-Type Assemblies [IC-111]

Giacomo Cecot, EPF Lausanne

K. Severin

New Monometallic and Heterobimetallic Complexes of Silver(I), Zinc(II) and Copper(II) with an Amino Acid Derived Ligand as Potential Antimicrobial Agents [IC-112]

Paula Corcosa, University of Fribourg

K. M. Fromm

Two-dimensional atomically bridged nanoporous silicate [IC-113]

Mostapha Dakhchoune, EPF Lausanne

K. Agrawal

Base-free Asymmetric Transfer Hydrogenation of Base-sensitive Ketones [IC-114]

Lorena De Luca, ETH Zurich

A. Mezzetti

Controlling the Selectivity in Ethenolysis of Cyclic Olefins with Ru-Based Metathesis Catalysts via Ancillary NHC Ligands: A Structure Activity Study [IC-115]

Pascal Engl, ETH Zurich

C. Santiago, C. P. Gordon, A. Fedorov, C. Serba, M. Sigman, A. Togni

Synthesis, Magnetism and Reactivity of Hetero-Polymetallic Uranyl(V) Schiff-base complexes [IC-116]

Radmila Faizova, EPF Lausanne

Development of organometallic assemblies for PDT [IC-117]

Marie Gaschard, University of Neuchâtel

B. Therrien

Toward a useful catalytic transformation of N_2O using group 9 organometallic complexes [IC-118]

Thomas Gianetti, ETH Zurich

R. E. Rodriguez-Lugo, S. P. Annen, H. Grützmacher

Heterotrimetallic assemblies based on Zn(II)-porphyrin metallacycles and dipyridyl-capped Fe(II)-clathrochelate complexes [IC-119]

Erica Giraldi, EPF Lausanne

Synthesis and Derivatisations of $[\text{Re}(\eta^6\text{-C}_6\text{H}_5\text{COOH})_2]^+$ [IC-120]

Carla Gotzmann, University of Zurich

H. Braband, R. Alberto

Chiral Iron(II) PN(H)P Pincer Complexes for the Asymmetric Hydrogenation of Ketones [IC-121]

Erik Gubler, ETH Zurich

A. Mezzetti

Synthesis of Nanocrystalline Iron(III) trifluoride from Molecular Precursors and its Li- and Na-ion Storage Properties [IC-122]

Christoph Guntlin, ETH Zurich

T. Zünd, M. Wörle, K. V. Kravchyk, M. I. Bodnarchuk, M. V. Kovalenko

N-heterocyclic carbene complexes of Silver(I) for C-C bond activation of alkynitriles and catalytic oxazoline synthesis [IC-123]

Rachael Heath, University of Bern

E. Keske, M. Albrecht

Towards the direct synthesis of nitrogen functionalized bis arene complexes of Re and $^{99(\text{m})}\text{Tc}$ [IC-124]

Daniel Hernández Valdés, University of Zurich

G. Meola, H. Braband, B. Spingler, R. Alberto

A Bidentate Mo(0) Isocyanide Complex is a Powerful Photo-redox Catalyst [IC-125]

Patrick Herr, University of Basel

L. A. Büldt, C. B. Larsen, O. S. Wenger

Boc(β -ala)₂N₂H₃ and its interaction with silver [IC-126]

Anja Holzheu, University of Fribourg

A. Crochet, K. M. Fromm

Iron(II) Complexes of Chiral, C_2 -Symmetric, P- or C-Stereo-genic PNP Pincer Ligands and their Application in the H₂ Hydrogenation of Ketones [IC-127]

Raffael Huber, ETH Zurich

A. Passera, A. Mezzetti

High thermoelectric performance of p-type solution processed SnTe nanocomposite through band engineering [IC-128]

Maria Ibáñez, ETH Zurich

R. Hasler, B. Kuster, A. Cabot, M. V. Kovalenko

Dopant Screening of Ceria-Based Materials for Solar Thermo-chemical Two-Step CO₂-Splitting [IC-129]

Roger Jacot, University of Zurich

R. Michalsky, A. Steinfeld, G. R. Patzke

Triazolylidene iron(II) piano-stool complexes: synthesis and catalytic hydrosilylation of carbonyl compounds [IC-130]

Chloë Johnson, University of Bern

M. Albrecht

Semi-hydrogenation of alkynes by a novel bimetallic rhodium(I) complex [IC-131]

Pascal Jurt, ETH Zurich

T. L. Gianetti, A. Fedorov, S. Gauthier, H. Grützmacher

Selective Semihydrogenation of Alkynes with Copper Nanoparticles Supported on Passivated Silica [IC-132]

Nicolas Kaeffer, ETH Zurich

H. Liu, H. Lo, A. Fedorov, C. Copéret

Heteroleptic light-emitting copper(I) complexes with applications in light-emitting electrochemical cells [IC-133]

Sarah Keller, University of Basel

A. Prescimone, H. J. Bolink, C. E. Housecroft, E. C. Constable

In search of uranium terminal sulfide complexes [IC-134]

Rory Kelly, EPF Lausanne

M. Falcone, J. Andrez, R. Scopelliti, C. A. Lamsfus, L. Maron, M. Mazzanti

Modifying spacers and anchoring groups for heteroleptic Cu(I) - 6,6'-dimethyl-2,2'-bipyridine based DSSCs [IC-135]

Y Klein, University of Basel

M. Willgert, Y. Baumgartner, E. C. Constable, C. E. Housecroft

Structural Cytotoxicity studies of {Mn(CO)₃Br}⁺, {Mn(CO)₃Br}⁺ and {Mn(CO)₃Br}⁺ bearing bipyrimidine derivatives or isocyanides as ligands [IC-136]

Emmanuel Kottelat, University of Fribourg

F. Zobi

Aluminum Chloride–Natural Graphite Battery and its Energy Density [IC-137]

Kostiantyn Kravchyk, ETH Zurich

S. Wang, L. Piveteau, F. Krumeich, M. V. Kovalenko

Efficient modulation of the donor sites of triazolylidene metal complexes for enhancing catalytic activity [IC-138]

Karst Lenzen, University of Bern

M. Albrecht

Periodic charging of individual molecules and charge patterns of an assembly of aromatic heterocyclic molecules on the surface [IC-139]

Shi-Xia Liu, University of Bern

N. Kocić, X. Liu, P. Weiderer, S. Decurtins, J. Repp, S. Liu, J. Repp

Electron transfer across oligo-ortho-phenylenes [IC-140]

Sabine Malzkuhn, University of Basel

O. S. Wenger

The History of “BLORANGE”: Co-Sensitized Copper(I) Dye-Sensitized Solar Cells [IC-141]

Frederik Malzner, University of Basel

C. E. Housecroft, E. C. Constable

Fighting Cancer with the Next Generation of Organometallic Assemblies [IC-142]

Vidya Mannancherril, University of Neuchâtel

B. Therrien

Characterization and improvement of p-type dye sensitized solar cells. [IC-143]

Nathalie Marinakis, University of Basel
E. C. Constable, C. E. Housecroft

Pincer-type Pyridylidene Amide (PYA) Ruthenium Complexes in Transfer Hydrogenation Catalysis [IC-144]

Philipp Melle, University of Bern
M. Albrecht

Induced-circular dichroism resulting from the interaction between a chromophoric calix[6]arene and a chiral non-chromophoric amine [IC-145]

Nicolas Ménard, Université Paris Descartes
B. Colasson, O. Reinaud, Y. Jacquot

A Mixed-Ring Sandwich Complex from Unexpected Ring Contraction in $[Re(\eta^6-C_6H_5Br)(\eta^6-C_6R_6)](PF_6)$ [IC-146]

Giuseppe Meola, University of Zurich
H. Braband, D. Hernández Valdés, C. Gotzmann, T. Fox,
B. Spingler, R. Alberto

Structural investigation of silica-supported copper(I) surface sites by IR spectroscopy [IC-147]

Jordan Meyet, ETH Zurich
K. Searles, J. A. van Bokhoven, C. Copéret

Formic Acid: A Promising Hydrogen Storage Material [IC-148]

Mickael Montandon-Clerc, EPF Lausanne
A. F. Dalebrook, G. Laurenczy

Quinones as Reversible Electron Relays in Artificial Photosynthesis [IC-149]

Mathias Mosberger, University of Zurich
A. Rodenberg, M. Orazzi, C. Bachmann, B. Probst, R. Alberto,
P. Hamm

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Miquel Navarro, University of Bern
C. Smith, M. Albrecht

Synthesis of iridium complexes containing both hydride and functionalized triazolylidene ligands [IC-151]

Marta Olivares, University of Bern
M. Panque, M. Albrecht

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Alessandro Passera, ETH Zurich
A. Mezzetti

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Monica Perinelli, University of Zurich
M. Tegoni, E. Freisinger

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Lucas Prieto, University of Zurich
R. M. Oetterli, B. Spingler, F. Zelder

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Hedvika Primasova, University of Bern
M. Vermathen, J. Furrer

Synthesis and isolation of previously infeasible di-thiolato bridged dinuclear ruthenium complexes $[(p-MeC_6H_4iPr)_2Ru_2SR_2Cl_2]$ using optimized reaction conditions [IC-156]

Hedvika Primasova, University of Bern
M. De Capitani, I. Gjuroski, J. Furrer

Optimized reaction conditions for the synthesis of trithiolato-bridged dinuclear arene ruthenium complexes: reducing the reaction time and synthesis of new complexes [IC-157]

Hedvika Primasova, University of Bern
J. Daapp, I. Gjuroski, J. Furrer

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F. Allouche, M. Wörle, C. Copéret

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Brendan Quigley, ETH Zurich
O. Gidron, M. Jirásek, N. Trapp, M. Ebert, F. Diederich

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Chiara Ricca, University of Bern
U. Aschauer

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Thibaud Rossel, Gymnase français de Bienne
C. Schneider, M. Creus

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Giovanni Salassa, University of Geneva

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Alma Salim, University of Zurich
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Kevin Salzmann, University of Bern
M. Albrecht

Enantiopure ligands and their luminescent lanthanide complexes [IC-165]

Atena Solea, University of Fribourg
L. Yang, C. Allemand, K. M. Fromm, O. Mamula Steiner

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Alexander Stephens, University of Basel
F. J. Malzner, E. C. Constable, C. E. Housecroft

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Dominik Suter, University of Zurich
K. Venkatesan

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Gabriella Tessitore, University of Bern
A. Mudring, K. W. Krämer

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Jens Top, Empa
B. S. Mun, A. Stephens, C. E. Housecroft, A. Braun

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David Trummer, ETH Zurich
A. Fedorov, C. Serba

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Marta Valencia, University of Bern
H. Müller-Bunz, M. Albrecht

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Massimo Varisco, University of Applied Sciences of Western Switzerland, HEIA-FR
D. Zufferey, O. Mamula Steiner

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Serhii Vasylevskyi, University of Fribourg
K. M. Fromm

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Ángela Vivancos, University of Bern
P. Nylund, M. Albrecht

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Tobias von Arx, University of Zurich
K. Venkatesan

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Nicola Weder, University of Zurich
B. Probst, G. Smolentsev, R. Alberto

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Cedric Wobill, University of Basel
C. E. Housecroft, E. C. Constable

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Fan Xiao, Paul Scherrer Institute
K. W. Krämer, C. Rüegg, K. W. Krämer, C. Rüegg

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Prerna Yadav, University of Zurich
N. Kumari, Z. J. Huang, H. Chao, G. Gasser, F. Zelder

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Keishi Yamamoto, ETH Zurich
C. P. Gordon, W. Liao, C. Copéret, C. Raynaud, O. Eisenstein

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Maksym Yarema, ETH Zurich

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Fan Zhang, University of Neuchâtel
B. Therrien

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Fabio Amadei, University of Zurich
S. Gallo, K. Schrader, J. A. Santamaria-Araujo, G. Schwarz, R. K. Sigel

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Marcello Anzola, University of Geneva
E. Lindberg, N. Winssinger

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Josep Arús-Pous, University of Bern
R. Visini, M. Awale, J. L. Reymond

The polypharmacology browser for ligand based target prediction [MC-104]

Mahendra Awale, University of Bern
J. L. Reymond

X-Ray crystallography of antimicrobial peptides as Lectin complexes [MC-105]

Stéphane Baeriswyl, University of Bern
R. Visini, A. Stocker, T. Darbre, J. L. Reymond

A Search for Hydride Shift Mechanism in Enzymatic Synthesis of Tetrahydrobiopterin [MC-106]

Esra Bozkurt, EPF Lausanne
R. Hovius, K. Johnsson, U. Röthlisberger

Interaction between steroid hormone receptors and the protein FKBP52: towards new molecular patterns [MC-107]

Cillian Byrne, Université Pierre et Marie Curie / Ecole Normale Supérieure

M. Belhou, M. A. Hennen, F. Cantrelle, I. Landrieu, E. E. Baulieu, G. Lippens, Y. Jacquot

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Dalu Chang, University of Geneva
E. Lindberg, N. Winssinger

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Simona Conti, University of Zurich
M. Croce, C. Maake, G. R. Patzke

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Raphaël de Matos, EPF Lausanne
J. Vuilleumier, S. Passemard, D. Staedler, S. Constant, L. Bonacina, S. Gerber-Lemaire

Diatoms functionalized with Vitamin B12 as micro-shuttle for targeting delivery of water poor soluble Ruthenium complex [MC-111]

Joachim Delasoie, University of Fribourg
J. Rossier, F. Zobi

Dihydropyridomycins as New Antitubercular Agents: Synthesis and SAR Studies [MC-112]

Maryline Dong, ETH Zurich
O. P. Horlacher, R. C. Hartkoorn, S. T. Cole, K. Altmann

Engineered protein superstructures for the encapsidation of nucleic acid therapeutics [MC-113]

Thomas Edwardson, ETH Zurich
D. Hilvert

Characterization of Ergothioneine Biosynthesis in a thermo-phobic fungus [MC-114]

Sebastian Flückiger, University of Basel
F. P. Seebeck

Fluorescent Labeling of the Antimicrobial Peptide Dendrimer G3KL to Probe Its Entry into *Pseudomonas aeruginosa* [MC-115]

Bee Ha Gan, University of Bern
T. Darbre, J. L. Reymond

Targeting RNA structure in *SMN2* reverses Spinal Muscular Atrophy molecular phenotypes [MC-116]

Amparo Garcia-Lopez, University of Geneva
F. Tessaro, H. Jonker, A. Wacker, C. Richter, A. Comte, B. Joseph, H. Schwalbe, L. Liu

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Agni F M Gavriliidou, ETH Zurich
H. Hunziker, D. Mayer, Z. Vuckovic, D. Veprintsev, R. Zenobi

Tamoxifen increases survival, improves motor function and reduces levels of BIN1 and DNM2 in a mouse model of X-linked centronuclear (myotubular) myopathy [MC-118]

Elinam Gayi, University of Geneva
H. Ismail, L. Neff, B. Cowling, J. Laporte, L. Scappoza, O. Dorches

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Matthias Gehringer, ETH Zurich
R. Bieri, P. Gersbach, N. Scherr, M. Ruf, K. Altmann, G. Pluschke

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Eleftheria Girousi, University of Bern
N. Schnidrig, I. Gjurovska, S. Pfister, J. Furrer, M. Vermathen

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Ilche Gjurovska, University of Bern
N. Schnidrig, E. Girousi, J. Furrer, M. Vermathen

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Simon Glauser, ETH Zurich
K.-H. Altmann

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Nathalie Grob, ETH Zurich
M. Béhé, R. Schibli, T. L. Mindt

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Maya Gulotti-Georgieva, University of Zurich
S. Paulus-Zelger, R. K. Sigel

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Jelena Habjanic, University of Zurich
O. Zerbe, E. Freisinger

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Roman Lagoutte, University of Geneva
C. Serba, D. Abegg, D. G. Hoch, A. Goujon, S. Soleimanpour

Fluorescent Bile Salt Derivatives for the Investigation of the Canicular Lipid Transporter System [MC-127]

Michele Leuenberger, University of Bern
S. Bernhard, B. Stieger, M. Lochner

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Takuya Machida, University of Geneva
A. Novoa, É. Gillon, S. Zheng, J. Claudinon, T. Eierhoff, A. Imbert, W. Römer, N. Winssinger

Boronic Acids Facilitate Oxime and Hydrazone Formation, Leading to a Fluorogenic Variant [MC-129]

Cédric Stress, University of Basel
P. Schmidt, D. G. Gillingham

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Adrien Marchand, ETH Zurich
R. Zenobi

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Larysa Markova, University of Bern
Y. Cotelle, R. Häner

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Irina Markova, University of Zurich
S. Johannsen, R. K. Sigel

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Dzmitry Miarzlou, University of Basel
M. Knop, F. P. Seebeck

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Levon Movsisyan, ETH Zurich
W. Goetzke, A. Nguyen, E. Hassaan, F. Diederich, G. Klebe

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Vlad Pascanu, University of Zurich
A. Dolbois, A. Caflisch, C. Nevado

Photocontrolled release of antibiotics and other bioactive molecules from supramolecular hydrogels with green light [MC-136]

Zbigniew Pianowski, KIT Karlsruhe
J. Karcher, K. Schneider, Z. Pianowski

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Marion Poirier, University of Bern
J. Pujol-Gimenez, C. Manatschal, I. Ehrnstorfer, R. Dutzler, J. L. Reymond, M. A. Hediger

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Hedvika Primasova, University of Bern
L. E. Paul, M. Vermathen, G. Diserens, P. Vermathen, J. Furrer

Unpacking the Black Box: Facilitating Visual Inspection of Large Datasets by Means of Interactive Web-Based Visualizations [MC-139]

Daniel Probst, University of Bern
J. L. Reymond

Using “old methods” to solve new structures: crystallization of the human CPEB3 ribozyme [MC-140]

Anna Przytula-Mally, University of Zurich
S. Johannsen, R. K. Sigel

Organometallic cobalamin anticancer derivatives for targeted prodrug delivery via transcobalamin-mediated uptake [MC-141]

Jérémie Rossier, University of Fribourg
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Enzymatic construction of metallo-DNA [MC-142]

Pascal Röthlisberger, Institut Pasteur
M. Hollenstein

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Jacques Saarbach, University of Geneva
E. Lindberg, S. Folliet, S. Georgeon, O. Hantschel, S. Soleimanpour

Can Polymeric Nanoparticles protect Porphyrinic Compounds from reacting with Proteins? – An NMR Spectroscopic Investigation [MC-144]

Luca Sauser, University of Bern
I. Gjuroski, J. Furrer, M. Vermathen

Diaryl Borinic Acids Modulate Store-operated Calcium Entry (SOCE) [MC-145]

Achille Schild, University of Bern
R. Bhardwaj, M. A. Hediger, M. Lochner

Olfaction of biologically relevant vapors [MC-146]

Pablo Sinues, ETH Zurich

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Thissa Siriwardena, University of Bern
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Nicolas Chuard, University of Geneva
P. Morelli, E. Bartolami, L. Zong, S. Lörcher, C. G. Palivan, W. Meier, S. Matile

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Bernhard Spingler, University of Zurich
M. Larocca, R. Rubbiani, A. Naik, G. Gasser, B. Spingler

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Andras Stracz, ChemAxon
A. Tarcsay, G. Imre, I. Solt

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Sébastien Tardy, University of Geneva
M. Feyeux, E. Nguyen, K. H. Krause, L. Scappoza

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Alina Tirla, ETH Zurich
P. Rivera-Fuentes

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Dominic Tscherrig, University of Bern
R. Bhardwaj, M. A. Hediger, M. Lochner

Peptidomimetic antibiotics targeting essential outer membrane proteins as a new weapon in the fight against resistance in Gram-negative bacteria [MC-154]

Matthias Urfer, University of Zurich
J. A. Robinson

Artificial lipid droplets as a model lipid system [MC-155]

Valerija Vezočnik, University of Ljubljana
S. Sitar, K. Kogej, M. Tušek-Žnidarič, V. Hodnik, K. Sepčić, E. Žagar, P. Maček

Effects of CPP-conjugated ERα17p peptide derivatives on the activation of ERK1/2 in breast carcinoma cells [MC-156]

Daniela Vieira, Université Pierre et Marie Curie / Ecole Normale Supérieure
C. Byrne, F. Burlina, Y. Jacquot

Functionalization of second harmonic generation nanoparticles for theranostic applications [MC-157]

Jérémie Vuilleumier, EPF Lausanne
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Zenghui Wang, University of Zurich
F. D. Steffen, A. Dominguez-Martin, Y. Zhong, Q. Cao, Z. Mao, R. K. Sigel, R. Börner

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Melanie Zechner, ETH Zurich
S. Jackson, C. A. Castro Jaramillo

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Yves Aeschi, University of Basel
M. Mayor

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Bassam Alameddine, Gulf University for Science and Technology
R. S. Anju, S. Shetty, F. Al-Sagheer, S. Al-Mousawi, T. Jenny

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Sébastien Alazet, EPF Lausanne
F. Le Vaillant, S. Nicolai, J. Waser

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Di Silvestro Alfredo, University of Basel
M. Mayor

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Linda Bannwart, University of Basel
M. Mayor

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Andreas Bielmann, University of Fribourg
C. Curty, C. G. Bochet

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Jérémie Boilevin, University of Bern
A. Ramirez, T. Darbre, K. Locher, J. L. Reymond

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Marta Brucka, University of Geneva
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Joël Bultel, University of Geneva
F. Medina, C. Besnard, J. Lacour

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Paola Caramenti, EPF Lausanne
S. Nicolai, J. Waser

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Josephine Cinqualbre, University of Bern
P. Mateo, P. Renaud

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Antonin Clemenceau, EPF Lausanne

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Janos Czirok, XiMo AG
A. Bucsai, L. Ondi, G. Frater

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Lorenzo Delarue Bizzini, University of Basel
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Michael Dieckmann, Syngenta Crop Protection AG
P. Dakas, A. De Mesmaeker

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Johannes Diesel, EPF Lausanne
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Talaat El-Emary, Assiut University, Egypt

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Alexandre Genoux
M. Hofer, R. Kumar, C. Nevado

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Cornelius Groppe, ETH Zurich
N. Trapp, T. Husch, M. Reiher, F. Diederich

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Daria Grosheva, EPF Lausanne
N. Cramer

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Elias Halabi Rosillo, ETH Zurich
Z. Thiel, P. Rivera-Fuentes

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Durga Hari, EPF Lausanne
L. Schouwley, V. Barber, J. Waser

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Freya Harvey, University of Fribourg
C. G. Bochet

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Nina Hentzen, ETH Zurich
L. E. Smeenk, J. Witek, S. Riniker, H. Wennemers

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Irene Hernández Delgado, University of Geneva
A. Wallabregue, S. Yamamoto, G. Hopfgartner, J. Lacour

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Alexandre Homberg, University of Geneva
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Tamara Husch, ETH Zurich
C. Gropp, N. Trapp, F. Diederich, M. Reiher

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Moritz Jackl, ETH Zurich

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Yun-Suk Jang, EPF Lausanne
M. C. Dieckmann, N. Cramer

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Agonist Kastrati, University of Fribourg
C. G. Bochet

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Dmitry Katayev, ETH Zurich
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Ievgenia Kovalova, University of Bern
C. S. Gloor, F. Denes, P. Renaud

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Roopender Kumar, University of Zurich
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Andrey Kuzovlev, University of Bern
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Le Liu, University of Geneva
Y. Cotelle, N. Sakai, S. Matile

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Mariano Macchione, University of Geneva
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Paola Morelli, University of Geneva
E. Bartolami, S. Soleimannpour, L. Zong, N. Sakai, S. Matile

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Mathias Mamboury, EPF Lausanne
M. Mamboury, G. Qiu, Q. Wang, J. Zhu

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Rajesh Mannancherry, University of Basel
M. Mayor

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Roger Marti, Hochschule für Technik & Architektur Fribourg
C. Marmy, V. Pilloud, L. Roselli, S. Demotz, J. Charollais

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Camilo Meléndez, University of Bern
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Jovana Milic, ETH Zurich
M. Zalibera, J. Nomrowski, D. Neshchadin, L. Ruhlmann, C. Boudon, O. S. Wenger, A. Savitsky, W. Lubitz, G. Gescheidt, F. Diederich

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Marzio Monagheddu, VITO
M. Dorbec, A. Buekenhoudt, D. G. Hoch, B. Maes

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Bastian Muriel, EPF Lausanne
U. Orcel, J. Waser

Axially Chiral Biaryl Atropisomers via a Pd-Catalyzed Atropo-enantioselective C–H Arylation [OC-146]

Christopher Newton, EPF Lausanne
E. Braconi, N. Cramer

Functionalizable oligoprolines as a platform for the development of extended self-assemblies with tunable morphologies [OC-147]

Nellie Ochs, ETH Zurich
U. Lewandowska, S. Corra, H. Wennemers

Heterobimetallic d⁸-d¹⁰ complexes as intermediates, transition states, and transition state analogs for the transmetalation step in Sonogashira and Negishi coupling reactions [OC-148]

Raphael Oeschger, ETH Zurich
P. Chen

Divergent Asymmetric Synthesis of Polycyclic Compounds via Vinyl Triazenes [OC-149]

Florian Perrin, EPF Lausanne
D. Kossler, N. Cramer, K. Severin

[4+2]-Annulations of Aminocyclobutanes [OC-150]

Daniele Perrotta, EPF Lausanne
S. Racine, J. Vuilleumier, F. de Nanteuil, J. Waser

Gold Nanoparticles Reaching out for Molecular Electronics via Tailor-Made Ligands [OC-151]

Erich Peters, University of Basel
M. Lehmann, M. Mayor

Synthesis of Hypervalent CF₃ Tellurium Compounds [OC-152]

Ewa Pietrasik, ETH Zurich
A. Togni

Indolizidine Formation through Dearomatic [3+2] Annulation Reactions of N-Heterocycles with Aminocyclopropanes [OC-153]

Johannes Preindl, EPF Lausanne
S. Chakrabarty, J. Waser

Reductive Transformations Under 1,3,2-Diazaphospholene Catalysis [OC-154]

John Reed, EPF Lausanne
S. Miaskiewicz, P. A. Donets, C. C. Oliveira, N. Cramer

Triangular Donor–Acceptor Systems [OC-155]

Peter Ribar, University of Basel
T. Solomek, L. Le Pleux, M. Juríček

Synthesis of Alkylated Pyridine Derivatives via S_HAr of N-Methoxypyridinium Salts [OC-156]

Samuel Rieder, University of Bern
P. Renaud

Parallel π–π Stacking Interactions: Substituent Effects at Different Displacement [OC-157]

Leslie Riwar, ETH Zurich
M. Harder, N. Trapp, F. Diederich

Synthesis of β-Lactams by Palladium(0)-Catalyzed C(sp³)-H Carbamoylation [OC-158]

Ronan Rocaboy, University of Basel
D. Dailler, O. Baudoin

Palladium-Catalyzed Long-Range Deconjugative Isomerization of Highly Substituted α,β-Unsaturated Carbonyl Compounds [OC-159]

Ciro Romano, University of Geneva
L. Lin, C. Mazet

Enantioselective α-Arylation of O-Carbamates via Sparteine-Mediated Lithiation and Negishi Cross-coupling [OC-160]

Titouan Royal, University of Basel
Y. Baumgartner, O. Baudoin

Thermal Activation of Togni's Reagent Generates F₃C[•]! [OC-161]

Nico Santschi, ETH Zurich
B. J. Jelier, T. Nauser, N. Santschi

Conformational Investigation of Catalytically Active Peptides of the H-Pro-Pro-Xaa Type [OC-162]

Tobias Schnitzer, ETH Zurich
H. Wennemers

Versatile Remote Functionalizations via C–H/C–C Bond Cleavage Under Mild Conditions [OC-163]

Wei Shu, University of Zurich
C. Nevado

High-resolution in 2D spectra using chemical shift encoding and spectral reconstruction [OC-164]

Eduard Sistaré Guardiola, University of Geneva
D. Jeannerat

Synthesis of Highly Substituted Rh(I) and Ir(I) Cyclopentadienyl Half Sandwich Complexes via β-carbon Elimination [OC-165]

Gints Smith, EPF Lausanne
B. Audic, N. Cramer

Synthesis of Vinyl Triazenes by Pd-Catalyzed Addition Reactions to 1-Alkynyltriazenes [OC-166]

Abdusalom Suleymanov, EPF Lausanne
K. Severin

Rh(III)-Catalyzed Asymmetric Synthesis of P-Stereogenic Phosphinamides [OC-167]

Yang Sun, EPF Lausanne
N. Cramer

Radical Triggered Three-Component Coupling of Alkenylboronates, Halides, and Organolithiums [OC-168]

Nicholas Tappin, University of Bern
M. Gnägi, P. Renaud

Biomolecule functionalization using hypervalent iodine reagents [OC-169]

Romain Tessier, EPF Lausanne
D. P. Hari, R. Simonet-Davin, B. Fierz, J. Waser

Synthesis and modification of the structure of the ionic liquids to optimize their thermoelectric properties [OC-170]

Ennio Vanoli, HEIA-FR

Novel Chiral CpxRu(II) Complexes for Asymmetric Catalysis: Enantio- and Regioselective Synthesis of Dihydrobenzoindoles [OC-171]

Shou-Guo Wang, EPF Lausanne
N. Cramer

Atroposelective Double Arene-Forming Aldol Condensation: Synthesis of Tetra-*ortho*-substituted Binaphthalenes [OC-172]

Reto Witzig, University of Basel
V. C. Fäseke, C. Sparr

Terminal-selective arylation of alkyl chains by regioconvergent Negishi coupling [OC-173]

Ke-Feng Zhang, University of Basel
S. Dupuy, A. Goutierre, O. Baudoin

A Stretching Induced Molecular Switch [OC-174]

Patrick Zwick, University of Basel
M. Mayor

(C₄H₄S₂) as a Candidate for Measuring the Parity Violating Energy Difference between Enantiomers of Chiral Molecules [PC-107]

Irina Bolotova, ETH Zurich
S. Albert, F. Arn, Z. Chen, C. Fabri, G. Grassi, L. Horny, P. Lerch, M. Quack

High-resolution FTIR spectroscopy of trisulfane HSSSH: a candidate for detecting parity violation in chiral molecules [PC-108]

Irina Bolotova, ETH Zurich
S. Albert, Z. Chen, C. Fabri, M. Quack, G. Seyfang, D. Zindel, M. Quack

Understanding the crowd: how specific is the influence of crowding particles on the activity of RNAs? [PC-109]

Richard Börner, University of Zurich
E. Fiorini, B. Köhn, M. Kovermann, R. K. Sigel

Investigation of PDZ2/RagEF peptide interactions by 2D infrared spectroscopy using wild type and modified photo-switchable peptide ligands [PC-110]

Olga Božović, University of Zurich
C. Zanobini, P. Johnson, B. Janković, P. Hamm

Reliable distance distributions in the nanometer range from 5-pulse Double Electron Electron Resonance (DEER) [PC-111]

Frauke Breitgoff, ETH Zurich
Y. O. Polyhach, G. Jeschke

Hybrid Organic-Inorganic Perovskites Studied with Ultra-Broadband Time-Resolved Terahertz Spectroscopy [PC-112]

Andrés Burgos-Caminal, EPF Lausanne
A. Willauer, A. A. Oskouei, J. Moser

NMR Studies of Hierarchical Protein Dynamics [PC-113]

Baptiste Busi, EPF Lausanne
J. Yarava, A. Hofstetter, M. Geiger, H. Oshkinat, M. Blackledge, L. Emsley

Towards 2D Raman-THz spectroscopy of supercooled water [PC-114]

Gustavo Ciardi, University of Zurich
A. Berger, A. Shalit, P. Hamm

Photophysical Study of Perovskite Organic Blends for Applications in Light Emissiting Diodes [PC-115]

Nikolaos Droseros, University of Fribourg
G. Longo, H. J. Bolink, N. Banerji

Mechanistic elucidation on the stability of SnO₂ NPs under electrochemical CO₂ reduction condition: An *in operando* Raman Spectroscopy study [PC-116]

Abhijit Dutta*, University of Bern
A. Kuzume, V. Kaliginedi, M. Rahaman, S. Vesztergom, P. Broekmann

Binding Properties of Polymer Nanoparticles Encapsulating Porphyrinic Photosensitizers [PC-117]

Ilche Gjurovski, University of Bern
L. Sauser, J. Furrer, M. Vermathen

Fast data sorting to distinguish unique single molecular break junction trajectories [PC-118]

Joseph Hamill, University of Bern
M. Arenz

Quantum Logic Spectroscopy for Single Trapped Molecular Ions [PC-119]

Gregor Hegi, University of Basel
K. Najafian, M. Sinhal, Z. Meir, I. Sergachev, S. Willitsch

**Physical Chemistry [PC]
Poster Session****More than a solvent: donor-acceptor complexes of room-temperature ionic liquids and electron acceptors [PC-101]**

Alexander Aster, University of Geneva
E. Vauthey

Combined spectroscopic studies of functionalized clusters for ion sensing [PC-102]

Ani Baghdasaryan, University Children's Hospital Zurich

Donor Effect on Photo-induced Electron Injection Process in D-π-A Type Diketopyrrolopyrrole Dyes on TiO₂ Surface [PC-103]

Heewon Bahng, EPF Lausanne
J. Moser

Crystal Structure Prediction and NMR Powder Crystallography [PC-104]

Martins Balodis, EPF Lausanne
A. Hofstetter, F. M. Paruzzo, G. Stevanato, A. C. Pinon, C. Widifield, P. Bygrave, G. M. Day, L. Emsley

Excited-State Dynamics of Radical Ions [PC-105]

Joseph Beckwith, University of Geneva
B. Lang, A. Rosspeintner, E. Vauthey

Improving the sensitivity of DNP NMR of microcrystalline solids by flip-back recovery of bulk proton magnetization [PC-106]

Snaedis Björgvinsdóttir, EPF Lausanne
B. J. Walder, J. Yarava, L. Emsley

High Resolution Gigahertz and Terahertz Spectroscopy and Theory of Parity Violation and Tunneling for 1,2-dithiine

Unravelling the Atomic-level Structure of Calcium Silicate Hydrate [PC-120]

Albert Hofstetter, EPF Lausanne

A. Kumar, B. J. Walder, A. K. Mohamed, B. Srinivasan, A. J. Rossini, K. Scrivener, L. Emsley, P. Bowen, L. Emsley

Light induced conformational isomerisation of helical photo-switchable S-peptide and perturbation of S-protein/S-peptide complex [PC-121]

Brankica Janković, University of Zurich

C. Zanobini, O. Božović, P. Johnson, P. Hamm

 $\text{Au}_{38}\text{Cu}_1(\text{SC}_2\text{H}_4\text{Ph})_{24}$ Nanoclusters: Synthesis, Enantioseparation and Luminescence [PC-122]

Rania Kazan, University of Geneva

B. Zhang, T. Bürgi

Mechanistic studies of conformationally controlled ionic cycloadditions and state selective reactions [PC-123]

Ardita Kilaj, University of Basel

H. Gao, D. Rösch, U. Rivero, J. Küpper, S. Willitsch

THz Emission Spectroscopy on organic semiconductors [PC-124]

Philipp Krauspe, University of Bern

M. Causa, J. Brauer, D. Tsokkou, N. Banerji

Correlation Between Charge Carrier Lifetimes and Cation Dynamics in Mixed Double A-Cation Lead Halide Perovskites Revealed by Solid-state NMR [PC-125]

Dominik Kubicki, EPF Lausanne

D. Prochowicz, P. Péchy, S. M. Zakeeruddin, M. Grätzel, L. Emsley

An Excited-State Proton Transfer Disentangled by fs Broad-band Spectroscopies [PC-126]

Tatu Kumpulainen, University of Geneva

A. Rosspeintner, B. Dereka, E. Vauthey

The Study of Electrolytes for Li-Air Batteries [PC-127]

Nam Hee Kwon, University of Fribourg

Y. Sheima, K. M. Fromm

A Mechanosensitive Dye as Surface Second Harmonic Generation Probe of Biomimetic Interfaces [PC-128]

Giuseppe Licari, University of Geneva

Carbon coating for nano-rattle Sn@C composite anode material for alkali metal ion batteries [PC-129]

Sivarajakumar Maharajan, University of Fribourg

N. H. Kwon, K. M. Fromm

Bimolecular Photoinduced Electron Transfer: the effect of the reorganization energy [PC-130]

Christoph Nançoz, University of Geneva

A. Rosspeintner, E. Vauthey

Molecular Insights on the 3D Lipid Monolayers of Lipid Droplet Organelle [PC-131]

Halil Okur, EPF Lausanne

Y. Chen, N. Smolentsev, S. Roke

Application of Reactive Molecular Dynamics on Astrochemical interest systems. [PC-132]

Marco Pezzella, University of Basel

Using pulsed EPR dipolar spectroscopy for the coarse-grained localisation of a residue in the intrinsically disordered domain of hnRNP A1 [PC-135]

Irina Ritsch, ETH Zurich

M. Yulikov, E. Lehmann, F. Allain, G. Jeschke

How good is the generalized Langevin equation to describe the dynamics of photo-induced electron transfer in fluid solution? [PC-136]

Arnulf Rosspeintner, University of Geneva

G. Angulo, P. Pasitsuparoad, J. Jedrak, A. Ochab-Marcinak, C. Radzewicz, P. Wnuk, E. Vauthey

The interfacial structure of water droplets in a hydrophobic liquid [PC-137]

Nikolay Smolentsev, EPF Lausanne

W. J. Smit, H. J. Bakker, S. Roke

Investigating Excited-State Symmetry Breaking in Quadrupolar Compounds using Time-resolved Infrared spectroscopy. [PC-138]

Magnus Söderberg, University of Geneva

E. Vauthey

On the Photoelectron Spectrum and Heat of Formation of the *meta*-Xylylene Biradical [PC-139]

Mathias Steglich, Paul Scherrer Institute

P. Hemberger, V. B. Custodis, A. Trevitt, G. daSilva, A. Bodí

Radical geometry: a key to efficient Dynamic Nuclear Polarization. [PC-140]

Gabriele Stevanato, EPF Lausanne

D. J. Kubicki, L. Emsley

Conformational effects in radical reactions [PC-141]

Patrik Stranak, University of Basel

L. Ploenes, H. Gao, S. Willitsch

Computational modeling of band gaps in perovskites [PC-142]

Olga Syzgantseva, EPF Lausanne

U. Röthlisberger

Characterization of the Platinum/liquid (gas) Catalytic Interface [PC-143]

Gökçen Tek, University of Zurich

D. Paleček, P. Hamm

DNP Jelly [PC-144]

Jasmine Viger-Gravel, EPF Lausanne

P. Berruyer, D. Gajan, J. Basset, A. Lesage, P. Tordo, O. Ouari, L. Emsley

Cold ion-molecule collisions in a cryogenic hybrid trap [PC-145]

Claudio von Planta, University of Basel

D. Haas, D. Zhang, S. Y. van de Meerakker, S. Willitsch

In-situ studies on the early stages of calcium carbonate nucleation from supersaturated micro droplets. [PC-146]

Jacinta Xto, Paul Scherrer Institute

K. Henzler, C. Borca, J. A. van Bokhoven, T. Huthwelker

Ionic Liquids based on Crown Ethers as electrolytes additives for batteries [PC-147]

Hervé Yao, University of Fribourg

K. M. Fromm

Studying Synthetic DNA using Molecular Dynamics Simulations [PC-148]

Polydefkis Diamantis, EPF Lausanne

U. Röthlisberger

Electronic structure calculations of Br-based halide perovskites [PC-149]

Marko Mladenovic, EPF Lausanne

J. Wiktor, A. Pasquarello, U. Röthlisberger

Polymers, Colloids & Interfaces [PI]
Poster Session

Ag nanoencapsulation for antimicrobial coatings [PI-101]

Sarah-Luise Abram, University of Fribourg

N. Héault, J. Widmer, J. Wagner, L. Horváth, K. M. Fromm, C. Bourquin

Synthesis of (FA/Cs)Pb(Br/I)₃ Perovskite Nanocrystals with Controlled Emission Properties through Adaptive Sampling in a Microfluidic Reactor [PI-102]

Léonard Bezinge, ETH Zurich

R. Maceiczyk, A. deMello

Formation of functionalizable DNA sheets via phenanthrene sticky ends [PI-103]

Caroline Bösch, University of Bern

S. M. Langenegger, R. Häner

Homoconjugation in Poly(Phenylene Methlene)s [PI-104]

Andreas Braendle, ETH Zurich

A. Perevedentsev, N. J. Cheetham, P. N. Stavrinou, J. A. Schachner, N. C. Mösch-Zanetti, M. Niederberger, W. R. Caseri

Colloidal synthesis approach for energy conversion electro-catalysts [PI-105]

Jan Bucher, University of Bern

M. Arenz

Cryo 3D printed nanofiber based aerogels [PI-106]

Tobias Burger, Zurich University of Applied Sciences

C. Adlhart

DNA functionalized supramolecular nanosheets [PI-107]

Nutcha Bürki, University of Bern

Y. Cotelle, S. M. Langenegger, R. Häner

Side-group modified high permittivity silicone elastomers for dielectric elastomer actuators [PI-108]

Philip Caspari, EPF Lausanne

F. A. Nüesch, D. M. Opris, S. J. Duenki, Y. Sheima, D. M. Opris

Investigating the extended hydration of a polyelectrolyte with second-harmonic scattering [PI-109]

Jan Dedic, EPF Lausanne

H. I. Okur, S. Roke

Direct access to primary amines and particle morphology control in nanoporous CO₂ sorbents [PI-110]

Nesibe Dogan, Korea Advanced Institute of Science and Technology, KAIST

E. Ozdemir, C. T. Yavuz

Biomimetic engineering of stimuli responsive artificial cell organelle membranes [PI-111]

Tomaž Einfalt, University of Basel

D. Witzigmann, A. Najar, S. Sieber, R. Goers, C. G. Palivan, J. Huwyler

Biopolymer-silica aerogel nanocomposites with improved thermo-mechanical properties [PI-112]

Zhao Fei, Empa

T. Budtova, W. M. Risen, W. J. Malfait, M. M. Koebel

The effect of hard phase crystallization on the microphase segregation of supramolecular polymers [PI-113]

Anne-Cécile Ferahian, University of Fribourg

S. Balog, C. Weder, L. Montero de Espinosa

Characterization of nanomotors behaviour by Fluorescence Correlation Spectroscopy [PI-114]

Florian Guignard, University of Fribourg

F. Begarani, M. Lattuada, F. Cardarelli

IL@PZS Nanocomposites as Catalysts for CO₂ Conversion [PI-115]

Zhang Huang, EPF Lausanne

Z. F. Fei, Q. H. Lu, P. J. Dyson

All-Atom Models of Tobermorite 11 Å and 14 Å – Benchmarks for Realistic Modelling of C-S-H [PI-116]

Tariq Jamil, University of Colorado Boulder, USA

R. K. Mishra, R. J. Flatt, H. Heinz

Multilayered Vesicles Formed by Polyaromatic Oligoamines [PI-117]

Jovana Jevrić, University of Bern

S. M. Langenegger, R. Häner

On the “soft template” effect of an enzymatic oligomerization reaction [PI-118]

Keita Kashima, ETH Zurich

T. Fujisaki, S. Luginbühl, G. Čirić-Marjanović, P. Walde

Increasing the Energy Transfer Efficiency of DNA-Photonic Wires with Light-Harvesting Supramolecular Polymers [PI-119]

Mariusz Kownacki, University of Bern

S. M. Langenegger, R. Häner

Low Temperature Wet Conformal Metal Silicide Deposition for Transistor Technology through an Organometallic Approach [PI-120]

Tsung-Han Lin, ETH Zurich

T. Margossian, M. De Marchi, M. Thammasack, S. Kumar, C. Shih, G. De Micheli, D. Baudouin, P. Gaillardon, C. Serba

Multidisciplinary Method Development to Characterize and Quantify SiO₂ Nanoparticle Degradation in Complex Matrices [PI-121]

Mattia Maceroni, University of Fribourg

D. Bossert, L. Rodriguez-Lorenzo, D. A. Urban, A. Petri-Fink, B. Rothen-Rutishauser, F. Schwab

Magnetically controlled structure of silica monoliths for increased mechanical properties [PI-122]

Joelle Medinger, University of Fribourg

Porous, ultralight 3D tubular scaffolds from short electrospun nanofibers [PI-123]

Markus Merk, Zurich University of Applied Sciences

C. Adlhart

Selective Modification of Snowman type Janus nanoparticles with Polypyrrole [PI-124]

Voichita. Mihali, Zurich University of Applied Sciences

A. Honciuc

Removing cationic dyes from wastewaters using 3-Dimensional bio-based nanofiber aerogel [PI-126]

Sara Mousavi, Zurich University of Applied Sciences

C. Adlhart

Improving the properties of alginate-based hydrogels by functionalization with bioactive ingredients [PI-127]

François Noverraz, EPF Lausanne

L. Szabó, S. Passemard, C. Wandrey, S. Gerber-Lemaire

High permittivity thin elastomer films for low voltage actuators [PI-128]

Dorina Opris, Empa

Y. Sheima, S. J. Duenki, F. A. Nüesch, D. M. Opris

Design of stimuli-responsive surfaces through layer-by-layer assembly for biomedical application [PI-129]

Alina Osypova, Empa
C. Pradier, J. Landoulsi, S. Demoustier

Polyamides Comprising π -Conjugated Segments [PI-130]

Bilal Özen, EPF Lausanne
H. Frauenrath

Polymer brushes on silicon: promising applications as electrochemical capacitors [PI-131]

Guido Panzarasa, Empa

Positron annihilation spectroscopy: a powerful approach for the advanced characterization of polymer brushes [PI-132]

Guido Panzarasa, Empa

Entrapment of ROS Generating Quinones in Stimuli-Responsive Peptide Beads [PI-133]

Pascal Richard, University of Basel
J. Gaitzsch, I. Craciun, L. Weiner, C. G. Palivan

Ring-opening polymerization for 100% renewables-based Polyethylene Furanoate (PEF) towards the Green Bottle [PI-134]

Jan-Georg Rosenboom, ETH Zurich
P. Fleckenstein, G. Storti, M. Morbidelli

Self-Assembly Studies of Anthracene-Containing Oligomers [PI-135]

Mattia Sabetti, University of Bern
R. Häner

Hydrogel preparation using polyethylene glycol potassium acyltrifluoroborates (PEG-KAT) and amine containing molecules as chemical-cross linkers. [PI-136]

Dominik Schauenbrug, ETH Zurich
A. Osuna Galvez, J. W. Bode

Reactive Hexayne Precursors for Microfluidic Production of Carbon Microcapsules [PI-138]

Bjoern Schulte, EPF Lausanne
V. Croué, E. Bomal, E. Amstad, H. Frauenrath

Electrovariable Nanoplasmonics at Liquid-Liquid Interfaces: the Case of Marangoni Shutters [PI-139]

Evgeny Smirnov, EPF Lausanne
P. Peljo, H. H. Girault

Functionalization of Sodium Alginate Hydrogels for Cell Microencapsulation [PI-140]

Luca Szabo, EPF Lausanne
S. Passemar, F. Noverraz, E. Montanari, L. Bühler, C. Wandrey, S. Gerber-Lemaire

Ion specificity on the dynamics of ion-induced surface charge asymmetry of freestanding lipid membranes [PI-141]

Orly Tarun, EPF Lausanne
H. I. Okur, S. Roke

Designing artificial soft materials exhibiting mechanochemical activity [PI-142]

Mykhailo Vybornyi, Eindhoven University of Technology
E. W. Meijer

Kinetics of Monoclonal Antibody Aggregation - Going From Elevated Towards Lower Temperatures [PI-143]

Ruben Wälchli, ETH Zurich
J. Massant, E. Norrant, M. Morbidelli

Surface Energy of Janus Nanoparticles and Their Application in Pickering Emulsions Polymerization [PI-144]

Dalin Wu, Zurich University of Applied Sciences
A. Honciuc

Increased heat stability of α -chymotrypsin through its confinement in liposomes [PI-145]

Makoto Yoshimoto, Yamaguchi University
J. Yamada, K. Mizoguchi, P. Walde

The selective transport of functional nanocarriers into cell nuclei via nuclear pore complexes [PI-146]

Christina Zelmer, University of Basel

Pseudomorphic transformation of SBA-15 and SBA-16 [PI-148]

Nicola Zucchetto, Zurich University of Applied Sciences
D. Brühwiler

The complete program and all abstracts are available as interactive application on <http://scg.ch/fallmeeting/2017>



ChemEdu'17

Symposium & Workshops

UniBE, VonRoll Areal

22nd August 2017



SCS
Swiss Chemical Society

FUTURE OF CHEMICAL EDUCATION (CHEMEDU'17)

Organized by the SCS Division of Chemical Education
 22nd August 2017, 08:30–17:30, vonRoll Areal, B6.004
 ChemEdu ist eine Plattform, um in der Schweiz den horizontalen und vertikalen Austausch unter Chemielehrpersonen zu stärken, Einblicke in aktuelle Forschungsthemen zu erhalten und den Dialog zu den in der Forschung oder Industrie tätigen Chemikerinnen und Chemikern zu ermöglichen. Die Inhalte dieser Weiterbildung sollen den Chemieunterricht der Zukunft bereichern und ergänzen.

Programm

08:30	Einschreiben Kaffee und Gipfeli
09:00	Begrüssung
09:10	Prof. Matthias Arenz , University of Bern «Die Bedeutung der Katalyse für unsere Gesellschaft»
10:00	Dr. Werner Bernhard , Institut für Rechtsmedizin, Universität Bern «Aktuelles aus der forensischen Chemie: Alkohol, Hanf und Toxikologie von Drogen»
10:50	Pause
11:15	Prof. Timothy Eglinton , ETH Zurich «The Importance of Chemistry in Earth Sciences Research and Education»
12:15	Dr. Thomas Seilnacht , Seilnacht Verlag & Atelier, Bern «Sicheres Experimentieren mit Schülerinnen und Schülern im kompetenzorientierten Unterricht»
13:00	Mittagspause
13:15	Poster Session des SCS Fall Meetings Ausstellung: Experimente, vor B8.C301

Workshop-Sessions A-E

A. Primarschule (Raum B8.C304)
14:15 Dr. Thomas Berset : Fragenbasiertes Lernen mit Chemie auf der Primarstufe
B. Lehrmittel (Raum C301)
14:15 Roger Deuber und Prof. Günter Baars : Kraft, Energie und Wahrscheinlichkeit – Schlüsselbegriffe im neuen Chemie Lehrbuch des hep-Verlags für Gymnasien – Präsentation und Diskussion
C. Unterrichtsideen (Raum B8.C302)
14:15 C1. Martin Schwarz : Chemie an der BMS
15:05 C2. Dr. Amadeus Bärtsch : Stöchiometrie – Unterrichtsideen für ein trockenes Thema

D. Unterrichtsmedien (Raum B8.C305)

- 14:15 D1. **Dr. Markus Müller**: Chemistry Cube Game
- 15:05 D2. **Dr. Markus Schudel**: Einsatz eines Tablets im Chemieunterricht – Ein Praxisbericht mit Anregungen

E. Instrumentalanalytik im Chemieunterricht (Raum B8.C101)

- 14:15 E1. **Dr. Juraj Lipscher**: Modernste chemische und physikalische Methoden zur Untersuchung von Gemälden
- 15:05 E2. **Prof. Clemens Koch**: VIS-Spektrometrie im Chemieunterricht – Unterrichtsbeispiele
- 15:50 Ausstellung: Experimente, freie Besichtigung Building 8, vor C301
- 16:20 Pause
- 16:40 **Dr. Werner Bernhard**, Institut für Rechtsmedizin, Universität Bern
«Vor-Ort-Detektion von Drogen und Sprengstoff»
- 17:30 Ende Symposium
- 18:30 Abendessen (Anmeldung obligatorisch)

Primarschulchemie – chemische Tischexperimente für das Schulzimmer

Einfache Tischexperimente, die sich insbesondere für die Primar- und die Sekundarstufe eignen:

- „Chemie für dich und mich“ (simplyscience.ch)
- Samino-Kisten mit chemischen Experimenten für die Primarschule (Ingold Verlag)
- Säure/Base-Reaktionen mit einem Mittel gegen Magenübersäuerung
- Einfachste Batterien
- Elektrostatik
- Rosten
- Bärlappsporen und Wasser
- Wachs schmelzen und ersticken lassen (-> Anwendung: Wachspräparate mit Schüler/innen selber herstellen)
- Superabsorber in Windeln
- Einen Kältebeutel selber herstellen
- Karotten und Randen in Wasser und Öl
- Tinte in Leitungswasser bzw. Salzwasser bzw. Zuckerwasser
- Salat in Leitungswasser bzw. Salzwasser bzw. Zuckerwasser
- Zuckerwürfel mit/ohne Asche verbrennen
- Zucker auflösen und kristallisieren
- Filzstiftchromatografie im forschend entdeckenden Lernen
- Teeblätter in Mineralwasser
- Duftschokolade
- Neocoloroberflächen / Papieroberflächen in Wasser und Öl
- Kerzenflamme – Wachsdampf entzünden
- Eiswürfel schmelzen

Detaillierte Inhalte der Vorträge und Workshops
 Online auf <http://scg.ch/chemedu/2017>

Anmeldung und Kosten

Online-Anmeldung auf <http://scg.ch/chemedu/2017>
Kurzfristige Anmeldungen am Symposiumstag sind möglich,
müssen aber vorgängig dem Konferenzsekretariat gemeldet werden.

- Gebühren für SCG-Mitglieder: kostenfrei
- Gebühren für Nicht-SCG-Mitglieder: CHF 50.00
- Kosten für das fakultative Nachtessen: CHF 60.00

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