



## ANNUAL REPORT 2018

Published in CHIMIA Volume 73, No 1-2/2019

### Introduction and Strategy

After an intense evaluation phase in 2017 including input from external stakeholders, we initialized in 2018 different initiatives to further strengthen the position of the SCS in Switzerland. The goal is to keep our core competences in the traditional fields of chemistry but to broaden the scope and to link new areas to the Society. Such fields are:

- Green & Sustainable Chemistry;
- Environmental Sciences;
- Intellectual Property in Chemical and Pharmaceutical Industry;
- Artificial Intelligence in Chemical Research;

Furthermore, we continued our efforts to enrich our event portfolio and partnered for many events in Switzerland and the near abroad. Together with the traditional SCS events and the incorporated events of the past three years, we offer now a very diverse program with annual or bi-annual activities.

Please enjoy reading through the 2018 annual report that shows again a very active and lively society.

Dr. Alain De Mesmaeker  
President

David Spichiger  
Executive Director

### Overview of the SCG Events 2018

David Spichiger

- |               |   |
|---------------|---|
| 26.–28.01.    | Swiss Snow Symposium, Saas-Fee                              |
| 06.04.        | SCS Spring Meeting, Neuchâtel                               |
| 12.–13.04.    | CHanalysis, Beatenberg                                      |
| 29.04.–03.05. | Bürgenstock Conference, Brunnen                             |
| 14.05.        | DMCCB Basel Symposium, Basel                                |
| 13.–15.06.    | SCS Seminar 18/1, Interlaken                                |
| 07.09.        | SCS Fall Meeting, EPFL Lausanne                             |
| 03.–04.10.    | ILMAC Lausanne, Lausanne                                    |
| 04.10.        | Clariant Chemistry Day, Basel                               |
| 05.10.        | PolyColl, Lausanne  |
| 07.–12.10.    | 13. Swiss Course on Medicinal Chemistry, Leysin             |
| 09.10.        | Artificial Intelligence in Chemical Research, Stein         |
| 19.10.        | 2 <sup>nd</sup> Swiss Industrial Chemistry Symposium, Basel |

### SCS Award Winners 2018

[scg.ch/awards](http://scg.ch/awards)

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The SCS awarded six individuals and one group of scientists for their outstanding contributions. A total sum of CHF 80'000 as well as medals and award certificates were given to the prize winners.

#### Paracelsus Award 2018

CHF 20'000; awarded to scholars who have produced outstanding scientific research in the field of chemistry at an international level. The award was given to



**Prof. Ruedi Aebersold,**  
ETH Zurich,

for his exceptional and visionary contributions to the field of proteomics in general and to the fields of analytical chemistry, protein chemistry, and mass spectrometry specifically.

The prize was given on the occasion of the SCS Fall Meeting in Lausanne on September 7, 2018.

#### Werner Prize

CHF 10'000 and medal in bronze; awarded to a promising young scientist for outstanding independent chemical research. The award was given to



**Prof. Sandra Luber,**

University of Zurich, for her excellent research accomplishments in the field of theoretical and computational chemistry. Her work covers a wide range of approaches, mostly with emphasis on highly accurate methods derived from quantum mechanics, which she has applied to a

wide variety of challenging systems.

The prize was given on the occasion of the SCS Spring Meeting in Neuchâtel on April 6, 2018.

#### SISF-SCS Distinguished Industrial Investigator Award

The prize is given to honor senior scientists for their lifetime achievements in chemical research. The winner receives a certificate and a cash check of CHF 15'000.



**Dr. Paul W. Manley,**

Novartis Pharmaceuticals AG, Basel, for his impressive track record of success as a medicinal chemist, including 31 years in Basel at Sandoz/Novartis, working in several disease areas and on multiple classes of drug targets, including the invention of the commercial antileukemia drug Nilotinib.

### SISF-SCS Senior Industrial Investigator Award

The prize is given to honor very successful and established investigators with outstanding achievements over many years. The winner receives a certificate and a cash check of CHF 10'000.



**Dr. Clemens Lamberth,** for his impressive track record of success in the field of fungicide research within Crop Protection, including the invention of the fungicide Mandipropamid (Revus®, Pergado®).

The two SISF-SCS award lectures took place on the occasion of the SCS Fall Meeting in Lausanne on September 7, 2018.

### Sandmeyer Award

CHF 20'000; awarded to a person or to a group for outstanding work in industrial or applied chemistry.



The SCS awarded the prize 2018 to the team from Syngenta Crop Protection AG, Stein (AG), namely

**Dr. Raymonde Fonné-Pfister, Dr. Claudio Screpanti, Dr. Alain De Mesmaeker and Dr. Harro Bouwmeester,** University of Amsterdam,

for their pioneering work on Strigolactones that can be considered a collaboration masterpiece between Industry and Academia to explore novel area of this phytohormonal family.

The award lecture was given at the Fall Meeting on September 7, 2018.

### Balmer Prize

CHF 2'000 for individuals and CHF 2'000 for the school's chemistry department. SCS awarded



**Dr. Thibaud Rossel,** Gymnase français de Bienne, École de Maturité, Spécialisée, for his very original and impressive research program at the Gymnase Français where he teaches using simple methods and resources and, even more impressively, the experiments are shared with high-school students, who are

happy to carry out original research work as part of their training in chemistry.

The award was given on the occasion of the VSN-Zentralkurs Chemie in Solothurn on October 17, 2018.

### Dr. Max Lüthi Award

CHF 1'000 and medal in bronze; presented for an outstanding diploma thesis in Chemistry conducted at a Swiss University of Applied Sciences. SCS awarded



**Ms. Fabienne Arn,** ZHAW Wädenswil, for her excellent Bachelor diploma thesis entitled «Strukturelle Optimierung eines Matrixmetalloproteinase-13-Inhibitors»

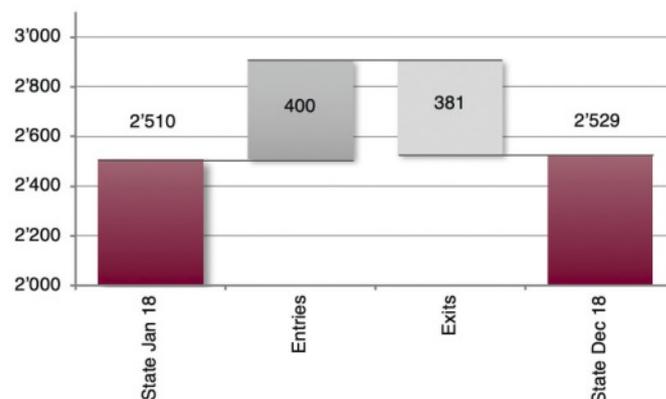
The award was given on the occasion of the TEDD Annual Meeting 2018 in Wädenswil on October 25, 2018.

### Member Statistics (December 2018)

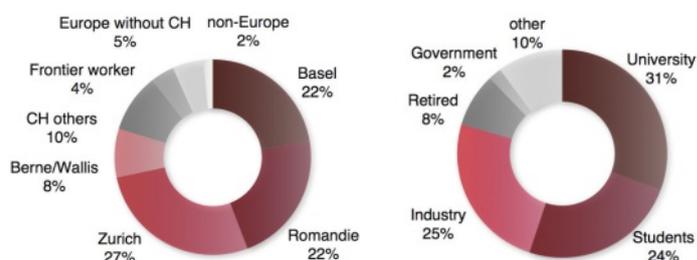
[scg.ch/membership](http://scg.ch/membership)

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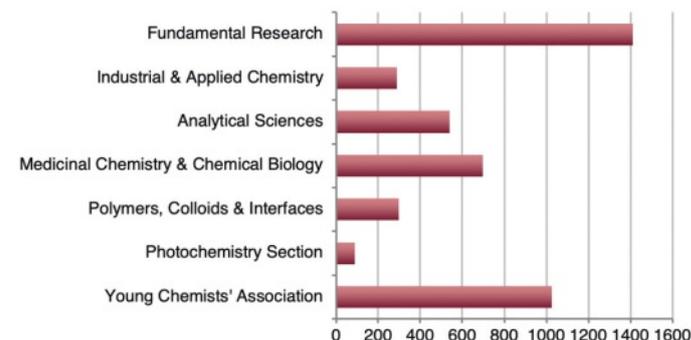
Development of members 2018: +19



### Members per region and profession



Members per SCS Division (multiple subscription per member are possible)



### Executive Board and Board of Directors

David Spichiger

#### Executive Board ExB

*Dr. Alain De Mesmaeker,* Syngenta Crop Protection AG

SCS President

*Prof. Christian Bochet,* University of Fribourg

SCS Vice President

*Dr. Roland Kunz,* University of Zurich

President CHIMIA

*Dr. Hans Peter Lüthi,* ETH Zurich

SCS Treasurer

*David Spichiger,* Swiss Chemical Society

SCS Executive Director

Roland Kunz stepped down as President of CHIMIA at the end of 2018 and Gillian Harvey took over the mandate.

**Board of Directors BoD** (in addition to the ExB members)

*Prof. Roger Alberto*, University of Zurich  
President Division of Fundamental Research  
*Dr. Yves Auberson*, Novartis Pharma AG  
President Division of Medicinal Chemistry & Chemical Biology  
*Prof. Christophe Copéret*, ETH Zurich  
Resort national and international relations  
*Prof. Sandrine Gerber*, EPF Lausanne  
Member of the board  
*Prof. Christian Hinderling*, ZHAW  
President Division of Polymers, Colloids & Interfaces  
*Dr. Marc J. Suter*, Eawag, Dübendorf  
President Division of Analytical Sciences  
*Prof. Antonio Togni*, ETH Zurich  
President Division of Chemical Education  
*Dr. Bernhard Urwyler*, Syngenta Crop Protection AG (new)  
President Division of Industrial & Applied Chemistry  
*Dr. Martin Vollmer*, Clariant International Ltd  
Member of the board

**Principal Supporters of the Swiss Chemical Society and the SCS Foundation**

Our most sincere thanks go to our main sponsors for their generous support. In addition, we like also to thank all our divisional event sponsors that supported the SCS during the year. The principal supporters were:

- SISF, Swiss Industry Science Fund (Novartis, Roche, BASF, Syngenta):
  - General supporter of the SCS;
  - Support of the award program (Paracelsus Prize, Werner Prize, Balmer Prize, SISF-SCS Awards);
  - Support of divisional events;
- Idorsia Pharmaceuticals Ltd (Actelion): Project sponsor of the SCS Foundation and support of divisional events.
- Metrohm Foundation: Sponsor of the Best Oral Presentation Awards at the Fall Meeting.
- DSM Nutritional Products SA: Sponsor of the Best Poster Awards at the Fall Meeting.
- Swiss Academy of Natural Sciences (SCNAT) and Swiss Academy of Technical Sciences (SATW): project and event sponsors.
- BASF, Firmenich, Givaudan, Lonza, Novartis, Roche, Syngenta: Supporters of the Alfred Werner Master Scholarships.
- Clariant: Organizer of the Clariant Chemistry Day and sponsor of the Clariant CleanTech Award Switzerland

**Society's activities and Head Office**

www.scg.ch  
*David Spichiger*

**ChemPubSoc Europe**

In its fifth year as a full member of the ChemPubSoc community the SCS could profit again from a respectable royalty payment of *Chemistry a European Journal* and other ChemPubSoc Journals as well as from the ChemPubSoc conference grant.



SCS hosted the annual ChemPubSoc meeting in Bern on June 15–16, 2018, including a dinner in the Restaurant Rosengarten, that was very much appreciated by the delegates.

SCS holds 5% of shares of *Chemistry – A European Journal* and participates as co-owner of *ChemElectroChem*, *ChemPlusChem*, *ChemistryOpen*, *ChemCatChem*, *ChemPhotoChem*, *Batteries & Supercaps* and *Chemistry Select*.

SCS supported the marketing initiatives of ChemPubSoc on its website, during SCS events and in CHIMIA.

**Helvetica – A Journal of the Swiss Chemical Society**

In year one after the 100<sup>th</sup> anniversary and in the 3<sup>rd</sup> year after the relaunch *Helvetica* registered an encouraging increase of Swiss contributions. However, the total number of published articles needs to be increased to ensure a sustainable development.

SCS signed a new contract with Willey-VHCA to underline the commitment of both parties to further push the journal and to strengthen the relationship.

As one of the major issues, *Helvetica* will have to adapt to the new guidelines from the European research funding organizations and their approach of a full Open Access publishing world.

**SCS Conference on Stereochemistry 2018**

For the second time, the traditional and renowned conference in Brunnen was under the patronage of the Swiss Chemical Society.

From April 29–May 3, 2018, a total of 111 researcher from 19 nations participated in the conference and listened to the 13 lectures.

Under the masterful direction of president Ilan Marek, Technion – Israel Institute of Technology, the unwritten theme of this year's meeting seemed to be “science meets art”. It was in this spirit, and thanks to the hard work of the organizing committee – Christian Bochet, Alain de Mesmaeker, Fabrice Gallou, and Cristina Nevado – that the 53<sup>rd</sup> Edition was a showcase of cutting-edge chemistry, ranging from the fundamental to the applicative; from the elegantly simple to the beautifully complex.

Main speakers of the 2018 edition were

- Helmut Schwarz, Technische Universität Berlin
- James P. Morken, Boston College
- Nuno Maulide, University of Vienna
- Shigehiro Yamaguchi, Nagoya University
- Andreas Marx, University of Konstanz
- Helma Wennemers, ETH Zurich
- Ashraf Brik, Technion
- Rubén Martín, ICIQ Catalonia
- Ang Li, SIOC
- Odile Eisenstein, Université de Montpellier/University of Oslo
- Philippe Renaud, Bern University
- Jonathan Nitschke, University of Cambridge
- Omar M. Yaghi, University of California Berkeley.

The next conference will take place in Brunnen from May 5–9, 2019. A conference report was published in *CHIMIA 2018*, 72(6), 436.



Organizers and Speakers of the Bürgenstock Conference 2018

### SCS at ILMAC Lausanne 2018

The necessity of a trade show in Lausanne is based on the strong position of the French-speaking part of Switzerland in the sectors of chemistry, biotechnology and laboratory in general. After a very successful launch of the fair in 2017, the second edition on October 3–4, 2018, was also a great success. As partner of ILMAC, SCS organized the forum program on the first fair day. BioAlps organized the forum on the second day.

PAT Symposium organized by SCS; [ilmac.ch/lausanne](http://ilmac.ch/lausanne)

### ILMAC Forum organized by the SCS: Wed, October 3, 2018

«SCS Symposium on Process Analytical Technology (PAT)»  
Five experts from the chemical and pharmaceutical production talked about their experiences and how PAT was implemented in their companies and what the impact is.

Chair: Tobias Merz, Lonza AG

Speakers: Volker Kehlenbeck, Nestlé, Marc Michaelis, Hüttlin GmbH, Samd Guizani, Ferring Pharmaceuticals, Helge Engelking, Lonza AG, Michal Dabros, HES-SO, Fribourg, Bernd Heinen, JMP Software/SAS Institute.

A conference report was published in *CHIMIA* 2018, 72(11), 824.

### Clariant Chemistry Day 2018

Clariant, in collaboration with University of Basel and the SCS, has once again honored outstanding scientific achievements in the field of Clean Technologies and Sustainable Chemistry at the fourth Clariant Chemistry Day by presenting its CleanTech Award. The top prize was awarded to Ydna Marie Questell-Santiago, EPFL Lausanne, for her scientific work on new routes to carbohydrates and derivatives derived from biomass. Runner-up prizes were awarded to Amita Ummadisingu, EPFL Lausanne, Erwin Lam, ETH Zurich, as well as Jan-Georg Rosenboom and Dr. Peter Fleckenstein, ETH Zurich.

As the winner of the Clariant Chemistry Award at University of Basel, Rajesh Mannancherry was awarded for his research on all-carbon ‘Geländer’ structures.

Prof. Paul Dyson, EPFL Lausanne, as invited guest and the lecturers from Clariant, Marvin Estenfelder, Markus Rarbach and Tobias Platen completed the program.

A conference report was published in *CHIMIA* 2018, 72(12), 908.



Award winners and organizing committee. © Clariant AG

### Head Office Event Support

In 2018 the head office further developed the support for divisional conferences and events and provided financial services, communication support (e.g. flyers, newsletters, forms and webpages) as well as legal advice and general consulting for 12 events.



### CHIMIA

[www.chimia.ch](http://www.chimia.ch),

[www.ingentaconnect.com/content/scs/chimia](http://www.ingentaconnect.com/content/scs/chimia)

Dr. Roland Kunz, Chairman of the Editorial Board

This year's issues were again organized and supervised by recognized specialists. It is with great pleasure that I thank them all for their voluntary work. Our guest editors in 2018 in the order of their appearance were: Hans Peter Lüthi and Antonio Togni (ETH Zurich), Xenia Beyrich-Graf (BASF SE, Ludwigshafen, Germany), Hans Peter Lüthi (ETH Zurich) and Silvio Decurtins (University of Bern), E. Peter Kündig (University of Geneva), Jürgen Stohner (ZHAW, Wädenswil) and Martin Quack (ETH Zurich), Alain de Mesmaeker (Syngenta Crop Protection, Stein), Clément Mazet (University of Geneva), Stefan Bieri (Official Food Control Authority of the Canton Vaud), Nicolas Winssinger (University of Geneva), Masahiro Murakami (University of Kyoto, Japan).

In 2018 (volume 72) the following 10 issues were published:

- 1-2 Chemical Education
- 3 Quality Aspects in Industrial Chemistry
- 4 Laureates: Junior Prizes of the SCS Fall Meeting 2017
- 5 News from New Chemistry Professors in Switzerland
- 6 Chirality Symmetries and Asymmetries
- 7-8 SCS Laureates and Awards & Fall Meeting 2018

- 9 Organometallics and Catalysis
- 10 Food Analysis: Meat and Meat Products
- 11 Bioorthogonal Chemistry
- 12 Chemistry Ties Linking Japan to Switzerland

The program and the laureate articles of the SCS Fall Meeting as well as a report of the SCS Spring Meeting were again the annually recurring fix points in the editorial program. The two new regular columns Medicinal Chemistry and Chemical Biology Highlights and Chemical Education started in the course of 2018. These, together with the conference reports and the well-established columns Swiss Science Concentrates, Highlights of Analytical Chemistry, Highlights in Polymer and Colloids Chemistry, the contributions from the Universities of Applied Sciences, the Swiss Academy of Sciences and of Biotechnol Switzerland complement the topical part. With the two new regular columns the self-representation of the SCS and divisional activities made another leap forward.



The CHIMIA regulations no longer – after nearly 12 years since the last revision – cleanly fit into the meanwhile revised SCS by-laws nor did they properly describe the internal procedures. The CHIMIA EB therefore amended the regulations and translated them into an understandable language. This draft was with two changes approved and enacted on September 7, 2018 by the SCS Board of Directors. Sarah Sulzer-Mosse took over as the contact person to the CHIMIA Advisory Board. She started to revamp the AB and to align its activities along the lines defined in the regulations. In addition to these organizational adaptations further steps to the continuing optical rejuvenation of CHIMIA are already initiated.

After 16 years in various functions Roland W. Kunz stepped down from the editorial board by the end of 2018 and therefore also from the SCS Board of Directors and Executive Board. Gillian Harvey, this journal's long-term technical editor, was elected to succeed him and we are very glad that she accepted this additional appointment.

## EuChemS

[www.euchems.org](http://www.euchems.org)  
David Spichiger



## About EuChemS

EuChemS acts as a single independent voice for chemistry in Europe. EuChemS advises the European Parliament and Commission on chemistry topics and promotes excellence in European research *via* continuous collaboration with the European Research Council. EuChemS runs the biennial

European Chemistry Congress, that took place in Liverpool from August 26–30, 2018. The divisions and working parties run biennial conferences and summer schools in most areas of chemistry as well as other activities.

This year's GA discussed many of the upcoming developments and activities to be carried out by EuChemS over the next year: in particular, preparations and ideas for projects and events in celebration of the 2019 International Year of the Periodic Table (IYPT2019); the approaching launch of the EuChemS online course on Chemistry and Ethics; as well as updates on the upcoming 3<sup>rd</sup> European Employability Survey for Chemists. The latest EuChemS activities on the upcoming EU research framework programme, Horizon Europe were also presented to the General Assembly.

The board members also presented the new EuChemS logo and announced the renaming of the organization from European Chemical Sciences to European Chemical Society.



Delegates and Board Members of EuChemS at the GA 2018

In 2018 EuChemS published four Newsletters and a monthly EuChemS Brussels News Update. SCS re-published them on the SCS website and partially in CHIMIA.

SCS hosted the Executive Board meeting in Bern on June 18–19, 2018, including a dinner in the Restaurant Kornhauskeller, that was much appreciated by the board members.

## Division delegates of the Swiss Chemical Society

- *Prof. Christophe Copéret*, ETH Zurich  
Member, EuChemS Executive Board
- *Prof. Jeffrey Bode*, ETH Zurich  
Member, Division of Organic Chemistry
- *Prof. Kay Severin*, EPF Lausanne  
Member, Division of Inorganic Chemistry
- *Prof. Franka Kalma*, HESSO/IVS  
Member, Division of Analytical Chemistry
- *Dr. Corinne Jud*, Agroscope  
Member, Division of Chemistry and the Environment
- *Prof. Andreas Türlér*, PSI Villigen  
Member, Division of Nuclear and Radiochemistry
- *Dr. Thomas Gude*, SQTS/Migros  
Member, Division of Food Chemistry
- *Prof. Roland Sigel*, University of Zurich  
Member, Division of Chemistry in Life Sciences
- *Dr. Hans Peter Lüthi*, ETH Zurich  
Treasurer, Division of Computational Chemistry
- *Prof. Thomas Bürgi*, Université de Genève  
Member, Division of Physical Chemistry
- *Dr. Markus Müller*, Kanti Frauenfeld  
Member, Division of Education
- *Prof. Greta Patzke*, University of Zurich  
Member, Division of Solid State and Materials Chemistry

## Division of Fundamental Research DFR

www.scg.ch/dfr/

Prof. Roger Alberto

### SCS Spring Meeting 2018, University of Neuchâtel, April 6

The Spring Meeting 2018 was organized by Prof. Bruno Therrien (University of Neuchâtel) under the topic 'Bio-inspired Chemistry'. To meet the importance and relevance of this topic, five leading speakers were invited; Profs. Leroy Cronin, University of Glasgow UK, Tom Ward, University of Basel Switzerland, Jean-Pierre Sauvage, University of Strasbourg France, Takashi Kato, University of Tokyo Japan, Peng Yin, Wyss Institute Harvard USA. They provided the attendees with exciting presentations about this topic in a broader sense. Traditionally, the Spring Meeting is the platform for the Alfred Werner Prize which was awarded this year to Prof. Sandra Luber from the University of Zurich, Switzerland. Her award lecture gave fascinating insights into theoretical chemistry as related to light-induced water oxidation processes and was entitled "Advanced computational approaches for bio-inspired water splitting". The Spring Meeting was very well attended with participants not only from Switzerland but also from abroad.

A conference report was published in *CHIMIA* **2018**, 72(6), 432.

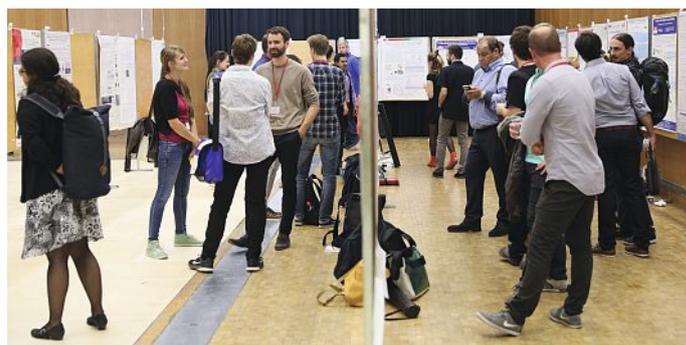


Lecture by Sandra Luber at the Spring Meeting 2018

### SCS Fall Meeting, EPFL Lausanne, September 7

The Fall Meeting is the largest event of the Swiss Chemical Society. Whereas it was extended to 1.5 days in 2017 in Bern, the duration was again one day at the Meeting in Lausanne. The two-day event will though not be given up but will be repeated in a three-year cycle. The DFR board proposed a corresponding sequence to the SCS executive board. The Fall Meeting was very well attended with about 900 national and international participants. 108 oral communications and 400 posters were presented throughout the fields of chemical research.

Plenary lectures were provided by the Sandmeyer Award recipients Drs. Raymonde Fonné-Pfister and Alain De Mesmaeker from Syngenta, by Dr. Paul W. Manley Novartis, the awardee of the SISF-SCS Distinguished Investigator Award, by Clemens Lambert from Syngenta, the winner of the SISF-SCS Senior Industrial Science Award and by Prof. Ruedi Aebersold, ETH Zurich as the Paracelsus Award recipient. The meeting was excellently organized by the local team under the chair of Prof. Sandrine Gerber and a scientific committee from all Swiss Universities. Parallel sessions in the classical fields of chemistry in the morning and in the afternoon gave insights into fundamental and applied research going on in the different divisions of the SCS.



Poster session at the SCS Fall Meeting 2018; EPFL Lausanne

The Fall Meeting was financially supported by many companies, namely the Swiss Industry Science Fund SISF (BASF, Syngenta, Novartis, Roche), by the Swiss Academy of Science SCNAT, ChemPubSoc and the EPF Lausanne. Session endowments came from Mettler Toledo, Clariant, IBM Research, Janssen, Idorsia, Syngenta and Dow. DSM and Metrohm are the award sponsors. All their support is gratefully acknowledged.

Feedback from the participants was excellent and the Jury had for once enough time to select the laureates, mirroring the excellent organization of Prof. Sandrine Gerber. In 2021, the next Fall Meeting will again be at the EPF Lausanne.

For program details and abstracts see *CHIMIA* **2018**, 72(7-8), 519 ff.

### Support to Conferences

One of the main DFR duties is to financially support conferences within Switzerland organized by its members. The rules for support have been amended in 2017 and support was given according to these new guide lines. The following conferences and symposia were thus supported in 2018

- 15<sup>th</sup> International Symposium on Persistent Toxic Substances, Nov. 6–9, 2018, FHNW, Basel, Prof. P. Corvini) <https://ispts2018.ch/>
- LightChEC Summer School and Conference, Aug. 19–23, 2018, Les Diablerets, Prof. R. Alberto <https://www.lightchec.uzh.ch/en>
- Molecular Quantum Dynamics and Kinetics, October 8–10, 2018, Athens, Prof. M. Quack
- Stereodynamics 2018 Sept 2–7, 2018, Prof. A. Osterwalder, EPFL. <http://www.rsc.org/events/detail/32029/stereodynamics-2018>
- ISRIUM (International Symposium on Reactive Intermediates and Unusual Molecules), July 10–15, 2018 Monte Verità <http://www.isrium2018.ethz.ch/>
- Eschenmoser Lecture, March 12, 2018. Profs. E. Carreira, H. Wennemers ETHZ

### SCS Lectureships 2018

The SCS Lectureships are a third major platform of the Division of Fundamental Research. It consists of a one-week lecture tour of the awardee through at least 4 or 5 Swiss Universities. The 2018 program consisted of the following eight programs:

- Prof. Scott J. Miller, Yale University, USA 'Searching for Selective Catalytic Reactions in Complex Molecular Environments'. 26.02.–05.03.2018, organizer: Prof. Christof Sparr, University of Basel.
- Prof. Masayuki Inoue, The University of Tokyo, Japan 'Radical-Based Approach for Synthesis of Complex Natural Products'. 07.–15.05.2018, organizer: Prof. Jieping Zhu, EPF Lausanne.
- Prof. Frank Neese, Max Planck Institute for Chemical Energy Conversion, Mülheim an der Ruhr, Germany 'Ab-initio

Ligand Field Theory and Magnetism of d- and f-Elements', 'Insight into the Water Oxidizing Cluster in Photosystem II', 'Insight into CO<sub>2</sub>-Activation', 'Reactivity of High-Valent Non-Heme Iron Centers'. 14.–18.05.2018, organizer: Prof. Thomas Bally, University of Fribourg.

- *Dr. Eng. Zhaomin Hou*, Riken Center for Sustainable Resource Science, Japan 'Search for new catalysts for efficient and selective chemical transformations'. 28.05.–04.06.2018, organizer: Prof. E. Peter Kündig, University of Geneva,
- *Prof. Craig Crews*, Yale University, USA 'PROTAC-mediated Protein Degradation: *The chemical equivalent of siRNA*'. 18.06.–22.06.2018, organizer: Prof. Dennis Gillingham, University of Basel.
- *Prof. Scott Snyder*, University of Chicago, USA 'Strategies and tactics for the rapid synthesis of molecular complexity'. 10.–17.09.2018, organizer: Prof. Christian Bochet, University of Fribourg
- *Prof. John R. Yates*, The Scripps Research Institute, USA 'Understanding the molecular defect in cystic fibrosis using mass spectrometry and proteomics'. 17.–24.10.2018, organizer: Prof. Renato Zenobi, ETH Zurich
- *Prof. Masahiro Murakami*, Kyoto University, Japan 'Life-Long Focus on Four-Membered Rings'. 28.10.–02.11.2018, organizer: Prof. Jérôme Lacour, University of Geneva

More details can be found at <http://scg.ch/scs-lectureships>

#### Changes in the DFR Board

- The representatives Profs. Andreas Pfaltz and Wolf Woggon of the University of Basel stepped down this year. Dennis Gillingham from Basel was confirmed as new board member
- Prof. Brigitte Buchmann started as an elected DFR board member from EMPA
- Prof. Jeffrey Bode, ETHZ, was elected as the EuCheMS delegate for the Division of Fundamental Research. Although not a DFR board member, he will be invited to attend the board meetings

#### Outlook 2019

- The SCS Spring Meeting 2019 entitled 'Novel Pathways in Material Science' will take place at EMPA Dübendorf April 5 2019, chaired by Brigitte Buchmann ([scg.ch/springmeeting/2019](http://scg.ch/springmeeting/2019))
- The Fall Meeting 2019 will take place on Sept. 6 2019 at UZH Irchel Campus chaired by Hans Peter Lüthi and Roger Alberto ([scg.ch/fallmeeting/2019](http://scg.ch/fallmeeting/2019))
- The DFR supports in 2019 a number of symposia, conferences and workshops which can be found under the SCS homepage
- 7–8 SCS lectureships are organized for 2019 to be found under the DFR homepage [scg.ch/scs-lectureships](http://scg.ch/scs-lectureships)

#### Photochemistry Section PCS

[scg.ch/pcs](http://scg.ch/pcs)

Olivier Nicolet (HES-SO/HEIA-Fribourg)

#### Activities, Symposia, Conferences, Projects

- At the General Assembly at EPFL Lausanne on September 7, 2018, Prof. Olivier Nicolet, University of Applied Sciences and Arts, Western Switzerland (HES-SO) was elected as new president. He succeeds Silvio Canonica who served as president for eight years and who will stay in the board as member for another term to ensure continuity.
- Tatu Kumpulainen, University of Geneva, was elected as new member of the board
- Pierre Brodard (HES-SO/HEIA-FR) has resigned as a member of the board and was gratefully acknowledged for his service during several years

- Alexandre Fürstenberg, University of Geneva, represents Switzerland in the European Photochemistry Association board and holds the mandate as its treasurer.
- Prof. Eric Vauthey was confirmed as new representative of the PCS in the SCS Award Board (Grammaticakis-Neumann Award).

#### Outlook 2019

- The PCS board will set up a survey asking all Photochemistry Section members what they think about possible future activities. This survey will include questions about the organization of a scientific meeting, and the most appropriate timeframes to hold such a meeting and the General Assembly.
- A Photochemistry Symposium will take place in Fribourg (HES-SO/HEIA-FR) on 14 June 2019.

#### Section of Catalysis (SwissCat)

[scg.ch/swisscat/](http://scg.ch/swisscat/)

Prof. Javier Pérez-Ramírez

#### SCS Seminar 2018/1 on Catalysis

SwissCat has successfully kicked off a new seminar cycle in the framework of the SCS Seminar series. The summer school entitled 'Catalysis Across Scales' brought together academic and industrial scientists and renowned Swiss and international instructors in Interlaken on June 13–15, providing an ideal platform to identify recent progress and open challenges in homogeneous, heterogeneous, and bio-catalysis spanning from the level of active site design to that of process implementation for timely conversions of small and large molecules, renewables and waste feedstocks. The active participation and intense scientific exchange strongly supported networking, paving the way to future collaborations.

The event, organized by Prof. Prof. Javier Pérez-Ramírez, Prof. Christophe Copéret, Dr. Cecilia Mondelli, and Dr. Alexey Fedorov, ETH Zurich, and Dr. Hans P. Lüthi, SCS Foundation, brought 34 participants and 13 instructors to the City Oberland Hotel in Interlaken. Among the participants, as well as within the body of instructors, industry was well represented.

A conference report was published in *CHIMIA* 2018, 72(11), 822.



Organizers and Instructors of the Catalysis Seminar in Interlaken

#### Outlook 2019

- In December 2018 the Catalysis Community, headed by ETHZ and EPFL, submitted a request to the SNF to launch an initiative for a National Centre of Competence in Research (NCCRs) on Sustainable Chemistry that includes homogeneous, heterogeneous and bio-catalysis. With the focus on research and education, academic institutes and industrial partners from all over the country are involved and would push catalysis as one of the key technologies to a more

sustainable world. The decision about the accreditation as a NCCR will be taken in summer 2019.

- SwissCat plans to organize a new edition of the seminar series to take place in 2020, which will be directed to a new, thematically more closely focused, topic within catalysis.
- A website will be setup to provide information and updates of all ongoing and upcoming catalysis initiatives and platforms in Switzerland

### Swiss Young Chemists' Association (SYCA)

[www.scg.ch/syca/](http://www.scg.ch/syca/)

David Spichiger

### Swiss Snow Symposium 2018

From January 26-28, members of the Swiss Young Chemists' Association came together in Saas Fee for the 16<sup>th</sup> Swiss Snow Symposium.

Invited lectures were given by Peter Chen, ETZ Zurich, Delia Mihaila, MDPI, Dmitry S. Perekalin, Russian Academy of Sciences and Matthias Rizzi, Consulting International.

As a novelty, a panel discussion about "perspectives with a PhD degree" was organized by the OC and included inputs from Sviatlana Siankevich, Embion Technologies SA, Matthew Wise, ABB, Justus Tönnemann, Carbogen Amcis and Gerald Bauer, PSI. Finally, three sessions with contributed lectures completed the program.

A conference report was published in *CHIMIA* **2018**, 72(3), 165.



Participants and speakers of the 2018 Snow Symposium

At the general assembly in Lausanne on September 6, Dmitry Vasilyev took over the presidency of the section and the chair for the Snow Symposium from Cornel Fink.

### Outlook 2019

- 17<sup>th</sup> Swiss Snow Symposium in Saas Fee: The symposium will be a great opportunity for approximately 40 young scientists to share their research in informal environment. 25.–27.01.2019
- Industry visits and 'Meet each other' events are planned.

### Division of Analytical Sciences DAS

[www.scg.ch/das/](http://www.scg.ch/das/)

Dr. Marc Suter

### Activities, Symposia, Conferences, Projects

The board had four regular board meetings and a two-day retreat in April, prior to the *CHanalysis*.

### *CHanalysis*, April 12–13, Beatenberg

Over 50 analytical scientists attended and enjoyed the scientific and social exchange.

A conference report was published in *CHIMIA* **2018**, 72(6), 434.

### Other Activities of the Division

- Courses: Esther Wolff takes over the course secretariat from the longtime assistants Verena Schmid and Lilo Weisshaupt.
- METAS has launched an award honoring outstanding contribution to the field of metrology in chemistry and/or biology.
- The DAS gave out five travel awards (one postdoc from the Hopfgartner group Uni Geneva visiting ASMS in San Diego, one PhD from the Zenobi group ETHZ going to ICORS in Korea, one PhD from the Bleiner group EMPA going to the Dioxin Symposium in Krakow, one PhD from the Suter group Eawag attending the MSBM Summer School in Dubrovnik, and one PhD student from the Schirmer group Eawag going to Rome).

### Changes in the Board

- Walter Giger, member of the board since 1991 and president of the DAS (2002–2005), leaves the board after 27 years of service. He is warmly thanked for his support of the division.
- Urban Frey (HES-SO Valais), board member since 2002, also leaves the board with acclamation.
- Corinne Jud (Agroscope), Kathrine Fenner (Eawag) and Christof Finkler (Hoffmann-La Roche) joined the DAS board in 2018.

### Outlook 2019

- The DAS has submitted a letter of intent for the Euroanalysis 2023 to be held in Geneva on September 2.–6. Four supporting letters from Hoffmann-La Roche, Nestec, Novartis and Syngenta were included in the package. Organizing committee comprises E Bakker, F Kalmann, M Suter.
- The Section Environmental Sciences is currently being initiated as sub-group of the DAS, led by the new DAS board member Kathrin Fenner (Eawag)
- Thomas Ternes will be the SCS Lecturer in May 2019. Roadmap: 13. Eawag (Dübendorf), 14. FHNW (Muttentz), 15. Uni Bern, 16. Uni Geneva, 17. EPFL (Lausanne). Organization: M Suter.
- The *CHanalysis* will be taking place in Beatenberg, April 11–12, 2019. DAS has acquired sponsoring for the event from four companies (PAL, Merck, Roche, Waters).

### Division of Industrial & Applied Chemistry DIAC

[www.scg.ch/diac/](http://www.scg.ch/diac/)

Dr. Bernhard Urwyler

### Annual DIAC Meeting

The annual DIAC meeting took place on March 22<sup>nd</sup> 2018 at CILAG AG, located in Schaffhausen. The welcome and introduction of CILAG AG was presented by Wolfgang Epple, Operations Director, BU Parenterals. Cilag AG was established in Schaffhausen in 1936 and has been part of the Johnson & Johnson family of companies since 1959. In the 1990s in particular,

the company expanded continuously through innovation, and today Cilag AG is one of the largest manufacturers in the Swiss pharmaceuticals industry. Cilag AG employs approximately 1200 people. The company is a strategic market launch and manufacturing location for some of Johnson & Johnson's most important pharmaceutical products, using state-of-the-art technologies and processes,

The scientific lecture during the annual meeting:

An exclusive and very interesting lecture was given by Setrak Bahceli from BASF Intertrade AG with the title 'Trading in Procurement - Gambling or Necessity?' The trading and balancing of the raw material flows, contributes to the stabilization of the world markets and therefore an increasing demand, considering the actual raw material supply situation in Europe.

## 2<sup>nd</sup> Swiss Industrial Chemistry Symposium

The symposium offered again a unique platform for industrial scientists, working in research and process research, to present their latest results, to interact with each other and to network with professors, PhD students and other scientific staff of Swiss universities. After its launch in 2016, the event took place at the University of Basel on October 19, 2018. More than 260 participants joined the symposium and listened to the lectures of Silvio Roggo, Novartis AG, Marc Thommen, Polyphor Ltd, and Dr. Stefan Eissler, Bachem AG, Michael Levis, Siegfried AG, Christian Chapuis, Firmenich SA, Andreas Hafner, BASF Schweiz AG, Andreas Gloger, Philochem AG, Christof Aellig, Lonza AG, Paul Hebeisen, PIQUR Therapeutics AG, Thomas Woltering and Dr. Jean-Michel Adam, F. Hoffmann-La Roche AG, Christoph Boss, Idorsia Pharmaceuticals Ltd. as well as Clemens Lamberth, Syngenta Crop Protection AG. Short presentations by Andreas Hafner, BASF Schweiz AG, Andreas Gloger, Philochem AG, Christof Aellig, Lonza AG, Paul Hebeisen, PIQUR Therapeutics AG, Craig Harris, Nestlé Skin Health/Galderma S.A., Werner Bonrath, DSM Nutritional Products, Thomas Fessard, Spirochem AG, Vit Lellek, Cilag/ Johnson & Johnson highlighted R&D success stories in two compact and interesting sessions.

A poster session with more than 50 posters stimulated the interaction between the participants and provided a welcomed platform for PhD students to present their latest research and to get in touch with industrial colleagues.

## Progress with the Green Chemistry Subgroup

A follow-up discussion at the board meeting in June has been held with invited guests, aiming to create a new DIAC sub-division 'Green & Sustainable Chemistry' G&SC. The new group will already support a scientific ILMAC part in 2019 under the lead of the SCG. The DIAC board decided at its annual board workshop to support the integration of the G&SC as a subgroup into the DIAC as a lot of its members are already actively working in this G&SC field. A final decision will be taken by the SCG board after the ILMAC 2019.

## CHIMIA Special Edition from the DIAC

A special issue of Chimia was issued in March 2018 with the title: 'Quality Aspects in Industrial Chemistry'. Our DIAC board member Dr. Xenia Beyrich-Graf acted as our guest editor.

## DIAC Workshop

DIAC Workshop was held November 8–10, 2018 in Bürglen. One topic was the preparation of the 14th Freiburger Symposium in May 2019 and annual strategic review of the DIAC.



Social event at the DIAC Workshop 2018

## Changes in the Board

- Dr. Kerstin Bodmann, LONZA AG had to resign from the DIAC board, due to a promotion and a related longer stay in the US.
- Dr. Niklaus Künzle from the Lonza AG will replace her from the next general assemble in 2019 onwards
- Dr. Xenia Beyrich-Graf will resign from the next year's general assemble after many years of active work in the DIAC board.
- Dr. Remo Gamboni (Roche) and Dr. Bernhard Urwyler (Syngenta) announced their demission for the GA early 2020. Dr Stefan Hildbrand, Head Development & Catalysis in Roche, and Dr. Andrea Sting, Head Global Process Technology in Syngneta have been designed as replacements.

## Outlook 2019

- Annual Meeting DIAC 2019 will take place at Metalor Technologies, the worldwide leading precious metal company, in 2074 Marin (NE), Route des Perveuls 8, on February 22.
- DIAC plans to organize in spring 2019 a next working session at the FHNW in Muttenz, by inviting selected students (orientation: applied chemistry) to a discussion about "networking as a chemist" including an Apéro.
- The 14<sup>th</sup> Freiburger Symposium will take place on May 16–17, at the HESSO in Freiburg. The symposium topic will be: 'Industrial Applications of Catalysis – Time for New Approaches'. The Sandmeyer award ceremony, as well as Dr. Wolfgang Wienand, CEO Siegfried AG, Zofingen, Switzerland, with a keynote lecture, will be integrated in the Freiburger Symposium 2019.
- ILMAC 2019: 25–27 September, 2019 in Basel with G&SC input
- DIAC Strategy Workshop will be held on November 7–9, 2019

## Division of Medicinal Chemistry & Chemical Biology DMCCB

[www.scg.ch/DMCCB/](http://www.scg.ch/DMCCB/)

Dr. Yves Auberson

## DMCCB Basel Symposium

The symposium on 'Novel Chemical Space and Tools for Chemical Biology, Medicinal and Agrochemistry' took place on May 14, and was attended by an audience of students and medicinal chemists from both industry and academia. The next edition will take place in February 2020, earlier in the year than usual, due to the preparation of the EFMC-ISMIC September meeting in Basel.

A conference report was published in *CHIMIA* 2018, 72(12), 907.

### Session at the SCS Fall Meeting

The DMCCB session at the SCS Fall meeting saw a balanced program between industrial and academic contributions. The winner of the best presentation award was Fabio Steffen, University of Zurich, while Michal Soshan, ETHZ was selected to represent Switzerland at the upcoming Young Medicinal Chemist Symposium in Athens, Greece

### Involvement in the Organization of International Events

- The preparation of the Frontiers in Medicinal Chemistry Meeting, co-organized with GDCh and DPhG, is progressing well. There will be a good representation of Swiss Scientists in the program. The event will take place in Würzburg on March 24–27, 2019.
- The DMCCB was involved in the organization of the EFMC-International Symposium on Medicinal Chemistry, which took place in Ljubljana, Slovenia, as well as of the Young Medicinal Chemist Symposium. The DMCCB started preparing for the EFMC-ISMC 2020 (Basel, Sept. 6–10, 2020) and will be strongly involved in the organization of the EFMC-YMCS 2020 (Basel, Sept 10–11, 2020).

### CHIMIA Column

A regular contribution to CHIMIA in the form of a DMCCB column and events report was established

### Changes in the Board

- Dr. Kristina Goncharenko was elected to the Board. She will be responsible for communication through social media.

### Outlook 2019

- There will be a DMCCB session on ‘Chemical Biology and Drug Development’ at the LS2 annual meeting, on February 14–15 (Zurich), co-chaired by Christian Heinis (EPFL) and Radka Snajdrova (Novartis).
- The DMCCB is also involved in the organization of the EFMC-Medicinal Chemistry Frontiers, to take place in Krakow, Poland on June 10–13, 2019, as well as in the EFMC-ASMC 2019 (Athens, Greece, September 1–5, 2019) and Young Medicinal Chemist Symposium (Athens, Greece, September 5–6, 2019).
- A series on the theme of ‘chemical elements in medicinal chemistry and chemical biology’ will complement the DMCCB column in CHIMIA, as a contribution to the International Year of the Periodic Table.

### Division of Polymers, Colloids & Interfaces DPCI

[www.polycoll.ch](http://www.polycoll.ch) / [www.scg.ch/DPCI/](http://www.scg.ch/DPCI/)

David Spichiger

### CHIMIA column

The PCI Division published five Polymer & Colloid highlights in 2018.

### Session at the SCS Fall Meeting

At the PCI Session of the SCS Fall Meeting 2018 scientific results were presented and discussed in 13 talks. The invited lecture at the beginning of the morning session was given by Sebastian Seiffert, Johannes-Gutenberg University Mainz, Germany. Further scientific exchange took place at the poster session with 52 contributions.

### Polycoll Meeting 2018

Organized by Daniel Görl, Oguzhan Oguz and Enzo Bomal and chaired by Prof. Holger Frauenrath, the 2018 Polycoll meeting took place at EPFL Lausanne on October 5, 2018.

Pol Besenius, University of Mainz, Christophe Schmitt, Nestlé Research Center, Giovanni Pavan, SUPSI Lugano, Stephen Schrettl, AMI Fribourg, Eric R. Dufresne, ETH Zurich, Andreas Herrmann, DWI Aachen, Francesco Stellacci, EPFL Lausanne and Erik Berda, University of New Hampshire, reported about their latest research in one of the invited lectures.

The three Doctoral Research Lectures were given by Omar Rifaie Graham, AMI Fribourg, Jan-Georg Rosenboom, ETH Zurich, and Michele Zanini, ETH Zurich.

A poster session with 23 posters during lunch time completed the program.

### Outlook 2019

- Polycoll meeting in spring/summer 2019.
- PhD Award 2019.
- DPCI Highlights in Chimia

### Division of Chemical Education DCE

[www.scg.ch/DCE/](http://www.scg.ch/DCE/)

David Spichiger

### Conferences and Activities

- Six Chemical Education columns were published in CHIMIA
- The Division partnered for the Scientiae & Robotica at EPFL Lausanne on September 5–8, 2018. This event provided further education possibilities for teachers on the secondary school level and not only focused on chemistry but also on robotic projects in the fields of biology, IT, mathematics and physics.
- SCS supported the ‘VSN Zentralkurs Chemie’ in Solothurn on October 17–19, 2018 and awarded the Balmer Prize on the occasion of the event dinner to Dr. Thibaud Rossel, Gymnase français de Bienne, École de Maturité, Spécialisée.

Bern, January 2019

## Appendix Reports from Member Societies

### Swiss Society for Food Chemistry

[swissfoodchem.ch](http://swissfoodchem.ch)

Dr. Hans Jörg Bachmann, Secretary



### Activities, Symposia, Conferences, Projects 2018

- To give students a first impression of possible working fields in their future professional career the SFC organized an information event with presentations of experienced professionals from all sectors of food chemistry and analysis, which took place in the afternoon of May 15 at ETH Zurich. Some 20 student used the chance to get useful information about possible fields of their future work. During the aperitif they had the opportunity to discuss with the professional experts and to get answers on their specific questions.
- The General Assembly 2018 was held at ETH Zurich before the information event mentioned above.
- The SFC Young Scientist Awards 2018 was granted to Angela Pridal and Silvia Leuzinger for their Bachelor and Master Thesis, respectively ([swissfoodchem.ch/Awards](http://swissfoodchem.ch/Awards)). With these prizes SFC wishes to honor two excellent masters' or bachelors' projects with a reward of 3,000 CHF and 2,000 CHF respectively, including a free three-year membership to the SFC.

### Outlook 2019

- Together with the association of Swiss cantonal chemists we organize the Swiss Food Science Meeting 2019 'Process and industrial food contaminants – Analytical Challenges and Risk Assessment', which will take place June 26–27 at the University of Neuchâtel (<http://www.foodsciencemeeting.ch/joomla/index.php/sfsm-2019>).
- The 131<sup>st</sup> General Assembly of the SFC will take place during SFSM 2019 on June 26.
- The SFC Young Scientist Awards 2019 will be presented during SFSM 2019. The deadline for application is February 28<sup>th</sup> ([swissfoodchem.ch](http://swissfoodchem.ch) | Awards).

### Number of Members and Trend

- Members as per 31.12.2018: 240

### Verein Schweizerischer Naturwissenschaftslehrer VSN

[www.vsn.ch](http://www.vsn.ch), [www.sspsn.ch](http://www.sspsn.ch), [www.asisn.ch](http://www.asisn.ch)

Dr. Klemens Koch

VSN  
SSPSN  
ASISN

### Activities, Symposia, Conferences, Projects 2018

- Zentralkurs 2018 vom 17. bis 19. Oktober in Solothurn, OK unter der Leitung von Pascal Pfister ([www.zentralkurs.ch](http://www.zentralkurs.ch))
- Gründung einer Deutschschweizer Biologiekommission
- Formation continue :7 mars 2018 : Traitements de surfaces PVD, galvano, CVD », Neode, HE-Arc à La Chaux-de-Fonds
- «La biologie du sol», Claire Le Bayon, l'UniNe: la fertilité des sols, techniques d'extraction des organismes des sols (sur le terrain), clés de détermination, lombricomposte, 19 avril 2018 à Sion.
- Observation des Cétacés aux Açores, Jean-Pierre Lardet, avril 2018.
- Journée pour les membres de la CRB : visite de la production de la soie, la sériciculture (SWISSSILK), 23 septembre 2018 à Hinterkappelen (BE).
- Herausgabe Vereinszeitschrift c+b (Chemie + Biologie), jährlich drei Ausgaben, Redaktor: Manuel Fragnière

### Changes in the Board

- Nouveau RAUBER Anne-Laure, Présidente CRB, Gymnase français de Bienne
- Neu REIST Silvia, Präsidentin DBK, Kantonsschule Beromünster

### Outlook 2019

- Projekte zum Internationalen Jahr des Periodensystems IYPT 2019
- Ausserhalb VSN: Mikroskopierkurs in Rapperswil SG
- Ausserhalb VSN: Life Science Symposium 23. März 2019 in Wettingen

### Number of Members and Trend

- Members as per 31.12.2018: 490
- Tendency over the past 5 years: slowly rising

Bern, January 2019