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SWISS CHEMICAL SOCIETY NEWS

Schönbeins Labor – Falkensteinerhof in Basel mit «Chemical Landmark» ausgezeichnet



Die Wirkungsstätte von Christian Friedrich Schönbein, der Falkensteinerhof am Münsterplatz in Basel, wurde am 16. November 2017 von der Akademie der Naturwissenschaften Schweiz als «Historische Stätte der Chemie» ausgezeichnet. Der Falkensteinerhof beherbergte von 1821 bis 1849 die naturwissenschaftliche Sammlung und damit

auch das chemische Laboratorium der Universität Basel. Ab 1828 war hier Christian Friedrich Schönbein tätig, einer der bedeutendsten Chemiker des 19. Jahrhunderts: Er entdeckte neben anderem das Prinzip der Brennstoffzelle, Zellulosenitrat («Schiesswolle») und das Ozon.

Im Falkensteinerhof entdeckte Schönbein 1839 den Effekt der Wasserstoff-Brennstoffzelle. Sein englischer Freund und Kollege William Grove entwickelte darauf 1842 die erste Brennstoffzelle mit kontinuierlicher Gaszufuhr als Energiequelle. Wasserstoff-Brennstoffzellen wurden im Apollo-Raumfahrtprogramm, insbesondere bei der Mondlandung 1969, als Energiequelle eingesetzt. Auch die Postauto AG testete bis 2016 erfolgreich fünf Brennstoffzellen-Postautos in Brugg und die Empa hat kürzlich eine Wasserstoff-Tankstelle in Betrieb genommen.

Im selben Jahr, 1839, entdeckte Schönbein auch das Ozon. Der brillante Wissenschaftler begnügte sich nicht mit der Entdeckung und erforschte das Ozon sein Leben lang. Beschrieb man früher Ozon als den «elektrischen Geruch», so gelang Schönbein die chemische Synthese ohne Elektrizität. Mit ausserordentlichem Weitblick schrieb er 1853 an Justus von Liebig, er sei «geneigt zu glauben, das atmosphärische Ozon spiele im Haushalte der Erde eine wichtige Rolle». Schönbein entwickelte ein chemisches Ozonmeter und ermutigte seine europäischen Kollegen zu zeitlich und geographisch weitläufigen Messreihen.

Sprühpflaster, Alleskleber, Kunststoffe

Zellulosenitrat, auch Schiesswolle genannt, entwickelte der Chemiker 1845. Die naheliegende Anwendung als Schiesspulver und Sprengstoff versuchte er erfolglos zusammen mit R. C. von Böttger zu vermarkten. Sobald die Löslichkeit von etwas schwächer nitrierter Baumwolle (Kollodion) in Ether entdeckt wurde, empfahl Schönbein seinem Medizinkollegen Jung, diesen «Klebäther» als flüssiges Pflaster zu testen, was gut funktionierte. Noch heute sind Sprühpflaster auf Zellulosenitrat-Basis erhältlich. Zellulosenitrat wird auch als Basis für Alleskleber (z. B. Uhu hart) verwendet. Zudem war das Material die Grundlage für die ersten Kunststoffe. Der Brite Alexander Parkes entwickelte daraus Parkesine, welches bis heute als Zelluloid Verwendung findet (bis in die 1950er-Jahre als Filmträger, bis in die 2010er-Jahre für Tischtennisbälle u.v.m.).

Als unermüdlicher Forscher mit Entdeckergeist war Schönbein einer der wichtigsten Chemiker Mitte des 19. Jahrhunderts, stark dem Wissensdurst und der Grundlagenforschung verbunden, aber auch um Anwendung der Resultate bemüht. Im Jahre 1854 schrieb er in einem Brief an von Liebig: «Wer nicht den Muth hat einen neuen Gedanken auszusprechen, auch auf die Gefahr hin zu irren oder für einen Narren gehalten zu werden, wird wenig zu irgend einer Art von Fortschritt beitragen können.»

Schönbein war nicht nur in der Wissenschaft äusserst aktiv und dominierte regelrecht die Publikationsreihe der Naturforschenden Gesellschaft in Basel (NGIB). Er war auch einige Jahre in der Redaktion der «Basler Zeitung» tätig und wurde 1840 zum Ehrenbürger der Stadt ernannt. Er war Gründungspräsident des Museumsvereins und blieb dies bis zu seinem Lebensende. Schönbein war im Grossen Kantonsrat und ab 1851 im Stadtrat. Ab 1831 war Schönbein Mitglied der Schweizerischen Naturforschenden Gesellschaft SNG (heute Akademie der Naturwissenschaften (SC-NAT)). Des Weiteren war er Gründungspräsident der Hebelstiftung und Mitglied der städtischen Beleuchtungskommission.

Erfolgreiche Forschung sichtbar machen

Durch die «Chemical Landmarks» macht die «Platform Chemistry» der Akademie der Naturwissenschaften auf das wissenschaftliche und technologische Erbe der Chemie in der Schweiz aufmerksam. Dabei werden historisch bedeutende Einrichtungen als «historische Stätten der Chemie» ausgezeichnet und als Teil des kulturellen Erbes gewürdigt. Der Falkensteinerhof ist bereits der neunte als «Chemical Landmark» ausgezeichnete Ort. Frühere Auszeichnungen gingen 2009 an die erste chemische Fabrik in Winterthur, 2010 an das alte Chemiegebäude der ETH Zürich, 2011 an das Laboratorium von J.-C. Galissard de Marignac in Genf, 2012 an das Rosental-Areal und das Firmenarchiv von Novartis in Basel, 2013 an das Lonza-Werk in Visp, 2014 an das Laboratorium im Schloss Reichenau (GR) und 2015 an das ehemalige Chemieinstitut der Universität Freiburg, 2016 an das ehemalige Chemieinstitut der Universität Zürich.

DAS Travel Award for the HPLC 2017 Symposium in Prague. Review from Fabio Stephan



The HPLC symposium is an international forum for the discussion and exchange of research in the field of liquid separation science with a strong focus on HPLC, capillary electrophoresis, supercritical fluid chromatography and their hyphenated techniques, such as LC/MS, CE/MS and SFC/MS. Micro and nanofluidic chip separation, diagnostic systems and other

leading technologies are also covered by this symposium.

In this year one of the main goals was the active participation of young researchers with posters and presentations. Therefore, young along with more experienced scientists could be found in the audience and on the speakers list of the symposium. As a result, an active exchange between generations could be seen and despite the great number of visitors, the atmosphere was familiar and easy-going.

The scientific sessions were divided into four parallel tracks: “Fundamentals”, “Hyphenations”, “Applications”, and “Young and Tutorial”. The “Fundamentals” track focused on latest development in separation techniques and stationary phases. Research in coupling MS with LC, CE and SFC were some of the main content of the “Hyphenations” track. Latest developments in multidimensional chromatography, MALDI in LC coupling, and data processing were further topics of these sessions. In the “Applications” track, analytical applications in fields such as omics, chiral separation, clinical, forensic, environmental and food analysis were presented.

Thanks to the DAS travel grant, I had the opportunity to present a poster from my master thesis research work with the title: “Optimization of Endotoxin Separation and Detection by SEC” to a broad and international scientific community at this symposium. The poster presents some of our latest research at the University of applied science HES-SO Valais. Fortunately, the organizers scheduled plenty of time for the poster presentation between the oral presentation sessions. This gave me the opportunity to connect with people from different fields interested in endotoxin research.

From participating at this symposium, I had the great chance to get a unique insight into the research of scientists from different fields and to network in the coffee breaks with some of them. This was the first time that I had the chance to participate at a scientific conference and it was very exciting for me to experience the atmosphere of such an event with so many people that are dedicated to science.

Thus, I would like to thank all people from HPLC 2017 for making such an excellent event happen and a special thanks to the “DAS Young Scientist Travel Award” board for their financial support that allowed me to participate in this symposium. *Fabio Stephan, HES-SO Valais, Sion*

Call for Nominations – EFMC 2018 Awards



To acknowledge outstanding achievements in the field of Medicinal Chemistry, EFMC is conferring every two years three Awards on the occasion of the International Symposium on Medicinal Chemistry. The 2018 Awards will be conferred on the occasion of the XXV EFMC “International Symposium on Medicinal Chemistry” (EFMC-ISMIC)

to be held in Ljubljana, Slovenia on September 2-6, 2018.

All 3 awards consist of a diploma, € 7,500 and an invitation for a lecture by the Award recipient at the upcoming EFMC-ISMIC International Symposium on Medicinal Chemistry.

The EFMC-Awards include:

- The Natur Award for Pharmacology**
 For the advancement of Medicinal Chemistry and the development of international organizational structures in Medicinal Chemistry. The award will be given for outstanding achievements in the field of Medicinal Chemistry.
- The UCB-Ehrlich Award for Excellence in Medicinal Chemistry**
 To acknowledge and recognise outstanding research in the field of Medicinal Chemistry in its broadest sense by a young scientist. This Award has been established with the support of UCB Pharma.
- The Prous Institute – Overton and Meyer Award for New Technologies in Drug Discovery**
 To encourage innovation and investigation in technological development related to drug discovery, this Award estab-

lished with the support of Prous Institute will be given for the discovery, evaluation or use of new technologies.

Nominations for these Awards consist of a nomination letter, a brief CV including a list of selected publications and two supporting letters. Self-nominations are also accepted. The nominations should be submitted to Dr. Yves Auberson, President of the EFMC as of 2018, via the official form on the website.

Deadline for submission: January 31, 2018

More information on www.efmc.info

Matthias Urmann wird neuer Präsident der GDCh



Der Vorstand der Gesellschaft Deutscher Chemiker e.V. hat auf seiner Sitzung am 12. September 2017 in Berlin Dr. Matthias Urmann, Sanofi-Aventis Deutschland GmbH, zum zukünftigen Präsidenten der Gesellschaft gewählt. Er tritt sein Amt am 1. Januar 2018 an und folgt damit Professorin Thisbe K. Lindhorst, Christian-Albrechts-Universität

Kiel. Zu stellvertretenden Präsidenten wurden in der gleichen Sitzung die bisherige Präsidentin Thisbe K. Lindhorst sowie Dr. Thomas Weber, BASF SE, gewählt.

Matthias Urmann studierte von 1983 bis 1989 Chemie an der Universität Heidelberg. Dort promovierte er auch von 1989 bis 1992 bei Professor Günter Helmchen. Nach einem Postdoc-Aufenthalt an der Harvard University, Cambridge, USA im Arbeitskreis von Professor Elias J. Corey trat er 1993 in die damalige Hoechst AG als Laborleiter Medizinische Chemie ein. Nach verschiedenen Aufgaben im Unternehmen, unter anderem als Leiter der Administration von Sanofi R&D Deutschland, einem der aus der Hoechst AG hervorgegangenen Unternehmen, und Leiter der Abteilung Insuline & Peptide innerhalb der Einheit Diabetes Research & Translational Medicine, ist er jetzt im Bereich Business Development Diabetes External Innovation tätig.

Source: gdch.de

SCS Anniversary Members



More than 80 of our members celebrate a special anniversary as SCS member this year. As one example we like to thank Prof. Ernst Schumacher, who joined SCS in 1947 and congratulate him for being with us for 70 years.

Thank you all for your support and your loyalty throughout the years.

Member for 70 years

Ernst Schumacher, Bern

Member for 60 years

Edmond G. Wyss, Boll
 Peter E. Häfelfinger, Riehen
 Dorothee Felix, Zürich
 Rolf H. Müller, Berkeley (USA)

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 Paul Müller, Eysins
 Janos Rétey, Karlsruhe (D)
 Urs Séquin, Therwil
 Christian Suter, Basel
 Raphael F.G. Tabacchi, Cormondrèche
 Hans-Kaspar Wipf, Wallisellen

Member for 40 years

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 Alex N. Eberle, Basel
 Beda E. Fischer, Therwil
 Werner Gans, Berlin (D)
 Roland Werner Kunz, Forch
 George R. Newkome, Akron (USA)
 Silvio Ofner, Münchenstein
 Paul Rys, Zürich
 Niklaus Schwizgebel, Uetendorf

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 Richard R. Ernst, Winterthur
 Heinz Gäggeler, Brugg
 Jürg Hunziker, Aarau
 Bernhard Jung, Rheinfelden
 Manuel Koller, Schliern b. Köniz
 Urs Krähenbühl, Belp
 Samuel Leutwyler, Bern
 Bruno Lohri, Reinach
 Peter Lohse, Weston (USA)
 Thomas Maetzke, Basel
 Erich Meister, Gränichen
 Peter Mohr, Basel
 Joachim Nozulak, Heitersheim
 Cornelius Nussbaumer, Oberillnau
 Cécile Pasquier Piller, Marly
 Dominique Plancherel, Bex
 Olivier Potterat, Aesch
 Peter Renold, Rheinfelden
 Gilles Ritter, Läufelfingen
 Christof Schickli, Caslano
 Richard R. Schmidt, Konstanz
 Jörg Senn-Bilfinger, Konstanz
 Peter Strazewski, Caluire
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 Andreas von Planta, Pfeffingen
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 Ralf Glatthar, Bad Säckingen (D)
 Stephan Graf, Heimberg
 Andreas Inauen, Wabern
 Tobias Jungo, Gelterkinden
 Christoph Krell, Basel
 Thomas Laube, Schaffhausen
 Jean-Luc Marendaz, Lausanne
 Andreas Marzinik, Basel
 Marcel Mayor, Basel
 Antonio Mezzetti, Zürich
 Jae-Kyoung Pak, Obfelden
 Claudia Pedroni, Muralto
 Mauro Perseghini, Biasca

Peter Radvila, Gais
 Stephen Raillard, Mountainview (CA)
 Thomas Rizzo, Lausanne
 Michel J. Rossi, Cossonay
 Martin Schär, Burgdorf
 Rolf Schütz, Dornach
 Richard J. Smith, Rotkreuz
 Frédéric Stauffer, Lignières
 Ralph Steffens, Schaan
 Hansjörg Walther, Münchenstein
 Philipp Weyermann, Sissach
 Andreas Zumbühl, Fribourg

A Warm Welcome to Our New Members!

Period: 01.11.2017 – 20.11.2017

Iris Landman, Ecublens
 Nadja Elena Niggli, Arch.

**Season's Greetings**

Many thanks to all our members, partners, board members and co-workers who support us throughout the year. Merci!

May this holiday season sparkle and shine, may all of your wishes and dreams come true, and may you feel this happiness all year round.

All the best for 2018 and Happy New Year!

Your team from the SCS Head Office
 Sarah & David



SCS PRIZE WINNERS 2018

It's our pleasure to announce the winners of the 2018 SCS awards. We would like to sincerely congratulate all winners and we are looking forward to the ceremonies that will take place at one of our events during the next year. Not included are the winners of the SISF-SCS Awards that will be communicated in early 2018.

Paracelsus Prize 2018



The Swiss Chemical Society awards the Paracelsus Prize 2018 to

Prof. Ruedi Aebersold, ETH Zurich for his exceptional and visionary contributions to the field of proteomics in general and to the fields of analytical chemistry, protein chemistry, and mass spectrometry specifically.

Picture: biol.ethz.ch

Past Paracelsus Prize Winners

2016: Prof. Michael Graetzel, EPF Lausanne

2014: Prof. Richard R. Schrock, Massachusetts Institute of Technology, USA

2012: Prof. Bernd Giese, University of Basel and Fribourg

2010: Prof. Steven V. Ley, Cambridge, U.K.

2008: Prof. Ben L. Feringa, Groningen, NL

2006: Prof. Sir Jack E. Baldwin, Oxford, U.K.

List of all winners since 1941: scg.ch/paracelsus

Werner Prize 2018



The Swiss Chemical Society awards the Werner Prize 2018 to

Prof. Sandra Luber, University of Zurich,

for her excellent research accomplishments in the field of theoretical and computational chemistry. Her work covers a wide range of approaches, mostly with emphasis on highly accurate methods

derived from quantum mechanics, which she has applied to a wide variety of challenging systems

Picture: chem.uzh.ch

Past Werner Prize Winners

2017: Prof. Kevin Sivula, EPFL and

Prof. Christoph Sparr, University of Basel

2016: Prof. Maksym Kovalenko, ETH Zurich and Empa Dübendorf

2015: Prof. Gilles Gasser, University of Zurich

2014: Prof. Clémence Corminboeuf, Lausanne and

Prof. Jérôme Waser, Lausanne,

2013: Prof. Cristina Nevado, Zurich and

Prof. Clément Mazet, Geneva

2012: Prof. Nicolai Cramer, EPF Lausanne

List of all winners since 1936: scg.ch/werner

Sandmeyer Award 2018



The SCS awards the Sandmeyer Prize 2018 to the team from Syngenta Crop Protection AG, Stein (AG), namely

Dr. Raymonde Fonné-Pfister,

Dr. Claudio Screpanti,

Dr. Alain De Mesmaeker and

Dr. Harro Bouwmeester, University of Amsterdam

for their pioneering work on Strigolac-

tones that can be considered a collaboration masterpiece between Industry and Academia to explore novel area of this phytohormonal family.

Past Sandmeyer Prize Winners

2017: Dr. Stefan Hildbrand, Dr. Gösta Rimpler, Dr. Daniel Fishlock, Dr. Pankaj Rege, Dr. Carsten Peters, Dr. Christian Mössner, Dr. Ralph Diodone and Dr. Markus Schantz, F. Hoffmann-La Roche AG

2016: Dr. Martin Weibel, Sika Technology AG, Dr. Thomas Müller, Sika Deutschland GmbH, Dr. Ratan K. Mishra, ETH Zürich, Prof. Robert J. Flatt, ETH Zürich, Prof. Hendrik Heinz, University of Colorado Boulder

2015: Dr. Stefan Abele, Dr. Jacques-Alexis Funel and Dr. Gunther Schmidt from Actelion Pharmaceuticals Ltd, Prof. Roger Marti, Hochschule für Technik und Architektur Fribourg, Dr. Christian Mössner, Mischa Schwaninger, Swisssi Process Safety, a member of TÜV SÜD Group

List of all winners since 1994: scg.ch/sandmeyer

Balmer Prize 2018

The SCS awards the Balmer Prize 2018 to

Dr. Thibaut Rossel, Gym Français, Ecole de Maturité, Bienne for his very original and impressive research program at the Gymnase Français where he teaches, using simple methods and resources and, even more impressively, the experiments are shared with high-school students, who are happy to carry-out original research work as part of their training in chemistry.

Past Balmer Prize Winners

2017: Hansrudolf Dütsch, Zürich

2015: Francis Mingard, Gymnase de Nyon

2013: Thomas Berset, Kantonsschule Musegg Luzern

List of all winners since 2010: scg.ch/balmer

Dr. Max Lüthi Prize 2018

The SCS awards the Dr. Max Lüthi Prize 2018 to

Ms. Fabienne Arn, Zürcher Hochschule für Angewandte Wissenschaften, ZHAW

for her excellent Bachelor diploma thesis entitiled «Strukturelle Optimierung eines Matrixmetalloproteinase-13-Inhibitors»

Past Dr. Max Lüthi Prize Winners

2017: Sonia De Andrade, ZHAW Wädenswil

2016: Flavio Gall, ZHAW Wädenswil

2015: Yvan Mongbanziama, HEIA Fribourg

2014: Yannick Stöferle, ZHAW Wädenswil

2013: Peter Elmiger, ZHAW Wädenswil and
Christophe Laporte, EIA Fribourg

List of all winners since 1992: scg.ch/max-luethi

HONORS AND AWARDS

Prof. Wennemers, ETHZ, receives the Inhoffen Medal 2017



This year's Inhoffen Medal, the most prestigious German prize within the area of natural product chemistry, goes to **Prof. Helma Wennemers**, ETH Zurich. She received this prize at the Inhoffen Lecture on November 7, 2017.

The Helmholtz Centre for Infection Research (HZI) and the Technical University (TU) Braunschweig annually organize the Inhoffen Lecture and award the Inhoffen Medal since 1994, in memory of the chemist Prof. Hans Herloff Inhoffen.

Additional information

- An extended press release (in German) was published on the website of Helmholtz HZI www.helmholtz-hzi.de/de/aktuelles
- An interview with Helma Wennemers is available on www.helmholtz-hzi.de/interview.

Source: chab.ethz.ch

Prof. Antonio Mezzetti, ETHZ, wins the Golden Owl 2017



This year's Golden Owl award goes to **Prof. Antonio Mezzetti** from the Laboratory of Inorganic Chemistry at ETH Zurich. Every year the students decide who is given this award to honor lecturers of each department for their excellent teaching abilities.

ETH Zurich's student association (VSETH) annually awards the Golden Owl to lecturers with excellent teaching skills. At the end of each spring semester, students are asked to complete a survey, thereby choosing the recipient of the Golden Owl for each department. This year's Golden Owl for the Department of Chemistry and Applied Biosciences goes to Prof. Mezzetti of the LAC. The award was given during ETH Day 2017
Source: dcb.unibe.ch

JOURNAL NEWS

ChemPubSoc Monthly Highlights, November 2017: Free Access to all Reviews from 2017



Free to read until December 31, 2017: All Reviews from 2017 published in ChemPubSoc Europe journals. Discover more information on: http://bit.ly/CPSE_Reviews2017

Meet ChemMedChem's New Editor-in-Chief



ChemPubSoc Europe and Wiley-VCH have named Dr. David Peralta as Editor-in-Chief of ChemMedChem, as of July 1, 2017. The appointment was confirmed by society representatives at the annual meeting of ChemPubSoc Europe and Wiley-VCH in Berlin in September.

ChemViews Magazine talked to David about his promotion.

DOI: 10.1002/chemv.201700089

INDUSTRIAL NEWS

Source: www.chemanager-online.com

White Tale Tells Clariant its Terms

October 31, 2017: Following Swiss speciality chemicals producer Clariant's decision last week to back away from the \$20 bn merger with Huntsman announced in May – citing uncertainty over gaining the required approval by two-thirds of its shareholders – activist investor White Tale has launched a drive to reshape the company according to its own vision. In a letter to management dated Oct. 30, the acquisition vehicle of the funds

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40 North and Corvex, now Clariant's biggest shareholder with 20% of capital, unveiled its targets, as a "long-term investor," to ensure the chemical producer's "success." White Tale said its immediate priority is to have three of its representatives seated on the board of directors, while hinting that it will solicit support for this from other shareholders. In the interest of restoring Clariant's "credibility," the investor also has called for the appointment of an independent financial advisor not involved in the Huntsman transaction to undertake a "thorough review of all strategic advantages without prejudging the outcome and without self-interested pre-conditions." As the Swiss company's largest shareholder, White Tale said it will take responsibility to see its conditions fulfilled, and if Clariant's management does not agree will push for an extraordinary general meeting. The funds stressed again that a primary goal continues to be divestment of the spun-off Plastics and Coatings business, with the proceeds reinvested in "pure-play" specialty chemicals businesses. Without commenting on the proposals, Clariant said its supervisory board will discuss the "requests" at its next meeting. It added that it has also offered to outline its own growth strategy for White Tale, listen to its plans and discuss "appropriate concrete ways forward." The company said it also has invited the investor to hold further talks, while continuing the ongoing dialog with all "shareholders that have shown long-term interest in the company." Commenting on the exchange of communications, analysts at investment broker Bernstein said they expect an independent review would show that the merger with Huntsman "did not make strategic sense." At the same time, they noted that White Tale would need the support of 50% of share capital to remove Clariant's management. According to news agencies, CEO Hariolf Kottmann has indicated he has no plans to step down.

Evonik Reshapes H₂O₂ Business

November 1, 2017: Evonik is reshaping its hydrogen peroxide (H₂O₂) portfolio to become more customer-focused and in response to growing demand for its Hyprox, Oxteril, Persynt and Clarmarin brands. The German group said it is currently working on an extensive program to realign its four production sites in Europe, located at Delfzijl, the Netherlands; Antwerp, Belgium; Rheinfelden, Germany and Weissenstein, Switzerland. The program will see capacity expanded and commissioned this year as well as the establishment of a new logistics center, which Evonik said would enable the business to offer smaller package sizes. Details on actual production figures and the location of the logistics center were not disclosed. Susanne Reinhart, head of the company's Active Oxygens Europe, Middle East & Africa business area, said that following the realignment Evonik will be faster, more flexible and closer to its customers in various industries, including pharmaceutical and cosmetics, processing of food packaging, pulp and textiles. "We want to be able to react to the very different requirements of our customers and to work together with them to develop solution concepts for the future," she said. Evonik, which produces around 950,000 t/y of the bleaching agent and claims to be the second largest producer worldwide, expects to finish implementing the measures resulting from its realignment program by the middle of 2018. In separate news, the Korea Herald newspaper reported that Evonik is in talks with South Korea's SK Chemicals (SKC) to collaborate on H₂O₂ as well as on hydrogen peroxide-to-propylene oxide (HPPO) technology. SKC said a partnership in HPPO technology could help both companies secure a bigger presence in the PO market.

Ineos Buys UK Shale Licenses from Total

November 6, 2017: Widening its already leading position as a holder of UK shale gas exploration licenses, Ineos has struck a deal with a subsidiary of French oil and gases group Total. The Swiss-based group now has exploration rights to 1.325 million

acres, including lands in Nottinghamshire, Yorkshire and Lincolnshire. Ineos also holds a major share of licenses for Scotland but will be barred from using them now that the Scottish government has now embedded its ban on fracking in the country's National Planning Framework. Total E&P UK said it has sold to Ineos 30% of working interest in each of the UK licenses PEDL 273, 305 and 316, while retaining a 20% interest. It has also sold 40% of working interest in the PEDL 139 and 140 licenses. The French group said its decision to reduce its holding of UK onshore acreage is in line with its strategy to concentrate on its current British offshore assets. In all five of its new areas, Ineos is part of a consortium with other businesses including IGas, Egdon and ECorp. IGas is the operator for all the sites. "Our acquisition of these assets represents an important development for Ineos Shale and demonstrates our ongoing commitment to this important industry," said Ron Coyle, new CEO of the group's UK-based exploration arm. "Shale gas represents an exciting opportunity for the UK, and has the real potential to bring much needed jobs and investment to local communities. The continuing growth of Ineos' portfolio of licenses means we will be at the very forefront of this transformational industry," Coyle added. Last week, the UK's High Court upheld the anti-trespassing injunction it granted to Ineos in July of this year. The court orders effectively blocks protest action on and around the Swiss group's shale sites. Its UK subsidiary had presented the court with "extensive evidence of widespread unlawful action" by anti-fracking activists. The injunction will now remain in place until the judge delivers his final decision, at an as yet undetermined date.

Syngenta Buys COFCO's Crop Seeds Business

November 8, 2017: Chinese-owned, Switzerland-based agrochemicals giant Syngenta has announced plans to acquire state-owned Chinese grains trader COFCO International's crop seeds business for an undisclosed sum. The international arm was officially launched in April of this year to combine the overseas trading activities. According to Reuters, the Chinese firm spent more than \$3 billion buying Dutch trader Nidera Seeds, along with Noble Agri, over the past three years, which enabled it to move into the league of multinational agricultural traders.

Nidera operates mainly in Latin America, with the most important activities in Argentina and Brazil. Its focus is on corn, sunflower, sorghum, soybean and wheat seeds. The sale "is an important step of our strategy to focus on our major businesses," said Johnny Chi, chief executive of COFCO International. He said Syngenta is "well placed to provide Nidera Seeds a strong platform for further long-term growth." Completion of the transaction is subject to clearance by the relevant antitrust authorities. Syngenta told the news agency Reuters it hopes to obtain all regulatory approvals by the end of 2017 or early 2018. In other Syngenta news, the agrochemicals group's US subsidiary, based in the Research Triangle area of North Carolina, has obtained a non-exclusive license from the Broad Institute of MIT and Harvard to use CRISPR-Cas9 genome editing technology for agricultural applications. The Swiss group said it will use the technology, which enables scientists to make genetic changes in an organism, to edit genes in various crops, including corn, soy, wheat, tomato, rice and sunflowers. "Gaining access to CRISPR-Cas9 technology will allow us to accelerate the rate of innovation in the development of new plant varieties and bring novel traits into the hands of growers faster and with greater efficiency," said Michiel van Lookeren Campagne, global head of seeds research at Syngenta. Syngenta employs around 500 people in the Research Triangle.

Novartis May Sell Dermatology Generics Arm

November 13, 2017: Amid estimates that the business could be worth as much as \$1.5 billion, speculation is mounting that

Swiss drugmaker Novartis may be planning to sell its dermatology generics arm, based mainly in the US, to concentrate on its cancer portfolio and other growth areas. Analysts told news agencies the assets, which include skin-care treatments and some manufacturing facilities, may draw interest from private equity as well as strategic buyers. The Basel-based company is said to be working with a financial adviser on the potential sale. As is the case for most other players, Novartis' generics business, steered by subsidiary Sandoz, is under price pressure. The sector is currently undergoing consolidation. In presenting third-quarter 2017 financial results in late October, the drugmaker warned that sales in the segment could decline slightly this year. Novartis has built its dermatology business mainly through acquisition over the past five years. It rose into the top ranks with the 2012 purchase of US-based Fougera Pharmaceuticals for \$1.5 billion. This deal was followed up last year with the takeover of the AmLactin skin care brands from Minnesota-based Upsher-Smith Laboratories for an undisclosed sum. The Swiss group meanwhile said it will strengthen its oncology portfolio through the takeover of radiopharmaceuticals producer Advanced Accelerator Applications (AAA). Under a memorandum of understanding with the company's board, it will launch a tender offer for 100% share capital at a price of \$41 per ordinary share and \$82 per American Depositary Share (each representing 2 ordinary shares). The offer would value the company at \$3.9 billion. AAA develops, produces and commercializes Molecular Nuclear Medicines including Lutathera, described as a first-in-class RadioLigand Therapy (RLT) product for neuroendocrine tumors (NETs). These are used clinically for both diagnosis and therapy. Novartis said the transaction would strengthen its oncology presence with both near-term product launches as well as a new technology platform with potential applications across a number of oncology early development programs. Lutathera was approved in Europe in September 2017 for treatment of unresectable or metastatic, progressive, well differentiated (G1 and G2), somatostatin receptor positive gastroenteropancreatic neuroendocrine tumors. The drug is under review in the US with a Prescription Drug User Fee Act (PDUFA) date of Jan. 26, 2018.

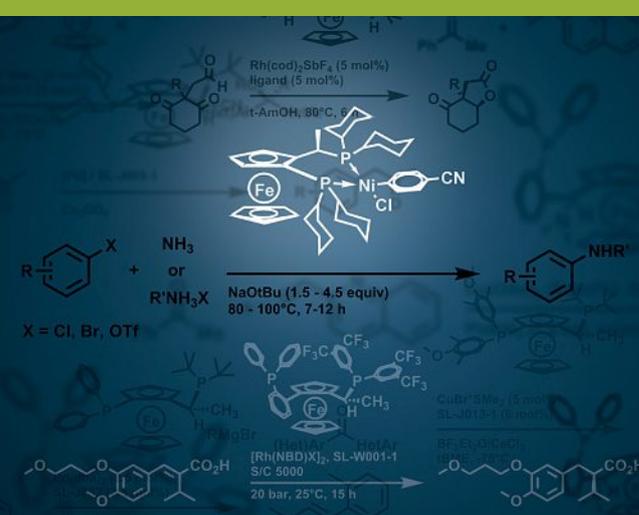
Cuadrilla to Pay Households near Fracking Sites

November 15, 2017: UK shale gas firm Cuadrilla will begin making the country's first-ever payments to a £100,000 community benefit fund for households near its fracking sites. The company said 29 households within a 1 km radius of the second well it is drilling between Blackpool and Preston in Lancashire will receive £2,070 each. Residents of an additional 259 properties who live 1-1.5 km away from the site will be eligible for a £150 payment. Some of the beneficiaries have opted to receive the payout directly rather than through a community fund, Cuadrilla said. The community benefit the company is offering is reportedly higher than the industry's agreed standard of £100,000 per site. As its shale gas operations continue to progress in Lancashire, Cuadrilla's CEO, Francis Egan, said nearly 300 households will directly benefit from the company's community payments, which are separate from the national government's pledge to pay up to £10,000 per household whenever commercial production begins. By its own account, Cuadrilla, which is currently drilling the first of two wells it has permits for at Preston New Road, has spent £4.7 million on shale gas exploration in the UK to date. The company said it expects to begin fracking at the end of this year or in early 2018. Another potential fracker, Third Energy, which plans to begin drilling a well near Kirby Misperton in North Yorkshire as soon as it receives its government license, has announced that local groups and charities will soon be able to bid for a share of a £100,000 community fund it is backing. Like Ineos, which has its holding's headquarters in Switzerland, the two UK-based firms continue to face strong local opposi-

tion. Ineos cited protests at Cuadrilla's sites as justification for seeking an injunction prohibiting "unlawful acts" by protestors at its shale gas exploration sites. After two reviews in the UK's High Court, the injunction will remain in place until a judge makes a final decision, at an undetermined date. Anti-fracking activists have criticized what they describe as the injunction's "draconian" penalties. Slow walking in front of vehicles to delay deliveries to an exploration site, for example, carries a £1,000 fine. The maximum penalty for contempt of court in a shale protest is two years in prison. Ineos also has proposed payouts to households near fracking sites if and when its activities progress beyond geological surveys. Although it holds the greatest number of UK exploration licenses, the group has yet does not hold a single fracking permit. Some residents of households that would benefit from Cuadrilla's offer have refused to accept the money. John Tootill, owner of a tree nursery within 1 km of the site, is quoted in the UK press as calling the payments "blood money," as "no amount of money can compensate for somebody's health being affected." Keith Taylor, a member of Parliament for the Green party party, has called the Cuadrilla proposals "immoral and tantamount to bribery". With Britain and the world are on course to miss climate targets, he said "kickbacks won't keep catastrophic climate change at bay."



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