

# 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

## European Union Provides Support to Bring an End to Cyanide Poisoning

**CyanoGuard enters the exclusive list of innovative SMEs selected for funding within Horizon 2020, the “biggest EU Research and Innovation Programme ever.” The company was selected for funding under Phase 1 of the SME Instrument, which finances feasibility studies for potentially disruptive new products.**

“This award is a game changer for our company” said Benedikt Kirchgässler, CyanoGuard’s founder and Managing Director. “To be recognised by the European Union as an innovative player in our continent’s food and water safety is a huge achievement for us, especially since we are a very young company,” he added. “It is an honour to be part of the small list of Swiss companies that have received funding from this instrument. We are coming a step closer to our vision of a world where fast and simple pollutant detection is available to everyone,” he said.

The funds will be used to study how CyanoGuard’s CyanoKit® tackles societal challenges related to climate change, environment, resource efficiency and raw materials, with close attention to food and water safety. In 2015, less than 10% of all

the proposals submitted to the European Commission under Phase 1 received funding.

Last year, CyanoGuard’s innovative technology won the second prize during the Royal Chemical Society’s Emerging Technologies Competition in London and an interest free loan from the Volkswirtschaft-Stiftung. The company recently closed its seed funding round and is a 2017 W.A. De Vigier Nominee.

CyanoGuard AG is a chemical technology company based in Zurich, Switzerland. Founded in August 2016 as a spinoff from the University of Zurich, the company develops new testing methods to improve food and water safety, environmental monitoring and emergency healthcare globally. CyanoGuard’s first commercial product, CyanoKit®, enables everyone to detect cyanide in any setting at any time. Following successful partnerships with early adopters from the mining, electroplating and chemical industries, CyanoKit® will be formally launched during the fourth quarter of 2017.

### CyanoGuard AG

CyanoGuard AG is a young chemical technology company with an innovative tech-

nology that allows for naked-eye detection of toxic substances in water, food extracts and blood samples.

Part of our team met while conducting research in the field of cyanide detection at the University of Zurich. They soon realised the need for simple and safe cyanide tests in the chemical, food and health care industries. The idea grew rapidly to a fully functional test kit.

Our first product, CyanoKit®, allows anyone to test liquid samples using a sensor that changes colour upon the presence of cyanide. Our method is rapid, simple and eliminates the use of hazardous substances. Equipped with the latest research, and with over six years of close collaboration with leading industry partners, CyanoGuard is committed to making cyanide visible. Anytime. Anywhere.

### Contact

CyanoGuard AG  
CH-8001 Zurich  
www.cyanoguard.ch



## EuCheMS Policy Report

June–September 2017

### EuCheMS-ACS Workshop – Preparing for Employment in a Global Workforce

The workshop Preparing for Employment in a Global Workforce, co-organized by EuCheMS and American Chemical Society (ACS), took place on 20 August during the 254<sup>th</sup> ACS National Meeting & Exposition in Washington, DC. In this discussion aimed at undergraduate and graduate students, postdoctoral researchers and their professors, the workshop explored ways in which students can be better prepared for employment in the global market. Careers opportunities and trends were discussed from the point of view of experts from government, industry and academia with a particular emphasis on trends in the United States and Europe. ACS and EuCheMS shared results of employment sur-

veys for chemists to help better understand the training needs of chemists worldwide.

Source: [euchems.eu](http://euchems.eu)

### EuCheMS Publishes Conclusions from Glyphosate Debate

The conclusions of the workshop Glyphosate: Harmless Tool or Sneaky Poison? are now available online. Among other, the conclusions call for more research regarding maximum daily intake of glyphosate, to develop standard methods for reliable measurements, or to increase transparency through the funding of dossiers submitted to ECHA/EFSA. The conclusions and other materials from this event can be found online at [euchems.eu/?p=8910](http://euchems.eu/?p=8910). This workshop was co-organised by MEP Pavel Poc, EuCheMS and the ECTN earlier this year at the European Parliament.

Source: [euchems.eu/glyphosate-workshop-conclusions](http://euchems.eu/glyphosate-workshop-conclusions)

### EuCheMS Provides Feedback on Acrylamide

EuCheMS has recently submitted its feedback on the European Commission’s draft Regulation on Establishing Mitigation Measures and Benchmark Levels for the Reduction of the Presence of Acrylamide in Food. According to the European Food Safety Authority, this chemical, that naturally forms in starchy food products during every-day high-temperature cooking, potentially increases the risk of developing cancer for consumers in all age groups. Source: [euchems.eu](http://euchems.eu)

### EuCheMS Solar-Driven Chemistry Meeting

In the follow-up of the publication of the white paper Solar-Driven Chemistry, EuCheMS is currently organising a meeting taking place on 16 October in Brussels. During this meeting, EuCheMS and sev-

eral European funding agencies will look into the possibilities opened by this white paper with the intent to discuss and coordinate efforts in order to promote Solar-Driven Chemistry at the European Level. This paper aims to show that it is possible, and even necessary, to drive chemical reactions by the energy from the sun in order to guarantee the welfare of future generations. Source: *euchems.eu*

### Horizon 2020 Evaluations

On 29 May 2017, the Commission published the interim evaluation of Horizon 2020, required by Article 32 of the regulation establishing Horizon 2020. The interim evaluation aims to contribute to improving the implementation of Horizon 2020 in its Work Programme 2018–2020, to provide the evidence-base for the report of the H2020 High Level Group on maximizing the impact of EU Research and Innovation programmes and to inform the design of the post H2020 Framework Programme. EuCheMS answer to the public consultation which preceded this report is available here. Source: *ec.europa.eu*

### European Parliament Defends more Funding for Post H2020

In a non-legislative resolution, Members of the European Parliament (MEPs) presented their assessment of the Horizon 2020 programme in which they state that H2020 must be primarily grant-based, that no more cuts should be made to the programme and that ‘excellence’ should remain the essential evaluation criterion while ‘impact’ should include economic and social effects. The resolution also included some recommendations for 9<sup>th</sup> Framework Programme for Research and Innovation (FP9). Recommendations include an increased overall budget of EUR 120 billion for FP9; the reintroduction of the two stage different programs with two different budgets; and priority to funding for climate change research. Source: *europarl.europa.eu*

### New Action Plan on Antimicrobial Resistance

The European Commission has presented on 29 June a new action plan to tackle antimicrobial resistance (AMR). The action plan is underpinned by a “one health” approach that addresses resistance in both humans and animals. Overall, the action plan contains more 75 actions built on three main pillars: 1) Making the EU a best-practice region; 2) Boosting research, development and innovation; and 3): Shaping the global agenda. More concretely, the Commission will, for example, support the research into the development of new antimicrobials and alternative products; support the establishment of a European-wide sustainable clinical research network; continue

to support research into the development of new effective preventive vaccines; and support the establishment of a virtual research institute. The Commission has already adopted the first deliverable of the plan, EU Guidelines on the prudent use of antimicrobials in human health. AMR is a growing threat that is responsible for 25,000 deaths and a loss of €1.5 billion in the EU every year. EuCheMS has provided input on this topic at a STOA event organised (by STOA, EuCheMS and EFMC) last year at the European Parliament. Source: *europa.eu*

### Priorities for the Estonian Presidency of the Council

Estonia is holding the Presidency of the Council of the European Union during the second semester of 2017. Under the motto “unity through balance”, the Estonian Programme prioritises, among other, the implementation of the Paris Agreement against climate change, the negotiations of the Waste Package, the adoption of Council conclusions on eco-innovation, or the amendment of the Carcinogens and Mutagens Directive. The Presidency will also focus on antimicrobial resistance (AMR) by fostering an expert-level discussion on how to assess AMR action plans. In the field of research, the programme states that “excellent research is an investment in the future” and thus Estonia intends to initiate a discussion on how to simplify the research and innovation partnering instruments, funded from the Framework Programme, and to support the participation of newcomers. Source: *eu2017.ee*

### Member States Approve Scientific Criteria to Identify Endocrine Disruptors

In July, Member States representatives voted in favour of the European Commission’s proposal on scientific criteria to identify endocrine disruptors in the field of plant protection products. The adopted criteria will provide a stepping stone for further actions to protect health and the environment by enabling the Commission to start working on a new strategy to minimise exposure of EU citizens to endocrine disruptors, beyond pesticides and biocides. The strategy will aim to cover for example toys, cosmetics and food packaging. In parallel, a substantive new research on endocrine disruptors with an important budget of approximately 50 million euro will be allocated in 2018 to around 10 projects in the next Horizon 2020 work programme. Source: *europa.eu*

### American Chemical Society on the USA Withdrawal from the Paris Climate Agreement

The American Chemical Society (ACS) has recently expressed its disappointment

regarding the plans to withdraw the United States of America from the Paris Climate Agreement, and the Society asks that this and future administrations reconsider this decision. The agreement, signed by 197 countries in 2015 and ratified by 147, is needed to reduce emissions of greenhouse gases and mitigate and adapt to climate change. According to ACS Executive Director and CEO Thomas Connelly Jr., “Climate change represents a real and current threat to our economy, health and welfare”. Source: *acs.org*

### European Innovation Scoreboard 2017

The European Commission has recently released the 2017 European Innovation Scoreboard (EIS), a tool providing a comparative assessment of research and innovation performance and the relative strengths and weaknesses of national research and innovation systems. Overall, innovation performance has improved in 15 countries, though large differences exist between these Member States. Sweden remains the innovation leader while Lithuania, Malta, the Netherlands, Austria and UK are the fastest growing innovators. In a global perspective, the EU is catching up with Canada and the US, but South Korea and Japan are pulling ahead. China shows the fastest progress among international competitors. Source: *europa.eu*

### Modernisation of Higher Education in Europe: Academic Staff – 2017

Eurydice has just released its latest publication “Modernisation of Higher Education in Europe: Academic Staff – 2017”. This report explores the current realities for academic staff within the changing higher education landscape in Europe. It focuses on the qualification requirements for academic staff, the recruitment process, employment and working conditions in academia, the impact of external quality assurance, and top-level strategies for internationalisation. It also includes national diagrams showing key characteristics of academic staff categories. The report is based mainly on qualitative data gathered by the Eurydice Network, covering higher education systems in 35 countries. Source: *eacea.ec.europa.eu*

### Contact

EuCheMS – European Association for Chemical and Molecular Sciences  
1050 Brussels – Belgium  
secretariat@euchems.eu  
www.euchems.eu

## Neue Produkte von Metrohm

Quelle: metrohm.ch

### 917 Coulometer: platzsparendes Gerät für geringe Wasserkonzentrationen

#### Karl-Fischer Ti-Touch: Kompakte Titratoren zur Wasserbestimmung nach Karl Fischer

Das praktische und einfach zu bedienende kompakte System ist mit vielen Merkmalen für ein effizienteres Arbeiten ausgestattet: berührungssensitiver Farbbildschirm, Schnellauswahl bevorzugter Methoden, Icons, die den Gerätezustand anzeigen, und vieles mehr.

Der KF Ti-Touch Titrator ist als volumetrisches System zur Wassergehaltsbestimmung oberhalb 0,1% und als coulometrisches System zur Bestimmung eines geringeren Wassergehalts bis zu 0,001% erhältlich.

#### Highlights

- Stand-alone-Titratoren mit allen Komponenten bereits integriert
- Präzise und sichere Handhabung von KF-Reagenzien dank Dosino-Technologie und integrierter Pumpe
- KF-Icons: auf einen Blick wissen, was der Titrator gerade macht
- Erhältlich in 2 Varianten die jegliche Wassergehaltsbestimmung abdecken.
- FDA-Konformität: Alle KF Ti-Touch Modelle erfüllen die Forderungen der CFR 21 Part 11.



#### OMNIS – die neue Titrierplattform: schneller, sicherer, einfacher.

OMNIS ist die modulare Analysenplattform, die mehr bietet: mehr Sicherheit, mehr Komfort, mehr Leistung. Aber auch mehr Zeitersparnis – etwa durch einen optimierten Titrationsalgorithmus, der dafür sorgt, dass die Ergebnisse schneller vorliegen. Lernen Sie die Vorteile der OMNIS Analysenplattform Feature für Feature kennen – angefangen beim OMNIS Basic Titrator!

#### Features

- Das Basismodul der OMNIS Titrierplattform
- Platz für 2 Messeingänge (digital und analog)

- Kann bei Bedarf um bis zu 4 zusätzliche Büretten und 8 Messeingänge erweitert werden
- Modulares Firmwaredesign – Titrations- und Messmodi können jederzeit ergänzt werden
- LEDs signalisieren Messbereitschaft

#### Bis zu 175 Proben automatisch analysieren: der OMNIS Sample Robot

Hoher Kostendruck? Rüsten Sie Ihren OMNIS Basic Titrator für den manuellen Betrieb mit einem OMNIS Sample Robot auf und OMNIS arbeitet Ihre Proben automatisch ab. Die Kapazität ist modular skalierbar: vom OMNIS Sample Robot S (bis zu 50 Proben) über das Modell M (bis zu 125 Proben) bis zum OMNIS Sample Robot L, der auf seinen 7 Racks Platz für bis 175 Proben bietet – genug Kapazität, um auch ganz große Probenserien vollautomatisch zu analysieren.



#### Mira M-3 handlicher Raman Analyser: Sicher, Schnell, Zuverlässig

Metrohm Instant Raman Analyzer (MIRA) sind robuste und zuverlässige portable Raman Spektrometer für die Identifikation und Verifikation von Materialien. Diese Geräte kombinieren einfache Bedienung mit einem Maximum an Sicherheit und liefern Ergebnisse innerhalb von Sekunden. Durch den Einsatz des einzigartigen Orbital Raster Scan (ORS) Samplingsystems erzielen Mira Systeme hochzuverlässige Ergebnisse und geben Ihnen damit mehr Vertrauen in Ihre Messergebnisse. Typischer Anwendungsbereich des Mira M-3 ist die Rohstoffkontrolle im Wareneingang von Pharma und Chemie. Unsere Software ist compliant mit FDA 21 CFR Part 11.

Mira M-3 auf einen Blick:

- Echter Einhand-Betrieb: kleine und leichte batteriebetriebene Raman Spektrometer
- Orbital Raster Scan (ORS) Technologie: genaue, reproduzierbare und zuverlässige Ergebnisse, auch bei inhomogenen Proben.
- Schnell und praktisch: Point-and-shoot oder Vial-Betrieb für kontaktlose Messung und Ergebnisse innerhalb von Sekunden

- zerstörungsfrei und vielseitig: Mehrere Probennahme Möglichkeiten für alle Arten von Analysen
- Robust und stabil: Widerstandsfähiges Aluminiumgehäuse (IP67)



#### 202X Serie: Wirtschaftliche, kompakte Prozessanalytoren für die Online-Abwasseranalyse

Unsere Analyser aus der 202X Serie sind erhältlich in zwei Grundausführungen. Einerseits ist der 2026 Titrolyzer ausgelegt für potentiometrische Titration, Messungen mit ionenselektiven Elektroden sowie automatisierte pH-Messungen. Andererseits werden mit dem 2029 Process Photometer alle photometrischen Anwendungen abgedeckt. Die 202X Serie sind kostengünstige und dedizierte Ein-Parameter Analysensysteme zur Überwachung kritischer Prozessparameter und Abwasserströme – der ideale Einstieg in die Welt der Prozessanalytik von Metrohm.

#### Hauptmerkmale

- 1 Messparameter, max. 2 Probeströme
- Gemacht für schwierigste Umgebungen: Kompakt und robuster Prozessanalytator (Gehäuse: IP 66 zertifiziert)
- Einfache Bedienung und Programmierung über 7" Touchscreen
- Verwendung von Hochpräzisionsbüretten
- Prozesskommunikation: Analog, digital sowie Modbus TCP/IP für den Fernzugriff



#### Kontakt

Metrohm Schweiz AG  
Bleiche West  
4800 Zofingen  
+41 62 745 28 28  
info@metrohm.ch

 **Metrohm**  
Schweiz AG

# CHIMIA 2018

PREVIEW TO ISSUES 2018, ADVERTISEMENT OPTIONS,  
COMPANY REPORTS, CORPORATE MEMBERSHIP

Interested in a collaboration with CHIMIA? Please contact  
Swiss Chemical Society, [info@scg.ch](mailto:info@scg.ch), +41 31 306 92 92

## CHIMIA, International Journal for Chemistry and Membership Journal of the SCS

CHIMIA, a scientific journal for chemistry in the broadest sense covers the interests of a wide and diverse readership. Contributions from all fields of chemistry and related areas are considered for publication in the form of Review Articles and Notes. A characteristic feature of CHIMIA are the thematic issues, each devoted to an area of great current significance, produced by a guest editor, an acknowledged expert in the field.

CHIMIA is published 10 times a year and is listed in the most important databases: Current Contents/Physical, Chemical and Earth Sciences, Chemical Abstracts, Science Citation Index, Research Alert, Scisearch, Index Chemicus, Chemistry Citation Index, Current Chemical Reactions, Reaction Citation Index, and Biological Abstracts.

### Editorial Program 2018

Issue	Topic, Guest Editor
Issue 1-2	Chemistry Education
28.02.18	A. Togni, ETH Zurich
Issue 3	Quality Aspects in Industrial Chemistry
28.03.18	X. Beyrich-Graf, BASF
Issue 4	Laureates Junior Prizes FM17
25.04.18	H.P. Lüthi, SCS Foundation
Issue 5	New Chemistry Faculty
30.05.18	P. Kündig, Univ. of Geneva
Issue 6	Chirality
28.06.18	J. Stohner, ZHAW and ETHZ
Issue 7-8	SCS Major Awards / SCS Fall Meeting
22.08.18	A. De Mesmaeker, Syngenta
Issue 9	Organometallics and Catalysis
26.09.18	C. Mazet, Univ. of Geneva
Issue 10	Food analysis: Meat products
31.10.18	S. Bieri, Canton of Vaud
Issue 11	Bioorthogonal Chemistry
28.11.18	N. Winssinger, Univ. of Geneva
Issue 12	Japan-Switzerland, Organic chemistry
19.12.18	M. Murakami, Univ. of Kyoto

### Editor-in-Chief 2018

Prof. Emer. E. Peter Kündig, University of Geneva, [peter.kundig@unige.ch](mailto:peter.kundig@unige.ch)

### Advertising in CHIMIA

Regular ad rates for CHIMIA 2018

Ad size	Price CHF (excl. VAT)	
	s/w	color
1/1 page	2'150	3'740
1/2 page	1'180	2'070
1/4 page	650	1'050
1/8 page	360	560
Cover		3'800
Cover back side		3'890
Back cover		3'990

### Job Advertisements:

20% discount on regular prices.

### Packages:

30% discount on 2<sup>nd</sup> ad, 50% discount on all additional ads.

All ads have to be of the same size and will be published in the same volume (calendar year).

### Technical Data:

Frequency	10 issues per year, incl. two double issues
Print run	3'300
Print	sheet fed offset printing
Format	A4, 210 × 297 mm
Deadlines	5 weeks before publication date

### Company Reports

Would you like to present your latest products, processes or methods to a broad scientific community? Company Reports in CHIMIA offers you easy access to decision makers from academia and industry.

Company Reports focus on scientific innovation in any field of chemistry and biotechnology. They support your marketing efforts in an efficient way and provide more scientific background information than simple ads.

### Company Report Topics:

- Analytical measurement instruments
- Laboratory installations
- Laboratory apparatus
- New chemical compounds and intermediates

### Price:

Company Report per page CHF 1'600  
Reduced rates for SCS Members

### SCS Institutional Membership

SCS not only offers membership to individuals but also collaborates with companies and partner societies and provides an attractive package of offers.

An institutional membership costs CHF 800 per year (+CHF 100 for an additional DIAC membership) and includes the following services:

### Complementary services:

- CHIMIA subscription incl. e-access for one site via IP-range (regular prize CHF 520);
- 1 free company report in CHIMIA (1 page, regular price CHF 1'600);
- Listing as SCS member on the SCS website;
- Listing as SCS member in CHIMIA, November issue;

### Reduced rates for institutional members:

- 50% discount on secondary subscriptions for multi-site companies. This includes electronic access;
- 50% discount on 2<sup>nd</sup> and 3<sup>rd</sup> company reports in CHIMIA (one report is free of charge).
- 1/1 page for CHF 800 (regular price CHF 1'600).
- 1/2 page for CHF 400;
- 30% discount on 1<sup>st</sup> ad (any size);
- 50% discount for job ads;
- Advertisement packages for CHIMIA (all same size): 30% on 1<sup>st</sup> ad, 50% on 2<sup>nd</sup> and 3<sup>rd</sup> ad;
- Pre-booking possibilities as exhibitor at SCS events;

Register as a corporate member on:  
<http://scg.ch/membership/>  
or write an email to [info@scg.ch](mailto:info@scg.ch)

### Contact address for subscriptions, ads and company reports

Swiss Chemical Society  
Haus der Akademien  
Laupenstrasse 7, P.O. Box  
3001 Bern, Switzerland  
+41 31 306 92 92  
[info@scg.ch](mailto:info@scg.ch)

# CHIMIA