SCS
Swiss Chemical
Society

Community News

www.scg.ch

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SWISS CHEMICAL SOCIETY NEWS

SCS Awards 2020: Call for Nominations

As one of our four strategic pillars, SCS awards excellence in science and chemistry respectively and is proud of its renowned award program that goes back to the age of 1936 with the ceremony of the first Werner Prizes to Dr. T. Posternak, Genève, and Prof. G. Schwarzenbach, Zürich.

The society hereby calls for nominations for the 2020 SCS Awards. Nominations have to be submitted electronically to info@scg.ch. The deadline for all documents to reach the Swiss Chemical Society is September 30, 2019.
For specific award information and a list of required documents please visit our website *scg.ch/awards*

Paracelsus Prize
CHF 20'000 and medal in gold
The Paracelsus Prize is awarded to an internationally outstanding scientist for his or her lifetime achievements in chemical research. It is awarded every two years.

Werner Prize
CHF 10'000 and medal in bronze
The Werner Prize is awarded to promising young Swiss scientists or young foreign scientists working in Switzerland for outstanding research in the field of chemistry. Selection of the winners is not restricted to candidates working at a university. On the deadline for submission of nominations, the candidate must be under 40 years old (i.e. 40th birthday after the deadline) and may not be a tenured professor or hold a managerial position in industry. The prize is awarded annually.

METAS Award
CHF 5'000
METAS honors with this award a promising scientist working in Switzerland for an outstanding contribution to the field of metrology in chemistry and/or biology. The price is announced nationally and is restricted to persons who are, at the time of the submission deadline, affiliated with Swiss academic or research institutions.

Balmer Prize
CHF 2'000 for individuals and CHF 2'000 for the school's chemistry department or CHF 3'000 for a group and CHF 1'000 for the school's chemistry department and medal in bronze
The Balmer Prize is awarded for innovation in chemistry teaching to a teacher working in Switzerland or to a team of teachers working at the same school at the high school level.
The innovation must consist of an original didactic approach, experimental method or teaching practice and be readily applicable to everyday teaching at the high school level. The costs for materials must be modest.

Dr. Max Lüthi Award
CHF 1'000 and medal in bronze
The Dr. Max Lüthi Award is presented for outstanding degree theses completed in the chemistry department of a Swiss University of Applied Sciences. Nominations must be submitted by the respective chemistry department heads. The prize is awarded annually.

Sandmeyer Award
CHF 10'000 for individuals or CHF 20'000 for groups
The Sandmeyer Award is presented to a team or an individual for outstanding work in the field of industrial or applied chemistry. The work must have been carried out in Switzerland or abroad by a team including Swiss nationals. The award may be presented to an individual – Swiss or foreign national – if the work was carried out in Switzerland. The award may be presented to an individual for work carried out abroad if the person is Swiss. Tenured professors will not be considered for the award as individuals. In the case of foreign teams, the Swiss member must have made a substantial contribution to the work. There is no age restriction. The prize is awarded annually.

SCS Industrial Science Awards
In 2013 the Swiss Chemical Society implemented this award program with support from the Swiss Industry Science Fund in order to honor researchers working in industry in the field of chemistry. The program targets scientists from companies of any size working in the field of chemistry or chemical related sciences. There are three awards with different criteria in terms of the experience and level of research attained by the candidates. The awards are presented to active researchers working in Switzerland and are given to individuals exclusively.

Industrial Science Award
to honor successful investigators with outstanding achievements.
Certificate and cash check of CHF 7'000
The prize is given on an annual basis.

Senior Industrial Science Award
to honor very successful and established investigators with outstanding achievements over many years.
Certificate and cash check of CHF 10'000
The prize is given on an annual basis.

Distinguished Industrial Science Award
to honor senior scientists for their lifetime achievements in chemical research.
Certificate and cash check of CHF 15'000
Rewarded on decision by the board

More information are available on our website:
scg.ch/awards

Minutes of the 29th General Assembly of the SCS

April 5, 2019, 13.30–14.00h at Empa Akademie, Dübendorf.

1. Welcome; Approval of the Agenda
During the lunch break of the SCS Spring Meeting David Spichiger, SCS Executive Director, opened the assembly and welcomed all members/attendees. Legal formalities were all fulfilled, and the assembly was quorate. The agenda was approved.

2. Election of the vote counters
26 SCS members were present at the beginning of the assembly. At the end, there were about 45 members in the room. The increase in members during the assembly had no impact on the results of the votes as all decisions were made without any dissenting vote. The director proposed Veronika Meyer as vote counter. She was confirmed with no objection.

3. Minutes from the 28th GA from April 6, 2018
The minutes was published in CHIMIA (2018, 72, No. 5, A348). It was approved unanimously.

4. Annual report 2018
The annual report was published in CHIMIA (2018, 73, No. 1-2, A128ff). It was approved unanimously.

5. Financial report 2018 and audit report
David Spichiger presented the financial statement. Incomes of CHF 1'567'599 and expenses of CHF –1'518'225 result in an operating surplus before taxes of CHF +49'373. The portfolio at Bank von Graffenried performed negatively and resulted in a loss of CHF –173'018. Taking into account the reduction of the fluctuation buffer from CHF 150'000 to CHF 50'000, taxes and non-periodic income and expenses, an overall surplus of CHF 7'343.37 resulted.
As of 31.12.2018 the assets summed up to CHF 4'114'878.98.

Audit Report:
In the audit report by BDO AG, Bern, from March 22, 2019, no inconsistencies are mentioned, and the financial statement fulfills the legal requirements according to the SCS bylaws and the Swiss Civil law.
The assembly approved the financial statement 2018 and the audit report with two abstentions and no dissenting vote.

6. Discharge the Organs of the Society
The assembly discharged the board members and the financial audit unanimously with no abstention.

7. Elections
The assembly confirmed all members of the BoD as elected in previous general meetings unanimously with no abstention. Members of the BoD that are not yet registered in the commercial register (*) will be added to the personal data list
- Dr. Alain De Mesmaeker, President
- Prof. Christian Bochet*, Vice President, joint signature at two
- Dr. Hans Peter Lüthi, Member and Treasurer
- David Spichiger, Member and Manager
- Prof Christoph Copéret*, Member, no signature
- Dr. Sandrine Gerber*, Member, no signature
- Dr. Martin Vollmer*, Member, no signature
- Dr. Bernhard Urwyler*, Member, no signature
- Prof. Roger Alberto*, Member, no signature
- Dr. Yves Auberson*, Member, no signature
- Prof. Christian Hinderling*, Member, no signature
- Dr. Marc J. Suter*, Member, no signature

The assembly elected Dr. Gillian Harvey* unanimously as Member of the BoD, joint signature at two, and successor of Roland Kunz who stepped down as chair of the Editorial Board of CHIMIA.

The assembly confirmed BDO AG, Bern unanimously to audit the financial statement 2019.

8. Strategy, Membership Fees and News
The main focus in the next 12 months will be:
- Consolidation/development of existing activities/events
- Push Helvetica Chimica Acta
- Transform CHIMIA into OA world
- Green & Sustainable Chemistry
- Environmental Sciences
- Swiss Women in Chemistry Network

The annual membership fees 2020 were approved unanimously:

• Regular member		CHF 150.00
• Student member		CHF 50.00
• Retired member / unemployed members		CHF 80.00
• Institutional member (companies)		CHF 800.00

Additional Fees for Divisions

• Industrial & Applied Chemistry	• Regular	CHF 20.00
	• Company	CHF 100.00
• Photochemistry Section	• Regular	CHF 40.00
	• Student	CHF 20.00

15% discount on collective memberships for university research groups.

9. Outlook 2019/20
- In 2019 fourteen conferences and symposia will take place under the direct organization of SCS. The list including details is available on *http://scg.ch/events*.
- DAS course organization continues its successful education program with close to 70 courses
- 7 top scientists from all over the world are invited in 2019 to hold a SCS Lectureship tour in Switzerland.
- No major changes in the event portfolio is planned for 2020.

10. Varia
No votes were requested from the audience. The director thanked for the confidence and closed the assembly.

Dübendorf, April 5, 2019
Dr. Alain De Mesmaeker, SCS President
David Spichiger, Executive Director

EuChemS Position Paper on the Guidance on the Implementation of Plan S

On 4 September 2018, 'cOAlition S', a coalition of national research funders, supported by the European Commission, launched 'Plan S', an initiative to accelerate the transition to open access in scientific publishing. Currently, several national funding bodies in Europe have committed to Plan S, others have not. The plan consists of 10 principles for the transition to Open Access and more specific implementa-

tion guidelines were published by cOAlition S on 27 November 2018.

EuChemS supports the transition to Open Access (OA) in scientific publishing. Access to research and dissemination of knowledge is a fundamental purpose of our community's values and aims. As a representative for research chemists and chemical societies across Europe, we welcome the conversation and the debate that this has engendered and look forward to working together with all stakeholders on finding sustainable solutions that secure the interests of researchers, societies, funders, librarians and publishers involved in the important task of disseminating scientific research.

Although the implementation guidelines provide some clarifications, we believe the consequences of Plan S remain unclear and could undermine the visibility and vitality of European research on a global stage if not properly implemented.

Links
Read the full statement by EuChemS
https://www.euchems.eu/wp-content/uploads/2019/02/EuChemS-statement-on-PlanS_final.pdf
Webstie of cOAlition S
https://www.coalition-s.org/
10 Principles by cOAlition S
https://www.coalition-s.org/10-principles/

Chemistry Demonstration Day 2019 for High School Chemistry Teachers

EPFL and the Association of High School Chemistry Teachers from the Canton de Vaud are organizing a Demonstration Day in memory of the 150th anniversary of Mendeleev 's table of the elements.
A group of chemistry teachers will show their best classroom demonstrations about the properties of the main chemical elements, using simple equipment like test tubes and beakers.
Chemistry Demonstration Day 2019
September 10, 2019, 09.00–15.00h
EPFL Lausanne, Lecture Hall CO3
Registration before August 30th, 2019. To register, please send a mail to *demonstration@magyc.educanet2.ch*

A Warm Welcome to Our New Members!

Period: 15.03.–29.04.2019
Laura Akbal, Ferney-Voltaire (FR) - Maurice Andrey, Zurich - Sophie Bravo-Veyrat, Geneva - Ezgi Bülbül, St Gallen - Luca Buzzetti, Lausanne - Aline Carrel, Muri bei Bern - Hang Chen, Zurich - Vittoria Chimisso, Basel - Maria Fernanda Cifuentes Girard, Geneva - Nemanja Cvjetan, Zurich - Mario De Capitani, Ittigen - Neel Deorukhkar, Geneva - Romain Dubey, Dübendorf - Brun Elodie, Geneva - Elija Grinhagena, Lausanne - Xavier Guichard, Zurich - Christian Hänsel, Zurich - Salome Heim, Olten - Hsin-Hua Huang, Basel - Nico Valerio Igareta, Möhlin - Filip Ilievski, Zurich - Susanne Kern, Zurich - Quentin Laurent, Gex - Alejandro Marquez, Brugg - Franziska Marx, Marly - Marco Meyer, Sissach - Dragan Miladinov, Basel - Laura Nicolle, Gex (FR) - Jasmin Ossola, Faulensee - Daniele Padula, Dübendorf - Faezeh Pazoki, Zurich - Thaylan Pinheiro Araujo, Zurich - Gabriele Raino, Zurich - Andreas Rötheli, Cambridge, MA (US) - Piotr Sosnowski, Geneva - Frederick Stein, Zurich - Karen Strassel, Uster - Ines Taarit, Geneva - Marco Zuccarello, Basel.

HONORS, AWARDS, APPOINTMENTS

Werner Prize 2019 awarded to Prof. Jeremy Luterbacher, EPFL Lausanne

On the occasion of the SCS Spring Meeting dinner in Dübendorf on April 4, 2019, Alain De Mesmaeker, SCS President, awarded the Werner Prize 2019 to ***Prof. Jeremy Luterbacher***, EPFL Lausanne for his original and groundbreaking research on chemical conversion of plant material using protection group chemistry during biomass depolymerization and upgrading. We like to take the opportunity to congratulate him again and wish all the best for the upcoming research projects.

About the Werner Prize
CHF 10'000 and medal in bronze
awarded to a promising young scientist for outstanding independent chemical research. The call for nominations for the 2020 award is open until September 30, 2019
www.scg.ch/werner

Prof. Eric Bakker, University of Geneva, receives the Simon Widmer Award 2019

On the occasion of the 5th *CH*analysis in Beatenberg, April 11–12, 2019, ***Prof. Eric Bakker*** received the Simon Widmer Award 2019 for his pioneering work in ionselective electrochemical and optical sensors. Eric established himself as one of the leading electroanalytical chemists in the world and he is a very deserving recipient of this distinguished award.

Picture: Prize winner Eric Bakker (right) receives the award from Marc Suter, President of the SCS Division of Analytical Sciences.

Eric obtained his PhD in 1993 under the supervision of Professor Wilhelm Simon at ETH Zurich. Following a postdoctoral stay at the University of Michigan, he then joined the faculty at Auburn University, Alabama, USA, as an Assistant Professor in 1995 and was later promoted to Full Professor in 2003. In 2005–2008, he was a Professor at Purdue University, West Lafayette, USA, and moved then to Curtin University, Perth, Australia. Since 2010, he is Professor at the University of Geneva, where he also served as Director of the Department of Inorganic and Analytical Chemistry.

Source: M. J. Suter, Eawag

Prof. Dieter Seebach, ETH Zurich, receives the Arthur C. Cope Award 2019

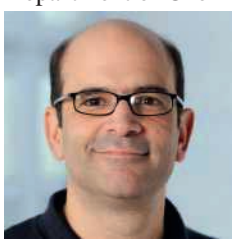
Prof. Dieter Seebach receives the Arthur C. Cope Award at the ACS Spring 2019 National Meeting in Orlando, Florida. He is awarded for fundamental and practical contributions to chemistry, including theory, innovative concepts, and methods for chemical synthesis, along with preparation and study of novel bioactive structures.

This is one of the American Chemical Society's most prestigious awards for Organic Chemistry.

Source: https://chab.ethz.ch

Prof. Eric Crick Carreira and Prof Peter Chen from ETH Zurich awarded ERC Advanced Grants

In its latest awarding process for the prestigious ERC Advanced Grants, the European Research Council (ERC) has selected five ambitious projects being conducted by ETH Zurich researchers who have been at the top of their respective fields for many years. Two out of these five grants go to Chemistry Professors a the ETH Department of Chemistry and Applied Biosciences:



For biology and medicine, the fact that two mirror-image chemical molecules do often not have the same properties plays an important role. ***Prof. Erick Carreira***, a professor of Organic Chemistry, is investigating how chemical reactions can be controlled so that only one of two theoretically possible mirror-image molecules is formed. In his ERC project, he aims to develop new chemical reactions with which he can attach functional groups to feedstock molecules – in a way that controls asymmetry. These groups enable chemists using the molecules for further elaboration in particularly sustainable processes. Scientists will benefit from such conveniently accessible molecules to generate compounds such as medicines and smart materials.

Prof. Peter Chen is a professor of physical-organic chemistry and investigates the interactions between atoms and between individual molecules. His ERC project aims to use ion trap mass spectrometry to investigate in detail, and quantitatively, a specific interaction that is important in chemistry – the London dispersion force that acts between two polarizable molecules. Essential parts of the project are the construction and operation of this state-of-the-art instrumentation and the development and synthesis of molecules with which this interaction can be investigated. The results of the project will help to understand how complex chemical molecules interact in three-dimensional space – an important aspect when it comes to designing new molecules.

Source: https://chab.ethz.ch

JOURNAL NEWS

Editor-in-Chiefs Meeting of the ChemPubSoc Membership Magazines/Newsletters

March 28–29, 2019, Wiley-VCH Verlag, Weinheim

Under the organization of Dr. Vera Köster, Editor-in-Chief Chemistry Views, representatives of eight European Chemical Society journals met with the Editors of the ChemPubSoc journals for the second meeting, after the one that took place in 2017. On the agenda were discussions and the exchange of information about products, challenges and hopes and expectations for the future.

The attending Editors were:

- Patricia Pineau, France
- Dr. Gillian Harvey, Switzerland
- Prof. Miltiades I. Karayannis, Greece
- Prof. Tamás Kiss, Hungary
- Prof. Vlastimil Vyskocil, Czech Republic
- Dr. Christian Remenyi, Germany
- Prof. Miguel A. Sierra Rodriguez, Spain
- Prof. Eric Schouteden, Belgium

The meeting started with a talk by Guido Hermann, VP & Managing Director, on Open Science and Open Access and the very recent activities that have taken place in this area, prompted by Plan S, launched by Science Europe on 4 September 2018, which is an initiative for open access science publishing. The meeting proceeded with the opportunity for each representative to present their own Society's journal and in particular the changes and developments that have occurred in the past two years. Several journals have undergone substantial redesigns of appearance and/or content. Workshops took place on increasing acceptance and use of ChemPubSoc Europe (CPSE) by society members and improving the collaboration between Societies. The ChemSocPub brand is being redesigned and is expected to be completed and relaunched in Summer 2019. Collaboration between the Societies themselves and CPSE was also the subject of much discussion. Some initiatives that could well come to fruition include bilateral contact with possible exchange of articles, increased social media interaction between the Societies and CPSE and Wiley, and more active use of the CPSE websites to publish the activities of the Societies and the contents of the journals.

It was agreed that this meeting should be repeated, possibly on a two-year cycle, or at the next EuChemS meeting.

Helvetica, Volume 102, Issue 4, April 2019

Communications

Exploring Crystal Structure in Ethyne-Substituted Pentacenes, and Their Elaboration into Crystalline Dehydro[18]annulenes
Matthew J. Bruzek, Emma K. Holland, Anna K. Hailey, Sean R. Parkin, Yueh-Lin Loo, John E. Anthony

4-Naphthylmethyl Proline Forms a Channel Structure
Carlotta Foletti, Nils Trapp, Simon Loosli, Bartosz Lewandowski, Helma Wennemers

Full Papers

Metal(II) Formates (M = Fe, Co, Ni, and Cu) Stabilized by Tetramethylethylenediamine (tmeda): Convenient Molecular Precursors for the Synthesis of Supported Nanoparticles
Tigran Margossian, Kim Larmier, Florian Allouche, Ka Wing Chan, Christophe Copéret

Hamilton Receptor-Mediated Self-Assembly of Orthogonally Functionalized Au and TiO2 Nanoparticles
Muhammad Ali, Dominik H. Hasenöhrl, Lukas Zeininger, Alexander R. M. Müllner, Herwig Peterlik, Andreas Hirsch

Strain-Promoted Double Azide Addition to Octadehydrodibenzo[12]annulene Derivatives
Satomi Fukushima, Minoru Ashizawa, Susumu Kawauchi, Tsuyoshi Michinobu

Straightforward Synthesis of 3-Aminothiophenes Using Activated Amides
Dylan Dagoneau, Amandine Kolleth, Alexandre Lumbroso, Gamze Tanriver, Saron Catak, Sarah Sulzer-Mossé, Alain De Mesmaeker

Screening of Three Transition Metal-Mediated Reactions Compatible with DNA-Encoded Chemical Libraries
Nicholas Favalli, Gabriele Bassi, Tania Zanetti, Jörg Scheuermann, Dario Neri

Antimicrobial Peptide Dendrimer Chimera
Thissa N. Siriwardena, Alexandre Lüscher, Thilo Köhler, Christian van Delden, Sacha Javor, Jean-Louis Reymond

Effect of Temperature and Solvent on the Structure of Amide Cavitands
Safwan Aroua, Ankita Ray, Marc-Olivier Ebert, Yoko Yamakoshi

An Enantiopure Cyclometallated Iridium Complex Displaying Long-Lived Phosphorescence both in Solution and in the Solid State
Aurélie Macé, Nora Hellou, Joanna Hammoud, Clothilde Martin, Etienne S. Gauthier, Ludovic Favereau, Thierry Roisnel, Elsa Caytan, Ghassan Nasser, Nicolas Vanthuyne, J. A. Gareth Williams, Fabienne Berrée, Bertrand Carboni, Jeanne Crassous

Transannular Hydrogen Bonding in Planar-Chiral [2.2]Paracyclophane-Bisamides
Will R. Henderson, Danielle E. Fagnani, Jonathan Grolms, Khalil A. Abboud, Ronald K. Castellano

Non-Planar and Flexible Hole-Transporting Materials from Bis-Xanthene and Bis-Thioxanthene Units for Perovskite Solar Cells
Javier Urieta-Mora, Inés García-Benito, Iwan Zimmermann, Juan Aragó, Pedro D. García-Fernández, Giulia Grancini, Agustín Molina-Ontoria, Enrique Ortí, Nazario Martín, Mohammad Khaja Nazeeruddin

https://onlinelibrary.wiley.com/journal/15222675/

Behind the Science: Cleaving Double Bonds in Fullerene Derivatives

Dr. Jonathan Faiz, Deputy Editor of ChemPlusChem, talked to Professor Yasujiro Murata, Kyoto University, Japan, about his work on open-cage C60 derivatives that was published in ChemPlusChem. Discover more on ChemistryViews.org and enjoy free access to the full article in ChemPlusChem.
https://www.chemistryviews.org/details/ezine/11129012/Cleaving_Double_Bonds_in_Fullerene_Derivatives.html

Celebrating the International Year of the Periodic Table

Check out the collection of IYPT2019 activities on ChemistryViews.org.
Find out more about funny, serious, fascinating, surprising projects around the periodic table. And the list is still growing.
https://www.chemistryviews.org/view/iypt2019.html

ChemistryViews.org: The Best Element Videos

April marks the half time of the Element Video Competitionand the first winning videoshave been announced.
We invite you to share a short video too: It should show an element or an element in its compounds in a visually appealing way. The competition runs until October 1st.
https://www.chemistryviews.org/details/ezine/11077131/Element_Video_Competition.html

Batteries & Supercaps, Special Issue: Bifunctional Catalysts for Metal-Air Batteries

Have you checked out Batteries & Supercaps' very first topical Special Issue? The theme is Bifunctional Catalysts for Metal-Air Batteries and features reviews and original research by leaders in the field, e.g. a minireview by Kisuk Kang et al. or this article by Marcel Risch et al.
https://onlinelibrary.wiley.com/toc/25666223/2019/2/4

INDUSTRIAL NEWS

Source: *www.chemanager-online.com*

Brenntag Forms JV with Singapore's Teehai

March 20, 2019: Major chemical distributor Brenntag has agreed to form a 51:49 joint venture with Singapore-based Tee Hai Chem. Teehai provides raw materials and high-purity specialty chemicals to the life sciences, electronics and research & diagnostic sectors in Singapore and Southeast Asia. It reported sales of around €110.8 million in 2018. "This is a great opportunity to foster growth for Brenntag into key markets primarily for pharma and semiconductors," said Anthony Gerace, managing director mergers & acquisitions at Brenntag. "Moreover, entering into the joint venture will allow us to further develop the company through realizing synergies with the existing supplier and customer base of Brenntag in the Asia-Pacific region." Henri Nejade, member of Brenntag's management board and CEO of Brenntag Asia-Pacific, added that the location of Teehai's facilities in Singapore offers strategic advantages in proximity to customers, major ports and neighboring growth markets. The transaction is expected to close in the coming weeks, subject to the usual conditions. In separate news, Brenntag announced that it has been distributing a range of perfume oils from French fragrance company Mane to customers in Germany and Switzerland since the beginning of 2019. Initially, the collaboration will concentrate on supplying producers of cosmetics and body care products, expanding in the near future to include the household cleaning and detergent segments. Brenntag announced also that subsidiary Multisol Europe has been appointed as the distributor for Infineum's lubricant and fuel additive products in Spain, Portugal, Morocco, Algeria and Tunisia with effect from Mar. 1. The agreement extends an existing relationship between the two companies that covers countries in Europe, the Middle East, Africa, Asia-Pacific and Latin America.

Novartis Takes US Biotech IFM Tre

April 3, 2019: Swiss drugmaker Novartis has agreed to buy US biotech IFM Tre in a deal worth nearly $1.6 billion, boosting its portfolio of anti-inflammatory medicines. Novartis will pay $310 million upfront with IFM eligible to receive up to another $1.265 billion in milestone payments. IFM Tre is a subsidiary of IFM Therapeutics, which was acquired by Bristol-Myers Squibb for $2.3 billion in 2017. The deal gives the Swiss drugs giant access to IFM Tre's portfolio of NLRP3 inhibitors, comprising one clinical and two preclinical programs. The three potential therapies include IFM-2427, a clinical-stage systemic antagonist for an array of chronic inflammatory disorders including gout, atherosclerosis and nonalcoholic steatohepatitis (NASH); a preclinical-stage gut-directed molecule for inflammatory bowel disease; and a preclinical-stage central nervous system (CNS)-penetrant molecule. The NLRP3 pathway plays a critical role in the body's immune system by fighting off potentially dangerous pathogens but its chronic activation is associated with several metabolic, fibrotic, autoimmune and neurological diseases. Preclinical studies have shown that IFM Tre's molecules can selectively suppress the inflammation caused by the NLRP3 inflammasome while allowing the rest of the immune system to continue as normal. "IFM Tre's compounds have demonstrated that they can fine-tune the immune system, offering a potentially potent approach for treating a large variety of diseases associated with inflammation," said Jay Bradner, president of the Novartis Institutes for BioMedical Research. "We look forward to applying our deep expertise in this field to advancing these medicines through the clinic and to patients who need them." The companies expect the transaction to close during the second quarter of 2019, subject to the usual conditions and antitrust clearance. In separate news, Novartis has announced that it has met all the conditions required to spin off its Alcon eye care business and anticipates completing the transaction on Apr 9. Each Novartis shareholder will receive one Alcon share for every 5 Novartis shares held at close of business on Apr. 8. Shares in Alcon will be listed on both the SIX Swiss and New York Stock Exchanges.

Lonza and Chr. Hansen in Biotherapeutics JV

April 5, 2019: Swiss fine chemicals producer Lonza and Danish biosciences company Chr. Hansen are forming a 50:50 joint venture to develop and manufacture live biotherapeutic products (LBPs) for pharma and biotech customers. The partnership plans to invest €90 million in the Basel, Switzerland-headquartered joint venture, which will have production facilities both in Switzerland and Denmark. With the ambition of being positioned as the leading contract development and manufacturing partner (CDMO) globally for pharma and biotech clients in the LBP field, the companies said the jv will focus on providing a full supply chain to manufacture bacteria strains. The partners expect the market value of supplying clinical and commercial supplies for the industry to exceed €1 billion by 2035. Under one roof, the joint venture will pool the two companies' leading competences in handling, characterizing, formulating, manufacturing and encapsulating strict anaerobe bacteria. This, they said, will allow "seamless exchanges" between drug substance and drug product activities, thus shortening development timelines and increasing the chance of achieving the desired result the first time around. While Chr. Hansen will contribute its extensive know-how in developing, upscaling and manufacturing bacteria strains, Lonza will bring strong capabilities in pharma contract manufacturing and formulation into the partnership, along with drug delivery technologies, including its enTRinsic capsules. For the Danish firm, CEO Mauricio Graber explained that the jv with Lonza is a way for Chr. Hansen to utilize its 145 years of experience in strain development and manufacturing and to play in "the highly attractive" LBP industry without becoming a fully-fledged pharmaceutical producer. Lonza's new CEO, Mark Funk, added that that combining his company's expertise with the knowhow of one of the world's largest producers of bacteria "perfectly fits the very specific needs of aspirational companies in the microbiome space." The jv partners will share investment costs equally over the three years that will be needed to build cGMP-compliant production facilities. An initial €45 million will go toward upgrading existing facilities at Hørsholm, Denmark, while new facilities in Basel will be equipped to handle preclinical to Phase 2 projects. Another €45 million will be invested in commercial production capabilities if customer demand for clinical Phase3 and commercial supply is confirmed.

Asian Interest in European Chemical Companies

April 11, 2019: The chemical industry is one of the most international sectors with activity dominated by cross border transactions. Chinese and other Asian firms have been particularly busy expanding their global footprint and taking advantage of the quality assets for sale. Worldwide, geopolitical tensions and slowing global economic growth took its toll in terms of the number of deals, according to Mergermarket data for fiscal year (FY) 2018. However, deal volumes jumped 11.5% to $3.53 trillion in 2018 compared to the prior year while more specifically the Asia-Pacific (excl. Japan) M&A region recorded 4,036 deals totaling $717.4 billion, a 2.6% hike over 2017. Overall, the industrials and chemicals sector was the most attractive sector in 2018 by both value and volume. The final tally was 318 deals priced at $68 billion, compared to $82 billion across 321 deals in 2017. China continued to be an active participant although the ongoing trade wars with the US caused a dramatic shift in deal flow. Eu-

rope became the preferred destination with Chinese acquisitions in the region surging 81.7% to $60.4 billion from $33.2 billion in 2017. Dealmaking slowed down in the fourth quarter, but the first nine months saw 23 transactions of which, for example, ten in the consumer or a respective seven in the business services and energy, mining and utilities sectors. By contrast, transactions in the US plummeted 94.6% to $3 billion last year from a record $55.3 billion in 2016, according to Mergermarket figures.

"Chinese and other Asian firms have been particularly busy expanding their global footprint and taking advantage of the quality assets for sale."

The motives behind European transactions are the same as those driving other global purchases — to close the gap through acquiring technological prowess as well as expertise, proprietary formulations and products. One example is the roughly €200 million sale of European engineering plastics specialist Elix Polymers by Sun European Partners to Beijing-based Sinochem. The deal supports the ABS Compound producer's strategy to expand its activities in Asia, a region in which it is currently underrepresented. At the same time, it will boost Sinochem's presence in the plastics industry beyond chemicals trading and fertilizer production.

Growing Investment Interest in Sustainable Industries

It has been well documented that the Chinese economy is slowing to 6% growth from an originally forecasted 6.5%, but growth is still relatively robust compared to the low single growth figures of many developed countries. Chinese companies will continue to look for opportunities in traditional chemical segments, but they are also interested in buying organizations involved in pollution, water and waste treatment solutions as well as green and sustainable chemicals and plastics. This is being driven by the government's new environmentally-friendly laws under the 12th Five-Year Plan which aims to clamp down on unsustainable industries and incentivize clean and green energy businesses.

Chinese Government Influence

While the flow of deals has mainly been from China to the West, the tide has not been just one way: Global conglomerates are divesting Chinese operations as well. As always, high quality assets are constantly in demand, such as the Hovione/Imax deal. But tighter government regulations have increased costs for companies and spurred divestment discussions. The Chinese government has clearly stated it intends to standardize chemical parks along the lines of global industry best practice. Currently, only about half of the chemical production plants in China are in dedicated chemical parks, but this proportion is expected to increase drastically by 2020, with some provinces having set targets of 90% or more. Western companies, especially those who do not obtain a permit to increase capacity, are increasingly exploring all options for their assets instead of moving to one of the new parks. The domestic industry is also set for a further bout of consolidations. Last year already saw Chinese chemical product manufacturers Yantai Wanhua and Wanhua Chemical joining forces in a $12.7 billion tie-up, but anticipation is running high for the merger between Sinochem and its rival Chemchina, which completed China's largest outbound deal a year ago with the $44 billion takeover of Swiss agribusiness Syngenta, a deal in which Alantra was involved. The transaction, which would produce an oil-to-chemicals giant with more than $100 billion in assets, has been in the works for at least two years and would eclipse Germany's BASF, the world's largest maker of industrial chemicals, by sales. If completed as anticipated, the deal is expected to significantly change the landscape of China's chemicals industry. It is likely to trigger a wave of restructuring resulting in new strategic plans and the hiving off of subsidiaries. Specialists and niche companies would be particularly attractive not only due to their sharper competitive edge and technological expertise but also lower valuations on the back of a weaker stock market. Medium-sized companies in the US and Europe such as the German Mittelstand would be especially interested in them because many missed out on getting a foothold in the Chinese market due to increasing prices during the first wave of M&A activity.

Merck KGaA Invests €150 million in Swiss Biopharma

April 12, 2019: Merck KGaA is investing €150 million in an expansion of manufacturing capacity for its biotech medicines at Aubonne, Switzerland. The expenditure will include a new building to produce drugs for indications such as fertility treatment and cancer. The new building is expected to be completed in 2020, with the new quality control labs operational in 2021 and the new lines for aseptic filling ready by 2023, following validation by regulatory authorities. Facilities will be equipped with what Merck said are cutting-edge technologies dedicated to aseptic filling and quality control, with an innovative design and a flexible operations model to deliver increased productivity. Two new lines and the new quality control labs will replace existing infrastructure with technological upgrades and higher capacity allowing production of up to 27 million vials per year, the German group said. One of the lines will be dedicated to freeze-dried formulations, the other to liquid formulations. "This investment reflects our commitment to ensuring that our medicines always meet the highest quality standards and are readily available to patients all over the world whenever they need them," said Belén Garijo, member of the Merck executive board and CEO Healthcare. Switzerland is Merck's prime hub for manufacturing biotech medicines. In addition to Aubonne, it also has facilities at Vevey. Including the new expansion, plans, the pharmaceuticals and chemicals group said it will have invested more than €800 million in Switzerland over the past ten years. Worldwide, its pharma and biotech manufacturing network spans 18 sites.

Novartis and Amgen in Migraine Dispute

April 17, 2019: Swiss drugmaker Novartis and US biopharma Amgen are embroiled in a legal dispute regarding their collaboration on migraine prevention drug Aimovig. Novartis has filed a complaint in a Manhattan federal court, alleging that Amgen is trying to "unjustifiably" end their collaboration. The company is asking the court to confirm that Amgen has no right to end the agreement, saying that it considers the termination is "without legal merit." Amgen has countersued, stating that Novartis has breached their agreement because the Basel-based company's Sandoz division has formed a manufacturing partnership with potential rival AlderBiopharmaceuticals to develop, manufacture and market a competing drug. The collaboration remains in place until a final and binding court decision is made to terminate the agreements. Amgen originally had rights to Aimovig but partnered in August 2015 with Novartis, which said it has spent $870 million on development and commercialization since then. The companies have co-commercialization rights for Aimovig in the US, while Amgen retains exclusive commercialization rights in Japan with Novartis holding the rights to markets in Europe, Canada and the rest of the world. Aimovig won approvals last year in Europe and the USA for the preventative treatment of migraine in adults. Separately, Novartis completed the spin-off of its Alcon eye care business on Apr. 9. The spin-off, said Novartis, gives it a financial profile closer to its pharmaceutical industry peers, including higher group margins. The Swiss pharma noted that it anticipates launching 10 potential blockbuster drugs in the next two years, with a further 20 on the horizon. Four launch-

es are planned in 2019, including RTH258 (brolucizumab) for treating age-related wet macular degeneration. RTH258 is part of the ophthalmology pharmaceuticals business that Novartis retained. The business, which had sales of $4.6 billion in 2018, has a pipeline of potential novel treatments for presbyopia, dry eye and genetic diseases.

Olon Buys Indian API Plant

April 18, 2019: Olon, an Italian API contract development and manufacturing organization (CDMO) and generics supplier, has finalized the purchase of a generics API manufacturing facility in Mahad, India. Financial details were not disclosed. With this acquisition, Olon said it has successfully finalized its three-year development plan and will now move to its next target, which is to play an important role in manufacturing biologics APIs. The Milan-headquartered company also bought Ricerca Biosciencies' chemical division in mid-2017 and Capua BioServices, which provides microbial fermentation services, in January 2019. Olon has set up a new company Olon API India, headquartered in Mumbai, to run the acquired plant, which mainly produces Rifampicin and its derivative. These are used to treat several types of bacterial infections, including tuberculosis. The Mahad site supplies products to Sandoz, a division of Swiss drugmaker Novartis, and the companies have agreed a long-term contract to guarantee a continuous supply of products from the plant. The facility employs approximately 270 staff. The Italian CDMO said it intends to invest in the site and pursue business development opportunities to optimize the plant's utilization and expand its customer base. Olon employs about 2,000 people at 10 manufacturing sites worldwide (eight in Italy, and one each in Spain and the US, turning over $400 million in 2018.

Trafigura and Altis Form Trading JV

April 23, 2019: Trafigura is forming a joint venture with US privately held trading and logistics company Altis Group International to create a commodity petrochemical trading business with a focus on bulk liquid chemicals. The jv will comprise two entities –the existing Altis Group based in Houston, Texas, USA, and Altis International (Singapore), which will have a branch office in Geneva, Switzerland. "We believe that the time is right to start exploring the potential of this market," said Tom Jay, former head of Trafigura's deals desk for refined metals, bulk and concentrates. He added that the petrochemicals market is expected to grow significantly over the next few years. Jay and Chris Clarkson, Trafigura's head of gasoline trading, will join the boards of the new venture. Jeff McNear, president of the Altis Group International management team, said the jv will accelerate Altis' growth and ability to expand its trading reach globally. Earlier this month, Trafigura announced it was to become the owner of major mining group Nyrstar. The Geneva-based trading house is also partially funding a chemicals plant to be built by Finnish nickel and cobalt mining company Terrafame. The plant at Sotkamo, Finland, will produce chemicals for use in electric vehicle batteries, with commercial production expected to start in early 2021.