



Conference Report

Swiss Snow Symposium

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The Swiss Snow Symposium is a 3-day chemistry conference traditionally organized every year by the young Swiss Chemical Society (youngSCS) in the Swiss Alps. This year's 19th edition took place from the 20th to the 22nd of January 2023 in Saas-Almagell, after two years of absence due to the COVID-19 pandemic, and the organization of the EYCheM2022 by Switzerland last winter. The Swiss Snow Symposium aims to provide students with the opportunity to present their research to peers and colleagues as well as to learn from speakers from academia and industry alike. This is accompanied by workshops on various topics and the opportunity to benefit from a unique location in Saas-Fee valley to enjoy activities such as skiing, snowshoeing, sledging, or curling! Networking is also at the core of the symposium, which by its size allows participants to share their passion for chemistry, connect with one another and gather experience from accomplished scientists in an informal setting.

The conference started on Friday evening with a few words of opening from *Marie Perrin* and *Marie-Désirée Scheidt*, respectively President and Vice-President of the youngSCS. This was shortly followed by the first and very apropos contribution of *Prof. Dr. Margit Schwikowski* (Paul-Scherrer Institute), who introduced us to the chemistry of glaciers and how, throughout her numerous expeditions around the globe, she could map the evolution of given chemicals in the atmosphere, to understand

past and present environmental changes. In this context of climate emergency, *Prof. Dr. Máté Bezdek* (ETH Zurich) urged our sense of urgency to develop simple but efficient chemical sensors to detect potent greenhouse gasses such as CH_4 and NO_x .



Fig. 2. Impressions of Friday sessions and quiz winners. © youngSCS.



Fig. 1. Swiss Snow Symposium 2023. © youngSCS.

The evening ended with a quiz during which teams of six participants had to answer 40 questions about chemistry on the one hand and Swiss culture on the other (Do you know which chemical you should use to remove a wine stain or what is the largest lake within Switzerland? Answers at the end of this report!). On Saturday, clear blue sky and fresh snow offered outstanding conditions to enjoy the slopes of the Allalin-Mountain, learn the basics of Eisstockschiessen or enjoy a relaxing day at the hotel Spa. The scientific program was restarted by *Prof. Dr. Philippe Schwaller* (EPFL) who walked us through the concept of atom-mapping like SMILES representations, which when combined to machine learning can predict chemical reaction, yields and retrosynthetic routes, paving the way of a new digital synthetic revolution. Then *Dr. Leslie Anne Fendt* (Roche) demonstrated through her own experience, that a career after a PhD in Chemistry does not need to follow a straight line, and prompted us to find our *Ikigai* (reason for being). The evening then continued with contributed talks from students and two very lively poster sessions.

On the final day of the conference, *Dr. Felix Flachsmann* (Givaudan) presented part of his work in the fragrance industry and once more our senses were tested with diverse smelling samples. The program continued with *Prof. Dr. Paola Luciani* (University of Bern) who exposed the breakthroughs that were made in drug delivery systems to induce a sustained release of drugs, and therefore reduce the frequency of administration and improve patient well-being. In the afternoon, *Prof. Dr. Michal Juricék* (University of Zurich) gave us a sample of the lecture



Fig. 3. Impressions of Saturday sessions. © youngSCS, and Laurent Severy and Subhradip Kundu (top two photos).

developed together with **Dr. Michel Rickhaus** on *Visualize Your Science*, with the two key lessons: first, it is not simple to be cool, but it is cool to be simple, and second, the youngSCS logo is an example of great graphic design! Finally, the conference was concluded by **Prof. Dr. Cristina Nevado** (University of Zurich) and an exciting journey into gold chemistry.

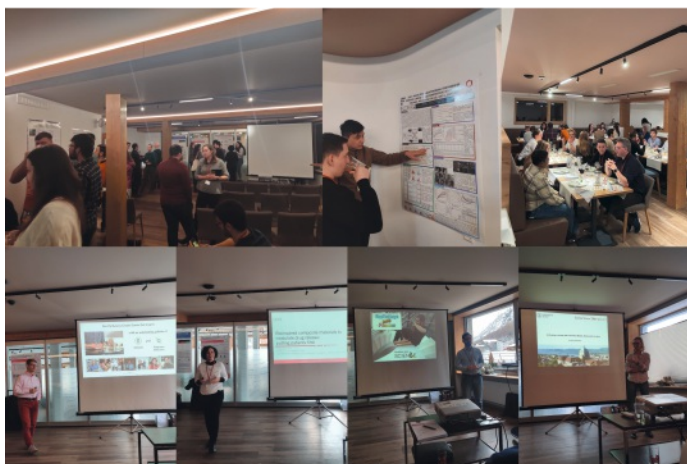


Fig. 4. Impressions of the poster session and Sunday sessions. © youngSCS, and Timur Ashirov (middle top photo).

Overall, there were 10 short oral presentations and 25 posters from students. The quality of the contributions was awarded with two best oral presentation awards sponsored by the EYCN, to Andrea Blankenship (ETHZ) and Cesare Berton (EPFL), while three best poster prizes sponsored by *Helvetica* were awarded to Ghewa AISabeh (EPFL/AMI), Patrick Fritz (University of Fribourg), and Sarah Teworte (University of Bern).

Answers: you should use oxalic acid and it is the lake of Neuchâtel !

Acknowledgements

We would like to thank the organizing committee for their commitment and dedication to the smooth running of the conference, in the person of Tara Forrest (UniGe), Edward Will (EPFL), Valentina Gasser



Fig. 5. Awardees of Best Talk and Best Poster Awards. © youngSCS, and Andrea Blankenship and Cesare Berton (top two photos).



Fig. 6. Organizing Committee SSS23. © Philippe Schwaller.

(ETHZ), Jaime Martín Gonzalez (UZH), Eva Vandele (UZH), Lluc Farrera-Soler (EPFL), Marie-Désirée Scheidt (UniNe) and Marie Perrin (ETHZ). We gratefully acknowledge Richard Smith for his scientific expertise and all speakers for their inspiring talks. We also thank the generous support of our sponsors, without whom the organization of the Swiss Snow Symposium 2023 would not have been possible, and the SCS Foundation for sponsoring the participation of Alfred Werner Scholars. And finally, we would like to thank all participants for contributing to this enriching and enlightening experience, both from a scientific and human perspective.

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