#  <br> CHEMISTRY in <br> Eur 

${ }^{S}$ CIENCES
Newsletter for European Chemistry, published by EuCheMS

## EDITORIAL

## MEP Pavel Poc on Glyphosate



The debate on glyphosate reauthorisation in the European Union (EU) has recently culminated under the shade of the socalled Monsanto papers scandal. The European Parliament (EP) played an important role in the postponement of the authorisation in the beginning of 2016 and will probably have to act again regarding how the EU legislation on pesticide authorisation is executed by the agencies and the European Commission (EC).
Despite a clear position voiced in the EP Resolution from 13 April 2016 on renewal of the approval of the active substance glyphosate, there is still a lot of confusion about the EP's position about the reauthorisation of the world's best-selling herbicide.
EP urged EC to acknowledge a majority of two decisive political groups and to mirror the outcome of the vote in their proposal, but despite the EC's claims about respecting this, only a very limited part of the EP resolution was eventually reflected in the EC draft proposal. As a consequence, the Member States refused to back the Commission proposal with a qualified majority, effectively leaving the whole situation without a decision.

Let us look closer at the EP's Resolution adopted in 2016 to clarify some of the recent developments. The objection to the re-approval of glyphosate as adopted in the Committee for Environment, Public Health and Food Safety (ENVI) was modified into a 7-year re-approval in the plenary of the EP. The 7-year option got a majority of only sixteen votes and many MEPs wanted a stricter time frame. In addition, crucial restrictions were adopted leaving only few uses for re-approval. Parliament agreed on no approval of non-professional use; close to public areas; where integrated pest management systems are sufficient for weed control; and on limited pre-harvest applications (for weed control and to enhance crop ripening). This means, that the EP did not call for a complete rejection of the approval as adopted in the ENVI committee but for a realistic option with many restrictions. The EC previously stated that if the two political groups reached an agreement (and they did), the EC would respect it, but that was not the case. EP criticized the EC draft implementing act for failing to ensure a high level of protection of human and animal health and the environment. MEPs also called for an independent review of overall toxicity of glyphosate and asked the EC and the European Food Safety Authority (EFSA) to immediately disclose all scientific evidence for the positive classification of glyphosate. EP also wanted the EC to start testing and monitoring glyphosate residues in foods and drinks produced in the EU as well as in imported products. There was also criticism of the EC for accepting an incomplete dossier with regard to endocrine disruption and a call to provide reference to further evidence of adverse effects of glyphosate. The resolution as a whole was adopted by majority.
The addition of key specific restrictions, most of which were supported by a large majority, provided an excellent basis for further discussion with the Member States against the EC proposal. As a rapporteur of the resolution, I am strongly convinced that we achieved a good result that was however not reflected in the EC's actions. I think this was a missed opportunity to accommodate the different positions and to effectively address the problem of glyphosate re-authorisation before the situation is clear with concerns about its carcinogenicity and genotoxicity or potentially devastating effects on cellular metabolism due to suppression of CYP 450 enzymes.

FOCUS

## V(EuCheMS17) $=\pi \int_{259}^{279} 9\left(x^{2}\right) d x$

La Sapienza, Università di Roma, is the venue chosen by Società Chimica Italiana, a EuCheMS Member Society, i which will host the EuCheMS annual meeting this year. As is traditional in Roma when it comes to hosting European meetings, quite some strategic discussions and decisions are expected in this global city by the EuCheMS community. Amongst others, David ColeHamilton, EuCheMS President, will give an overview on EuCheMS growth during the past three years. His intervention will serve as an input into a discussion, chaired by Pilar Goya, who will preside over EuCheMS as of 1 January 2018, on the advancement of EuCheMS in the coming years. EuCheMS Member Societies, Professional Networks and Executive Board Members are invited to join this brainstorming session, which will be discussing questions on collaboration between Member Organisations and Professional Networks in organising conferences, on integrating policy activities into Professional Networks' agendas, on strategic discussion on EuCheMS Professional Networks and other issues.
For details and registration, please see http://www.euchems.eu/about-us/2017-general-assembly-rome-italy/.
I look forward to meeting you in Roma.



> Glyphosate: Harmless Tool or Sneaky Poison workshop conclusions now online at www.euchems.eu/? $p=8910$

## Can the Benefits of Using Agricultural Chemicals Outweigh the Risks?

Sadly, I was not able to attend the European Parliamentary Workshop on glyphosate organised by Pavel Poc, Member of the European Parliament, EuCheMS and ECTN on 10th May, 2017, but I have watched the video and was impressed by the very high level of scientific debate with most, but sadly not all, approaching the discussion with an open mind. It was appropriate that this debate focussed mainly on the science but it got me thinking about the whole issue of hazard/risk and risk versus benefit.
More generally, can it ever be justifiable to use a hazardous chemical? Of course, if the risk can be contained to an acceptably low level. Petrol (gasoline) is a very hazardous material because it forms highly explosive mixtures with air, which is why it works as a fuel. Yet, all of us are happy to drive around with many litres of it in the back of our cars. It is contained in such a way that the risk of an uncontrolled explosion is very slight, but it is not zero (...) You can read the entire article at https://wp.me/P7iPLy-LA

David Cole-Hamilton
EuCheMS President

## The Case of Glyphosate

The re-authorisation of a substance, herbicides, involvement of chemists, farmers, ghost-writers, courts, multinationals, NGOs, policy makers, and a lot of EU Legislation these are the unlikely
 ingredients of a policy file whose outcome is unpredictable. Given the particular complexity and importance of this topic, I will be providing a wide range of sources for several points of this article.

## The initial years

Glyphosate [N-(phosphonomethyl) glycine] was discovered by Dr. Henri Martin in 1950, a chemist working for a pharmaceutical (...) You can read the entire article at https://wp.me/P7iPLy-LA\#case

Bruno Vilela
EuCheMS Public Affairs Officer

## EuCheMS at the EC Circular Economy Mission to South Africa



As presented in the last issue of CiE , the Circular Economy (CE) is a priority for the EU, being a challenge and an opportunity and displaying great potential for the generation of jobs. In this context, led by the Directorate-General for Environment of the European Commission (DG Environment), the Circular Economy Mission to South Africa (CEMSA) took place from $2-5$ May this year, following previous CE missions to China and Chile. These actions intend to share EU strategies in CE with local companies and institutions, as well as to provide an overview of the achievements carried out in Europe and of the technologies developed by European companies and institutions. The mission statement of the DG-Environment can only be achieved with a global perspective and by incorporating stakeholders from other regions.
As for other CEMs, EuCheMS was invited to participate in the CEMSA, which was very relevant taking into account the key position of South Africa in different chemistry-related areas, e.g. mineral resources, synthetic fuels and the existence of a variety of initiatives to establish the bases of CE in SA.
The activities carried out during the CEMSA involved around 40 European participants, including the EC's Director-General for Environment, Mr. Daniel Calleja, and took place in parallel to the events of the World Economic Forum in Africa 2017. The initial activity in Johannesburg was the seminar on CE in the mining/metals value chain organized with the support of Eurometaux and the Chamber of Mines of SA, followed by a forum with SA business representatives, including members of the Chamber of Commerce and Industry, other business associations and industrial associations like Plastics and Chemical and Allied Industries, with the final participation of the EU ambassadorin SA and the Premier of the Gauteng region, Mr. David Mahkura. (...)
You can read the entire article at https://wp.me/P7iPLy-LB

## Future Members of the Chemical Community

For several years now, a general tendency of the students to choose careers in non-scientific fields is observed. Chemistry, like other STEM (Science, technology, engineering and mathematics) subjects, suffers from a lack of attractiveness in the eyes of the younger generation since it requires a lot of work in understanding its language and considerable effort to learn and apply its rules. In addition, in many cases, the public shows hostility against chemistry and chemical processes. Therefore, in many countries assuring the future generation of chemists generates some concerns.
Several programs supported by the EU and other governmental bodies are in operation at European level, aiming to attract the younger generation towards STEM professions. For instance, SCIENTIX is a project funded from the European Union's H2020 research and innovation programme which aims to promote and support a Europe-wide collaboration among STEM teachers, education researchers, policymakers. In the US, a STEM Education Coalition works aggressively to raise awareness in Congress, the Administration, and other organizations about the critical role that STEM education plays.
Many steps have been taken towards increasing the attractiveness of the science related professions among the younger generation but still much needs to be done. Consequently, in many member societies, there are constant efforts spent to offer the kids the chance to get in contact with science at early stages in an attractive way. For example: in Sweden Berta, a staffed dragon, visits kids and presents interesting chemical reactions. It's a lovely set of demonstrations, which aren't huge explosions or massive light shows but which are easily reproducible in the classroom and are colourful and unexpected with good basic science behind them. In Hungary, a world record was established raising public awareness, by performing the same experiment by a large number of people in the same time. Starting from Germany and now going across the EU, a project supported by BASF, called "Kid's Lab" invites primary school children to perform experiments with their own hands, in perfectly safe conditions, explaining the basic principles behind them and discussing important topics like the vitamin content of our food, or solving pollution problems etc. (...)
You can read the entire article at https://wp.me/P7iPLy-Ly

Cristina Todasca<br>Romanian Chemical Society

## WHO IS WHO



Alice Soldà, Chair of the European Young Chemists' Network.
Alice Soldà is a Postdoctoral Research Fellow at University of Bologna, Italy.


Torsten John, Secretary of the European Young Chemists' Network. Torsten John is a PhD Student at Leipzig University, Germany, and Monash University, Australia.


Kseniia Otvagina, Communications Team Leader of the European Young Chemists' Network.
Kseniia Otvagina is a PhD Student at Nizhny Novgorod State Technical University, Russia.


Jelena Lazić, Membership Team Leader of the European Young Chemists' Network. Jelena Lazić is a PhD student at the University of Belgrade, Serbia.


Victor Mougel, Networks Team Leader of the European Young Chemists' Network. Victor Mougel is a CNRS Researcher at the College de France, Paris, France.


Hanna Makowska, Science Team Leader of the European Young Chemists' Network. Hanna Makowska is a Master student at the Łódź University of Technology, Poland.


Fernando Gomollón-Bel, adviser of the European Young Chemists' Network. Fernando Gomollón-Bel is Science Communicator at the Institute of Chemical Research of Catalonia, Spain.

# EuCheMS Position Paper on Brexit <br> you can read the entire article at https://wp.me/P7iPLy-Lz 

David Cole-Hamilton EuCheMS President

Pilar Goya EuCheMS Vice-President

Liverpool Executive Board Meeting
you can read the entire article at https://wp.me/P7iPLy-Lz\#liverpool
David Cole-Hamilton EuCheMS President

## 2017 European Prize for Organometallic Chemistry <br> you can read the entire article at https://wp.me/P7iPLy-Lz

Jan Čermák
Chair of EuCheMS Division of Organometallic Chemistry
Chemistry Rediscovered
you can read the entre article at https://wp.me/P7iPLy-Lz\#rediscover
David Conceição Project Leader

Oana Fronoiu
EYCN Science Team Leader 2015-2017

## Giant Periodic Table

you can read the entire article at https://wp.me/P7iPLy-Lz\#giant

Pedro Lozano Rodriguez University of Murcia
http://on.fb.me/1B8Qa0n

FUNNY


A laboratory report by a chemistry pupil
This glass contains 50\% H2O(l); 39\% N2(g); 10.5\% O2(g); 0.44\% Ar(g); 0.66\% CO2(g) Do you spot any errors?

## CALENDAR

## EuroAnalysis 2017

28 August - 1 September 2017
Stockholm, Sweden
Website: http://euroanalysis2017.se/
11ICHC - 11th International Conference on the History of Chemistry
29 August - 2 September 2017
Trondheim, Norway
Website: http://www.ntnu.edu/11ichc
ISOC 2017 - International School of Organometallic Chemistry: Organometallic Chemistry: From Theory to Applications
2-6 September 2017
San Benedetto del Tronto, Italy
Website: http://d7.unicam.it/isoc/home
3rd EuGSC - 3rd EuCheMS Congress on Green and Sustainable Chemistry
3-6 September 2017
York, United Kingdom
Website: https://www.york.ac.uk/chemistry/research/green/events/3eugsd/

11EUCO-TCC - 11 European Conference on Theoretical and Computational Chemistry
4-7 September 2017
Barcelona, Spain
Website: http://www.11euco-tcc.org/

For the complete list of events please visit our events calendar at www.euchems.eu


## COLOPHON

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