



A Perspective on Chemistry and Society

A Column on the Occasion of the 75th Anniversary of CHIMIA

YoungSCS

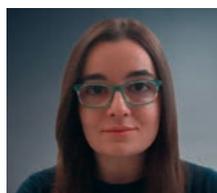
The Young Swiss Chemical Society Empowering Young Chemists in Switzerland for 20 Years

Stephanie M. Linker^{*a}, Chrysanthi Papadimou^b,
Magdalena Lederbauer^c, Christian Schellhaas^d,
Dragan Miladinov^e, and Eva Vandaele^f

^{*}Correspondence: S. M. Linker, E-Mail: linker@phys.chem.ethz.ch, ^aLaboratory of Physical Chemistry, ETH Zurich; ^bInstitute of Chemistry, University of Neuchâtel, E-mail: chrysanthi.papadimou@unine.ch; ^cDepartment of Chemistry and Applied Biosciences, ETH Zurich, E-mail: mlederbauer@ethz.ch; ^dDepartment of Chemistry and Applied Biosciences, ETH Zurich, E-Mail: cschellh@student.ethz.ch; ^eDepartment of Chemistry, University of Basel, E-Mail: dragan.miladinov@unibas.ch; ^fDepartment of Chemistry, University of Zurich, E-mail: eva.vandaele@chem.uzh.ch



Stephanie M. Linker is a PhD student in the Computational Chemistry group at ETH Zurich. She is the responsible for international relations in the youngSCS board.



Chrysanthi Papadimou is a PhD student at the University of Neuchâtel. She acts as a representative of UniNE at the youngSCS.



Magdalena Lederbauer currently pursues her Bachelor's studies of Chemistry at ETH Zurich and is an active member of the youngSCS.



Christian Schellhaas is a Master's student in Interdisciplinary Sciences and ETH Zurich representative for the youngSCS.



Dragan Miladinov is a PhD student of organic chemistry in the Sparr research group and is the youngSCS representative of University of Basel.



Eva Vandaele is a PhD student in the Computational Chemistry group at the University of Zurich. She currently is the vice president of youngSCS and representative of the University of Zurich.

Introduction

Young scientists are key drivers for innovation and intellectual progress. They will become the future professional and scientific leaders. Tomorrow's science will only be as strong as our pool of diverse young talents today.^[1] In our knowledge-driven economy, nurturing a well-educated, connected, and organised academic youth is the determining factor for future success.^[2,3] Therefore, the question arises on how to best support, connect and empower young scientists with a set of professional skills that will be key in advancing their career development.^[4,5]

Collaborative networks stimulate professional and personal development.^[6–10] Hence, the young Swiss Chemical Society (youngSCS) aims to provide such a network for young chemists all over Switzerland (Fig. 1). This is achieved through various events by which young chemists can develop meaningful competences. Soft-skills are enhanced in symposia and seminars. Networks are expanded through career-path-focused events, organised as industrial or academic visits, which lead to better informed decisions about future endeavours. Furthermore, professional and personal views are broadened thanks to the diversity of our members. The youngSCS supports chemists at different career stages, from various backgrounds and aims to represent all areas of chemistry across Switzerland.

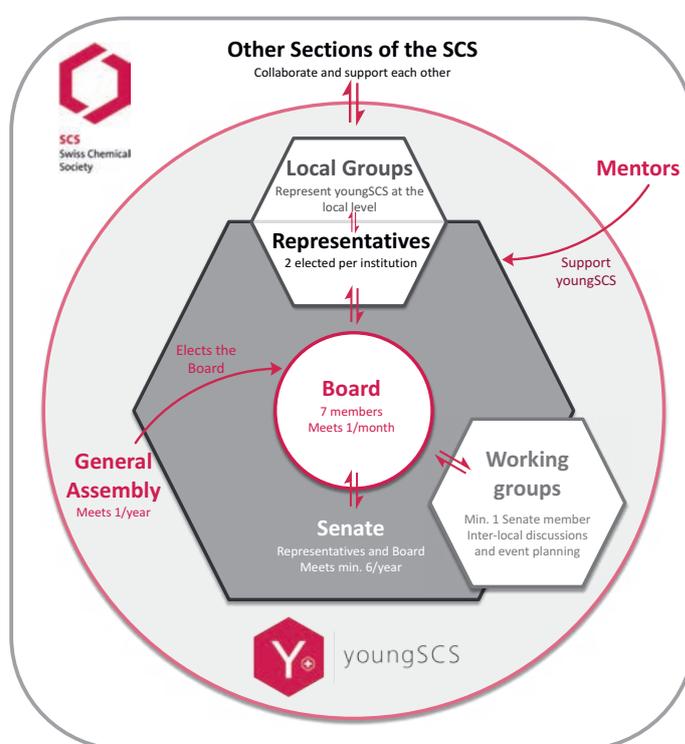


Fig. 1. The youngSCS is a subgroup of the SCS directed to young chemists. At the yearly general assembly the members of youngSCS elect the board. The youngSCS members are organised into local groups and every institution sends two representatives to the senate. These representatives act as linkers between the local groups and the board. Events are organised and planned in working groups, which are set up by the senate. These are generally open to any member that might be interested.

In addition to a historical glance, this article is intended to inform the reader about the past and future activities of the recently rebranded youngSCS, along with details concerning our community as well as our mission.



- How can I become an **active youngSCS** member?
- By joining SCS on the new SCS-website;
- By following youngSCS on LinkedIn and/or Twitter to share your passion for chemistry and not miss any chemistry-related event and career advancement opportunity;
- By participating in the events organized by youngSCS and spreading the word around you to benefit others as well.

History of the youngSCS

Founded in 2001 under the name of ‘Swiss Young Chemists’ Committee’, ‘Club des Jeunes Chimistes Suisses’ or ‘Schweizer Jungchemikerforum’, respectively, a group of PhD students from the University of Basel intended to initiate a platform for young scientists inspired by the German Jungchemikerforum. With the sponsorship of the Swiss Chemical Society and the support of the Basler Chemische Gesellschaft & KGF, its main focus was to provide PhD and PostDocs with a platform for networking and to give rise to regional groups in Swiss universities.

Back then, the communication between the Chemical Institutes of the University in Basel was predominantly informal. The activities consisted of monthly board meetings, a football tournament and presentations by young researchers. In addition to that, the country’s first career fair exclusively for chemists was held in Basel in 2002 and the next year in Lausanne. The Swiss Snow Symposium – a tradition held up to this day – was first organised in 2003. It combines a scientific conference with snow sports and quickly grew from less than 10 to more than 60 participants in 2006. A group photo of the first Swiss Snow symposium is shown in Fig. 2.

Over the course of time, the young association ‘grew organically’, as the former president Dr. Ellie Piper (née Shardlow) recalled: in 2003, the first official board reformed the network into an association by law and decided to become a body to foster national events, with first seminars held in Basel. In the SCS



Fig. 2. Participants at the first Swiss Snow Symposium, held in March 2003.

Spring meeting on March 10th 2005, it was formally integrated into the Division of Chemical Research of the SCS.^[10,11] The JCF changed its name into ‘Swiss Young Chemists’ Association’ (SYCA) to reflect the multilingualism of Switzerland. In 2020, the SYCA was rebranded as ‘youngSCS’ to express the close connection to its mother organisation, the SCS.

Mission and Activities of the youngSCS

The youngSCS *represents, connects, and empowers* young scientists in chemistry-related fields all across Switzerland.

Young chemists are *represented* both nationally, *i.e.* in the SCS board, local universities, Swiss career fairs, and internationally. The youngSCS board currently includes up to two representatives from each university and institute in Switzerland (Fig. 1, Fig. 3). The youngSCS collaborates closely with the European Young Chemists’ Network (EYCN^[12]) and the International Young Chemists’ Network (IYCN^[13]) and has one delegate in each of these organisations. A recent example of an international collaboration is the Young Chemists’ Summit, organised in September 2020. This hybrid conference was initiated by the Austrian Young Chemists as a mixture of virtual talks and local hubs and offered participants a rare opportunity for face-to-face scientific exchange in the pandemic-stricken year 2020. The youngSCS represented Switzerland in this conference and set up local hubs in Fribourg and Zurich.

A picture of the plenary session by Prof. Giese is shown in Fig. 4. Moreover, the youngSCS committed to support the Young Chemists’ sustainability guidelines in collaboration with the German and Austrian young chemists’ associations, JCF and Jungchemiker, respectively.^[14] As their representative body, the youngSCS aims to advocate for rising chemists and communicates their interests towards the general public, industry, and academia.

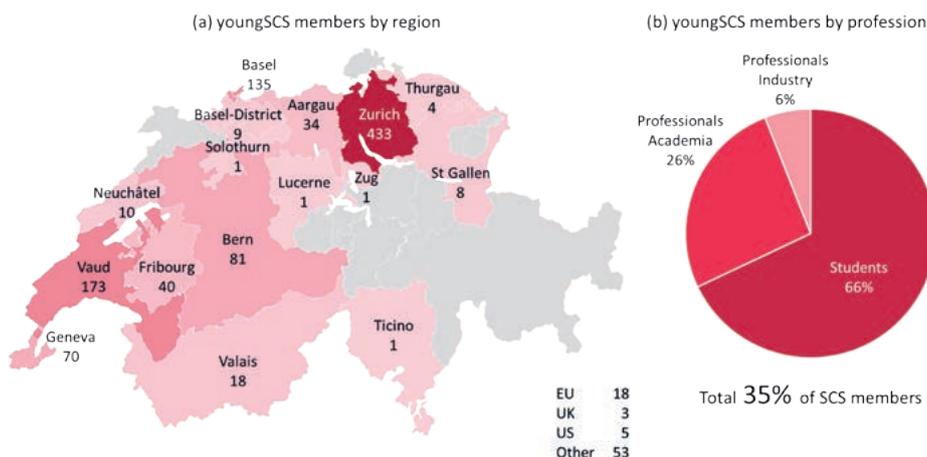


Fig. 3. youngSCS statistics of 2020 (a) youngSCS members by region illustrates the location of youngSCS members. Most members were based in canton Zurich, followed by the cantons Vaud and Basel. ‘Other’ includes members outside the annotated regions or with unknown locations. (b) youngSCS members by profession shows that in 2020, 66% of youngSCS members were students, 26% senior scientists in academia and 6% employed in industry. In total, youngSCS counted 1098 members, and contributed to 35% of all SCS members.



Fig. 4. The youngSCS has established four event tracks to empower young chemists. A comparison between different career tracks was virtually organised to provide students new perspectives. Innovative research was presented at one of the plenary lectures of the young chemists summit in Fribourg, in collaboration with the Austrian Young Chemists. The Swiss snow symposium (group picture from January 2020) connects young chemists all over Switzerland and members are encouraged to enhance their presentation skills by annual awards.

To **connect** young chemists, the division supports the exchange of scientific and technical know-how and offers networking possibilities with academia, industry, and public relations. The focus of the youngSCS is to connect students, young professionals and staff from all Swiss universities and research institutions. A multitude of youngSCS events offer networking opportunities. Here, we only highlight a few of them. ‘Visit each other’ is an event where youngSCS members visit chemistry departments of Swiss-based universities. This strengthens the ties between universities and provides students with a broader picture of the chemical research in Switzerland. Furthermore, the youngSCS organises company visits, *e.g.* a virtual tour at IBM Research Europe in Zurich (March 2021), to provide youngSCS members with insights into possible career paths. Another highlight is the aforementioned annual Swiss Snow Symposium. The deliberately small venue of the Snow Symposium fosters not only intense exchange among the youngSCS members, but also with external partners from industry and academia. Thanks to industry sponsors and the SCS, the youngSCS is able to offer the Swiss Snow Symposium at an affordable fee for students. This relates to another core value of the youngSCS: the youngSCS is an advocate for diversity. It supports chemists at different career stages, from various social and cultural backgrounds and minority groups.

The youngSCS **empowers** young chemists by providing unique opportunities to train and strengthen their skills. Early career chemists are **informed** via its freshly-established newsletter and social media channels of webinars and relevant events. Recent examples include a webinar about insights into academic publishing by Richard J. Smith (February 2021) and a comparison between an academic and an industrial career path in the outreach event ‘Chemistry Degree and Now?’ by Prof. Dr. Christof Sparr and Dr. Amandine Kolleth-Krieger (December 2020), shown in Fig. 4. In addition, the youngSCS and the SCS provide multiple platforms for enhancing **presentation and communication skills**. Members are encouraged to present their work at the SCS Fall Meeting and/or the Swiss Snow Symposium, opportunities that,

- Are you a chemist or chemistry-related scientist in Switzerland?
- Are you studying chemistry or a chemistry-related science and/or working in a swiss-based academic institution or industry?
- Are you interested in the swiss-wide chemistry community?

If you answered ‘YES!’ to any of the above questions, the Swiss Chemical Society (SCS) is the scientific organization you should be member of.

- Are you a member of the SCS and less than 35 years old?

Then, you automatically belong to the **youngSCS**.

at other conferences, are often limited to more advanced or senior researchers. Another key asset for young researchers is **international competence**. The youngSCS supports international exchange via their network and traveling grants are provided by the SCS. Last but not least, becoming an active youngSCS member and taking over responsibilities in the board fosters one’s **leadership skills**. Board members advance their teamwork ability, learn to organise events as well as to communicate efficiently to large groups and build competences in how-to-moderate a meeting and lead a team.

In summary, these events and opportunities are all aimed to provide all youngSCS members with the information and skills they need to get noticed in their field or just find their next job.

Acknowledgements

We would kindly like to thank Dr. Ellie Piper, Lukas Scherer, as well as Thomas Haefele-Racin, who led the SYCA board from 2003-2006, for an interview and information about the youngSCS’ early years. We would also like to thank David Spichiger for providing the membership statistics. Special thanks to Marie Perrin, Marie-Désirée Scheidt, Iluc Farrera-Soler, and Melanie Gut for the elaboration of the youngSCS structure figure. We would also like to thank our board members Benjamin Ries, Patrick W. Fritz, Ahmed Elabd, and Amin Hodaei.

Received: March 17, 2021

- [1] I. Friesenhahn, C. Beaudry, ‘The Global State of Young Scientists – Project Report and Recommendations’, Akademie Verlag, Berlin, **2014**.
- [2] ‘Universities and Business: Partnering for the Knowledge Society’, Eds. L. Weber, J. Duderstadt, Economica, London, **2006**.
- [3] ‘The Changing Conditions for Academic Work and Careers in Select Countries’, Eds. W. Locke, U. Teichler, Werkstattberichte, Kassel, **2007**.
- [4] S. W. Cameron, R. T. Blackburn, *J. High. Educ.* **1981**, 52, 369.
- [5] T. D. Allen, M. L. Poteet, L. T. Eby, E. Lentz, L. Lima, *J. Appl. Psychol.* **2004**, 89, 127.
- [6] N. Hara, P. Solomon, S.-L. Kim, D. H. Sonnenwald, *J. Am. Soc. Inf. Sci.* **2003**, 54, 952.
- [7] L. Hunter, E. Leahey, *Am. Sociol.* **2008**, 39, 290.
- [8] A. Soldá, A. M. Rodríguez-García, *Chem. - A Eur. J.* **2020**, 26, 9661.
- [9] R. M. Kanter, *Harvard Business Review* **1994**, July-August Edition.
- [10] *Chimia* **2006**, 60, No. 1/2, 100.
- [11] *Chimia* **2007**, 61, No. 1/2, 62-3.
- [12] The European Chemical Society, ‘The European Young Chemists’ Network’ can be found under <https://www.euchems.eu/divisions/european-young-chemists-network/> (Accessed on February 21, 2021)
- [13] International Younger Chemists Network, IYCN, can be found under <https://www.iycnglobal.com/> (Accessed on February 21, 2021)
- [14] The German Young Chemists’ Forum, Team sustainability, can be found under <https://jcf.io/en/organization/teams/team-sustainability> (Accessed on February 21, 2021)