A662 CHIMIA 2019, 73, No. 7/8 COMMUNITY NEWS



Swiss Chemical Society

# **Community News**

www.scg.ch

www.chemanager-online.com

# 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.  $40^{th}$  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* 









#### Obituary: Prof. Dr. Georg Fráter (1941–2019)



Dear members of the Swiss Chemical Community

It is with deep mourning that we have to communicate the unexpected passing of Prof. Dr. Georg Fráter, on June 25, 2019. Our thoughts and hearts reach out to his family, his wife Marijke and his daughters Kinga and Saskia.

Georg Fráter was born in Budapest, on September 27, 1941 and moved to Switzerland in the wake of the Hungarian revolution in 1956. After studies at the Universities of Zurich, Leiden and Alberta at Edmonton he joined SOCAR AG, the agrochemical division of Hoffmann-La Roche in 1970. His love for terpene chemistry and complex synthesis, later made him switch to Givaudan in Dübendorf. In 2010, he became a founding member of the startup XiMo AG, a collaboration partner of Givaudan in the field of metathesis catalysts where he was still active as scientific advisor.

Throughout his career in industry, he kept lecturing at the University of Zurich and was awarded the title of Professor in 2001.

After his retirement, he served as president of the Swiss Chemical Society from 2004–2010 and was the initiator and founding father of the SCS Foundation established in 2008. He served as member of the board until 2012, being one of the drivers to establish the foundation. Georg and his spirit will stay with us and the Swiss chemical community forever.

# Call Prix Schläfli 2020: Rewarding the Best Swiss PhDs in the Natural Sciences



The Prix Schläfli, one of the longest-running science prizes in Switzerland (since 1866), is awarded by the Swiss Academy of Sciences (SCNAT) to young scientists for excellent articles resulting from PhDs in each of the following natural science disciplines: Biology, Chemistry, Geosciences and Astronomy.

Eligibility is limited to young researchers who did their doctoral thesis at a Swiss University, or Swiss nationals who did their doctoral thesis abroad. Candidates must have defended their doctoral thesis between 1 November 2016 and 31 October 2019. Nominations may be submitted by the candidate's doctoral supervisor or by the president of an SCNAT member society.

The two best candidates from the disciplines of biology, chemistry, and astronomy will be proposed to the Lindau Nobel Laureate Meeting Committee for participation at the meeting in 2020.

Nominations for the Prix Schläfli must be submitted via our online form before 31 October 2019.

Image: Caspar Klein

More information and nomination form on https://naturalscienc-es.ch

# Swiss Young Chemists' Association: "Visit Each Other" at ETH Zürich



On the 15th June 2019, the second edition of the "Visit Each Other" initiative took place at the Eidgenössische Technische Hochschule (ETH) of Zürich. Organized by the Swiss Young Chemists' Association (SYCA) and sponsored by the Swiss Chemical Society (SCS), this event is an excellent opportunity for the groups of the host institution to showcase their work

and for the visitors to network and become aware of the cutting-edge research that is performed in the laboratory next door.

Picture: Moments of the visit to (a,b) Prof. Copéret Laboratory, (c,d) Prof. Niederberger Laboratory.

The visit started at the ETH campus Hönggerberg from the Department of Chemistry and Applied Biosciences (D-CHAB), where the Laboratory of Prof. Christophe Copéret was represented by Ms. Margherita Pucino. Her amazing results in the field of organometallic catalysts-mediated C=C metathesis demonstrated once more that it is at the meeting point between basic and applied research where technological breakthroughs can arise.

Moving to the Department of Materials (D-MATL) and to the Multifunctional Materials Laboratory, led by Prof. Markus Niederberger, Dr. Walter Remo Caseri unraveled the chemical secrets of roman concrete, Ms. Murielle Schreck discussed the production of photocatalytic aerogels, while the use of lipid vesicles as nanoreactors and the development of wearable batteries were the topics respectively of Mr. Cvjetan Nemanja and Ms. Linda Wehner.

The variegated activities of the Laboratory of Soft and Living Materials (Prof. Eric R. Dufresne) were then presented by Ms. Tianqi Sai (structural colors by colloidal assembly), Mr. Alexandre Torzynsky (mechanical properties of lipid vesicles and bilayers) and Dr. Guido Panzarasa (complex chemical dynamics for the development of transient, self-regulating materials).

The permanent exhibition on the history of chemistry, with its collection of chemicals, instruments and other laboratory paraphernalia from the 19<sup>th</sup> century, gave the opportunity to consider that modern chemists really stand on the shoulders of past giants such as Werner, Ruzicka, Staudinger and many others which also contributed to make the chemical research performed at ETH a worldwide model.

After so much food for thought, it became time to consider actual food too! The lunch took place on the terrasse of the restaurant "Die Waid", from which the eye could also rejoice from the beautiful view over Oerlikon and Zürich.

The event was concluded after a brief tour of the historical building of ETH Zentrum, which gave also the possibility to enjoy the view from the Polyterrasse, and a stroll in Zürich around the Limmat.

In total, 14 people attended the event, of which two were post-doctoral researchers and the others PhD students. The visitors came from EPFL (Lausanne), PSI (Villigen) as well as from ETH. The first "Visit Each Other" took place at EPFL last year; the next will be hosted at the University of Bern, soon after the summer break.

A664 CHIMIA 2019, 73, No. 7/8 COMMUNITY NEWS

## 'Towards a New SusChem SIRA' Workshop: Post-Event Report



SusChem stakeholders met on 16 and 17 May in Brussels to work on the next SusChem Strategic Innovation and Research Agenda (SIRA), reflecting on the new opportunities and challenges to be faced in the next European research and innovation framework programme: Horizon Europe. This SusChem SIRA-dedicated workshop brought together mem-

bers of the SusChem Board, the SusChem NTPs and experts from across Industry, Academia and SMEs, to finalise the technology content of the SusChem SIRA. The SusChem community continued a process that was initiated at the SusChem Stakeholders 2018 meeting, followed by nominations of experts and two consultation rounds. The communication of the new SusChem SIRA is expected at the upcoming 2019 SusChem Stakeholder meeting on 27 November 2019.

SusChem has been working on identifying technology priorities along its three main technology pillars: Advanced Materials, Advanced Processes and enabling Digital technologies. The 'Towards a New SusChem SIRA' workshop was a follow up to prior consultation rounds that were initiated after the SusChem 2018 Stakeholders meeting. The new SIRA will reflect on the overall strategy and role of Sustainable Chemistry and Industrial Biotechnology in boosting innovation in Europe and tackling global challenges, in the context of Horizon Europe.

Read the full article on http://www.suschem.org

# **Chemists from Across the World Celebrate IUPAC Centenary in Paris**



From July 5–12, 2019 a week-long event combined the 47<sup>th</sup> IUPAC Congress, the IUPAC General Assembly, and the celebrations of its 100-year anniversary. Taking place in the Paris Congress Centre, the conference mixed plenary talks, a large number of varied parallel sessions, awards, and featured a poster area and stand exhibition – where Nobel lau-

reates and aspiring chemists were able to discuss and share their ideas

The centenary celebrations looked at the rich history of IU-PAC's beginnings and later development, and invited attendees to think about the future, and what chemistry can do to provide solutions to the myriad challenges our world faces. More about the event is available on <a href="https://www.iupac2019.org">https://www.iupac2019.org</a>, or check out the #IUPAC2019Paris hashtag on Twitter.

During the congress, Presidents and representatives of Chemical Societies from across the globe signed a Joint Framework Agreement on the United Nations Sustainable Development Goals (UN SDGs). Pilar Goya, EuChemS President signed the document on behalf of the European Chemical Society. The agreement, in recognition of the role the chemical sciences can play in addressing global challenges, aims to encourage and commit chemical societies around the world to cooperate in identifying solutions, locally and globally, using the SDGs as a guide, to such challenges. Solving such complex and multidimensional issues will indeed require the collaboration and joint effort between governments, industry, academia and non-governmental organizations.

More information on https://www.iupac2019.org

## IAESTE - Your partner for international exchange



The International Association for the Exchange of Students for Technical Experience (IAESTE) is an organization for the exchange of students at higher education institutions wishing to obtain technical experience abroad.

The aim of IAESTE is to provide science & engineering students with training experience abroad that is rele-

vant to their studies to offer Swiss employers well-qualified and motivated foreign trainees to be a source of cultural enrichment for trainees and their host employers

Interested in a traineeship abroad?

Are you enrolled at a Swiss university or an institute of applied science? Would you like to gain international work experience? Are you open-minded and interested in intercultural exchange? If this applies to you, an IAESTE traineeship is exactly the right choice for you.

Interested in foreign interns?

By employing a foreign trainee...

- ...you enlarge your international network.
- ...you strengthen the intercultural competence of your team and enrich your daily working life.
- ...you contribute to the promotion of Swiss students as young professionals, as for each internship in Switzerland, one internship abroad will be available for a Swiss student.

More information on https://www.iaeste.ch/en/

# Keine halben Sachen.



Die Welt ist voll von Halbwissen. Besonders im sensiblen Umfeld der Chemie ist dies jedoch fehl am Platz. Deshalb arbeiten wir seit 1947 mit Leidenschaft und Liebe zum Detail daran, dass evaluierte Daten und Fakten rund um das Themenfeld Chemie zur Verfügung stehen. Immer. Und ohne Ausnahme. So wurde "Der RÖMPP" Synonym für inzwischen über 65 000 Stichwörter und über 240 000 Querverweise, auf die man sich verlassen kann. Das sollten Sie sich am besten selbst anschauen.

Sonderkonditionen für SCG-Mitglieder.

Nur 100% sind 100%. www.roempp.com



# New SCS Corporate Member: Plasmion GmbH, Augsburg



Plasmion GmbH, Augsburg, Germany, joined the Swiss Chemical Society as corporate member. As partner of ETH Zurich and Eawag, Dübendorf, Plasmion has already business relations in Switzerland and will further develop its services in Switzerlad.

Plasmion offers plug and play ionization devices for atmospheric pressure

mass spectrometers or customized stand-alone "electronic nose" sensors. In doing so, they also customize their solutions for your specific application and instrument.

If you are interested in an "electronic nose" sensor for your specific industrial application, please do not hesitate to contact us. We are continuously looking for further cooperation partners in this area.

Contact: Dr. Christine Merkert, Marketing & Sales Manager christine.merkert@plasmion.de, www.plasmion.de

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



Period: 28.05.–18.07.2019

Moritz Bernhardt, Zurich – Dina
Boyarskaya, Ecublens – Sergio Cuesta-Galisteo, Zurich – Barbara Czarniecki, Zurich – Bastien Delayre,
Clarmont – Luca Dick, Langendorf –
Andreas Gimpel, Zurich – Andrea Gini,
Geneva – Helge Grunwald, Basel – Michael Hofstetter, Bern – Juliane Hollender, Zurich – Derek Kiebala, Fribourg –

Paola Luciani, Bern – Teresa Mairinger, Zurich – Michael Moret, Zurich – Andreas Müller, Zurich – Kleni Mulliri, Bern – Muhammad Awais Naeem, Zurich – Franciszek Pawlak, Szubin (PL) – Patrick Schanen, Sierre – Ulrich Scholten, Marly.

# Honors, Awards, Appointments

# Prof. Jérôme Waser was promoted to full professor at EPFL Lausanne



**Prof. Jérôme Waser** was named as Full Professor of Organic Chemistryfrom the 1<sup>st</sup> of August 2019. His research focuses on unconventional organic synthons (structural entities inside a molecule to which a possible synthesis stage can be attributed). He has achieved significant advances in this field, such as the development of new catalytic processes for

the introduction of alkynyl groups. His scientific contributions have been awarded an ERC Starting Grant, among others. Jérôme Waser shows great potential in a multidisciplinary context and will continue to make an important contribution to EPFL's standing in the area of organic synthesis.

Source: actu.epfl.ch/news

# Prof. Christophe Copéret, ETHZ, wins the Air Liquide 2018 Scientific Challenge



The 2018 Scientific Challenge by Air Liquide aimed at improving air quality and preventing global warming for the planet. *Prof. Christophe Copéret* is one of three winners who receive the Air Liquide Scientific Prize. Congratulations!

The 2018 Scientific Challenge organized by Air Liquide, received more

than 132 proposals from 34 different countries. They had invited teams of researchers, start-ups and private or public institutes to submit scientific research projects aimed at improving air quality and fighting climate change using "essential small molecules" such as O<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub>, CO<sub>2</sub>, etc. in three projects.

The winners, announced on June 27, 2019, are endowed with 50,000 euros. In addition, they have signed a partnership agreement with the Air Liquide Group that will enable them to receive a total 1.5 million euros in funding, shared between the three projects, to develop their scientific proposals and transform them into market-ready technologies.

Prof. Copéret wins the Air Liquide Scientific Prize for the project «"H<sub>2</sub> is coming" – How to use hydrogen to avoid greenhouse gas and air pollutant emissions in fossil fuel based industrial processes?»

His partnership with Air Liquide will focus on the development of efficient catalysts for the use of  $\rm H_2$  and  $\rm CO_2$  to produce methanol.

Source: www.chem.uzh.ch

# Katalyse und Design – Jochen Block-Preis 2019 für Sandra Luber von der Universität Zürich



Der Jochen Block-Preis 2019 der Deutschen Gesellschaft für Katalyse geht an *Prof. Sandra Luber* von der Universität Zürich / CH. Damit werden ihre herausragenden Beiträge zur theoretischen Behandlung von Katalysatoren, insbesondere hinsichtlich Struktur, Dynamik und Spektroskopie, anerkannt. Der Jochen Block-Preis ist mit 3000 Euro do-

tiert und würdigt außergewöhnliche Leistungen von Nachwuchswissenschaftlern. Er wird im Rahmen des Jahrestreffens Deutscher Katalytiker am 14. März 2019 in Weimar überreicht.

Sanda Luber beschäftigt sich in ihren Arbeiten unter anderem mit der detaillierten Untersuchung komplexer Flüssigkeiten und funktioneller Moleküle sowohl in der Gasphase als auch an Oberflächen. Ein Schwerpunkt ihrer jüngsten Forschungen ist die eingehende Untersuchung und das intelligente Design neuartiger bio-inspirierter Katalysatoren für eine solar-lichtgetriebene Wasserspaltung sowohl im natürlichen Photosystem II als auch in künstlichen Systemen. Die aktuellen Arbeiten befassen sich mit der Entwicklung von Berechnungsmethoden zur hochgenauen (dynamischen) Untersuchung und intelligenten Konstruktion effizienter Katalysatoren sowie neuen Ansätzen für die computergestützte Spektroskopie.

Quelle: dechema.de

A666 CHIMIA 2019, 73, No. 7/8 COMMUNITY NEWS

# Prof. Maksym Kovalenko, ETHZ, receives Rössler Prize



**Prof. Maksym Kovalenko** is being recognised for his research on bright nanoparticles with this year's Rössler Prize, which carries an endowment of 200,000 Swiss francs in research funding.

A brilliant blue, a luminous green, a deep red – the range of colours Maksym Kovalenko presents in an array of test tubes in his lab is fascinating. But

what is fascinating about the colours isn't just that they shine so brightly, but also that they are the product of a remarkable idea that could set new standards in many areas.

Joël Mesot, President of ETH Zurich, classifies the chemistry professor's achievements as: "Maksym Kovalenko's work provides vital stimulus for both basic research and new applications." That is why Kovalenko was awarded this year's Rössler Prize at the ETH Foundation's annual "Thanks Giving" event. Source: www.chem.uzh.ch

# Yong Ho Lee is a finalist for the Reaxys PhD Prize 2019



Yong Ho Lee is among the finalists for the Reaxys PhD Prize 2019. For his recent publication on metathesis-active ligands he was selected for the final round of 45 contestants. Yong Ho Lee is currently a PhD student in the group of Prof. Bill Morandi.

The Reaxys PhD Prize recognizes accomplished young chemists for inno-

vative and rigorous research. This global competition is open to anyone who is doing or has recently completed a PhD in any discipline of chemistry. The Advisory Board, a committee of expert reviewers look at all the submissions, applying rigorous selection criteria to select the 45 finalists for that year.

Source: www.chem.uzh.ch

# **J**OURNAL **N**EWS

# 2018 Impact Factors of ChemPubSoc Europe Journals



The newest results in the Journal Citation Report (JCR) by Clarivate Analytics for journals published by ChemPubSoc Europe and their sister journals published by the Gesellschaft Deutscher Chemiker (GDCh, German Chemical Society) are given below. ChemPlusChem and ChemSusChem received their highest ever impact factors.

ChemPubSoc Europe is a partnership of 16 European chemical societies nurturing a family of high-quality chemistry journals.

Angewandte Chemie International Edition: 12.257

Chemistry – A European Journal: 5.160

ChemBioChem: 2.593 ChemCatChem: 4.495 ChemElectroChem: 3.975 ChemistryOpen: 2.205 ChemistrySelect: 1.716 ChemMedChem: 3.016 ChemPhysChem: 3.077 ChemPlusChem: 3.441 ChemSusChem: 7.804

European Journal of Inorganic Chemistry: 2.578 European Journal of Organic Chemistry: 3.029

No Impact Factor yet for Batteries & Supercaps , ChemPhoto-Chem, ChemSystemsChem

Source: ChemViews Magazine, https://www.chemistryviews.org Wiley-VCH Verlag GmbH & Co. KGaA

# European Journal of Organic Chemistry: Special Issue dedicated to 50 Years of Rotaxanes



50 years ago, Gottfried Schill and Hubertus Zollenkopf reported the synthesis of a macrocyclic ring threaded onto a linear aromatic moiety capped by bulky end groups, which they named for the first time as rotaxanes. This special issue guest-edited by Jean-Pierre Sauvage honors this important milestone in supramolecular chemistry, which was pub-

lished in Liebigs Annalen, one of the key founding journals of EurJOC. With contributions from Jean-François Nierengarten, Nicholas H. Evans, Maurizio Prato, Shinichi Saito, Nicolas Giuseppone and many more.

https://onlinelibrary.wiley.com/toc/10990690/2019/2019/21r

# Special Issue of ChemPlusChem on Novel Aromatics



This issue is packed with top contributions on the synthesis and properties of aromatic compounds and is organised in collaboration with the ISNA-18 conference that will be held in Sapporo, Japan, in July 2019. It features an Editorial by Guest Editors Aiko Fukazawa (Kyoto University), Shinji Toyota (Tokyo Institute of Technology), Rik Tykwinski

(University of Alberta), and Wallace Wong (University of Melbourne). The cover feature highlights work by Hiroshi Shinokubo et al. on regioselective oxidative ring cleavage reactions of nickel(II) norcorroles. The inside cover features work by Yasujiro Murata that was highlighted in an interview on ChemistryViews.org. Enjoy free access until August 2019.

https://onlinelibrary.wiley.com/toc/21926506/2019/84/6

## Helvetica, Volume 102, Issue 6, June 2019



### Essays

Preparation of Enantiomerically Pure Compounds Employing Anodic Oxidations of Carboxylic Acids – A Late Review of Research Done in the 1980ies Dieter Seebach

# Communications

Effect of  $\beta^3$ -Amino Acids on the Perfor-

mance of the Peptidic Catalyst H-**D**Pro-Pro-Glu-NH<sub>2</sub> *Tobias Schnitzer, Helma Wennemers* 

### **Full Papers**

Short Syntheses of some 'Decalin-1,8-diones' and their Derivatives: Breaking the Pretended Symmetry

Rudolf Knorr, Annette Nadolny, Hermann Hauer, Petra Böhrer

First Synthesis of Highly Chemiluminescent Benzo[b]furan-2(3H)-ones Bearing a Urea Substructure

Reimar Krieg, Birgit Hoffmann, Dieter Weiß, Christoph Biskup

Trifluoromethyl Derivatives of Benzooxatellurole Ewa Pietrasiak, Amanda F. Baxter, Benson Jelier, Nico Santschi, Antonio Togni

### Helvetica, Volume 102, Issue 7, July 2019

#### **Communications**

Multi-Gram Scale Synthesis of Chiral 3-Methyl-2,5-trans-tetrahydrofurans

Shuanglin Qin, Yuting Cao, Yunhao Luo, Shende Jiang, J. Stephen Clark, Xiaoji Wang, Guang Yang

#### **Full Papers**

Iodoamination of Alkenyl Sulfonamides by Potassium Iodide and Hydrogen Peroxide in Aqueous Medium Sabrina Giofrè, Roberto Sala, Egle Maria Beccalli, Leonardo Lo Presti, Gianluigi Broggini

A Concise Synthesis of *rac-Ambrox*® via the Palladium(0)-Catalyzed Carboalkoxylation of an Allylic Ammonium Salt, as Compared to a Formaldehyde Hetero *Diels–Alder* Approach *Christian Chapuis, David Skuy, Claude-Alain Richard* 

Total Synthesis of Fontanesine B and Its Isomer: Their Antiproliferative Activity against Human Colorectal Cancer Cells *Takumi Abe, Tomoki Itoh, Masaru Terasaki* 

Evaluation of the Potential of Cobalamin Derivatives Bearing Ru(II) Polypyridyl Complexes as Photosensitizers for Photodynamic Therapy

Marta Jakubaszek, Jeremie Rossier, Johannes Karges, Joachim Delasoie, Bruno Goud, Gilles Gasser, Fabio Zobi

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

# INDUSTRIAL NEWS

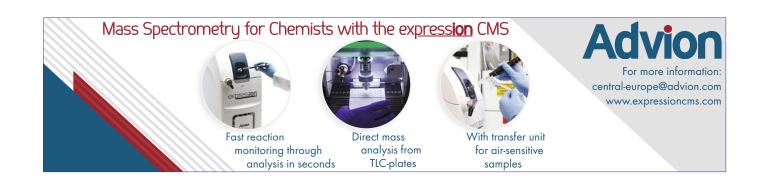
Source: www.chemanager-online.com

## **Indorama: Two Senior Leadership Appointments**

May 28, 2019: Thailand-based chemical producer Indorama Ventures (IVL) announced two senior leadership appointments, effective Apr. 1, 2019. Deepak Parikh has been appointed as chief strategy officer (CSO). He has more than 30 years of experience in the chemical sector, most recently as president and CEO of Clariant North America. He has also served as vice chairman and managing director of Clariant Chemicals India. Prior to joining Clariant, Parikh held positions at Dow Chemical, DuPont, Invista and at private equity firms. Roberto Bettini has been appointed as chief human resources officer. He graduated with an Economics degree from the University of Modena, Italy. He started his career in 1986 in the food Industry, and in 1993 he joined Tetra Pak where he held various international senior HR positions. In 2009 he was appointed executive HR vice president of Sidel Group, based in Switzerland. The two new executives are also members of IVL's executive management committee.

#### **DKSH Takes Dutch Dols**

May 29, 2019: In its second deal of 2019, Swiss distributor and market services group DKSH has acquired Dols International, a privately owned Dutch distributor of specialty chemicals and ingredients. Dols is focused on markets in Belgium, the Netherlands and Luxembourg (Benelux), which DKSH said represented a "white spot" in Europe for its Performance Materials business unit. Based in Roermond, Dols' product portfolio includes pigments, binders and additives for use in paints, coatings, adhesives, plastics and construction applications. It also formulates products in its own laboratory, which DKSH will convert to an innovation center, expanding its network to 40 centers around the world. DKSH did not reveal the purchase price, but noted that Dols generates annual net sales of nearly 10 million Swiss francs at "sound" profitability. The Zurich-based group expects the acquisition to be immediately accretive to earnings. The management team and staff of Dols will join DKSH's Performance Materials division, the only unit in the company that has a distribution business both in Europe and Asia. "The value-accretive acquisition of Dols International marks an exciting and important step in strengthening our position as a specialty chemicals distributor in Europe," said Thomas Sul, co-head of DKSH's Performance Materials business unit. "As with earlier acquisitions, this local setup will be synergistic for our industrial chemicals business and establish a basis for expanding into the personal care, food and pharma industries." DKSH has been building up its presence in Europe in recent years, acquiring



A668 CHIMIA 2019, 73, No. 7/8 COMMUNITY NEWS

businesses in Spain, Portugal and the Nordics. In June 2014, the group took over Zeus Quimica, a specialty chemicals distributor in Spain and Portugal. In July 2015, the company acquired Andreas Jennow, a supplier of specialty chemicals and raw materials in the Nordic and Baltic countries. In March this year, DKSH announced that it had completed the purchase of the consumer goods distribution business of Auric Pacific in Singapore and Malaysia.

#### Showa Denko Buys Switzerland's ILAG Industrielack

May 31, 2019: Japanese chemical company Showa Denko has agreed to buy ILAG Industrielack, a Swiss manufacturer of specialty non-stick coating chemicals (NSCs), from investors led by private equity firm Helvetica Capital. Financial terms of the deal, which is expected to be completed within a couple of months, were not disclosed. ILAG regards itself as the second-largest supplier of NSCs to the European consumer goods market, and the fourth largest worldwide. The Wangen-headquartered company has a production facility in Shanghai, China, and employs around 100 staff worldwide. NSCs are used in consumer goods such as cookware, bakeware and home electrical appliances, as well as industrial goods including automotive parts and other equipment, for preventing substances sticking to surfaces and supporting low friction and release during use. According to Showa Denko, the global market for NSCs is worth around \$1.2 billion annually. The Japanese firm said the acquisition is highly synergistic with GMM Group, which it acquired in November 2016. Headquartered in Hong Kong, and with two manufacturing units in China and India, GMM has a large market share in the US NSC market for consumer goods. In order to manage and integrate both of the NSC businesses, Showa will establish a Coating Materials Department in July 2019. The Tokyo-based group added that it has a strategy where it aims to turn more than half of its business sectors, including NSC, into individualized - or Koseiha – businesses by 2025. Showa defines a Koseiha business as one in which the group realizes operating income of billions of yen or more per year, an operating margin of at least 10% along with stable profitability that is "tolerant to environmental change". The acquisition, said DKSH, increases its exposure to the high-margin food service business and expands its presence in the Asian consumer goods sector. DKSH paid about 160 million Swiss francs for the business, which has annual net sales of about 185 million Swiss francs.

### **Clariant Starts Masterbatches Plant in China**

June 3, 2019: Swiss specialty chemicals producer Clariant has started up its new masterbatch plant at Guangzhou, China. The site also includes a state-of-art workshop and an upgraded advanced lab. The new production facility dedicated to the manufacturing and supply of specialty black masterbatches, which the group said are in "high demand" from a number of consumer goods sectors in the People's Republic, was built at a cost of 5 million Swiss francs. With black PET/PA masterbatches for manmade fibers already developing into a "sizable" business in China and some other Asian countries, Clariant said the new facility in Guangzhou will supplement supply from its existing plant in Taiwan, which has been running flat out. Over the past two decades, the Muttenz-based group has been building its presence in the South China region with a focus on products for fiber, consumer goods and packaging applications. In 2017, it widened its high performance masterbatch activities supplying the E&E sector. Including the Taiwan facility, the specialty chemicals producer has three masterbatch production sites in the Greater China region. Bernd Hoegemann, head of Clariant's Masterbatches business unit, said the new investment will enhance the specialty chemicals producer's full range serve in supplying black masterbatches to local customers.

#### **Lonza Splits Specialty Ingredients, Plans Job Cuts**

June 4, 2019: Swiss fine chemicals company Lonza is carving out its specialty ingredients (LSI) segment under independent management, giving it increased control over operations and costs. LSI will, however, remain fully owned by Lonza. The separation has already begun, and the company expects to complete the process by the middle of 2020. "Our decision will allow the segment to focus on its strengths and drive future growth in a dynamic and competitive environment. More widely, it reflects our commitment to enabling the segment to become the leading global player in microbial control," said Lonza group CEO Marc Funk. Sven Abend, executive vice president and chief operating officer of the LSI segment, added that the carve-out will improve efficiency, create synergies and also deliver greater levels of transparency and control. The company has also announced plans to start consultations on 130 job losses, of which 50 roles will be in Switzerland, and 35 will be in the US. Where possible, Lonza said it would transfer employees to vacant positions and offer early retirement. The proposed layoffs are limited to LSI and support functions and do not impact its Pharma Biotech & Nutrition segment, the company added.

#### **BASF Starts Construction Chemicals Sale**

June 5, 2019: BASF has kicked off the sale process for its construction chemical business, the news agency Bloomberg has reported, and the German group meanwhile has confirmed contacts with selected potential buyers about a deal that analysts believe could be worth around €2.7 billion. According to Bloomberg, private equity investors such as Bain Capital, Cinven and KKR, along with roofing materials specialist Standard Industries. In February this year, the Reuters news agency said Swiss building group Sika could be interested in parts of the business. Sika is currently in the process of acquiring the Parex Group from CVC for 2.5 billion Swiss francs BASF picked up the construction chemicals activities in 2006 from the former Degussa (now part of Evonik) during an expansion drive launched by former CEO Jürgen Hambrecht but is believed to have never been entirely happy with it. At a strategy press conference in October 2018, new CEO Martin Brudermüller announced plans for a partnership or divestment of the business, which reported sales of €2.4 billion in 2017 and EBITDA of €245 million. CFO Hans Engels said earlier a deal would be completed sometime this year.

# PhoenixMD and WuXi STA Ready for Cancer Trial

June 11, 2019: Canadian biotech company Phoenix Molecular Designs (PhoenixMD) and partner STA Pharmaceutical (WuXi STA), a Chinese contract development and manufacturing organization (CDMO), have finished production of a multi-kilogram supply of PMD-026 for upcoming clinical trials. PMD-026 is PhoenixMD's lead candidate drug and the first RSK inhibitor to treat triple-negative breast cancer (TNBC), a particularly aggressive form of the disease. RSKs are a family of protein kinases that regulate diverse cellular processes, including cell growth and proliferation, and they are commonly associated with refractory cancers such as TNBC, hormone-refractory prostate cancer and resistant melanoma. According to PhoenixMD, around 400,000 cases of TNBC are diagnosed every year worldwide, and it is one of the most difficult breast cancer subtypes to treat because of the lack of effective, targeted therapies. The companies entered into a manufacturing agreement for PMD-026 in March 2018. WuXi STA, a subsidiary of WuXi AppTec, expanded its US operations to include capsule production (in compliance with GMP regulations). "The opportunity to enable PhoenixMD's first-inman studies came at an opportune moment for STA's San Diego facility," said Minzhang Chen, WuXi STA's CEO. Sandra Dunn, PhoenixMD's CEO, added that the partnership with the

Chinese CDMO has been critical to advance this stage of the drug's development. She commented: "The rapid achievement of this milestone brings us one step closer to initiating our study for women suffering from breast cancer. More specifically, metastatic triple-negative breast cancer, which is the most deadly type of breast cancer. RSK is a promising new drug target for the treatment of TNBC, and PMD-026 is the first drug to ever reach clinical use against this novel target." The volumes manufactured are enough to treat all the patients in the Phase 1 study, which is scheduled to start in the third quarter of this year. PhoenixMD added that it has also completed its companion diagnostic for measuring activated RSK2 in tumors signals, enabling the two key elements for this "precisely designed" clinical trial to advance. The diagnostic was developed in collaboration with Swiss drugmaker Roche. According to PhoenixMD, preclinical studies have shown that PMD-026 shrank tumors by more than 70% as a single agent after only two weeks of treatment in tumors with high RSK2 activation. Last month, WuXiAppTec announced that it had acquired US clinical research services company Pharmapace. Located in San Diego, California, Pharmapace provides biometrics services for all clinical trial phases.

#### **Christian Kohlpaintner to Leave Clariant**

June 19, 2019: Swiss specialty chemical company Clariant announced that Christian Kohlpaintner, who is a member of the company's executive committee, decided to resign from his position effective June 30, 2019. Kohlpaintner led the business units Care Chemicals, Catalysis and Natural Resources and was accountable for the regions Greater China, India, Japan, and South East Asia & Pacific. In addition, he was responsible for Group Technology & Innovation and Corporate Sustainability & Regulatory Affairs. "We very much regret the decision of Christian Kohlpaintner to leave Clariant", said Hariolf Kottmann, chairman of Clariant's board of directors. "He made significant contributions to shaping the company into the leading specialty chemicals player it is today. From business turnarounds and acquisitions to innovations, he has created substantial value for Clariant over the past 10 years. It is largely thanks to him that Clariant is inextricably linked to topics such as sustainability, innovation and our China growth strategy. We wish him all the best for his future endeavors." For the time being, Kohlpaintner's responsibilities will be assumed by the remaining members of the executive committee, the company said.

### **Lonza to Acquire Swiss Facility from Novartis**

July 2, 2019: Swiss fine chemicals producer and drug developer Lonza has signed a binding agreement to acquire a sterile drug product fill & finish plant from Novartis, the first such facility in its production network. In future, the company will produce drug products at the facility for Novartis as well as providing capacity for additional customers. The deal expected to be finalized within the coming months will enable Lonza Pharma & Biotech to build on existing parenteral drug product development and testing capabilities and offer an end-to-end service to customers for clinical supply and launch. Currently the sterile, multi-product facility serves as the Novartis Center of Excellence for sterile clinical (phases 1 to 3) drug product manufacture. According to Lonza, it has an excellent quality and safety track record and is cGMP approved. The Novartis premises include classified cleanroom areas for cGMP manufacture as well as office, lab space, utilities and storage. Lonza said it will continue sterile manufacturing, including liquid and lyophilized dosage forms for up to 200-liter bulk volumes, at the site. Lonza Pharma & Biotech, which entered the field of drug product development services at the end of 2016, earlier announced expansions at its sites in Basel and at Visp, Switzerland. From 2020 the Swiss group plans to expand development and testing labs into a larger building in Basel. Its Ibex Solutions fill and finish facility in Visp is on track to be operational from mid-2021. Karen Fallen, head of Mammalian and Microbial Development and Manufacturing at Lonza Pharma & Biotech, said the planned acquisition represents the latest phase in the company's stepwise expansion of parenteral drug product services, which should provide customers with shorter timelines to the clinic and best-in-class quality.

# Swiss World Cargo: Approval of CSafe RAP for Wide-Bodied Aircraft

July 3, 2019: Swiss WorldCargo, the airfreight division of Swiss International Air Lines, has approved the CSafe RAP for its fleet of wide-bodied aircraft. This container is CSafe's latest innovation in active temperature-controlled containers and has quickly gained approval to fly on an ever-expanding list of airlines. Susanne Wellauer, Head of Pharmaceuticals and Healthcare Vertical Industry Management, comments: "Swiss World-Cargo is delighted to allow CSafe RAP containers onboard our aircraft. Our partnership underscores not only a continued focus on quality in shipping temperature-sensitive pharmaceutical goods worldwide every day, but also our dedication to finding the best solutions for doing so." This specific container is part of the carrier's growing portfolio of temperature-controlled containers. It underscores CSafe's dedication to quality and ensures Swiss WorldCargo's commitment to providing the best solutions to maintain temperature integrity and the deliver temperature-sensitive, life-enhancing products worldwide.

# Neste and LyondellBasell Produce Bio-based Polymers

July 5, 2019: Neste and LyondellBasell have achieved what they say is the first commercial-scale parallel production of biobased PP and bio-based LDPE. The joint project leveraged Neste's broad renewable feedstock base – in particular waste and residue oil – and LyondellBasell's process knowhow. LyondellBasell said the cracker flexibility at its site in Wesseling, Germany, enabled it to introduce a new renewable feedstock that could be converted directly into the two bio-based polyolefins. Using carbon tracers, an independent company later confirmed the polymers had more than 30% renewable content. Trial runs produced several thousand tonnes of material, which were approved for food packaging applications, the partners said. LyondellBasell is now producing the polymers under the names Circulen and Circulen Plus2, its new circular economy brands. Household films supplier Cofresco, part of German's Melitta group, plans to use the PE film to create a sustainable food packaging line. In the past several years, Neste has formed partnerships with companies in various fields to help find outlets for its renewables residue. In late 2018, the Finnish group signed an agreement with Swiss specialty chemicals producer Clariant to use its renewable hydrocarbons. Previously, Neste launched a project with Swedish home furnishings retailer Ikea to promote the use of renewable solutions in plastic home furnishings and accessories.

# **Archroma Buys BASF's Brightening Agents**

July 9, 2019: Swiss dyes and specialty chemicals company Archroma has agreed to buy BASF's stilbene-based optical brightening agents (OBA) business for paper and powder detergent applications. Financial terms were not disclosed. The agreement was signed between Archroma India and BASF India and includes a manufacturing plant in Ankleshwar, India, where around 100 people are currently employed. Completion is anticipated in the fourth quarter of 2019. "This acquisition will not only allow Archroma to strengthen our OBA supply to customers in the packaging & paper industry, in particular in India and Asia, it will also help us develop our portfolio offering to customers in the detergents market with high-performance powder

A670 CHIMIA 2019, 73, No. 7/8 COMMUNITY NEWS

OBA," said Marcos Furrer, Archroma's president of packaging & paper specialties. BASF said the divestment was in line with its strategy of "actively managing" its portfolio. Archroma bought another BASF business in 2015, that time it was BASF's textile chemicals assets, which included the legal entity BASF Pakistan based in Karachi. The Reinach-based company has been owned by private equity group SK Capital Partners since 2013.

### **Omya Takes Singapore's Trilogie Polymers**

July 15, 2019: Swiss specialty chemicals distributor Omya has acquired Trilogie Polymers, a Singapore-based engineering polymers distributor. Trilogie distributes engineering thermoplastics, compounds, plastic additives, masterbatch and pigments plus polymer stock shapes to markets in Singapore, Malaysia, Indonesia, the Philippines and China. As well as Singapore, the company also has bases in Johor Bahru, Malaysia, and Shanghai, China. Omya said the acquisition is another successful part of its strategy to acquire complementary businesses and strengthen its position among the world's leading specialty chemical distributors. Trilogie's founder Thomas Wee commented: "Together, we can leverage Omya's international presence to further drive our clients' businesses with a broader and deeper engagement." Financial terms of the deal, which closed on July 9, were not disclosed.

#### **Lonza Completes Tampa Expansion**

July 15, 2019: Swiss fine chemicals producer and drug developer Lonza has completed a \$15 million multi-phase expansion at its site in Tampa, Florida, USA, adding solid oral dose development and manufacturing capabilities. The project, said Lonza, will enable the site to provide more integrated services across early stage product development, manufacture of material for clinical trials and drug commercialization. The site now hosts a fully equipped product development and quality control laboratory area with 13 processing suites along with two packaging suites that include low-humidity environments and serialization for tracking and tracing. Lonza has also added manufacturing suites for tablet, multi-particulate and powder-encapsulated drug products as well as dedicated sampling and dispensing areas capable of handling highly potent compounds. The development suites include expanded powder-in-capsule/powder-in-bottle micro-dosing capacity for early phase studies. In addition, the Swiss group has expanded and renovated its cGMP manufacturing clean room. "This expansion at our Tampa site adds concept-to-commercial capacity for the US market, said Anthony Macci, senior vice president global operations, chemical division of Lonza Pharma & Biotech. "We continue to invest heavily in our site network to ensure that flexible, phase-appropriate and integrated capabilities are in place to meet the needs of today's pharma and biotech innovator companies." Earlier this month, Lonza announced that it had signed an agreement to buy a sterile drug product fill & finish plant from Novartis.

## Trend Barometer of Specialty Chemicals Industry

July 16, 2019: The 34<sup>th</sup> and, so far, biggest edition of Chemspec Europe attracted a total of 4,295 trade visitors from 53 countries to the exhibition grounds of Messe Basel, Switzerland. During the trade fair, a total of 379 exhibitors from 27 countries presented their innovative substances on a record net exhibition space of 6,369 m<sup>2</sup>. Compared to the previous event this represents an increase in net exhibition space of 4% and an increase in exhibitor numbers of nearly 6%. With topics such as custom synthesis, nanotechnology and the booming start-up scene, the International Exhibition for Fine and Specialty Chemicals, once again, showcased the full potential of the fine and specialty chemicals industry. The CHEManager team was right in the middle of it all, not just there: they were on the road in the exhibition hall on

both days of the fair to see and hear the exhibitors' latest news. On the eve of Chemspec Europe, we hosted the meanwhile traditional CHEManager Dinner at the EastWest Hotel on the Rhine promenade - and more than 30 guests accepted the invitation to eat and network, and despite the hot temperatures they spent a relaxed evening with stimulating conversations and cool drinks.

#### **Participant Profiles**

Liljana Goszdziewski, Exhibition Director of Chemspec Europe sums up the event on behalf of the organizer Mack Brooks Exhibitions: "For international trade visitors, Chemspec Europe has become a key event to stay up-to-date with current trends and the latest findings in R&D, form strategic partnerships, and meet with top decision-makers as well as innovative start-ups." The provisional results of the exhibition survey show that most visitors came from the following industries: fine chemical industry, agriculture, plastics, pharma, cosmetics, toiletries and personal care, petrochemicals, water treatment, paints & coatings, polymers, food & feed ingredients as well as adhesives & sealants. The majority of visitors were manufacturers, distributors, raw material suppliers or equipment suppliers and work in research and development or for consulting firms. Visitors were particularly interested in the following products and services: custom synthesis, chemical intermediates, catalysts, pharmaceuticals, general chemicals, agrochemicals, household chemicals and industrial chemicals.

#### Extensive Conference Program

A highlight of this year's show was the "Innovative Startups" conference, organized in cooperation with BCNP Consultants. In line with the extensive conference program, more than 15 startups presented their innovative ideas, substances and approaches in the fine and specialty chemicals industry. These conference sessions were well received, and visitors gained valuable input. Visitors of this year's show had the opportunity to attend a total of 74 conferences and workshops covering several topics. In cooperation with renowned partner organizations, the conferences did not only offer insights into trends and prospects, but also encouraged exchange and networking with international industry colleagues. The conference program included the "Agrochemical Outlook Conference", as well as the mentioned "Innovative Startups" conference.

#### Pharma Lecture Theatre

In the Pharma Lecture Theatre, several speakers gave lectures on trends, challenges and outlook of the pharmaceutical industry, including a presentation given by pharma industry veteran Magid Abou-Gharbia, Moulder Center for Drug Discovery Research, and the "Pharma Outsourcing Best Practices Panel". The lecture given by Magid Abou-Gharbia was about the challenges of the pharmaceutical industry, about patents being the "life blood" of the companies, as it is the most secure way to ensure a return on the investments made. The conference focused also on the differences between generic and brand names medications. In the US, as of 2017, 9 out of 10 drugs are generic (89% generic and 11% brand name), even though they only account for the 26% of the drug income. Furthermore, the conference program included the two-day "RSC Symposium" of the Royal Society of Chemistry, the "Regulatory Services Conference", organized by REACHReady, as well as the "Crop Protection & Fine Chemicals Forum" held by EFCG (European Fine Chemicals Group).

#### RSC Symposium

Florian Bächle, Leading Scientist & Product Manager Ligands at Solvias, talked about chemocatalysis as a "major tool towards sustainable (green) chemistry." The principles of the latter are quite straightforward: selectivity, quantitative yields,

atom economy and low E-factor, and a very convenient way to implement these concepts is to consider catalytic transformations in the synthetic route. This has already been successfully applied to asymmetric hydrogenation of ligands. Rafael Kuwertz, Project Manager Process Development at Ehrfeld Mikrotechnik, held a talk on "Micro Reaction Technology with Macro Process Effiencies." During the past 20 years, micro reaction technology raised from a pure academic field of research to a technology which can be used in the industrial area of the chemical and pharmaceutical industry. Important benefits like the higher heat exchange and the better mixing, leading to higher yields, are based on a higher surface-to-volume ratio in comparison to traditional batch technology.

#### Best Practices in Pharma Outsourcing

During the "Pharma Outsourcing Best Practices Panel", approaches to developing global outsourcing strategies, identifying outsourcing partners, and addressing challenges associated with outsourcing and how to effectively manage partnerships were discussed. The panel was organized by Magid Abou-Gharbia (Associate Dean for Research Director at Temple University, Philadelphia) and Ben Jones (President at Century Global) and co-moderated by Rudolf Hanko (Board Member and former CEO of Siegfried). The panelists were Susan Billings (Vice President and Global Head of Business Development at AMRI), Harry Rathore (President and CEO at Callery), Marianne Spaene (Executive VP Global Business Development at Siegfried), Tom Sturgeon (Assistant Director Business Development at Johnson Matthey), Aldo Cartagena (Senior Procurement Specialist at Merck) and Robert Waltermire (Vice President, Head Chemical and Synthetic Development, Global Product Development and Supply at Bristol Myers Squibb). The panel was revised to include the audience even more. They had the opportunity to cast their vote on the topics discussed. One of them was whether the Pharmaceutical Industry will offer fewer growth opportunities than the Agrochemical Sector in the next years. Most experts on the panel and in the audience disagreed. When asked if combining agro and pharma businesses would give a company a competitive edge, again most of the participants present did not agree with this statement.

### NanoTECH Pavilion

For the first time, Chemspec Europe featured a new Nano-TECH Pavilion, which exclusively highlighted companies and organizations from the nanotechnology industry. The dedicated on-site area offered visitors of Chemspec Europe 2019 an attractive opportunity to explore the latest nanotechnological innovations and discuss bespoke solutions with industry experts.

## Doing Business in China

A more general but nevertheless very interesting lecture was given by Tina Li, Intercultural Lecturer & Trainer, about doing business in China. She first talked about the differences between the East, which is a collective society, and the West, a very individualistic society by giving some examples. In China, being "in" or "out" of a group makes a really big difference, and trust is needed to build any kind of relationship, even a business one. The conference also focused on the fundamental importance of "Guanxi", a Chinese system of beliefs used in social networks

and when doing business, and the need to develop non-conventional skills for carrying out business oversea.

#### **Industry News**

During the trade fair, Jennifer Abril, president of the Society of Chemical Manufacturers & Affiliates (SOCMA), gave CHE-Manager an update on the US chemical industry and unveiled the new SOCMA brand, which has the intention of focusing on its members and provide solutions for a dynamic specialty industry.

#### **Boehringer Buys AMAL Therapeutics**

July 18, 2019: Germany's Boehringer Ingelheim has purchased AMAL Therapeutics for an undisclosed sum. AMAL is a private Swiss biotech that is focused on cancer immunotherapy and vaccines derived from its proprietary KISIMA technology platform. The German drugmaker said it plans to develop new therapies by combining assets from its cancer immunology portfolio with the KISIMA immunization platform. KISIMA enables three functional components to be combined into one fusion protein that can be used as an anti-cancer therapeutic vaccine. "Acquiring AMAL is part of Boehringer Ingelheim's long-term strategy to enhance our existing position as an innovator of novel cancer therapies, including immuno-oncology treatments, which leverage cutting-edge scientific discoveries and their applications," said Michel Pairet, member of Boehringer Ingelheim's board of managing directors with responsibility for the company's Innovation unit. Pairet said Boehringer wants to pioneer new paradigms of biology-based care for cancer patients and the technologies and expertise developed at AMAL is critical to its efforts. Boehringer's cancer immunology group aims to discover therapies that engage the triggering of immune responses against non-inflamed, "cold" tumors, which represent a large group of cancer types that are resistant to many treatments.

Immune targeting of these cold tumors is a particular challenge, the company said, and the KISIMA vaccine technology, which is designed to stimulate potent immune responses, is a promising option for patients with these type of cancers. Designed using KISIMA, AMAL's lead candidate ATP128 is a therapeutic chimeric recombinant protein vaccine that is currently under development for stage IV colorectal cancer and is expected to begin first-in-human trials later this month. "Our new relationship with Boehringer Ingelheim will enable us to realize the full potential of our KISIMA platform to fight solid cancers while preserving AMAL's approach to biotechnology research and our scientific and academic networks," said Madiha Derouazi, AMAL's founder and CEO. "Moreover, sharing resources and capabilities in clinical development will greatly help us to move ATP128 and other assets forward," Derouazi added. The total transaction, which could be worth up to €325 million, comprises an upfront payment plus contingent clinical, development and regulatory milestone payments as well as up to €100 million if certain commercial targets are met. Boehringer said the addition of AMAL together with Vita Therapeutics, which it acquired in 2018, has significantly strengthened its strategic focus on immune cell-directed therapies. AMAL is headquartered on the medical campus of Switzerland's University of Geneva - from which it was spun off in 2012 with financial backing from a syndicate of corporate and institution investors that included the Boehringer Ingelheim Venture Fund.