



SCS  
Swiss Chemical  
Society

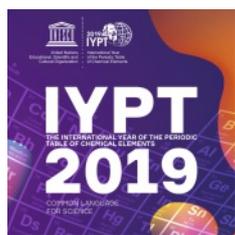
## Community News

[www.scg.ch](http://www.scg.ch)

[www.chemanager-online.com](http://www.chemanager-online.com)

### SWISS CHEMICAL SOCIETY NEWS

#### Celebrate the Periodic Table again with the IYPT19 Final report



The Final Report of the International Year of the Periodic Table of Chemical Elements 2019 (IYPT) was released in October 2020 and is now available online (pdf). The report gathers the planning and the initiatives organised throughout the year-long celebration #IYPT19, including also the ones by

EuChemS and its Member Societies, who coordinated hundreds of activities and events in 2019, and these actions have reached millions of people through media coverage.

If you wish to discover more about the content of the report related to EuChemS activities, we invite you to read the article on the EuChemS website.

[euchems.eu/iypt19-final-report-is-now-available](http://euchems.eu/iypt19-final-report-is-now-available)

#### Videos of the Symposium 4.0 at the ILMAC 2020 are now online



The Videos of the talks at the ILMAC Lausanne 2020 Symposium “Industry 4.0 – Trends and best Practice” are available on the SCS-ILMAC-Website. Due to Covid-19 restrictions, some of our community members were not able or allowed to visit ILMAC and therefore we provide the lectures as online content.

Four focus talks built the core of the morning session on Wednesday, 7. October 2020:

- Juan-Luis Naveira, Syngenta Crop Protection AG  
“Manufacturing 4.0: Digital Transformation in Syngenta and Beyond”
- Jean-Luc Robyr (and Olivier Vorlet), School of Engineering and Architecture of Fribourg  
“Digital twin for a real time decision support system for the reduction of production breakdowns”
- Sebastien Gonzalez, Vifor Pharma, Villars-sur-Glane  
“Augmented Reality in Pharmaceutical Processing – Optimization of Set-up and Line Clearance”
- Michel Barthe, Firmenich SA  
“Innovation by design: SOP Digitalization – From Paper to Tablets” (Note: Introduction by M. Barthe only. Not full lecture.)

[ilmac20.chemistrycongresses.ch/en/videos](http://ilmac20.chemistrycongresses.ch/en/videos)

#### SCS Partnership: Making the difference as an Institutional Partner



SCS implemented the SCS Partnership as a new strategic tool to strengthen the collaboration with industrial partners and to align the Society’s activities to the community’s requirements.

Already 13 partner companies signed the agreements for 2020 and 2021. Please contact the SCS Head Office if you are interested in a SCS Partnership

as well (CHF 3’000 p.a.).

Making the difference as an Institutional Partner through

- Active involvement in the strategic alignment of the society (board-, committee- and jury-membership)
- Becoming Industrial Science Award Program Stakeholders (former SISF Program)
- VIP Guests/Delegates at the Swiss Chemistry Science Night ... and also enjoying the benefits of a “classical” corporate membership:
- Free CHIMIA subscription, publication of Company Reports in CHIMIA, advertising at reduced rates, and logo presence on SCS documents (print, digital)

SCS Partnerships 2020 and 2021:

BASF, Clariant, Dottikon, DSM, Givaudan, Idorsia, Merck (Sigma-Aldrich), Metrohm, Mettler Toledo, Novartis, Roche, Sika and Syngenta.

[scg.ch/partnership@scg.ch](mailto:scg.ch/partnership@scg.ch)

#### A Warm Welcome to Our New Members!



Period: 27.10.–17.11.2020

Daniel Abbott, Zurich – Graziano Amati, Zurich – Etienne Bonvin, Neyruz – Fei Chang, Zurich – Edouard Ehret, Olten – Wolfram Feuerstein, Saint-Sulpice VD – Andrea Geraci, Basel – Lu Han, Zurich – Soohee Huh, Basel – Nadja Klipfel, Sion – Evgenia Kountoupi, Dübendorf – Joseph Lawrence, Zurich – Camilla Massoudi, Zurich – Carlos Moreno Cruz, Zurich – Dally Moya, Zurich – Erin Plasek, Minneapolis – Nieves Pilar Ramírez Hernández, Lausanne – Sirine Sghaier, Neuchâtel – Andriy Stelmakh, Zurich – Melanie Strauss, Zurich – Georgijs Trenins, Dietikon – Maria Tsitopoulou, Basel.

## HONORS, AWARDS, APPOINTMENTS

### Dr. Patrick Hemberger, PSI Villigen, wins the Ružička Preis 2020



The Ružička Prize 2020 goes to **Dr. Patrick Hemberger, PSI Villigen**, for his research on understanding the mechanisms of catalytic fast pyrolysis by unveiling reactive intermediates in heterogeneous catalysis.

The ceremony of the Ružička-Prize 2020 took place as an online event on November 24, 2020.

The Ružička Prize, named after the ETH professor and Nobel laureate Leopold Ružička, is considered one of the most important awards for the promotion of young scientists in the field of chemistry in Switzerland.

Source: [chab.ethz.ch](http://chab.ethz.ch)

### Anna-Katharina Pfitzner, University of Geneva, wins one of the six Birnstiel Awards



In the second year of the International Birnstiel Award for Doctoral Studies in the Molecular Life Sciences, six exceptional young scientists were chosen as laureates. One of them is **Anna-Katharina Pfitzner**, a PhD student in the lab of Prof. Aurélien Roux at the University of Geneva's Biochemistry Department. In her doctoral research

project, she studied the mechanism of membrane remodelling by the most ancient membrane remodelling complex, the Endosomal Sorting Complex Required for Transport-III (ESCRT-III).

The International Birnstiel Award for Doctoral Research in Molecular Life Sciences recognises the exceptional achievements of up to six PhD students in molecular life sciences from anywhere in the world.

Source: [imp.ac.at/achievements/birnstiel-award/](http://imp.ac.at/achievements/birnstiel-award/)

### Helvetica awards three young Scientists with the SICS 2020 Best Virtual Poster Award



At the Swiss Industrial Chemistry Symposium that took place as an online conference on October 30, 2020, Helvetica awarded the Best Virtual Poster Award to three young scientists. As traditional posters in A0 format were not convenient to be studied online, the students presented their projects in a 3min video message. The jury considered video presentations from academic participants only.

The three winners got a certificate and a cash check of CHF 200.00 each.

**Yongpeng Liu**, EPFL Lausanne

“Molecular Hydrogen Production Through Solar Water Splitting”

**Luca Buzzetti**, EPFL Lausanne

“Enantioselective Carboetherification/Hydrogenation for the Synthesis of Amino Alcohols via a Catalytically-Formed Chiral Auxiliary”

**Zlatko Jonev**, University of Basel

“Stereoselective Synthesis of Atropoisomeric Biaryls”

Source: [scg.ch/sics/2020](http://scg.ch/sics/2020)

## JOURNAL NEWS

### 75<sup>th</sup> Anniversary of CHIMIA in 2021



In 2021 CHIMIA, will celebrate its 75<sup>th</sup> birthday. To laud this anniversary, CHIMIA will publish a special column in the form of opinion articles covering contributions from industry, academia and government to address the current challenges and future aspects of chemistry and society: environment, public health, education, open science, etc.

Please contact Gillian Harvey ([chimia.tr@bluewin.ch](mailto:chimia.tr@bluewin.ch)), Chair of the Editorial Board if you are interested in contributing an article.

[chimia.ch](http://chimia.ch)

### CHIMIA Editorial Program 2021



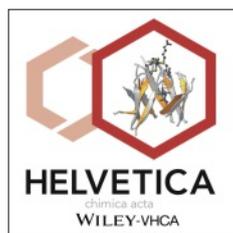
CHIMIA covers the interests of a wide and diverse readership. Contributions from all fields of chemistry and related areas are considered for publication in the form of Review Articles and Notes. A characteristic feature of CHIMIA are the thematic issues, each devoted to an area of great current significance.

Editorial Program 2021 and Guest Editors;

- Issue 1-2: The Future of Chemical Education  
C. Housecroft, University of Basel / J. Cvengros, ETH Zurich
- Issue 3: H<sub>2</sub> Production and CO<sub>2</sub> Conversion: Insights and Progress  
G. Patzke, University of Zurich
- Issue 4: Laureates, Junior Prizes Fall Meeting 2020  
H.P. Lüthi, ETH Zurich and SCS Foundation / Silvio Decurtins, University of Bern
- Issue 5: Colloidal Nanocrystals  
J. De Roo, University of Basel
- Issue 6: Peptide Chemistry in Switzerland  
J-L. Reymond, University of Bern
- Issue 7-8: SCS Major Awards / SCS Fall Meeting  
A. De Mesmaeker, SCS / C. Housecroft, University of Basel
- Issue 9: Green and Sustainable Chemistry  
F. Gallou, Novartis, / E. Godineau, Syngenta
- Issue 10: Photochemistry  
C. Bochet, University of Fribourg
- Issue 11: Industry-Academic Partnerships  
C. Sparr, University of Basel
- Issue 12: Chemical Biology  
H. Riezmann, University of Geneva

More information and back issues are available on our website: [chimia.ch](http://chimia.ch)

## Helvetica, Volume 103, Issue 11, November 2020



### Communications

Post-Assembly Photomasking of Potassium Acyltrifluoroborates (KATs) for Two-Photon 3D Patterning of PEG-Hydrogels

*Haewon Song, Dino Wu, Dimitry Mazunin, Sizhou M. Liu, Yoshikatsu Sato, Nicolas Broguiere, Marcy Zenobi-Wong, Jeffrey W. Bode*

Silica-Supported Cationic Tungsten Imido Alkylidene Stabilized by an *N*-Heterocyclic Carbene Ligand Boosts Activity and Selectivity in the Metathesis of  $\alpha$ -Olefins

*Jordan De Jesus Silva, Deni Mance, Margherita Pucino, Mathis J. Benedikter, Iris Elser, Michael R. Buchmeiser, Christophe Copéret*

Environmentally Compatible Access to  $\alpha$ -Trifluoromethylseleno-Enones

*Kevin Grollier, Alexis Taponard, Clément Ghiazza, Emmanuel Magnier, Thierry Billard*

### Full Papers

Facile Synthesis of 2-Fluorobenzofurans: 5-endo-trig Cyclization of  $\beta,\beta$ -Difluoro-*o*-hydroxystyrenes

*Ryutaro Morioka, Takeshi Fujita, Junji Ichikawa*

Total Synthesis of (–)-Rotundone and (–)-*epi*-Rotundone from Monoterpene Precursors

*Fabian Rüthi, Fridtjof Schröder*

[onlinelibrary.wiley.com/journal/15222675/](https://onlinelibrary.wiley.com/journal/15222675/)

## INDUSTRIAL NEWS

Source: [www.chemanager-online.com](http://www.chemanager-online.com)

### Proman Joins North-C-Methanol Project

November 4, 2020: Swiss project management and construction services company Proman has joined nine private- and public-sector partners to mark the launch of the North-C-Methanol project, touted as the largest renewable hydrogen-to-methanol complex in the world. The project will be both Proman's first methanol plant in Europe and its first renewable power-to-methanol plant globally. The collaborative agreement is for the construction of two plants – a 65 megawatt (MW) electrolyzer fed by renewable power and a methanol plant – on the Rodenhuize peninsula of the North Sea Port in Belgium. Together these two plants will form North-C-Methanol, aiming to reduce CO<sub>2</sub> emissions by 140,000 t/y while generating 44,000 t/y of renewable methanol locally. The methanol can be used as feedstock by the local chemical industry, and as a sustainable fuel for ships, road vehicles and trains. The methanol facility will use the green hydrogen generated by the electrolyzer to convert the collected CO<sub>2</sub> emissions of major local industrial players, such as ArcelorMittal, Alco Bio Fuel and Nippon Gases, into green methanol. Proman said the project will create a new circular economy in the North Sea Port area, with waste material from production sites utilized by other businesses. All by-products of the methanol production, such as oxygen, heat and water, will also be recycled locally. Over time, North-C-Methanol's capacity could be increased from 65 MW in 2024 to 600 MW by 2030, with a planned expansion into new products, including ammonia. "Green methanol presents a significant opportunity to bridge the gap from fossil-based to renewable energy, and this landmark project provides an exciting new model for sustainable, zero-waste production," said Proman CEO David Cassidy. The other partners in the project are North Sea Port, financing company PMV, Mitsubishi Power, storage group Oiltanking, Development Agency East-Flanders (POM), gas infrastructure firm Fluxsys, green energy producer Engie, steel manufacturer ArcelorMittal and biorefinery Alco Bio Fuel. The partners have not disclosed a timescale for the project.

### Moderna Taps Takeda to Distribute Vaccine in Japan

November 6, 2020: US vaccine manufacturer Moderna has tapped Takeda as marketing partner for its Covid-19 vaccine candidate mRNA-1273f in Japan. Financial terms of the deal were not disclosed. The Japanese drugmaker will import and distribute the vaccine starting in the first half of next year as well as handle local regulatory approvals. The original contract is for 50 million doses. Moderna's recombinant vaccine candidate is currently in a 30,000-patient Phase 3 study, for which early data is expected sometime later this month. Takeda is already engaged in other segments of the coronavirus protection and treatment market, as a manufacturer and also as an R&D lead on a convalescent plasma-based therapy. This is the second vaccine distribution contract for the Tokyo group, In August, it signed an agreement with US independent biopharma Novavax to develop, manufacture and sell the biotech's coronavirus vaccine candidate, NVX-CoV2373 in Japan. The candidate is currently in Phase 3 trials in the UK and is set to begin late-stage trials in the US and Mexico. Without disclosing full details, the two companies said in a statement that Japanese health authorities would help fund technology transfer, create new infrastructure and scale up manufacturing, with an eye to producing 250 million doses annually. In October, Takeda, CSL Behring and other companies in the CoVig Plasma Alliance started commercial manufacturing of their immunoglobulin (H-Ig) drug to fight Covid-19 as a Phase 3 trial run by the US National Institute of Allergy and Infectious



## Season's Greetings

Many thanks to all our members, partners, board members and co-workers who support us throughout the past year. Merci!

Despite the difficult situation with COVID-19, we hope that this holiday season may sparkle and shine, may all of your wishes and dreams come true, and may you feel this happiness all year round.

All the best for 2021 and Happy New Year!

Your team from the SCS Office  
Sarah, Gillian, Esther, Céline,  
Robert, Hans Peter & David



Diseases (NIAID). This is due to be completed by year's end. Clinical batches for the NIAID trial were produced at Takeda's US facility near Covington, Georgia – a site picked up in the 2018 acquisition of Shire – and CSL's site in Bern, Switzerland.

### Lonza Opens new Plant for ADC Payload Manufacturing

November 11, 2020: Swiss CDMO Lonza has inaugurated the first of two planned state-of-the-art, highly-potent API (HPAPI) suites for antibody-drug conjugate (ADC) drug-linker (payload) manufacturing at its site in Visp, Switzerland. The new facility can handle compounds with occupational exposure levels down to  $1\text{ng}/\text{m}^3$ . Due to Covid-19 restrictions, the opening ceremony that followed the successful completion of the plant's first process validation and the start of manufacturing for in-market supply was virtual. The new facility can handle compounds with occupational exposure levels down to

$1\text{ng}/\text{m}^3$ , strengthening overall bioconjugation capabilities in Visp, the company said. Its operation is said to be complementary to the Basel-based CDMO's full-service capability for HPAPI from bench-scale through  $10\text{m}^3$  scale. Lonza said the expansion underlines the strategic position of ADCs in its portfolio – the company develops and produces all components of these increasingly important cancer treatments, including cytotoxic payloads, antibodies and the required linkers, at one site. The first suite, which actually became operational in March, supports an unidentified global biopharmaceutical partner active in the oncology field, securing its long-term supply of highly potent ADC payloads. A second suite will become available to other customers early in 2021 for similar HPAPI and payload development and manufacturing programs. Together the new suites will extend the options for companies developing APIs with even higher potencies, Lonza said. At the same time, they will increase the company's capabilities to provide fully scalable HPAPI and ADC solutions from lab to commercialization, supporting the accelerated timelines that many drug programs in this category require. Oncology continues to be the leading indication in biopharma and a key driver for highly potent ingredients such as antibody-drug conjugates, said Maurits Janssen, Strategic Business Development Small Molecules at Lonza. The CDMO continues to add capabilities and capacity to meet the increasing development and manufacturing needs of its partners in this field, he added.

### W. R. Grace Rejects 40 North Takeover

November 13, 2020: US specialty chemical company W. R. Grace has rejected a takeover offer by shareholder 40 North Management, stating it “undervalues the company and is not a basis for further discussion.” The offer at \$60 per share valued Grace at \$4 billion. 40 North is Grace's largest shareholder with a stake of about 15%, according to Bloomberg data. “We believe this proposal to take the company private represents the most credible path to unlock value for the company and its shareholders with a high level of certainty,” 40 North principals David Millstone and David Winter wrote in a Nov. 9 letter to Grace's board. In response, Grace said it has a portfolio of high-value, specialty businesses and while end markets have been significantly impacted by the coronavirus pandemic, its business fundamentals remain strong and demand trends continue to improve. The company added that it has “often pursued opportunities to maximize shareholder value and remains open to all opportunities.” Grace also stated that it was “focused on executing its long-term strategy and advancing its key investments to accelerate growth, improve its competitive advantages and strengthen its portfolio.” 40 North, as part of investment vehicle White Tale, was instrumental in scuppering Huntsman's \$20 billion takeover of Clariant in October 2017. SABIC eventually scooped up White Tale's shares in Clariant in January 2018, representing roughly a 24.9% stake in the Swiss specialty chemicals firm. The Saudi petrochemicals giant subsequently raised its stake in the Swiss firm to 31.5% in March 2020.



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