

# Launch of the SCS Swiss Women in Chemistry

September 2019 marks the official launch of the new platform SCS Swiss Women in Chemistry (SWC). Under the umbrella of the Swiss Chemical Society, its aim is to facilitate networking and provide a supportive community for female chemists in Switzerland at all career stages.

The newly established SCS Swiss Women in Chemistry (SWC) is open to all female scientists of Switzerland across the diverse fields of chemistry, life sciences, and biotechnology, coming from academia, industry, and government. The platform aims to support and generate visibility for female chemists through a professional network for women at all stages of their career, from senior executives to junior scientists. Members of the network will be provided with an open platform for the exchange of ideas and experiences, and early researchers can be supported in their professional development through a mentoring program. Members can realize opportunities for collaboration with other organizations and corporations through various networking events.

Through its social media channels, the SWC aims to relay opportunities for external funding (fellowships, travel grants, etc.) and career opportunities, as well as to document and publicize the contributions of female scientists in Switzerland. The SWC network will facilitate access to female experts for media communications and panel discussions, and hopes to play an active role in meetings and events across Switzerland.

## **Upcoming Events**

The launch of SWC will be celebrated at the *Swiss Women in Chemistry Inauguration Gala Night* (September 25, 17:30-20:30, Basel). The program includes presentations by Dr. Maria Inès Velazco (Consultant at MIV Senses, former SVP R&D at Firmenich) and Dr. Leslie A. Fendt (AI Integrated Strategy Leader, Global Launch Leader, Ulcerative Colitis at Hoffmann-La Roche) and will be followed by a networking gala. Registration information will be made available via the SWC social media accounts and the SCS homepage.

In addition to networking, a goal of the SWC is to increase support for young female scientists in Switzerland. To help achieve this, a mentor-mentee matching platform will be available for advising PhD students/postdoctoral researchers and helping to guide them in achieving their career goals. For those interested in acting as a mentor, please contact the SWC for further information.

The SWC and Firmenich are co-organizing a corporate meet-and-greet event on March 12, 2020. The event will present an opportunity for female Alfred Werner MSc scholarship recipients, PhD students, and postdoctoral researchers to interact with female scientists employed at Firmenich. The event will feature an introduction to Firmenich and short presentations by Dr. Jezabel Praz (Trainee Perfumer) and Dr. Sarah Reisinger (VP Biotechnology and Process Science), followed by a networking apéro. The SWC will be looking to organize additional corporate meet-andgreet events in the future.

#### SWC Organizers/Contacts:



**Dr. Rachel Hevey, University of Basel** Dr. Rachel Hevey is a Research Associate in Molecular Pharmacy at the University of Basel. After

completing degrees in Chemistry and Biological Sciences, Rachel undertook her PhD studies in glycochemistry at the University of Calgary (Canada) under the supervision of Prof. Chang-Chun Ling. In November 2013, Rachel joined the group of Prof. Dr. Beat Ernst as a postdoctoral researcher, and in January 2015 was promoted to a Research Associate at the University of Basel. Rachel's main research interests involve elucidating glycan-protein interactions and developing glycoconjugates as potential therapeutics. She is a recipient of the J.B. Hyne Research Innovation and Dr. Don F. Tavares Teaching Awards, and was recently selected for the IUPAC Periodic Table of Younger Chemists.



# Dr. Maud Reiter, Firmenich S.A.

Dr. Maud Reiter is the Director of New Ingredients Discovery at the corporate R&D Division of Firmenich

S.A. in Geneva (Switzerland). Maud received her undergraduate degree from Imperial College, London in 2002, followed by a DPhil under the supervision of Professor Véronique Gouverneur at the University of Oxford. After postdoctoral work with Professor David MacMillan at Caltech/Princeton University, Maud joined Merck&Co. in 2008 in Rahway, NJ, USA as a medicinal chemist. In 2011, Maud moved into her current position at Firmenich, where she is overseeing the discovery of novel and sustainable perfumery ingredients.



Prof. Dr. Rebecca Buller, ZHAW

Prof. Dr. Rebecca Buller leads the Competence Center for Biocatalysis (CCBIO) at the Institute of

Chemistry and Biotechnology, Zurich University of Applied Sciences, Wädenswil. Before joining the ZHAW, Rebecca Buller held a position as Laboratory Head and Project Manager at Firmenich, a flavour and fragrance company. In this role, she developed and optimized several biocatalysis based processes for the manufacture of asset molecules. Additionally, Prof. Dr. Buller brings in-depth knowledge of enzyme engineering through her academic research at ETH Zurich. Dr. Rebecca Buller received her Diploma degree in Chemistry from the University of Münster and studied at the University of California in Santa Barbara. She holds a PhD degree from the Institute of Chemistry and Applied Biosciences at ETH Zurich.



#### Contact

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## cOAlition S Releases Revised Implementation Guidance on Plan S Following Public Feed-back Exercise

cOAlition S releases revised guidance on Plan S implementation which has been approved by all coalition members. "Plan S is a bold step forward which the European Commission, along with a growing number of national funders, is committed to implement" explained Carlos Moedas, the European Commissioner for Science, Research and Innovation.

May 31, 2019 – Since its launch in September 2018, Plan S has reinvigorated the global debate on Open Access to scholarly publications. cOAlition S is grateful to all those who took the trouble to respond and provide specific advice during its recent feedback exercise – the largest ever international consultation that has been conducted on an Open Access policy. The 600 plus inputs received allowed the coalition to make changes that take into consideration the views expressed by the diverse communities affected.

Changes include an extension to the formal commencement point for Plan S which will now take effect from 1 January 2021. This new timetable provides more opportunity for researchers, institutions, publishers, and repositories to make changes and for funders' policies to develop and take effect. The Plan S principles now also reflect a commitment made by the funders to revise methods of research assessment along the lines of the San Francisco Declaration on Research Assessment (DORA).

"This final version of Plan S will accelerate the necessary transition to full and immediate Open Access and allow different stakeholders to start implementation in the most optimal way," explained Prof. John-Arne Røttingen, Chief Executive of the Research Council of Norway (RCN) and co-chair of the cOAlition S implementation task force. "We are committed to implement what is one of the most significant and ambitious changes to the research system and with the final plan now in place we look forward to more funders, from across the world, supporting the transition to full and immediate Open Access by joining and aligning with cOAlition S," concluded Marc Schiltz, President of Science Europe and co-initiator of Plan S

## In Summary

The revised Plan S maintains the fundamental principles

- No scholarly publication should be locked behind a paywall;
- Open Access should be immediate *i.e.*, without embargoes;
- Full Open Access is implemented by the default use of a Creative Commons Attribution CC BY license as per the Berlin Declaration;
- Funders commit to support Open Access publication fees at a reasonable level;
- Funders will not support publication in hybrid (or mirror/sister) journals unless they are part of a transformative arrangement with a clearly defined end-point.

But a number of important changes are proposed in the implementation guidance

- In order to provide more time for researchers and publishers to adapt to the changes under Plan S, the timeline has been extended by one year to 2021;
- Transformative agreements will be supported until 2024;
- More options for transitional arrangements (transformative agreements, transformative model agreements, 'transformative journals') are supported;
- Greater clarity is provided about the various compliance routes: Plan S is NOT just about a publication fee model of Open Access publishing. cOAlition S supports a diversity of sustainability models for Open Access journals and platforms;
- More emphasis is put on changing the research reward and incentive system: cOAlition S funders explicitly commit to adapt the criteria by which they value researchers and scholarly output;
- The importance of transparency in Open Access publication fees is emphasised in order to inform the market and funders' potential standardisation and capping of payments of such fees;
- The technical requirements for Open Access repositories have been revised.

For more information: cOAlition S c/o Science Europe Rue de la Science 14 Brussels Etterbeek 1040 Belgium www.coalition-s.org

#### Why Plan S?

Open Access is Foundational to the Scientific Enterprise

Universality is a fundamental principle of science (the term "science" as used here includes the humanities): only results that can be discussed, challenged, and, where appropriate, tested and reproduced by others qualify as scientific. Science, as an institution of organised criticism, can therefore only function properly if research results are made openly available to the community so that they can be submitted to the test and scrutiny of other researchers. Furthermore, new research builds on established results from previous research. The chain, whereby new scientific discoveries are built on previously established results, can only work optimally if all research results are made openly available to the scientific community.

Publication paywalls are withholding a substantial amount of research results from a large fraction of the scientific community and from society as a whole. This constitutes an absolute anomaly, which hinders the scientific enterprise in its very foundations and hampers its uptake by society. Monetising the access to new and existing research results is profoundly at odds with the ethos of science (Merton, 1973). There is no longer any justification for this state of affairs to prevail and the subscription-based model of scientific publishing, including its socalled 'hybrid' variants, should therefore be terminated. In the 21st century, science publishers should provide a service to help researchers disseminate their results. They may be paid fair value for the services they are providing, but no science should be locked behind paywalls!

The Swiss Chemical Society supports the fundamental intention of Plan S and welcomes some of the principles formulated. However, the impact of Plan S on the SCS and its community is substantial and the Board of Directors and the Editorial Board of CHIMIA will discuss in detail how to follow up. Let us know your point of view and send us a mail to info@scg.ch.

# **CHIMIA REPORT/COMPANY NEWS**

Firmen stellen sich und ihre Produkte vor Companies present themselves and their products Interested in a contribution? Please contact Swiss Chemical Society, info@scg.ch, +41 31 306 92 92

# iScienceSearch – The chemical intelligent Internet search

iScienceSearch is targeted for the specific needs of a chemist. It covers only sources that are relevant for scientists, with a focus on chemistry. It searches websites and databases in real-time, thus eliminating the need for an index that needs to be maintained. That means, as soon as new/updated data are available in a given website, or database, you are able to find them.



The start page provides a sophisticated chemical editor, full structure, substructure and similarity searches are supported. You also can search by identifiers like CAS Registry numbers, chemical names or free text. Irrespective if you start your search by structure or text such as a chemical name, we search in the background, related search terms that automatically get added to the search.

	BioConcept Ltd
Expand/Collapse all groups	BioTek Instrum
Use 'Group' from the left handed navigation bar to group by a co	Brechbühler AC
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1 hit(s) performing TEXT search using query. Maslinic acid Category assigned to this link: Chemistry	1s <i>http://isc</i> friendly ve
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For example, you do a text search for 'maslinic acid', we automatically extend the search by including the chemical structure, the CAS registry number, the IUPAC name and other well-known synonyms giving you results in sources that contain only the synonym such as 'crategolic acid'. This feature of a chemical intelligent query extension is unique.

iScienceSearch searches about 100 websites and databases. Classical search engines, such as Google, index websites and not databases, such missing many chemical data. Chemistry specific searches such as substructure or structure similarity searches are not possible in Google.

iScienceSearch results are always grouped by website. That means, if you find more than one hit in a given source for your search term, you only get one result link. The landing page of a result is equivalent of executing the search in the native source. The result page can easily be filtered, sorted and grouped by various criteria.

A second tab will open the "Lab Equipment Search". For instance, if you search for "electronic pipettes", you will get a list of companies that provide such instruments. The advantage is that you get only one hit per company, even if the search term appears in many pages of the company. This means you see also suppliers that would never become visible in Google because they would appear not on the first pages.

Agilent Technologies (Schweiz) AG Bing search insite 82
Anton Paar Switzerland AG Bing search insite 1
Baumer Electric AG Bing search insite 2
BioConcept Ltd. Bing search insite 12
BioTek Instruments GmbH Bing search insite 13
Brechbühler AG Bing search insite 2
CAMAG Bing search insite 1
Gerber Instruments AG Bing search insite 1

Gilson (Schweiz) AG Bing search insite 83

iScienceSearch is free and no registration is needed. The iScienceSearch homepage is *http://isciencesearch.com/iss*. A mobile friendly version is available using the link *https://www.ilmac.ch/sciencesearch.aspx*. If you are interested to make your website searchable via iScienceSearch, please contact us.

# Open sourced based chemical compound registration system

Targeted to startups or small to medium sized companies, looking for an attractively priced system, that allows to register chemical structures and all the associated data in a relational database and make them easily searchable. The system is already used by several customers, and has proven its usability and stability.

Open sourced based (RDKit, PostgreSQL) – highly flexible data model, that allows to register batches, salts, inventory data, analytical data and assay data – user rights management – full audit trail of all database operations – supports both interactive and bulk registration – responsive Web User interface including free chemical drawing tool – support for sorting, filtering and grouping all of your data – flexible report management.

# Cheminformatics consulting and solution provider

We work since almost 30 years, in the cheminformatics area, and have a proven record of being a capable and reliable solution provider.

Let us know your projects, and we are happy to discuss and deliver possible solutions.

#### Contact

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#### Sparen Sie die CO<sub>2</sub>-Abgabe!

Unternehmen der chemischen Industrie benötigen oft viel Energie. Daher ist für sie neben den effektiven Strom- und Brennstoffkosten auch die  $CO_2$ -Abgabe ein beträchtlicher Kostenfaktor. Mit dem Abschluss einer Zielvereinbarung vor dem 31. August kann man sich jedoch von dieser gesetzlichen Abgabe befreien und spart damit bares Geld.

Mitten zwischen den beschaulichen Hügeln des Emmentals steht eine moderne Fabrik. Es sind die Gebäude der Temmentec AG, die in Sumiswald hochwertige Körperpflegeprodukte produziert. Die automatische Abfüllanlage des Betriebs reiht unentwegt Flasche um Flasche auf ein Förderband und befüllt sie unter einem kurzen Zischen mit Feuchtigkeitslotion. Angetrieben wird die Anlage von Druckluft, die das ganze Gebäude mit Bewegungsenergie versorgt.



Drucklufterzeugung, Maschinenantriebe, Warmwasseraufbereitung, Raumheizung – all dies verbraucht viel Strom und beträchtliche Mengen an Brennstoffen.

Doch es sind nicht nur die reinen Energiekosten, die dem Finanzchef zu denken geben – die gesetzliche  $CO_2$ -Abgabe treibt die Energierechnung zusätzlich in die Höhe. Derzeit macht die Lenkungsabgabe rund 30 Prozent der Ausgaben für die Energiebeschaffung aus. In den letzten Jahren ist die  $CO_2$ -Abgabe deutlich angestiegen um rund 60 Prozent angestiegen, unter anderem darum, weil die Schweiz ihre Klimaziele nach wie vor nicht erreicht.

#### Befreiung

Fast alle Unternehmen, die mit Öl oder Gas heizen, könnten sich von der  $CO_2$ -Abgabe befreien lassen – auch Hersteller und Distributoren von chemischen und phar-

mazeutischen Produkten. Allerdings läuft die Frist dafür nur noch bis zum 31. August. Wer profitieren möchte, tut also gut daran, sich bald zu melden. Der Weg zur Befreiung ist denkbar einfach, denn es gibt zwei Agenturen, welche die Unternehmen im Auftrag des Bundes unterstützen und ihnen einen grossen Teil der Arbeit abnehmen. Eine davon ist die act Cleantech Agentur Schweiz. Olga Kpodzro, verantwortlich für den Bereich Pharma, erklärt: «Der Betrieb muss einen Jahresverbrauch von mindestens 38'000 Litern Heizöl aufweisen oder einer entsprechenden Menge Gas.» Unternehmen, die dieses Volumen nicht erreichen, können sich auch zusammenschliessen. «Durch die Abgabebefreiung erhalten sie jedes Jahr Rückvergütungen von 10'000 Franken und mehr.»

#### Chance

Abgesehen von der Mindestverbrauchsmenge ist die Abgabenbefreiung lediglich an eine Bedingung geknüpft: Das Unternehmen muss sich gegenüber dem Bund verpflichten, seine Energieeffizienz schrittweise zu verbessern. Eine solche Selbstverpflichtung wird Zielvereinbarung genannt und kann von jedem Unternehmen auf freiwilliger Basis abgeschlossen werden. Für Grossverbraucher ist sie in den meisten Kantonen obligatorisch. Das Eingehen einer Zielvereinbarung bedeutet in jedem Fall finanzielle Vorteile, da lediglich jene Massnahmen umgesetzt werden müssen, die sich in kurzer Zeit durch eingesparte Energiekosten amortisieren lassen.

#### Kompetenz

Auch die Temmentec AG ist ein Grossverbraucher und schloss mit Unterstützung von act eine Zielvereinbarung mit dem Bund ab. Wie für viele andere Betriebe war dieser Schritt für das Unternehmen im Emmental der Anstoss dazu, bereits angedachte Optimierungsmassnahmen in Tat umzusetzen. «Wir haben schon immer darauf geachtet, die Umwelt nicht unnötig zu belasten», erklärt Michel Bolliger, der neben seiner Hauptaufgabe als Produktentwickler im Labor für alle Umweltbelange zuständig ist.

Gemeinsam mit act-Energespezialist Rüdiger Settelmeyer haben sich die Verantwortlichen der Temmentec AG systematisch daran gemacht, Energie-Lecks im Unternehmen ausfindig zu machen.



Settelmeyer prüfte beispielsweise jeden Meter der Druckluftleitungen auf Lecks – vom Kompressor im Keller bis ins zweite Obergeschoss, wo die Produktions- und Abfüllanlagen stehen.

«Rund zehn Prozent der erzeugten Druckluft ging unterwegs verloren», fand Settelmeyer heraus. Allein durch das Optimieren der Schläuche und Anschlüsse spart der Emmentaler Traditionsbetrieb nun über 20'000 Kilowattstunden elektrische Energie pro Jahr – und die entsprechenden Stromkosten.

Trotz ihrer eigenen betrieblichen Kompetenzen hat die Temmentec AG gute Erfahrungen mit der externen Unterstützung gemacht. «Unser Energiemanagement ist dank der act Cleantech Agentur deutlich professioneller geworden», anerkennt Michel Bolliger.

Professionell unterwegs zu sein – das zeigt sich bei den Unternehmen auch in den Zahlen unter dem Strich. Von der Zielvereinbarung profitiert denn auch die Temmentec AG gleich auf mehreren Ebenen: Die Anlagen arbeiten effizient und zuverlässig auf dem neusten Stand. Die Energiekosten sanken. Und als Zugabe erhält der Betrieb die CO<sub>2</sub>-Abgabe rückerstattet.

#### Kontakt

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# Swiss biotechnology: Investments at record level and outstanding success stories

The Swiss biotech industry continues to be buoyant and once again managed to increase its sales, exports and research investments in 2018. As a result, it is laying the foundations for further growth and forward-looking development. Capital investment in listed biotech companies saw an especially striking increase: Polyphor boasted one of Europe's most successful flotations in recent years.

## Basel, 7. Mai 2019

The Swiss biotech industry can once again look back on a record year. Industry sales increased by 6 percent compared to 2017, reaching CHF 4 billion. The number of people employed within the 249 biotech companies and 63 suppliers rose by around 4 percent to over 14,300. Capital investment in listed biotech companies has been booming.

# Investment in research as the foundation of success

The industry has been laying the foundations for this impressive, sustained growth spanning a number of years with investment in research and development, which has been increasing for years and which rose by a further 32 percent from 2017 to 2018. Swiss biotech companies also invested the lion's share of resources generated by profits and financing transactions in research and development in 2018. The results include a valuable patent portfolio (53 percent of Swiss biotech patents are "world-class patents") and a pipeline filled with promising drug candidates in the preclinical and clinical research phase. The Swiss biotech industry is predominantly made up of small to medium-sized enterprises, and is bolstered by capital investment, major interest from global companies in collaborations, and success in national and international project support programs (Innosuisse, Horizon 2020, international trusts and foundations).

#### Fit for the future

With the focus this year on "Shaping change", the Swiss Biotech Report 2019 – which is published today – tells the story of this success and uses comprehensive figures to substantiate its claims. The report thus provides proof that the Swiss biotech industry is optimally placed to meet global challenges. An outstanding example of the industry's promising future is the flotation of Polyphor in spring 2018. Having raised around CHF 155 million, this was the largest biotech IPO in Switzerland in over 10 years, and one of the three largest in Europe in the last three years.

#### Awards for outstanding achievements

The secret to the Swiss biotech industry's success lies not in individual leading-edge companies, but in its diversity. Each year, the Swiss Biotech Association presents companies with the "Swiss Biotech Success Stories Awards" in recognition of outstanding achievements. Biogen, Okairos, Roche Glycart, Selexis and Vifor Fresenius Medical Care Renal Pharma received the award at this year's Swiss Biotech Day after being nominated in 2018.

The companies nominated for the coming 2019/2020 period were also announced. For the first time, the nominees include an individual: Prof. Werner Arber, who was awarded the 1978 Nobel Prize in Physiology or Medicine. With his groundbreaking research in the field of molecular genetics, he was instrumental in the development of biotechnology in many ways over several decades. Furthermore, three foundations have been nominated that have been supporting biotech startups with great success for more than 10 years, thereby making a significant contribution to the growth of the industry: Venture Foundation, Venturelab and Venture Kick. Three outstanding and commercially successful biotech companies additionally made it onto the independent jury's list: Actelion, Debiopharm and Helsinn. Actelion, a Janssen pharmaceutical company of Johnson & Johnson, is an industry leader in pulmonary hypertension. Debiopharm, known for oncological therapies and antibiotics, has developed a business model whereby promising product candidates are optimized, tested in clinical development and finally licensed to pharmaceutical partners. Helsinn has a broad portfolio of marketed cancer care products and a deep development pipeline. It has built significant R&D and manufacturing capacities and is an im-portant employer in Ticino.

The Swiss Biotech Association will be working closely with these laureates over the coming 12 months to highlight the diversity and innovative strength of the Swiss biotech industry based on these successes.

### Winners of the Swiss Biotech Success Stories Awards 2018/19 (in alphabetical order)

**Biogen** is a biotech pioneer and is being recognized for the many Swiss elements in its success story. Founded in Switzerland, Biogen is now one of the world's leading biotech companies with over 7,000 employees. **Glycart** (now Roche Glycart) is a pioneer in antibody engineering for cancer immunotherapy. The first drug to be based on this technology was approved in 2013 for the treatment of chronic lymphocytic leukemia.

*Okairos* (now GlaxoSmithKline) has developed innovative vaccines based on T cells for the treatment of major infectious diseases like malaria, hepatitis C, HIV and Ebola. GSK acquired the company in 2013 for EUR 250 million.

*Selexis* has been at the forefront of the development of protein expression for more than a decade and is setting new standards in bioproduction. Selexis's cutting-edge technology is used by over 100 partners worldwide.

*Vifor Fresenius Medical Care Renal Pharma* is a transformational joint venture between Vifor Pharma and Fresenius: a partnership that established a leading global company offering therapies for the treatment of kidney diseases.

#### **Further information**

The Swiss Biotech Report 2019 sheds light on the most important trends, innovation factors and sources of innovation, and summarizes topics and facts on the development of the Swiss biotech industry. The report is available in digital format. You can find out more about Swiss Biotech Success Stories on the Swiss Biotech website.

#### Media contact:

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# SWISS

## About the Swiss Biotech Association

The Swiss Biotech Association is a nonprofit, member-driven organization representing the interests of the Swiss biotech industry. Swiss biotech companies are leading the way in developing and commercializing innovative medicines, diagnostics, healthcare treatments, services and enabling technologies.

Our core objective is to ensure that the value generated by the Swiss biotech industry continues to grow and that the industry contributes to the well-being of the socio-economic ecosystem thereby enabling Switzerland to be a key player at the forefront of bioscience innovation.

Founded in 1998, the Swiss Biotech Association represents the interests of the Swiss biotech industry. To strengthen and promote the Swiss biotech industry, the Swiss Biotech Association collaborates with numerous partners and life science clusters globally under the brand Swiss Biotech<sup>TM</sup>.