CHEMISTRY in Europe
Newsletter for European Chemistry, published by EuChemS

Issue #2021 – 1

EDITORIAL

Light at the end of the tunnel

Welcome words from the new EuChemS President

When I became part of the EuChemS Executive Board one year ago, I could not have imagined that I would start my term as President under the current circumstances. Even though the virus in Wuhan was already there, not many of us could anticipate that in March the majority of European countries would be in lockdown and that the rest of 2020 would be dominated by the COVID-19 pandemic. The EuChemS Chemistry Congress in Lisbon was postponed for two years, the 50 years anniversary of EuChemS was celebrated online instead of in Prague, and all physical meetings were cancelled and replaced by Zoom meetings. I am sure that also Pilar Goya had a different year in mind to end her term as President; nevertheless, I would like to thank Pilar for leading EuChemS with great dedication and enthusiasm during the past three years.

Since the last two months we can be somewhat more optimistic, there is light at the end of the tunnel with the vaccination campaigns that have started in many countries. New vaccines, some even with an unprecedented mode of action, have been developed in an extremely short period of time, which is clear proof of the level of current day science. Extensive research, performed by both academic and industrial scientists, has contributed to a wealth of in-depth knowledge about the COVID-19 virus, has led besides vaccines to improved clinical treatment, and has laid the foundation for new antiviral drugs. The role of science, with Chemistry being an integral part, and the dedication of scientists to successfully address the COVID-19 challenge cannot be underestimated.

> The role of science, with Chemistry being an integral part, and the dedication of scientists to successfully address the COVID-19 challenge cannot be underestimated.

Most likely, a disruptive event as this pandemic will cause that what previously looked normal will change. We have learned that online meetings can be good alternatives to physical meetings thereby avoiding time-consuming and laborious traveling. Working from home can be done and may be a more viable possibility than we thought before the pandemic. Conferences may also change – would we still spend many hours traveling to a meeting to deliver a single lecture and travel back again, while we can also deliver the lecture online? Some things will change, and the future will tell.

With all attention focused on the pandemic, one would almost forget that also Brexit came at the end of last year. I am glad that this political decision does not affect the role of the Royal Society of Chemistry within EuChemS and that we, as European societies, will keep working together as we have done before. That also makes me optimistic about the future, and I cannot wait to start!

Floris Rutjes
EuChemS President 2021 – 2023

FOCUS

EuChemS at #GWB2021

EuChemS organised its first Global Women's Breakfast event as an interactive webinar on 9 February 2021, which was a part of the global initiative of IUPAC.

You can watch the EuChemS @Global Women's Breakfast 2021 webinar recording here.

Together for more Chemistry

Following an initiative of the EuChemS Outreach Task Group, we are introducing a new section into the Chemistry in Europe newsletter: 'Chemistry Talks'. In this new section, we want to bring publications from across Europe under the spotlight of our readers and bring forward articles of interest which are originally published elsewhere.

Have a look at the first contribution from Chemistry Views here and contact us if you are willing to exchange publications with EuChemS.

Year Book 2020

Is 2020 a year to remember, or a year to forget? For the European Chemical Society, last year was of great importance – we celebrated our 50th birthday! Our 2020 activities are represented in the most recent EuChemS Year Book, which is available here. As every year, it represents a unique annual report designed to highlight major advancements of our Chemistry society, and with it, we say "Goodbye 2020, let's get ready for even better 2021!"

EuChemS Secretariat

POLICY

Prosciutto pizza for vegans: haute cuisine?

Nothing seems to make sense in the title, does it? Still, the title captures the world of science and infrastructure behind measurements, in particular in Chemistry. Let me explain how by taking you through a brief story.

Brief history of modern metrology

Year 1875 is written in history as the year when an international organisation, the Bureau International des Poids et Measures (BIPM), was established by the Metre Convention. Through BIPM, Member States act together on matters related to measurement science and measurement standards. Its vision is to be universally recognised as the world's central point for the international system of measurement.

The first time the International System (SI) of Units was introduced dates back to year 1799. In this year two platinum standards, representing the metre and the kilogram, were deposited in the Archives de la République in Paris. Since then, other SI base units were added to the SI system. As the very last one, the seventh, the mole, was adopted for the quantity amount of substance in 1972. This followed a proposal from the International Organisation for Standardisation originating in a proposal from the Commission on Symbols, Units and Nomenclature (SUN Commission) of IUPAP, which was supported by the International Union for Pure and Applied Chemistry (IUPAC).

Chemistry, when it comes to metrology, science of measurements, is thus the youngest member of the SI family, with the corresponding Committee for amount of Substance (CCQM) being set up in 1993. This has brought in metrology many new aspects in addition to those for physical measurements. It is thus not surprising that many exciting discussions are ongoing, aiming at embracing science of measurements also in other scientific fields, not only Chemistry, in addition to the traditional Physics. Recently, "biology" was added to the CCQM's name, which reads now "Committee for amount of Substance (CCQM): Metrology in Chemistry and Biology".

My contribution to science of measurements

Measurements in Chemistry, also known as analytical chemistry, were in the centre of my research interest since my Bachelor's degree. Soon after completing my PhD, in which I dealt with chemistry, metrology and chemometrics, I moved my professional interest entirely on metrology, mostly chemistry related, but not only. This meant, amongst other, stepping into science-policy world and thus first having to acquire new skills, most of them rather different than the work of a researcher. In 2000, I accepted the invitation of the Joint Research Centre of the European Commission to join them as a visiting scientist. The topic to jointly work on was metrology in chemistry, in particular related to, at that time, twelve EU pre-accession countries, including my home country, Slovenia. This topic fit nicely in my job description at the Metrology Institute of the Republic of Slovenia, and for the next ten years I had an opportunity to work on, develop and contribute to some new concepts, as well as to plant seeds for reshaping metrology landscape at a national and at the European level. We were working through brainstorming on extracting from (at that time still rather foggy) metrological terminology, meanings of definitions and terms for measurements in chemistry, trying to build a coherent environment for measurements (in chemistry) which fits into an overall metrology, accreditation and standardisation landscape. Amongst other, two initiatives on education popped up: a pan-European lifelong learning programme for metrology in chemistry, and an initiative for including topics on measurements in chemistry in the academic curricula. Our many brainstorming outcomes throughout these ten years resulted in publishing papers in scientific journals, as well as books, while also organising many events, most important (kick off) ones during the Slovenian Presidency of the Council of the EU in 2008.

Recently, I had the privilege to write a chapter of the book "Metrology for the Sea". In this chapter, I give an overview of the foundation for measurements in the chemical sciences, in particular of those related to the sea. For those who like reading overviews and digging into details on your own, this book may be of your interest. In my chapter, I explain traceability, validation, measurement uncertainty, sampling and quality aspects on twenty ages. I provide an outline of interconnected worlds of the chemical sciences, metrology, policy, standardisation, accreditation, and science communication at the national, regional, and global levels. I demonstrate how measurements in chemical sciences work on examples that people can relate to, such as quality of bathing waters, classification of olive oils, accumulation of 210Po in coastal waters, and in fish tissue in the Gulf of Trieste.

Finally, I look at the difference between a research laboratory and an accredited testing laboratory, and briefly touch on the importance of discourse in a decision-making process. You may also find the answer to the title question there. Hint: #validation.

Landmark decision on SI units

Last but not least, I will add that a landmark decision has been made at the twenty-sixth meeting of the General Conference on Weights and Measures (CGPM) concerning SI units. This landmark decision means that from 20 May 2019 all SI units are defined in terms of constants that describe the natural world. This was a somewhat disruptive birth of new scientific models, which are not yet finished. As part of this decision, the mole is redefined in the SI as "the amount of substance of a system that contains 6.02214076×1023 specified elementary entities" (the Avogadro constant NA).

Nineta Hrastelj
EuChemS Secretary General

How can plants become sensors of toxic chemicals?

The OPCW Plant Biomarker Challenge

The Organisation for the Prohibition of Chemical Weapons (OPCW) launched a call for proposals for scientists to present innovative ideas on plant-based chemical detection techniques.

As natural vegetation is always present in areas of human and animal habitation, the OPCW plant biomarker challenge aims to enhance scientific research on methods or systems by which a specific type of vegetation could act as an indicator of exposure to toxic chemicals. This crowdsourcing challenge is part of the re-emergence of chemical weapons prevention strategy of the OPCW.

The project is funded by the European Union. Up to five of the submissions will be awarded contract of up to €40,000 to allow the proof-of-concept project to be performed as Phase 2 of the project.

Discover more about this initiative here.

Chemists against chemical weapons

The European Chemical Society (EuChemS) supports the OPCW activities and take action whenever needed.

Find out more about EuChemS' actions against chemical weapons here.

Laura Jousset
EuChemS Science Communication & Policy Officer

About the OPCW:
The Organisation for the Prohibition of Chemical Weapons (OPCW) is the implementing body for the Chemical Weapons Convention, which entered into force on 29 April 1997. The OPCW is an intergovernmental organisation with 193 member states, and has its seat in The Hague, Netherlands. The OPCW oversees the global endeavour for the permanent and verifiable elimination of chemical weapons.

The OPCW website

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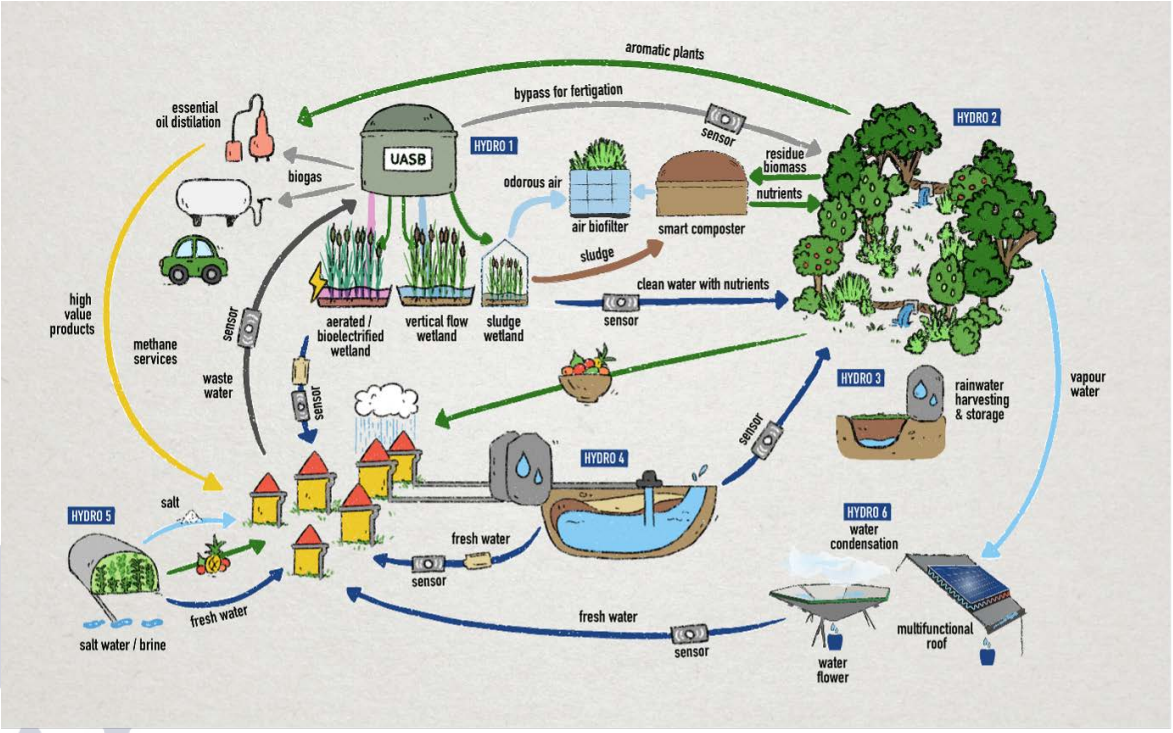
RESEARCH

Recovering non-conventional water sources to combat water scarcity

Focusing on water scarce decentralised areas, the case of the EU funded project HYDROUSA

The European Commission's Circular Economy Action plan targets on "closing the loop" of valuable recourses and products. Implementing innovative solutions, the goal is to abandon the 'take-make-dispose' culture, by recovering and reusing resources and products. Within Horizon2020, the EU is investing approximately € 1 billion on circular economy projects within the period 2018-2020, including water related projects. On the water sector in particular, the development of water services, which 'go beyond water supply sustainability addressing the different water value chains' is promoted. Reclaimed water reuse is at the top of these priorities.

HYDROUSA, a Horizon 2020 Research & Innovation project funded by the EU, inspired by this 'philosophy', aims to recover water from non-conventional water sources by capitalising on the rational management of water resources. It supports the new EU Regulation on minimum requirements for water reuse for agricultural irrigation. Our goal is to close the water loops and boost the agricultural and the energy profile in the Mediterranean region using nature-based and nature-inspired innovative systems at local level. 28 partners from 10 countries are involved in the project which is coordinated by the Sanitary Engineering Laboratory of the National Technical University of Athens.



The Islands of Lesbos, Tinos and Mykonos are hosting six full scale demonstration sites (HYDRO1-6), where sustainable innovative and nature-based solutions for water/wastewater treatment and management are developed within the framework of HYDROUSA.

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In Lesbos Island, low-cost reclaimed water is produced combining anaerobic processes (Upflow Anaerobic Sludge Blanket – UASB) and constructed wetlands (two-stage subsurface vertical flow) for the treatment of the domestic wastewater of Antissa village (HYDRO1). After disinfection, the nutrient rich water is used for fertigation of 1 ha agroforestry system (HYDRO2). The biogas produced is upgraded to methane and used as fuel for local vehicles. This solution is a self-sustaining wastewater management system where water, nutrients and the produced sludge are reused with significant economic benefits from the agroforestry system.

In Mykonos Island, where the cost of water or even the non-availability of water are putting severe pressure on the agricultural growth, rainwater harvesting systems are developed. HYDRO3 in Ano-Mera village consists of a novel, subsurface rainwater harvesting system developed in a remote agricultural area. The collected rainwater is used to irrigate an oregano field which is then valorised to produce essential oils. In HYDRO4, rainwater and surface runoff are collected and stored into the aquifer during the wet season and are used domestically and for agricultural production (lavender cultivation) during the dry season.

In Tinos Island, the demos implemented seek alternative, sustainable solutions to treat and recover water and valuable products. HYDRO5, is a nature-inspired, low-cost desalination system based on the principles of evaporation and condensation, located in Tinos. The Mangrove still system (inspired by the Mangrove plant) produces irrigation water and edible salt combined with a greenhouse to produce tropical fruits that will be consumed locally. Tinos Ecolodge (HYDRO 6) is an eco-tourist facility exhibiting a self-sufficient management cycle of water, energy, and food. Rainwater and vapour water recovery systems are demonstrated within the facilities. Furthermore, wastewater is treated by reedbeds and is recycled locally in agriculture.

HYDROUSA's solutions have been co-developed by the relevant stakeholders (farmers, water-utilities, tourist businesses) within co-creation workshops, so their needs and views are included. The HYDROUSA consortium has developed policy briefs on how the project supports the European Green Deal and on the revisions within the UWWTD. HYDROUSA has also attracted the attention of the scientific community and investors. Within the achievements of the first two years of the project are the development of a methodology on circularity assessment, which is already applied by large companies, several publications in prestigious peer reviewed journals, and the development of an innovative monitoring tool for precision irrigation, which is already on the market.

Simos Malamis, Eleni Nyktari, Stavroula Kappa, Daniel Mamais, Constantinos Noutsopoulos
National Technical University of Athens

Acknowledgment:
HYDROUSA has received funding from the European Union's Horizon2020 research and innovation programme under grant agreement No. 776643

MEMBERS' PERSPECTIVES

GDCh and ACS panel discussion about the United Nations Sustainable Development Goals

On 28 October 2020, the Presidents of the German and the American Chemical Society, Peter R. Schreiner and Luis Echegoyen, welcomed more than 200 participants to an online panel discussion on "The Chemical Societies' Approach Towards the United Nations Sustainable Development Goals".

Keynote speeches by Mary Kirchhoff (ACS Executive Vice President, Scientific Advancement) and Regina Palkovits (RWTH Aachen University, Chair of the GDCh Sustainable Chemistry Division) highlighted the goals most relevant to chemistry, as well as some concrete projects from sustainable chemistry, for example on the circular economy and the defossilisation of the energy supply. One of the questions discussed was how the scientific societies can contribute to achieve the Sustainable Development Goals. The audience was invited to participate in the discussion via chat. The entire event was recorded and can be viewed here.

In addition to the talks, both societies extended their existing cooperation agreement for another five years.

Karin J. Schmitz
GDCh, Head of Public Relations Department

Hans-Georg Weinig
GDCh, Director Education, Career and Science

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News from the Hungarian Chemical Society

Many programs, events and conferences announced by the Hungarian Chemical Society (HCS) last year had to be postponed or organised in an alternative way as a result of the COVID-19 situation. The laboratory practice round of the 52nd János Irinyi National Secondary School Chemistry Competition had to be cancelled, and the winners of the national finals are determined based on the written, theoretical and computational rounds. At the initiative of the Chemistry-teachers Division of the HCS, a summer camp entitled "Magical Chemistry" was the only event, which was held in-person from 3-7 August 2020 for 8-10 grade students interested in Chemistry. The camp, which included a thematic city quiz, attractive scientific presentations, experiments and short projects to be solved in teams, as well as career guidance, was hosted by the Károly Eszterházy University of Eger with a limited number of participants. As one student reported: "In addition to a lot of fun, it was great to meet people with similar interests. We learned a lot about teamwork and from each other, both scientifically and practically."

The HCS is very proud of its recognised and promoted members in 2020. The title of the Chemistry Europe Fellow was awarded to Ferenc Joó, Member of the Hungarian Academy of Sciences, Professor Emeritus of University of Debrecen. The Chemistry Europe Fellows Program was established in 2015 to recognise chemists for their outstanding support as authors, advisors, guest editors, or referees, as well as services to their national chemical societies. The Fellowship is the highest award given by Chemistry Europe. New Fellows are announced every two years in the run-up to the biennial EuChemS Chemistry Congress, but this year, due to the pandemic, it was handed over by societies in each member state. At the ceremony, the award was presented by Livia Sarkadi, President of the HCS, and László Csernoch, Deputy Rector of Science of the University of Debrecen, who recalled the beginning of Ferenc Joó's career and praised his school-creating teaching, research and educational organisation activities. We are also proud of the success of Péter Szalay, Chair of the EuChemS Division of Computational and Theoretical Chemistry, who was elected to the EuChemS Executive Board from January 2021 as a representative of this EuChemS Professional Networks.

Eva Frank
Correspondent of the Hungarian Chemical Society (HCS)

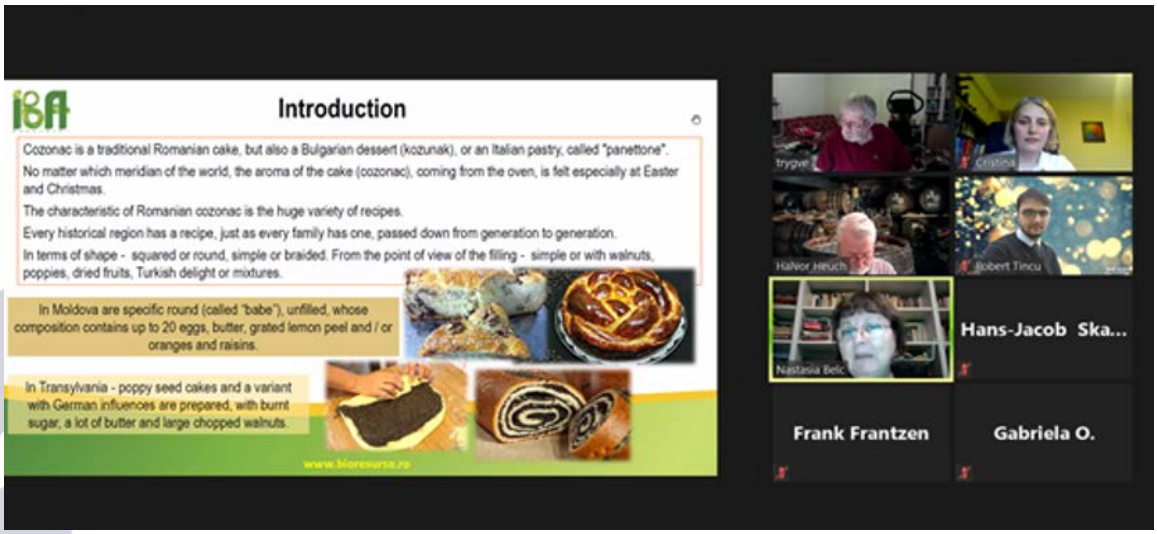
Bridging Christmas Traditions

In the unfortunate circumstance of the COVID-19 pandemic, new and diverse methods to communicate arise. Traditional events needed to find new ways of organisation using online platforms. This situation offers some advantages, since the necessary time for traveling long distances, is reduced to one mouse click. In this context, the Romanian and the Norwegian representatives of each respective Food Chemistry Division decided to connect through Christmas traditions. Therefore, starting from a traditional event called "Chimie de Craciun" organised at the Romanian Chemical Society every year in December, a new partnership was created exploiting the online prospects.

In this way, the first English edition of "Christmas Chemistry" was organised on 3 December 2020, uniting food specialists and public from both countries. The event kept its previous Christmas food chemistry-related topics, but for this edition the Romanian traditions were mirrored by the Norwegian ones, in a continuous symphony of traditional Christmas food and drinks. Therefore, after learning about the chemistry of "Sarmale" (meat cabbage rolls), the participants found out some of the "Rakfisk" secrets (a fermented fish specialty). The presentation continued with the unveiling of the "Cozonac" (Sweet bread) mysteries and fascinating details about traditional drinks like Aquavit and Romanian wines. The final talk was dedicated to a fish specialty called "Lutefisk".

Even though the online event removed the opportunity for direct contact between the audience and the presenters, the event was very well received by more than 100 participants making the social distancing disappear for almost 2 hours.

At the end of the event, in a non-formal framework, questions were asked by participants from both countries, proving a real interest in knowing and understanding the traditions and food culture of the two countries. The experience gained after organising this Romanian-Norwegian edition motivates us to explore further partnerships in the next editions.



A capture image during the talk regarding "Cozonac" of Mrs Nastasia Belc together with all the other speakers, starting from top left: Trygve Eklund, Cristina Todasca, Halvor Heuch and Robert Tincu.

Cristina Todaşcă
Member of the Food Chemistry Division of Romanian Chemical Society and Secretary of the EuChemS Division of Food Chemistry

Hans Jacob Skarpeid
Member of the Food Chemistry Division Norwegian Chemical Society

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MEET...

Welcome in your new role at EuChemS!

Renáta Oriňaková

Renáta Oriňaková is a new member of the EuChemS Executive Board. She is currently a research Professor and the Head of the Department of Physical Chemistry at the Institute of Chemistry at Pavol Jozef Šafárik University in Košice in Slovakia.

Slavica Ražić

Slavica Ražić is a new member of the EuChemS Executive Board. She is currently a Professor at the Faculty of Pharmacy of the University of Belgrade in Serbia.

Péter Szalay

Péter Szalay is a new member of the EuChemS Executive Board. He is currently a Professor of Chemistry at the Eötvös Loránd University in Hungary.

Martin Albrecht

Martin Albrecht is the new Chair of the EuChemS Division of Organometallic Chemistry (DOM). He is currently the Deputy Director of the Department of Chemistry, Biochemistry and Pharmaceutical Sciences at the University of Bern in Switzerland.

Joana Amaral

Joana Amaral is the new Chair of the EuChemS Division of Food Chemistry (DFC). She is currently a Professor at the Polytechnic Institute of Bragança in Portugal.

Yulia Gorbunova

Yulia Gorbunova is the new Chair of the EuChemS Division of Inorganic Chemistry (DIC). She currently works at the Kurnakov Institute of General and Inorganic Chemistry of the Russian Academy of Sciences in Moscow in Russia.

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Pilar Goya awarded the HonFRSC designation

Interview with Pilar Goya, EuChemS Vice-President

Pilar Goya Laza was the first woman President of the European Chemical Society (EuChemS) from 2018 to 2020.

She is a Research Professor of the Spanish Research Council (CSIC) at the Instituto de Química Médica working in medicinal chemistry and drug design. She was a postdoctoral researcher at the University of Konstanz, Germany, financed by the Alexander von Humboldt Foundation, and was Head of International Affairs of the CSIC. She has chaired the Chemistry Committee of the Marie Sklodowska-Curie Fellowships, and was the director of the Instituto de Química. She has been the Vice-President of the Spanish Royal Society of Chemistry (RSEQ) and the President of the Spanish Society of Medicinal Chemistry (SEQT). She is very active in reaching out to the general public having published two popular books, on "What we know about Pain" and the other one in 2019, on "The Periodic Table of the Chemical Elements".

Recently, you have been awarded with the HonFRSC designation from the Royal Society of Chemistry (RSC). First of all, congratulations! How do you feel about this recognition?
Every year, the Royal Society of Chemistry invites a few eminent individuals to become Honorary Fellows of the Royal Society of Chemistry (HonFRSC) in recognition of their achievements ranging from public engagement to distinction in research. For me, it is a great honour and privilege to have been invited this year to be part of this list of personalities. Personally, it is even more special, since it comes from a most prestigious organisation from the United Kingdom, a country with which since my childhood I have had special bonds.

Brexit happened. How do you see scientific and research cooperation between the United Kingdom and Europe evolving in the coming years?
Already in 2017, EuChemS issued a position paper which stated that research and industrial competitiveness across the EU greatly benefitted from the input of UK researchers and vice versa. Withdrawal of the United Kingdom from many funding schemes would remove some of the key quality drivers and fundamentally damage research and innovation in Europe as well as in the United Kingdom, so we urge the negotiators to retain as strong as possible a relationship between the EU and the UK researchers.

EuChemS counts now 50 members societies and supporting members, and 19 professional networks. How does EuChemS rely on its unique and diverse network of chemists to provide a single European voice?
EuChemS, the supranational association of chemical societies covering the European countries and beyond, is all about subsidiarity, synergy and solidarity. Our actions have the added value of being endorsed by all our chemical societies representing the voice of 150.000 individual chemists.
Through our network we can pair big and small, wealthy and less wealthy societies, all belonging to different regions in Europe, integrating them into a bigger community and ensuring that their voice is heard at the EU level.

You have been the President of the European Chemical Society from January 2018 to December 2020. Your mandate has been marked by important events and moments for the European Chemistry community, such as the International Year of the Periodic Table (IYPT19), the EuChemS 50th anniversary celebration, but also more generally, by the COVID-19 pandemic. What are some of the moments and achievements from your time as EuChemS President that you are most proud of?
It is true that my mandate has coincided with memorable events for EuChemS. In 2018, a landmark in our history: a new name, a new acronym and a new logo, EuChemS, the European Chemical Society, and the excellent ECC7 congress that took place in Liverpool organised by the RSC. Then, 2019 was the International Year of the Periodic Table (IYPT19), with the many interesting events and activities that took place, and in 2020 we celebrated our 50 years, from FECS to EuChemS, which culminated with our online celebration on 3 July.

Unfortunately, 2020 was also the year of the pandemic, but EuChemS readapted itself to new ways of working and of organising meetings online.

In your opinion, what it the most memorable moment of the International Year of the Periodic Table (IYPT19)?
I think the major breakthrough was our iconic Periodic Table, highlighting availability and vulnerability of the 90 elements that make up everything, which was designed by David Cole-Hamilton and Nicola Armaroli, and was promoted extensively.

This EuChemS Scarcity Periodic Table, available in 32 languages, was a great success, it was first disclosed at the European Parliament, widely distributed in schools, used in lectures and in the media. This will probably be the most valuable legacy of EuChemS from the IYPT19.

In 2020, EuChemS celebrated its 50th anniversary since its foundation in 1970. Where is EuChemS now, after 50 years?
The European Chemical Society, EuChemS, has advanced notably since its foundation as FECS, Federation of European Chemical Societies, and has largely fulfilled the expectations of the founding fathers who strived to create a union of all the chemical societies in Europe and beyond.

You were the first woman President of the European Chemical Society. What was the greatest challenge during your Presidency?
To be the president of EuChemS is above all a great privilege, but also a great challenge. In my case, being the first woman implied additional concerns, because I was afraid I could be more thoroughly scrutinised than a male colleague. However, those concerns did not materialise at all, I have always felt absolutely respected and was very comfortable in my position, and I do not think that I have been judged any differently than my male predecessors. Not in vain EuChemS supports inclusion and diversity in all its forms, and we do all we can to eradicate discrimination and inequality in the realm of those of us working in chemical sciences.

During your mandate, you actively promoted actions to enhance inclusion and diversity in the chemical sciences. In your opinion, what did EuChemS achieved in this regard?
In line with what I have just said, EuChemS has been very much concerned in recent years with promoting gender balance and diversity. To mention just some examples, during the IYPT19, we organised together with IUPAC and the University of Murcia, Spain, the congress "Setting their Table: Women and the Periodic Table". We also supported the publication of the book "Women in Their Element: Selected Women's Contributions to the Periodic System" edited by two members of EuChemS Working Party on the History of Chemistry i.e., Brigitte van Tiggelen and Annette Lykknes. We are also signatories of the "Statement on inclusion and diversity in the chemical sciences" promoted by the Royal Society of Chemistry, and we have recently established a Task Group on "Inclusion and Diversity" to deal with these important issues.

Is there a message you would like to leave to young girls and graduates interested in Chemistry?
There would be many recommendations I could convey to chemistry students, but if I have to choose one, my message here would be addressed both to girls and boys. Even if chemistry is the subject of your choice, you should not leave aside your interest for other disciplines; first, because it is most enriching for your personality, but also because science is becoming more and more multidisciplinary and many of the problems you will face would have to be tackled in a multidisciplinary fashion. So, even though you should dedicate most of your efforts to your particular chemical subject, you should try to widen your knowledge of general chemistry and beyond. Remember that many of the greatest scientists had multifaceted skills and interests: Newton studied in depth and wrote on The Temple of Solomon, whereas the romantic poet S.T. Coleridge enjoyed the chemistry lessons of Humphry Davy very much.

How do you think EuChemS can support the careers of young chemists in Europe?
EuChemS has a dynamic, enthusiastic network of young chemists, the European Young Chemists' Network (EYCN), who provides valuable guidance and help young chemists in Europe.

Do you expect closer cooperation between Asian and American societies in the future?
International cooperation has always been in the agenda of EuChemS. We have strong ties with global organisations such as IUPAC, the Federation of Asian Chemical Societies (FACS), the Federation of Latin American Chemical Societies (FLAQ), and a long-standing collaboration with the American Chemical Society (ACS).

In 2019, EuChemS together with chemical societies worldwide signed the joint agreement on the UN Sustainable Development Goals.

In the future, we intend to increase our collaboration with all of these associations since we have many common objectives such as presenting chemistry as the indispensable solution to global challenges.

This interview is coming to an end, would like to add a few words?
Well, I would like to thank the Chemistry in Europe (CiE) Editorial Board, and in particular Nineta Hrastelj for inviting me for the interview and Laura Jousset for conducting it.

Interview of Pilar Goya, EuChemS Vice-President
Conducted by Laura Jousset, EuChemS Science Communication & Policy Officer

NETWORKS

EYCN Podcast – Chemistry to your ears

You want to hear something about the latest chemistry research while walking the dog, washing the dishes, or doing your laundry? We have got you covered! Late last year, the European Young Chemists' Network (EYCN) started a new science podcast to present current research topics in chemistry and related sciences to a general audience.

With this podcast, the EYCN wants to make current chemical research more accessible and demystify currently discussed science topics in the news. The target audience is not only chemists who want to explore topics beyond their own research, but also science-interested people in the general public.

Each episode focuses on a highly discussed field or a research topic. The EYCN gives a short introduction and interviews an expert in the field. Furthermore, these interviews are highlighting some of the most interesting stories in chemical research in the last month.

In the very first episode, the EYCN interviewed Professor Victor Mougel in an episode about the increasingly more popular field of the CO_2 reduction. He explained the principal issues and goals in the current research, and the various approaches of different groups. In the second episode, our Irish delegate Dr Mark Kelada talked about the highly discussed topic of microplastics and highlighted both the positive aspects of plastic in general, and the issues associated with its waste management.

This year, the EYCN also released a new mini-series, in which they interview the four winners (gold and silver medals) of the prestigious European Young Chemists' Award (EYCA) to discuss their research with them and ask them for advice for other young chemists. In these four episodes, Dr Maria Chiara Sportelli, Dr Eoin Murray, Dr Grégory Chatel, and Dr Emilila Paone gave us personal insights into their lives as young scientists and answered many questions about their innovative research topics. They explained the possible applications of antimicrobial thin films on food packaging, a novel device that allows for fast, cheap and continuous monitoring of nitrite and nitrate in natural and industrial waters, the application of ultrasound to enable novel reactions, which could allow for more eco-friendly processes in the chemical industry, and how important chemicals for industrial processes can be synthesised in a more sustainable way without relying on petrochemical resources.

If you feel intrigued by any of the mentioned topics, you can listen to the EYCN podcast on your favourite platform for podcasts.

Miguel Steiner
EYCN Membership Team Leader

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CHEMISTRY TALKS

A European Chemist, If Not A World Citizen

Chemistry Europe Fellows Award Ceremony during the Coronavirus Pandemic

Last year, Chemistry Europe recognised the exceptional commitment of members of the chemistry community with its highest honor for the third time. The Chemistry Europe Fellows Program was established in 2015. New Fellows are announced every two years. In 2020, 37 Fellows were honored. There are now a total of 103 Chemistry Europe Fellows and 6 Honorary Fellows.

Traditionally, the new Fellows receive their certificates at a reception at the EuChemS Conference. However, the COVID-19 pandemic has changed the way we meet and interact. It was not possible to honor the new Fellows at a reception at the 8th EuChemS Congress in Lisbon as planned. The congress will now take place in 2022.

Therefore, together with the national membership magazines of the Chemistry Europe societies, we came up with a new approach: The Editors-in-Chief interviewed the Fellows from their society and published the interviews in their magazine. Depending on which society you are a member of, you may have seen the interviews in Anales de Química, Chimia, C2W/MeMo, La Chimica e l'Industria Online, Magyar Kémikusok Lapja, ChemistryViews.

These interviews provide a very nice insight into the experiences and careers of the Fellows. They talk about formative moments in their lives, discuss current issues, and reflect on chemistry in their country and globally. They also look back at historical visions for Europe and the individual chemical societies and a pan-European publication network.

To make this treasure accessible to a larger audience and to bring the individual interviews together, I have highlighted some aspects and quotes from the interviews that resonate with me in an article. You are welcome to read the full interviews and/or the excerpts that cover topics such as Current Goals and Visions, Which Language Do We Speak?, "Times They Are a-Changin," and what got individual fellows excited about chemistry.

Link to full article in ChemistryViews https://doi.org/10.1002/chemv.202100002
(links to individual interviews are listed at the end of this article)

Vera Koester
Editor in Chief of ChemistryViews, the magazine of Chemistry Europe

CALENDAR

In the current environment and status of COVID-19, some events recognised by EuChemS are being postponed or canceled. However, EuChemS Events calendar is being updated on a regular basis.

If you plan to attend an event, we invite you to check the calendar here.

The recordings of EuChemS online events are available on the EuChemS YouTube Channel.

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.

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