



A Perspective on Chemistry and Society

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

Swiss Women in Chemistry (SWC)

Swiss Women in Chemistry – Two Years Later ...

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Abstract: The SCS Swiss Women in Chemistry network was launched in September 2019. Under the umbrella of the Swiss Chemical Society, its aim is to create visibility, facilitate networking and provide a supportive community for female chemists in Switzerland across all career stages both in industry and academia. The current article provides an overview on the platform's activities over the past two years.



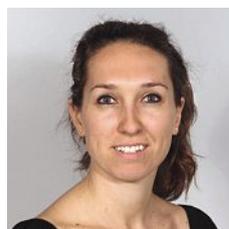
Dr. Maud Reiter is the Director of New & Renewable Ingredients in the corporate R&D Division of Firmenich S.A. in Geneva (Switzerland). Maud received her undergraduate degree from Imperial College, London in 2002, followed by her DPhil with Professor Véronique Gouverneur at the University of Oxford.

After postdoctoral work with Professor

David MacMillan at Caltech/Princeton University, Maud joined Merck & Co. in 2008 in Rahway, NJ, USA as a medicinal chemist. In 2011, Maud moved to Firmenich, where she is overseeing the discovery of novel & sustainable perfumery ingredients and since October 2020, the implementation of renewable versions of existing ingredients. She is a core team member of the SCS Swiss Women in Chemistry & Suschem.ch networks and joined the SCS board of directors in June 2021.



Prof. Dr. Rebecca Buller is a biological chemist and Professor for Biotechnological Methods, Systems and Processes at the Zurich University of Applied Sciences. Rebecca Buller studied chemistry at the Westfälische-Wilhelms Universität Münster (D) and the University of California Santa Barbara (US). After completing her PhD with a focus on enzyme engineering at the ETH in Zurich (CH), Rebecca Buller accepted a position as laboratory head at the flavour and fragrance company Firmenich (CH). In 2015 she relocated to the Zurich University of Applied Sciences where she founded the Competence Center for Biocatalysis (CCBIO). Rebecca Buller serves as an expert on numerous panels, among them the steering board of the NCCR Catalysis, the working group 'Biotransformations' of the DECHEMA/VAAM, the European Section of Applied Biocatalysis (ESAB) and she is founding board member of the SCS Swiss Women in Chemistry. Research in Rebecca Buller's laboratory focusses on the expansion of the biocatalytic toolbox by sourcing and engineering enzymes for synthetic applications.



Dr. Rachel Hevey is a Research Associate at the University of Basel. After completing degrees in both Chemistry and Biological Sciences, she undertook her PhD studies with Prof. Chang-Chun Ling at the University of Calgary (Canada). In 2013, she joined the group of Prof. Beat Ernst in Switzerland as a postdoctoral researcher, and in 2015 was promoted to a Research Associate at the University of Basel. Her main research interests involve glycan synthesis and the development of carbohydrate-based pharmaceuticals. Her research and teaching have been recognized through several awards, including the J.B. Hynes Research Innovation Award and recent selection for the IUPAC centenary 'Periodic Table of Younger Chemists' highlighting emerging chemistry leaders under age 40. Rachel is a co-founder and core member of the SCS Swiss Women in Chemistry.



Inga Shybeka is a PhD candidate in the group of Professor Stefan Matile at the University of Geneva since 2018, where she is working on cellular uptake. Inga obtained her MSs degrees following a double diploma program. Firstly, she carried out her master thesis project in green chemistry with Professor Michele Baltas at the Université Toulouse III – Paul

Sabatier in Toulouse, France in 2018. Afterward, Inga completed her 2nd MSs in chemistry of natural compounds from Taras Shevchenko National University of Kyiv, Ukraine in 2019. Inga is a student ambassador of the SCS Swiss Women in Chemistry network for the Swiss Romandy area.

Introduction

It has been two years already since the official launch of the SCS Swiss Women in Chemistry (SWC) platform. The network was created, in part, as an initiative to increase participation of female speakers at SCS chemistry conferences and scientific advisory boards within Switzerland. Typically, over the past years, women comprise from 20–30% of the SCS conference audience, but this percentage is not reflected in the speakers' program, with several recent Swiss meetings lacking any female speakers.

Social Media

SWC social media accounts highlight local events, celebrate award recipients, and share recent publications either first- or senior-authored by Swiss female scientists to increase awareness of work currently being done in Switzerland. In addition, SWC will soon launch a 'Meet the Members' campaign to further highlight the achievements of our members.

The SWC network has been highly active on social media. Compared to the first year after launch, the SWC network has increased by 2.5 times and today includes:

- ~400 members within its LinkedIn group
- ~570 followers on @SwissWomenChem on Twitter
- ~200 followers on Instagram (swisswomenchem)

Events

SWC has been organising several yearly events:

- Corporate Insights
- Mentor program dinners
- IUPAC Global Women's breakfasts
- Career round tables

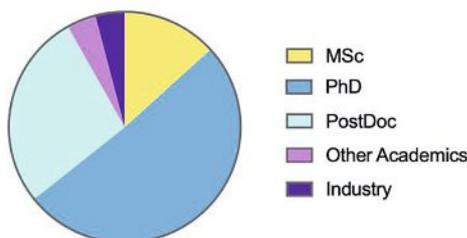
Corporate Insights

Two events have been held, namely at Novartis and Firmenich, both in an online format. During these Insights events, students had the opportunity to learn more about the career path of junior or senior industrial scientists, as well as interact more directly with female industrial scientists through workshops in small groups.

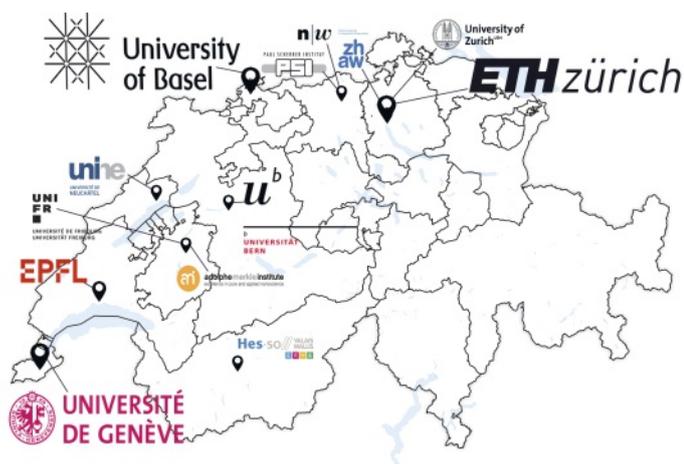
Novartis Round Tables

Organised in collaboration with Novartis, the Round Table events covered the topic of careers in chemistry. The two events already held were online due to the pandemic but we are hoping to move to an in-person format in 2022.

The two sessions attracted approximately 100 *participants* each. For the second event, half of the participants (51%) were PhD students, another 27% were PostDocs and 13% were master students, with the remaining percentage corresponding to established academic or industrial members.



Among the students, more than half of attendees were from larger universities: University of Basel (22%), ETH Zurich (17%) and University of Geneva (16%). Other participants attend EPFL (11%), University of Bern (11%), University of Fribourg (4%) and University of Zurich (3%). In addition, there were several participants from Adolphe Merkle Institute, FHNW, HES-SO Valais, Paul Scherrer Institute, University of Neuchatel, ZHAW, one academic from outside Switzerland, and several specialists from industry (4%).



The round table discussion was split into different topical rooms, covering Analytical Chemistry, Automated & High-Throughput Experimentation, Materials Science, Medicinal Chemistry, Biotechnology, Process Chemistry, and Computational Chemistry, with a final room being dedicated to Pursuing a PostDoc. The latter was introduced in the 2nd series, as per survey outcome, stating that students were interested in learning more about the different options of postdoctoral studies in industry versus academia. Various topics were covered during the round table discussions, such as job search strategies and tools, importance of personalised cover letters, networking, what a classic workday looks like, and the evolution of responsibilities while progressing up the career ladder.

Mentor Program

Each year, the SWC network matches up local mentees with established mentors in both academia and industry across the three regions. The Mentor Program was initiated in 2019 and has helped to support over 25 mentees per year. Currently, the 3rd round of mentoring is ongoing and consists of more than 30 Mentor/Mentee pairs. As there is no better way to provide you with feedback on the program, we would like to give the word to the participants themselves.



Mina
EPFL Master Student, Lonza
2020 Mentee

“Just as my master studies in chemical engineering at EPFL were coming to an end, I learned about the SWC mentoring program. I saw this as an opportunity to receive much-needed guidance and support for the transition between university and an industrial career, so I decided to join the program. As the program spans across several months, it was able to cover all important steps during my transition, starting with job applications and finishing with my first months as a new Lonza employee. My mentor's advice was always empowering, and our regular meetings helped me evaluate my progress and prepare for the next big step. The insights of an experienced professional, as well as personal contact with another colleague were very valuable to me in this period.”



Maria Inès
Retired SVP R&D, Firmenich
2020 -2022 Mentor

“[...] I believe SWC mentoring program offers excellent support to recent graduates of all levels, as it can be tailored to personal needs of each participant and their career goals, whether it be in academia or industry. I joined this program since I'm convinced that the exchange of needs, expectations and experiences between generations is beneficial to both the mentee and the mentor. Different times and periods in own's lives require different solutions for both, professional and private lives. But there is a convergence in needs, probably more specially for women, about making choices and progressing in their careers while maintaining a harmonious social life....”



Gisèle
ETH Master Student, MIT VR
2019 Mentee

“The SWC mentorship program has given me a lot of guidance and confidence for important steps in my academic career. Above all, it has encouraged me to go further than I would have on my own.”



Selina
ETH PhD Student, Harvard University
PostDoc
2020 & 2021 Mentee

“The SWC mentoring program provides a unique networking platform to connect with female role models in academia and industry that empowered me to make confident decisions on my next career steps. I am truly grateful to my mentors for openly sharing their personal views, struggles, keys to success and the invaluable knowledge that can only be gained through experience.”



Jade
ETH PhD Student, EPFL PostDoc
2020 & 2022 Mentee

“I joined the SWC network in my last year of doctoral studies by participating as a mentee in the SWC mentoring program. At that time, I was unsure if I wanted to pursue postdoctoral studies or go directly into industry. I felt like there was a considerable gap between where I was then and where I was supposed to be

the following year. This transition to the ‘real working world,’ as I used to call it, raised many questions. With my mentor, we could discuss career choices and opportunities. We also talked about the importance of work–life balance. I could benefit from her past experiences and unbiased guidance. We shared our respective journeys, the highs and the lows, the success, and the challenging situations. We may have the best relationship with our PIs, colleagues, friends, or family, but it is always helpful to have someone outside of our circle who has been through a similar path and whom we can trust, who listens, understands, and supports us. I am grateful to have met my mentor through this program, as well as other great scientists, at some of SWC’s networking events.”



Vittoria
UniBas, PhD Student
2019 Mentee

“I would say that the mentoring program taught me to take up space and stand my ground. My mentor taught me that communication and mediation is fundamental, but so it is to be seen, heard and understood.”

Conclusions

Connecting virtually allowed us to continue our activities during the pandemic, however, we look forward to transitioning back to in-person meetings as soon as it is safe, in order to benefit most from networking opportunities within the SWC community.

Acknowledgements

We would like to thank all mentors, who since 2019 have kindly supported our mentees in their professional development, as well as the principal coordinators for the Career round tables organized with Novartis, Cara Brocklehurst and Lucie Lovelle. Finally, we would also like to thank Melanie Vanberghem for serving as seed crystal and Alain De Mesmaeker as a sponsor of the Swiss Women in Chemistry network.

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