



## EDITORIAL



### RSC chief executive, Robert Parker looks back on the 7<sup>th</sup> EuChemS Chemistry Congress

We are very proud to have played host to so many members of our international chemistry community in the UK this summer and there are some impressive numbers from our packed programme. We welcomed more than 1,500 delegates from 60 countries to Liverpool – a city with a history, present and future, rich in chemistry. The five-day programme followed a theme of “Molecular frontiers and global challenges” and included eight plenary lectures, more than 450 talks across nine parallel sessions, as well as networking opportunities and poster sessions. Memorably, the social programme also included hundreds of chemists dancing to the music of Liverpool’s most famous exports, with an appearance from the excellent Bootleg Beatles!

When EuChemS President, Professor Pilar Goya Laza, welcomed delegates to the congress, she rightly thanked the organising committees, chaired by Bengt Norden and Tom Brown. Pilar outlined the importance of science making connections across borders, saying: “Through EuChemS, we will continue to bring together your voice, and the voices from over thirty different countries into one common language, and to communicate our shared belief in chemistry, in science, in Europe.”

The congress also included the presentation of the EuChemS European Chemistry Gold Medal to Nobel laureate Professor Ben Feringa. Ben was one of our plenary speakers in Liverpool, as well as in Seville in 2016, shortly before receiving his Nobel Prize. This year, Frances Arnold was plenary speaker in Liverpool and shortly after received the Nobel Prize, just the fifth woman to receive the prize...

Read the full editorial online:

<https://www.euchems.eu/newsletters/chemistry-in-europe-2018-4/>

*Robert Parker  
CEO, Royal Society of Chemistry*

## FOCUS

### Horizon Europe – negotiations in full swing

Negotiations surrounding the future EU research framework programme, Horizon Europe, are in full swing. In August, EuChemS published a Position Paper emphasising the need for excellence to remain the core pillar of the future programme.

EuChemS also called for a more convincing and ambitious budget than currently proposed by the European Commission, as well as budget increases for the European Research Council and the Marie Skłodowska-Curie Actions – both of which have over the years demonstrated highly successful results, but which are unable to fully support the vast amount of excellent proposals submitted. Finally, EuChemS has emphasised that science knows no borders, and that countries that have in the past participated in EU framework programmes, should be able to do so in Horizon Europe. Different visions are appearing in negotiations however – especially over whether the principle of excellence should make way to geographical distribution of funds in order to address the research and innovation divide in Europe. Shifting Horizon Europe towards a cohesion-like funding programme risks damaging the quality of European science in the long term and may not fix the divide.

## POLICY

### Open Education is on its way

Obtaining a quality education is the foundation to improving people's lives and to achieving sustainable development. While there are many world-wide methodologies in place to assess the quality of traditionally formal education systems, this is not yet the case for open education.

Open education is education without academic admission requirements and is typically offered online. Open education broadens access to the learning and training traditionally offered through formal education systems.

There are a number of concerns regarding the implementation of open education systems. These include a potential lack of administrative oversight and quality assurance systems for educators/materials in some programmes, a lack of equal access to technologies required for students' full participation in

online education initiatives, and questions regarding the use of copyrighted materials.

Ultimately, open education calls for multi-stakeholder action.

In Europe, policy approaches to open education vary between countries, while at the European level, the European Commission, ministries, regional authorities, associations, educational institutions and NGOs are key stakeholders.

At the 7<sup>th</sup> EuChemS Chemistry Congress in Liverpool in August this year, a panel discussion "Education and Empowering the Future Global Workforce" was jointly organised by the European Chemical Society and the American Chemical Society on the role of (open) education, global collaboration and the current job market...

You can read the full article online:

<https://bit.ly/2RA2O63>

*Nineta Hrastelj,  
General Secretary, EuChemS*

## RESEARCH

### EYCN at the 7<sup>th</sup> EuChemS Chemistry Congress

I saw Professor Ben Feringa sitting at the back of the room. I had to get out and double check I was in the right room. It clearly said 'European Young Chemists' Network' – it was the right place. If a Nobel laureate had decided to come and listen, did that mean that the session had been a success? I personally believe so. But not only because of him. Throughout the entire week, we saw many very prestigious people come and go in the EYCN sessions: editors from the most respected chemistry journals, leading senior researchers, top-level representatives from several chemical societies... and even the world-famous Twitter star Prof. Dr. Chicken!

How did we achieve it?

You can read the full article online:

<https://bit.ly/2zslFbS>

*Fernando Gomollon Bel  
Past Chair, EYCN*

### Young Chemists Crossing Borders (YCCB) – from Boston to Liverpool

Chemists and chemical societies strive for the exchange of ideas and collaborate on projects across borders. The world we live in is the most connected it has ever been. Science, but also trade and politics, stand in a globalised network of an ever-growing complex world. As a logical consequence of indistinct borders, the young generation needs to make the best from the opportunities which this development offers. International collaboration is a chance, but also a task in the future work environment. Preparing young chemists for a globalised world and revealing to them the opportunities are some of the many goals of the Young Chemists Crossing Borders (YCCB) exchange programme...

You can read the full article online:

<https://bit.ly/2zslFbS>

*Torsten John  
Secretary, EYCN*

## ChemRxiv: Year One and Beyond

This time last year, ChemRxiv was launched with the goal to become the world's premier preprint server focused on the chemical sciences, and what a year it has been! This spring, the Royal Society of Chemistry (RSC), and the German Chemical Society (Gesellschaft Deutscher Chemiker, GDCh) joined the American Chemical Society (ACS) as co-owners. This three-society group provides experience and expertise in meeting authors' needs and is well-positioned to provide strong governance for ChemRxiv in addition to promoting the chemical sciences around the globe. ChemRxiv has attracted more than 450 different submitting authors (who posted over 500 original preprints and more than 200 revisions) and readers from 40 different countries..

You can read the full article online: <https://bit.ly/2zslFbS>

*ChemRxiv Governing Board*

*(Rich Kidd; Wolfram Koch; James Milne; Irina Sens; Sarah Tegen; Emma Wilson; et al.)*

### MEMBERS' PERSPECTIVES

## 150<sup>th</sup> Anniversary of the D.I. Mendeleev Russian Chemical Society

*"It is the function of science to discover the existence of a general reign of order in nature and to find the causes governing this order. And this refers in equal measure to the relation of man – social and political – and the entire universe as a whole." - D.I. Mendeleev*

In 2018, the Mendeleev Russian Chemical Society (MRCS) celebrates its 150<sup>th</sup> Anniversary. The idea of creating a union of Russian chemists was developed following the Karlsruhe Congress which was the first international meeting of chemists in September 1860. Seven Russian chemists, including D.I. Mendeleev and A.P. Borodin were present.

During the first Russian congress of natural scientists and doctors in 1867, the statement: «The chemical section declared a unanimous desire to join the Chemical Society to communicate the already established forces of Russian chemists» was made...

You can read the full article online: <https://bit.ly/2F5NCFQ>

*Yulia Gorbunova*

*Corresponding member of RAS and Ilya V. Vorotyntsev*

### MEET...



Gianluca M. Farinola elected new Chair of the EuChemS Organic Chemistry Division of EuChemS. He is Professor of Organic Chemistry at the Università degli Studi di Bari "Aldo Moro".



Venko Beschkov is the President of the Union of Chemists in Bulgaria. He is Emeritus Professor at the Bulgarian Academy of Sciences, Institute of Chemical Engineering.

NOTES

## 90 Elements that make up everything



It is an astonishing thought that *everything* we see around us is made up of different combinations of just 90 building blocks – the 90 naturally occurring chemical elements. Since 2019 will be the 150<sup>th</sup> anniversary of Mendeleev's publication, UNESCO has proclaimed 2019 as *The International Year of the Periodic Table of Chemical Elements* (IYPT).

You can read the full article online:  
<https://bit.ly/2yPtsB6>

David Cole-Hamilton  
 Vice-President, EuChemS

## 2018 Nobel Prize in Chemistry

Very warm congratulations to Frances Arnold, George P Smith and Gregory Winter on being awarded the 2018 Nobel Prize in Chemistry for their discoveries in enzyme research – studies which are already impacting medicine and the role of antibodies in neutralising toxins, counteracting autoimmune diseases and treating metastatic cancer.

Professor Frances Arnold is the fifth woman to win the Chemistry Nobel Prize, and we were very glad to have her speak at the EuChemS Chemistry Congress 2018 in Liverpool. You can watch the recent interview with her here: <https://youtu.be/1645d8kcJLE>

You can read the full article online:  
<https://bit.ly/2yPtsB6>

## Launch of a MOOC on Good Chemistry

A course entitled "*Good Chemistry - Methodological, Ethical, and Social Dimensions*" has been conceptualised and realised by a EuChemS task force. The undertaken efforts are the response to a growing demand for educational material on matters of research ethics and science ethics.

You can read the full article online:  
<https://bit.ly/2yPtsB6>

Jan Mehlich  
 Project Leader EuChemS Online course on Ethics

## EuChemS Service and Lecture Award nominations open!

We are happy to announce that the call for nominations for the **EuChemS Lecture Award** and the **EuChemS Award for Service** are now open!

Lecture Award: Use the form [here to submit your nomination!](#) And make sure to read the [guidelines](#).  
 Deadline: 31 December 2018.

Award for Service: We invite all EuChemS member organisations, Professional Networks, and any individuals to submit their nominations now! Use [the online form here to submit your nomination](#).  
 Deadline: 31 December 2018.

You can read the full article online:  
<https://bit.ly/2yPtsB6>

## EuChemS General Assembly 2018

This year's EuChemS General Assembly, which took place on 25 – 26 August 2018 in Liverpool, UK, discussed many of the upcoming developments and activities to be carried out by EuChemS over the next year: in particular, preparations and ideas for projects and events in celebration of the 2019 International Year of the Periodic Table ([IYPT2019](#)); the launch of the EuChemS online course on Chemistry and Ethics; as well as updates on the upcoming 3rd European Employability Survey for Chemists.

More information available online: <https://bit.ly/2yPtsB6>



## CALENDAR

### Setting their Table: Women and the Periodic Table of Elements

Murcia, Spain

11 February 2019

Website: <https://bit.ly/2qtq1eP>

### EuChemS Executive Board Meeting

Lisbon, Portugal

18 – 19 February 2019

### 1<sup>st</sup> GHI World Congress on Food Safety and Security (GHI2019)

Leiden, The Netherlands

24 – 28 March 2019

Website: <https://bit.ly/2qv3SMY>

### 14<sup>th</sup> International Symposium on Macrocyclic and Supramolecular Chemistry (ISMCS2019)

Lecce, Italy

2 – 6 June 2019

Website: <https://bit.ly/2SMoaP5>

### EuChemS Executive Board Meeting

Brussels, Belgium

13 – 14 June 2019

### 17<sup>th</sup> International Conference on Chemistry and the Environment (ICCE2019)

Thessaloniki, Greece

16 – 20 June 2019

Website: <https://bit.ly/2P8xq1K>

### 6<sup>th</sup> International Conference on the Chemistry and Physics of the Transactinide Elements (TAN 19)

Wilhelmshaven, Germany

25 – 30 August 2019

Website: <https://bit.ly/2qtq72Q>

### GDCh – Wissenschaftsforum Chemie 2019 (WiFo 2019)

Aachen, Germany

15 – 19 September 2019

Website: <https://bit.ly/2OolcGk>

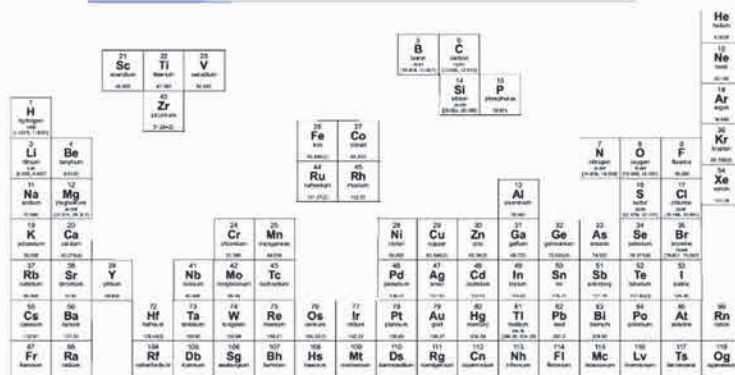
### EuChemS General Assembly 2019

Bucharest, Romania

3 – 4 October 2019

Website: <https://bit.ly/2On0v4s>

## FUNNY



## How the Periodic Table was actually made

Need a hint? Click on the link: <http://bit.ly/2ANjpy1>

## COLOPHON

**Chemistry in Europe (CiE)** is the EuChemS quarterly newsletter mainly intended for an audience of chemists. Its objective is to inform the community about research in Europe, to provide updates from EuChemS Member Organisations, and to investigate the latest policy-related developments.

### Editorial Board:

David Cole-Hamilton, Willem de Lange, Pilar Goya, Nineta Hrastelj (Chair), Torsten John, Marta Kucza, Alex Schiphorst (coordinator), Karin Schmitz, Emmanuel Sinagra, Cristina Todasca.

### Communication Advisors

Jon Edwards  
Adam Brownsell

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