SCS
Swiss Chemical
Society

Community News

www.scg.ch

www.chemanager-online.com

SWISS CHEMICAL SOCIETY NEWS

Call for Nominations for the SCS Awards 2017

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 2017 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, 2016.
For specific award information and required documents please visit our website *http://scg.ch/awards*

Werner Prize
CHF 10'000 and medal in bronze
The Werner Prize is awarded to a promising young Swiss scientist or scientist working in Switzerland for outstanding independent chemical research. At the time of the award the candidate may not be a tenured professor or someone in a higher position in industry, and should be younger than 40. The prize is awarded annually.

Grammaticakis-Neumann Prize
CHF 5'000
The Grammaticakis-Neumann Prize is awarded to a promising young scientist for outstanding independent research in photochemistry, photophysics or molecular photobiology. At the time of the award the candidate may not be a tenured professor or a person in a higher position in industry, and should be younger than 40. The prize is awarded bi-annually as of 2014.

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 to a teacher working in Switzerland at high school (gymnasium) level for innovation in chemistry teaching. The innovation must be easily applicable in current teaching and the costs for materials must be modest. The candidate may not make any claim to copyright in the innovation. The prize is awarded annually.

Dr. Max Lüthi Award
CHF 1'000 and medal in bronze
The Dr. Max Lüthi Award is presented for an outstanding diploma thesis in Chemistry conducted at a Swiss University of Applied Sciences. Nominations must be submitted by the head of the Chemistry Department of a Swiss University of Applied Sciences. The prize is awarded annually.

Clariant CleanTech Award Switzerland
CHF 10'000 in total
The Clariant CleanTech Award Switzerland is available to successful Master students, PhD students, and Postdocs who have distinguished themselves with outstanding scientific achievements in Switzerland in areas of Sustainable Chemistry such as resource efficiency, renewable energy, renewable raw materials or green technologies and environmental protection.
The prize is awarded every 18 months. Deadline for this award is July 31, 2016.

Sandmeyer Award
CHF 10'000 for individuals or CHF 20'000 for groups
The Sandmeyer Prize is awarded to a person – excluding tenured professors – or to a group for outstanding work in industrial or applied chemistry. The work must be completed in Switzerland or with the involvement of a Swiss national. The prize is awarded annually and supported by the Division of Industrial and Applied Chemistry of the SCS.

KGF/SCS Industrial Science Awards
The KGF/SCS Industrial Scientific Awards are given to scientists working in Switzerland that are still working in industrial R&D.

Industrial Investigator Award honors successful investigators with outstanding achievements.
Certificate and cash check of CHF 7'000

Senior Industrial Investigator Award honors very successful and established investigators with outstanding achievements over many years.
Certificate and cash check of CHF 10'000

Distinguished Industrial Investigator Award honors senior scientists on the top of their research career for their lifetime achievements.
Certificate and cash check of CHF 15'000
Rewarded only on decision by the board

SCS Awards are sponsored and supported by

KontaktGruppe für Forschungsfragen
Contact Group for Research Matters
BASF The Chemical Company · NOVARTIS · Roche · syngenta

Chemical Education: Towards a New SCS Division

Given its increasing importance, the Swiss Chemical Society (SCS) decided to extend its activities into the area of chemical education. The new Division of Chemical Education (DCE), which now is in the process of being established, shall support the interaction of educators and teachers of chemistry at all levels. The possibility to interact with scientists of the other SCS divisions will create bridges between research and education. To launch this process, the symposium "Future of Chemical Education", which is part of the next SCS Fall Meeting, will be held (see symposium program in events section of this edition of CHIMIA).

"Who has experience with e-learning tools?" Or, "Who is experienced in problem based learning in chemistry, or in inquiry based laboratory sequences?", "What are the best tools for the 3D- visualization of phase transitions or of quantum mechanical phenomena in chemical reactions?", "What is the status of didactics training at the Swiss universities, the universities of applied science, and the universities of teacher education?", "What are the hot topics in chemical research that should be integrated in current curricula?". Unless you have access to this knowledge through your network, these are questions that are not always easy to respond to.

For high-school chemistry, the Verein Schweizerischer Naturwissenschaftslehrer (VSN), with its training courses, offers such a network. When it comes to access to university chemistry, establishing contacts is not always as obvious. At the university level, the exchange between the different schools is much less established; typically there is only relatively little and very scattered knowledge on how chemistry is taught elsewhere.

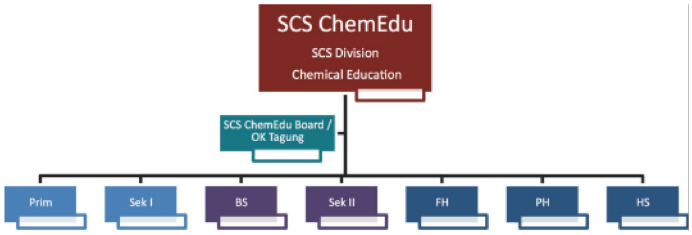
The increasing budget pressure education is facing, and the mandate to maintain a high standard in education and training at all levels, calls for a broader view and proactive measures such as the concentration of forces within the community. The SCS is committed to have a positive effect on both, the quality of education and training, and on the public opinion on chemistry in Switzerland in general.

The Goals of the SCS Division of Chemical Education

- The goals of the DCE can be summarized as follows:
- Establishment of a platform for the exchange of educational know-how at all levels (horizontal integration) and also between educational levels (vertical integration).
- Extension of the current offerings on training courses and workshops for chemistry teachers at all levels: showing and sharing good practice.
- Creation of opportunities for chemistry teachers at all levels to establish contacts to researchers from industry and academia (and vice versa) and preparation of current research topics for their deployment in chemical education and training
- Presentation of the subject as an interesting area of science and improvement of the public opinion on chemistry through better education

In the board of the DCE, all levels of chemical education will be represented, each one forming its own section. Each section will plan its activities such as workshops, excursions, meetings, or events for the public. The lead for the annual SCS ChemEd meeting, which involves all sections, will be taken by another university each year.

Proposed structure of the SCS Division of Chemical Education (DCE)



If you are interested to be part of this initiative and to contribute to chemical education, please contact the SCS or join us at the Fall Meeting of the Swiss Chemical Society at the University of Zürich Irchel Campus on September 15, 2016.

Clariant CleanTech Award Switzerland 2016: call for nomination

Clariant, the Swiss Chemical Society and the University of Basel are partnering to award the Clariant CleanTech Award Switzerland and offer a lecture slot at the "Clariant Chemistry Day, University of Basel" on October 12, 2016.

The Clariant CleanTech Award Switzerland is endowed with a total of 10'000 CHF. The first prize is endowed with 5'000 CHF.

This award program will honor outstanding scientific achievements of Master students, PhD students, and Postdocs in Switzerland in the field of Sustainable Chemistry, in areas such as resource efficiency, renewable energy, renewable raw materials or green technologies and environmental protection.

With Research & Development the chemical industry contributes to tackle the challenges of our society by creating product and process innovation. As a company that creates value through sustainability and innovation, Clariant is particularly concerned about strengthening the knowledge base of CleanTech in Switzerland by sponsoring basic research and fostering the knowledge and technology transfer between industry and academia.

For Participation

The Clariant CleanTech Award Switzerland is available to successful Master students, PhD students, and Postdocs who have distinguished themselves with outstanding scientific achievements at the Departments of Chemistry and adjacent disciplines of Universities, Universities of Applied Sciences and Institutes in Switzerland in areas of Sustainable Chemistry such as resource efficiency, renewable energy, renewable raw materials or green technologies and environmental protection.

Master students, PhD students, and Postdocs will be considered with regard to their different levels of training.

Applicants are requested to submit

- their curriculum vitae,
- a brief description of the scientific results (max. 5 pages), and
- an expert assessment from a supervisor

by July 31, 2016 via the online form on *http://scg.ch/cleantech-award*

Ruzicka-Prize 2016: call for nominations

The Ruzicka-Prize is awarded each year to a young scientist for her/his outstanding, published contribution in the field of chemistry, achieved either in Switzerland or by a Swiss citizen abroad.

Proposals for candidates (age limit 40 years) may be submitted until September 16, 2016 (date of receipt) to the Vice-President Research and Corporate Relations, Prof. Dr. Detlef Günther, ETH Zürich / HG F 57, Rämistrasse 101, CH-8092 Zürich
More details on:
Source: *https://www.chab.ethz.ch/*

Thank You Chemistry!

EuCheMS would like to announce the launch of EuCheMS donation programme "Thank You Chemistry".

From now on, other than participating in EuCheMS activities, subscribing to our newsletters, and telling us your ideas and concerns, you will also have the opportunity to contribute financially to the work of EuCheMS. This important milestone in EuCheMS activities will allow chemists and non-chemists from all around the world to support the work developed by EuCheMS in promoting the chemical sciences.
Source: *http://www.euchems.eu/*

Science: How Close to Open? – Outcomes

The outcomes of the EuCheMS workshop Science: How Close to Open?, which took place in Amsterdam in April, are now available at EuCheMS' website. This event looked into the current challenges and opportunities of open science and gathered policy-makers, researchers and publishers. As the conclusions of the event point out, the path to reach an open science is open in itself, but whatever choices are made they must be beneficial for the progress of science and society.
Source: *http://www.euchems.eu/*

Countdown to ILMAC 2016

ILMAC has been Switzerland's trade fair for process and laboratory technology for more than 50 years. Every three years, more than 12'000 specialists from the pharmaceutical, chemical, biotechnology, cosmetics, food and drinks sectors meet up to find out about the latest approaches and solutions adopted in industrial applications and to foster their business relations.

Be sure not to miss this opportunity and note down the dates of the forthcoming ILMAC in your diary already. The next ILMAC is being held from 20 to 23 September. Under the motto ILMAC 4.0, the ILMAC Forum will be featuring discussions on current industry topics and trends.

Your fair preparation
The ILMAC Team and more than 450 exhibitors from Switzerland and the regions over the border look forward to your visit. Reserve the time for your visit to the fair right now! Please visit the SCS-ILMAC website for further details:

- Lunch&Learn Events program
- SCS-HF Award
- Booth of SCS and its partners
- Ticket shop. Use the priority code ILMAC2016-SCS to get free tickets

http://scg.ch/ilmac

A warm welcome to our new members!

Period: 27.04.2016 – 27.05.2016

Cristina Alvarino, Geneva – Sergey Antipov, Lausanne – Stéphane Baeriswyl, Riaz – Haitham Barqawi, Bad Säckingen (D) – Peter Benedek, Zurich – Sebastian Benz, Carouge – Olga Bozovic, Zurich – Fabian Brunner, Schopfheim (D) – Alena Budinská, Roztoky – Anna Bujalska, Zurich – Andrés Burgos-Caminal, Nyon – Baptiste Busi, Bussigny – H. C. Stephen Chan, Basel – Elena Cosimi, Zurich – Martin Czar, Zurich – David Dailler, Basel – Lorena De Luca, Zurich – Raphaël de Matos, Pully – Otoniel Denis Alpizar, Allschwil – Nikolaos Droseros, Fribourg – Urs Eggenberger, Zurich – Besim Fazliji, Wangen – Matthias Gehringer, Zurich – Bahman Golesorkhi, Geneva – Nathalie Grob, Zurich – Cornelius Gropp, Zurich – Julien Guillemin, Archamps (F) – Luzia Gyr, Oberengstringen – Zahra Harati Taji, Zurich – Nina Hentzen, Zurich – Yuya Hu, Geneva – Xiangang Huang, Zurich – Golnaz Isapour, Fribourg – Aaron Johnson, Zurich – Chloe Johnson, Bern – Agonist Kastrati, Fribourg – Jessica Kisunzu, Zurich – Liviana Klein, Zurich – Amy Knorpp, Zurich – Martin Köhler, Zurich – Philipp Krauspe, Fribourg – Tatu Kumpulainen, Plan-les-Ouates – Stefan Künzi, Zurich – Robert Kuratle, Winterthur – Michele Larocca, Zurich – Vincent Lebrun, Basel – Karst Lenzen, Bern – Dominik Lotter, Basel – Nathan Luedtke, Zurich – Vidya Mannancherril, Neuchâtel – Kris Meier, Zurich – Romain Melot, Saint-Louis (F) – Jordan Meyet, Zurich – Melinda Mojzesova, Thun – Padmabati Mondal, Basel – Fahimeh Moradiafrapoli, Basel – Paola Morelli, Geneva – Peter Müller, Oberohringen – Olga Nazarenko, Schlieren – Julia Nomrowski, Basel – Marta Olivares, Bern – Alina Osypova, St. Gallen – Guido Panzarasa, St. Gallen – Dusko Paripovic, Zurich – Monica Perinelli, Zurich – Erich Henrik Peters, Basel – Marco Pezzella, Basel – Giovanni Picca, Bern – René Pretorius, Bern – Jonny Proppe, Zurich – Lorenzo Querci, Zurich – Craig Richmond, Zurich – Paul Rouster, Geneva – Kanak Roy, Zurich – TItouan Royal, Saint Louis (F) – Stepan Ruzicka, St-Sulpice – Saeed Saedy, Villigen – Kevin Salzmann, Raron – Achille Schild, Balm b.M. – Mauro Schilling, Kriens – Olivia Schmidt, Zurich – Elia Schneider, Schaffhausen – Candela Segarra Almela, Bern – Mykola Sichkar, Moutier – Eduard Sistaré Guardiola, Confignon – Gints Smits, Lausanne – Petr Sot, Windisch – Christopher Stein, Zurich – Alexander Stephens, Lyss – Vitaly Sushkevich, Brugg – Alberto Tejero Rioseras, Zurich – Masayuki Tera, Zurich – Daniela Trogolo, Morges – Athanasia Tsoukalou, Zurich – Mona Wagner, Zurich – Xing Wang, Villigen – Nicola Weder, Zurich – Jan Wilhelm, Zurich – Cedric Wobill, Frenkendorf – Patrick Wolf, Zurich – Keishi Yamamoto, Zurich – Lei Yang, Basel – Maksym Yarema, Zurich – Raphael Zahn, Dübendorf – Ke-Feng Zhang, Basel – Fan Zhang, Neuchâtel – Liqing Zheng, Zurich – Fedor Zhurkin, Lausanne – Vincent Zoete, Morges.

HONORS AND AWARDS

KGF-SCS Industrial Science Awards 2016

The Swiss Chemical Society and the Contact group for research matters (KGF) are proud to announce the winners 2016 of the prestigious KGF-SCS Industrial Investigator Awards and to honor their outstanding achievements.

We sincerely congratulate all winners and we are looking forward to the ceremonies and award lectures that will take place on the occasion of the SCS Fall Meeting in Zurich on September 15, 2016.

KGF-SCS Senior Industrial Science Award 2016

Certificate and reward of CHF 10'000

The award is given to
Dr. Eric Francotte,
Novartis Pharma AG,
for his outstanding contributions to chromatographic resolution of racemic compounds on optically active polymers as chiral stationary phases and his pioneering work in implementing new preparative chromatographic techniques.

Professional career

1974-78	PhD with Prof. H. G. Viehe, University of Louvain
1978/80	Assistant and Postdoctoral Fellow at the University of Geneva under Prof. W. Oppolzer.
1980-90	Research chemist and group leader in the Central Research Laboratories of former Ciba-Geigy, Basel
1990-97	Head of the Chromatography Laboratories, Ciba Basel.
1997-08	Director, Unit Head of 'Separations' within Global Discovery Chemistry at Novartis Institutes for BioMedical Research.
2008-	Executive Director, 'PrepLabs, Separations, and Bioreactions (PSB)' within Global Discovery Chemistry at Novartis Institutes for BioMedical Research.

Scientific experience/contribution

Eric Francotte started his industrial research activities in the field of chiral polymers for more than 30 years ago in the central research laboratories of former Ciba-Geigy, now Novartis.

The focus of his research was on the design and synthesis of optically active polymers to be used as chiral stationary phases (CSP) for the chromatographic separation of stereoisomers. A broad variety of chiral polymers were prepared for this purpose. After shaping the obtained polymers in a form which was suitable for packing into chromatographic columns, the ability of these materials to separate stereoisomers was systematically tested. The influence of physical parameters like porosity, specific surface, particle size, or density on the chiral recognition ability of the materials was investigated in details. Extended mechanistic investigations on the interactions between chiral polymers (chiral selector) and chiral solute were also performed.

As a result of this pioneer work, he invented and patented in 1995 a technique to immobilize polysaccharide derivatives on carrier materials. This was a breakthrough in the field of chiral separations as this technology permitted to overcome the limitations of this type of chiral stationary phases. This was ground-breaking considering that the polysaccharide-based phase are dominating the field of chiral separation Sciences in terms of efficiency and application range and the market in terms of sale volume (more than 80% worldwide). The invented chiral phases are now used in almost all academic, pharmaceutical and agrochemical and other laboratories dealing with chiral compounds over the world. In the Life Sciences, the invention has greatly facilitated the investigation of the biological activity of chiral substances, permitting to evaluate more accurately the safety and efficacy of drugs or crop protection substances, and consequently contributing to improve people's quality of life and environment protection. In addition, the technology has opened up a new way to produce safer drugs for patients on an industrial scale. The developed chiral materials are not only used on a daily basis in all pharmaceutical research laboratories to rapidly access the single enantiomers of drug candidates but also at an industrial production scale of tonnes of enantiomerically pure drugs per year. This was totally unconceivable 20 years ago.

The award is given to
Prof. Peter Nesvadba,
BASF Schweiz AG,
for his groundbreaking contributions to the discovery and development of novel stabilizers for monomers and polymers, novel dyes, first industrial realization of controlled radical polymerization, to the development of safe alternatives to organic peroxides and for his engagement as bridge builder between academia and industry.

Professional career

1982-87	PhD with Prof. Albert Gossauer, University of Fribourg
1987-93	Career start as research scientist at Ciba-Geigy in Marly
1993-94	Internship at Ciba-Geigy R&D center in Ardsley, New York, USA.
2003	Promotion as Senior Research Fellow of Ciba SC
Current	Senior Research Fellow at BASF Schweiz AG in Basel

Scientific experience/contribution

Prof. Nesvadba and his colleagues have successfully developed several innovative products and brought these to the market. His industrial career started with research on antioxidants, stabilizers for monomers and novel dyes. This work has led to the commercialization of the unique processing stabilizer for polyolefines and novel environmentally friendly polymerization inhibitor. Additionally, he laid the foundations for the development of novel dyes for electronic industry. A later true highlight is his ground-breaking work on nitroxides and alkoxyamines for controlled radical polymerization (CRP). The novel molecules developed by his team allowed the first successful realization of CRP on industrial scale worldwide and permit the commercial production of highly innovative specialty polymers. Given that many academic research groups around the world are working on CRP and that this general technique is useful for virtually every polymer producing company, this achievement is remarkable. Moreover, during the work on CRP, a hitherto unknown radical reactivity of N-acyloxyamines was discovered, investigated in detail and used for the development and commercialization of a novel and safe radical initiator for controlled degradation of polypropylene.

The above mentioned achievements of Peter Nesvadba and his colleagues were honored with the Ciba research award three times and in 2011 with the prestigious Sandmeyer Award from the Swiss Chemical Society.

The accomplishments of Prof. Nesvadba's very small team are documented by an impressive number of 95 published patent applications as well as 42 publications in peer reviewed journals or books. It is nowadays not usual for industrial scientists to publish extensively in scientific journals or to speak at conferences. Consequently - and unfortunately - many valuable results generated in industrial laboratories remain inaccessible to the chemical community. Peter Nesvadba routinely goes beyond his primary task of securing patent rights for his company and publishes the fundamental aspects of his work in the academic literature.

During his entire career Peter Nesvadba kept and intensified his ties with the academic world. In 2001, he started to teach Organic and Polymer Chemistry as "Lehrbeauftragter" at the University of Fribourg, obtained his Habilitation in 2007, and was nominated associate Professor in 2011.

Every year Prof. Nesvadba personally coaches a student as part of the "Schweizer Jugend forscht" program in his laboratory and thus provides the next generation of scientists with invaluable and meaningful experiences early on. These accounts document that Prof. Nesvadba is not only a scientific leader and industrial innovator, but also serves as a bridge builder between the industrial and academic communities and as a role model and mentor for the next generation of chemists.

KGF-SCS Industrial Science Award 2016

Certificate and reward of CHF 7'000

The award is given to
Dr. Martin H. Bolli,
Actelion Pharmaceuticals Ltd,
for his excellent contributions in medicinal chemistry culminating in the discovery and development of macitentan, a drug for the treatment of pulmonary arterial hypertension.

Professional career

1991–94	PhD with Prof. Dr. Christian Leumann at ETH Zürich and University of Bern
1995–97	Postdoctoral studies in the group of Prof. Dr. Albert Eschenmoser, ETH Zurich and The Scripps Research Institute, La Jolla, California, USA
1997–98	Postdoctoral studies with Prof. Steven V. Ley, University of Cambridge, UK
1998–02	Medicinal Chemistry Lab Head at Actelion Pharmaceuticals Ltd, Allschwil
2002–	Group leader in Medicinal Chemistry at Actelion, Allschwil

Scientific experience/contribution

In 1998 Dr. Bolli started as a medicinal chemistry lab head at Actelion. His contributions as chemistry leader of the endothelin receptor antagonist project culminated in the discovery of macitentan (ACT-064992), a dual, orally active endothelin receptor antagonist which was approved by the US Food and Drug Administration (FDA) in October 2013 and later also by the European and Japanese authorities. He was also involved in the identification of another active pharmaceutical ingredient now in phase II clinical development for cardiovascular disorders.

After the journey to his first clinical candidate and now marketed product Dr. Bolli took over the project leadership in the field of sphingosine 1-phosphate receptor modulators. Building on the experience and key learnings from the discovery of macitentan, he and his team discovered ponesimod, a potent, orally active sphingosine 1-phosphate receptor 1 (S1P1) agonist, which completed positive phase II clinical trials in relapsing remitting multiple sclerosis (RRMS) and psoriasis. Currently, this compound is in phase III clinical development in patients suffering from RRMS and in phase II clinical trials in patients suffering from chronic graft-versus-host disease. By exploring several additional classes of novel S1P1 agonists, Dr. Bolli and his team identified a second compound, cenerimod, that recently entered phase II clinical development in patients with systemic lupus erythematosus.

Dr. Bolli has published close to 100 scientific papers and patent applications and is currently leading a team of medicinal chemists that aims to identify novel drugs interfering with a variety of biological mechanisms associated with cardiovascular and fibrotic diseases.

The award is given to
Dr. Andreas Herrmann,
Firmenich SA,
for his essential contributions to make pro-fragrance chemistry an interdisciplinary research area and to establish it as a key technology for fragrance delivery.

Professional career

1988–93	Chemistry studies at the University of Karlsruhe (Vordiplom) and the Ecole de Chimie de Strasbourg (EHICS, Diplôme d'Ingénieur)
1993–97	PhD with Prof. François Diederich at ETH Zürich
1997–	Laboratory Head in the Corporate R&D Division at Firmenich SA, Genève
2008–	Lecturer at the University of Fribourg
2010–	Principal Scientist at Firmenich SA, Genève

Scientific experience/contribution

The performance of perfumed consumer articles is usually judged on the duration of the fragrance perception. To overcome the rapid evaporation of perfumery compounds and to increase the stability of unstable raw materials, the development of efficient delivery systems has become an important research area in the flavor and fragrance industry.

In 1997 Andreas Herrmann was hired at Firmenich as a research scientist to develop fragrance delivery systems based on the covalent bond cleavage of suitably designed, non-volatile precursor molecules, so-called pro-fragrances. With his background as an organic chemist he investigated mild organic reactions for their ability to generate fragrances with different functionalities under environmental conditions typically encountered in perfumery applications. With water being the most important solvent in perfumery, he developed and optimized different aspects of hydrolytically cleavable and photo-labile systems in an aqueous environment.

Apart from selecting suitable chemistries, the successful development of pro-fragrances requires insight into mechanistic aspects to understand and suppress the formation of side-products, as well as reflection on issues of reaction kinetics, product formulation, stability, deposition on target surfaces and many more. Quite rapidly the topic expanded from organic chemistry to an interdisciplinary research project covering supramolecular chemistry, physical chemistry, analytical chemistry and various aspects of materials science. Dr. Herrmann teamed with experts of different fields inside the company, but also with academia, such as the collaboration with Prof. Jean-Marie Lehn, to adapt dynamic combinatorial/covalent chemistry to the needs of fragrance delivery.

Today pro-fragrances constitute an important delivery technology in the perfume industry and Dr. Herrmann's fundamental work contributed to the practical deployment of this technique. The work inspired scientists in-house and from our competitors or clients in the design of commercially successful pro-fragrances.

The KGF-SCS Industrial Science Award Program was implemented in 2013 and is a joint initiative of the KGF and the SCS.

KontaktGruppe für Forschungsfragen
Contact Group for Research Matters
BASF The Chemical Company · NOVARTIS · Roche · syngenta

Michael Grätzel wins the 2016 RSC Centenary Award

The Centenary Prizes are awarded annually "to outstanding chemists who are also exceptional communicators". The winners can be up to three international scientists who are invited to give lectures in the British Isles.

Prof. Michael Grätzel, director of EPFL's Laboratory of Photonics and Interfaces, is known worldwide for pioneering the field of molecular photovoltaics (the famous Grätzel cells) and energy- and electron-transfer reactions in mesoscopic systems in the context of solar electricity and fuels. He has also initiated research on storing electric power in mesoscopic lithium ion batteries.

Each winner of the Centenary Award will receive £5000, a medal, and a certificate, all to be presented at the RSC's Prize ceremony in November 2016. The winners will then complete a lecture tour across the UK.
Source: *http://actu.epfl.ch/news*

Jieping Zhu wins the 2016 RSC Natural Product Chemistry Award

The Natural Product Chemistry Award is given every two years to scientists who have distinguished themselves in "studies of the chemistry of natural products". The winner receives £2000, a medal and a certificate, and is invited to a lecture tour across the UK.

Prof. Jieping Zhu leads the Laboratory of Synthesis and Natural Products at EPFL. His research focuses on the development of novel synthetic methods, their application in the synthesis of bioactive natural products, the design of novel multicomponent reactions and development of catalytic enantioselective transformations. The RSC states that Professor Zhu has been awarded "for outstanding contributions to the synthesis of complex natural products".
Source: *http://actu.epfl.ch/news*

Prof. Helma Wennemers wins the 2016 Pedler Award

Prof. Helma Wennemers, ETH Zurich, is this year's winner of the Royal Society of Chemistry Pedler Award: "For the profound and elegant discovery of small molecules that function like natural macromolecules"

The Pedler Award is given for contributions to an area of Organic Chemistry from a researcher under the age of 55. Prof. Helma Wennemers is the first female scientist to receive the Pedler Award since it was initiated in 1929. It is also the first time since Leopold Ruzicka was awarded in 1932 that the award goes to a researcher in Switzerland.

The citation for Professor Helma Wennemers' award reads: "For the profound and elegant discovery of small molecules that function like natural macromolecules".

Proteins have a range of functions in nature, from giving bones and skin their structural integrity, to playing a key role in metabolism. Prof. Helma Wennemers' research group uses peptides, the small analogs of proteins, to interrogate how natural proteins work and utilizes the power of organic synthesis to access new functions that nature might have not had in the repertoire of building blocks. This scope includes the development of bioinspired asymmetric catalysts and functionalizable collagen, and molecular scaffolds for applications in supramolecular and biological chemistry (*e.g.*, cell-penetrating peptides, and tumor targeting) and the controlled formation of metal nanoparticles.

Professor Wennemers receives a medal and a certificate and will deliver lectures at up to four UK universities.
Source: *https://www.chab.ethz.ch*

Prof. Madhavi Krishnan wins the Nernst-Haber-Bodenstein-Preis 2016

Prof. Madhavi Krishnan from the Department of Chemistry at University of Zurich is awarded the Nernst-Haber-Bodenstein-Preis 2016.

The Nernst-Haber-Bodenstein Prize is dedicated to the memory of Max Bodenstein, Fritz Haber and Walther Nernst. The prize was awarded at the opening ceremony of the 115th General Assemblyof the German Bunsen-Society for Physical Chemistry on Thursday, 5th of May 2016 in Rostock, Germany.

The prize is awarded to a distinguished junior scientist (of up to 40 years of age) for outstanding scientific achievements in Physical Chemistry.
Source: *http://www.chem.uzh.ch*

Chinese Government honors PhD student at University of Bern

Dr. Cancan Huang, Chinese Postdoc at the Department of Chemistry and Biochemistry at the University of Bern, has been honored with "The Chinese Government Award for Outstanding Self-financed Students Abroad".

From October 2012 to December 2015, she joined the group of Prof. Thomas Wandlowski (later group of PD Dr. Peter Broekmann) in the Department of Chemistry and Biochemistry (DCB), University of Bern for her PhD studies. Since then, she has fo-

cused on research topics related to molecular electronics, charge transport (CT) studies through single molecules, molecular switches and devices.

Source: *http://www.dcb.unibe.ch*

Prof. Diederich elected member of the European Academy of Sciences and Arts

Prof. François Diederich, ETH Zurich, was elected as an ordinary member of the European Academy of Sciences and Arts. His membership belongs to class IV, natural sciences.

The European Academy of Sciences and Arts is a forum for scientists and artists, enabling the mutual exchange of ideas with colleagues and contributing to a positive development of European societies and cultures. Its 1900 members are divided amongst seven classes: Arts, Humanities, Medicine, Natural Sciences, Social Sciences, Technical and Environmental Sciences, and World Religions.

Projects on all levels are carried out in plenary sessions and working sessions where every member can contribute.

The ceremonial admission of Prof. Diederich takes place on March 4 during the festival plenary in Salzburg.

Source: *https://www.chab.ethz.ch*

ERC Advanced Grants for Tom Ward, University of Basel

Prof. Thomas R. Ward from the Department of Chemistry at University of Basel receives funding for his projects called "DREAM: Directed Evolution of Artificial Metalloenzymes for In Vivo Applications". Thomas Ward and his team were able to generate the first artificial metalloenzymes (AMs) with high reactivity. This hybrid between a protein and a metal ion can be used as a catalyst in chemical synthesis.

The project "DREAM" will now examine whether artificial metalloenzymes can become as catalytically efficient as their naturally-evolved models. The goal is to evolve the artificial catalyst in vivo (in a living organism) and to test its performance. The researchers will use the bacteria Escherichia coli as the test organism. The main deliverable is an engineered and evolvable E. coli strain capable of performing in vivo reaction cascades combining AMs and natural enzymes.

http://www.chemie.unibas.ch/~ward/

ERC Advanced Grants by the European Research Council (ERC)

The ERC Advanced Grants rank among the most renowned funding contributions in Europe: In this competition the ERC received 1'953 grant applications – 277 were successful. This year, 20 scientists in Switzerland have been awarded a grant. With its sought after funding contributions, the ERC promotes already well established top researchers of any nationality and supports them in the implementation of innovative and high-risk research projects. Each research project generally receives up to 2.5 million Euros over a funding period of five years.

Source: *http://www.chemie.unibas.ch*

JOURNAL NEWS

ChemPubSoc Europe News

ChemBioChem and ChemMedChem: Joint Special Issue on Protein–Protein Interactions

Given the importance of this topic, ChemBioChem and ChemMedChem recently published a joint Special Issue on Protein–Protein Interactions. The issue comprises papers published in both journals by leaders in this exciting research field. In the ChemBioChem issue, the emphasis is on chemical biology and its use in understanding and controlling PPIs. The ChemMedChem issue focuses more on the development of therapeutic agents addressing disease-relevant PPIs.

Read more in the free Editorials:

- Editorial ChemBioChem: http://onlinelibrary.wiley.com/enhanced/doi/10.1002/cbic.201600166
- Editorial ChemMedChem: http://onlinelibrary.wiley.com/enhanced/doi/10.1002/cmdc.201600158

EurJIC: Cluster Issue on Advanced Complex Inorganic Nanomaterials

EurJIC welcomed the opportunity to publish a Cluster Issue based on research presented at the 3rd International Conference on Advanced Complex Inorganic Nanomaterials (ACIN), which took place in Namur, Belgium, in July 2015. This issue shows the importance and very rich diversity of nanomaterials research in the field of inorganic chemistry.

With an issue as varied as this one, why not enjoy an optimal browsing and reading experience on your smartphone or tablet? Now apps are available for both Apple and Android devices.

Source: http://www.chemistryviews.org

Prof. Hopfgartner assigned as new ABC Editor

Analytical and Bioanalytical Chemistry (ABC) welcomes four new members in the team of Editors: Hua Cui, Emily Hilder, Gérard Hopfgartner and Adam Woolley!

Gérard Hopfgartner (picture): Professor for Analytical Chemistry and Mass Spectrometry at the University of Geneva, Switzerland;

His research interests focus on the application and development of novel hyphenated mass spectrometry approaches in the field of life sciences.

Hua Cui: Professor of Analytical Chemistry at the University of Science and Technology of China, Anhui, China;

Main research interests: analytical chemiluminescence and electro-chemiluminescence, and their applications in interdisciplinary fields.

Emily Hilder: Director of the Future Industries Institute at the University of South Australia;

Her research focuses on the design and application of new polymeric materials in all areas of analytical science, in particular separation science.

Adam T. Woolley: Professor in the Department of Chemistry and Biochemistry at Brigham Young University in Utah, USA;

Overarching theme of his research is the interrelationship between biological molecules and miniaturization.

Analytical and Bioanalytical Chemistry publishes:

- Outstanding research results from all areas of analytical and bioanalytical science;

- Popular columns on career development and the teaching of analytical science;
- Challenging bimonthly puzzle.

http://www.springer.com/chemistry/analytical+chemistry/journal/216

All SCS-DAS members have free access to the ABC journal through the DAS website. Login to your SCS profile and check the corresponding menu item on *http://scg.ch/das.*

INDUSTRIAL NEWS

Source: www.chemmanager-online.com

Novartis Seen Mulling Roche Share Sale

April 26, 2016: Selling and reinvesting now would relieve pressure on CEO Executive Joe Jimenez, to improve growth after disappointments with the company's eyecare unit Alcon and new heart drug Entresto, analysts said.

Novartis is said to be planning to divest its nearly $14 billion stake in rival Swiss drugmaker Roche, accounting for about 6% of that company's shares and more than 30% of its voting capital, according to the Swiss newspaper Sonntagszeitung, citing supervisory board and banking sources. Both companies are based in Basel. The sale would free up cash at Novartis for possible acquisitions, the paper's sources said, while stressing that a deal may not be imminent. Under its former CEO Daniel Vasella, Novartis took a stake in Roche in the early 2000s with the eye to a merger that never got off the ground. More recently, speculation has been building about a potential sale of the stock. Selling and reinvesting now would relieve pressure on CEO Executive Joe Jimenez, to improve growth after disappointments with the company's eyecare unit Alcon and new heart drug Entresto, analysts said. The majority of Roche's voting capital is still held by members of the Swiss Hoffmann-Oeri family. Some commentators have noted that Roche also needs to think about spending some of its already ample cash on acquisitions, especially as it faces growing competition from manufacturers of biosimilars, among them Novartis' own Sandoz subsidiary.

Clariant Seeks Enhanced China Presence

May 02, 2016: Christian Kohlpaintner, member of the Swiss company's executive committee, said China is a decisive market for Clariant, where the specialty chemicals market can expect growth of about 7% per year.

Swiss specialty chemicals producer Clariant has unveiled a new strategy for upgrading its presence in the Greater China market. In a talk at the recent Chinaplas exhibition in Shanghai, the company said the strategy will rest on five local components: Local Insight, Competitiveness, Empowerment, Innovation and Partnerships. To emphasize its commitment to being a "China Insider," Clariant plans to shift decision- making authority for the region to the People's Republic as well as strengthening R&D capabilities locally. Here it is following the lead of competitors such as Germany's BASF and relocating a member of its executive committee to China. Christian Kohlpaintner, member of the Swiss company's executive committee, took up his duties in the country on May 1. Commenting on the decision to post a senior management member there, Kohlpainter said China is a decisive market for Clariant, where the specialty chemicals market can expect growth of about 7% per year. At Chinaplas, Jan Kreibaum, the company's regional head for Greater China, provided details of the new strategy. In particular, he pointed to plans for the One Clariant Campus, a new integrated facility located in Shanghai. The new regional innovation center is designed to facilitate internal communication and strengthen customer interaction and cooperation, particularly from a R&D perspective. Groundbreaking ceremonies are scheduled to take place at the end of 2016. To enhance its local competitiveness, Clariant has earmarked 40% of its 2017 capital spending budget for investment in China. Since establishing its first representative office in Tianjin in 1995, the company's local business has grown to include production facilities and offices in 17 major cities across Greater China with more than 1,500 employees. In 2015, Clariant recorded sales of 640 million Swiss francs – 11% of its global sales total – in the region, which includes Taiwan and South Korea in addition to mainland China.

Erik Fyrwald Named Syngenta CEO

May 09, 2016: Swiss agrochemicals giant Syngenta has named J. Erik Fyrwald, currently president and CEO of US chemical distributor Univar, to head the company from Jun. 1, 2016.

Swiss agrochemicals giant Syngenta has named J. Erik Fyrwald, currently president and CEO of US chemical distributor Univar, to head the company from Jun. 1, 2016. Fyrwald succeeds John Ramsay who has been acting CEO since November 2015. Former CEO Mike Mack resigned in October 2015, two months after the company rejected a hostile takeover by US rival Monsanto and before it agreed to be acquired by ChemChina. The future CEO, who holds a degree in chemical engineering from the University of Delaware and completed the Advanced Management Program at Harvard Business School, spent 27 years at US chemical produer DuPont, where he held various global positions and spent four years in Asia. From 2003, Frywald was group vice president of DuPont Agriculture and Nutrition, which included the Pioneer Seed, DuPont Crop Protection Products and Solae Food Ingredients businesses. He also chaired Brussels-based Crop Life International, the industry association representing agrochemicals producer for two years. Among other positions, the new Syngenta chief was chairman, president and CEO of water treatment and oil & gas products and services company Nalco and subsequently president of EcoLab, which acquired Nalco in December 2011. In May 2012, he was appointed CEO of Univar. Syngenta chairman, Michel Demaré, said John Ramsay will work closely with the incoming CEO to ensure a smooth transition and support the closing of the ChemChina transaction.

Savitzky to Succeed Haag as Lonza CFO

May 11, 2016: Lonza announced that its Board of Directors appointed Rodolfo Savitzky as new Chief Financial Officer (CFO) for the Swiss chemical company. In this function he will be succeeding Toralf Haag, who after 11 years of service for Lonza accepted an offer from the Voith Group in Germany to become their new CFO and member of the Corporate Board of Management. The change will be effective as of 1 October 2016, when Rodolfo Savitzky will also succeed Toralf Haag as a member of the Lonza Executive Committee.

Rodolfo Savitzky (54) joined Lonza in March 2015 as Head of Finance & Controlling for the Pharma&Biotech segment. Previously he was Chief Financial Officer for the Animal Health Division of Novartis. Prior to this position, Rodolfo Savitzky held various financial management positions with increasing responsibilities at Novartis and Procter & Gamble. He holds an MBA in Finance/Economics from the University of Chicago. With his broad financial and industry background, his thorough understanding of Lonza's strategic direction and his contributions to the Pharma&Biotech segment, Rodolfo Savitzky brings the necessary skillset to his new position. Toralf Haag joined Lonza in 2005 as CFO and since then successfully led the financial organization of Lonza. He was significantly involved in the strategic development of Lonza and managed M&A projects successfully, as well as refinancing projects and the deleveraging of the company.

Syngenta Launches Biological Seed Treatment

May 13, 2016: Swiss agrochemicals giant Syngenta has launched a range of new biostimulants, called Epivio, which address abiotic stress through seed treatment. Over the last five years Syngenta has developed abiotic stress management testing capabilities to simulate drought, heat, cold, and nutrient stresses. The company has now commercialized the resulting products under the Epivio brand in combination with others from its Seedcare business to improve plant growth while also addressing difficult-to-control pathogens, insects and nematodes. Epivio products stimulate the development of seedlings by providing micronutrients and biostimulant compounds and activating soil microflora, leading to stress-tolerant plants. "We see soil productivity as a major new opportunity to make crops more efficient, stress tolerant and higher yielding, said Syngenta's global head of Seedcare, Ioana Tudor. According to Syngenta, extensive field trials in Latin America have demonstrated yield benefits averaging 5% to soybean growers under a broad range of conditions. First sales of Epivio will occur this year in Brazil for soybean and in China for corn. Epivio will then be rapidly expanded to additional crops and geographies.

ChemChina Extends Offer for Syngenta

May 18, 2016: ChemChina's takeover of Syngenta would be the largest foreign acquisition ever by a Chinese company. ChemChina has extended its $43 billion offer for Swiss agrochemicals giant Syngenta by more than a month as it waits for regulatory approval. The main offer period has been extended to July 18 with potential further extensions to be determined, said CNAC Saturn, a subsidiary of ChemChina. The previous deadline was May 23. The Chinese company is expecting to complete the deal by the end of the year. According to the offer prospectus, ChemChina may continue to extend the main offer period until Nov. 23, if regulatory approval has not been granted by then. The deal requires that at least 67% of Syngenta shares are tended for the transaction to conclude. As well as approval from antitrust authorities in Europe and elsewhere, the toughest scrutiny is expected to come from the US, notably the Committee on Foreign Investment in the United States (CFIUS). ChemChina and Syngenta voluntarily initiated a review by CFIUS following their announcement of the proposed merger in February. According to media reports, the US Department of Agriculture (USDA) has agreed to join the US state panel that is reviewing the takeover. The move was said to have occurred after lawmakers wrote in March to Treasury Secretary Jacob Lew, who is also the chair of CFIUS, requesting that the USDA be involved so that any potential impact on domestic food security could be better assessed.

Novartis Splits Pharmaceutical Division

May 19, 2016: Novartis said the new divisional structure reflects the importance of oncology to the company following the successful integration of the GSK assets. The Swiss drugmaker said it expects the changes to help drive its growth and innovation strategy, with an increased focus and improved execution for both the Oncology and Pharmaceuticals business units.Novartis said the new divisional structure reflects the importance of oncology to the company following the successful integration of the GSK assets. The Swiss drugmaker said it expects the changes to help drive its growth and innovation strategy, with an increased focus and improved execution for both the Oncology and Pharmaceuticals business units.

Swiss drugmaker Novartis has announced plans to split its Pharmaceutical division into two business units, Novartis Pharmaceutical and Novartis Oncology. The first-mentioned will incorporate all of the company's ethical drugs business except cancer treatments and include the franchises Neuroscience, Ophthalmology, Immunology and Dermatology, Respiratory, Cardio-Metabolic and Established Medicines. Together, the two new business units will form the company's Innovative Medicines Division (which replaces the Pharmaceuticals division). The leader of each business unit will join the Novartis executive Committee with effect from Jul. 1, 2016. As part of the realignment, David Epstein, current CEO of the Novartis Pharmaceuticals division, will leave the company and "explore new challenges from the US." CEO-designate of Novartis Pharmaceuticals is Paul Hudson, while Bruno Strigini is slated to become CEO of Novartis Oncology. Both will report directly to group CEO Joseph Jimenez. Hudson is currently executive vice president, North America, at British-Swedish drugmker AstraZeneca and a member of that company's executive committee. Novartis said the manager has experience in particular in cardiovascular and immunology, which complement the Swiss company's major product launches. He will be based at the global headquarters of the Innovative Medicines Division and the Pharmaceuticals business unit in Basel, Switzerland. Strigini, who at present heads Novartis Oncology, will lead the Oncology business unit, comprised of the franchises Oncology and Cell and Gene Therapies. The executive who joined Novartis in 2014 from Merck & Co. of the US to lead the oncology business is said to have been instrumental in the successful integration of the oncology assets acquired from GSK last year for $16 billion. He will also be based in Basel. Novartis said the new divisional structure reflects the importance of oncology to the company following the successful integration of the GSK assets. The Swiss drugmaker said it expects the changes to help drive its growth and innovation strategy, with an increased focus and improved execution for both the Oncology and Pharmaceuticals business units. The new Innovative Medicines Division accounts for two-thirds of the company's sales. Other parts of the Novartis group include Sandoz, the generics and biosimilar division, which includes the Retail Generics, Anti-Infectives and Biopharmaceuticals franchises; and Alcon, the eye care devices division, which includes the Surgical and Vision Care franchises. The divisions will be supported by Novartis Institutes for BioMedical Research, Global Drug Development and Novartis Operations, which includes Technical Operations and Novartis Business Services.

Clariant Develops Catalysts for Gevo Process

May 23, 2016: Swiss specialty chemicals company Clariant is to develop and scale up catalysts for Gevo's ethanol-to-olefins (ETO) process technology. The single-step process uses Gevo's proprietary mixed metal oxide catalysts to produce tailored mixes of polymer-grade propylene, high-purity isobutylene and hydrogen from fuel-grade ethanol. Gevo said once the ETO technology has been successfully developed and scaled up, Clariant will be able to produce the quantities of catalyst needed to meet commercial production requirements. It added that while Clariant works on developing the catalyst, Gevo will focus most of its resources on the ongoing optimization of its core isobutanol technology. ETO technology, said Gevo, has the potential to provide the ethanol industry, estimated at 25 billion gallons globally, a much broader set of end-product markets and margin opportunities beyond its use as a gasoline blendstock. "We see the potential with this technology to address several major opportunities cutting across chemicals, plastics, fuels and hydrogen, said Gevo's CEO Patrick Guber. Gevo has filed a series of patent applications relating to the technology and anticipates growing its ETO business through licensing.

Givaudan to Acquire US-based Spicetec

May 25, 2016: Swiss flavors and fragrances producer Givaudan is to buy Spicetec Flavors & Seasonings from US packaged foods company ConAgra Foods for $340 million. Spicetec has operations in Omaha, Nebraska; Carol Stream, Illinois and Cranbury,

New Jersey, supplying customers mostly in North America. The transaction is expected to add around $185 million to Givaudan's revenue on a full year basis. Givaudan said the acquisition fits its 2020 strategy to expand its product offering and invest in high-growth markets. Spicetec's additional capabilities would help to strengthen its portfolio of natural ingredients, flavors and taste solutions, it added. The company plans to fund the purchase from existing resources. The transaction remains subject to antitrust approvals but is expected to close in the next two to three months. As part of its 2020 strategy, Givaudan recently opened new laboratory facilities in Karachi, Pakistan, where it became the first global flavors company to establish a presence, and is currently also building a new innovation center in Switzerland. Givaudan's center in Kemptthal, being built at a cost of 120 million Swiss francs, is expected to open in 2019. Research areas will include organic chemistry, fermentation and biocatalysis, flavor creation and application science, as well as delivery systems.

Grace Divests Laboratory Product Lines

May 27, 2016: US chemical company W.R. Grace has agreed to sell businesses associated with its chromatography instruments, columns and related laboratory products to companies in Germany, the UK and Singapore. Financial terms for the deals were not disclosed. The company said the product portfolios were not aligned with its growth plans which are focused on service lines for the pharmaceutical and nutraceutical industries. Robert Gatte, vice president of Grace's Discovery Sciences business, said the move meant Grace could concentrate on its core materials science and manufacturing capabilities. Grace will continue to supply Vydac and Davisil media for process chromatography and Syloid FP excipients for drug formulations, as well as custom manufacture of regulatory starting materials and intermediates.

Switzerland's Buchi Labortechnik is buying Grace's flash chromatography and evaporative light scattering detector (ELSD) instrument business. The acquisition includes Reveleris purification systems, GraceResolv and Reveleris flash cartridges and Alltech ELSD 3300 instrumentation. Dr. Maisch, a German specialist in high-performance liquid chromatography (HPLC), has agreed to purchase Grace's line of analytical HPLC and preparative columns, as well as its packing equipment and services. The deal includes Exsil, Modsil and Exmere media, the Alltech HPLC column brands Adsorbosphere, Allsphere, Brava, Econosphere, GraceSmartTM, Platinum and VisionHT, and the Modcol brands which comprise Spring preparative column hardware and MultiPacker packing equipment and services. Additional HPLC column brands, including Vydac, will be sold to the UK's Hichrom which will also acquire Grace's Alltima, AllsepTM, Apex, Apollo, Genesis and Prevail column products. The Grace and Alltech solid phase extraction cartridge brands – Maxi-Clean, Extract-Clean and Gracepure – will be sold to Singapore laboratory and scientific equipment supplier, S*Pure. This transaction also includes Grace's manufacturing facility in Surat, India. Grace said it would continue to supply media for all the product lines sold. The US company is currently buying BASF's polyolefin catalysts business with completion due in the third quarter of 2016.