

European Association for Chemical and Molecular Sciences

Year Book 2015





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Editorial



Welcome to the EuCheMS Yearbook for 2015, in which we tell you about some of the things we have been doing over the year. As I finish my first year as President, I look back on what has been a really exciting year for me and a huge learning curve, which I am only part way up. Some of the high points include attending

the very moving ceremony in Ypres on the 100th anniversary of the first large scale use of chemical weapons to commemorate all those who have died throughout the world as a result of this dreadful scourge. It was a great privilege for me to be there with Thomas Geelhaar, President of the German Chemical Society, and David Phillips, past President of the Royal Society of Chemistry, standing shoulder to shoulder to show that the use of chemical weapons is an abuse of chemistry and can never be justified. EuCheMS called for the complete abolition of all chemical weapons and called on all chemists to refuse to work on developing them. The event was organised by the Organisation for the Prohibition of Chemical Weapons (OPCW), which has already persuaded 192 of the world's 196 countries to sign and ratify the treaty which guarantees, with help and inspections, the removal of chemical weapons in those countries. The OPCW therefore has developed a Hippocratic Oath for chemists with the EuCheMS Working Party on Ethics in Chemistry very much involved.

We have engaged with the European Commission on climate change, scientific advice for the Commission and the removal of funds from research to a new European strategic investments fund. The positions we have recommended have generally been followed, although, of course, many others have also supported these positions.

We continued to develop ties with the American Chemical Society. Nineta Hrastelj Majcen (General Secretary) and I were guests at the ACS meeting in Boston in August, with two other Executive Board members Wolfram Koch (GDCh) and Robert Parker (RSC) there representing their societies. We had high level discussions with the ACS which will lead to collaboration in various areas, including the next employment survey following from the first one for Europe conducted by Reiner Salzer and others on behalf of ECTN and EuCheMS; strengthen interactions for young people especially through EYCN's Young Chemists Crossing Borders programme; supporting one another's meetings and developing jointly with the Chemical Society of Canada, the Federation of Latin American Chemical Societies and the

Federation of Chemical Societies of Africa, a new type of meeting aimed at building connections between chemists from around the Atlantic basin.

We have run a series of Parliamentary workshops, which are detailed elsewhere in this yearbook, but these have allowed us to further develop working relationships with MEPs, especially Julie Girling, Ian Duncan and Catherine Stihler. Catherine and I have now been formally paired through the MEP-Scientist pairing scheme and we look forward to working with her more closely on a number of issues. The installation of carbon monoxide detectors in holiday homes is something we are working on together at present.

Most of our Divisions and Working Parties have had their biennial conferences this year and it has been a pleasure for me to attend some of them. They have been very successful with exciting chemistry being discussed with European and world experts. It was delightful for me to present Christina Moberg, the first Chemist to be President of the Royal Swedish Academy, with her EuCheMS Lecture Award at ESOC in Lisbon, to open the First European Conference on Physical and Theoretical Chemistry in Catania and to be able to announce the translation of the Working Party on Green and Sustainable Chemistry into a Division at their meeting in Lisbon.

At the General Assembly in Vienna, for which Herbert Ipser and Erich Leitner were perfect hosts, we were very pleased to welcome three new supporting members; The Fraunhofer Society, European Federation of Managerial Staff in the Chemical and Allied Industries, and the European Research Institute for Catalysis. We also welcome Pavel Drašar and Philippe Garrigues as elected members of the Executive Board and thank Igor Tkatchenko and Ehud Keinan for the tremendous work they have done on the EuCheMS Executive board as their term of office comes to an end.

Next year, the major event will be the 6th EuCheMS Chemistry Congress, which will take place in Seville, 11 -15 September 2016. This promises to be a really exciting festival of chemistry in a wonderful city. It really should not be missed and I look forward to seeing you all there.

David Cole-Hamilton President, EuCheMS

St. Andrews

Acknowledgement

EuCheMS would like to thank all who made their contribution to the 2015 EuCheMS Year Book.





































































































EDITORIAL		1
ACKNOWLEDO	GEMENT	2
ON EUCHEMS	LONG-TERM DEVELOPMENT	4
EUCHEMS EXI	ECUTIVE BOARD	7
EUCHEMS GE	NERAL ASSEMBLY	g
POLICY RELAT	TED ACTIVITIES	10
EUCHEMS AW	ARDS	15
EUCHEMS CH	EMISTRY CONGRESSES	17
EUCHEMS RE	COGNISED EVENTS	19
EUCHEMS ME	MBER SOCIETIES	22
EUCHEMS SU	PPORTING MEMBERS	25
EUCHEMS PR	OFESSIONAL NETWORKS	26
	Division of Analytical Chemistry	26
	Division of Chemical Education	26
	Division of Chemistry and the Environment	26
	Division of Chemistry in Life Sciences	26
	Division of Computational Chemistry	27
	Division of Food Chemistry	27
	Division of Inorganic Chemistry	27
	Division of Nuclear and Radiochemistry	28
	Division of Organic Chemistry	28
	Division of Organometallic Chemistry	29
	Division of Physical Chemistry	29
	Division of Solid State and Materials Chemistry	29
	Working Party on Chemistry and Energy	30
	Working Party on Chemistry for Cultural Heritage	30
	Working Party on Green and Sustainable Chemistry	30
	Working Party on Ethics in Chemistry	31
	Working Party on History of Chemistry	31
	European Young Chemists' Network	31
ANINI IAL DEDO	ODTO OF ELICUENC PROFESSIONAL NETWORKS	~~
ANNUAL REPO	DRTS OF EUCHEMS PROFESSIONAL NETWORKS	32

On EuCheMS long-term development

At the General Assembly meeting in Torun in 2014, Eu-CheMS devoted a session to strategic planning. As a result of this session and some subsequent discussion it was decided to set up four Task Groups charged with examining:

- The vision for EuCheMS
 (Chair: David Cole-Hamilton, EuCheMS President)
- Future financing of EuCheMS
 (Chair: Franco De Angelis, EuCheMS Treasurer)

Chair of the Division for Physical Chemistry)

- The interaction between EuCheMS Secretariat and its Professional Networks
 (Chair: Eckart Rühl, Executive Board member and
- The interaction between EuCheMS Secretariat and its Member Organisations

(Chair: Saskia van der Vies, Executive Board member)

The capitals consisted of members of the EuCheMS Executive Board, supplemented by a member of EYCN on each and the General Secretary. They were charged with providing an interim report at the Executive Board meeting in Rome in June and a final report at the General Assembly meeting in Vienna in September. In this contribution, we summarise the main findings, for which implementation plans are being prepared. More detailed outcomes are summarised in a separate publication.

The Vision of EuCheMS

Policy and Profile

Although the profile of EuCheMS in Europe is increasing, the Task Group believes that it could and should be considerably further enhanced so that EuCheMS becomes the first port-of-call for the Commission and the Parliament on all matters relating to Chemistry. Several measures were identified in this respect including:

- Offering advice solicited or unsolicited
- Inviting senior members to meetings

- Responding to consultations
- Parliamentary Events
- Events related to topical issues
- Setting up Parliamentary Links

Membership

Our first loyalty is to our current members. We must nurture them and be prepared to help them if local difficulties arise. They should be able to look to EuCheMS for support and help and we should look to them to be involved in all our activities.

Our ambition will be to unite all bodies which coordinate any aspect of chemistry in Europe. This will mean welcoming supporting members with very varied remits and sizes. Care must be taken to maintain the correct balance between the member societies and supporting members.

Conferences

Part of raising the profile of EuCheMS and its relevance to the community is to improve and enhance the conferences we offer.

The EuCheMS Chemistry Congresses must become an essential part of the conference attendance of all European Chemists

The European Young Chemists Conferences must be established as an essential aspect of the training of young chemists

The Divisional/Working Party Conferences must be major conferences in their fields attracting increasing numbers of delegates.

EuCheMS will sometimes work with others to put on attractive conferences of relevance to our members.

EuCheMS will try to coordinate its conference activities to avoid clashes in time or scientific area.

Internationalisation

Until now, EuCheMS has been focussing on establishing its own internal structures, constitution, etc. With these safely embedded in the system, the time has come to look out-

The Task Group did not think it would be appropriate to try to expand EuCheMS membership much beyond its current

borders, but it is appropriate to seek collaborations outside Europe.

Projects

The new website and other improved communications provide the ideal forum for dissemination of research results to our 160,000 members.

EuCheMS is an ideal partner in European projects, namely in handling advertisement and dissemination.

Staffing

Until recently, Nineta Majcen and Bruno Vilela are doing an outstanding job running the office in Brussels and most of the policy activities. They are stretched to the limit so the Task Group believed it was essential to find a way to remove some of the more routine, mostly administrative-financial work. Fortunately, this has now been done and Irina Simion has been employed on a part time basis from 1st December to take over routine financial matters. We warmly welcome Irina to the Brussels Office.

Future financing of EuCheMS

The Task Group on Finance carried out a wide ranging study of all possible methods for income generation. It was seen to be of paramount importance that the integrity and independence of EuCheMS should be retained. One of the unique features of EuCheMS is that it provides an independent voice and does not lobby on behalf of any specific organisations; only on behalf of chemistry as a discipline.

With this in mind, the Task Group came up with 13 different proposals for raising additional funding, ranking them in terms of the level of revenue generation and ease of implementation. Some of these have already been implemented, while discussions are on-going as to which of the other proposals will be implemented and over what timescale.

Interaction between EuCheMS Secretariat and its Professional Networks

The Task Group centred its discussion around three main topics

- Areas in which Divisions can improve their contributions to the activities at the EuCheMS level
- Additional support for Divisions from the EuCheMS Secretariat
- Implementation of the identified improvements.

The following activities were identified for possible increased involvement of Divisions in EuCheMS activities:

- European Chemistry Congress
- Scientific Conferences, Workshops, and other EuCheMS Events
- EU Consultations
- Parliamentary Workshops
- Education
- EuCheMS Policy
- Awards
- Continued implementation of sharing surpluses or deficits from conferences

As for what the EuCheMS Secretariat can do for the Divisions, the Task Group identified:

- To build, keep and maintain a reliable list of contact points for various purposes (eg for conferences, networking, spreading information) under data protection legislation
- Help with planning and organising events and conferences (including professional conference management), support in project management
- The update of websites (either as a central service or efficient technical help for people in charge) and advertisement of events, which is of crucial importance to attract a larger community
- Assistance with contracts, guidelines for applications, redrafting rules or regulations, creating terms of office, etc. is required for various levels of activities.
- Exchange of knowledge and information
- Quick response to requests, development of strategies for efficient transfer of relevant information to the Divisions will link the Divisions closer to the EuCheMS Secretariat.

On the implementation side,

- Redefinition of the role of Divisions,
- Improvements in two-way communication,
- Improvement of present sources of information,
- Preparation of strategic information,
- Surveys, whenever relevant,
- Extended staff,
- Additional employees at EuCheMS Secretariat in Brussels (eg for event management)

were recognised as key topics.

Interaction between EuCheMS and its Member Organisations

A questionnaire was sent to all Member Organisations. The questionnaire concentrated on four key questions:

- How do members view the quality of EuCheMS newsletters?
- Do national societies send EuCheMS newsletters to members?
- Is EuCheMS on the agenda of board meetings of Member Organisations?
- What can EuCheMS do for Member Organisations?

In general, the suggestions can be summed up as reinforcing the idea that, because EuCheMS is a very heterogeneous organisation with members ranging from very large societies with several hundred permanent staff to societies run by one person working in their spare time and because some members are not in the European Union, very different activities will be needed for the different types of member societies and supporting members.

We need to engage with all member societies, including those who did not respond to the questionnaire, to identify the real needs of each EuCheMS member.

Let me finish by giving my heartfelt thanks to the members of the Task Groups for their hard work in developing plans which are now being implemented and especially to Franco De Angelis, Eckart Rühl and Saskia van der Vies, who so capably chaired these Task Groups. Their work is not over as they are involved in the implementation of what they are recommending!

David Cole-Hamilton 9 December, 2015

EuCheMS Executive Board

The Executive Board is responsible for managing the scientific, educational and professional activities of EuCheMS.

The composition of the Executive Board includes the President, Vice-President, the Treasurer, members elected by the General Assembly and other members appointed by the Executive Board to provide special expertise.

President

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EuCheMS General Assembly

The General Assembly, the governing body of EuCheMS, meets annually and defines the general policy of EuCheMS. It is composed of a representative from each of the member societies and member organisations.

2015 EuCheMS General Assembly, Vienna, Austria

In one of EuCheMS largest General Assemblies, EuCheMS Members reinforced their commitment towards European chemistry and discussed new directions for the future.



Apart from these discussions, there was a talk by Prof. Reiner Salzer on the outcomes and future of the *European Employment Survey for Chemists and Chemical Engineers* (http://bit.ly/1lwWqTx), as well as a talk from Dr. Robert Parker, RSC Chief Executive, on *Public Attitudes Towards Chemistry* (http://rsc.li/1fgw4vt).

The General Assembly also marked EuCheMS growth, with integration of three new supporting members, Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), European Federation of Managerial Staff in the Chemical and Allied Industries (FECCIA), and European Research Institute of Catalysis (ERIC), thus elevating the number of EuCheMS members to 46.

During the second day of the General Assembly, and in the follow-up of the "EuCheMS Strategy" discussion initiated in 2014, four presentations showed the results of the strategic task groups.

The presentations given at the General Assembly meeting can be found at http://www.euchems.eu/?p=4777.

Thank you, Gesellschaft Österreichischer Chemiker (Austrian Chemical Society), for hosting us all.

Policy related activities

Open Consultations

EuCheMS is playing an active role in the European policymaking process by responding to the open consultations published by the European Commission that concern its domain of interest.

In 2015 EuCheMS has responded to the Public Consultation on Circular Economy.

A 'circular economy' aims to maintain the value of the materials and energy used in products in the value chain for the optimal duration, thus minimising waste and resource use. By preventing losses of value from materials flows, it creates economic opportunities and competitive advantages on a sustainable basis.

Conscious about the central role of chemistry in achieving a circular economy, EuCheMS submitted to the Commission a note raising the attention about possible environmental and economic consequences of the existence of contaminants or impurities in recycled materials. This note is accessible at http://bit.ly/1SC7va2

Policy Workshops

With the purpose of bringing together the scientific community with policy makers and to showcase the solutions that chemistry has to offer to society, EuCheMS has organised several workshops during 2015.

Integrating CO₂ in the Value Chain – The Role of Chemistry, March 2015

This workshop, which took place at the European Economic and Social Committee in Brussels, explored the ecological and economic possibilities of integrating CO₂ in the value chain.

Chaired by MEP Julie Girling and opened by Mindaugas Maciulevičius, Member of the European Economic and Social Committee, it included a presentation from EuCheMS President, Prof. David Cole Hamilton with the presence of EuCheMS Vice-President Prof. Ulrich Schubert.



Audience at Integrating ${\rm CO_2}$ in the Value Chain



Panel of Integrating $\mathrm{CO}_{\scriptscriptstyle 2}$ in the Value Chain



Speakers from Protecting Endangered Elements

This event was an opportunity for participants to learn from the ESCA winners of 2014, Prof. Dr. Walter Leitner and Prof. Dr. Jürgen Klankermayer, who not only provided evidence on the rich possibilities of ${\rm CO_2}$ conversion but also transmitted a clear message on sustainability: "If you want to go fast, go alone. If you want to go far, go together." In addition, the European Commission's activities on these topics were explained by José Lorenzo Valles from DG Research & Innovation.



18th EuroAnalysis, September 2015, Bordeaux



(Re)searching for Jobs Speakers



Networking Cocktail at Zero Carbon Energy - The Future, Edinburgh

The workshop was co-organised with the European Parliament Intergroup on Climate Change, Biodiversity and Sustainable Development and brought together European policy-makers, the chemical sector, the academic world and civil society in order to discuss the opportunities of turning waste into fuels, basic chemicals, polymers, and even fine chemicals and pharmaceuticals. More on this workshop can be found at http://www.euchems.eu/?p=667.

Zero Carbon Energy: The Future May 2015, Edinburgh

As an early contribution to European Sustainable Energy Week, EuCheMS, the Royal Society of Chemistry and the Royal Society of Edinburgh jointly organised a conference on Zero Carbon Energy – The Future at the Royal Society of Edinburgh on 27 May.

This workshop chaired by EuCheMS President, Prof. David Cole-Hamilton, included the lectures of Prof. Mercedes Maroto-Valer (Herot Watt University, Edinburgh), Prof. Md. K. Nazeeruddin (École polytechnique fédérale de Lausanne), Prof. James Durrant (Imperial College, London), and Prof Peter Wasserscheid (Lehrstuhl für Chemische Reaktionstechnik, Friedrich-Alexander-Universität Erlangen). More info on this event can be found at http://www.euchems.eu/?p=3876.

(Re)searching for Jobs June 2015, Brussels

This event, which took place in Brussels on 2 June 2015, brought together academia, industry, policy-makers, and citizens to discuss the many barriers that young researchers face when entering the labour market, a discussion underpinned by the first European Employment Survey for Chemists and Chemical Engineers which was presented during this event

The event, chaired by MEP Catherine Stihler, featured lectures from EuCheMS President David Cole-Hamilton providing his view as an Emeritus Professor at St. Andrews, UK, on how young students and young researchers could make the best out of their degrees and research activities. Following this, Prof. Reiner Salzer, Dresden University of Technology provided a first glance over the final findings of the European Employment Survey for Chemists and Chemical Engineers (bit.ly/1lwWqTx), Margaret Waters (European Commission), Dr. Cristina Todasca (University Politehnica of Bucharest), Dr. Viviana Fluxà, (CLS Behring), Elizabeth C. McGaha (American Chemical Society).

After the presentations many questions arose from an attentive audience showing concerns on how to further develop

the quality of curricula and teaching, also including new relevant topics/subjects. Providing long-term incentives, and not only one or two years-long, from the EU was mentioned as a possible approach. Other questions revolved around the discrepancies in job opportunities and salaries between EU countries which should be harmonised to avoid a vicious circle where low GDP countries educate students that after will be "forced" to move abroad, thus not contributing to the creation of value in their original countries. The outcomes of this workshop can be found at http://www.euchems.eu/?p=3819.

Protecting Endangered Elements September 2015, Brussels

The workshop, co-chaired by MEP Ian Duncan and David Cole Hamilton, EuCheMS President, took place in Brussels on the 22 September 2015 and looked in depth into the central issue of critical raw materials and what solutions can chemistry provide.

Following presentations by Nicola Armaroli (CNR, Italian National Research Council, Bologna), Claire Carmalt (University College of London), Willem Schipper (Willem Schipper Consulting, Middelburg), Constantin Ciupagea (European Commission JRC, Ispra), and Peter Tom Jones (Katholieke Universiteit, Leuven), David Cole-Hamilton conducted a discussion session where many interesting conclusions were reached such as the need to have a Circular Economy Directive that completely substitutes the older "linear economy approach" directives; the need for data consistency and availability; the importance of having a long-term vision for research funding; or the need of both political commitment and private sector investment.

The outcomes of this workshop, including a one-page document with brief conclusions for policy-makers, can be found at http://www.euchems.eu/?p=5192.

18th EuroAnalysis

September 2015, Bordeaux

During this conference EuCheMS General Secretary, Dr. Nineta Hrastelj Majcen, chaired an Environmental-Policy

session where panelists explored the many concrete ways in which chemists can interact with the European Union institutions and agencies – for instance through providing evidence to policy-makers or through applying to EU research funds.

EuCheMS at Expo 2015 – The chemist towards Europe and the World

On the occasion of EXPO 2015 a series of conferences have been jointly organised by the Chemical Association of Lombardy, as representative of the Consiglio Nazionale dei Chimici, together with the European Association for Chemical and Molecular Sciences (EuCheMS) which was mainly involved in the selection of speakers and contributed towards pertinent expenses. The purpose was to become acquainted with the role that Chemists and Chemistry play in agriculture, water processes, feeding and energy and provided an amazing opportunity to raise awareness of the importance of chemical sciences in society. These events brought together experts with a wide range of backgrounds to examine these problems. With these objectives in mind the following seven conferences and one summarising lecture have taken place:

- Towards a Circular Economy? Catalysis for the Production of Biomass-Based
 Building Blocks. Bert M. Weckhuysen-Debye Institute for Nanomaterials Sciences, Utrecht University (The Netherlands)
- Where food begins: the role of soils for food security and food safety.
 Luca Montanarella – European Commission DG JRC-Ispra (Va)
- Problems of Chemical Safety of Foods and Drinks.
 Valery S. Petrosyan Research Center "Ecology and Health" Chemistry Department – Moscow State University.
- Water basis for life.
 Fritz H. Frimmel Karlsruhe Institut for Technology (KIT)
 Karlsruhe (Germany).

- Molecular secrets of the italian gastronomy.
 Rosangela Marchelli Departement of Organic and Industrial Chemistry. University of Parma (Italy)
- Food allergens and new food.
 Rosangela Marchelli Departement of Organic and Industrial Chemistry. University of Parma (Italy)
- The water problem in Europe.
 Fritz H. Frimmel Karlsruhe Institute for Technology (KIT)
 Karlsruhe (Germany)
- Summarising Outcomes of the International Conferences.
 Sergio Facchetti Consiglio Nazionale dei Chimici. Rome (Italy).

Such events have provided an important forum of exchange of ideas between scientists, young researchers and the general public crucial in ensuring our future prosperity and well-being. These events also represented an ideal opportunity to spread the power of chemical science in research and innovation in global food and nutrition security. In fact, "Feeding the Planet" is a challenge to identify real solutions to meet the needs of a global population that will reach 9 billion people in 2050 for whom there will not be enough food and water and for a population that even today suffers from unacceptable injustice in food distribution. Out of a current population of 7 billion, there are 805 million people suffering from malnutrition. On the other hand, there are the richest countries whose emergency is overfeeding, which has led to a significant increase in obesity, diabetes, cardiovascular disease and cancer.

How can these two extremes be balanced? The Charter of Milan is a document about the right to food and clean water, about the fight against waste and about environmental sustainability. This is the most important intangible heritage from EXPO 2015. Such a document involves everyone: governments, institutions, businesses, associations and individuals who have been asked to add their signature. We must feed the world, while respecting the Earth on which we live and from which we get the essential resources we need to live.

Thanks are due to all those who have put so much work into the preparation of the event.

EuCheMS Contacts with President of European Parliament and European Commission

EuCheMS on CO₂

In a reply to a EuCheMS letter to President Schulz and President Juncker concerning reducing CO_2 emissions, President Schultz has highlighted the European Parliament's commitment to substantially reduce emissions, increase use of renewable fuels and increase energy efficiency by 2030, a position defended also during the COP21 Climate Negotiations in Paris, December 2015.

EuCheMS on Evidence-Based Policy

Following the concerns expressed by EuCheMS regarding the end of the European Commission's Chief Scientific Adviser position, President Juncker stated in a letter to EuCheMS his commitment to the role of science in decision-making. Thanks to the efforts of EuCheMS and other organisations, the European Commission announced in November that the creation of the new European Scientific Advice Mechanism will include a High Level Group of seven scientific advisors.

EuCheMS on the Reallocation of Horizon 2020 Funds

In the beginning of 2015, EuCheMS contacted President Juncker urging the European Commission to stop the proposal for the reallocation of funds from Horizon 2020 to the new European Fund for Strategic Investments. Following pressure from the scientific community, amongst others from EuCheMS, and after negative feedback from the European Parliament's Industry, Research and Energy Committee (ITRE), the European Commission stepped back and presented a new proposal safeguarding funding for ERC, Marie Skłodowska-Curie actions, and for the programme Spreading Excellence and Widening Participation.

Other initiatives of EuCheMS and members

100 Years of the First Mass Use of Chemical Weapons



RSC Past President, David Phillips, EuCheMS President, David Cole-Hamilton, and GDCh President, Thomas Geelhaar, gathered in front of a plaque presented to the Town of Ypres by the Organisation for the Prohibition of Chemical Weapons, OPCW, commemorating all those who have died as a result of the use of chemical weapons.

The plaque was presented at the commemoration of the 100th anniversary of the first large scale use of chemical weapons. The three Presidents represented responsible and ethical chemistry and chemists at the meeting and joined in abhorring the use of chemistry in the pursuit of war.

EuCheMS published a press release available at http://www.euchems.eu/?p=4217.

First European Employment Survey for Chemists and Chemical Engineers

Reiner Salzer (Dresden University of Technology) who provided a first glance over the final findings of the European Employment Survey for Chemists and Chemical Engineers which involved the participation of EuCheMS. Details were published as a Guest Editorial in Chemistry – A European Journal and can be found at http://bit.ly/1MHEGqf.

MEP-Scientist Pairing Scheme

In its effort to promote science-based policy making as well as to raise the profile of chemistry within the European Parliament EuCheMS has successfully linked Prof. David Cole-Hamilton, EuCheMS President with Catherine Stihler, Mem-

ber of European Parliament under the MEP-Scientist Pairing Scheme. This scheme envisages putting together MEPs and scientists in order to make sure that the best science advice is available to politicians.

Solar-Driven Chemistry

In an initiative coordinated by EuCheMS Vice-President Ulrich Schubert, several chemists are preparing a long-term vision for a Solar-Driven Chemistry which should be a main topic under the post-Horizon 2020 European Union research programme.

The main idea is to develop "artificial photosynthesis" or "artificial leaves", but other systems can be envisioned where sunlight is used as the energy source for chemical reactions. This goal cannot be reached in a five to ten-years period, it is rather a visionary endeavour with a long-term perspective and many scientific problems still have to be solved, not to mention technical problems. The more recent brainstorming meeting on Solar-Driven Chemistry took place in Berlin, in October 2015, chaired by Ulrich Schubert and hosted by the Deutsche Forschungsgemeinschaft – DFG.

Brussels News Updates (BNU)

Readers of the Brussels News Updates can learn about the most recent developments in European legislation on selected issues, mostly in the area of chemistry, forthcoming events and news on European roadmaps and consultations on a monthly basis. Brussels News Updates is delivered in electronic form to our Members, Divisions and Working Parties, officials of the European Commission and members of the European Parliament, other stakeholders and interested citizens.

New Logo, New Website

Conscious about the importance of creating an appealing image for chemistry, EuCheMS launched its refreshed logo and a new website. The website www.EuCheMS.eu objective is to be the new face of chemical sciences in Europe, a place where everyone can check chemistry news, our policy related activities, conferences, professional networks, members and, of course, what chemistry can do for society.

EuCheMS Awards

2015 EUCYS EuCheMS Special Prize

Michaela Kajšová, from the Czech Republic, is the winner of the 2015 EUCYS EuCheMS Special Prize with her project entitled "The Effect of Cholesterol on Biological Membranes". EuCheMS interviewed Michaela shortly after she received this prize. This interview, where Michaela's en-



thusiasm for research is evident, can be found at http:// www.euchems.eu/?p=5435.

The contest is an initiative of the European Commission that was set up in 1989 with the goal of promoting cooperation and interchange between young scientists and guiding them towards a future career in science and technology.

European Prize for Organometallic Chemistry



The first European Prize for Organometallic Chemistry was awarded to Professor Malcom L. H. Green, Oxford University, UK. This prize is to be awarded every two years" for a single piece of outstanding work or for a body of outstanding work

primarily done in Europe, including Turkey and Israel".

Malcolm L. H. Green, Emeritus Professor at Oxford University, UK, has received the Prize for his outstanding contributions to the field of organometallic chemistry including pioneering studies of molybdenocene and tungstenocene systems, novel methods for molecular inorganic synthesis, for catalysis and for carbon materials as well as fundamental studies of alpha- and beta-hydrogen migratory insertions and C-H bond activations – the well-established term agostic interaction was conceived by Prof. Green.

For more information on the scientific achievements of the 2015 winner, please consult http://research.chem.ox.ac.uk/malcolm-green.aspx

The Prize ceremony and a lecture by the winner took place at the 21st European Conference on Organometallic Chemistry in Bratislava.

Division of Analytical Chemistry Tribute



The Division of Analytical Chemistry (DAC) Tribute was awarded to Professor Reiner Salzer of Dresden University of Technology, Germany, for his longstanding commitment to DAC and the advancement of Analytical Chemistry in Europe. He is chair

of the DAC Education Study Group and recently supervised the completion of the European Employment Survey for Chemists and Chemical Engineers. He regularly organises the Education Session which is a feature of the Euroanalysis conferences.

Division of Analytical Chemistry – EuCheMS Award



The DAC-EuCheMS Award recognizes a European individual who has demonstrated significant and sustained achievements in Analytical Chemistry research or education throughout his or her career. The inaugural 2015 awardee was Professor Miguel

Valcárcel of the University of Córdoba, Spain. He has been Full Professor of Analytical Chemistry there since 1976. He also served as chair of DAC for six years (1999-2004) and was a member of the DAC Education Study Group for 10 years. His research interests include analytical nanoscience and nanotechnology, automation in the laboratory, flow injection analysis, flow-through sensors, non-chromatographic separation techniques, supercritical fluid extraction and metrology in chemistry and he has over 900 publications. Professor Valcárcel has also approached the teaching of Analytical Chemistry in an innovative manner throughout his

academic career and has contributions include 10 monographs and 12 textbooks.

Division of Analytical Chemistry Robert Kellner Lecture



The Robert Kellner Lecture (RKL) recognises a European individual who has made substantial recent contributions in the last five years to the advancement of Analytical Chemistry research or education. The 2015 RKL was awarded to Professor

Bernhard Lendl of Vienna University of Technology, Austria. He received his PhD in Chemistry from the same university in 1996 and was appointed Associate Professor of Analytical Chemistry there in 2001. From 2003-04 he was Guest Professor at the University of Córdoba, Spain, and in 2008 he co-founded QuantaRed Technologies. His research focuses on the development of novel methods and technologies based on infrared and Raman spectroscopies. His current work centers on mid-IR quantum cascade lasers for environmental and process monitoring, lab-on-a-chip systems for time resolved mid-IR spectroscopy, ultrasound enhanced mid-IR fiber optic sensors, surface enhanced Raman scattering and stand-off Raman spectroscopy.

EuCheMS Chemistry Congresses

ECC6

6th EuCheMS Chemistry Congress 11 – 15 September 2016 Sevilla, Spain

Dear Reader, with the preparations and organisation well under way, as chair of the Scientific Committee, I would like to take this opportunity to describe what ECC6 will look like next September.



Following consultation, as well as learning from the experience from previous EuCheMS Congresses, it was agreed to include 8 themes, each representing a subject focussed area of chemistry. These are:

- A: Education and Society
- B: The Environment, Energy and Sustainability
- C: New Chemical Compounds: Synthesis, Methods and Industrial Processes
- D: Catalysis, Industry and Applications
- E: Materials, Devices and Nanochemistry
- F: Properties of Matter
- G: Physical, Analytical and Experimental Methods in Chemistry
- H: Chemistry in the Life Sciences

Each theme is further sub-divided into several topics, and with a convenor who has substantial freedom to design their sessions as they see best serves their community. Thus there will be a variety of presentation styles across the programme including space for 'flash' and 'slam' sessions.

A consequence of this approach is that individuals (as well Divisions and Working Parties) with a particular research interest will see relevant topics across the programme and the

overall provision of content that will interest them will be significantly greater than that solely collected within the theme that appears most closely aligned to their general field. The programme will accommodate approximately 130 Invited and Plenary Speakers and approximately 400 session lectures selected from the submitted abstracts in addition to poster presentations.

Specifically for younger scientists, the European Young Chemists Network will be organising a parallel programme which is already well advanced.

Several areas of current topical importance (e.g. carbon dioxide management, emerging environmental challenges, future challenges and oppor-

tunities for young scientists) will also have space as Round-Table Discussion Sessions or Workshops. There will also be multidisciplinary discussion sessions (Masterclasses) relevant to anyone exploring fields outside their background experience area.

Registration is open, please check the web site for further details (http://euchems-seville2016.eu). As well as the wonderful venue, Seville with culture, architecture, dining and nightlife to suit everyone, we aim to provide stimulating science for all regardless of your professional field of interest and on behalf of the Scientific and Local organising Committees, we would very much like to welcome you to ECC6 and hope to enjoy your company there in September 2016.

Peter Edwards (Chair Scientific Committee)
Cardiff, December 8, 2015



Less than a year away...

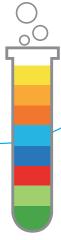






Themes and Topics

8 major Themes developed into 29 Topics that cover a whole range of Chemistry issues, applications and specialties.



Theme A. Education and Society

- Topic Al.Chemistry Education
- Topic A2. Chemistry, Society and Public Engagement
- Topic A3 Benefits: Wealth Creation and Society

Theme B. The Environment, Energy, and Sustainability

- Topic B1. Sustainable Energy and Air Quality
- Topic B2. Environment and Natural Resources Management
- Topic B3. Sustainable chemistry
- · Topic B4. Food Chemistry

Theme C. New Chemical Compounds: Synthesis, Methods and Industrial Processes

- Topic C1. Synthesis and reactivity in Metal based Compounds
- Topic C2. Synthesis and reactivity in Carbon based Compounds
- Topic C3. Methods and Mechanisms
- Topic C4. Catalysis in Solution

Theme D. Catalysis, Industry and Applications

- Topic D1. Chemistry in Industry
- Topic D2. Industrial Processes for the 21st Century.
- Topic D3. Catalysis at Interfaces.

Theme E. Materials, Devices and Nanochemistry

- Topic El. Materials Chemistry
- Topic E2. Nanomaterials, Devices, Technology and applications
- Topic E3. Analytical Techniques, Characterisation and Properties
- Topic E4. Carbon Based Nanochemistry

Theme F. Properties of Matter

- Topic Fl. States of Matter
- Topic F2. Properties of Materials
- Topic F3. Polymers
- Topic F4. Innovative Computational Environments for Molecular Science

Theme G. Physical, Analytical and Experimental Methods in Chemistry

- Topic Gl. Analytical and Physical Methods
- Topic G2. Determination of Structure and Physical Properties
- Topic G3. Chemical Dynamics

Theme H. Chemistry in the Life Sciences

- Topic HI. Drug Discovery and Chemical Biology
- Topic H2. Bio-macromolecules
- Topic H3. Methods and Applications
- Topic H4. In-silico Methods in Life Sciences





Topic Conveners

Get to know Topic Conveners

V

Submit your Abstract!

Guidelines, information for authors, submission procedures & important dates all available now.

<u>Deadline for abstract submission: 1st April, 2016</u>



Speakers

Plenary Speakers, Topic Plenary Speakers and Invited Speakers have been announced including the best European and world Chemistry figures

Organized by



Check all the information in the Congress website

www.euchems-seville2016.eu

Keep updated signing up to the Congress newsletter!!

Subscribe

EuCheMS Recognised Events

9th European Winter School on Physical Organic Chemistry

6 February 2015

Bressanone, Italy

Website: http://www.chimica.unipd.it/wispoc

Integrating CO₂ in the Value Chain: The Role of Chemistry

3 March 2015 Brussels, Belgium

Website: http://www.euchems.eu

The Chemist Towards Europe and the World @ Expo 2015

Bert Weckhuysen, Towards a Circular Economy? Catalysis for the Production of Biomass-Based Building Blocks

11 May 2015 Milan, Italy

Website: http://www.euchems.eu

Bunsentagung 2015

14 – 16 16 May 2015

Bochum, Germany

Website: http://www.bunsen.de/bunsentagung2015

Energy Science Technology Conference 2015

20 – 22 May 2015 Karlsruhe, Germany

Website: http://www.est-conference.com

Zero Carbon Energy: The Future

27 May 2015

Edinburgh, United Kingdom Website: http://www.euchems.eu/

(Re)searching for Jobs

2 June 2015 Brussels, Belgium

Website: http://www.euchems.eu

6th European Conference on Chemistry for Life Sciences

10 – 12 June 2015 Lisbon, Portugal

Website: http://6eccls.eventos.chemistry.pt

The Chemist Towards Europe and the World @ Expo 2015

Luca Montanarella, Where Food Begins: The Role of Soils

11 June 2015 Milan, Italy

Website: http://www.euchems.eu

XL Edition of the "Attilio Corbella" International Summer School on Organic Synthesis (ISOS-2015)

14 - 18 June 2015

Gargnano, Italy

Website: http://www.corbellasummerschool.unimi.it

VIII International School on Organometallic Chemistry Marcial Moreno Mañas

15 – 17 June 2015

Seville, Spain

Website: http://school2015.orfeo-cinqa.es

• ISCE 2015

Stockholm, Sweden

19 June – 3 July 2015

Website: http://www.isce2015.com

CoCoTea 2015

22 – 24 June 2015

Aveiro, Portugal

Website: http://www.cocotea2015.com

The Chemist Towards Europe and the World @ Expo 2015

Valery Petrosyan, Problems of Chemical Safety of Foods and Drinks

23 June 2015

Milan, Italy

Website: http://www.euchems.eu

3rd EuCheMS Inorganic Chemistry Conference "Chemistry Over the Horizon"

28 June - 01 July 2015

Wrocław, Poland

Website: http://euchems.chem.uni.wroc.pl

31st conference of the International Society of Chemical Ecology

29 June - 3 July 2015

Stockholm, Sweden

Website: http://www.isce2015.com

SCF'15: Chemistry and Energy Transition

04 - 09 July 2015

Lille, France

Website: http://www.scf15.fr

21st European Conference on Organometallic Chemistry

05 - 09 July 2015

Bratislava, Slovakia

Website: http://www.eucomcxxi.eu

19th European Symposium of Organic Chemistry

12 - 16 July 2015

Lisboa, Portugal

Website: http://esocxix.eventos.chemistry.pt

Summer School of the Euromaster Measurement Science in Chemistry

12 - 25 July 2015

Puławy, Poland

Website: http://www.msc-euromaster.eu

In Vino Analytica Scientia 2015

14 - 17 July 2015

Mezzocorona, Italy

Website: http://eventi.fmach.it/IVAS2015

15th European Conference on Solid State Chemistry

23 – 26 August 2015

Vienna, Austria

Website: https://ecssc15.univie.ac.at

WiFo 2015 – GDCh Scientific Forum Chemistry

30 August – 02 September 2015

Dresden, Germany

Website: http://www.wifo2015.de

10th European Conference on Computational Chemistry

31 August – 03 September 2015

Fulda, Germany

Website: http://www.euco-cc-2015.org

International Symposium on Synthesis and Catalysis 2015 – ISySyCat2015

2 – 4 September 2015

Évora, Portugal

Website: http://isysycat.eventos.chemistry.pt

The Chemist Towards Europe and the World @ Expo 2015

Fritz Frimmel, Water - Basis for life

2 September 2015

Milan, Italy

Website: http://www.euchems.eu

International School of Organometallic Chemistry 2015

5 – 9 September 2015

Camerino, Italy

Website: http://d7.unicam.it/isoc

EuroAnalysis 2015

6 - 10 September 2015

Bordeaux, France

Website: http://www.euroanalysis2015.com

Chemical Biography in the 21st Century

9 – 12 September 2015

Aveiro, Portugal

Website: http://10ichc-2015.web.ua.pt

• 6th EuCheMS Conference on Nitrogen Ligands

13 – 17 September 2015

Beaune, France

Website: http://www.nligands2015.com

1st European Conference on Physical and Theoretical Chemistry

14 - 18 September 2015

Catania, Italy

Website: http://www.1stphyschemconference.unict.it

9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications"

20 - 24 September 2015

Kalamata, Greece

Website: http://www.ima2015.teikal.gr

58th Annual Scientific Meeting of the Polish Chemical Society

21 - 25 September 2015

Gdansk, Poland

Website: http://ptchem2015.ug.edu.pl

15th EuCheMS International Conference on Chemistry and the Environment

22 – 25 September 2015

Leipzig, Germany

Website: http://www.icce2015.org

The Chemist Towards Europe and the World @ Expo 2015

Rosangela Marchelli, Molecular Secrets of the Italian

Gastronomy

29 September 2015

Milan, Italy

Website: http://www.euchems.eu

The Chemist Towards Europe and the World @ Expo 2015

Summarising Outcomes

2 October 2015

Milan, Italy

Website: http://www.euchems.eu

2nd EuCheMS Congress on Green and Sustainable Chemistry

4 - 7 October 2015

Lisbon, Portugal

Website: http://web.ist.utl.pt/jnlopes/2EUGSC

EuroFoodChem XVIII

13 - 16 October 2015

Madrid, Spain

Website: http://www.eurofoodchemxviiimadrid2015.com

20th Meeting of the Portuguese Electrochemical Society

21 - 23 October 2015

Braga, Portugal

Website: http://www.quimica.uminho.pt

EuCheMS Member Societies

Austrian Chemical Society

Gesellschaft Österreichischer Chemiker (GÖCH)

President: Prof. Herbet Ipser Website: www.goech.at



Estonian Chemical Society

Eesti Keemia Selts

President: Prof. Margus Lopp Website: http://ecs.kbfi.ee/Engl.html



Austrian Society of Analytical Chemistry

Österreichische Gesellschaft fur Analytische Chemie (ASAC)

President: Prof. Wolfgang Buchberger Website: www.asac.at/default.aspx



Finnish Chemical Societies

Kemiska sällskapet i finland / Suomen Kemian Seura

President: Prof. Kimmo Himberg Website: http://kemianseurat.fi/kemia



Royal Society of Chemistry (Belgium)

Société Royale de Chimie

President: Prof. Claudine Buess-Herman

Website: www.src.be



French Chemical Society

Société Chimique de France

President: Prof. Olivier Homolle

Website: www.societechimiquedefrance.fr



Royal Flemish Chemical Society

Koninklijke Vlaamse Chemische Vereniging (KVCV)

President: Christophe De Bie Website: www.kvcv.be



German Chemical Society

Gesellschaft Deutscher Chemiker (GDCh)

President: Dr. Thomas Geelhaar Website: www.gdch.de



Croatian Chemical Society

Hrvatsko Kemijsko Društvo

President: Prof. Srđanka Tomić-Pisarović Website: www.hkd.hr/index-en.html



German Bunsen Society for Physical Chemistry

Deutsche Bunsen-Gesellschaft für Physikalische Chemie e.V.

President: Dr. Marcel Peuckert Website: www.bunsen.de



Pancyprian Union of Chemists

President: Dr Christina Valanidou Website: www.chemistry.org.cy



Association of Greek Chemists

Ένωση Ελλήνων Χημικών

President: Prof. Athanasios N. Papadopoulos Website: www.eex.gr/Pages/Default.aspx



Czech Chemical Society

Česká Spolecnost Chemická

President: Prof. Jan John Website: www.csch.cz



Hungarian Chemical Society

Magyar Kémikusok Egyesülete

President: Prof. Dr. Livia Simon Sarkadi

Website: www.mke.org.hu



Danish Chemical Society

Kemisk Forening

President: Prof. Stefan Vogel Website: www.chemsoc.dk



Institute of Chemistry of Ireland

President: Dr. Margaret Franklin Website: www.chemistryireland.org



Israel Chemical Society

President: Prof. Ehud Keinan Website: www.chemistry.org.il



Polish Chemical Society
Polskie Towarzystwo Chemiczne

President: Prof. Boguslaw Buszewski Website: www.en.ptchem.pl



National Council of Chemists

Consiglio Nazionale dei Chimici

President: Prof. Armando Zingales

Website: www.chimici.it



Portuguese Chemical Society

Sociedade Portuguesa de Química

President: Prof. Maria José Calhorda

Website: www.spq.pt



Italian Chemical Society

Società Chimica Italiana

President: Prof. Raffaele Riccio Website: www.soc.chim.it



Portuguese Electrochemical Society

Sociedade Portuguesa da Electroquímica

President: Luisa Margarida Martins Website: cqe.ist.utl.pt/speq



Association of Chemists of Luxembourg

Association des Chimistes Luxembourgeois

President: Albert Lambert Website: www.achil.lu



Romanian Chemical Society

Societatea de Chimie din Romania

President: Prof. Sorin Rosca Website: www.schr.org.ro



Society of Chemists and Technologists of Macedonia

Сојуз на хемичарите и технолозите на Македонија

President: Prof. Svetomir Hadzi Jordanov Website: www.pmf.ukim.edu.mk/PMF/

Chemistry/sojuz.htm



Mendeleev Russian Chemical Society

President: Prof. Aslan Tsivadze Website: www.chemsoc.ru



Chemical Society of Montenegro

Hemijsko Društvo Crne Gore

President: Prof. Zeljko Jačimovič



Russian Scientific Council on Analytical Chemistry

President: Prof. Yuri Zolotov



Royal Netherlands Chemical Society

Koninklijke Nederlandse Chemische Vereniging

(KNCV)

President: Prof. Kees De Gooijer

Website: www.kncv.nl



Serbian Chemical Society

Српско хемијско друштво (СХД)

President: Prof. Živoslav Tešić

Website: www.shd.org.rs/HtDocs/SHD/

SHD-index.htm



Slovak Chemical Society

Slovenská chemická spolocnost

President: Prof. Viktor Milata Website: www.schs.chtf.stuba.sk



Norwegian Chemical Society

Norsk Kjemisk Selskap (NKS)

President: Prof. Øyvind Mikkelsen

Website: www.kjemi.no



Slovenian Chemical Society

Slovensko kemijsko društvo

President: Prof. Venčeslav Kaučič Website: www.chem-soc.si



Real Sociedad Española de Quimica

President: Prof. Jesus Jimenez-Barbero

Website: www.rseq.org

Spanish Society for Analytical Chemistry

Sociedad Española de Química Analítica (SEQA)

President: Prof. Elena Dominguez

Website: www.seqa.es

National Association of Chemists of Spain

Asociación Nacional de Químicos de España

(ANQUE)

President: Prof. Ernesto Castañeda

Website: www.anque.es

Catalan Chemical Society

Societat Catalana de Quimica

President: Prof. Carles Bo Website: http://blogs.iec.cat

Swedish Chemical Society

Svenska Kemistamfundet

President: Prof. Helena Grennberg Website: www.chemsoc.se

Swiss Chemical Society

President: Prof. Peter Kündig Website: www.swiss-chem-soc.ch

Turkish Chemical Society
Türkiye Kimya Dernegi

President: Prof. Erkan Baykut Website: www.turchemsoc.org



Royal Society of Chemistry

President: Prof. Dominic Tildesley

Website: www.rsc.org















EuCheMS Supporting Members

European Nanoporous Materials Institute of Excellence (ENMIX)

Website: www.enmix.org



European Chemistry Thematic Network Association (ECTN)

Website: http://ectn-assoc.cpe.fr/association/index.htm



Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB)

Website: www.igb.fraunhofer.de/en.html



European Federation of Managerial Staff in the Chemical and Allied Industries (FECCIA)

Website: www.feccia.org/en



European Research Institute of Catalysis (ERIC)

Website: www.eric-aisbl.eu



EuCheMS Professional Networks

EuCheMS Professional Networks are platforms in their own fields of expertise and promote collaboration with other European and international organisations. Among others, the Professional Networks organise high quality scientific conferences in chemical and molecular sciences and interdisciplinary areas.



Chair: Professor Paul Worsfold **Email:** P.Worsfold@plymouth.ac.uk

Division of Analytical Chemistry

The EuCheMS Division of Analytical Chemistry is a network of chemical societies and their members working in all fields of analytical sciences. It gives a voice to the interdisciplinary field of analytical sciences. It is based in Europe and aims at close links to related institutions all over the world.



Chair: Dr. Iwona Maciejowska
Email: maciejow@chemia.uj.edu.pl

Division of Chemical Education

The EuCheMS Division of Chemical Education has two goals: to look for new activities to promote chemical education research and practice in Europe and to improve the dissemination of information between countries.



Chair: Professor Santiago Luis Email: luiss@uji.es

Division of Chemistry and the Environment

The EuCheMS Division of Chemistry and the Environment has as its main goal to identify and promote collaboration and advances in areas of science, technology and other human activities relevant to chemistry and the environment.



Chair: Professor Nick Westwood **Email:** njw3@st-andrews.ac.uk

Division of Chemistry in Life Sciences

The general aim of the EuCheMS Division of Chemistry in Life Sciences is to promote active collaborations, maintain effective communication, and disseminate knowledge among chemists in Europe working in the broad area of chemistry for life sciences. Achievement of these goals is pursued through networking activities, organization of conferences and schools.



Chair: Professor Antonio Laganà Email: lagana05@gmail.com

Division of Computational Chemistry

The Division of Computational Chemistry networks the EuCheMS members exploiting the pervasive nature of computer science and technologies to enhance research and education in chemistry, molecular and materials sciences. Computational Chemistry research provides new understanding and development of procedures for simulating, designing and operating systems ranging from atoms and molecules to interactions of molecules in complex systems such as cells and living organisms. In this respect the division promotes the development of virtual research and education communities fostering collaborative activities between theoreticians and experimentalists, academics and professionals, teachers and students seeking innovation in all the production sectors where chemistry plays a part.



Chair: Professor Marco Arlorio
Email: marco.arlorio@pharm.unipmn.it

Division of Food Chemistry

The EuCheMS Division of Food Chemistry aims are to represent food sectors of national chemical societies at European level; to be recognised as a European authority in all matters concerning food chemistry and to promote and harmonize teaching of food chemistry within food science across Europe.



Chair: Professor Anna Trzeciak

Email: anna.trzeciak@chem.uni.wroc.pl

Division of Inorganic Chemistry

The EuCheMS Division of Inorganic Chemistry provides a forum for the interdisciplinary field of inorganic chemistry and its applications. The Division aims at close links all over the world. It also aims to motivate national chemical societies to promote inorganic chemistry in their countries and to become the focal point of inorganic chemists in Europe. The Division promotes the dissemination of inorganic chemistry through its biennial conference, or dedicated initiatives within the EuCheMS Chemistry Congress, and supports high level education through specialist schools and the production of dedicated books and other publications.



Chair: Professor Nick Evans
Email: N.D.M.Evans@lboro.ac.uk

Division of Nuclear and Radiochemistry

The Division of Nuclear- and Radiochemistry is a network of scientists from national member societies working in nuclear- and radiochemistry throughout Europe and aims to have close links to related institutions all over the world. A broad communicative basis is achieved by cooperation with relevant supranational bodies such as IUPAC and IAEA as well as with journals and newsletters. It endeavours to establish and maintain the highest quality standards in science and research. DNRC accepts a role to harmonise education and training in all aspects of nuclear- and radiochemistry and to offer a means of communication and collaboration between scientists working in the fields. The main objectives of the DNRC are to contribute to the advancement of nuclear- and radiochemistry in Europe; to identify important areas in science, technology and other human activities relevant to nuclear- and radiochemistry, and to stimulate actions in such fields; to address aspects of importance in or to nuclear- and radiochemistry which need regulation, harmonisation, standardisation or codification, and to make recommendations as appropriate and to encourage cooperation between radio chemists whether working in academia, industry or governance, in particular within the countries of the member societies of EuCheMS.



Chair: Professor llan Marek (until June 2015) Email: chilanm@techunix.technion.ac.il



Chair: Professor Veronique Gouverneur (from July 2015 onwards)

Email: veronique.gouverneur@chem.ox.ac.uk

Division of Organic Chemistry

The EuCheMS Division of Organic Chemistry is currently composed of representatives from 27 member societies and has gained international recognition within the chemistry community. Since its creation, the Organic Division has been pro-active at various levels and was involved in the organization of numerous satellite symposia at the European Chemical Congresses. The Division also endorses on a regular basis a series of well-established and high-profile Conferences and Schools.

However, the EuCheMS Organic Division hallmark activity is the creation of the Young Investigator's Workshop (YIW) to further promote and recognize academic excellence in organic chemistry within (and outside) Europe. This annual event is deliberately held close to either the European Chemical Congress (EEC) or the European Symposium on Organic Chemistry (ESOC), as we encourage the attendees of the YIW to attend these events.



Chair: Professor Jan Čermák Email: cermak@icpf.cas.cz

Division of Organometallic Chemistry

The Division of Organometallic Chemistry will continue being an active, trusted, and sustainable voice of EuCheMS on any matters relating to the large and interdisciplinary field of fundamental and applied organometallic chemistry, providing and coordinating activities such as congresses, schools and workshops of interest for students, researchers and others interested in or actively employing organometallic chemistry.



Chair: Professor Eckart Rühl Email: ruehl@zedat.fu-berlin.de

Division of Physical Chemistry

The EuCheMS Division of Physical Chemistry aims to strengthen the interaction of physical chemists throughout Europe. The EuCheMS Division of Physical Chemistry integrates and coordinates its scientific activities with respective national and international activities of its members. The EuCheMS Division of Physical Chemistry strongly supports focused scientific meetings which are organized by active members in Physical Chemistry. Furthermore, the EuCheMS Division of Physical Chemistry aims to increase the networking and communication among its active members, which is expected to lead to a higher level of coordination and communication resulting in integration of topical national events into the EuCheMS Physical Chemistry Community.



Chair: Professor Martin Jansen Email: m.jansen@fkf.mpg.de

Division of Solid State and Materials Chemistry

The Division of Solid State and Materials Chemistry is covering a highly multidisciplinary area of research, which embraces major sub-disciplines of chemistry such as inorganic, organic, physical, theoretical and analytical chemistry, and bridges to physics and engineering. Research in solid state and materials chemistry is not exclusively motivated by the quest for knowledge but is ultimately application-oriented, and thus has strong ties with industrial chemistry. As one basic objective, the Division aims to bring together the various sub-disciplines of the field, coordinating all activities with those of the already existing national associations. In particular, the Division is running biannually pertinent conferences and is striving to organise symposia during the EuCheMS Chemistry Congresses in the intermittent years. Finally, the Division aims to enhance networking and promote education related to solid state and materials chemistry in Europe.



Chair: Dr. Nicola Armaroli
Email: nicola.armaroli@isof.cnr.it

Working Party on Chemistry and Energy

The Working Party on Chemistry and Energy is a network of members of EuCheMS societies working in all fields of chemistry related to energy science and technology in their broadest sense.

The Working Party aims at becoming the key forum for discussion and promotion of any initiatives at the scientific, technical and political level to advocate the leading role of chemistry in contemporary energy research. It further looks for synergies with other EuCheMS divisions and WPs on topics of common interest. The main objective is to organise conferences and workshops on energy related topics in cooperation with other scientific, industrial and political stakeholders at the European as well as national levels.

Moreover, the WP aims to support activities, to organize platforms, attract funding, enhance networking and promote education related to energy and chemistry in Europe.



Chair: Professor Rocco Mazzeo Email: rocco.mazzeo@unibo.it

Working Party on Chemistry for Cultural Heritage

The Working Party is a network of representatives from EuCheMS member societies working in chemistry for cultural heritage. It aims to make links all over the world. The Working Party aims for collaborate closely with the professional conservation community eg. IIC, ICOM-CC, ENCoRe etc. It aims for motivating and assisting the national chemical societies in promoting the interest and knowledge of the relation between chemistry and cultural heritage in their countries.



Chair: Professor Pietro Tundo Email: tundop@unive.it

Working Party on Green and Sustainable Chemistry

The Working Part on "Green and Sustainable Chemistry" is a network of members of EuCheMS societies working in all fields of chemistry related to "The invention, design and application of chemical products and processes to reduce or to eliminate the use and generation of hazardous substances".

The Working Party aims at becoming the key forum for discussion and promotion of any initiatives at the scientific, technical and political level to advocate the leading role of chemistry in contemporary green research. It further looks for synergies with other EuCheMS Divisions and WPs on topics of common interest. The main objective is to organize conferences and workshops on energy related topics in cooperation with other scientific, industrial and political stakeholders at the European as well as national levels.

Moreover, the WP aims to support activities, to organize platforms, attract funding, enhance networking and promote education related to Green and Sustainable Chemistry in Europe.

Following a recommendation from the Executive Board, the General Assembly 2015 decided to convert this Working Party into a Division.



Chair: Professor Hartmut Frank
Email: hartmut.frank@uni-bayreuth.de

Working Party on Ethics in Chemistry

The Working Party is a network of representatives of EuCheMS member societies to promote the understanding of the involvement and importance of ethical considerations in all areas of the education and practice of chemical research and applied chemistry.



Chair: Dr. Brigitte Van Tiggelen
Email: vantiggelen@memosciences.be

Working Party on History of Chemistry

The Working Party on the History of Chemistry is a network of members of EuCheMS societies working in all aspects of the history of chemistry in their broadest sense. Over the years, the international conference organized by the WP every other year has become a key event in history of science community, gathering chemists and historians, from all over Europe and far beyond to investigate and discuss the latest research and reflections on a wide variety of aspects of the history of the molecular sciences. On top of this main objective, the WP has led several projects to promote chemistry through its history, and serves as a platform for international networking to this aim.



Chair: Frederique Backaert (until April 2015) Email: frederique.backaert@eycn.eu



Chair: Fernando Gomollón-Bel (from April 2015 onwards) Email: chair@eycn.eu

European Young Chemists' Network

The European Young Chemists' Network (EYCN) is the younger members division of the EuCheMS. Every chemist under 35 within the EuCheMS framework is part of EYCN.

The aim of EYCN is to promote the exchange of information among young chemists in European industry, academia, professional institutions and European government bodies. Moreover, it provides a communication gate for all areas of chemistry within Europe and also to the rest of the world.

EYCN forms an organised and united opinion within EuCheMS to represent the European voice in science and education and provide the platforms to generate and expand new ideas that contribute to the future role of chemistry and molecular sciences in the European society.

It also bridges the gap between academics and industry by organising shared activities, promoting discussion and handover of experience at an informal level.

Annual reports of EuCheMS Professional Networks

1. Division of Analytical Chemistry

The 2015 Annual Meeting (45th Meeting of EuCheMS-DAC) was successfully held in Istanbul. Eighteen delegates and observers attended the meeting. The Steering Committee membership for 2014 – 2015 was Paul Worsfold (Chair, Royal Society of Chemistry), Wolfgang Buchberger (Secretary, Austrian Society for Analytical Chemistry), Slavica Ražić (Web Secretary, Serbian Chemical Society), Jiri Barek (Czech Chemical Society), Charlotta Turner (Swedish Chemical Society) and Christian Rolando (Société Chimique de France).

DAC currently has six active Study Groups: 'Education in Analytical Chemistry'; 'Quality Assurance and Accreditation'; 'History'; 'Bioanalytics'; 'Chemometrics' and 'Analytical Chemistry in Archeology and Cultural Heritage'. The latter was established in 2014 and is currently seeking new members.

Two awards were announced by DAC in 2015. The Robert Kellner Lecture (RKL) recognises a European individual who has made substantial recent contributions in the last five years to the advancement of analytical chemistry research or education. The recipient of the 2015 RKL was Professor Bernhard Lendl of the University of Vienna, Austria. The inaugural DAC EuCheMS Award recognises a European individual who has demonstrated significant and sustained achievements in analytical chemistry research or education throughout his or her career and the 2015 awardee was Professor Miguel Valcárcel of the University of Córdoba, Spain.

The Head of the Education Study group, Reiner Salzer, co-ordinated a European survey on the employability of chemists, the findings from which were first presented at the Workshop on the Employability of Chemists, which took place on the 12th December 2014 in Brussels.

DAC cooperated also in the In Vino Analytica Scientia conference in Trento, Italy (14 – 17 July 2015).

EUROANALYSIS XVIII was held in Bordeaux, France on 6 – 10 September 2015. EUROANALYSIS is a biennial conference that has established itself as the premier European meeting for the presentation and discussion of a broad range of analytical chemistry topics.

Chair: Prof. Paul Worsfold (Royal Society of Chemistry, 2011-2016)

Secretary: Prof. Wolfgang Buchberger (Austrian Society for Analytical Chemistry, 2012-2016)

Web Secretary: Dr. Slavica Ražić (Serbian Chemical Society)

Treasurer: Prof. Jir'i Barek (Czech Chemical Society, 2014-2017)

Members: 36 active delegates

Countries: 28 (Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary,

Ireland, Israel, Italy, Macedonia, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia,

Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom)

2. Division of Chemical Education

The 6th European Variety in Chemistry Education Conference organised under umbrella of DivCEd EuCheMS took place between 29th June and 1st July 2015 in Tartu, Estonia (https://sisu.ut.ee/eurovariety). This conference, which is devoted to tertiary (academic) chemistry education, included four invited talks:

- Dr. Peter Childs (Ireland): 'We're not in Kansas any more!': some challenges for teaching and learning third level (university) chemistry
- Prof. Ivo Leito (Estonia): Using MOOCs for teaching analytical chemistry: experience at University of Tartu
- Prof. Simon Lancaster (United Kingdom): Facilitating Learning in the Lecture Theatre
- Prof. Reiner Salzer (Germany): Education and Careers of Chemists in the Higher Education Sector in Europe

It also involved thirty oral papers, two workshops and ten posters. It was attended by 72 delegates from 33 countries. Conference themes were: a) Chemistry and interdisciplinary science at first year of tertiary education; b) Problem-and inquiry-based teaching and learning in chemistry; c) Context based teaching in chemistry education for promoting employability skills; d) Chemistry, chemistry education and health; e) Chemistry education - industry links for partnership; f) Training university chemistry lecturers and chemistry teachers; g) ICT and smart technologies in chemistry education; h) Innovative teaching - learning materials for third level chemistry teaching; i) Developing the skills that employers want in undergraduate chemistry degrees; j) Teaching environmental chemistry for responsible citizenship; and Promotion of chemistry and attracting students to study chemistry at university.

The annual DivCEd meeting in Tartu involved 16 people, including members, deputy members and observers. Fifteen national annual reports are published on the division's

website (http://www.euchems.eu/wp-newly-created-to-bedealt-with/national-reports/). During the DivCEd council meeting the issue of having degrees in chemistry education has been addressed. In many European countries it is not possible or very difficult. An international survey on this topic has been proposed and decided. Also the future collaboration with EuCheMS Working Party on the History of Chemistry was accepted. A Chairman of the WPHCh Prof. Dr. Brigitte Van Tiggelen was introduced with that during the 10th International Conference on the History of Chemistry (9-12 September, Aveiro, Portugal) and the WPHCh meeting. Prof. Dr. Gisela Boeck from the WPHCh was engaged as a contact person for the future collaboration. The proposal for the future collaboration incorporates: 1. Exchange of members of DivCEd and WPHCh; 2. Collection of ideas and teaching/ learning material associated with an application of history of chemistry in chemistry teaching; 3. The theme for the 13th ECRICE in Barcelona: the development of big ideas through history of chemistry as a basis for understanding the NOS.

The Division continues to cooperate with ECTN and EC2E2N. Delegates were encouraged to contribute information to the database on methods and experts in tertiary education organised by EC2E2N Work Package 1 "Towards Excellence in School and University Teaching" (http://star-fish.innovatievooronderwijs.nl/information/77/). The overall intention of the group was to create a knowledge-based platform on which information and people can be functionally connected in a network that can grow and develop in a sustainable way, making it possible for lecturers to obtain information and take inspiration from the experiences of peers on how to design and develop high quality and sound teaching programmes. Two distinct types of record are currently being input into the database to facilitate the above aims.

(a) Personal profiles of individual university chemistry and chemical engineering educators (lecturers and other university teaching staff) which present details of their experience and areas of expertise in teaching and learning. (b) Short descriptions of a range of topics related to the teaching and learning of chemistry and chemical engineering at university level. The descriptors are linked to lecturers with relevant expertise, who are willing to answer questions, partake in discussions or even consider entering into advisory or cooperative arrangements.

In cooperation with EC2E2N the book entitled. *A Guidebook of Good Practice for the Pre-service Training of Chemistry Teachers* has been published (Editors: Iwona Maciejowska, Bill Byers), available at www.ec2e2n.net.

The divisional conference 13th European Conference on Research in Chemical Education "Inspiring Science Education through Research" will be organised by the Catalan Chemical Society in Barcelona between 7 and 10 September 2016 (http://ecrice2016.com). ECRICE is the forum for researchers and teachers to exchange research experiences in chemistry education and about teaching and learning chem-

istry at all levels. One of the main ideas behind the 2016 topic is that there is often a gap between chemistry education and research in chemistry. Research achievements and conclusions should inspire innovative teaching methods to teach new generations with new challenges. The other main idea is that the fields of research in teaching and education should be adapted to the needs of teachers, and the results should be transferred and disseminated effectively to the teaching community.

Closer cooperation with the IUPAC Committee on Chemical Education will be developed, especially with a new chair Prof. Dr. Mustafa Sözbilir (Turkey).

The next meeting of DivCEd Council will take place in Barcelona on the 8 September 2016.

Chair: Dr. Iwona Maciejowska (July 2014 - 2017)

Vice Chair: Dr. Dragica Trivic (for Eastern Europe)

Mariann Holmberg (for Western Europe)

Secretary: Dr. Paul Yates (2012-2015)

Members: 25 + 1 observer (Division of Analytical Chemistry)

Countries: 25 (Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel,

Italy, Macedonia, The Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden,

Switzerland, Turkey, United Kingdom)

3. Division of Chemistry and the Environment



The publication organ of DCE is the journal Environmental Science and Pollution Research (ESPR), a journal which continues to experience an extraordinary growth since 2010. Submitted manuscripts: 515 (2010), 1075 (2011), 2011 (2012), 3212 (2013), 4408 (2014), 4147 (Sept 2015). Published articles: 159 (2010), 167 (2011), 416 (2012), 835 (2013), 1370 (2014), 1500 (2015 goal).

The French DCE delegate Philippe Garrigues acts since 2011 as Editor-in-Chief of ESPR, with five DCE delegates as Editors: Walter Giger (Switzerland), Ester Heath (Slovenia), Roland Kallenborn (Norway), Santiago V. Luis (Spain) and Gerhard Lammel (Germany). Furthermore, five DCE delegates are members of the Editorial Board.

Since 1980, the Division (and its predecessors) has organized an International Conference on Chemistry and the

Environment (ICCE) about every second year. In 2015 the Division organized the 15th ICCE in Leipzig, Germany. The conference, presided by Hartmut Herrmann and Thorsten Reemtsma, took place 20 – 24 September 2015.

The ICCE 2015 provided a unique information and communication platform for environmental scientists and a forum of exchange with their collaborators in (eco-) toxicology, microbiology, geosciences and other disciplines. The conference addressed scientists in academia, industry and in governmental institutions with a scientific programme that has been organized around 17 specific symposia developed from Monday to Wednesday, four satellite events on Sunday 20th and a technical session on Thursday 24th, everything complemented by exhibitors presenting the latest equipment and services in the field of environmental chemistry. There were more than 450 registered participants coming from more than 30 countries mainly from Europe but also from America, Asia or Africa.

A Special ESPR Issue was agreed to be prepared based on presentations at the ICCE 2015. The Spanish, German and Swiss DCE delegates Santiago V. Luis, Gerhard Lammel and Walter Giger, along with Thorsten Reemtsma, as one of the co-chairs of the Conference will serve as Guest Editors. More information on this event can be found at www. icce2015.org.

The ICCE 2017 will be held 18 – 22 June 2017 in Oslo, Norway. The Conference president will be Roland Kallenborn.

Chair: Prof. Santiago V. Luis, Spain (2015–2017)

Vice Chair: Prof. Ake Bergman, (Swedish Chemical Society), 2009-2014

Secretary: Prof. Willem de Lange, The Netherlands

Members: During 2014 the Division included 28 active delegates

Countries: 24 Austria (2), Belgium, Croatia, Cyprus, Czech Republic, Denmark, France, Germany (2), Greece, Finland,

The Netherlands, Hungary, Italy (2), Israel, Norway, Poland, Portugal, Russia, Serbia, Slovenia, Spain (2),

Sweden, Switzerland, United Kingdom.

The initial steps of the organisation have been set up by the local organization committee. More information about the conference can be found on www.icce2017.org.

The conference on Contaminated Sediments: Environmental Chemistry, Ecotoxicology and Engineering was held from 8 to 13 March 2015 at Monte Verità, Ascona, Switzerland. Recent sediments are major sinks for contaminants and impact the environmental fate of pollutants. Sediment cores reveal historic records of organic contaminants, heavy metals and radionuclides. The Conference was organised by the DCE in cooperation with CSF and with the support of the Division of Analytical Sciences of the Swiss Chemical Society. About 80 participants from 22 countries presented their contributions in this event.

A conference report appeared in Chimia: CHIMIA 2015, 69, No. 7/8, 488-490. doi:10.2533/chimia.2015.488. More details can be found at the conference website, contased.org.

The symposium Per- and Polyfluoroalkyl Substances Associated with Aqueous Film Forming Foams (AFFF): Chemistry, Remediation, and Regulatory Issues, will be held at San Diego, California, March 13 – 17, 2016, as part of the 251st American Chemical Society National Meeting & Exposition. This symposium has been organised in cooperation with the ACS Division of Environmental Chemistry, following a fruitful cooperation implemented in the last years. The Swiss DCE delegate, Walter Giger, is acting as one of the organisers.

The meeting of the Steering Committee of the Division took place in Helsinki in 28 February 2015, hosted by the Finnish Chemical Society, with the participation of eight DCE delegates. The activities of the meeting included a visit to ECHA headquarters.

The **Annual meeting of the DCE** took place in Leipzig in 19 September 2015, hosted by the UFZ and within the activities associated to the 15th International Conference on Chemistry and the Environment (ICCE 2015).

4. Division of Chemistry in Life Sciences

The key past activities of the Division of Chemistry in Life Sciences (EUCLS) in 2015 were running our 6th Divisional from 10 – 12 June 2015 in Lisbon. This meeting attracted over 100 attendees and included 8 plenary lectures in a wide range of areas across our remit. In addition, there were 5 invited lectures in a session that was co-run with the European Federation for Medicinal Chemistry. Short presentations from younger members at the conferences also gave them a valuable opportunity to present in front of a high quality audience. Our meeting was gender-balanced with equal numbers of male and female attendees. A fact that was also reflected in our overall speaker balance. The science discussed at this meeting was excellent and we are all very thankful to Prof. Pauleta for all her hard work in making this such a success.

The following members of our Division also attend a management meeting we held at the conference: Professors Pauleta (Portugal), Giralt (Spain), Perczel (Hungary), Delepierre (France), Brunsveld (Netherlands), Bernardi (Italy) and Westwood (UK). This meeting led to the following series of actions:

- a) Appoint Treasurer Prof. Luc Brunsveld (NED)
- b) Establish updatable file with job assignments for Divisional members to enable spread and monitoring of tasks (for example see below).
- c) Discussed challenges relating to renewing and expanding members
- d) Plan for next Divisional meeting(s) in 2017 and then in 2019 and 2021 – what format should these take; how do we engage with our very diverse community; how do we successfully link with other Divisions
- e) Improve our Division's website within the EuCheMS website

f) Establish a budget line within EuCheMS bank account and get share of profit transferred from Portugese Chemical Society

The President of EUCLS Division also worked closely with Professor Peter Matyus to provide advice on the structure of Life Sciences component in the 6th EuCheMS Chemistry Congress in Seville where we are looking forward to a very exciting meeting with a major Life Sciences component. We are very grateful for the input of Professor Sigel (Switzerland member) as he chairs one of the Topics.

Key on-going plans/challenges include:

- a) Concerns of running the right conferences to deliver excellent science and financial profit – we continue to come up with creative ways of trying to achieve this for our 2017 commitments. This includes doing our best to work well with other Divisions and EFMC.
- b) Desire to help deliver very strong Life Sciences component in Seville Congress we continue to develop ways to advertise this within our community. The four topic areas are: Chemical Biology and Drug Discovery; Biomacromolecules; Methods and Applications (at the chemistry-biology Interface) and in silico Methods in the Life Sciences.
- c) Engage our new members effectively and continue to expand our reach and reputation within the Life Sciences community. This is not an easy thing to achieve as this scientific area already has several excellent Europeanwide Societies working within it.

We wish to thank everyone who has and continues to commit time to the running of the EUCLS Division.

Chair: Prof. Nick Westwood (Royal Society of Chemistry, UK)

Treasurer: Prof. Luc Brunsveld (NED)

Members: 14 active delegates

Countries: France, Germany, Greece, Hungary, The Netherlands, Portugal, Slovenia, Spain, Switzerland,

United Kingdom

5. Division of Computational Chemistry

During the last year the activity of the Division has focused on the organisation of its biennial scientific conference – the 10th European Conference on Computational Chemistry (EuCO-CC 2015) which was held in Fulda, Germany, from 31 of August to 4 of September 4 2015. The conference hosted 12 sessions (Theoretical Chemistry meets Drug Design I and II, Computational Chemistry of Biological Systems and Biomolecules, Computational Environments, Computational Material Sciences, Molecular Dynamics and Kinetics I and II, Electronic structure, Quantum Mechanics and Molecular Mechanics, Applications, Research Telegrams, Molecular Interactions and Chemical Reactions) each opened by the following invited plenary speakers: Margareta Blomberg (Stockholm/SE), Ria Broer (Groningen/NL), Richard Friesner (New York/USA), Holger Gohlke (Dusseldorf/DE), Katharina Meier (Wuppertal/DE), Benedetta Mennucci (Pisa/IT), John Mitchell (St. Andrews/UK), Christian Ochsenfeld (Munich/ DE), Maria João Ramos (Porto/PT), Gabor Terstyanszky (London/UK), and Walter Thiel (Mülheim an der Ruhr/DE).



The conference was successful in attracting a large, international audience (144 participants from 29 countries), in combining theoretical advances with innovative applications, in prompting new solutions and novel computations, and in strengthening the network of the European

Computational Chemistry community and with related national divisions. In summary 47 talks and 85 posters were presented. In addition, the division supported four young participants with a poster award. The merit of this goes to the local organisers (the Chemistry-Information-Computer Division of the German Chemical Society, the German working Group of Theoretical Chemistry) and Frank Oellien, the conference chairman and Secretary of the Eu-CheMS DCC Division. In the course of the EuCO-CC 2015, the DCC Council members met for their annual meeting (picture shown below).

A second important activity carried out by the Division this year focused on the adoption of initiatives aimed at enhancing the collaboration with ECTN, which has obtained the status of EuCheMS Supporting Member. Along this line the DCC member societies and institutions are invited to analyse and adopt the ECTN Syllabus for chemistry teaching and to apply for the ECTN Eurolabels® which have set an

internationally recognised standard for Higher Education in Chemistry. Part of these standards are EChemTest® (e-tests designed for evaluating the students' knowledge of chemistry) and the distributed repository of Learning Objects (LOs) GLOREP, useful for sharing teaching units with colleagues and allowing their continuous update and improvement (a repository of LOs distributed over some member institutions is already available and has also been populated with materials provided by the RSC). Concerning Euromasters (just renewed) and Eurodoctorates, the typical example in which the activity of the Division is apparent are the TCCM (Theoretical Chemistry and Computational Modeling) ones developed by some members of the DCC

Council according to the guidelines of ECTN.

A third important collaborative endeavour put forward by the DCC is the proposal for the establishing of a Chemistry, Molecular and Materials Science and Technologies (CMMST)

Virtual Research Environment. The proposal submitted on 14 January 2015 was unsuccessful and is now considered for resubmission in a bottom-up form.

Finally, efforts were made to contribute to establishing a cluster of spinoffs for the software as a service for research use and the corresponding training school in sustainable entrepreneurship.

The most important recent achievement was partly renewing and considerably extending the composition of the Council: 29 delegates from 26 European countries. The nomination of 3 additional delegates is expected soon (Greece, Netherlands, Bunsen Society).

Short-term (next year) plans include the preparation of the EuCheMS General Conference by organising a session on Computational Chemistry.

The key long-term activity of the Division is developing a Virtual Research Environment. This process intends to put together all the complementary activities carried out by the member societies and gain strength in the services that can be provided to the members for research and education. For this the (unsuccessful) proposal submitted on 14 January 2015 is now considered for resubmission after redesign in a bottom-up fashion. In addition a working group meeting was held on 1 of September 2015 attended by those interested in the initiative (in particular Westminster (UK), Aachen (DE), Chieti and Perugia (IT), Nancy and Toulouse (FR)). This task force decided to start the procedure for implementing the project by writing a draft program singling out the compute resources available as a service, technology to be used, available competences and applications, and market targets (products, education & training, software, etc.).

Chair: Prof. Antonio Laganà, 2013-2016

Secretary: Dr. Frank Oellien (German Chemical Society), 2013-2016

Members: 29 delegates

Countries: Austria, Belgium, Croatia, Czech Republic, Cyprus, Denmark, Finland, France, Germany, Hungary, Ireland,

Israel, Italy, Norway, Macedonia, Poland, Portugal, Russia, Serbia, Slovak Republic, Slovenia, Spain,

Sweden, Swiss, Turkey, United Kingdom

6. Division of Food Chemistry

Main 2015 activities of the Division, also taking into consideration events supported by FCD active Members, were mainly focused on i) congresses organisation ii) teaching activity, awards and courses iii) lobbying activity towards political decision in food quality and safety area, also in collaboration with other European non-profit scientific boards.

Main events organised in 2015 are listed below (many other events not listed here were successfully supported by National members of FCD):

- Cocotea 2015, 22 24 June 2015, Aveiro (PT) www.cocotea2015.com
- In Vino Analytica Scientia; 14 17 July 2015, Trento (IT) http://eventi.fmach.it/IVAS2015
- NUTRICON: Food Quality & Safety, Health & Nutrition 2014, 27 – 28 November, Skopje, Republic of Macedonia, www.keyevent.org
- Recent Advances in Food Analysis (RAFA), 5 8 November 2015, Prague, Czech Republic
- NUTRICON 2015, 19 20 November 2015, Skopje, Republic of Macedonia
- 4th MS-Food Day 7 9 October 2015, Foggia (IT) www.msfooday.darepuglia.it
- Special Parallel Session on Food Safety, co-organized by DFB Center (Novara, IT), SAFE CONSORTIUM (Bruxelles, B) and GICA-SCI/EuCheMS at Euro Food Chem XVIII – 13 – 16 October 2015, Madrid (Spain) www.eurofoodchemxviiimadrid2015.com
- 5th EuroDrying2015, 21 23 October 2015, Budapest (HCS), www.eurodrying2015.mke.org.hu

- 67th Congress of Chemists, 7–11 September 2015, Starý Smokovec (SK), www.plasticportal.eu/en/67th-congressof-chemists/c/2836
- 5th Trans-Atlantic Fisheries Technology Conference (45th WEFTA), 12 15 October, Nantes (F) http://eventegg.com/taft-2015
- 12th Chemical Conference Greece-Cyprus, 8 12 may 2015, Thessaloniki, Greece (GCS) http://greececyprus. blogspot.gr
- Eurofoodchem XVIII, 2015, Madrid/Spain; 13 16 October; Scientific committee members of the Division: J. Frias Arevallilo, L. Simon-Sarkadi, M. Murkovic, I. Undeland, M. Arlorio; I. Vovk, E. Anklam, A. Basman, V. Piironen www.ictan.csic.es/eurofoodchem2015
- Recent Advances in Food Analysis, 3 6 November 2015, Prague, Czech Republic, www.rafa2015.eu

Intensive exchange with other organisations has taken place, particularly with SAFE Consortium, EFFOST, ISEKI, and Codex Alimentarius; upcoming new collaboration with Asia Food Chemistry-related Boards and Associations is under formalisation (ref. Dr. Chen Fang, China Agricultural University, Bei Jing, China; Dr. Bo Jiang, Jiang Nan University, China, Secretary-general of the 8th International Conference and Exhibition for Nutraceuticals and Functional Foods, Wu Xi city, China, 20 – 23 September 2015). More activities in collaboration with Asia are currently under evaluation with FCD being involved in the organisation of the new edition of CoCoTea ASIA Edition, together with Elsevier Company.

Chair: Prof. Marco Arlorio (Italian Chemical Society), 2015-2017

Secretary: Prof. Michael Murkovic (Austrian Chemical Society), 2015-2017

Treasurer: Dr. Irena Vovk (SI), 2015-2017

Members: 64 active delegates; 1 observer (EU Commission – JRC)

Countries: Albania, Austria, Belgium, Bosnia & Herzogovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark,

European Commission, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Israel, Italy, Latvia, Lithuania, Macedonia, Mongolia, The Netherlands, Norway, Poland, Portugal, Republic of Ireland, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine,

Uzbekistan

The division main challenge is correlated to the low reactivity of some countries/delegates; as a response, the Board of the FCD is planning to re-design the Delegates Network, asking for more communication with the Chairing Office, as well as working on the identification of new approaches to link the countries (e.g. Periodic Divisional Newsbrief; social networks activity; interactive FCD's web site, linked to the FCD page on the EuCheMS official website)

The division is currently preparing a FCD Summer School in Food Chemistry (harmonized teaching activity in EU) that will be held in Bruxelles (First Edition: Summer 2016), in collaboration with Regione Piemonte (Italy), the European Commission Joint Research Centre, EU Universities, and more International EU Organizations/Boards focused on food science.

As discussed in the general programme of the Chair (2015 – 2017) and reflected upon with the FCD Board in Budapest, September 2014, the main developing points will be focused on:

- i) The harmonisation of activities (mainly regarding the National EU partners of FCD, more particularly avoiding overlapping of relevant International Scientific Events in Europe;
- ii) Connection activities (first, improving the connections between FCD and other division belonging EuCheMS; then, improving connections with different non-profit scientific bodies as well as particularly food companies and EU bodies (e.g. Food Drink Europe, ILSI Europe; Food For Life Platform), creating new links and partnerships;
- iii) Design activities (mainly regarding the creation of an academic/technical EU network in Europe based on food chemistry skills, when possible collaborating with EU Commission (particularly with JRC Laboratories and EU's/National Reference Laboratories located in Europe).

7. Division of Inorganic Chemistry

The activity was concentrated on the organization of the conference EICC-3 (*EuCheMS Inorganic Chemistry Conference*) which was held in Wroclaw from 28 June until 1 July 2015.

The main topics of modern inorganic chemistry were discussed during the conference in three parallel sessions and in two poster sessions. The conference was attended by 230 active participants.

During the Board meeting which was organised during EICC-3 in Wrocław we discussed closer cooperation between the Organometallic Division and the Inorganic Chemistry Division. In fact some research topics are considered at the meetings of both divisions. In particular, closer cooperation would be fruitful during EuCheMS congresses.

EICC-4 will be organised in 2017 (2 – 5 July) in Copenhagen and EICC-5 in 2019 in Vienna.

Chair: Prof. Anna Trzeciak (Polish Chemical Society), 2013-2016

Secretary: Dr. Konrad Herbst (Danish Chemical Society)

Members: 16 delegates

Countries: Austria, Belgium, Denmark, Germany, Hungary, Israel, Italy, Netherlands, Poland, Portugal, Slovak Republic,

Spain, Sweden, Switzerland, United Kingdom, Russia

8. Division of Nuclear and Radiochemistry

As any odd year, 2015 has been a year without a European Nuclear- and Radiochemistry (NRC) conference. Therefore, in 2015 the activities of the Division of Nuclear- and Radiochemistry (DNRC) concentrated on regular business, the CINCH II project and the preparation of future activities. A number of topical conferences took place in the reporting period in various sub-fields of NRC such as the Migration Conference at Santa Fe in September.

DNRC was actively involved in the preparation of the 6th European Chemistry Congress, to take place in Seville in 2016. DNRC has also been supervising the on-going organisation of the next European Nuclear- and Radiochemistry Conference – 9th International Conference on Nuclear- and Radiochemistry (NRC9), to take place in Helsinki, Finland, on 29 August – 2 September 2016. We have the pleasure to inform you that Professor Thomas Fanghänel, one the most internationally distinguished radiochemists, will give the opening lecture (more info available at http://nrc9.it.helsinki.fi/).

The DNRC has been appointed as the formal accrediting body for the new EuroMaster Degree being created as part of the CINCH II project – Cooperation in education and training in Nuclear Chemistry. This is a coordination action supported by the European Atomic Energy Community's 7th Framework Programme (EURATOM FP7 2007 – 2011) and is a direct continuation of the CINCH-I project. The CINCH-II project aims at mobilisation of the identified existing fragmented capabilities to form the critical mass required to implement the courses and meet the nuclear chemistry

postgraduate education and training needs of the European Union, (http://cinch-project.eu). CINCH II has established minimum requirements for the EuroMaster in nuclear- and radiochemistry which will be evaluated by the DRNC upon receiving an application(s). Universities fulfilling the minimum requirements are allowed to grant the NRC EuroMaster label to their students. These universities will form a network to promote NRC education in Europe and to organise student exchange and common courses. The Division will evaluate the candidate universities by comparing their NRC curricula to the minimum requirements set in this document. If the NRC curriculum fulfills the requirements by 90% the university will be given the right to grant NRC EuroMaster to their NRC students and the university will become a member in the NRC EuroMaster Network. The aims of the NRC Euro-Master are to give the European NRC students good common knowledge and skills in nuclear- and radiochemistry and thereby harmonise, at a minimum level, the teaching programs in European universities. A further aim of the NRC EuroMaster is to promote the exchange of students, teachers and teaching tools and help employment of nuclear and radiochemists at a European level. On completion of the NRC EuroMaster program the student should have the following knowledge, abilities and skills:

1 Subject knowledge:

- Recall the underlying principles of nuclear- and radiochemistry
- Explain the main practical aspects of nuclear- and radiochemistry

Chair: Dr. Nick Evans (Royal Society of Chemistry), 2014-2016

Secretary: Prof. Jan John (Czech Chemical Society)

Members: 23 active members

Countries: Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Israel, Italy,

Montenegro, The Netherlands, Norway, Poland, Portugal, Russia, Serbia, Slovak Republic, Spain, Sweden,

Switzerland, Turkey, United Kingdom

2 Abilities and skills:

- Perform essential radiochemistry related calculations
- Work safely in a radiochemistry laboratory
- Perform chemical reactions including radionuclides
- Use a range of radiation measurement techniques
- Handle radioactive materials safely
- Identify the hazards pertaining to a radionuclide

9. Division of Organic Chemistry

Election of new President, Veronique Gouverneur, and Executive Board took place on 13 July 2015 in Lisbon.

Some of the recent work of the Division includes the organisation of the 7th EuCheMS Organic Division Young Investigator's Workshop, 12 – 16 July 2015 took place in Lisbon and involved the participation of 23 participants from 22 countries. The 8th edition of the EuCheMS Organic Division Young Investigator's Workshop will be organised in 2016 in Huelva, Spain. The Division of Organic Chemistry is also actively collaborating in the organisation of ECC6 on themes B, C, D, E, and H. Funding activities to secure the Young Investigator's Workshop are currently being developed with Wiley and Synlett. Moreover, the division is envisaging the production of a glossy brochure to be used for fund raising.

In addition to an outstanding programme covering all aspects of Organic Chemistry, the 19th European Symposium on Organic Synthesis (ESOC), held in Lisbon 10 –16 July, 2015, hosted Christina Moberg's EuCheMS Award Lecture. She gave a wonderful explanation of her important work on increasing enantioselectivity of catalytic organic synthesis by recycling the minor isomer of the product.

Next divisional meeting will take place during ECC6 in Seville, Spain.

Chair: Prof. Ilan Marek (Israel Chemical Society), 2012-2014

Prof. Veronique Gouverneur (Royal Society of Chemistry), 2015 onwards

Members: 27 active delegates

Countries: 27 (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece,

Hungary, Ireland, Israel, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Portugal, Russia, Serbia,

Spain, Sweden, Switzerland, Turkey, United Kingdom).

10. Division of Organometallic Chemistry

The first conference organised in 2015 by the Division of Organometallic Chemistry the Third Nordic Meeting on Organometallic Chemistry, hosted by Ola Wendt, in Lund, Sweden, 11 – 12 March 2015, was a "zero-budget" workshop on organometallic chemistry with 53 participants, 16 lectures and several posters. The series will continue next spring with a meeting in Iceland.

The XXI European Conference on Organometallic Chemistry took place in Bratislava, Slovak Republic, 5 – 9 July, 2015. This conference is the key event organised by our Division biennially in odd years. This year the conference was coorganised by Slovak and Czech Chemical Societies. More than 220 participants from 38 countries of five continents gathered in the capital of Slovakia to listen to 56 speakers and to discuss 134 posters in topics ranging from fundamental organometallic chemistry via catalysis and materials towards environmental and bio-aspects of organometallic compounds.

Distinguished Plenary Lectures were presented by Alois Fürstner (Germany), Ian Manners (UK), Masakatsu Shibasaki (Japan), Georg Süss-Fink (Switzerland), and Maria Christina White (USA) whereas Young Plenary Lectures were given by Thibault Cantat (France), Oleg Filippov (Russian Federation), Peter Fristrup (Denmark), Giuliano Giambastiani (Italy), and Roman Šebesta (Slovakia). Two poster prizes sponsored by the RSC journal Inorganic Chemistry Frontiers document-

ed the effort of organisers to encourage and support the youngest generation of European organometallic chemists.

Finally from 5 – 9 September, 2015, the 10th International School of Organometallic Chemistry took place in Camerino, Italy, hosted by Claudio Pettinari.

In the long term, the Division is determined to continue presentation of the European Prize for Organometallic Chemistry every two years "for a single piece of outstanding work or for a body of outstanding work primarily done in Europe, including Turkey and Israel". The first to receive the prize was Malcolm L. H. Green, Emeritus Professor at Oxford University, UK. The prize ceremony and a lecture (as a plenary award lecture) took place during the XXI European Conference on Organometallic Chemistry in Bratislava.

The Division has also contributed to the organisation of the 6th European Chemistry Congress in Seville by suggesting the names of speakers in appropriate themes.

Chair: Prof. Jan Čermák (Czech Chemical Society), 2014-2017

Vice Chair: Prof. Helena Grennberg (Swedish Chemical Society)

Treasurer: Prof. Kees Elsevier (since 2014)

Members: 22 permanent delegates and one observer (from an at present EuCheMS non-member society).

Two additional member societies have not appointed a permanent delegate.

Countries: 25 (Austria, Belgium, Bulgaria (presently non-member), Czech Republic, Denmark, Estonia, Finland, France,

Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia (no appointed delegate), The Netherlands, Norway, Poland, Russia, Slovak Republic, Spain, Switzerland, Sweden, Turkey (no appointed delegate), United

Kingdom).

11. Division of Physical Chemistry

The General Assembly of the Physical Chemistry Division took place in Catania, Italy on 15 September 2015.

Since December 2013 we started to work intensely on this conference as a major milestone to establish Physical Chemistry on a European scale. This conference is intended to be the start of a conference series that will be held every two years, i.e. in those years when no EEC is held, so that the community can meet on an annual basis. Several preparatory meetings were held in Italy (Catania: two meetings in December 2013 and March 2014, Rome: one meeting (September 2014)). The conference was advertised in December 2014 and about 150 scientific contributions came in for the First European Conference on Physical and Theoretical Chemistry. The conference was held from 13 - 18 September 2015 with about 180 participants. The EuCheMS President joined the opening ceremony. French colleagues already expressed interest to continue with the next conference in this series in October 2017, as discussed and approved during the General Assembly of the Physical Chemistry Division (Catania, Italy, September 15, 2015).

The EuCheMS Physical Chemistry Division was contacted by two conveners, A. Agostiano (Topic F: Properties of Matter) and G. Gauglitz (Topic G: Physical, Analytical and Experimental Methods in Chemistry) in order to make suggestions for the scientific programme. These suggestions were assembled according to the feedback received from the active members and EuCheMS Member Societies, where revisions were also required to be worked out, because some of the suggested conveners declined.

As in previous years we had scientific conferences held under the patronage of the EuCheMS Physical Chemistry

Division. This included the Femtomat Conference (March 2015, Mauterndorf, Austria, 15 – 17 March 2015), and the Bunsen-Meeting in Germany (Bochum, 14 – 16 May 2015). Highlight of the reporting period was certainly the First European Conference on Physical and Theoretical Chemistry (Catania, Italy, September 13 – 18, 2015).

Most important was to establish a new conference series on a European scale "European Conference on Physical and Theoretical Chemistry". This has been successfully accomplished. The second conference in this series has been approved by the General Assembly of the Physical Chemistry Division.

Another visible achievement of the Physical Chemistry Division is its active scientific life and its members contributing to various levels to EuCheMS. This includes scientific conferences, contributions to shape European Chemistry Conferences, contributions to the Executive Board, as the Division Chair is an elected member of the Executive Board, and increasing the number of delegates and EuCheMS member organisations within the Physical Chemistry Division.

The Physical Chemistry Division aims for establishing its scientific activities on a stable basis, i.e. international meetings of the European community every year, i.e. in the framework of ECC or the European Conferences on Physical and Theoretical Chemistry. The General Assembly of the Physical Chemistry Division agreed to plan joint workshops with other EuCheMS Divisions/Working Parties at ECC Conferences or other occasions. This enhanced interaction may also be exploited to develop joint European research and funding strategies. Furthermore, scientific meetings in the individual countries will be established on a broader basis

Chair: Prof. Eckart Rühl (German Bunsen Society for Physical Chemistry)

Members: 23

Countries: 20 (Austria, Cyprus, France, Germany (2), Greece, Hungary, Israel, Italy, The Netherlands, Norway, Poland,

Portugal (2), Serbia, Slovakia, Slovenia, Spain (2), Sweden, Switzerland, Turkey, United Kingdom)

under the patronage of the EuCheMS Physical Chemistry Division. Educational standards in physical chemistry have been discussed at the last General Assembly of the Physical Chemistry Division. It appears to be a feasible goal to launch a survey, in which details of the educational programs in physical chemistry are gathered and evaluated in the active countries. This will help to define minimum educational standards in physical chemistry, which will be useful to enhance the student's mobility within Europe. This can be done together with ECTN in order to establish on a broader basis common quality standards.

12. Division of Solid State and Materials Chemistry

The conference of the Division has been held in Vienna during the 15th European Conference on Solid State Chemistry, 23 – 26 of August.

This meeting involved the presence of members of the International Advisory Board of ECSSC. The Chair of the Conference was H. Ipser, Department of Inorganic Chemistry, University of Vienna. 350 attendees joined the Conference. The scientific program was divided in 9 plenary sessions. Each session was divided into one plenary lecture followed by an invited talk and two oral presentations chosen from the abstracts afterwards. To these 36 talks were combined two poster sessions of 140 posters each.

The topics of the oral sessions were intermetallics; functional materials; modern developments in chalcogenide research; new methods of synthesis; solid state theory; collective magnetic phenomena; new methods of characterisation; ionic and electronic transport in solids; and high pressure synthesis and in situ investigations.

One of the highlights of the conference was the speech given on high TC superconductivity up to 195K by M.I. Eremets (Max Planck Institute für Chemie, Chemistry and Physics at High Pressure Group, Mainz, Germany), a discovery which opens new possibilities to obtain high TC superconductors in hydrides.

More details on the conference can be found at http://ecssc15. univie.ac.at.

The 16 ECSSC will take place in Glasgow, in 2017, with E. Cussen as the chairman of the local organising committee.

Chair: Prof. Martin Jansen (German Chemical Society)
 Vice Chair: Prof. Paul Attfield (Royal Society of Chemistry)
 Secretary: Prof. Antoine Maignan (French Chemical Society)

Members: 21 Countries: 19

13. Working Party on Chemistry and Energy

The WP Chemistry and Energy was strongly involved in the organisation of the Energy Science & Technology Conference in 2015, which was held in Karlsruhe (Germany) on 20 – 22 May 2015. WP members organised five important sessions on chemistry-related topics. Jordi Llorca, Robert Slade and Nicola Armaroli organised the sessions on: hydrogen (JL), solar fuels (JL), fuel cells (RS), photovoltaics (NA). Maurizio Peruzzini suggested Elisabetta Agostinelli as candidate chairperson for the session on *energy efficient magnetic materials*.

The Energy Science & Technology International Conference and Exhibition was organized jointly by the Karlsruhe Institute of Technology, the EuCheMS, the European Physical Society, the European Materials Research Society, the German Society for Chemical Engineering and Biotechnology (DECHEMA) and the German Materials Society (DGM). Over 600 participants from all over the world attended the event, which included plenary morning lectures, followed by three parallel technical sessions on Renewable Energy, Energy Efficiency and Systems/Storage/Grids.

The conference merged similar existing initiatives at the European level, such as the E2C series (European Energy Conference), co-organised by EuCheMS since 2010. In line with the mission of our WP, the key idea was to make a single big European event with the highest possible degree of multidisciplinarity – e.g., chemistry, physics, engineering, biology – in order to promote a tighter interaction between the academic and the industrial sector and to discuss both scientific and technological aspects of the ongoing energy transition. Plenary lectures at EST2015 were focused on key technological drivers of the energy mix transformation and on the decarbonisation of the energy system, in the light

of the last IPCC report. A public evening lecture by Dieter Zetsche, Head of Mercedes-Benz Cars, was attended by over 1000 people and outlined the future of car transportation. Our WP and the European chemical community gave a crucial contribution to the success of EST2015, particularly in the area of photovoltaic and magnetic materials, hydrogen production and storage, fuel cells and biomass conversion.

On 3 July 2015, the organising bodies of the conference met in Karlsruhe to start discussing the continuation of this conference series. EuCheMS and the WP strongly support the continuation of EST and merge it with the previous E2C series, held in 2010 (Barcelona), 2012 (Maastricht) and 2013 (Budapest). The meeting was attended by Nineta Hrastelj Majcen, EuCheMS General Secretary.

During 2015 the WP was also involved in the discussion meeting on *Solar-Driven Chemistry*, jointly organised by Eu-CheMS and German DFG, Berlin, 9 October 2015, and was also involved in the Workshop on Endangered Chemical Elements co-organised by EuCheMS the European Parliament, 22 September 2015

The chairmen, along with the President and with the support of the General Secretary are making big efforts to widen the societies represented in the WP and to replace inactive participants. A Dutch representative has been finally appointed. Further work is ongoing to engage other delegates in the WP, particularly from new countries.

Our WP aims at contributing to EuCheMS roadmaps on specific energy topics to be proposed to the EU for funding in the frame of Horizon 2020.

Chair: Dr. Nicola Armaroli (Italian Chemical Society), 2011

Members: 14 active delegates

Countries: Cyprus, France, Germany, Israel, Italy, The Netherlands, Portugal, Spain Sweden, Switzerland, Turkey,

United Kingdom

14. Working Party on Chemistry for Cultural Heritage

In 2015, the steering Committees' meeting took place in Berlin with the aim of discussing the organisation of the 4th edition of the International Congress in Chemistry for Cultural Heritage (ChemCH-2016) that will take place in Brussels on 5 - 9 July 2016. The congress will be arranged by The Belgian Société Royale de Chimie in collaboration with the Royal Institute for Cultural heritage (IRPA-KIK) – Dr. Jana Sanyova and the Chemistry department of the Antwerp University - Prof. Koen Janssens.

The WP envisages to continue organising the Congresses in Chemistry for Cultural Heritage on a biennial basis and to improve the participation of other members from other European Chemical Societies as WP delegates.

Chair: Prof. Rocco Mazzeo (University of Bologna, Italian Chemical Society)

Members: 14 active members

Countries: Austria, Belgium, Croatia, Denmark, France, Germany, Macedonia, Romania, Russia, Sweden, Turkey,

United Kingdom

15. Working Party on Ethics in Chemistry

The Working Party organised its Symposium Carl Djerassi – Memoriam, in Frankfurt, 25 – 26 September 2015, having as main topics the ethical implications of chemistry in science, industry, society and culture; the role of chemists in ethical reflection and decision-making; and the dimensions of ethical and social implications of chemistry. At that meeting a new structure for the Working Party was proposed. This is now under active discussion and should be implemented in the near future.

Members of the working party were heavily involved in discussions led by the Organisation for the Prohibition of Chemical Weapons (OPCW) on an internationally accepted handbook on Ethical Guidelines for Chemists.

Chair: Prof. Hartmut Frank

Members: 12 members from 5 countries, and an observer from the US

Countries: Belgium, Germany, Italy, Romania, United Kingdom

16. Working Party on Green and Sustainable Chemistry

By the end of 2015 the Working Party changed its status into Division, a change which will take effect on the 1 January 2016.

The 2nd EuCheMS Congress on Green and Sustainable Chemistry (EuGSC) was held in Lisbon, Portugal on 4 - 7 October. This event was hosted by the Faculty of Sciences and Technology of the Nova University of Lisbon (FCT/UNL) and chaired by Prof. Ana Aguiar-Ricardo of the Nova University of Lisbon (FCT/UNL) and Prof. José Nuno Canogia Lopes of the University of Lisbon. Members of the newly formed division of EuCheMS acted as the scientific advisory board. Due to the efforts of the conference chairs as well as the host organising committee, this has been a very successful event with an excellent scientific programme. The conference centered around three thematic topics each containing different sub-topics, namely: Molecular innovations: materials for better future, Novel Technology: new solutions for existing problems and Sustainability and awareness: planet Earth chemistry.

The scientific programme consisted of six half-day blocks, each block containing a plenary and/or keynote lecture. The keynote lectures were given by internationally known, leading experts in their respective fields. The first keynote lecture, given by Prof. Nunes da Ponte, summarised decades of his scientific work on the utilization of carbon-dioxide as a green reaction medium. Further keynote lecture of Sir Prof. Martyn Poliakoff "Old solvents: Green solutions" and of Prof. Jairton DuPont on "Supported Ionic Liquid nanocatalysis" highlighted exciting recent developments in the field of green solvents. Prof. Regina Palkovits and Prof. Bert Weckhuysen presented new approaches in chemical catalysis and the road forward towards establishing the future Bio-Based

economy. The program also consisted of interesting keynote contributions by Prof. Fabrizio Cavani on new insights into heterogeneous catalysis for the transformation of alcohols derived from renewables; Dr. Elsje Alessandra Quadrelli who highlighted her latest results on photocatalytic carbon dioxide reduction; Prof. Fabio Arico talked about the use of dialkyl-carbonates as green building blocks for the synthesis of heterocycles; Prof. Mara Freire's lecture was on the unique utilisation of ionic liquids in diagnostics and medicinally related applications and Prof. Eduardo Garcia-Verdugo Cepeda showed how ionic liquids can be useful tools for chemical processes.

During this congress, opened by EuCheMS President Prof. David Cole-Hamilton, students and staff members from more than 20 countries came together to share their latest results and discussed new ideas, projects and partnerships in the field of Green and Sustainable Chemistry. The conference also provided an excellent venue for discussion between academia, industry and policy makers from diverse institutions within Europe. A number of local industrial sponsors supported the conference financially and were given the possibility to showcase their products and services.

The best posters were selected by a discipline-wide scientific committee and several poster prizes, sponsored by the Royal Society of Chemistry and journal Green Chemistry were awarded to acknowledge the dedication and excellent research work of younger researchers.

The next, $3^{\rm rd}$ EuGCS conference will be held in 2017 in York, UK. This event will, no doubt, draw substantial interest from the community and beyond.

Chair: Prof. Pietro Tundo

Members: 25

Countries: Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel,

Italy, The Netherlands, Poland, Portugal, Spain, Spain, Turkey, United Kingdom

17. Working Party WP on the History of Chemistry

The Working Party on the History of Chemistry organises an international conference on the history of chemistry every second year.

The 10th International Conference for the History of Chemistry (10ICHC) of the Working Party on the History of Chemistry (EuCheMS) was held on 9 - 12 September 2015 at the University of Aveiro, Portugal. The theme of the meeting was "Chemical Biography in the 21st Century". Biographies - whether in the form of books or articles - have always been an important genre in the history of chemistry. General histories of chemistry have indeed often taken a biographical approach. Many chemists have written autobiographies, which, along with the formal obituaries produced by national academies of science, have formed an important source of information for historians of chemistry. This conference was an opportunity to critically examine how the genre evolved and explore ways in which the biographical approach can be fruitfully employed by historians of chemistry and chemists, especially at a time where manuscripts and typed documents are disappearing.

The conference was a successful event, and gathered 63 participants from 21 countries and 3 continents. Most participants came from European countries, but there were also participants from USA, Japan, Columbia and Brazil. Even more encouraging was the strong presence of the younger generation, new faces from countries that were not yet represented and the presence of colleagues from the Division of Chemical Education.

The program combined keynote lectures and thematic sessions with shorter papers. One of the plenary lectures was given at the Fábrica Centro Ciência Viva, Science Center of the Aveiro University, and featured the reputed Portuguese chemist Jorge Calado (Technical University of Lisbon) who gave a lecture entitled "Ghost Science". In her key-note "Towards a Biography of Carbon at the Intersection Between Nature and Culture", Bernadette Bensaude-Vincent (University of Paris 1 Panthéon-Sorbonne) explored how choosing to write a biography of a scientific object might add to the usual narratives in the history of chemistry and get deeper into the specific essence of the science. By asking "Who Doesn't Get a Biography in the History of Chemistry?", Michael Gordin (Princeton University) analysed the reason why certain important figures such as Paul Walden, or Wilhelm Ostwald, as well as other less known but nevertheless crucial actors, are still missing a decent biography.

The remaining part of the two and a half days was split into two parallel sessions that hosted 52 papers, concentrated on a wide range of themes, including Translation, Textbooks, Oral and Digital Sources for Recent History, Controversies and Autobiographies, Myths and Misrepresentations, Prosopography, Dictionaries and Sets of Biography, Historiography, Discipline Building, Biography and History of the Laboratory, Biographies and History of Chemical Engineering.

The Working Party plans a double session on Standardisation and International Scientific Organisations at the next European conference for the History of Science, as well as a tribute session on Dalton's 250th birthday in partnership with the Division of Chemical Education.

Chair: Dr. Brigitte Van Tiggelen (Royal Chemical Society, Belgium), 2013

Vice Chair: Prof. Annette Lykknes (Norwegian Chemical Society), 2009

Secretary: Dr. Ignacio Suay-Mattallana (Royal Spanish Society), 2015

Members: 26 active delegates, 150 members

Countries: 21 countries represented by 23 member societies and 32 delegates (Austria, Belgium, Czech Republic,

Denmark, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, The Netherlands, Norway,

Poland, Portugal, Russia, Serbia, Spain, Sweden, United Kingdom) and 15 observers

The Working Party is currently under internal and external reorganisation: refreshing national delegations, and recruiting delegates from societies not yet represented; reviewing structures so as to adapt to reality (terms of chair, broadening the board, task group; connecting to the other EuCheMS divisions, and participating in EuCheMS activities; appointing observers from other institutions and groups devoted to the history of chemistry). The Working Party on the History of Chemistry published a report on the teaching of the discipline in 2007. The final document – titled "Teaching history of chemistry in Europe", a survey of the History of Chemistry in Europe – was the result of information provided by many colleagues from all around Europe, and aimed at understanding the position of history of chemistry in the context of the Bologna reform.

Some eight years later, the academic landscape has evolved and the discipline is facing new challenges, both inside and outside of the university sphere. By updating the 2007 report and preparing an overview on the situation of the history of chemistry in Europe, the WP wants to evaluate the current situation and help to identify how best to support and reinforce local, national and international initiatives.

The questionnaire includes a detailed paragraph on the teaching of history of chemistry, since this is the most visible aspect of the discipline and its professionalisation. There are other questions however, as history of chemistry spreads into other areas, and many of our colleagues are active in museums, collections, associations and journals. Two questions touch on the actual challenges and successes of the history of chemistry in the local context, so as to get a better sense of where we stand and what we can do. The preliminary results have been discussed during the business meeting in 10ICHC and the report will be accessible on the Working Party webpage.

18. European Young Chemists' Network

2015 - We celebrated our 10th Delegates Assembly in Berlin, Germany. During the meeting, we elected a new board for EYCN (2015-2017): Michael Terzidis (Greece) is responsible for networks, Sarah Newton (UK) is in charge of communications, Emanuel Emhki (Austria) supervises membership, Oana Fronoiu (Romania) is responsible for science, and Fréderique Backaert (Belgium), immediate past Chair, will be an advisor to the current Board. Camille Oger (France) was elected as Secretary and Fernando Gomollón-Bel was elected as the new Chair of EYCN.

The new board of EYCN. From left to right: M. Terzidis (GR, Networks), O. Fronoiu (RO, Science), F. Gomollón-Bel (ES, Chair), C. Oger (FR, Secretary), S. L. Newton (UK, Communications) and E. Emhki (AT, Membership).

In 2015 EYCN organised a soft skills training workshop for EYCN Delegates (Berlin, Germany). The topic of this workshop was Communicating Science. Talks were addressed by Chiara Ceci (RSC), Andy Mabbett (Wikimedian in Residence, RSC), Fréderique Backaert (pi technology) and Fernando Gomollón Bel (ISQCH, CSIC-UZ).

EYCN also collaborated in organising the 2015 Career Days for Scientists in Early Stage celebrated in Universidad Rey Juan Carlos (Madrid, Spain) in July. The activity was designed for senior undergraduates and junior PhD students in Science and Engineering career paths. Santiago Gómez-Ruiz (URJC) organised the activity.

EYCN actively participated with the Young Chemists Crossing Borders programme. Six European young chemists (PhD, postdocs, young professionals) travelled to the 250th

ACS National Meeting and Exposition in Boston (MA, USA). Fernando Gomollón-Bel, Chair of EYCN, also attended the meeting invited by YCC-ACS. The students not only attended the conference, but also participated in several meetings designed to strengthen the links of young chemists around the globe organised by YCC-ACS and NESACS. The YCCB Awardees were: Sophie Carenco PhD (France), Gregory Chatel PhD (France), Madeline Kavanagh PhD (Australia-UK), Thomas McGlone PhD (UK), Sebastian Sobottka (Germany) and Bart Verbraeken (Belgium).

A new collaboration with EVONIK should also be highlighted. Thanks to it, we now have a 5000 € yearly income for the next three years, in addition to other activities (such as internships and travel grants) that will be developed in collaboration with Matthias Kleff and Anne McCarthy at EVONIK and announced publicly very soon.

Chair: Fernando Gomollón Bel, 2015-2017

Secretary: Camille Oger, 2015-2017

Members: 7 Members of the Board, 35 Delegates, around 35.000 members (estimated) around Europe

Countries: Austria, Belgium, Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Israel, The

Netherlands, Poland, Portugal, Romania, Russia, Serbia, Spain, Sweden, Switzerland, Turkey, United

Kingdom

After the election of the new board, we have started a monthly newsletter, which anyone can subscribe by writing to communications@eycn.eu, in order to keep all our delegates and collaborators informed.

Short-term future activities include Internships at EVONIK; Travel Grants; the Delegates Assembly (Guimarães 2016); the 1st European Young Chemists Conference (Guimarães 2016); Programming activities (and hopefully a Career Day) for ECC6 (Sevilla); EYCA 2016 and YCCB 2016 (both to be awarded during ECC6).

Key long-term activities include the continuation of important activities such as EYCA and YCCB; the establishment of new connections with industries; applying for European Funding; and creating the bases for an International Young Chemists Network.

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