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EuChemS Award Program: Call for Nominations



EuChemS Lecture Award

Each year, the major achievements of one junior scientist working in Chemistry in a country with a EuChemS member organisation will be rewarded.

Who is eligible for a nomination

Nominees for the EuChemS Lecture Award should be scientists who have

made major contributions to any area of Chemistry and significantly advanced our understanding of a particular discipline. Nominees must be working in a country with a EuChemS member organisation at the time of the nomination. The Award is generally meant for scientists within 10 years of their PhD. Eligible career breaks that can be considered for the extension of the eligibility window are maternity or paternity leave after PhD award.

Awarding ceremony

The winner will be offered to give a plenary invited lecture at the next European EuChemS Chemistry Congress (ECC). During the Award ceremony the awardee will be presented with a commemorative statuette and a certificate. The awardee's travel, accommodation and registration fee will be covered in accordance with EuChemS regulations i.e. equally shared between the ECC organiser and EuChemS Budget.

How to apply

Nominations for EuChemS Lecture Award are open via the online nomination system. Deadline is December 31, 2021

EuChemS Award for Service

The EuChemS Award for Service acknowledges outstanding commitment with regard to fostering Chemistry and molecular sciences in Europe and the goals of EuChemS.

Who is eligible for a nomination

The nomination must demonstrate service to EuChemS and/or to European Chemistry over and above the basic voluntary contribution that would normally be expected. In addition to recognised service to EuChemS, this may include activities in governmental, non-governmental or funding organisations, publicity-related activities, etc. Nominations must demonstrate achievements for improved competitiveness, visibility, coherence, or structure of Chemistry in Europe.

It is normal practice that members of the Executive Board, members of the Presiding Council, and of Professional Networks are not considered for the Award until after their term of office has ceased. Service in any of the aforementioned governance bodies of EuChemS is not itself sufficient to merit the Award.

Awarding ceremony

Place and date for awarding ceremony is agreed with the awardee.

How to apply

Nominations for EuChemS Award for Service are open via the online nomination system. Deadline is December 31, 2021

EuChemS Historical Landmarks Award

The EuChemS Historical Landmarks program aims at designating sites in Europe where:

- (i) events in chemistry (be it social, theoretical, experimental, pedagogic, industrial...) occurred that
- (ii) have been important to the European or local (regional) chemical community and/or
- (iii) have inspired a sense of European or local (regional) belonging. Chemistry is an integral part of the Cultural Heritage of Europe. However, while there are many touristic signs marking the very place where important intellectual developments or events happened, only a few chemical sites are identified and publicised. Most of the existing programmes are run by national chemical societies and therefore often overlook the European, and even the international dimension, of the chemical sciences.

Who can submit a nomination

The nomination must be made on behalf of one of the EuChemS member societies. If you consider to nominate a Swiss site for the award, please contact the SCS Head Office (info@scg.ch).

More information on the EuChemS award program is available on the website: euchems.eu/awards/overview/

Chemistry Europe Fellows Program: Call for nominations



The Chemistry Europe Fellows Program was established in 2015 by the Chemistry Europe Presidents and Representatives to recognize members of the Chemistry Europe societies for their outstanding achievements and contributions to Chemistry Europe and their service to at least one member society. The Chemistry Europe Fellows Program is

established to foster the identity of Chemistry Europe within continental Europe but is not limited to that continent. It is the highest honor given by Chemistry Europe.

Nomination Process

The Chemistry Europe Fellows will be announced and honored at the biannual EuChemS conference or during appropriate national meetings in the years in-between.

Nominations should include the name, educational background, professional history (no more than 200 words), as well as contributions to Chemistry Europe (no more than 300 words). The submission must document that the nominee's accomplishments, excellence, and leadership are having a lasting impact on Chemistry Europe and its member societies.

Nominations for the Chemistry Europe Fellows 2020/2021 must be sent to Dr. Vera Koester, Secretary General Chemistry Europe

Fellows Program, by December 3, 2021 (vkoester@wiley.com). The new Fellows Class 2020/2021 will be announced in spring 2022

More information: chemistryviews.org/view/fellows.html

IUPAC Council 2021, Virtual Meeting



The Council did not meet in Montreal, Canada, but instead virtual on 5 Aug, and 13-15 Aug 2021. The following actions were taken.

1. Election of the Officers and Elected Members of the Bureau

On 1 January 2022, Professor Javier García Martínez (Spain), Vice President and President-Elect of IUPAC, will become President for two years. Professor Ehud Keinan will be the new Vice President. Treasurer Colin Humphris (United Kingdom) will retire and Wolfram Koch (Germany) was elected by the Council for a four-year term. Secretary General Richard Hartshorn (New Zealand) was re-elected by the Council in July 2019 for a four-year term and will continue his service for two more years.

See details: iupac.org/council-2021-elections-updates/

2. IUPAC 2027

Council voted for the site and dates of the 51st World Chemistry Congress and 54th General Assembly. The National Research Council (NRC), the Canadian Society for Chemistry (CSC) and the Canadian National Committee for IUPAC (CNC-IUPAC) will host the 51st World Chemistry Congress and 54th General Assembly, 16-23 July 2027, in Montréal, Canada.

See details: iupac.org/iupac-2027-bidding-update/

3. Other Motions voted on by Council

See iupac.org/actions-taken-at-iupac-council-virtual-2021/

A Warm Welcome to Our New Members!



Period: 27.07.–28.08.2021

Enzo Brack, Zürich – Katharina Gaus, Möhlin – Anika Hoffmann, Sion – Rafael Kessler, Aesch – Leonard Krupnik, St. Gallen – Luca Maggiulli, Villigen – Annabell Martin, Lausanne – Thomas Muggli, Heimberg – Merlin Seidel, Zürich – Alisa Vikhoreva, Solothurn

HONORS, AWARDS, APPOINTMENTS

Robert K. Grasselli Award for Javier Pérez-Ramírez, ETH Zurich



Prof. Pérez-Ramírez, ETH Zurich, is the very first recipient for this prestigious EFCATS award, recognizing him as a world expert in halogen chemistry. His discoveries span diverse reaction types including hydrogen halide oxidations, halogenations, oxyhalogenations, hydrodehalogenations, and halocarbon couplings. These have – quoting the distinguished nominators and evaluators – “generated almost unlimited opportunities for innovation in the direct functionalization of natural gas involving halides” and “led to better ways to make many key building blocks for the manufacture of chemicals, polymers, and fuels”.

The Robert K. Grasselli Award for Catalysis aims to recognize outstanding theoretical and experimental contributions in the field of oxidation catalysis that advance our understanding and practice of catalysis during the last five years prior to the year the award is given.

Source: efcats.org/awards

Prof. Yimon Aye, EPFL, wins Tetrahedron Young Investigator Award



Prof. Yimon Aye, EPFL Lausanne, is the 2021 winner of the Tetrahedron Young Investigator Award. Prof. Aye leads the Laboratory of Electrophiles And Genome Operation (LEAGO) in the Institute of Chemical Sciences and Engineering (ISIC).

Founded in 2005, the Tetrahedron Young Investigator Award is given each

year by the Executive Board of Editors and the Publisher of Tetrahedron Publications. It is given to two individuals under the age of 40 who have exhibited “exceptional creativity and dedication” in the fields of Organic Synthesis and Bioorganic & Medicinal Chemistry, respectively.”

Source: actu.epfl.ch

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zhaw.ch/ichbt/weiterbildung

Prof. Ardemis Boghossian, EPFL, wins 2021 ESP Young Investigator Award



The winner of the 2021 European Society of Photobiology (ESP) Young Investigator Award is **Prof. Ardemis Boghossian**, EPFL Lausanne. Her research straddles the interface of nanotechnology and protein engineering, aiming at the commercial development of protein-based constructs for light-harvesting and biosensing applications using

inorganic nanomaterials, which demonstrate enhanced photo-physical and electronic properties that enable optical devices with unprecedented, quantum optoelectronic properties.

Each year, the European Society for Photobiology (ESP) offers the Young Investigator Award to a young researcher who has conducted original research of exceptionally high quality in a field related to Photobiology. The Award is part of the ESP's continuing effort to promote Photobiology.

Source: actu.epfl.ch

Best Poster Presentation Award Winners at the Peptide Therapeutics Forum 2021



As part of the 2021 edition of the Peptide Therapeutics Forum 2021, taking place as a hybrid conference in Basel and online on August 19-20, 2021, the SCS also offered a virtual poster session and honored the best contributions with the 'Chemistry Europe' Best Poster Award. Elisabeth and Christina (picture) were present on-site and received the certificates and the vouchers of CHF 100 from Wiley online library from the organizers. Titia connected *via* video call to receive the award.

Elisabeth Engelsberger, ETH Zurich

«Functionalizable peptide-coated PtNPs for targeting liver cancer cells»

Christina Lamers, University of Basel

«Insight into mode-of-action and structural determinants of the compstatin family of peptidic complement inhibitors»

Titia Rixt Oppewal, University of Groningen

«Selection of chemically-upgraded macrocyclic peptides by phage display»

The short videos of the virtual poster sessions and additional information about the event are available for free on the website of the symposium on ptf21.scg.ch.

JOURNAL NEWS

Chemistry Europe supported SCS Events in Fall 2021



The Chemistry Europe (CE) sponsorship program is a contractual arrangement between the Chemistry Europe Societies and Wiley-VCH and allows the national societies to implement CE promotion activities at its events. Chemistry Europe supported the following SCS events in fall 2021 and we like to thank for the generous support:

- Peptide Therapeutics Forum 2021, Basel/online, 19.-20.08.2021
 - Swiss Summer School 2021: «Catalysis and Sustainable Chemistry», Les Diablerets, 05.-09.09.2021
 - 2nd Swiss SusChem Day 2021 @ILMAC, Basel, 20.10.2021
- Website Chemistry Europe Journals: chemistryeurope.com

Helvetica, Volume 104, Issue 8, August 2021



Reviews

An Overview of Recent Advances in the Synthesis of Organic Unsymmetrical Disulfides
Chiu Ling Ong, Salam Titinchi, Joon Ching Juan, Nader Ghaffari Khaligh

Communications

Inhibition of Thiol-Mediated Uptake with Irreversible Covalent Inhibitors

Bumhee Lim, Yangyang Cheng, Takehiro Kato, Anh-Tuan Pham, Elliott Le Du, Abhaya Kumar Mishra, Elija Grinhagena, Dimitri Moreau, Naomi Sakai, Jerome Waser, Stefan Matile

Enantioselective Total Synthesis of (+)-Nordasycarpidone, (+)-Dasycarpidone, and (+)-Uleine

Bastien Delayre, Cédric Fung, Qian Wang, Jieping Zhu

Nickel-Catalyzed *Suzuki-Miyaura* Cross-Coupling Involving C–O Bond Activation

Aoi Morishige, Yasuaki Iyori, Naoto Chatani

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Full Papers

Redox-Neutral Syntheses and Electrochemical Studies of 10-Bromo-Substituted Light-Stable Antivitamin B₁₂ Candidates

Christopher Brenig, Leila Mosberger, Katja Baumann, Olivier Blacque, Felix Zelder

pH-Controlled Supramolecular Self-Assembly of Naphthalene-diimide Appended L-Alanine and Ethylenediamine Asymmetric Bolaamphiphile

Dada B. Shaikh, Mahmood D. Aljabri, Dinesh N. Nadimetla, Shailesh S. Birajdar, Mohammad Al Kobaisi, Rajesh S. Bhosale, Frank Antolasic, Sidhanath V. Bhosale, Sheshanath V. Bhosale

onlinelibrary.wiley.com/journal/15222675/

INDUSTRIAL NEWS

Source: www.chemanager-online.com

Clariant Hikes Catalysts Output in Germany

July 30, 2021: Clariant has expanded and enhanced capacity for emission control catalysts at its plant in Heufeld, Germany, in order to meet growing demand worldwide, and especially in China. The plant produces its EnviCat catalysts, which remove up to 99% of harmful emissions such as volatile organic compounds (VOCs), hydrocarbons, carbon monoxide, nitrous oxide, nitrogen oxide and ammonia, from industrial off-gases in chemical production plants, stationary engines, and turbines. Clariant said output has increased 100% compared with that in 2019, adding it has seen a dramatic increase in global demand for this type of catalyst, particularly in China which had introduced strict new legislation to improve air quality. The Swiss firm noted that in 2020 and the first half of 2021, 56 Chinese chemical producers had decided to use its catalysts to upgrade their production facilities, with strong growth for controlling emissions in propane dehydrogenation, as well as in acrylic acid, acrylonitrile, and acrylonitrile butadiene styrene (ABS) production. The Heufeld plant is Clariant's second-largest production site for catalysts, producing more than 500 varieties of those used in emission control.

Bayer to Acquire US Biotech Vividion Therapeutics

August 9, 2021: In a deal potentially worth \$2 billion, German drugs and agriculture company Bayer is acquiring Vividion Therapeutics, a San Diego-based US biotech. The California company focuses on using protein surface screening to unlock high value, traditionally undruggable, targets. The terms foresee Bayer paying \$1.5 billion upfront and up to \$500 million for milestones not publicly defined. Closing of the transaction is expected during the current third quarter, subject to all approvals. With the perspective of being acquired, US reports said Vividion has canceled its recently announced plans for an initial public offering. In future, the company will continue to operate separately from its new owner, however.

As part of the agreement, Bayer will gain full rights to Vividion's proprietary discovery platform, which comprises what the biotech said are three integrated, synergistic components: a novel chemoproteomic screening technology, an integrated data portal and a proprietary chemistry library. Vividion's approach identifies previously unknown binding pockets in undruggable targets to generate first-in-class novel compounds in indications of high unmet medical need. The company said its technology "has already proven its applicability pre-clinically in oncology and immune-related diseases, with potential to expand into additional

therapeutic areas. "Despite advances in genomics, structural biology, and high-throughput screening, about 90% of disease-causing proteins cannot be targeted by current therapies due to the lack of a known addressable binding site," said Vividion CEO Jeff Hatfield.

For Bayer, Stefan Oelrich, managing board member and president of the pharmaceuticals division, said the acquisition reflects the Leverkusen-based group's drive to fuel its platform with breakthrough innovation. "Vividion's technology is the most advanced in the industry, and it has demonstrated its ability to identify drug candidates that can target challenging proteins," he commented. Leveraging Vividion's and Bayer's own knowhow, Oelrich said the German pharma will be able to develop first-in-class drug candidates and increase the value of its pipeline with a view to providing innovative therapies for patients with unmet medical needs. Bayer is the second major pharma player in a week to announce plans to acquire a small, highly specialized US biotech. Earlier, French drugmaker Sanofi said it would buy Translate Bio, with which it is developing a Covid-19 vaccine. Vividion currently collaborates with several major pharmaceutical producers, including Switzerland's Roche and Bristol Myers Squibb of the US, in immunology and oncology.

WuXi STA Closes Purchase of Swiss BMS plant

August 11, 2021: WuXi STA, CDMO subsidiary of WuXi AppTec, has completed the acquisition of a drug product manufacturing facility in Couvet, Switzerland, from US pharma Bristol Myers Squibb. The Chinese company, which announced the purchase plans earlier this year, said the state-of-the-art facility significantly enhances its European capacity. The Couvet facility opened in 2018 has a state-of-the-art tablet & capsule manufacturing and packaging capabilities. By enhancing its network, WuXi STA said it can "better support customers' long-term needs globally, as they bring new and existing commercial manufacturing projects from their pipelines to a plant that has the capability and capacity to supply drug products to major global markets." With the transaction, the company has increased its global presence to eight R&D and manufacturing sites across Asia, North America, and Europe, including the recently announced Middletown site in the US state of Delaware. "Through combining resources of the Couvet site with our other facilities, we continue strengthening and broadening our capacity and capabilities to better support our global customers in delivering innovative medicines to patients in need," said Minzhang Chen, co-CEO of WuXi AppTec.

Fine Chemicals in China

China's Chemical Industry: a "Low-end Surplus and a High-end Shortage"

August 23, 2021: Fu Xiangsheng, Vice Chairman of the China Petroleum and Chemical Industry Federation, characterized China's chemical industry as having a surplus of basic chemicals and a shortage of functional chemicals. Indeed, the share of fine chemicals as a percentage of the total industry value is only about 45% compared to 60-70% in the US and in many European countries, and 90% in Switzerland. Thus, the Chinese government is interested in supporting the development of local fine chemicals production. While there are about 100,000 different fine chemicals produced globally, in China the number reaches only 20,000, according to the Xingyuan Chemical Park Research Institute. A paper by Shanghai-based chemical industry consultant Kai Pflug examines the status and trends related to China's Fine Chemicals industry in some detail. "China's low share of fine chemicals has several disadvantages for China", Kai Pflug states in his special report for the China Chemical Reporter (CCR). This means that China is a net importer of chemicals, with the value of its chemical exports equal to only about 72% of its imports, the expert continues. Moreover, the self-sufficiency is particularly low in

high-end segments such as new chemical materials, which in 2018 reached a self-sufficiency rate of only about 65%. “China’s low share in fine chemicals is also a commercial disadvantage”, Pflug adds. Fine chemicals on average have higher profit margins than basic chemicals, as the number of competitors is smaller, the number of buyers is larger, and the relative cost share for buyers of specialty chemicals is lower, and buyers often lack the knowledge to easily replace fine chemicals suppliers. It is thus not surprising that the Chinese government is interested in supporting the development of local fine chemicals production, according to Kai Pflug, who is also a frequent contributing author for CHEMANAGER. He adds: “However, establishing a strong fine chemicals industry in China is easier said than done. Main entry barriers for individual chemical companies include developing relevant R&D capabilities, establishing sufficient amounts of segment-specific application knowledge, gaining customers and a reputation for reliability and product quality among them.” His paper discusses the above and the most recent trends in China’s Fine Chemicals segment in more detail.

Lonza Invests in Chinese Drug Product Manufacturing

August 24, 2021: Swiss CDMO Lonza plans to invest an undisclosed sum to establish drug product manufacturing capabilities at its site in Guangzhou, China. The investment in the central-southern province of Guangdong will include installation of an aseptic drug product fill and finish production line at the 17,000 m² state-of-the-art cGMP mammalian facility. Lonza said the fill & finish production line at the plant that began operation in Q2 2021, where it expects to deliver its first cGMP batch later this year, will “significantly expand” its capacity, thereby supporting global and domestic customers with supply for clinical trials and commercial batches in China. The project expected to be completed in 2022 will create more than 150 new positions at the Guangzhou site. The introduction of drug product manufacturing at the site, Lonza said, will provide a combined drug substance and drug product manufacturing service offering, in line with its strategy to provide integrated end-to-end solutions to customers. The sterile, multi-product fill line will support the filling of both liquid and lyophilized products. To facilitate the installation of the new drug product line, the CDMO also plans to expand the footprint of its global hub at its Basel, Switzerland, home base. Lonza operates the drug product services laboratories as a center of excellence, supporting drug product capabilities across its global network by providing formulation development and process development. Commenting on the investment, Hong Pan, the company’s general manager for China, said it not only demonstrates Lonza’s commitment to the Chinese market but also marks an important milestone in achieving its long-term ambition of increasing drug product capacity and addressing growing customer demand for an end-to-end drug product solution. “Through the expansion of our services at Lonza Guangzhou, we will have the capability to support our customers with the late-stage clinical trial and commercial development of potentially life-saving treatments,” he said. Peter Droc, head of drug product services, added that the planned expansion at Basel “will be a key enabler to support our integrated drug substance and drug product offering across modalities.” Lonza Biologics Guangzhou is a multi-product facility for clinical and commercial supply, with capabilities that include single-use bioreactors at 200 L, 1,000 L and 2,000 L and downstream processing equipment. The site will employ the Swiss company’s current GS Xceed platform technology. The CDMO said the facility is capable of producing mammalian cell culture therapeutic proteins including monoclonal antibodies, bispecific antibodies, fusion proteins and recombinant enzymes.

Sika Sells German Coatings to Sherwin-Williams

August 24, 2021: Swiss specialty chemicals company Sika has agreed to sell its European industrial coatings business to US paints and coatings group Sherwin-Williams for an undisclosed sum. The business based in Vaihingen, Germany, sells anticorrosive and fire protective coatings to specialized customer groups, such as those in steel construction, and mainly located in Germany, Switzerland, Austria, and Poland. These customer segments, explained Sika, offer little synergy potential with the group and the business has remained a specialized niche. It had sales of approximately 75 million Swiss francs in 2020. The transaction is expected to close in the beginning of 2022. Sika said it believes Sherwin-Williams is the “right long-term owner” for the business, adding that “industrial coatings is a core competence for Sherwin-Williams and the acquired business an important strategic opportunity to drive growth and support the expansion of its market position in Europe.” “This transaction fits our strategy of acquiring complementary, high-quality, differentiated businesses that add to our profitable growth momentum,” said Sherwin-Williams chairman, president, and CEO John Morikis. “The business brings us scale, unique technology, a strong sales and marketing team, technical service capabilities, strategically located manufacturing, and leading specification and approval positions, all of which we can leverage further throughout Europe and other regions across the world. Additionally, synergy opportunities give us great confidence in accelerating the already strong financial performance of the business.” The acquired business, along with roughly 130 Sika employees, will become part of the Sherwin-Williams’ Performance Coatings Group segment.

Clariant Acquires Remaining 70% of Beraca

August 25, 2021: Swiss specialty chemicals producer Clariant has agreed to acquire the remaining 70% of Brazilian Personal Care Specialties company Beraca after taking a 30% stake in 2015. Seller is the founding Sabará family. Financial terms of the acquisition expected to close in this year’s fourth quarter were not disclosed. Based in the Amazon region, Beraca is one of the key manufacturers of natural ingredients for the personal care sector with a portfolio composed in particular of fats, oils and botanicals that are collected and extracted in an environmentally sustainable production process. The family-run company with 90 employees and 2020 sales of \$15 million has invested significant resources in expanding research and innovation and has steadily increased production capacity. It has won several awards for its ethical sourcing. With the purchase, which he described as “a building block in the strategy of further strengthening individual core business areas through targeted acquisitions,” the Swiss group’s CEO, Conrad Keijzer, said Clariant will gain valuable access to natural materials. based on the biodiversity of the Brazilian rainforest. This, he said, will open up opportunities for high-quality growth in its Care Chemicals business, into which the acquisition will be integrated. Having full control of Beraca will mean that Clariant is well placed to meet the increasing demand for ethically produced products on the world market, added Christian Vang, head of Industrial & Consumer Specialties business unit.