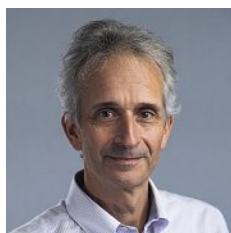




SCS
Swiss Chemical
Society

ANNUAL REPORT 2023

Introduction and Summary



Dear members of the SCS,

With pleasure we look back on a very interesting and active year. The Swiss Chemical Society not only continued and developed its well-established activities but again pushed new initiatives to face today's challenges. We also implemented new programs to incorporate

community members whose interest were not covered so far. We successfully organized more than twenty on-site symposia and congresses respectively and were able to generate an important contribution to the exchange between academia and industry.

Unfortunately, the growing global instability that last year brought us has not improved, quite on the contrary. It is not the specific mandate of the SCS to solve political problems, but we can still all find a common ground over religious, political or historical disagreements through Science and Chemistry. While a better understanding of the transformation of matter will probably not solve most of the current problems the world is facing, it will certainly help bring people together and form strong and beneficial communities. And this is precisely the main goal of the SCS. We encourage all of you to read (again) on the Society website its vision and mission statements, which have been reformulated a few months ago.

Another major event over the last year was the public-wide availability of generative AI tools, such as ChatGPT. Its use for trivial and time-consuming tasks is certainly a great help. But for us scientists, there is also a great danger. We should all keep in mind that the algorithms feed themselves on published data. Data that has been so far generated by humans, with (hopefully) critical evaluation of their validity. If AI tools are now blindly used to produce data and publications, which is a growing trend, we will gradually create a recursive picture of reality that will drift away from reality. Science is the observation and understanding of the world as it is, and reporting on it cannot allow lax treatment of facts and ambiguous formulations.

In addition to the well-established activities that are part of the SCS portfolio for years and are mentioned later in this annual report, we focused on the following, new or specific initiatives in 2023:

- revise the SCS vision and mission statement.
- establish the SCS Mentoring Program to support the personal and professional development of students and postdocs with focus on career development.
- provide event organization services for third parties.
- further develop the IT infrastructure.
- extend the SCS Partnership program to 24 companies.

- prepare the merger of the Division of Polymers, Colloids & Interfaces with the MatChem Network to form the Division of Materials Chemistry as of January 2024.

The Swiss Chemical Society is a not-for-profit organization. Its programs are financed through sponsoring contributions, publishing, revenues from activities, and the membership-fees. We would like to thank all our members, sponsors and partners who supported us financially and logistically in 2023.

Please enjoy reading through the 2023 annual report that shows again a very active and lively society.

We are looking forward to seeing all of you very soon and we wish you a very successful 2024.

Prof. Christian Bochet
President

David Spichiger,
Executive Director

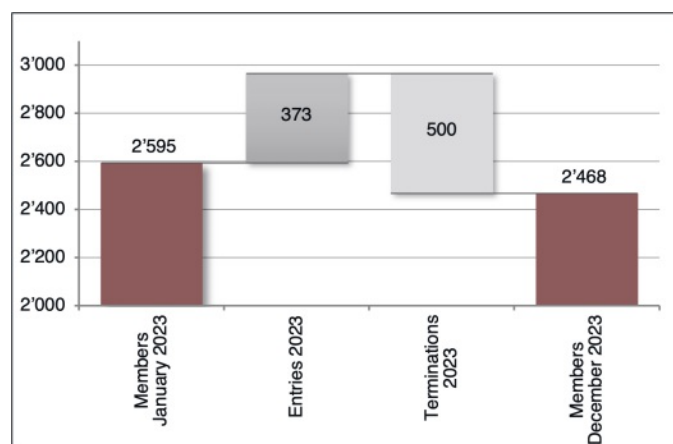


Swiss Chemical Society

SCS Key Figures



Development of SCS Memberships*: -127



Regional Distribution of Members*



Employer of the Members*



*Source: SCS member database as per 31.12.2023.

SCS Board Members and Employees 2023

Executive Board ExB

- Prof. Christian Bochet, University of Fribourg
SCS President
- Dr. Yves Auberson, Novartis Pharma AG
Projects and partnerships, SCS Vice-President
- Dr. Gillian Harvey, Luzern
Chair of the CHIMIA Editorial Board
- Dr. Maud Reiter, dsm-firmenich AG
SCS Treasurer
- David Spichiger, Swiss Chemical Society
SCS Executive Director

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

- Prof. Eric Bakker, University of Geneva
President Division of Analytical Sciences (DAS)
- Prof. Thomas Bürgi, University of Geneva (new)
President Division of Fundamental Research (DFR)
- Prof. Jean-Louis Reymond, University of Bern
President Division of Medicinal Chemistry & Chemical Biology (DMCCB)
- Prof. Roger Marti, HEIA Fribourg
President Division Industrial & Applied Chemistry
- Prof. Esther Amstad, EPFL Lausanne
President Division Polymers, Colloids and Interfaces (DPCI)
- Prof. Jan Cvengros, ETH Zurich
President Division Chemical Education (DCE)
- Dr. Hans Peter Lüthi, ETH Zurich
Director SCS Foundation, EuChemS Executive Board
- Prof. Christophe Copéret, ETH Zurich
Member of the board, EuChemS Board of Directors

- Dr. Leslie Fendt, F. Hoffmann-La Roche AG
Member of the board
- Dr. Corinne Jud, Agroscope
Member of the board

At the end of 2023, Eric Bakker, Jean-Louis Reymond and Esther Amstad stepped down as presidents of their divisions. We would like to thank them for their valuable contributions.

SCS Employees

- David Spichiger, Executive Director (1.0 FTE)
- Gillian Harvey, CHIMIA, Technical Editor (0.6 FTE)
- Gordon Honeyman, CHIMIA, Technical Editor (0.6 FTE)
Start in Nov 2023
- Hans Peter Lüthi, Director SCS Foundation (0.4 FTE)
- Robert Meyer, Finance & Accounting (0.4 FTE)
- Sarah Schmitz, Business Support (0.8 FTE)
- Céline Wittwer, Events & Communication (1.0 FTE)

We would like to thank Gillian Harvey who served as CHIMIA Technical Editor for more than 23 years and who retires by the end of January 2024.



SCS General Assembly 2023

The General Assembly 2023 took place during the lunch break of the SCS Spring Meeting on April 14, 2023, at University of Zurich.

The assembly approved the annual report, the financial statement, and the audit reports, confirmed personnel turnovers in the Board of Directors (BoD) and the Executive Board (ExB) and set the course for the SCS of the upcoming years. The previous section of this report provides information on the details of the personnel changes.

Prof. Christian Bochet, SCS President and David Spichiger, Executive Director, led the meeting and ensured that all legal requirements were fulfilled. The minutes of the meeting were published in CHIMIA 5/2023, A357ff..

Updated Vision and Mission Statement, <https://scg.ch/about>

Vision

Our vision is to promote chemistry-based sciences and foster innovation in Switzerland to benefit society and the environment.

Mission Statement

The Swiss Chemical Society (SCS) supports the scientific community and promotes chemistry-related activities and the information exchange among academic, governmental, and industrial scientists.

The SCS offers and organizes:

- Events, including conferences, congresses, and courses to promote the exchange of knowledge.
- Platforms for networking and fostering career development.
- Prizes and awards for outstanding achievements.
- Representative bodies to ensure the exchange of information in national and international organizations.
- Publications as active publisher or partner.

The Society actively supports diversity and inclusion for all its members and activities.

The SCS is a member of the European Chemical Society (EuChemS), the Swiss Academy of Sciences (SCNAT) and the Swiss Academy of Engineering Sciences (SATW). It is also connected to the International Union of Pure and Applied Chemistry, IUPAC (with the Platform Chemistry of the SCNAT being the Swiss representative).

SCS Mentoring Program, <https://foundation.scg.ch/mentoring>

In 2023, the SCS in collaboration with the SCS Foundation launched a Mentoring Program to support the personal and professional development of students and postdocs by providing guidance, advice, and feedback from senior professionals. The focus of the program, supported by the Swiss Academy of Sciences (SCNAT), is on career development and completes the existing mentoring program of the Swiss Women in Chemistry Network.

The current class runs from September 1, 2023, to July 31, 2024.

Four regional clusters, each consisting of a managing team, mentors and mentees, organize a kickoff meeting, at least one activity per semester, and a closing event.



SCS Partnership Program and Corporate Memberships

We further established the SCS Partnership Program as a new strategic tool to strengthen our collaboration with industrial partners and to align our activities to the community's requirements.

As SCS Partnership company, institutions enjoy all the benefits of a 'classical' corporate membership and make the difference through:

- Active involvement in the strategic alignment of the society (board-, committee-, and jury-membership)
- Becoming Swiss Industrial Science Awards stakeholders
- Invited guests at the Swiss Chemistry Science Night

SCS Partnership Companies 2023



Corporate Members 2023

In addition to the partnerships for CHF 3'000, the following companies participated in the activities of the SCS with a corporate membership for CHF 800:

CABB AG, Pratteln; CIM Chemicals AG, Zug; Comsol GmbH, Göttingen; HAS Healthcare Advanced Synthesis SA, Biasca; Helsinn Healthcare SA, Pazzallo-Lugano; Ivoclar vivadent AG, Schaan; Magritek GmbH, Aachen; MDPI AG, Basel; Metalor Technologies SA, Marin; METAS, Federal Institute of Metrology, Bern; Omya International AG, Oftringen; Pentapharm AG, Aesch; Plasmion GmbH, Augsburg; Primco, Chêne-Bourg; Rolic Technologies Ltd, Berlin; Schärer & Schlöpfer AG, Rothrist; Shimadzu Schweiz GmbH, Reinach; SICPA SA, Prilly; Siegfried AG, Zofingen; SimplyScience Stiftung, Zurich; Société Suisse des Explosifs, Brig; Thermo Fischer Scientific (Schweiz) AG, Reinach; TÜV Süd Schweiz AG, München; UCB Farchim SA, Bulle; Willy A. Bachofen AG, Muttenz.

Communication

For all SCS events we implemented specific websites and if required platforms for online conferences. In addition, we communicated via our Social Media channels, as well as with flyers and posters. Our X (formerly, Twitter) profiles counts more than 3'400 followers.

By sending newsletters, we managed to inform specific groups of the community about events according to their sphere of interest. Furthermore, publications in the *CHIMIA* journal, such as Columns and Conference Reports give a regular insight into the activities of the SCS and the networks. The Society information pages also provide news and information about current and future events.



SCS Scientific Awards

The SCS awarded twelve individuals and one group of scientists for their outstanding contributions. A total sum of CHF 79'000 as well as medals and award certificates were given to the winners.

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



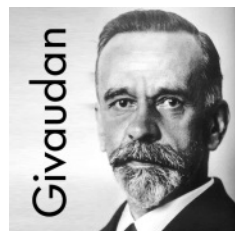
Prof. Victor Mougel, ETH Zurich, for his research at the interface of molecular, surface, and materials chemistry, encompassing lanthanide/actinide coordination, bioinorganic and materials chemistry as well as electrochemistry and catalysis and especially for the development of high efficiency systems

for solar-driven conversion of CO₂ to hydrocarbons based on a bioinspired approach.

The award lecture took place at the SCS Spring Meeting 2023.

Sandmeyer Prize

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



In 2023 the SCS awarded the *Ambrofix* ((-)-Ambrox) Project Team from Givaudan, namely *Dr. Agnes Bombrun, Dr. Boris Schilling, Dr. Eric Eichhorn and Dr. Fridtjof Schröder*, for their outstanding research contributions that led to the development of an innovative and even more importantly an industrially viable and sustainable process for AmbrofixTM ((-)-ambrox) using green chemistry and biotechnology.

Two award lectures were held at the Freiburger Symposium on April 28, 2023, and at the SCS Fall Meeting on August 25, 2023.

SCS Distinguished Industrial Science Award

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

The 2023 prize was given to



Dr. Alain De Mesmaeker, Syngenta Crop Protection AG (retired), for his exceptional research career in numerous research areas, always focused on scientific excellence, and for his ongoing commitment to human development and mentoring that has shaped and inspired multiple generations of scientists and leaders. The award lecture took place at

the SCS Fall Meeting 2023.

SCS Senior Industrial Science 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.

The 2023 prize was given to

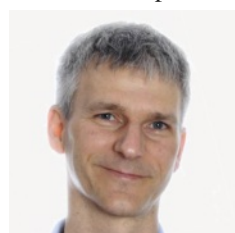


Dr. Robin Fairhurst, Novartis Pharma AG, for his outstanding contributions to the discovery and optimization of several drug development candidates, many of which have reached the clinic and even the market. The award lecture took place at the SCS Fall Meeting 2023.

SCS Industrial Science Award

The prize is given to honor successful investigators with outstanding achievements. The winner receives a certificate and a cash check of CHF 7'000.

The 2023 prize was given to



Dr. Uwe Grether, F. Hoffmann-La Roche AG, for his tremendous impact on medicinal chemistry, focused on the discovery and characterization of small molecules that modulate the activity of the endocannabinoid system for the treatment of various important diseases, and thus for his direct impact on the pre-

clinical and clinical drug discovery portfolio at Roche,
and



Dr. Tomáš Šmejkal, Syngenta Crop Protection AG, for his high impact track record in process chemistry and technology that has truly enabled projects and have seen the journey from process research through development and ultimately to commercial scale implementation.

Both award lectures took place at the SCS Fall Meeting 2023.

SCS Green & Sustainable Chemistry Award (sponsored by Syngenta)

CHF 10'000 honors outstanding contribution to the field of metrology in chemistry and/or biology.

The 2023 award was given to



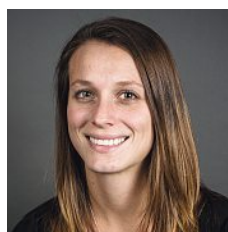
Prof. Ali Coskun, University of Fribur, for his outstanding contributions towards the development of sustainable polymers for catalysis, energy and environmental applications.

The award lecture will take place at the SCS Fall Meeting 2024.

Grammaticakis-Neumann Prize

CHF 5'000 is awarded to a promising young scientist for outstanding accomplishments in the field of experimental or theoretical photochemistry.

The 2023 award was given to



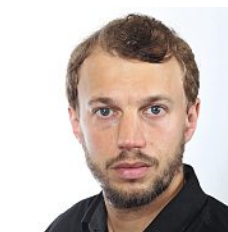
Prof. Lea Nienhaus, Florida State University (USA), for her nationally and internationally recognized research program in Light-Matter Interactions in Semiconductors probing the influence from the macroscale to nanoscale.

The award lecture took place at the SCS Fall Meeting 2023.

METAS Award

CHF 5'000 honors a young and promising scientist working in Switzerland for an outstanding contribution to the field of metrology in chemistry and/or biology.

The 2023 award was given to



Dr. Michael Stravs, Eawag Dübendorf, for his outstanding scientific achievements, especially the new and innovative approach to combine state-of-the-art analysis technologies, artificial intelligence and reference data in near real time that is exemplary for similar problems in chemistry and biology.

The award lecture took place at the *CHanalysis* 2023.

Simon-Widmer Award

CHF 5'000 and a trophy is awarded to distinguished scientists to honor their contribution to fundamental and applied analytical science and the education of analytical scientists

The 2023 award was given to



Prof. Uwe Sauer, ETH Zurich, for his pioneering work in the field of metabolomics.

The award lecture took place at the Euroanalysis 2023.

Cancer Drug Discovery Research Award (supported by RGCC International)

CHF 5'000 honors outstanding scientific achievements of Master students, PhD students or Postdocs at Swiss research institutes that are working in the field of cancer drug discovery research.

The 2023 award was given to



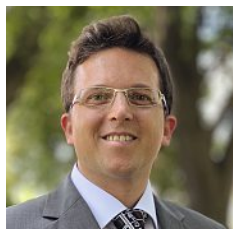
Dr. Elena Zakhorva, University of Bern, for her outstanding work, in discovering new peptide-based anti-cancer agents, that she did during her PhD studies at University of Bern.

The award lecture took place at the DMCCB Basel Symposium 2023.

Balmer Prize

CHF 4'000 and a medal in bronze: awarded to a teacher working in Switzerland at high school (gymnasium) level for innovation in chemistry teaching.

The 2023 award was given to



Dr. Stefan Dolder, Gymnasium und FMS Lerbermatt, für sein grosses Engagement und seine Ideen zur Verbesserung des Unterrichts, insbesondere für das mangels verfügbarer Software selbst entwickelte Mac-Zeichenprogramm MoleculeSketch zur Darstellung von chemischen Strukturen.

Der Vortrag fand im Rahmen des ChemEdu Events 2023 statt.

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



Frau Fabiana Bächli, ZHAW Wädenswil, für ihre herausragende Bachelorarbeit «Mesoporöse bioaktive Glasnanopartikel für den Wirkstofftransport», and



Ms. Alicia Rodrigues Machado, HEIA Fribourg, for her outstanding Bachelor project: «Process design and scale-up studies using single-atom heterogenous catalysts for the synthesis of an API intermediate».

Lectureship Awards

SCS Lectureship Awards

The selection of the lecturers follows a bottom-up approach where PIs from all Swiss research institutions can propose candidates. The program covers all areas of chemistry. The choice among the proposed lectureships is made by the board of the SCS Division of Fundamental Research (DFR).

In 2023 the SCS Lectureship Award was given to four world-class distinguished scientists. Over a week, the lecturers gave five presentations and discussed with colleagues at four to five different Swiss research institutions.

Prof. Motomu Kanai, University of Tokyo (Japan)

«Catalytic C-H functionalization of hydrocarbons and preins: dehydrogenation, C-C bond-formation, and amyloid degradation»

Tour dates: March 27–31, 2023

Tour organizer: Prof. Jérôme Lacour, University of Geneva

Prof. Hideki Yorimitsu, Kyoto University (Japan)

«Aromatic Metamorphosis: Breaking Aromaticity to Construct New Cyclic Systems»

Tour dates: April 24–28, 2023

Tour organizer: Prof. Jérôme Lacour, University of Geneva

Prof. David Nesbitt, JILA and University of Colorado, Boulder (USA) «A Physical Chemist in Search of Simplicity: From Interstellar Chemistry to Single Molecule Biophysics» Tour dates: April 25 – May 2, 2023

Tour organizer: Prof. Stefan Willitsch, University of Basel

Prof. Scott Denmark, University of Illinois at Urbana-Campaign (USA)

«Application of Chemoinformatics and Machine Learning to Enantioselective Catalysis»

Tour dates: September 18–21, 2023

Tour organizer: Prof. Jeff Bode, ETH Zurich

Heilbronner-Hückel Lecture Award

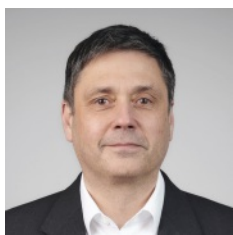
The Heilbronner-Hückel Lecture Series was implemented in 2009 with the first series in 2010 together with the Gesellschaft Deutscher Chemiker (GDCh). The annual series takes place alternatively in Switzerland and Germany.



As 2023 Lecturer the SCS selected **Prof. Markus Reiher**, ETH Zurich. His group focuses on theory in chemistry with a special emphasis on so-called first-principle methods, which are deeply rooted in quantum mechanics.

The Heilbronner-Hückel lecture tour 2022 of **Prof. Alois Fürstner**, Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr, Germany, was postponed from fall 2022 to October 2023. Prof. Fürstner visited ETH Zurich, University of Basel, EPFL Lausanne, University of Bern and University of Zurich from October 9-13, 2023, and talked about «Tinkering with Metal-Carbene Chemistry».

DIAC Fellowship 2023



The DIAC Fellowship 2023 award was given to **Dr. Kurt Püntener**, from F. Hoffmann-La Roche AG, Basel, for his tremendous impact on process chemistry and outstanding contributions in delivering innovative and breakthrough solutions in route design, (bio)catalysis, and process development for more than 100 Roche

pipeline molecules, including Oligonucleotides and Peptides.

The three lectures took place at Syngenta Research Center Stein, University of Zurich and University of Geneva between September to November 2023.

Scholarship Awards

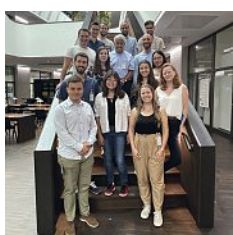
Best Presentation Awards at the Fall Meeting



At the SCS Fall Meeting in Bern on August 25, 2023, Metrohm and dsm-firmenich again sponsored the very renowned Best Presentation Award Program. A total of 41 presenters (18 winners and 23 runners-up) with a total prize sum of CHF 42'750 were honored for their extraordinary presentations. See

CHIMIA 10/2023, A710 for the list of all winners.

Alfred Werner Scholarship Program



In 2023 twelve Alfred Werner Scholars successfully completed their MSc studies. Reports on their MSc thesis projects along with their career plans were published in the 2023 December issue of *CHIMIA*. Eight scholars started their doctoral studies, one of them at a university abroad. Two scholars started

their careers in industry, and two others are still in the process of deciding on their next steps. Three of the scholars had the opportunity of an internship in one of the program-supporting companies.

Five BSc students coming from China, Canada, Spain, Ukraine, and UK, started their Master studies programs with the support of the Alfred Werner Program.

At this point, the "pool" of Alfred Werner Scholars has become an attractive source for the recruitment of talented and well-integrated young chemists. In 2023, following the successful online Meet&Greet event hosted by Novartis the year before, more than thirty scholars, many of the alumni looking to launch their professional careers, were invited to an in-person meeting on Novartis campus. The exchange between scholars and Novartis staff members was much appreciated by both parties, making this the perfect platform to connect the talented young professionals to industry and *vice versa*. A short review of the 2023 Meet&Greet meeting was published in the November issue of *CHIMIA*.

At the Swiss Chemistry Science Night, three scholars, now PhD students, introduced themselves and the Alfred Werner Program to the audience. The program, with its remarkable track-record, deserves the attention of our community. The Web Page of the Foundation (www.scs-foundation.ch) offers pictures of the event, also giving more background on the now 10-year-old program.

The SCS Foundation Board would like to thank dsm-firmenich, Givaudan, Merck Sigma-Aldrich, Novartis, Roche, Syn-

genta, the Gebert-Rüf and the Metrohm Foundations, as well as our private donors for their continued support.

- 80 scholarships granted since 2013
- 33 countries of origin of our scholars
- 28:42 gender ratio of the scholars

Chemistry Travel Award



Through the «Chemistry Travel Award», contributions towards the cost of participation at an international conference in the chemical sciences are granted to selected PhD students. The award is sponsored by the Platform Chemistry of the SCNAT and the Swiss Chemical Society. Students from all fields of chemistry and from any Swiss institution were invited to participate. 45 winners were honored with the Chemistry Travel Award 2023.



Publishing



CHIMIA (Volume 77)

Catherine E. Housecroft, University of Basel, again managed the journal content as Editor-in-Chief and published in collaboration with the guest editors, ten issues of our membership journal. Contributions from all fields of chemistry and related areas were considered for

publication in the form of review articles and notes.

- 1–2 Artificial Intelligence in Chemical Research
Torsten Luksch, Syngenta Crop Protection AG, and Teodoro Laino, IBM Research Europe and NCCR Catalysis
- 3 NCCR Catalysis
Javier Pérez-Ramírez, ETH Zurich, Jérôme Waser, EPFL, Marie Francine Lagadec, Sharon Mitchell and Lauren Gamp, ETH Zurich
- 4 Laureates: Junior Prizes of the SCS Fall Meeting 2022
Hans Peter Lüthi, SCS Foundation, and Roger Alberto, University of Zurich
- 5 The Evolution of Flow Chemistry
Claudio Battilocchio, Syngenta Crop Protection AG
- 6 Biocatalysis
Rebecca Buller and Katrin Hecht, ZHAW
- 7–8 SCS Laureates and Awards & Fall Meeting 2023
Christian Bochet, University of Fribourg / President of the Swiss Chemical Society and Catherine Housecroft, University of Basel
- 9 Swiss TPH: 30 Years of R&D Towards New Drugs for Tropical Diseases
Jürg Utzinger and Pascal Mäser, Swiss Tropical and Public Health Institute

- 10 Challenges in Teaching Chemistry
Jan Cvengros, ETH Zurich
- 11 Chemistry & Soil
Claudio Screpanti, Syngenta Crop Protection AG
- 12 Green and Sustainable Chemistry – Waste Valorization
Felix Bobbink, Plastogaz SA and Fabrice Gallou, Novartis Pharma AG

The SCS Junior Awards (issue 4) and SCS Major Awards articles together with the program of SCS Fall Meeting (issue 7/8), are regular features of the annual program. The column section with the Swiss Science Concentrates, Highlights of Analytical Chemistry, Highlights in Polymer, Colloids and Interfaces, Medicinal Chemistry & Chemical Biology Highlights, Chemical Education, Flow Chemistry, Universities of Applied Sciences, and SCS Foundation is well-established and with the Conference Reports give a regular insight into the activities of the SCS and the Divisions. The Society information pages provide news and information about current and future events.

The CHIMIA.ch website consolidates all CHIMIA activities on one site: journal information, submission, editorial activities, and publication. The site is working well: submissions are efficiently processed and the CHIMIA back catalogue, including the community content, is available to 1990. CHIMIA is listed in the most important databases, including PubMed.

CHIMIA OJS Technical Documentation (for system admin) and CHIMIA OJS Editorial/Publishing Documentation (for EB) have been prepared to ensure that the website can continue to function in the event of the Webmaster or the Technical Editor being unavailable.

Digitization of the CHIMIA back catalogue 1947–1989 is in planning.

Chemistry Europe



After its renaming in spring 2020 the brand of Chemistry Europe is now well established. Founded 26 years ago with the creation of Chemistry A European Journal, the societies' flagship publication, Chemistry Europe is an association of 16 European chemical societies, representing over 75,000 chemists. Chemistry

Europe journals are published by Wiley-VCH.

SCS holds 5% of shares in Chemistry Europe 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 Chemistry Europe on its website, during SCS events and in CHIMIA.

Chemistry Europe supported the following Events:

- SCS Spring Meeting 2023
- SCS Fall Meeting 2023
- Swiss Summer School «Organic Synthesis»
- Int. Summer School «Electrocatalysis»
- Peptide Therapeutics Forum 2023
- Ilmac Basel 2023

Helvetica – A Journal of the Swiss Chemical Society



Prof. Eva Hevia, University of Bern and Jérôme Waser, EPFL Lausanne are now in their second year as Co-Editors-in-Chief. In 2023 *Helvetica* has published, for the first time since the re-launch in 2016, over 100 manuscripts. *Helvetica* has published special issues for the late Jack D. Dunitz, for Janine

Cossy, Robert Deschenaux, Scott Denmark, Andrea Vasella, Alois Fürstner and special collections highlighting the work of female scientists across chemical sciences and finally a collection to celebrate industrial chemistry in Switzerland. For the last one, *Helvetica* has introduced a new article type: synthetic procedures, especially for process chemists, which is completely unique within the Wiley chemistry journal portfolio. *Helvetica* will continue to grow and invites all authors in Switzerland and abroad to submit their best papers to *Helvetica*. *Helvetica* not only publishes good science but also supports the SCS and the community at a lot of conferences and lectureships with sponsorship and prizes.

onlinelibrary.wiley.com/journal/15222675

Additional Publishing Activities

The Division of Fundamental Research and the Division of Analytical Sciences hold shares of Physical Chemistry Chemical Physics (PCCP) and Analytical and Bioanalytical Chemistry (ABC) respectively.



Overview of SCS Events 2023

Congresses and Symposia

- | | |
|----------------|---|
| 20.–22.01.2023 | Swiss Snow Symposium 2023, Hotel Alphubel Saas-Almagell (youngSCS) |
| 27.01.2023 | 4 th Swiss Industrial Chemistry Symposium (SICS), University of Basel (DIAC) |
| 03.02.2023 | DMCCB Basel Symposium 2023: «Chemical space beyond small molecules», Biozentrum Basel (DMCCB) |
| 16.02.2023 | EuChemS Historical Landmark Award 2021 - Chemistry and Physics in the Atmosphere on the Jungfraujoeh: a cooperation between Belgium and Switzerland, University of Bern (SCS) |
| 30.–31.03.2023 | CHanalysis, Dorint Hotel Beatenberg (DAS) |
| 13.04.2023 | BeNeFri Student Spring Symposium 2023, Université de Fribourg (youngSCS) |
| 14.04.2023 | SCS Spring Meeting 2023, «Chemistry and Physics of the Atmosphere», University of Zurich (DFR/SCE) |

14.04.2023	Swiss Soft Days 2023/1, University of Fribourg (DPCI)	10.05.2023	Visit to Metrohm in Herisau, Metrohm AG (youngSCS)
18.04.2023	APPLICA - Seminar für Instrumental-Analytik, Hotel Olten (DAS)	22.05.2023	DIAC Annual Member Meeting 2023 and Visit of Sika, Zürich (DIAC)
16.–20.04.2023	SCS Spring School on Digital Chemistry and AI, Eurotel Victoria Les Diablerets (CompChem)	14.06.2023	From Lab to Production – Insights into Process Chemistry 2023/2, University of Bern (DIAC)
27.–28.04.2023	16. Freiburger Symposium 2023: «From Lab to Industrial Application - Trends/Innovation in Process Chemistry & Technology», HEIA Fribourg (DIAC)	26.09.2023	Swiss Women in Chemistry Networking event @ Ilmac, Messe Basel (SWC)
07.–11.05.2023	SCS Conference on Stereochemistry 2023 (Bürgenstock Conference), Brunnen (SCS)	10.10.2023	Online Workshop: Five Rules of effective writing in the sciences, Online Conference (youngSCS)
07.–08.06.2023	LS ² /SCS Seminar on Intellectual Property, Zentrum Löwenberg (SCS/DMCCB)	20.10.2023	Swiss Women in Chemistry: Corporate Insights at Syngenta, Stein (SWC)
14.06.2023	1 st Swiss Symposium on Materials Chemistry 2023, Empa Dübendorf (MatChem)	21.11.2023	Industry Visit to Dottikon Exclusive Synthesis, Dottikon (youngSCS)
20.06.2023	26 th ETH Nanoparticles Conference 2023, ETH Zürich (SCS/ETH)		
16.07.2023	International Chemistry Olympiad (IChO) 2023, Zürich (IChO with support from SCS, youngSCS)		
24.08.2023	Future of Chemical Education: Challenges in Teaching Chemistry, University of Bern (DCE) vonRoll Campus		
24.-25.08.2023	SCS Fall Meeting 2023, University of Bern vonRoll Campus (SCS/DFR)		
26.–31.08.2023	Euroanalysis, International Conference Centre Geneva (DAS)		
27.–31.08.2023	Swiss Summer School on Organic Synthesis, Hôtel Nendaz Haute-Nendaz (SCS/DFR-OC)		
28.–31.08.2023	International Summer School on Electrocatalysis, Hotel Metropole Interlaken (SCS/SwissCat)		
04.–05.09.2023	Peptide Therapeutics Forum, University of Basel (SCS/DMCCB)		
10.–13.09.2023	Conference on applied surface and solid state analysis AOFKA, ETH Zurich (DAS)		
11.09.2023	Fachtagung Umwelt 2023, FHNW Muttenz (SCE)		
15.09.2023	Swiss Soft Days 2023/2, University of Basel (DPCI)		
15.09.2023	Swiss Chemistry Science Night 2023, Casino Bern (SCS)		
26.–28.09.2023	Ilmac Basel, Messe Basel (SCS and partners) Day 1: Digitalization (SusChem/DIAC) Day 2: Chemical Technologies (FlowChem) Day 3: New Biotech Methods (SBA, SVC)		
16.11.2023	EFMC International Symposium on Chemical Biology (EFMC-ISCB 2023), Congress Center Basel (DMCCB)		

In addition, several evening events were held as part of the two SCS mentoring programs.



Reports from the SCS Networks

To complement the activities of our traditional divisions and sections, SCS has implemented additional thematic networks in recent years. The networks were quite active, organizing on-site events and providing platforms for personal interactions with the community members.

As of December 2023, the SCS maintains the following thematic networks:

- Analytical Sciences (DAS)
- Catalysis (SwissCat)
- Chemical Ecology (ChemEco)
- Chemical Education (ChemEdu)
- Chemistry and the Environment (SCE)
- Computational Chemistry / Artificial Intelligence (CC)
- Flow Chemistry (FlowChem)
- Food Chemistry (SwissFoodChem)
- Green & Sustainable Chemistry (SusChem CH)
- Industrial & Applied Chemistry (DIAC)
- Inorganic Chemistry (IC)
- Intellectual Property (IP)
- Mass Spectrometry (Swiss Group for Mass Spectrometry)
- Materials Chemistry (MatChem)
- Medicinal Chemistry & Chemical Biology (DMCCB)
- Organic Chemistry (OC)
- Photochemistry (PCS)
- Physical Chemistry (PC)
- Polymers, Colloids & Interfaces (DPCI)
- Fundamental Research (Umbrella for OC, IC, PC, CC)

Information and Networking Events

14.02.2023	2023 IUPAC Global Women's Breakfast, ETH Zurich (SWC)
03.04.2023	Visit to Bachem in Bubendorf and Vionnaz (youngSCS)
03.04.2023	From Lab to Production – Insights into Process Chemistry 2023/1, EPFL Lausanne (DIAC)

DPCI and MatChem are merged to the Division of Materials Chemistry as of Jan 2024.

As of December 2023, the SCS maintains the following social networks:

- youngSCS
- Swiss Women in Chemistry (SWC)
- Honorary Members
- Alfred Werner Scholars Alumni
- Chemistry Europe Fellows

Division of Analytical Sciences (DAS)

I would like to put emphasis on the fantastic (and challenging) unique event of Euroanalysis 2023. Here, I allow myself to remark on the support from the SCS DAS and the organizational success by Prof. Eric Bakker, University of Geneva, Dr. Marc Suter, EAWAG, Dr. Franka Kalman, HES Sion, and Dr. Bodo Hattendorf, ETH Zurich.

On the line of dissemination, and local community bundling, CHanalysis was held over two days for the first time. The SCS DAS provided financial support for the participation of young scientists and retired members. DAS is also the place where most of the academy offers are driven, also thanks to the commitment of Ernö Pretsch.

Finally, at DAS we are open for more and more ‘citizen science’ and public events, such as the International Chemistry Olympiads 2023, where analytical lab visits were offered at several Swiss institutions in academia and industry. Such abridging function of DAS is the most exciting part.

Dr. Davide Bleiner, President DAS

Division of Industrial & Applied Chemistry (DIAC)

The year 2023 was a very intensive and successful year for DIAC. After the SICS meeting in January with a full auditorium at the University of Basel, the traditional Freiburg Symposium on ‘From Lab to Industrial Application - Trends/Innovation in Process Chemistry & Technology’ took place at the end of April. With more than 130 participants it was again a great success, exciting lectures with the highlight being a talk by Nobel Prize winner Prof. MacMillan and many good discussions during the breaks and dinner rounded off the event.

Our PRD colloquia took place this year at the University of Bern and EPFL, again with many participants and stimulating exchanges during the following apéro. In addition, Dr. Kurt Püntener from F. Hoffmann-La Roche, DIAC Fellow 2023, presented his work at the Syngenta Research Center in Stein as well as at the University of Zurich and Geneva. A final piece of the puzzle in the successful and intensive exchange between industry and academia!

Prof. Roger Marti, President DIAC

Division of Fundamental Research (DFR)

A highlight of 2023 was the SCS Fall Meeting in Bern taking place on August 24th and 25th. Much appreciated by the young researchers was the summer party that stimulated scientific discussions in front of the posters in a relaxed atmosphere.

With the co-organization of the SCS Spring Meeting, the SCS Lectureships and the Heilbronner-Hückel Lecture tour, the DFR actively contributes to a rich overall program of the SCS.

Through the SCS Conference Grant the DFR supported the following conferences with a financial contribution of CHF 5'000 each:

- Symposium EuChemS Historical Landmark Award 2021
16.02.2023, University of Bern
- Conference on Dynamic Materials, Crystals, and Phenomena (DynaMiC), 22.–24.03.2023, University of Fribourg
- Bürgenstock Conference 2023 (JSP Program)
07.05.2023, Brunnen
- Conference on Artificial Photosynthesis and Green Catalysis
17.–19.07.2023, EPFL Lausanne
- Euroanalysis 2023 “Analytical Probing of Complex Systems”
27.–31.08.2023, Geneva
- Fachtagung Umwelt 2023
11.–13.09.2023, FHNW MuttENZ
- Operando VII, Int. Congress on Operando Spectroscopy
07.–11.05.2023, Grindelwald
- Symposium of Theoretical Chemistry
11.–14.09.2023, ETH Zürich
- 40 years of surface science and nanotechnology
15.–20.10.2023, Ascona

Prof. Thomas Buerger, University of Geneva

Division of Medicinal Chemistry and Chemical Biology (DMCCB)

It has been a very active year for DMCCB, providing a varied offer of different scientific activities, such as the DMCCB Basel symposium, the DMCCB session at the SCS Fall Meeting, the Peptide Therapeutics Forum and, for the first time, hosting in Basel the EFMC-ISCB taking over the successful series launched by NCCR Chemical Biology. Besides events, the DMCCB has curated and shared with the medicinal chemistry and chemical biology community articles and perspectives through *CHIMIA* columns and the DMCCB literature spotlight on LinkedIn, which receive at times more than 3'000 impressions! The DMCCB is also proud to have assigned in 2023 the RGCC cancer research award and the DMCCB symposium best poster award, as well as one travel grant in support of the next generation of medicinal chemists and chemical biologists.

Dr. Fides Benfatti, Syngenta

Division of Chemical Education (DCE)

In 2023 the Division of Chemical Education enjoyed a very active year with several highlights. In July, the International Chemistry Olympiad took place at ETH Zurich, and some members of the division contributed to its flawless organization. At the end of August, we were pleased to welcome around 60 participants at the symposium in Bern, which focused on the challenges of teaching chemistry and formed the basis for the *CHIMIA* issue on chemistry education.

Prof. Jan Cvengros, President DCE

Section of Chemistry and the Environment (SCE)

This year, the SCE not only hosted its fourth session at the SCS Fall meeting with two exciting and thought-provoking keynote lectures by Prof. em. Janet Hering (Eawag/ETH) and ClimeWorks but continued to increase its footprint. We organized a SCE-sponsored session at the Umwelt 2023 (SETAC GLB/GdCH) in MuttENZ and invited four young environmental chemists as keynote speakers. Most importantly, however, we

nominated a team of environmental chemists and engineers from Eawag for the 2024 Sandmeyer award for their pioneering work on oxidative wastewater treatment, and, to our greatest excitement, saw them winning it against stiff competition.

Prof. Kathrin Fenner, President SCE

Section Flow Chemistry

2023 has been a very exciting year for the Flow Chemistry Network as we have entered the third year from the creation of this SCS network and have started to plan future activities based on the learnings throughout the last years. We have contributed to the successful realization of the Ilmac Conference in Basel, which was a great event. We have embarked on establishing a close partnership with the Flow Chemistry Society Europe, which will increase the visibility of the activities planned and enable our network to reach out to the broader community.

Dr. Claudio Battilocchio, President of the Flow Chemistry Section

Swiss Association of Computational Chemistry (SACC)

There was no SACC Spring Meeting 2023. Prof. Jeremy Richardson, ETHZ and Prof. Clemence Corminboeuf, EPFL organized the SACC Computational Chemistry session within the SCS Fall Meeting on August 24/25, 2023, in Bern. There was a total of 10 contributed talks and two invited presentations by Lars Ruddigkeit, Microsoft, and Anna Feldman-Salit, Arcondis Group. In addition, a poster session was held.

Board Members: Prof. Jürg Hutter (University of Zurich), Prof. Tomasz Wesolowski (University of Geneva), Prof. Markus Meuwly (University of Basel), Prof. Ursula Röthlisberger (EPFL), Prof. Daniele Passerone (EMPA), Prof. Jeremy Richardson (ETHZ), Dr. Torsten Luksch (Syngenta), Prof. Sergey Churakov (University of Bern)

Prof. Jürg Hutter, President SACC

youngSCS

2023 has been a successful year for youngSCS. We relaunched the Swiss Snow Symposium after the COVID break and could have several in-person visits to different companies. All these in-person events help to intensify the relationship between young chemists and foster a highly interactive and social environment.

Marie-Désirée Schlemper-Scheidt, President youngSCS

Swiss Women in Chemistry Network

Swiss Women in Chemistry has grown in 2023 with participation in events such as the IUPAC Global Women's Breakfast in Zurich in February and ILMAC in Basel in September. The participation of young female scientists gives an incredible sense of community and the feedback we have received is extremely positive. A new round of "Mentors-Mentees" pairing has also taken place with great participation from industrial and academic mentors who offer support and guidance to PhDs and Post Docs. We look forward to another great year in 2024.

Francesca Paradisi, University of Bern

National Collaborations

Swiss Academies of Arts and Sciences (A+)

The SCS is a member of the Academies of Natural Sciences (SCNAT) and the Academy of Technical Sciences (SATW) and maintains a good partnership with joint-initiatives and mutual support for each other's activities.

scienceindustries

David Spichiger represents the SCS in the board of *scienceindustries* and participates in the Executive Committee Education and Research.

Link to Academia, Industry and Governance

As the majority of the SCS mandates are based on volunteer work, SCS maintains good contacts with all stakeholders in the field to find board members at all levels and in all fields, representing academia, industry, and government.

Member Societies and Partner Societies

- Verein Schweizerischer Amts- und Spitalapotheker (GSASA)
- Swiss Association of Computational Chemistry (SACC)
- Swiss Society for Food Chemistry (SSFC)
- Swiss Group for Mass Spectrometry (SGMS)
- Verein Schweizerischer Naturwissenschaftslehrerinnen und -lehrer (VSN)
- Life Sciences Switzerland LS²

International Collaboration

European Chemical Society (EuChemS)

Delegates from the Swiss Chemical Society

- Board of Directors: Christophe Copéret, ETHZ
- Executive Board and Board of Directors: Hans Peter Lüthi, SCS Foundation, Treasurer
- Division of Organic Chemistry: Christof Sparr, University of Basel
- Division of Inorganic Chemistry: Kay Severin, EPFL
- Division of Analytical Chemistry: Franka Kalman, HESSO/VS
- Division of Chemistry and the Environment: Thomas Bucheli, Agroscope
- Division of Nuclear and Radiochemistry: Patrick Steinegger, PSI
- Division of Food Chemistry: Laura Nyström, ETHZ
- Division of Organometallic Chemistry: Martin Albrecht, Bern, Chair of the Division
- Division of Chemistry in Life Sciences: Leonardo Scapozza, University of Geneva
- Division of Computational Chemistry: Hans Peter Lüthi, ETHZ
- Division of Physical Chemistry: Stefan Willitsch, Basel
- Division of Education: Dr. Markus Müller, Kanti Frauenfeld and Klemens Koch, PH Bern
- Division of Solid State and Materials Chemistry: Greta Patzke, University of Zürich
- European Young Chemists' Network EYCN: Chrysanthi Papadimou, University of Neuchâtel
- International Award Committee for the EuChemS Lecture Award (IACL): Dr. Hans Peter Lüthi, ETH Zürich
- Working Party on Chemistry for Cultural Heritage: Edit Joseph, Haute Ecole Arc Neuchâtel

Other International Collaborations

SCS maintains also contact with other international organizations like Eurachem, SusChem Europe (ETP), IUPAC and partner societies from its neighboring countries.

Bern, January 2024

David Spichiger, Céline Wittwer, Christian Bochet, Hans Peter Lüthi, Gillian Harvey