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Swiss Chemical  
Society

## Community News

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### SWISS CHEMICAL SOCIETY NEWS

#### Invitation to the SCS General Assembly 2020



The Board of Directors invites all members of the Swiss Chemical Society and the delegates of its associated societies to join the 30<sup>th</sup> General Assembly. April 3, 2020, 13.00–13.30h  
FHNW, School of Life Sciences  
Big Lecture Hall, Ground Floor  
Hofackerstrasse 30, 4132 Muttenz

#### Provisional Agenda

1. Welcome and approval of the agenda
2. Election of the vote counters
3. Minutes of the 29<sup>th</sup> General Assembly from April 5, 2019 in Dübendorf (published in CHIMIA 5/2019, A430)
4. Annual report 2019 (published in CHIMIA 1-2/2020)
5. Financial statement 2019 incl. audit report
6. Discharge the Board
7. Elections
8. News and strategic projects
9. Outlook 2020/2021
10. Varia

A summary of the financial statement 2019 will be published on the website after the formal audit.

#### Chemistry Travel Award 2020



Through the «Chemistry Travel Award», contributions towards the cost of participation at an international conference in the chemical sciences are granted to selected PhD students. The award is sponsored by the Platform Chemistry of the SCNAT and the Swiss Chemical Society

The award includes a contribution of CHF 1'000 towards the cost of an active participation (poster or oral presentation) at an international conference of three days or more between 15 May 2020 and 14 May 2021 in any field of the chemical sciences. Up to 45 awards will be distributed to selected doctoral students from Swiss research institutions. Selection will be based primarily on scientific accomplishments and on the submitted conference abstract.

- Only applications in English will be considered.
- The award can only be won once in a lifetime – winners of previous years are excluded.
- There is no limitation of winners per research group.
- The award money will be paid upon presentation of a confirmation of attendance from the conference.
- The deadline is 31 March 2020 (23:59)

The results will be communicated as soon as possible (around begin-May).

[chemistry.scnat.ch/travel\\_award](http://chemistry.scnat.ch/travel_award)

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



Period: 28.01.–24.02.2020

Takuji Adachi, Geneva - Johanna Brazard, Geneva - Adriano D'Addio, Basel - Patrick Eisenring, Zurich - Adrian Gheata, Lausanne - Matthias Grotevent, Dübendorf - Laura Guasch, Basel - Nina Hartrampf, Zurich - Lu Hostettler, Kemptthal - Philipp Koldewey, Basel - Anastasiia Lepikhina, Zurich - Marie

Perrin, Zurich - Kay Schaller, Kgs. Lynby (DK) - Zhanyun Wang, Zurich - Samuel Watts, St. Gallen - Lukasz Wozniak, Lausanne.

### HONORS, AWARDS, APPOINTMENTS

#### Winners of the SCS Industrial Science Awards 2020

It's our pleasure to announce the winners of the 2020 SCS Industrial Science Awards. We would like to sincerely congratulate the three winners and we are looking forward to the award lectures that will take place on the occasion of the SCS Fall Meeting at University of Bern, vonRoll Campus on August 24 and 25, 2020.

#### SCS Senior Industrial Science Award 2020

The prize is given to honor very successful and established investigators with outstanding achievements over many years. The winner receives a certificate and a cash check of CHF 10'000.



**Dr. Frank Petersen**, Novartis Pharmaceuticals AG, Basel,

is awarded in recognition of his outstanding contributions in the field of natural product research over three decades that includes the investigations for several products on the market or in clinical evaluation but also the partnerships in microbial sourcing and in accessing iso-

lated plant metabolites in Africa, China, and Thailand.



**Dr. Hasane Ratni**, F. Hoffmann-La Roche, Basel,

in recognition of his outstanding contributions to medicinal chemistry and his track record of delivering successful clinical development candidates resulting in five molecules entering human clinical trials. This includes the seminal work on RNA interaction with small

molecules leading to the discovery of risdiplam.

## SCS Industrial Science Award 2020

The prize is given to honor successful investigators with outstanding achievements. The winner receives a certificate and a cash check of CHF 7'000.



**Dr. Denis Jacoby**, Firmenich SA, Geneva, gets the award to honor his outstanding achievements at Firmenich especially the development of major new processes for several key perfumery ingredients that are manufactured on multi MT scale today.

## Award of the International Solvay Institutes for Prof. Hans Jakob Wörner, ETH Zurich



The International Solvay Institutes award **Prof. Hans Jakob Wörner** from the Laboratory of Physical Chemistry at ETH Zurich with the New Horizons Solvay Lectureship. This lecture series provides outstanding young scientists in the field of chemistry with the opportunity to give a broad lecture on their current research, and the challenges of their discipline. The lecture will take place in March/April 2020 at the Solvay Institutes in Belgium.

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

## JOURNAL NEWS

### Helvetica, Volume 103, Issue 2, February 2020



#### Communications

Anhydrous Conditions Enable the Catalyst-Free Carboxylation of Aromatic Alkynes with CO<sub>2</sub> under Mild Conditions

*Davide Toniolo, Felix D. Bobbink, Paul J. Dyson, Marinella Mazzanti*

#### Full Papers

C–H Activation and Olefin Insertion in d<sup>8</sup> and d<sup>0</sup> Complexes: Same Elementary Steps, Different Electronics

*Andreas E. Bumberger, Christopher P. Gordon, David Trummer, Christophe Copéret*

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

## INDUSTRIAL NEWS

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

### EU to Rule on Aramco-SABIC Deal by Feb. 27

January 30, 2020: The European Commission has given itself until Feb. 27 to decide whether to approve plans by state-owned oil and energy group Saudi Aramco to take a 70% stake in compatriot chemical producer SABIC from the Kingdom's sovereign wealth fund Public Investment Fund (PIF) for \$69.1 billion. Aramco is in the process of acquiring the stake as part of crown prince Mohammed bin Salman's drive to diversify

the country's economy away from oil. The arrangement was announced in March last year. During its preliminary review of the takeover, which is currently in process, the Commission will have the option of clearing the deal with or without conditions, or open an in-depth investigation over a period of up to five months if it has serious competition concerns. To date, India and several other countries have given the go-ahead without demanding concessions. In the run-up to Aramco's initial public offering on Saudi Arabia's Tadawul exchange, the company announced it would delay fully paying for SABIC stake four years until September 2025. SABIC has invested heavily in the European market since it began buying up assets, mainly in the Netherlands and the German Ruhr area, at the beginning of the millennium. Its most recent move was the acquisition of a 50% stake in Swiss specialty chemicals producer in a deal completed last year. In other Aramco news, Saudi finance minister Mohammed Al-Jadaan hinted that following the oil producer's successful listing on the Tadawul, an international listing is "still on the cards," though it is unlikely to happen soon. At the same time, the minister told Bloomberg News he is "very confident" that the Saudi economy is picking up speed, and that international investors have responded positively to ongoing reforms in the Kingdom. Al-Jadaan pointed to the recent successful completion of a \$5 billion bond sale at Aramco after it received orders for four times that sum. "We are starting to see results of Vision 2030. The numbers are proving that reform is working. We are basically cashing on the successes," the minister asserted.

### Celanese Strengthens Acetyls Business

February 3, 2020: US specialty chemicals company Celanese has announced it is buying Nouryon's Elotex range of redispersible polymer powders for an undisclosed sum. Celanese said the acquisition marks a critical step in its acetyl core derivatization strategy and supports the continued growth of its vinyl acetate ethylene (VAE) emulsions business. The announcement came just a day after the Dallas, Texas-based group disclosed it was investing in a series of VAE capacity expansions. "By acquiring Elotex, Celanese will have direct access to relatively fast-growing applications and a customer base that is complementary to our emulsions business. The acquisition offers additional flexibility and downstream growth optionality through derivatization, both of which are vital to unlock value under our unique global acetyl chain business model," said Todd Elliott, Celanese's senior vice president, acetyls. "With this acquisition, Celanese will extend its global leadership position in the VAE emulsions space and continue to support our customers in construction and building materials, where Celanese is already focusing significant product, solution and customer development efforts," Elliott added. Celanese will acquire all of Nouryon's global production plants for redispersible polymer powders, together with all Elotex products, customer agreements and technology. Elotex has production plants in Europe and China that include Frankfurt, Germany; Geleen, the Netherlands; Moosleerau, Switzerland; and Shanghai. Its global headquarters, R&D and technical service functions are located in Sempach, Switzerland. The transaction is expected to complete in the second quarter of 2020, subject to the usual closing conditions, regulatory approvals and completion of the works council process. The US firm is also planning a series of investments in VAE capacity in order to "capture disproportionate growth in the global emulsions market". The program comprises a range of expansion and debottlenecking projects from now through 2023. In Geleen, Celanese will debottleneck its VAE unit by 20,000 t/y by 2021. It will then install an additional reactor, adding another 50,000 t/y by early 2023, taking total capacity at Geleen from 130,000 t/y to 200,000 t/y. At its

Nanjing site in China, a plant debottlenecking will initially add 20,000 t/y by 2022. Celanese will add a third VAE reactor by late 2022, boosting total capacity at the site to 215,000 t/y from 130,000 t/y. In addition to the Geleen and Nanjing projects, Celanese intends to add an estimated 25,000 t/y through incremental capacities at its other (undisclosed) emulsions sites by 2023. The company noted that its expansion plans “will be implemented when operationally feasible and pending customary regulatory and permitting approvals”. Last October, Bloomberg reported that Celanese was performing a strategic review that could include a breakup.

### Merck KGaA Invests in Swiss Biotech Center

February 4, 2020: German pharmaceuticals, chemicals and life sciences group Merck KGaA is investing €250 million over three years in a new facility at Corsier-sur-Vevey, Switzerland, which will be dedicated to biotech development and manufacturing for clinical studies and will link research and manufacturing. The Darmstadt-based group said the Merck Biotech Development Center, covering a space of 15,700 m<sup>2</sup>, “will help to sustainably secure capacity and high agility to deliver clinical trial material in a cost-effective way, contribute to accelerated development timelines of new biological entities and address the increasing manufacturing complexity of the next generations of biotech compounds.” Expected to be fully operational by the end of 2022 following validation by regulatory authorities, Merck said the facility joining together a cross-functional team of around 2250 employees currently spread across different sites is being designed to conform to the highest quality, environment, health and safety standards as well as leveraging the latest in digital technology, including continuous manufacturing and laboratory automation. In particular, the facility is planned to showcase Merck’s science and technology across its three business sectors, including Life Sciences’ process solutions for clinical manufacturing and pilot plant operations and Performance Materials’ eyrise dynamic liquid crystal windows as part of the highly efficient energy management of the building. Speaking at the groundbreaking ceremony, group CEO Stefan Oschmann said the investment reflects Merck’s commitment to speed up the availability of new medicines for patients in need and confirms the importance of Switzerland as its prime hub for biotech medicines.

### Clariant Expands Bleaching Earths

February 10, 2020: Clariant has expanded capacity for activated bleaching earths in Yuncos, Spain, enabling the group to offer an extended portfolio of advanced purification products to the edible oil and biofuel markets in Europe, the Middle East and Africa. The company did not reveal actual capacity details for the plant. The move also enables more local supply, shorter lead times and better service for its customers, the Swiss specialty chemicals producer added. Anil Sönmez, head of purification and functional adsorbents EMEA, said the Yuncos project complements Clariant’s investments over the last three years in France, Germany and Turkey. High-quality bleaching earths are in demand to remove unwanted impurities from refined oils as customers want healthier cooking oils. Clariant said there is particular attention on minimizing levels of 3-MCPD, a chemical compound that is suspected of being carcinogenic and which is currently under scrutiny by the EU. 3-MCPD esters are found in some processed foods and vegetable oils, where they are formed unintentionally, particularly during the oil refining process. The company added that rising interest in using biofuels throughout Europe is also increasing demand for effective purification solutions.



## Assistenzprofessur (Tenure Track) für Anorganische Chemie

→ Im Departement Chemie und Angewandte Biowissenschaften ([www.chab.ethz.ch](http://www.chab.ethz.ch)) der ETH Zürich ist am Laboratorium für Anorganische Chemie (LAC) ([www.lac.ethz.ch](http://www.lac.ethz.ch)) eine Assistenzprofessur (Tenure Track) für Anorganische Chemie zu besetzen. Die Forschungsgebiete des LAC umfassen die Synthese und Charakterisierung von molekularen und nanoskaligen anorganischen Verbindungen sowie die Aufklärung von komplexen Reaktionssystemen, die mit hochauflösenden Methoden erforscht werden.

→ Die neue Assistenzprofessur soll ein international kompetitives Forschungsprogramm im Bereich der Hauptgruppenelementchemie, der Materialchemie, der Festkörperchemie, der theoretischen Chemie, oder der Entwicklung physikochemischer Methoden aufstellen. Eine Kombination dieser Forschungsfelder ist erwünscht. Es wird erwartet, dass interdisziplinäre Forschungsprojekte an der Schnittstelle von anorganischer Chemie und Physik, den Material- oder Biowissenschaften entwickelt werden können.

→ Die enge Zusammenarbeit mit anderen theoretischen und experimentellen Gruppen an der ETH Zürich soll angestrebt werden. Die zukünftige Professorin bzw. der zukünftige Professor engagiert sich in der Lehre auf dem Gebiet der Anorganischen Chemie und der Organometallchemie auf Bachelor- sowie Masterstufe.

→ Assistenzprofessuren dienen der Karriereförderung junger Wissenschaftlerinnen und Wissenschaftler. Das Tenure Track-Verfahren an der ETH Zürich ist mit denjenigen anderer erstklassiger internationaler Universitäten vergleichbar. Engagement in der Lehre sowie die Fähigkeit eine Forschungsgruppe zu führen werden erwartet.

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[www.facultyaffairs.ethz.ch](http://www.facultyaffairs.ethz.ch)

→ Bewerbungen mit Lebenslauf und Publikationsliste, einer Beschreibung der beabsichtigten Forschungs- und Lehrtätigkeit sowie der drei bedeutendsten Leistungen sind **bis zum 15. April 2020 in Englisch einzureichen. Das Anschreiben ist an den Präsidenten der ETH Zürich, Prof. Dr. Joël Mesot, zu richten.** Die ETH Zürich setzt sich für Chancengleichheit, die Erhöhung des Frauenanteils innerhalb der Professorenschaft, die Bedürfnisse von Dual-Career-Paaren sowie die Vereinbarkeit von Beruf und Familie ein.

## Underestimated Chemical Diversity

February 17, 2020: An international team of researchers has conducted a global review of all registered industrial chemicals: some 350,000 different substances are produced and traded around the world – well in excess of the 100,000 reached in previous estimates. For about a third of these substances, there is a lack of publicly accessible information. The last time a list was compiled of all the chemicals available on the market and in circulation worldwide, it ran to 100,000 entries. Drawn up shortly after the turn of the millennium, the list focused on markets in the US, Canada and western Europe, which made sense because 20 years ago, these countries accounted for more than two thirds of worldwide chemical sales.

### Global Market

Things have changed dramatically since then. First, turnover has more than doubled, reaching €3.4 billion in 2017; second, the global west now participates in just a third of the worldwide chemical trade, whereas China alone accounts for 37% of turnover. “We broadened our scope to take in the global market – and we’re now presenting a first comprehensive overview of all chemicals available worldwide,” says Zhan-yun Wang, senior scientist at the Department of Civil, Environmental and Geomatic Engineering at ETH Zurich, Switzerland. Working with a team of international experts, Wang brought together data from 22 registers covering 19 countries and regions (including the EU). The new list contains 350,000 entries. “The chemical diversity we know now is three times greater than 20 years ago,” says Wang. This, he says, is primarily because a larger number of registers are now taken into account: “As a result, our new list includes many chemicals that are registered in developing and transition countries – often under limited supervision.”

### Confidential Business Information

On its own, this comprehensive list cannot provide information about which chemicals are hazardous to health or the environment, for example. “Our inventory is only the first step in the substances’ characterization,” says Wang, adding that previous work suggested that some 3% of all chemicals may give cause for concern. If you apply this figure to the new multitude of chemicals, 6,000 new potentially problematic substances could be expected, he says. Far more astonishing for Wang was the fact that a good third of all chemicals have inadequate descriptions in the various registers. About 70,000 entries are for mixtures and polymers (such as petroleum resin), with no details provided about the individual components. Another 50,000 entries relate to chemicals where the identities are considered confidential business information and are therefore not publicly accessible. “Only the manufacturers know what they are and how dangerous or toxic they are,” says Wang. “That leaves you with an uneasy feeling – like a meal where you’re told that it’s well cooked, but not what it contains.”

### An Urgent Call for International Collaboration

Globalization and worldwide trade ensure that – unlike national registers – chemicals do not stop at national borders. As Wang and his colleagues note in their article in the journal *Environmental Science & Technology*, the various registers need therefore to be merged if we want to keep track of all the chemicals that are produced and traded anywhere in the world. “Only by joining forces, across different countries and disciplines, will we be able to cope with this ever-expanding chemical diversity,” says Wang.

## Chemspec Europe 2020: Europe’s Top Trade Fair for the Fine and Speciality Chemicals Industry

February 18, 2020: Chemspec Europe returns to Cologne, Germany, for its 35th edition. Renowned manufacturers, suppliers and distributors of fine and speciality chemicals present their latest products, services and research findings to a dedicated audience of industry experts. The huge success of the previous event in Basel, Switzerland, not only illustrates the high demand for bespoke chemicals and innovative products. With a total of 379 exhibitors and 4,295 trade visitors from 65 countries, it also underlines the show’s unique position as the primary specialised trading and networking event for the fine and speciality chemicals industry in Europe. Looking at the current booking status, Chemspec Europe 2020 is set to continue its success story: three months before the start of the event, more exhibition space than ever has been sold and booked. Amongst the exhibiting companies are Albemarle, Arkema, CABB, Chevron Phillips Chemicals, Evonik, Johnson Matthey, Kemira, Lonza, Solvay, Sumitomo Chemical, Tosoh, Vertellus, WeylChem and many more. “Sustainability, new trends such as power foods and bio-based cosmetics, and digitalization are not just buzzwords. In fact, these aspects and the ongoing demand for innovations determine the industry. The choice of the right suppliers and the exchange of knowledge within international industry networks is more important than ever”, says Liljana Goszdziewski, exhibition director of Chemspec Europe, on behalf of the organisers, Mack Brooks Exhibitions. “With a highly specialized exhibition profile, Chemspec Europe is a key event for buyers, traders and agents in search of bespoke solutions and innovative substances. Furthermore, the exhibition is a powerful gateway to global business and industry knowledge and makes the event so appealing to both exhibitors and visitors.” Chemspec Europe 2020 features the full spectrum of fine and specialty chemicals for various applications and industries, including pharmaceuticals, agrochemicals, polymers, green chemicals, food and feed ingredients, flavors and fragrances, bio-based chemicals, pigments and dyes, paints and coatings, household and cleaning chemicals, adhesives and sealants, petrochemicals, electronic chemicals and many others. Visitors of the event have the opportunity to explore bespoke solutions, new approaches and innovative substances as well as to discuss the latest market trends, technical innovations, business opportunities and regulatory issues.

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### Extensive 2-Day Conference Program alongside the Exhibition

Chemspec Europe works with a number of partner organizations to host various conferences on a wide range of subjects – from regulatory and pharma outsourcing to current market trends and developments. All conferences are free to attend, offering first-class content and excellent networking opportunities.

- The Chemspec Agrochemical Outlook Conference, sponsored by AGROW
- The Pharma Outsourcing Best Practices Panel, chaired by Dr Susan Billings
- The Regulatory Services Conference, organized by REACHReady
- The RSC Symposium, organized by the Royal Society of Chemistry
- The Chemspec Careers Clinic, organized by Chemical Search International
- Innovative Startups, organized by the European Chemistry Partnering

<https://www.chemspeceurope.com/2020/english/>

### Roche Boosts Fibrotic Diseases with Promedior

February 21, 2020: Swiss pharma giant Roche has closed its acquisition of US clinical-stage biotech Promedior. Roche snapped up the Lexington, Massachusetts-based firm for an up-front cash payment of \$390 million plus additional payments of

up to \$1 billion, contingent on achieving certain predetermined development, regulatory and commercial milestones. The two companies signed on the deal last November, more than four years after Promedior had agreed a deal with Bristol-Myers Squibb (BMS). In September 2015, BMS paid \$150 million up-front to gain worldwide rights to PRM-151 and the option to acquire Promedior but the deal never came to fruition. Promedior's lead candidate is PRM-151, an investigational treatment for idiopathic pulmonary fibrosis (IPF), which received breakthrough therapy designation from the Food and Drug Administration in March 2019. "We look forward to being part of Roche to further advance programs in IPF, hematological cancer and other fibrotic disorders and bring new treatment options to patients within these areas of significant unmet need, said Promedior's CEO Jason Lettmann PRM-151 is a recombinant form of human pentraxin-2 protein that Promedior said opens up new opportunities to treat a wide range of systemic fibrotic diseases. The biotech said phase 2 trials had demonstrated that PRM-151 is the first molecule to show a slowing of decline in lung function in combination with standard of care (SoC) therapies, when compared to SoC alone. The therapy has also shown broad anti-fibrotic activity in multiple preclinical models of fibrotic disease, including pulmonary fibrosis, myelofibrosis, acute and chronic nephropathy, liver fibrosis and age-related macular degeneration.

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