

The Open Science Policy Platform

About a year ago, Carlos Moedas, the EU Research Commissioner, established a high-level expert group on Open Science, the Open Science Policy Platform (OSPP), a topic that is of increasing relevance to the Commission and which will have and already has had significant effects on the European science policy, in particular on Horizon 2020.

The OSPP consists of 25 members, representing the various stakeholders: universities, research organisations, academies/learned societies, funding organisations, citizen science organisations, publishers, open science platforms, and libraries. Together with Christophe Rossel, President of the European Physical Society, I represent the European learned societies. The OSPP's main objective is to advise the Commission on the further development and implementation of the open science policy, which Commissioner Moedas defined as one of his priorities.



Carlos Moedas (centre), and the OSPP, including Wolfram Koch (third from the right)

Since its inception the OSPP met three times. Whereas the first meeting was mainly introductory in character, the subsequent meetings focused on issues such as "Citizen Science", "European Open Science Cloud", and "Open Access Publishing", for which working groups were established. In all three meetings Commissioner Moedas was present for some time and addressed the group, showing his dedication and commitment to push the Open Science agenda forward. In particular the still widespread lack of compliance with the requirement that all research publications originating from Horizon 2020 funded projects need to be open access is a matter of concern. At the last meeting, which took place on March 20 in Berlin, the Commissioner explained that to achieve 100% compliance stronger measures, such as warnings and even sanctions, seem to be necessary. As an additional instrument to support the Open Access (OA) requirement the Commission is considering an Open Research Platform, akin to the platform established recently by the Wellcome Trust. The platform will offer Horizon 2020 researchers a place to publish their results after they successfully pass the peer review. This service will not be for free but will require an adequate article processing charge. The idea, however, received mixed responses, mostly because such low cost but also low reputation open access publishing outlets usually are not heavily used by the scientific community. At the meeting, also the working group on "OA Publishing" presented its report, which pointed to the differences between disciplines with regard to their acceptance and support of open access – one size does not fit all. The development of sustainable business models is also a key recommendation of the report, which also highlights the important role that learned societies play in this process. The next meeting of the OSPP is planned for October 2017 in Tallinn, Estonia.

Wolfram Koch

EuCheMS representative at the OSPP, Member of EuCheMS Executive Board

Recent use of chemical weapons



Brussels, 7 April 2017

The European Association for Chemical and Molecular Sciences, EuCheMS, condemns in the strongest possible terms the continuing use of chemical weapons in the Syrian conflict. It calls on the perpetrators to be tried for War Crimes at the earliest possible moment. The use of chemical weapons is a Crime against Humanity of the severest kind and no one who orders attacks using chemical weapons should be allowed to remain free. We further call on all parties in the Syrian conflict immediately to inform the Organisation for the Prohibition of Chemical Weapons (OPCW) of all known stockpiles of chemical weapons held by them or their opponents and to allow them to be removed and destroyed at the earliest possible opportunity.

EuCheMS Executive Board



Video, abstracts and presentations from this workshop are available online at <http://www.euchems.eu/?p=8910>

POLICY

Circular Economy (and why chemistry matters)

An astronaut, President Juncker, and a chemist walk into a bar, what do they have in common?

If your answer is “circular economy” (CE), which coincidentally is in the title of this article, then you are correct. Circular economy has been a rather omnipresent term in European debates since the launch of the first CE Package by the European Commission in 2014, but before going into the latest developments it is useful to go back the 1960s to better understand the concept of CE.

Understanding Circular Economy

The ideas behind CE were initiated by many and are difficult to trace back but one of its main founders was the economist Kenneth E Boulding with his 1966 essay *The Economics of the Coming Spaceship Earth*. In this essay Boulding defends an economic model where humans do not act with the mind-set of cowboys in the Wild West, using resources without any concerns as if they were infinite, but instead act like astronauts living in a spaceship with very limited resources. Contrary to the cowboy linear-economy model of buy, consume and dispose, in a “closed economy” (the term “circular economy” would only appear some years later), resources would be carefully used and waste would

be used as a valuable resource hence assuring the long-term sustainability of the surrounding finite environment. Ideally, this would translate into a zero-waste economy, or as the European Commission



states more pragmatically, in a CE “the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised”.

Wasting an Opportunity?

So what is the current situation regarding the production of waste in the European Union?

You can read the entire article at <http://bit.ly/2pZQgGS>

Bruno Vilela
 EuCheMS Public Affairs Officer

RESEARCH

20 years of Marie Skłodowska-Curie Actions



Launched in 1996, Marie Skłodowska-Curie Actions (MSCA) have become, after 20 years, an essential tool of the EU to strengthen research at a European level and support the researchers’ work through Europe.

You can read the entire article at <http://bit.ly/2rva46g>

Santiago V. Luis
 Chair of EuCheMS Division of Chemistry and the Environment

EYCN and COST Actions

The European Young Chemists’ Network (EYCN) moves forward thanks to its Board and four teams consisting of delegates (Science, Networks, Membership and Communications).

You can read the entire article at <http://bit.ly/2pXGJ40>

Camille Oger
 EYCN Secretary

Women in chemistry: time to move on

Since the age of alchemy, for years a secretive and persecuted activity, women have significantly contributed to chemical sciences. Prominent chemists revolutionized life with new discoveries and research, new findings that have had a huge impact in fields as diverse as medicine, physics, materials, environment and aeronautics. Marie Skłodowska-Curie, a double Nobel laureate, is the most famous woman in chemistry, but not the only one. There are many other female scientists who were also Nobel laureates such as Dorothy Crowfoot-Hodgkin for using X-ray to determine the structure of biomolecules; Irene Joliot-Curie for the discovery of artificial radioactivity and Ada Yonath for her pioneering work on the structure of the ribosome. Famous non-Laureate female researchers include Elisabeth Arden mother of cosmetics; Rosalind Franklin who discovered the structure of DNA; Stephanie Kwolek inventor of Kevlar;

You can read the entire article at <http://bit.ly/2rva46g>

Silvia Lacorte
 IDAEA-CSIC

Maria Teresa Galceran
 University of Barcelona

MEMBERS' PERSPECTIVES

GDCh celebrates 150 years of the German Chemical Society

In 2017 the Gesellschaft Deutscher Chemiker (GDCh, German Chemical Society) celebrates the 150th anniversary of the founding of its predecessor society.

The Deutsche Chemische Gesellschaft (DChG) was founded in Berlin in 1867 with August Wilhelm von Hofmann as its first president.

You can read the entire article at <http://bit.ly/2pZX1sy>

Karin J. Schmitz

GDCh, Head of Public Relations Department

RSC commitment to collaboration

On 29 March the UK government triggered Article 50 of the Treaty of Lisbon, formally beginning the negotiations for the UK leaving the EU by April 2019. It is a time of uncertainty for UK science – but what is certain is the commitment from the Royal Society of Chemistry (RSC) and UK chemists to European and international collaboration in science.

You can read the entire article at <http://bit.ly/2pZX1sy>

Jon Edwards

RSC, Corporate Communications Manager

Introducing EFMC

The European Federation for Medicinal Chemistry (EFMC) is an independent association founded in 1970 that represents 25 scientific organisations from 23 European countries (around 7,500 members). Its objective is to advance the science of medicinal chemistry by promoting cooperation and encouraging strong links between the national adhering organisations in order to deepen contacts and exchanges between medicinal chemists in Europe and around the World.

You can read the entire article at <http://bit.ly/2pWW5Gd>

Koen Augustyns

EFMC President

WHO IS WHO



Ernst Gruber, President of the Austrian Chemical Society.

Ernst Gruber is the Managing Director, Site and Operations Manager of Axalta Coating Systems Austria in Guntramsdorf.



Slavica Ražić, Chair of the Division of Analytical Chemistry.

Slavica Ražić is a professor at the University of Belgrade, Faculty of Pharmacy.



Peter Šimon, President of the Slovak Chemical Society.

Peter Šimon is a professor at the Slovak University of Technology, Faculty of Chemical and Food Technology.



Sonsoles Martín-Santamaria, Chair of the Division of Chemistry in Life Sciences.

Sonsoles Martín-Santamaria leads the Computational Chemical Biology at CSIC (Spanish Research Council).



Péter Szalay, Chair of the Division of

Computational and Theoretical Chemistry.

Péter Szalay is a professor at the Eötvös Loránd University.

NOTES

Frankfurt Executive Board meeting

During the EuCheMS Executive Board meeting, hosted by the GDCh in Frankfurt, there were many relevant topics on the table. You can read the entire article at <http://bit.ly/2pPeMzh>

David Cole-Hamilton
 EuCheMS President

European Chemist professional designation

The European Chemist Register (ECR) is maintained by EuCheMS in order to help chemists in Europe who are members of national chemical societies to demonstrate their (...) You can read the entire article at <http://bit.ly/2pPeMzh>

Pavel Drašar
 Member of EuCheMS Executive Board

Science Me!

Science Me! is an opportunity for researchers to present their science to a general audience in a playful, inventive and unconventional atmosphere (...)

you can read the entire article at <http://bit.ly/2pPj2Pr>

Didier Perret
 University of Geneva, Science Me Steering committee

CALENDAR

Glyphosate: Harmless Tool or Sneaky Poison?

10 May 2017
 Brussels, Belgium
 Website: <http://www.euchems.eu/>

TFA VIII – Trends in Food analysis VIII

24 May 2017
 Gent, Belgium
 Website: <https://www.kvcv.be/>

EuCheMS Executive Board Meeting

8 – 9 June 2017
 Liverpool, United Kingdom
 Website: <http://www.euchems.eu/>

Science Me! 2017

11 – 13 June 2017
 Hannover, Germany
 Website: <http://scienceme.unige.ch>

Inorganic Chemistry Days

12 – 14 June 2017
 Nynäshamn, Sweden
 Website: <http://www.oorgan.se/>

ICCE 2017 – 16th EuCheMS International Conference on Chemistry and the Environment

18 – 22 June 2017
 Oslo, Norway
 Website: <http://icce2017.org/>

ISOS 2017 – International Summer School on Organic Synthesis “A. Corbella”

18 – 22 June 2017
 Brescia, Italy
 Website: <http://www.corbellasummerschool.unimi.it/>

SPE2017 – XXII Meeting of the Portuguese Society of Electrochemistry

19 – 22 June 2017
 Ponta Delgada, Portugal
 Website: <http://www.spe2017.com/>

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

COLOPHON

Editorial Board

David Cole-Hamilton, Pavel Drašar, Pilar Goya, Nineta Hrastelj (responsible), Marta Kucza, Santiago Luis, Camille Oger, Karin Schmitz, Cristina Todasca, Bruno Vilela (coordinator).

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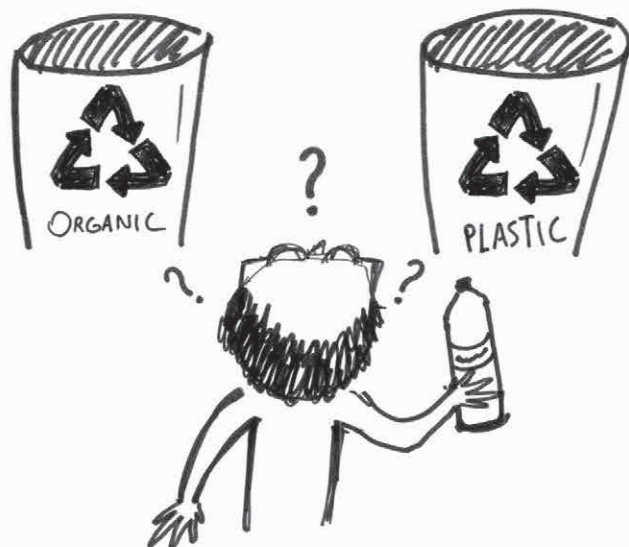
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<http://on.fb.me/1B8Qa0n> <https://twitter.com/EuCheMS>

FUNNY



The organic chemist's dilemma

MEP Pavel Poc on Glyphosate



The debate on glyphosate reauthorisation in the European Union (EU) has recently culminated under the shade of the so-called 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.

Pavel Poc

Member of the European Parliament

$$V(\text{EuCheMS17}) = \pi \int_{259}^{279} f(x^2) dx$$

La Sapienza, Università di Roma, is the venue chosen by Società Chimica Italiana, a EuCheMS Member Society, 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 Cole-Hamilton, 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.



SAPIENZA
UNIVERSITÀ DI ROMA



Società Chimica Italiana

Nineta Hrastelj

EuCheMS General Secretary



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

POLICY

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.

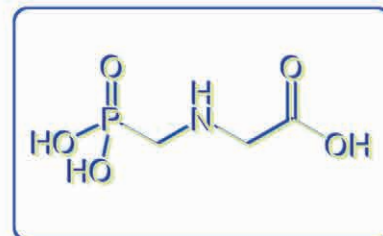
More generally, can it ever be justifiable to use a hazardous chemical? Of course, if the risk can be contained to an acceptably low level. Petrol (gasoline) is a very hazardous material because it forms highly explosive mixtures with air, which is why it works as a fuel. Yet, all of us are happy to 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

RESEARCH

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 ambassador in SA and the Premier of the Gauteng region, Mr. David Mahkura. (...)

You can read the entire article at <https://wp.me/P7iPLY-LB>

Santiago Luis
 Chair of EuCheMS Division of Chemistry and the Environment

MEMBERS' PERSPECTIVES

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
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.



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



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



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



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



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.



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

NOTES

EuCheMS Position Paper on Brexit

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

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 entire article at <https://wp.me/P7iPLy-Lz#rediscover>

David Conceição
Project Leader

Oana Froneiu
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> <https://twitter.com/EuCheMS>

CALENDAR

EuroAnalysis 2017

28 August – 1 September 2017
Stockholm, Sweden
Website: <http://euroanalysis2017.se/>

11ICH – 11th International Conference on the History of Chemistry

29 August – 2 September 2017
Trondheim, Norway
Website: <http://www.ntnu.edu/11ich>

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/3eugs/>

11EUCCO-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

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?

COLOPHON

Editorial Board

David Cole-Hamilton, Pavel Drašar, Pilar Goya, Nineta Hrastelj (responsible), Marta Kucza, Santiago Luis, Camille Oger, Karin Schmitz, Cristina Todasca, Bruno Vilela (coordinator).

Communication Advisers

Adam Brownsell
Jon Edwards

English Proof-reading

David Cole-Hamilton

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