



SCS
Swiss Chemical
Society
Flow Chemistry

Flow Chemistry Highlights

Flow Chemistry Network

Selected Topic: Two Years of the Flow Chemistry Network

Two Years of the Flow Chemistry Network

Introduction

At the beginning of 2018, a group of passionate colleagues had the idea to pull together a small network (what we used to call the ‘Basel Flow Chemistry’ network) of industrial experts, who believed in the need to pre-competitively share know-how and nurture Flow Chemistry as an enabling technology within Switzerland.

In 2020, this informal network had the chance to get the support from the SCS, to establish the first small steps towards an official Swiss Flow Chemistry Network, thanks to Alain De Mesmaeker and David Spichiger.

It was finally in Lausanne, on 7th October 2020 during the ILMAC 2020, where we formally created the network during a dedicated workshop. Despite the COVID times and since that day in October, the team has grown from a small number to more than twenty colleagues, who share the passion and commitment and are now part of either the core or extended team of the network. Since the beginning of 2021, the core team has been working relentlessly to put together a framework for a sustainable growth of the network, which is splendidly supported by the SCS. Amongst several ideas we had since the start of such network, the core team (namely, *Agnieszka Ladosz*, *Claudio Battilocchio*, *Benjamin Martin*, *Francesca Paradisi*, *Christof Sparr*, *Joerg Sedelmeier*, *Jacques Membrez*, *Roger Marti*, *Marc-Andre Mueller*, *Nina Hartrampf*) has focused on establishing:

- A regular Swiss Flow Chemistry Symposium which would be associated to the ILMAC event to cover many of the industrial and academic advances.
- Flow Chemistry curriculum initially piloted at the UZH with the potential to expand such curricula for a broader use.
- A monthly Flow Chemistry column in CHIMIA.
- Last but not least, the most recent Flow Chemistry Seminar which aims to bring together experts and non-experts in flow chemistry.

A Quick Look back

Flow Chemistry Symposium at ILMAC Basel 2021

It goes without saying that our first Flow Chemistry Symposium at ILMAC 2021 in Basel (Fig. 1) was a great celebration of our newly formed network and showed the value of creating such a network within the SCS. We had great feedback coming from many corners, energizing the community during that very maiden event.

Student Curriculum in Flow Chemistry at UZH

We have created a nice curriculum program thanks to the efforts of Prof. Nina Hartrampf, with some guest lectures coming from the core team members (Fig. 2).



Fig. 1. Panel discussion at the Flow Chemistry Symposium, ILMAC 2021. Photo credit: SCS.

Guest Lectures from Industry:



Fig. 2. Guest lecturers at UZH: Agnieszka Ladosz (Idorsia), Claudio Battilocchio (Syngenta), Benjamin Martin (Novartis), Joerg Sedelmeier (Roche)

Regular CHIMIA columns

During the year of our activity, you also had the chance to get familiar with the flow technology through a series of short-paper reviews, ‘Flow Chemistry Highlights’. In those one-pagers, we covered topics ranging from reaction safety, sustainability, enabling technologies such as photo- and electrochemical transformations in flow, to automation and flow purification systems.

Flow Chemistry Seminar in Fribourg

Most recently, a group of industrial and academic enthusiasts of flow technology met in the beautiful Villars-sur-Glâne for a three-day seminar on Flow Chemistry (Fig. 3). With both industrial and academic speakers, attendees were offered a unique opportunity to learn about flow chemistry basic and more advanced concepts, interact directly with vendors of flow equipment and meet more experienced colleagues for an excellent scientific exchange.

Would you like to propose a Flow Chemistry Highlight topic here?

Please contact Agnieszka Ladosz or Benjamin Martin, E-mail: agnieszka.ladosz@idorsia.com; benjamin.martin@novartis.com

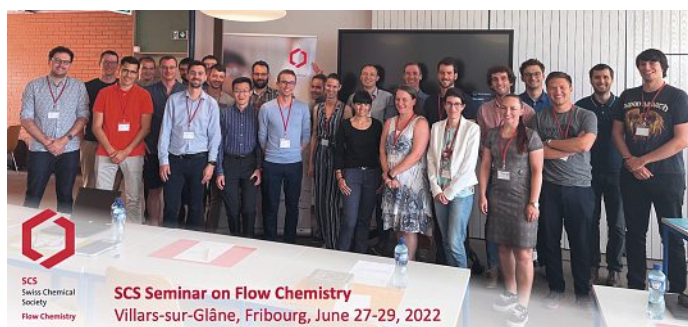


Fig. 3. Participants of the SCS Seminar on Flow Chemistry. Photo credit: SCS.

With such an exciting first two years behind us, we are looking forward to organizing memorable events and delivering Flow Chemistry content to the Swiss Chemistry community in the future!

Yours,

Claudio Battilocchio,
Agnieszka Ladosz,
Benjamin Martin,

on behalf of SCS Flow Chemistry Network

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A Quick Look forward

As new scientific breakthroughs are happening every day, so the interests of our network also develop. Comparison of the word clouds generated in 2021 (Fig. 4) and 2022 (Fig. 5) depicts growing interest in automated and autonomous experimentation among the Network's members. To meet this need, we are collaborating with the Artificial Intelligence Network of the SCS to organize a joint Symposium 'Towards the closed Loop' at the ILMAC 2022 in Lausanne.



Fig. 4. Word cloud created from members' input in 2021 showcases broad interests of the Flow Chemistry Network. Versatile topics were associated with flow technology, reflecting heterogeneity of the network.



Fig. 5. New input was collected in 2022, indicating increased interest for automation and autonomous experimentation among network members.