

EuCheMS

European Chemical Sciences



European Association for Chemical
and Molecular Sciences

Year Book 2016





Publisher and Copyright

European Association for Chemical and Molecular Sciences (EuCheMS) aisbl
 Rue du Trône 62
 1050, Brussels, Belgium
 +32 2 289 25 67, +32 2 289 26 90
 www.euchems.eu
 secretariat@euchems.eu

The Editors

Dr. Nineta Hrastelj Majcen, Marta Kucza, Bruno Vilela

Every effort has been made in preparing this publication. Nevertheless, the authors, editors and publisher disclaim all liability for the accuracy of information, references and recommendations and for any printing errors.

All rights reserved (including those of translating in other languages). No part of this publication may be reproduced in any form – by photoprinting, microfilming, or any other means – nor transmitted or translated into a machine language without written permission of the publisher.

© EuCheMS aisbl

ISBN 978-2-9601655-3-1

EDITORIAL	2
ACKNOWLEDGEMENT	5
EUCHEMS EXECUTIVE BOARD	6
EUCHEMS GENERAL ASSEMBLY	8
POLICY INITIATIVES	9
EUCHEMS AWARDS	14
EUCHEMS CHEMISTRY CONGRESSES	16
EUCHEMS RECOGNISED EVENTS	18
EUCHEMS MEMBER SOCIETIES	21
EUCHEMS PROFESSIONAL NETWORKS	24
Division of Analytical Chemistry	24
Division of Chemical Education	24
Division of Chemistry and the Environment	24
Division of Chemistry in Life Sciences	24
Division of Computational and Theoretical Chemistry	25
Division of Food Chemistry	25
Division of Green and Sustainable Chemistry	25
Division of Inorganic Chemistry	26
Division of Nuclear and Radiochemistry	26
Division of Organic Chemistry	26
Division of Organometallic Chemistry	27
Division of Physical Chemistry	27
Division of Solid State and Materials Chemistry	27
Working Party on Chemistry and Energy	28
Working Party on Chemistry for Cultural Heritage	28
Working Party on Ethics in Chemistry	28
Working Party on History of Chemistry	29
European Young Chemists' Network	29
ANNUAL REPORTS OF EUCHEMS PROFESSIONAL NETWORKS	30



Welcome to the EuCheMS 2016 Yearbook!

2016 has been an exciting and busy year. The high point has to be the 6th EuCheMS Chemistry Congress (ECC) in Seville, which attracted around 2000 people from all over Europe and beyond. Peter Edwards (Chair of the Scientific Committee) and Carlos Negro (Chair of the Local Organising Committee) contrived to put on a spectacular celebration of Chemistry in the wonderful FIBES Conference Centre on the outskirts of the exhilarating city of Seville. The scientific programme started with one Nobel Prize Winner, Dick Schrock, wound its way through all areas of chemistry, beautifully explained, and finished with Ben Feringa giving a delightful exposition of molecular machines, for which he was awarded the Nobel Prize in Chemistry only a few weeks later, along with Jean-Pierre Sauvage and Sir Fraser Stoddart, three Europeans, two of them still working in Europe. The social programme was also spectacular with a delightful tour of the Alcazar by the light of the (almost) full moon.

At the Congress, we signed *The Seville International Chemistry Declaration*, which highlights the importance of chemistry to the modern world and calls upon the development of a better understanding of and continued support for chemistry in all nations. The full text is available at www.euchems.eu/seville-international-chemistry-declaration-2016 where the declaration is open for others to sign.

36 Presidents of EuCheMS Member Societies or their deputies, also signed *The Seville Declaration on the use of chlorine in warfare* (<http://www.euchems.eu/seville-declaration-use-chlorine-warfare/>), where they deplored the use of chlorine in Syria or anywhere else and called on those responsible for its use to be brought to justice. On the subject of chemical weapons, EuCheMS has been working to try to support the brave stand taken by Ehud Keinan, President of the Israeli Chemical Society, who wrote an open letter to the Prime Minister of Israel calling on him to ratify the *Chemical Weapons Convention*. Israel is one of only four nations not to have ratified the Convention and the only one to have signed but not ratified.

Seville also marked the last meetings of Ulrich Schubert's 6 years on the EuCheMS Presidential Council (3 years as

President). He did a wonderful job putting EuCheMS on a sound footing, building its reputation, establishing the office in Brussels and more recently heading the team that produced the white paper on solar driven chemistry, which was launched at the Seville ECC. We are delighted that Pilar Goya has joined the Presidential Council. She was elected President-Elect by the General Assembly in Seville and will become President in January, 2018. Franco de Angelis also finished his term as Treasurer at the end of 2016. He has been a master at making sure we have enough money to do what we want without depleting necessary reserves. His chairing of the Task Group on EuCheMS Funding has had a significant positive impact, which has allowed us to be bolder in what we do and to employ, in addition to Nineta Hrstelj Majcen (General Secretary) and Bruno Vilela (Public Affairs Officer), Irina Simon, who looked after the financial administration. Sadly, Irina decided to return to Romania, but we are very grateful for what she has done. Marta Kucza took over his tasks, but will also be involved in other EuCheMS activities. Eckart Rühl is taking over Treasurer's tasks and moves from very ably representing the Divisions on the Executive Board. Antonio Laganà also represented the Divisions, but his term of office has come to an end and we thank him warmly for his many useful interventions and his special interest in Open Science. We welcome Artur Silva (Portugal) and Christophe Copéret (Switzerland) to the Executive Board from January.

We continue to try to strengthen the links between the EuCheMS Secretariat and Executive level and the Professional Networks (Divisions, Working Parties, Member Societies and Supporting Members), to the list of which we are delighted to welcome in 2017 the European Federation of Medicinal Chemists (EFMC).

I have had the pleasure of addressing the Norwegian Chemical Society in Oslo where I was very graciously welcomed by Harald Walderhaug and Øyvind Mikkelsen. I also spoke at the XX Mendeleev Congress on Pure and Applied Chemistry in the remarkable city of Ekaterinburg, where they honour Tsar Nicolas II, Lenin and Boris Yeltsin. It was a pleasure to have discussions with Aslan Tsivadze, President of the Mendeleev Society, Thisbe Lindhorst, President of the GDCh and Natalia Tarasova, President of IUPAC, amongst others. I very much enjoyed presenting EuCheMS at the 25th anniversary celebrations of The Association of Chemical and Pharmaceutical Industry of the Slovak Republic in Bratisla-

va. Finally, it was also a great pleasure for me to lecture on wood conservation at the biennial International Congress of the EuCheMS Working Party on Chemistry for Cultural Heritage in Brussels in April and to attend the EYCN Delegates Assembly in *Guimarães*, which coincided with the First European Young Chemists Meeting.

Having sorted out the internal structures of EuCheMS, especially as a result of the new constitution, developed by a team headed by Ulrich Schubert, we have started to try to build collaborations with other organisations outside Europe. As mentioned, we have begun discussions with IUPAC and at the General Assembly in Seville signed a Memorandum of Understanding with the American Chemical Society, which represents a similar number of individual chemists as EuCheMS. The MoU commits us to working together whilst protecting one another's interests. Already, we have presented a joint session at the ECC in Seville and another on preparing for employment in a global economy that will take place at the ACS Fall Meeting 2017 in Washington DC. Senior ACS members attended the ECC and EuCheMS attended the ACS Fall Meeting. We are committed to supporting our young chemists working together especially through the Young Chemists Crossing Borders scheme, which allows reciprocal visits of young chemists to the ECC and ACS meetings.

More broadly, we are a sponsoring society for the Atlantic Basin Chemistry Conference, ABC Chem, which will take place in Cancun, 24 – 27 January, 2018. This conference has been designed to allow chemists in Africa, Brazil, Canada, Europe, Mexico, the rest of South America and the US to learn much more about what is going on in the different countries and to start to build collaborations. We look forward to meeting some of you there.

We have continued to advise the European Parliament and Commission and are delighted that Executive Board member, Wolfram Koch, has been appointed to the High Level Group on Open Science and that Nicola Armaroli, Chair of the Working Party on Chemistry and Energy is a member of Commission Missions on the circular economy. We also held a highly successful workshop on solving antibiotic resistance in the European Parliament jointly with the European Federation of Medicinal Chemistry.

I started by discussing ECC in Seville and I shall finish by looking forward to the next ECC, which will be in Liverpool, UK 26 – 30 August, 2018. The Royal Society of Chemistry, who remain fully committed to EuCheMS despite the decision of the UK to leave Europe, are already planning an exciting celebration of chemistry in all its diverse and wonderful facets.

At the General Assembly in Seville, it was decided that ECC-8 will be held in Lisbon, 30 August – 3 September, 2020.

I would like to express my deepest thanks to Nineta, Bruno, Irina and Marta for all the very hard work they put into ensuring that EuCheMS runs smoothly and that EuCheMS Brussels News Updates is interesting and comes out regularly on time. I wish them and all of you my very best wishes for a very successful and interesting 2017.

David Cole-Hamilton
President, EuCheMS

Thank you!

We would like to express our heartfelt gratitude to Prof. Ulrich Schubert and Prof. Francesco de Angelis, two members of the EuCheMS Presiding Council who finished their terms in 2016, for their time, unceasing support, and relentless commitment to EuCheMS.



Acknowledgement

EuCheMS would like to thank all who made their contribution to the 2016 EuCheMS Year Book.



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

Professor David Cole-Hamilton
Royal Society of Chemistry
Email: djc@st-andrews.ac.uk



Elected member

Dr. Philippe Garrigues
Société Chimique de France
Email: p.garrigues@ism.u-bordeaux1.fr



Vice-President

Professor Ulrich Schubert
Austrian Chemical Society
Email: uschuber@mail.zserv.tuwien.ac.at



Elected member

Dr. Pilar Goya
Spanish Royal Society of Chemistry
Email: pgoya@iqm.csic.es



Treasurer

Professor Francesco De Angelis
Italian Chemical Society
Email: francesco.deangelis@univaq.it



Elected member

Professor Ivanka Popović
Serbian Chemical Society
Email: ivankashd@tmf.bg.ac.rs



Elected member

Professor Bogusław Buszewski
Polish Chemical Society
Email: bbusz@chem.umk.pl



Elected member

Professor Livia Simon Sarkadi
Hungarian Chemical Society
Email: sarkadi@mail.bme.hu



Elected member

Professor Pavel Drašar
Czech Chemical Society
Email: Pavel.Drasar@vscht.cz



Elected member

Professor Saskia van der Vies
Royal Netherlands Chemical Society
Email: s.m.vander.vies@vu.nl



Elected member

Professor Michael Dröscher
German Bunsen Society
for Physical Chemistry
Email: m.droescher@t-online.de



Appointed member

Professor Sergio Facchetti
National Council of Chemists
Email: s.facchetti@chimici.it



Appointed member

Professor Wolfram Koch
German Chemical Society
Email: w.koch@gdch.de



Appointed member

Prof. Antonio Laganà
Società Chimica Italiana
Email: lagana05@gmail.com



Appointed member

Dr. Robert Parker
Royal Society of Chemistry
Email: parkerr@rsc.org



Appointed member

Professor Francisco Javier Pérez Trujillo
Asociación Nacional de Químicos de España
Email: fjperez@anque.es



EuCheMS Secretariat

General Secretary

Dr. Nineta Hrastelj Majcen
Email: Nineta.majcen@euchems.eu



Administrative Assistant (part time)

Irina Simion
Email: Irina.simion@euchems.eu



Public Affairs Officer

Bruno Vilela
Email: Bruno.vilela@euchems.eu



Administrative Assistant (part time)

Marta Kucza
Email: marta.kucza@euchems.eu



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.

2016 EuCheMS General Assembly, Seville, Spain

EuCheMS 2016 General Assembly took place on 10 – 11 September 2016, at the Seville Chamber of Commerce, Sevilla, Spain.

The General Assembly meeting was kindly hosted by our four Member Societies – Asociación Nacional de Químicos de España (ANQUE), Real Sociedad Española de Química (RSEQ), Sociedad Española de Química Analítica (SEQA), and Societat Catalana de Química (SCQ).

This year's Assembly left an important societal mark with the *Sevilla Declaration on the Use of Chlorine in Warfare*, where chemists from all over Europe called for the responsible use of chlorine, a chemical used in our everyday life that can be used as a terrible chemical weapon.



Also during the General Assembly, EuCheMS and the American Chemical Society signed a Memorandum of Understanding, where both Parties agreed to work together to “promote the ethical use of chemistry” and “collaborate for the good of the chemical enterprise, of their members, and of the subject of chemistry” in such areas as events, surveys, lobbying, ethics and safety, global challenges, exchange programmes, the public understanding of chemistry, among others.

At the open sessions of the General Assembly, a session on the upcoming 2nd European Employability Survey of Chemists and Chemical Engineers was chaired by Prof. Reiner



Salzer and included the participation of Antonio Cammarota (DG Employment, European Commission), and Bradley Miller (American Chemical Society).

The open session included a contribution by Prof. Sir John Holman, President of the Royal Society of Chemistry, about RSC's commitment to European research and the future of chemistry.

Finally, this General Assembly signalled the growth of EuCheMS with the acceptance of a new Supporting Member, the European Federation of Medicinal Chemistry (EFMC), thus bringing to 47 the number of EuCheMS Members.

Policy Initiatives

EuCheMS Policy Initiatives

Being conscious about the role of chemistry in society, EuCheMS is constantly seeking for better ways to create links between citizens, politicians and chemists, and to show what chemistry has to offer in preparing sound legislation, in providing solutions for our present environmental and wellbeing challenges, in creating new products, or simply to share a vision for the future or the enthusiasm that chemists have for their research.

In 2016, we successfully nominated a representative for a Commission high-level advisory group, collaborated with several Members of the European Parliament, organised extremely well-received science-policy workshops, answered many public consultations, published a visionary paper on solar-driven chemistry, brought forward two declarations on responsible chemistry, participated in European Commission delegations, and many other activities. At the same time, we refreshed one of the tools we use to communicate these activities, the monthly Brussels News Updates newsletter. With all these activities, 2016 was definitely a particularly active year in terms of policy initiatives and in setting the foundations for many future actions, always having in mind the role of chemistry in society.

EuCheMS at Open Science Policy Platform

EuCheMS representative Prof. Wolfram Koch, Member of the EuCheMS Executive Board, was selected for the High-Level Advisory Group “Open Science Policy Platform”. The group was announced in May by European Commissioner Carlos Moedas at the Competitiveness Council in Brussels and met twice during 2016. The mandate of this multi-



stakeholder group composed of 25 members, is to advise the Commission on how to advance open science by providing input, namely from researchers and publishers, in formulating and implementing open science policy.

Public Consultations

EuCheMS is playing an active role in the European policy-making process by responding to chemistry-related open consultations published by the European Commission. It is important to mention that 2016 marked a significant increase in the interactions with EuCheMS Members in order to prepare EuCheMS responses to consultations.

Please replace the paragraph with: Regarding the European Commission's public consultation on antimicrobial resistance (AMR), EuCheMS called for more awareness and more research, two points which currently integrate the new European Commission action plan on AMR.

In its answer to the consultation on the Modernisation Agenda for Higher Education in the European Union, EuCheMS provided its views on the current strengths and weaknesses of higher education in the EU, on the priority areas where those in charge of higher education should focus their attention, and on how the EU should support efforts to improve higher education.

Funding was also a concern in these consultations. EuCheMS has provided input on Horizon 2020 priorities for “Nanotechnologies, Advanced Materials, Biotechnology, and Advanced Manufacturing and Processing”; and also to the “Science with and for Society” Work Programme 2018 – 2020.

Finally, EuCheMS responded to the public consultation on the Joint Programming on Metrology Research, (EMRP and EMPIR), a topic in which chemistry plays a major role.

Science-Policy Workshops

With the purpose of bringing together the scientific community and policy makers, and to showcase the solutions that

chemists can offer to society, EuCheMS has organised two workshops during the course of 2016 and several panels during the 6th EuCheMS Chemistry Congress in Seville.

Science: How Close to Open?

This workshop, which took place in Amsterdam on 5 April 2016, was organised on the occasion of the Open Science Conference organised by the Dutch Presidency of the Council of the EU. This event looked into present and future intellectual property boundaries in chemistry research and debated questions such as which model should be used for peer-review publishing, who owns research data and how to share it, and which approach is better for creating innovative products and services. Many different approaches were defended, but all participants agreed in one point: whatever choices are made, they must be beneficial for the progress of science and society.



Panel discussion with the speakers of Science: How Close to Open? (from left to right: Steffen Pauly, Springer; Cristina Todasca, University Politehnica of Bucharest; Wolfram Koch, GDCh; David Cole-Hamilton, EuCheMS; Emma Wilson, Royal Society of Chemistry; José Cotta, DG Connect, European Commission; Eva Wille, Wiley-VCH)

Solving Antibiotic Resistance

During this Science and Technology Options Assessment (STOA) Working Breakfast co-organised by the European Parliament's STOA, EuCheMS, and the European Federation of Medicinal Chemistry on 28 April 2016, researchers and several Members of the European Parliament analysed the global challenge of antimicrobial resistance and weighed the pros and cons of possible solutions, namely more research coordination in this field. This workshop attracted a large participative audience including six MEPs and was chaired by Paul Rübigen MEP, Chair of STOA.



Speakers of Solving Antibiotic Resistance with MEP Paul Rübigen and David Cole-Hamilton (from left to right: Lloyd Czaplewski, Chemical Biology Ventures Ltd; MEP Paul Rubig, STOA Chair; Chris Schofield, University of Oxford; Philippe Glaser, Institut Pasteur; David Cole-Hamilton, EuCheMS)

MEP-Scientists Pairing Scheme

The MEP-Scientists pairing scheme, which is run by the Science and Technology Options Assessment (STOA) of the European Parliament, aims to allow Members of the European Parliament (MEPs) to know more about science and how it may help in Parliamentary business as well as to allow scientists to become more aware of what MEPs do. EuCheMS is currently represented in this scheme by Prof. David Cole-Hamilton, EuCheMS President, paired with MEP Catherine Stihler, and by Prof. Pavel Drašar, Member of EuCheMS Executive Board, paired with MEP Pavel Poc. Under the scope of this scheme, researchers and MEPs had the chance to exchange ideas and follow each other's work twice during 2016.



David Cole-Hamilton and Catherine Stihler, MEP

Pavel Drašar

Pavel Poc, MEP

Missions on Circular Economy

Following earlier EuCheMS initiatives on the circular economy the European Commission (EC) invited EuCheMS to be part of the EC Delegations to Chile and to China that took place in April and November, respectively. Dr. Nicola Armadori, Chair of the EuCheMS Working Party on Chemistry and Energy, was EuCheMS representative at these missions led by Environment Commissioner Mr. Karmenu Vella and Mr Daniel Calleja, EC Director-General for Environment.

The scope of these missions was to deepen relationships and align policies on the circular economy between EU and these countries. With Chile being one of the strongest South American economies and China being the world's second biggest economy, the adoption of circular economy measures is both an economic opportunity and an environmental need.



EuCheMS at a networking session during the mission to China

Declarations

Seville Declaration on the Use of Chlorine in Warfare

"We, the Member Societies of the European Association for Chemical and Molecular Sciences (EuCheMS), deplore the use of chlorine in the Syrian conflict or any other and call upon the international community to bring to justice those responsible for the misuse of chlorine."

It was with these very concrete words that Chemical Societies in Europe deplored the use of Chemical weapons and called for the misusers of chlorine to be brought to justice.



The Seville International Chemistry Declaration 2016

The Seville International Chemistry Declaration 2016 highlights the importance of chemistry to the modern world and calls upon the development of a better understanding of and continued support for chemistry in all nations. This declaration was first signed in Seville at the 6th EuCheMS Chemistry Congress on September 13th, 2016, having as its first signatories Carlos Negro (Foro Química y Sociedad President and Co-Chairman of ECC6), Jean Marie Pierre Lehn (Nobel Laureate), Antón Valero (President of Spanish Chemical Industry Federation), Ehud Keinan (President of EuCheMS Member, the Israel Chemistry Society), Robert Parker (CEO of the EuCheMS Member, the UK Royal Society of Chemistry) and Hartmut Frank (University of Bayreuth, and Chair of EuCheMS Working Party of Ethics in Chemistry).

As the declaration clearly states it in its initial paragraph, “In spite of the fact that chemistry is invisible to most, it is the basis for practically all the scientific, technological and innovation advances that enable humankind to progress. Without chemistry’s important and continuous contribution, we would not have been able to achieve the life expectancy and quality of life we have today.” The full text is available at www.euchems.eu/seville-international-chemistry-declaration-2016 where the declaration is open for everyone to sign.



The first signatories of the Seville International Chemistry Declaration 2016 from left to right: Robert Parker, Hartmut Frank, Carlos Negro, Jean Marie Pierre Lehn, Ehud Keinan, Antón Valero, with Jorge Alcalde (moderator, Quo magazine)

The White Paper on “Solar-driven Chemistry”

EuCheMS and Cefic started at the end of the year 2011 a discussion on a joint initiative with the original working title Artificial Photosynthesis to create a document as input for European research programs and possibly a European platform on this topic. In the years 2012 and 2013 several expert meetings took place in Brussels, with participants both from science and industry, during which the discussion shifted towards Circular CO₂ Economy.

In a brainstorming meeting in December 2014 with a number of experts from different European countries continuation of this activity by EuCheMS took place. A EuCheMS-only document should focus on a long-term vision and basic science and be broader than just artificial photosynthesis. The group suggested Solar-Driven Chemistry as a new working title,

i.e. to put the scientific focus on how to use sunlight to arrive at new chemicals. The final document is solely based on scientific arguments and not so much on commercial aspects. The EuCheMS Executive Board followed this recommendation and considered such an activity as highly relevant for the general goals of EuCheMS.

On 9 October 2015, a group of experts, nominated by EuCheMS and national funding agencies, gathered in Berlin upon invitation of Deutsche Forschungsgemeinschaft (DFG). Nicola Armaroli (CNR Bologna), Vincent Artero (Université Grenoble Alpes, CNRS and CEA), Gabriele Centi (University of Messina), Angela Dibenedetto (University of Bari), Leif Hammarström (University of Uppsala), Guido Mul (University of Twente), Christopher Pickett (University of East Anglia), Sven Rau (University of Ulm) and Joost N. H. Reek (University of Amsterdam) presented and discussed their views on different future prospects of generating base chemicals and fuels directly from air components (CO₂, N₂) and water with solar radiation as the energy source. Ideally, such man-made, ecologically friendly systems should be more efficient than their natural counterparts.

The presentations and intense discussions were summarized in a first draft of a White Paper, which was subsequently refined and focused in several steps by the same group of experts. The goals of the White Paper are, among others, to

- elaborate on the vision to produce fuels and base chemicals with solar radiation as the energy source
- summarize the state-of-the-art and scientific/technical options for implementation
- identify scientific/technical gaps of knowledge
- have a realistic timescale for reaching all the goals, showing the benefits of intermediate results also
- demonstrate the huge environmental, societal and economic impact
- call for a broad and inclusive action at the European level and strong support for basic and applied research

The conclusions of the White Paper can be summarized as follows: “Solar-driven chemistry” is an ambitious long-term

innovative scientific and technological endeavour. It will have huge environmental, societal and economic benefit. A broad and inclusive action (European platform) driven by chemists is needed to accomplish this ambitious goal. Realising solar-driven chemical technologies requires an integrated and synergetic approach and strong support for basic and applied research. It will take several decades to reach all the goals, but short-term and intermediate results will already generate huge benefits.

The White Paper (www.euchems.eu/wp-content/uploads/2016/10/161012-Solar-Driven-Chemistry.pdf) was finalized in September 2016 and first presented at the European Chemistry Congress in Seville. It is currently disseminated on a European level through the distribution channels of EuCheMS and DFG, as well as nationally through the EuCheMS member societies and national funding organizations.

EuCheMS Awards

2016 European Union Contest for Young Scientists (EUCYS) EuCheMS Special Prize

Christian Schärf, Paul Rathke, and Friedrich Wanierke, from Germany, are the winners of the 2016 EUCYS EuCheMS Award with their project entitled "Alpha-aluminium oxide-based gemstones: Development of a chemical synthesis process prompted by current mining conditions". The award was given during the 28th edition of the EUCYS which took place in Brussels, 15 – 20 September 2016.



From left to right: Paul Rathke, Friedrich Wanierke, Christian Schärf, Nineta Hrastelj Majcen

Mining gemstones damages the environment and often occurs under dehumanising conditions. Christian Schärf, Paul Rathke and Friedrich Wanierke hypothesised that, because rubies and sapphires are a mixture of aluminium oxide and certain metals, it might be possible to produce the gemstones themselves. The trio experimented with various melting and crystallisation processes, and thoroughly analysed the synthesis progression and the powder particles and crystals that formed. The young researchers came to the conclusion that nature is a highly skilled chemist. They succeeded in creating tiny ruby monocrystals but the path to creating a large gemstone in the lab proved more difficult than anticipated.

EuCheMS Award for Service

The winners of the 2015 EuCheMS Award for Service are Professor Helena Grennberg and Professor Anthony Smith.



Helena Grennberg

Professor Helena Grennberg is a Professor of Organic Chemistry at Uppsala University, Sweden. Her research interests include topics from organometallic chemistry, organic nanomaterials and catalysis. Helena

Grennberg has served the chemical community in Europe in many respects. Among the prominent positions she held are chairperson of the EuCheMS Division of Organometallic Chemistry, member of the EuCheMS Executive Board (2007 – 2013), Scientific Chair of the 5th European Chemistry Congress in Istanbul 2014, President of the Swedish Chemical Society (since 2012). She has a clear and forward-looking vision, a broad perspective and well-defined positions on many issues relevant to the chemical community in Europe. Her critical approach to solving problems, her reliability and the combination of team-player as well as leadership abilities contributed to a high degree to shaping the profile of EuCheMS. The award ceremony for Prof. Grennberg took place during the 6th EuCheMS Chemistry Congress in Seville, Spain, 11 – 15 September 2016.



Anthony Smith

Professor Anthony Smith had a key role in establishing, organizing, and co-ordinating the European Chemistry Thematic Network Association (ECTN) from 1996 onwards. This included six successful proposals within the EU Socrates frame, each for 3-year-funding from the European Commission. The network represents a large consortium with 109 partners from 28 EU countries, the Republic of Serbia, the Former Yugoslav Republic of Macedonia, and third countries.

The award was given to Prof. Smith by Prof. Franco De Angelis, on behalf of EuCheMS, on 25 April 2016 at the ECTN General Assembly in Gdańsk.

EuCheMS Lecture Award

The EuCheMS Lecture Award 2015 winner is Prof. Ursula Röthlisberger (Ecole Polytechnique Fédérale de Lausanne), a role model for women in science. Prof. Ursula Röthlisberger received the award for her outstanding contributions in computational chemistry and in promoting science at the European level. She organized a number of European conferences. Prof. Röthlisberger is a world-wide recognized expert in the field of first-principles based computer simulations and associate editor for Journal of Chemical Theory and Computation (ACS), one of the leading journals in the field.

European Young Chemist Award

The European Young Chemist Award (EYCA) is intended to showcase and recognise the excellent research being carried out by young scientists working in the chemical sciences.

The Italian Chemical Society (SCI) and the Italian Consiglio Nazionale dei Chimici (CNC) sponsored the initiative as in the previous editions which took place under the patronage of EuCheMS, the EuCheMS Chemistry Congress, and the European Young Chemistry Network (EYCN). Also, this year ANQUE (Asociación Nacional de Químicos de España), as organizer of the 6th ECC, added a remuneration for special mentions given from the Jury.

At the 35 years old level, the Gold Medal went to Maria Escudero-Escribano, Technical University of Denmark, Denmark, and the

Silver Medal (ex equo) went to Ruben Dario Costa Riquelme, Friedrich-Alexander-Universität Erlangen-Nuernberg, Germany, and to Daniele Leonori, Manchester University, U.K.

At the PhD level, the Gold Medal went to Giulio Ragazzon, University of Bologna, Italy, and the Silver Medal went to Mercedes Zurro de la Fuente, Regensburg Universität, Germany.

The Award was organized by Bruno Pignataro. The advisory Board was constituted by Camille Oger (EYCN), Michael Terzidis (EYCN), Ilya V. Vorontyntsev (EYCN), Sergio Facchetti (CNC), Michele Pavone (SCI), Javier Pérez-Trujillo (ANQUE) and the General Organization was due to Camillo Sartorio (University of Palermo, Italy).



EuCheMS president awards Maria Escudero-Escribano, the winner at the 35 years old level.



Sergio Facchetti (CNC) awards Giulio Ragazzon, the winner at the PhD level.



A group photo at the EYCA award ceremony during the closing ceremony of 6th ECC in Seville. From right to left: Bruno Pignataro, Raffaele Riccio, Frederique Backaert, Sergio Facchetti, Javier Garcia-Martinez, Federico Bella, Bill Morandi, Filippo Monti, Silvia Osuna, David Cole-Hamilton, Mercedes Zurro de la Fuente, Giulio Ragazzon, Ernesto Castañeda, Ruben Dario Costa Riquelme, Daniele Leonori, Maria Escudero-Escribano.

EuCheMS Chemistry Congresses

ECC6

6th EuCheMS Chemistry Congress

11 – 15 September 2016

Seville, Spain

The 6th EuCheMS Congress in Seville, 11 – 15 September, was a great success further establishing the tradition that is becoming the figure-head Chemistry Conference in Europe.

More than 2000 people attended the Congress during the five days. The 8 parallel Themes, each broadly representing a specific disciplinary focus, provided session space for the delivery of a total of approximately 840 oral presentations. The introduction of 'short oral' slots considerably increased the opportunity for oral presentations and these were primarily offered to younger scientists and authors of highly regarded poster applications. As well as a series of excellent main Plenary presentations and presentations by National and International Award Winners, there were approximately 30 Topic Plenaries, 110 invited and keynote speakers, 420

session oral speakers and 270 short oral presentations. In addition to all the oral presentations, there were approximately 1000 posters presented during the two main poster sessions. Ultimately, the success of a conference depends upon the quality of the science presented by the speakers and poster presenters and this was certainly excellent at ECC-6, thanks are due to all presenters.

As well as the main programme, there were several parallel symposia and events that were well attended and very well received by their audiences. These included a round-table discussion on carbon dioxide, its management and associated scientific and political issues, a Symposium in honour of the 250th anniversary of John Dalton which included a very entertaining slam session of presentations by young scientists and a workshop on Responsible Research and Innovation in education.

There was also a comprehensive and well attended parallel symposium organised by the European Young Chem-

ists Network and the EYCN did a fantastic job in developing their own programme and populating it with speakers, workshops and advice sessions. Of particular note here is the Science Café event they organised in a bar in the centre of Seville which was enormously entertaining, very well attended (to full capacity) and was a great forum for collecting young and established scientists in an informal environment.

A noteworthy innovation introduced in ECC-6 is the concept of masterclasses. Two masterclasses aimed especially at younger chemists and intended to present a broad overview of a key field by an established and respected practitioner of that field were presented and very well received.

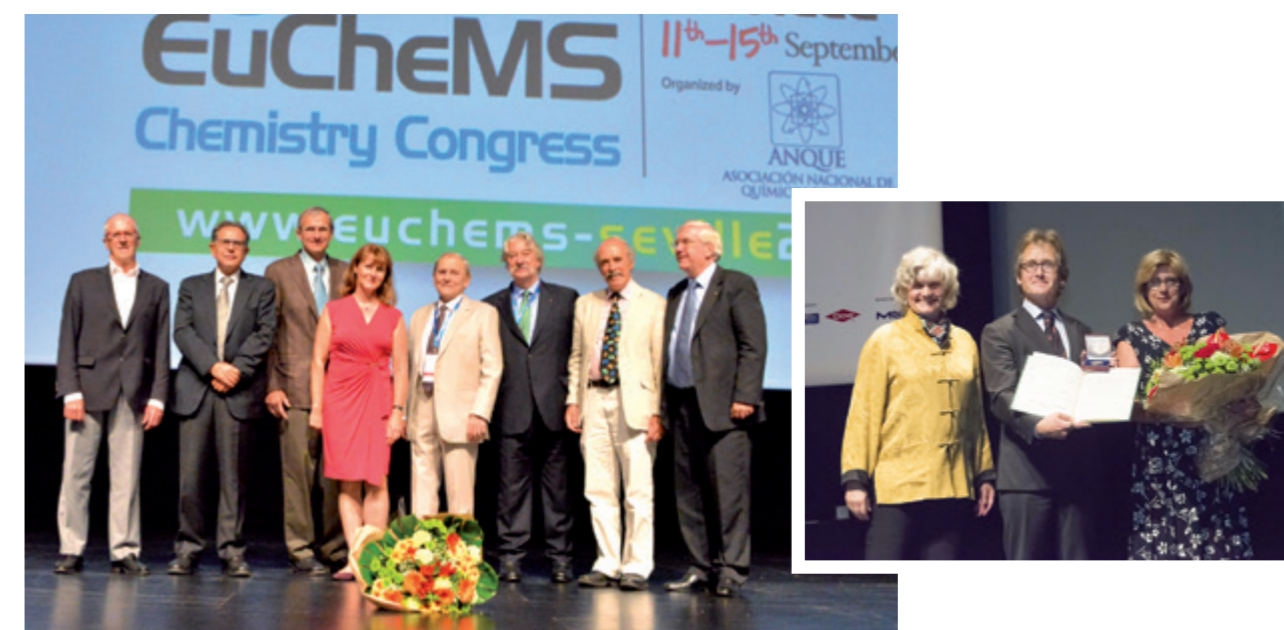
In balance, along with the more traditional programme of offering of parallel sessions and symposia, the introduction of short orals to main programme sessions, the Science Café, and the masterclasses all contributed to a very successful conference that was very much enjoyed by all.

The complexity of the programme was a challenge to organise with over 800 speaking slots across all the categories coupled with the need to achieve the best balances across all interest groups and stakeholders. This required constant

effort and contributions from the Scientific and Local (host) Organising Committees. We are enormously grateful to their dedication to making ECC-6 a success, it would not have happened without them. They worked hard throughout the two-year period since ECC-5 and their voluntary contribution is very much appreciated indeed. The organisation of the venue, the physical delivery of the Congress and organising all the various EuCheMS committee and Divisional meetings was primarily due to the hard work of the Local Organising Committee who did a fantastic job. The venue was marvellous, bright, spacious and with excellent facilities. The catering and support systems were also excellent and the Venue staff were approachable and very helpful working hard to ensure a smooth delivery of the Congress.

We need to continue to work towards raising the profile of EuCheMS Congresses and ensuring their success as the major conference activity in European Chemical Sciences and I am very much look forward to the next, ECC-7 in Liverpool in 2018.

Peter Edwards,
Chair of ECC-6 Scientific Committee



2016 EuCheMS Recognised Events

- **10th European Winter School on Physical Organic Chemistry – e-WISPOC 2016**
Bressanone, Italy
31 January – 5 February 2016
Website: <http://www.chimica.unipd.it/wispoc/publica>
- **I Convegno del Grupo Interdivisionale di Chimica per le Energie Rinnovabili – ENERCHEM-1**
Florence, Italy
18 – 20 February 2016
Website: <http://www.enerchem-1.it>
- **13th Chemistry Conference for Young Scientists – ChemCYS 2016**
Blankenberge, Belgium
16 – 18 March 2016
Website: <http://www.chemcys.be/>
- **Bruner Workshop 2016 – Fabrizio Bruner Memorial Workshop on Environmental LC-MS**
Urbino, Italy
6 – 8 April 2016
Website: <http://brunerworkshop2016.uniurb.it>
- **11th DA – 11th Delegates Assembly of EYCN**
Guimarães, Portugal
26 – 30 April 2016
Website: <http://11da.eventos.chemistry.pt>
- **5th PYChem and 1st EYChem – 5th Portuguese Young Chemists Meeting (5th PYChem) and 1st European Young Chemists Meeting (1st EYChem)**
Guimarães, Portugal
26 – 29 April 2016
Website: <http://5pychem.eventos.chemistry.pt>
- **Analytica Conference**
Munich, Germany
10 – 12 May 2016
Website: <https://www.gdch.de>
- **IWSG – 8th International Workshop on Science Gateways**
Rome, Italy
08 – 10 June 2016
Website: <https://sites.google.com/a/nd.edu/iwsg2016/home>
- **Kemiportalen – Analysdagarna**
Umeå, Sweden
14 – 17 June 2016
Website: <http://kemiportalen.nu>
- **ISOS 2016 – International Summer School on Organic Synthesis “A. Corbella”**
Gargnano, Italy
12 – 17 June 2016
Website: <http://www.corbellasummerschool.unimi.it/>
- **4th EuCheMS Inorganic Chemistry Conference – EICC-4**
Copenhagen, Denmark
2 – 5 July 2016
Website: <http://www.eicc-4.dk>
- **16th Conference on Molten Salts and Ionic Liquids**
Vienna, Austria
03 – 08 July 2016
Website: <http://www.euchem2016.org/welcome/>
- **ExTech'2016 / ISSS'2016**
Toruń, Poland
03 – 06 July 2016
Website: <http://www.extech-iss2016.pl/>
- **ChemCH2016 – Chemistry for Cultural Heritage 2016**
Brussels, Belgium
06 – 07 July 2016
Website: <http://org.kikirpa.be/chemch2016/>
- **IX International School on Organometallic Chemistry “Marcial Moreno Mañas”**
San Sebastián, Spain
06 – 08 July 2016
Website: <http://school2016.orfeo-cinca.es/>
- **NRC9 – 9th International Conference on Nuclear and Radiochemistry**
Helsinki, Finland
29 August – 2 September 2016
Website: <http://nrc9.it.helsinki.fi>
- **9th AES 2016 – 9th Asian-European Symposium on Metal-Mediated Efficient Organic Synthesis**
Stockholm Sweden
4 – 7 September 2016
Website: <http://aes2016.se>

2017 EuCheMS Recognised Events

- **e-WISPOC 2017 – 11th European Winter School on Physical Organic Chemistry**
Bressanone, Italy
29 January – 3 February 2017
Website: www.chimica.unipd.it/wispoc
- **25HSKIKI – 25th Croatian Meeting of Chemists and Chemical Engineers with international participation**
Porec, Croatia
19 – 22 April 2017
Website: <http://www.25hskiki.org>
- **Circular Economy in Drugs**
Valleta, Malta
5 May 2017
Website: <http://www.euchems.eu/events/circular-economy-drugs>
- **Glyphosate: Harmless Chemical or Silent Killer?**
Brussels, Belgium
10 May 2017
Website: <http://www.euchems.eu/events/glyphosate-harmless-chemical-silent-killer/>
- **Inorganic days – Inorganic chemistry days**
Nynäshamn, Sweden
12 – 14 June 2017
Website: <http://www.oorgan.se>
- **ISOS 2017 – International Summer School on Organic Synthesis “A. Corbella”**
Gargnano, Italy
18 – 22 June 2017
Website: <http://www.corbellasummerschool.unimi.it>
- **ICCE 2017 – 16th EuCheMS International Conference on Chemistry and the Environment**
Oslo, Norway
18 – 22 June 2017
Website: <http://www.icce2017.org>
- **Bienal 2017 – XXXVI Biennial Meeting of the Spanish Royal Society of Chemistry (RSEQ)**
Barcelona, Spain
25 – 29 June 2017
Website: <http://www.bienal2017.com>
- **23rd Conference on Isoprenoids**
Minsk, Belarus
4 – 7 September 2016
Website: <http://isoprenoids-23.basnet.by/>
- **JCO – Journées de Chimie Organique**
Palaiseau, France
7 – 9 September 2016
Website: <http://www.jco2016.com/>
- **ECRICE – European Conference on Research in Chemical Education**
Barcelona, Spain
7 – 10 September 2016
Website: <http://ecrice2016.com>
- **16th Ružička days – International conference 16th Ružička days: “Today Science – Tomorrow Industry”**
Vukovar, Croatia
21 – 23 September 2016
Website: <http://www.ptfos.hr/ruzicka>
- **IASOC 2016 – XVII Session of Ischia Advanced School of Organic Chemistry**
Naples, Italy
25 – 29 September 2016
Website: <http://www.iasoc.it>
- **Café Chimique on the Future for Collaborative Research and Innovation in Europe**
Brussels, Belgium
24 January 2017
Website: <http://rscbelgium.blogspot.si/p/the-public-perceptions-of-chemistry-and.html?m=1>
- **30th EFFoST International Conference: Targeted Technologies for Sustainable Food Systems**
Vienna, Austria
28 – 30 November 2016
Website: <http://www.fffostconference.com>

- **7th EuroVariety – 7th European Variety in University Chemistry Education**
Belgrade, Serbia
28 – 30 June 2017
Website: <http://www.chem.bg.ac.rs/eurovariet>
- **ISSNP 2017 – International Summer School on Natural Products**
Naples, Italy
3 – 7 July 2017
Website: <http://www.issnp.org>
- **EuroAnalysis**
Stockholm, Sweden
28 August – 1 September 2017
Website: www.euroanalysis2017.se
- **11ICHC – 11th International Conference on the History of Chemistry**
Trondheim, Norway
29 August – 2 September 2017
Website: <http://www.ntnu.edu/11ichc>
- **ISOC 2017 – International School of Organometallic Chemistry: Organometallic chemistry: from theory to applications**
San Benedetto del Tronto, Italy
2 – 9 September 2017
Website: <http://d7.unicam.it/isoc/home>
- **3rd EuGSC – 3rd EuCheMS Congress on Green and Sustainable Chemistry**
York, UK
3 – 6 September 2017
Website: <http://www.york.ac.uk/3EUGSC>
- **EuCOMC 2017 – 22nd European Conference on Organometallic Chemistry**
Amsterdam, The Netherlands
9 – 13 September 2017
Website: <http://www.eucomc2017.amsterdam>
- **WiFo 2017 – GDCh-Wissenschaftsforum Chemie 2017**
Berlin, Germany
10 – 14 September 2017
Website: <http://www.wifo2017.de>

EuCheMS Member Societies

Austrian Chemical Society

Gesellschaft Österreichischer Chemiker (GÖCH)

President: Prof. Herbet Ipsner

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 für 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. Jari Yli-Kauhaluoma

Website: <http://kemianseurat.fi/kemia>



Walloon Royal Society of Chemistry

Société Royale de Chimie

President: Prof. Thierry Randoux

Website: www.src.be



French Chemical Society

Société Chimique de France

President: Prof. Gilberte Chambaud

Website: www.societechimiquedefrance.fr



Royal Flemish Chemical Society

Koninklijke Vlaamse Chemische Vereniging (KVCV)

President: Dr. Christophe De Bie

Website: www.kvcv.be



German Chemical Society

Gesellschaft Deutscher Chemiker (GDCh)

President: Prof. Dr. Thisbe K. Lindhorst

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: Prof. Dr. Joachim Sauer

Website: www.bunsen.de



Panyprian Union of Chemists

Παγκύπρια Ένωση Επιστημόνων Χημικών

President: Dr Christina Valanidou

Website: www.chemistry.org.cy



Association of Greek Chemists

Ένωση Ελλήνων Χημικών

President: Mrs. Triantafyllia Sideri

Website: www.eex.gr



Czech Chemical Society

Česká Společnost 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

Instituid Ceimice Na Héireann

President: Dr. Margaret Franklin

Website: www.chemistryireland.org



Israel Chemical Society*הימכל תל ארשיה הרבחה*

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

**National Council of Chemists***Consiglio Nazionale dei Chimici*

President: Prof. Nausicaa Orlandi
 Website: www.chimici.it

**Italian Chemical Society***Società Chimica Italiana*

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

**Association of Chemists of Luxembourg***Association des Chimistes Luxembourgeois*

President: Mr. Albert Lambert
 Website: www.achil.lu

**Society of Chemists and Technologists of Macedonia***Сојуз на хемичарите и технолозите на Македонија*

President: Prof. Zoran Zdravkovski
 Website: www.pmf.ukim.edu.mk/PMF/Chemistry/sojuz.htm

**Chemical Society of Montenegro***Hemijsko Društvo Crne Gore*

President: Prof. Zeljko Jačimović

**Royal Netherlands Chemical Society***Koninklijke Nederlandse Chemische Vereniging (KNCV)*

President: Prof. Floris Rutjes
 Website: www.kncv.nl

**Norwegian Chemical Society***Norsk Kjemisk Selskap (NKS)*

President: Prof. Øyvind Mikkelsen
 Website: www.kjemi.no

**Polish Chemical Society***Polskie Towarzystwo Chemiczne*

President: Prof. Jerzy Błażejowski
 Website: www.en.ptchem.pl

**Portuguese Chemical Society***Sociedade Portuguesa de Química*

President: Prof. Artur Silva
 Website: www.spq.pt

**Portuguese Electrochemical Society***Sociedade Portuguesa da Electroquímica*

President: Prof. Luísa Margarida Martins
 Website: <http://cqe.ist.utl.pt/speq>

**Romanian Chemical Society***Societatea de Chimie din Romania*

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

**Mendeleev Russian Chemical Society**

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

**Russian Scientific Council on Analytical Chemistry**

President: Prof. Yuri Zolotov

**Serbian Chemical Society***Српско хемijsко друштво (СХД)*

President: Prof. Živoslav Tešić
 Website: www.shd.org.rs/HtDocs/SHD/SHD-index.htm

**Slovak Chemical Society***Slovenská chemická spoločnosť*

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

**Slovenian Chemical Society***Slovensko kemijsko društvo*

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

**Spanish Royal Society of Chemistry***Real Sociedad Española de Química*

President: Prof. Jesús Jiménez-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 Química*

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***Société Suisse de Chimie – Schweizerische Chemische Gesellschaft*

President: Dr. Alain De Mesmaeker
 Website: www.swiss-chem-soc.ch

**Turkish Chemical Society***Türkiye Kimya Derneği*

President: Prof. Dr. Bahattin Yalçın
 Website: www.turchemsoc.org

**Royal Society of Chemistry**

President: Prof. Sir John Holman
 Website: www.rsc.org



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: Prof. 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: iwona.maciejowska@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. To achieve those goals the Division is running biannually alternately two conferences: ECRICE - European Conference on Research in Chemical Education (even years) and EuroVariety - European Variety in University Chemistry Education (odd years).



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

● Division of Chemistry and the Environment

The overall aim of the EuCheMS Division of Chemistry and the Environment is to promote and support co-operation in the area of chemistry and the environment issues amongst the European chemical societies and their members.



Interim Chair: Prof. Anna Bernardi
Email: anna.bernardi@unimi.it

● 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: Prof. Antonio Laganà
Email: lagana05@gmail.com

● Division of Computational and Theoretical Chemistry

The Division of Computational and Theoretical 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: Prof. Marco Arlorio
Email: marco.arlorio@uniupo.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: Prof. Nicholas Gathergood
Email: nicholas.gathergood@ttu.ee

● Division of Green and Sustainable Chemistry

The Division of 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 Division 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 Division aims to support activities, to organize platforms, attract funding, enhance networking and promote education related to Green and Sustainable Chemistry in Europe.



Chair: Prof. 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: Prof. Jon Petter Omtvedt
Email: j.p.omtvedt@kjemi.uio.no

◆ Division of Nuclear and Radiochemistry

The Division of Nuclear and Radiochemistry is a network of scientists working in nuclear and radiochemistry throughout Europe. Cooperation with relevant supranational bodies such as IUPAC and IAEA as well as with journals and newsletters provides a broad network reaching also outside Europe. The main objective of the DNRC is to contribute to the advancement of nuclear and radiochemistry in Europe. Furthermore, DNRC strives to harmonise education and training in all aspects of nuclear and radiochemistry.



Chair: Prof. Veronique Gouverneur
Email: veronique.gouverneur@chem.ox.ac.ukl

◆ 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: Prof. 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: Prof. 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 organize 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 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 energy and chemistry in Europe.



Chair: Prof. 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 to collaborate closely with the professional conservation community eg. IIC, ICOM-CC, ENCoRe etc. It aims to motivate and assist the national chemical societies in promoting the interest and knowledge of the relation between chemistry and cultural heritage in their countries.



Chair: Prof. 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, experts from other relevant disciplines and professions, and of individuals worldwide interested and active in the advancement of academic and industrial chemistry for the common good under consideration of global sustainability. In this sense, the WP and its members aim to assist in the propagation of ethical guidelines within the chemical community and to help by dialectical reasoning in resolving controversies about the consequences, benefits and problems arising from the practice of chemistry. Towards this end, the WP intends to consult and cooperate with other public organisations such as the OPCW or EU and national science-administrative bodies. A particular goal is to promote between chemical professionals a better understanding of the importance of ethical considerations in all areas of chemical research and applied chemistry by education.



Chair: Prof. 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 the 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: Fernando Gomollón-Bel
Email: chair@eycn.eu

● European Young Chemists' Network

The European Young Chemists' Network (EYCN) is the younger members' division of 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 organized 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 organizing shared activities, promoting discussion and handover of experience at an informal level.

Annual reports of EuCheMS Professional Networks

1. Division of Analytical Chemistry

The Division of Analytical Chemistry (DAC) Steering Committee (StC) for 2016 was Paul Worsfold (RSC; Chair), Wolfgang Buchberger (Austrian Chemical Society; Secretary), Slavica Ražić (Serbian Chemical Society; Web secretary), Jiří Barek (Czech Chemical Society; Treasurer), Christian Rolando (Société Chimique de France), Charlotta Turner (Swedish Chemical Society) and Sibel Özkan (Turkish Chemical Society). Slavica Ražić was elected as Chair Elect and she will be Chair of DAC for 2017-2019.

DAC has active Study Groups in the following areas: "Education", "Quality Assurance", "History", "Bioanalytics", "Chemo-metrics" and "Analytical Chemistry in Archaeology and Cultural Heritage". It also established a Task Force in Nano-analyticals. Further details of their activities can be found at <http://www.euchems.eu/divisions/analytical-chemistry>. During the year, DAC also produced two "Letters of Information" and the "European Analytical Column".

Preparations for EUROANALYSIS XIX in Stockholm in 2017 (28 August –1 September) have already started to continue this successful series of conferences.

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. Jiří Barek (Czech Chemical Society, 2014 – 2017)
Members:	36 active delegates
Countries:	28 (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Former Yugoslav Republic of Macedonia, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom.)

2. Division of Chemical Education

The main task of the Division is to support the exchange of information and to develop partnerships in the field of chemistry education research and practice. It is accomplished in several ways. Conferences and annual reports are some of them. The European Conference on Research in Chemistry Education 2016 "Inspiring Science Education through Research" organised by the Catalan Chemical Society under the umbrella of DivCEd EuCheMS took place between 7 and 10 September 2016 in Barcelona, Spain.

ECRICE is a forum for researchers and teachers to exchange research experience in chemistry education and deals with teaching and learning chemistry at all levels. The conference included five plenary lectures.

Members, deputy members and observers participated in the annual DivCEd meeting in Barcelona on 8 September 2016. During the DivCEd council meeting, the issue of gaining degrees in chemistry education was addressed. In many European countries obtaining the degree in that field is not possible or very difficult. The results of a pilot phase of an international survey on this topic were discussed. Cooperation with other divisions was also considered. National annual reports are now published on the DivCEd website.

A new publication prepared in cooperation with EC2E2N (work package 1, Towards excellence in school and university teaching) "A Guidebook of Good Practice for the Pre-Service Training of Chemistry Teachers" (Editors: Iwona Maciejowska, Bill Byers) is available on the DivCEd website

<http://www.euchems.eu/divisions/chemical-education-2/> references. One of the authors' key objective was the desire to respond to the allegations claiming that we teach teachers how to use active strategies and teaching methods based on constructivism (e.g. PBL, IBSE) while continuing to use traditional passive, teacher-centred, expository, lecture methods. The authors did their best to make each chapter as widely applicable throughout European universities as possible, using, where possible, the authors from at least two different countries and encouraging consultation in a wider group. Each chapter consists of similar parts: reasons (why is this topic important in pre-service teacher education), theoretical framework (short literature review), good practice example (example of a practical approach to introduce key aspects of that topic to PSTs), recommendations (implementations in teacher education), future reading (a few most important and easily available sources, references).

DivCEd delegates were encouraged to contribute information to the EC2E2N database on the methods and experts in tertiary education:

(<http://starfish.innovatievooronderwijs.nl/information/77/>). It will allow university teachers to link with colleagues having expertise in particular areas. The Division held a Responsible Research and Innovation in Chemical Education workshop as the Division's input to the Sixth European Chemistry Congress in Seville in 2016. The workshop, aimed at exploring the introduction of RRI methods and practices at universities and schools, included presentations and discussions on various approaches to RRI in chemistry and chemical

Chair:	Dr. Iwona Maciejowska (2014 – 2017)
Vice Chair:	Dr. Dragica Trivic (for Eastern Europe) Mariann Holmberg / Karolina Broman (supported by Ilka Parchmann) (for Western Europe)
Secretary:	Dr. Paul Yates / Rachel Mamlok-Naaman
Members:	24 + 1 observer (Division of Analytical Chemistry)
Countries:	24 (Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom)

education. Other DivCEd members also contributed to the success of the 6th ECC, e.g. Paul Yates “Defining Excellent Chemistry Teaching” – topic plenary, LEMONIA Antonoglou “Virtual Laboratories in Teaching Science at Secondary and Elementary School Students” – invited talk, Hana Ctrnactova, Liberato Cardellini and Simon Lancaster – oral presentations. In addition, a symposium celebrating the life and work of John Dalton was organized in partnership with the Working Party on the History of Chemistry. The symposium reflected both Dalton’s teaching practice, as well as his fundamental contributions to Chemistry.

The divisional conference 7th Eurovariety in University Chemistry Education entitled „Challenges for chemical education in a changing world” will be held in Serbia (Belgrad), 28 – 30 June 2017. Eurovariety meetings are focused on practice in tertiary (academic and vocational) education.

3. Division of Chemistry and the Environment

In 2016, the DCE Steering Committee met in Oslo on 2 April 2016, with the participation of 10 Delegates. Following the new EuCheMS regulations, the Norwegian delegate, Dr. Roland Kallenborn, was elected as the new Treasurer of the Division.

The DCE participated at the symposium on Per- and Polyfluoroalkyl Substances Associated with Aqueous Film Forming Foams (AFFF): Chemistry, Remediation, and Regulatory Issues, as part of the 251st American Chemical Society National Meeting & Exposition held at San Diego, California 13 – 17 March, 2016, in cooperation with the ACS Division of Environmental Chemistry.

The publication organ of DCE is the *Journal Environmental Science and Pollution Research* (ESPR) that continued to experience an extraordinary growth with almost 1900 articles published in 2015 and having received almost 6000 submissions; for 2016 the number of submissions was close to 7000 with more than 2000 published articles.

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

A short report on the activities of ContaSed 2015 has appeared in ESPR (2016, 23:10304 – 10307) and a Special Issue has appeared in 2016 under the title of “Recent sedi-

ments: environmental chemistry, ecotoxicology and engineering” with 24 contributions solicited from experts participating at this Conference (2016, 23: 10301– 11392). The DCE Swiss delegate Walter Giger acted as one of the editors of this monographic issue.

A Special ESPR Issue is being prepared based on contributions from presenters at the ICCE 2015. The Spanish, German and Swiss DCE delegates Santiago V. Luis, Gerhard Lammel and Walter Giger, along with Thorsten Reemtsma, are serving as Guest Editors. More than 30 submissions have been received for this monographic issue.

Also, a Special issue in ESPR is being gathered from contributions submitted by the participants at the AFFF symposium at the San Diego ACS meeting.

In tight collaboration with EuCheMS, the chair of the DCE also prepared a position paper on “Chemistry and Climate Change” that appeared at the website of Adjacent Government (www.adjacentgovernment.co.uk/research-science-innovation-news/chemistry-climate-change/23849/).

The Annual Meeting of the DCE took place in Seville, 10 September 2016, in parallel with the activities of the EuCheMS ECC 2016 Conference at which several DCE delegates participated at different levels.

The main envisaged future activity of the DCE is the organization of the 16th International Conference on Chemistry and

Chair:	Prof. Santiago V. Luis, Spain (2015–2017)
Treasurer:	Dr. Roland Kallenborn
Secretary:	Prof. Willem de Lange, The Netherlands
Members:	27
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 Environment. The ICCE 2017 will be held on 18 – 22 June 2017 in Oslo, Norway. The Conference president will be Roland Kallenborn. The process has significantly advanced since the SC meeting of the DCE in Oslo in April 2016 with the involvement of most DCE delegates in different tasks (<http://icce2017.org/>). Besides the expected involvement of experts from ACS-ENVIR and ECHA, the DCE intends to highlight in this ICCE the 50th anniversary of the discovery of PCBs – taking place this year –, a seminal contribution of European Scientists in the field of Environmental Chemistry.

The interaction of the DCE with other Institutions and Professional networks is also a priority for the DCE. Besides the interaction with the central bodies of EuCheMS, the DCE has strong connections with other EuCheMS Divisions, with the Division of Analytical Chemistry and the Division of Green and Sustainable Chemistry (especially through the European Sustainable Chemistry Award). Several DCE delegates also participate in the activities of these Divisions. A strong and very positive interaction is being maintained with the ACS Division of Environmental Chemistry, with their participation at the ICCE Conferences (also for ICCE 2017) and related activities, and with the involvement of DCE delegates at the ACS activities and mentioned above.

4. Division of Chemistry in Life Sciences

The main activity for the Division during 2016 was to help in the construction of the programme for the “Chemistry in the Life Sciences” theme of ECC-7 in Seville. The Division offered full support to Peter Edwards and his team, suggesting convenors and speakers. The Swiss representative on the Division, Roland Sigel, was particularly heavily involved, being Topic Convenor for Biomacromolecules.

During the year the Division appointed a Treasurer, Luc Brunsveld, and opened its own budget line within the EuCheMS Accounts. Part of the surplus from the 6th European conference on Chemistry in the Life Sciences, held in Lisbon in 2015, was transferred into this budget line.

A start was made on renewing and revitalising the Division and this is being continued by Anna Bernardi, who is interim Chair of the Division following Nick Westwood’s decision to step down as Chair. A new Chair will be elected in 2017.

Chair:	Anna Bernardi (Interim Chair)
Treasurer:	Prof. Luc Brunsveld (NED)
Members:	14
Countries:	France, Germany, Greece, Hungary, The Netherlands, Portugal, Slovenia, Spain, Switzerland, United Kingdom

5. Division of Computational and Theoretical Chemistry

The first activity was aimed at continuing the effort of building a virtual community for computational chemists. This collaborative endeavour (following the failed attempt to put forward for the DCTC a proposal submitted on 14th January 2015, which leveraged on the established Chemistry, Molecular and Materials Science and Technologies (CMMST) Virtual Research Environment) was aimed both at building a common European infrastructure (SUMO CHEM, first stage submission March 2016) and at participating in a flagship project for a European Open Science Cloud. The latter is concerned with the creation of a cost-effective IPR-conscious virtual environment, allowing EU researchers to store, manage, analyse and reuse data through the federation of existing and emerging data infrastructures (MOSEX is our subproject), still to be assembled. For this we are already editing an e-magazine (VIRT&L-COMM).

The second activity consisted of the assemblage of the participation of the DCTC members to the Sevilla 6th EuCheMS Chemistry Congress with dedicated sessions (following the total absence of such sessions at the 5th Congress in Istanbul) within theme F: Properties of Matter, under Topic F4: Innovative Computational Environments for Molecular Science (Session F4.1 for contributions more focused on the characteristics of innovative computational environments with G. Terstyansky (Director of the Supercomputer Centre of the University of Westminster, UK) as plenary speaker and T. Ferrari (Director of the European Grid Infrastructure, NL) as invited speaker and Session F 4.2 for contributions more focused on molecular science data production and reuse with S. Herres Pawlis (Professor at the University of Aachen) as invited speaker).

The third activity was devoted to strengthening the collaboration with ECTN (the European Chemistry Thematic Network, which has recently become a EuCheMS Supporting Member and is active in promoting educational activities in Molecular Sciences, in particular in the use of computer technology based tools). Along this line the DCTC member societies and institutions were prompted to comply with the ECTN recommended good practices in e-learning and to apply for the ECTN Eurolabels® (a set of internationally recognized standards for Higher Education in Chemistry including Computational Chemistry). Part of these standards are EChemTest® (a set of e-tests designed for evaluating the students' knowledge of chemistry) and the distributed repository GLOREP of Learning Objects (a distributed environment in which teaching and learning units can be shared with colleagues and can be continuously updated and improved).

The fourth activity was the support given to European joint conferences, schools and research initiatives. Although this activity was limited to a few initiatives, a highly successful one is that devoted to the EU-funded Theoretical Chemistry and Computational Modelling (TCCM) Master and Doctorate projects established a few years ago and coordinated by the Universidad Autonoma of Madrid.

The fifth initiative that was undertaken by the DCTC is the change of name into CTC (Computational and Theoretical Chemistry), which was unanimously approved by vote by the Division Council and given final approval by the General Assembly in September. This extension allows us to extend the community around the division and open up some new activities.

The seventh initiative that was undertaken in collaboration with ECTN was establishing a School in Sustainable Entrepreneurship. This School, implemented as part of the initial training course of the ITN TCCM EJD (European Joint Doctoral Programme), is an opportunity to expose the young researchers to subjects involved in the development of self-entrepreneurship and to put them in contact with the cluster of spinoffs acting under the umbrella organization of ECTN providing the software as a service for research use and the corresponding training school in sustainable entrepreneurship.

With great regret, we have to note that the DCC-COST collaboration is over due to the fact that the Chemistry Domain and the related committee have been terminated by COST.

The most important recent achievement was partly renewing the composition of the council and increasing the number of delegates.

Short term (next year) plans are those concerned with the preparation of the Division scientific conference in Barcelona (September 2017), renewal of the Officials (December 2016), and strengthening of the virtual community character and the use of distributed cooperative computing tools.

The key long-term activity of the Division is the effective building of a Virtual Environment for both research and education. This process will put together all the complementary activities carried out by the member societies and strengthen the services that can be provided to the members. We are waiting for the outcome of the proposal submitted in March 2016 and progress to be made for the participation to the flagship process.

The DCC Council will examine in detail the new obligations for EuCheMS members concerning conference organization and related financial commitments.

Chair:	Prof. Antonio Laganà, 2013 – 2016
Secretary:	Dr. Frank Oellien (German Chemical Society), 2013 – 2016
Members:	32 delegates
Countries:	Austria, Belgium (2), Catalonia, Croatia, Czech Republic, Cyprus, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy (2), Former Yugoslav Republic of Macedonia, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom (2)

6. Division of Food Chemistry

The past activities of the Division (also considering the events supported by FCD active Members) were mainly focused on congresses organization, teaching activity, awards and fellowships, as well as lobbying activity regarding political decisions in Food Quality and Safety Area (also in collaboration with other European non-profit scientific organizations).

Main events organized in 2016 are chronologically listed below (this list is not exhaustive: many other events not scheduled were successfully supported by National members of FCD):

- CzechFoodChem2016;
23 – 25 May 2016, Hotel Skalský Dvůr; Czech Republic
- Austrian Food Chemistry Days;
8 – 10 June 2016, St. Pölten, Austria
- 2nd International Conference on Food Packaging;
13 – 14 June 2016, Rome, Italy
- Pigments in Food;
28 June – 1 July 2016 Cluj Napoca, Romania
- 6th EuCheMS Chemistry Congress;
11 – 15 September 2016, Seville, Spain
- 1st Black Sea Association of Food Science and Technology – B-Fost, (www.keyevent.org)
22 – 24 September 2016, Ohrid, Former Yugoslav Republic of Macedonia

- Special Session on Food Chemistry at XI National Congress of Food Chemistry, Italian Chemical Society-GICA, 4 – 7 October 2016
- Special Session on Food Chemistry at 30th EFFoST International Conference,
28 – 30 November 2016, Wien, Austria

The forthcoming congresses supported by the Food Chemistry Division are:

- Chemical Reaction in Foods VIII,
15 – 17 February 2017, Prague, Czech Republic
- CoCoTea2017 (co-organized by University of Turin, University of Piemonte Orientale and FCD-EuCheMS (Italy))
25 – 28 June 2017, Turin, Italy
- In Vino Analytica Scientia,
17 – 20 July 2017, Salamanca, Spain
- EuroFoodChem (Divisional Congress),
4 – 6 October 2017, Budapest, Hungary

During 2016, the Board opened the discussion about the planning/technical organization of the “First School of Food Chemistry Division”. As discussed during the 2015 Meeting, the first edition will be organized in 2017 (Venue: Bruxelles (BE); Wien (AT) or Stresa, IT, depending on the final decision of the Board). The topic of the School, organized in collaboration with different European Scientific Board (e.g. JRC- European Commission) and some analytical-based

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; Division of Analytical Chemistry)
Countries:	Albania, Austria, Belgium, Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, European Commission, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Israel, Italy, Latvia, Lithuania, Former Yugoslav Republic of Macedonia, Mongolia, The Netherlands, Norway, Poland, Portugal, Republic of Ireland, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, Uzbekistan

Companies, was discussed and voted upon during the annual Meeting of FCD on 28 November 2016 in Wien, selecting “Food Authenticity and Traceability” as key topic. The target of this school will be a high degree update on the topics related to food chemistry, and aimed at training young scientists and young technicians from the industry. FCD hopes to consolidate this school (summer or winter) as an annual event.

Some Awards and Fellowships have been dedicated particularly to young food chemists participating at the events supported by FCD-EuCheMS:

- two fellowships for young scientists (free entry to the next Congress Edition of PIF 2019, Germany) have been released by FCD-EuCheMS
- two fellowships for young scientists (reimbursement of the registration fee) have been released by FCD-EuCheMS during the IV MS Food Day (Foggia, Italy).
- Czedik-Eysenberg Award: awarded to a young food chemist at the Austrian Food Chemistry Days

The FCD Board considers lobbying activity as the key target. A deep action of collaboration with EuCheMS Divisions is currently being developed, in order to organize new, shared events.

There is an ongoing collaboration with the Analytical Chemistry Division: a part of the next Annual Meeting of the FCD Board will be opened to an “observer” from the Division of Analytical Chemistry. Moreover, an activity aimed at sharing scientific interest with FCD is currently being developed with EffoST, SAFE Consortium and many other technical/scientific European Boards, particularly in order to plan the “First Pan European Meeting on Food Quality and Safety”, scheduled for 2017. There is an ongoing contact with USP (USA Pharmacopoeia) and FDA. This platform will open the drafting of the first Position Paper on Food Chemistry role, edited by Food Chemistry Division – EuCheMS and presented at the next Chemistry Congress of EuCheMS (Liverpool, UK, 2018).

Among the most important recent achievements are intensive exchange and collaborations with other organisations (particularly SAFE Consortium, EFFOST, ISEKI, Codex Alimentarius); upcoming new collaboration with Asia Food Chemistry-related Boards and Associations.

The Board of the FCD is working on the re-design of the Delegates Network, as well as working on the identification of new approaches to link together the participant countries/bodies/societies (e.g. Periodical Divisional News brief; Social Networks activity; interactive FCD’s web site, linked to the FCD page on the EuCheMS Official Web site). A short periodical *e-news* will be prepared (two issues per year), starting from 2017.

Key long-term activities are:

- Euro Food Chem XX (Divisional Congress), Porto, 2019 (Portuguese Chemical Society)
- Writing and editing of Consensus Documents/Position Papers: “Food Chemistry and consumers’ safety: a choice of quality” (running title)
- Revision of the “Who’s Who in Food Chemistry” database

7. Division of Green and Sustainable Chemistry

The Division of Green and Sustainable Chemistry (DGSC) was approved by EuCheMS in 2015.

In 2016, the positions of Chair (Nicholas Gathergood, Estonia), Vice-Chair (Piotr Stępnowski, Poland), Secretary (Katalin Barta, Netherlands) and Treasurer (James Sullivan, Ireland) have been elected. Our principle activity of 2016 has been drafting the procedures and practice guidelines for the Division. The final version was approved at the AGM of the DGSC in Seville this year.

The Division webpage has been updated and includes information regarding green and sustainable chemistry conferences in Europe.

Past activities in 2015/16 include the organizing the 2nd EuCheMS Green and Sustainable Chemistry conference in Lisbon in the Autumn of 2015. In Lisbon, it was decided that the 3rd conference in this series will be held at the University of York, UK in 2017.

The selection of the location for the 2019 DGSC conference will be performed at the 2017 Annual meeting, also in York.

The Steering Committee of the DGSC was elected in winter 2016 and consists of Nicholas Gathergood, Piotr Stępnowski, Katalin Barta, James Sullivan, Michael North (Next DGSC Conference Chair), José Nuno C Lopes and Ana Aguiar-Ricardo (Past DGSC conference Chairs) and Joel Barault, according to the procedures and practices 3.5(i) of the DGSC.

Chair:	Prof. Nicholas Gathergood
Vice Chair:	Prof. Piotr Stępnowski
Secretary:	Dr. Katalin Barta
Treasurer:	Prof. James Sullivan
Members:	25
Countries:	Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Netherlands, Poland, Portugal, Slovakia, Spain, Turkey, United Kingdom

DGSC has worked closely with the Division of Chemistry and the Environment (DCE) and we acknowledge their assistance in drafting the policy and practices for our Division. We also are working together with the DCE to support the ESCA and expect the nomination process to be announced early in 2017.

Ewa Chmielewska authored an article entitled *Division of green and sustainable chemistry EuCheMS accepted global (millenium) targets of sustainable development*, in ChemZi on 12/1/2016.

Nicholas Gathergood gave a plenary lecture at the EuCheMS Division of Analytical Chemistry supported ECO-BALT 2016 conference in Tartu, Estonia in October. He was able to promote the DGSC and their core ideals to members of the analytical and environmental community.

8. Division of Inorganic Chemistry

The main activity was preparation of the conference EICC-4 (EuCheMS Inorganic Chemistry Conference) which will be organized in Copenhagen from 2 to 5 July 2017. EICC-5 will be organized in 2019 in Vienna. The organizational scheme, main topics and invited speakers were specified.

Discussion started about the project of a Division website as the forum of exchange information between partners.

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

9. Division of Nuclear and Radiochemistry

The main 2016 event for the Division of Nuclear and Radiochemistry (DNRC) was the 9th International Conference on Nuclear and Radiochemistry (NRC9), which took place in Helsinki, Finland, between 29 August and 2 September 2016. The conference was well attended – above expectation – by around 330 participants who delivered high quality contributions. Headed by Prof. Jukka Lehto on behalf of Helsinki University, the conference was organized and ran excellently. This was clearly reflected in the post survey where the grades “good” and “very good” were selected by more than 95% of those answering the survey. The NRC conference series is arranged every fourth year and the next will be hosted by the University of Manchester (UK) in 2020, where Prof. Melissa Denecke has taken on the responsibility to organize the event. Before that, in May 2018, the other major European NRC conference series RadChem will be organized according to tradition in Mariánské Lázně, Czech Republic. This will be the 18th event in this series and will be organized on behalf of DNRC by the Czech Chemical Society, Ioannes Marcus Marci Spectroscopic Society and the Czech Technical University in Prague.

The DNRC annual meeting for 2016 was held during NRC9. Due to the unfortunate resignation of the then chairman Dr. Nick Evans in 2015, the previous chairman Prof. Heinz Gäggeler was called upon to take on the chair ad interim in accordance with DNRC Procedures and Practices. In the 2016 meeting Prof. Jon Petter Omtvedt from University of Oslo was elected as new chair. The Division gratefully thanks Prof. Gäggeler for taking care of the Division during this unexpected situation. Prof. Jan John continues as secretary and will also take on the responsibility as treasurer.

Chair:	Prof. Jon Petter Omtvedt
Secretary:	Prof. Jan John (Czech Chemical Society)
Members:	20 active members
Countries:	Cyprus, Czech Republic, Denmark, Finland, Germany, Greece, Hungary, Israel, The Netherlands, Norway, Poland, Portugal, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey

The FP7 EU-project CINCH (headed by Prof. Jan John, CTU) aimed in 2016 to further coordinate and enhance NRC education in Europe. The project was initiated to establish a NRC EuroMaster quality label for MSc-students that entail the student fulfilling a minimum-requirement of NRC knowledge and competence. The CINCH project has asked DNRC, as a formal body, to evaluate and grant the use of the label. By electronic voting the Division agreed to this early in 2016. This project was also discussed with ECTN. Currently two universities (University of Helsinki and Czech Technical University in Prague) have applied for the right to use the label. The evaluation is performed by a DNRC subcommittee established during the NRC9 Division meeting. Further applications are welcome.

Another important event in 2016 that stemmed from the collaboration of CINCH-project and DNRC was establishment of the “The European Network on Nuclear and Radiochemistry Education and Training (European NRC Network - <http://nrc-network.org/>)” as a new Euratom Fission Training Scheme (EFTS) and as a major step towards the sustainability of the results achieved in the series of CINCH projects. Its objective and functions are to cooperate in NRC education and training in Europe, to promote development of NRC education and training in Europe, to represent NRC education and training community towards other organizations and society, to promote and organize student and teacher exchange between partners, and to organize common courses in NRC. The members are organizations relevant as providers or end-users of NRC education and/or training. During the first year of its existence, 24 universities and research institutions became members of this Network.

10. Division of Organic Chemistry

The mission of the Division is to promote Organic Chemistry in the broadest sense in Europe. The flagship event of the Division is the annual Young Investigator Workshop (EuCheMS-OD-YIW) that gathers the rising stars in organic chemistry across Europe with the aim to discuss the most exciting developments and the challenges ahead of the field. This workshop typically consists of a programme where each participant (typically one per member country) presents their own research with plenty of time for discussion to promote scientific exchange. This event is gaining international recognition bridging intercontinental gaps across the world. The American Chemical Society supports the EuCheMS-OD-YIW by welcoming two participants of their choice to present their research at an ACS National meeting. Reciprocally, EuChems-OD invites two young faculty members located in the USA to attend our annual workshop. This two-directional arrangement will be extended to other continents/countries (Africa, Australasia, Canada, China, Japan, South America), as a matter of priority. To increase visibility, SYNLETT publishes yearly a Special Issue assembling research papers of our YIW's participants, an initiative that we received gratefully. The event receives the support of Wiley, for which the Division is also very grateful.

The last Edition of the YIW took place in Huelva (16 – 17 September 2016) just after the 6th EuCheMS Chemistry Congress (Seville, Spain, 11 – 15 September 2016) and was hosted by Professor Pedro J. Pérez (Universidad de Huelva, Spain) with the participation of Professor Antonio Echavarren (ICIQ, Tarragona, Spain), Professor José Luis

Mascareñas (University of Santiago, Spain), Professor Artur Silva (University of Aveiro, Portugal, Chair YIW 2015), and Professor Véronique Gouverneur (University of Oxford, UK). The event involved 22 European Young Investigator participants and 2 from the USA.

The next event will take place in Germany (Bergisch Gladbach) just after the 20th European Symposium in Organic Chemistry (2 – 6 July, Cologne, Germany), and will be hosted by Professor Prof. Dr. Hans-Guenther Schmalz with Dr. Martin Breugst (University of Cologne, Germany).

Chair:	Prof. Veronique Gouverneur (Royal Society of Chemistry, 2015 onwards)
Secretary:	Prof. Gianluca M. Farinola
Treasurer:	Prof. Gianluca M. Farinola
Members:	27 active delegates
Countries:	27 (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, the Netherlands, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Russia, Serbia, Spain, Sweden, Switzerland, UK).

11. Division of Organometallic Chemistry

30 – 31 March 2016, 4th Nordic Organometallic Symposium was organized in Reykjavik, Iceland.

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

As for short-term activities, the Division continues preparation for 22nd EuCOMC (European Conference on Organometallic Chemistry) in Amsterdam, 9 – 13 July, 2017. The conference will take place in historical location Beurs van Berlage – formerly the first stock exchange building transformed into a conference center. Registration started in January 2017. (www.eucomc2017.amsterdam)

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 Norway, Switzerland, Turkey and Israel”. The first to receive the prize was Malcolm L. H. Green, Emeritus Professor at Oxford University, UK, in 2015. The call for nominations for the 2017 Prize was opened in autumn 2016.

Because of the recent earthquakes that damaged Camarino in Italy, the 10th International School of Organometallic Chemistry will take place in San Benedetto del Tronto on the Aegean coast of Italy 5 – 9 September 2017. This workshop will be one of the events marking the reopening of the badly damaged University of Camarino.

Chair:	Prof. Jan Čermák (Czech Chemical Society), 2014 – 2017
Vice Chair:	Prof. Helena Grennberg (Swedish Chemical Society)
Treasurer:	Prof. Kees Elsevier
Members:	23 permanent delegates and one observer (from an at present EuCheMS non-member society). Two additional member societies have not appointed a permanent delegate.
Countries:	26 (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, Romania, Russia, Slovak Republic, Spain, Switzerland, Sweden, Turkey (no appointed delegate), United Kingdom)

12. Division of Physical Chemistry

Shaping the scientific activities of the Physical Chemistry Division was the primary task during the reporting period (currently contributions to 6th and 7th EuCheMS Chemistry Congresses). The concept of biannual European Physical Chemistry Meetings was established in September 2015 (12 – 15 September 2015; Catania, Italy): First European Conference on Physical and Theoretical Chemistry. The follow-up conference “2nd European Conference on Physical Chemistry” is scheduled for September 23 – 27, 2017 in Belambra Pineto (Borgo), near Bastia Airport on Corsica (France).

In addition, the Physical Chemistry Division approved upon proposal the following conferences, which were announced on the Division's Webpage:

- International Winter School on Molecules at Surfaces
31 January – 5 February 2016, Villaggio Olimpico di Bardonecchia, Italy
- International Conference on Dermal Drug Delivery by Nanocarriers
14 – 16 March 2016, Berlin, Germany
- 2nd Erwin Schrödinger Symposium 2016 of the Erwin Schrödinger Society for Nanosciences
23 – 25 May 2016, Vienna, Austria

The EuCheMS Physical Chemistry Division was extensively 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 program. These sugges-

tions were assembled according to the feedback received from the active members and EuCheMS member societies, where also various revisions were required, since some of the suggested conveners declined. All in all, shaping the program appeared to be more transparent than in earlier times which is greatly appreciated by the active members of the Physical Chemistry Division.

More recently, the EuCheMS Physical Chemistry Division provided first suggestions regarding ECC-7. The program is currently under development.

The most important issue was to establish a new conference series on a European scale “European Conference on Physical Chemistry”, which is currently in stable conditions. The second conference in this series (Corsica, France) was approved by the General Assembly of the Physical Chemistry Division in September 2015. The local organizers made substantial steps forward regarding the location and the scope of the conference.

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 appointed member of the Executive Board, and a stable number of delegates and EuCheMS member organizations within the Physical Chemistry Division.

The long-term goals have not been changed since the last report: the Physical Chemistry Division aims to establish its scientific activities on a stable basis, i.e. international

Chair:	Prof. Eckart Rühl (Freie Universität Berlin, Germany)
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)

meetings of the European community every year, i.e. in the framework of ECC or the European Conferences on Physical Chemistry. The General Assembly of the Physical Chemistry Division agreed to plan joint workshops with other EuCheMS Divisions/Working Parties at ECC Conferences or on other occasions. This enhances the interactions and may also be exploited to develop joint European research and funding strategies. Furthermore, scientific meetings in the individual countries shall be established on a broader basis under the umbrella 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.

13. Division of Solid State and Materials Chemistry

The Division organized on the 9 – 10 September 2016 a discussion meeting entitled « Challenges and Prospects for Solid State Chemistry » at the University of Sevilla just prior to the EuCheMS Congress. The meeting focussed on the latest developments in synthesis, properties and structural investigations of solids. (website: www.cpssc16.ciccartuja.es; local organizers: Alfonso Caballero, University of Sevilla and ICMS-CSIC, José Antonio Odriozola, University of Sevilla and ICMS-CSIC, Emilio Moran, Complutense University of Madrid; sponsors: Universidad de Sevilla, CSIC, ICMS and Facultad de Química).

Around 80 delegates attended the meeting which was organized around four subthemes: Frontiers of solid materials synthesis, Structural advances through new methodology, Solid state chemistry and applications and Rationales for functional materials synthesis. The format was chosen to promote discussions and to introduce the different fields through 12 invited talks of 50 minutes. The poster sessions allowed lively exchanges between the participants, around the 56 posters. The meeting closed with a panel and audience discussion. It was agreed that this event was very successful and that in the future it should be organized in the context of the EuCheMS conference if possible.

An additional objective of the meeting was to gather the Division Delegates for their annual meeting (10 September 2016). Six delegates attended and six external representatives – including the three Spanish local organizers – were also invited. A main point was the announcement by Eddie Cussen (local organizer) of the venue and terms of the 16th

European Conference of Solid State Chemistry to be held at University of Strathclyde, Glasgow 23 – 26 July 2017. The program will include 9 sessions, each with one keynote talk and one invited short oral contribution. The list of potential speakers was presented and approved. The full scientific program, deadlines and registration details will be announced in due time on the web page <https://ecssc16.com>.

Andrei Shevelkov (Moscow State University) was approved as the website manager for the Division's webpage which is linked to the home page of EuCheMS.

The three Board Members of the Division (Martin Jansen, Paul Attfield, Antoine Maignan) met in Bangalore at the end of the year (1 – 3 December 2016). (All three were invited to the International Symposium on Solid State Chemistry organized at the Jawaharlal Nehru Center for Advanced Scientific Research; convener: A. Sundaresan). The Board Members discussed several points on the 1 December: an update on invitations for ECSSC Glasgow; possible locations for ECSSC-17 (Prague; Lille). A point on the budget of the Division was made by Paul Attfield (Treasurer). A reminder that themes, names of potential speakers and conveners need to be sent to the Scientific Committee of ECC7, Liverpool, 2018 was noted. A final point concerned the elections of the Division Board Members, to be organized in Glasgow, during 16 ECSSC in 2017.

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:	16 (Austria, Czech Republic, France, Germany, Hungary, Israel, Italy, Netherlands, Portugal, Russia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, UK)

14. Working Party on Chemistry and Energy

The chairman of the WP Chemistry and Energy was a member of the team who wrote the White Paper "Solar-Driven Chemistry", which was presented at the EuCheMS conference in Seville. Now we are spreading the paper within the European chemical community, also as an instrument to raise EU and national funding on this key topic.

Following the invitation of Mr. Daniel Calleja, Director General for the Environment of the European Commission, EuCheMS participated at the first Circular Economy Mission overseas on 25 – 26 April 2016, represented by the chairman of the Working Party. The scope of the event was to promote circular economy and sustainable innovation, to help EU green companies to operate in Chile, to foster EU-Chile business partnerships in sectors such as renewable energies, waste recycling, water purification, and sustainable use of natural resources. The EU delegation encompassed representatives from the industrial, commercial, research and academic sectors, who had the opportunity to meet Chilean entrepreneurs, high level politicians as well as leaders of industrial and commercial associations.

Chile is a leading country in South American regarding democratic stability, quality of life, industrial development, per capita income. It owns highly valuable assets such as an outstanding agriculture, vast mineral deposits (particularly Cu and Li) and rich fishery resources. All of them are endangered under a traditional linear economic system, therefore it is a natural partner for EU on the route to a circular economy. During the mission, the large know-how of the European chemical community in the area of sustainable production was highlighted among Chilean and EU enterprises and institutions. It was also a great opportunity to strengthen the

link between EuCheMS and the European Commission on the circular economy, an area that is poised to acquire even greater strategic relevance through new partnerships being launched by the EC in the near future.

EuCheMS also participated to the Circular Economy Mission in China, 22 – 25 November 2016, and was represented by the chairman of the Working Party. The European delegation was led by the EC Commissioner and Director General for the Environment (Mr. Karmenu Vella and Mr. Daniel Calleja) and included over 60 representatives from European companies, agencies, research centers and associations. The scope of the mission was to deepen relationships and align policies on the circular economy (CE) between the EU and China, which are presently the frontrunners on CE on the international stage, although approaches partly differ due to peculiarities of the two economic systems. China's strategy reflects a greater concern with industrial production, water use and environmental pollution. Europe's conception focuses on waste and efficient use of resources. This provides motivation for greater mutual collaboration and lesson-drawing.

The EU Delegation participated in the China International Circular Economy Exhibition 2016, organised by the China Association of Circular Economy (CACE). Tens of Chinese and European companies presented advanced solutions for municipal waste and effluents, electronic devices, agricultural byproducts, manure, construction materials, and so on. We also visited a Chinese company which is rapidly expanding and is going to be one of the world leaders in recycling solutions. Several B2B meetings between the EuCheMS delegate and Chinese companies, research

centers, development zones, associations and even NGOs, evidenced opportunities for collaboration. In particular, demand for consulting in the area of rubber, waste recycling and catalysis has been made by Chinese companies. Notably, EuCheMS may also provide educational opportunities to Chinese companies and citizens in the broader area of chemical and environmental education.

The mission to China was a further opportunity to strengthen the relationship between EuCheMS and the European Commission on the circular economy, an area of widening industrial and academic relevance.

Short-term future activities include: (a) Increasing the number of societies and countries represented in the WP. (b) Participating in future circular economy missions, (c) Planning the Energy Science & Technology Conference 2018, to be held in Karlsruhe, Germany;

Key activities 2020: promotion of energy-related topics for funding within Horizon 2020 and beyond.

Chair:	Dr. Nicola Armaroli (Italian Chemical Society)
Members:	18 active delegates
Countries:	13 (Cyprus, France, Germany, Ireland, Israel, Italy, Netherlands, Portugal, Spain Sweden, Switzerland, Turkey, United Kingdom)

15. Working Party on Chemistry for Cultural Heritage

The Working Party organises on a biennial basis an international conference on Chemistry for Cultural Heritage (CHEM-CH) which is aimed at providing an international platform for presentation and discussion on new and advanced chemical technologies applied to diagnosis, understanding causes and state of conservation, ancient production techniques, development and evaluation of restoration materials and methods for movable and immovable cultural properties.

The 4th International Congress in Chemistry for Cultural Heritage (ChemCH-2016) was organized 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 and was held in Brussels on 5 – 9 July, 2016.

A steering Committee meeting took place respectively in Berlin (2015) with the aim of discussing the organisation of the 4th edition of International Congress in Chemistry for Cultural Heritage (ChemCH-2016) and another took place in Brussels at the ChemCH-2016 Congress.

The key long-term activities (up to 2020) are: continuing the organisation of the Congresses in Chemistry for Cultural Heritage on a biennial basis and improving the participation of other members from other European Chemical Societies as WP delegates.

The 5th CHEM-CH congress will take place in Bucharest (Romania) in 2018.

Chair: Prof. Rocco Mazzeo (University of Bologna, Italian Chemical Society)
Members: 14
Countries: Austria, Belgium, Croatia, Denmark, Germany, Italy, Former Yugoslav Republic of Macedonia, Romania, Russia, Sweden, Turkey, United Kingdom

16. Working Party on Ethics in Chemistry

Upon the decisions taken at the WP meeting in Frankfurt (Germany) in September 2015 to improve its organizational base for future activities, in the first half of 2016 its members discussed and drafted a set of rules for a statute. The final discussion on that matter took place in Sevilla (Spain) on 13 September 2016 during the 6th EuCheMS Chemistry Congress (ECC), where the statutes were voted upon and unanimously accepted by the members present.

The WP participated in the 6th ECC by organizing a quarter-day session of three lectures within the thematic section "Education and Society", including a joint contribution by J. Forman of the Organisation for the Prohibition of Chemical Weapons (OPCW, The Hague, Netherlands) and B. Miller of

the American Chemical Society (ACS, Washington, USA) on possibilities of and needs for educational steps to be taken in view of the Hague Ethical Guidelines (OPCW) and similar initiatives of ACS. Also, the WP helped launch the Seville International Chemistry Declaration 2016 (above) by participation of its chair Hartmut Frank in the inaugurating panel discussion.

During the following months, under surveillance by Brigitte van Tiggelen (Louvain, Belgium) and Hans-Georg Weinig (Germany, GDCh) the WP members elected its first statutory Steering Committee (below), to set the next stage for defining the WP's priorities of topics and scope of activities for the years to come.

Senior Chair: Prof. Luigi Campanella (Roma, Italy)
Chair: Prof. Hartmut Frank (Bayreuth, Germany)
Vice Chair: Prof. Anca Silvestru (Cluj-Napoca, Romania)
Treasurer: Dr. Jan Mehlich (presently Taiwan)
Consultants: Prof. Henning Hopf (Braunschweig, Germany), Dr. Frank Moser (Geneva, Switzerland)
Members: 33 members from 17 countries, and an observer from the US
Countries: Austria, Belgium, Czech Republic, Germany, Greece, Hungary, Italy, Netherlands, Poland, Portugal, Romania, Russia, Spain, Switzerland, Turkey, Ukraine, United Kingdom

17. Working Party on the History of Chemistry

The Working Party on the History of Chemistry (WPHC) has been involved in the setting up of the John Dalton 250th Anniversary Symposium in the frame of the ECC in Sevilla, in close collaboration with Mats Tilset and Sylviane Sabo, and with members of the Division of Chemical Education.

The symposium reflected on Dalton's fundamental contributions to chemistry and our present understanding of the elements. It also provided an opportunity to focus on his career in teaching, and how his conceptual innovations are embedded in his teaching practice. Expanding this theme more generally, historical papers devoted to the Periodic Table and Berthollet's chemical affinities emphasized teaching and textbooks as a place for ground breaking conceptual innovation and the diffusion thereof.

The WPHC provided the plenary lecture for the opening of the Symposium on 14 September in the morning and historical papers for the afternoon session "Chemistry meets History" during which lively short oral presentations showcased young scholars.

The Working Party on the History of Chemistry (WPHC) organizes an international conference on the history of chemistry every year.

The 11th International Conference on the History of Chemistry (11th ICHC) will take place in the Medieval city of Trondheim from 29 August to 1 September (excursion on 2 September), 2017. The Norwegian University of Science and Technology (NTNU), which has been the country's centre for

technology education since 1910, will host the conference. See the conference website, <http://www.ntnu.edu/11ichc>, and the call for papers for special symposia. There will be no general theme this year, and the programme committee will especially encourage the submission of panel/session proposals.

The conference programme will include scientific sessions, key-note lectures, the WP business meeting, as well as social events such as excursions, receptions, and a banquet. The steering organizing committee consists of Christoph Meinel, Universität Regensburg, and Ignacio Suay-Matallana, Centro Interuniversitário de História das Ciências e da Tecnologia, Lisbon (chairs of the scientific committee), Annette Lykknes (chair of the local organizing committee) and Brigitte Van Tiggelen, Mémosciences/Chemical Heritage Foundation (chair of the WP).

The WPHC has started conversations with other Divisions and WP's, as well as the UK group of historians of chemistry, the Historical Group of the RSC, to plan activities for the ECC in Liverpool, UK, in 2018.

Among ongoing activities are: internal and external reorganization, connection with same aim groups, renewing national delegations, and recruiting new delegates from countries not yet represented, connecting to the other EuCheMS divisions (WP Ethics in Chemistry, WP Chemistry for Cultural Heritage, Division for Chemical Education) and participating in EuCheMS activities, connecting with the sister division of EPS and working on a joint programme of EuCheMS/EPS

historic sites. We have appointed observers from other institutions and groups devoted to the history of chemistry (see the WPHC webpage on the EuCheMS website).

The Working Party on the History of Chemistry published a report on the teaching of the discipline in 2007. The final document – entitled "Teaching history of chemistry in Europe" – was the result of information provided by many colleagues all around Europe, and aimed at understanding the position of history of chemistry in the context of the Bologna reform. Some ten 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 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 preliminary results have been discussed during the WPHC business meeting in 10ICHC. The complete survey was published in open access in the Journal for Chemical Education <http://pubs.acs.org/doi/abs/10.1021/acs.jchemed.6b00401> and accessible on the WPHC webpage, as is the 2007 survey.

Chair:	Dr. Brigitte Van Tiggelen (Walloon Royal Chemical Society, Belgium), 2013
Vice Chair:	Prof. Annette Lykknes (Norwegian Chemical Society), 2009
Secretary:	Dr. Ignacio Suay-Matallana (Royal Spanish Society), 2015
Members:	26 active delegates, 150 members
Countries:	21 countries represented by 23 member societies and 35 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

18. European Young Chemists' Network

EYCN is the young division of EuCheMS, and has been connecting young chemists around Europe for more than 10 years. Now, the time has come to go further beyond, and EYCN is working to develop new connections all over the world.

In 2016, we celebrated our yearly meeting – the Delegates Assembly – in Guimarães, Portugal. During this meeting, we accomplished many important challenges. Among them, we modified our voting rules to a new, open, more transparent election system. We also introduced a new way to get funding for innovative projects, thanks to our long-term collaboration with EVONIK.

2016 was a very important year for us because we organized two very important scientific events. First, also in Guimarães, we celebrated our first European Young Chemists Conference (EYCC). With a participation of over 200 students, we can consider this first approach a true success. Then, we also organized a full satellite event for young chemists during the 6th EuCheMS Chemistry Conference in Seville. It was a true pleasure to see a full-house throughout the event, and to introduce new activities to bring the conference closer to the locals, like our 'Science in the bar' event. Guimarães and Seville were also witnesses to our Career Day events, where young students can improve their soft skills, draft a better CV or learn how to face a job interview. Career Days were a great success thanks to the collaboration of our good friends at the Royal Society of Chemistry, GDCh, SCF, EVONIK, and of course the outstanding work of EYCN past-delegates.

2016 and the Sevilla conference marked the spot for a new edition of the European Young Chemists Award (EYCA). We were proud to see so many young talents among the applicants, and truly remarkable presentations during the finals. Selecting the awardees was a challenge. We are also happy to see EYCA growing: ANQUE (ES) joined our long-time sponsors, the Società Chimica Italiana (IT) and the Consiglio Nazionale dei Chimici (IT), which allowed us to have even more prizes and mentions. EYCA was recently highlighted in prestigious journals like *Angewandte Chemie* or *Chemistry: A European Journal*.

EYCN has always believed in communicating science to the general public. Among other initiatives, we would like to highlight our Photochimica project, a scientific-photography contest that received submissions from all around Europe, and that allowed us to create an exhibition that has travelled to six different European countries so far.

EYCN is also working very hard to create new connections. That is why we have started reaching out to SCI, CIA, CEFIC, FECCIA and other societies. We have also collaborated for the first time with European projects. Among other things, we reached out to several COST actions, and established collaborations between them and EYCN. These allowed us to fund the participation of European students in different conferences.

In the spirit of keeping our international collaborations, in 2016 we continued our Young Chemists Crossing Borders

program, organised in collaboration with the Younger Chemists Committee at the American Chemical Society (YCC-ACS). This year, five American students had the opportunity of attending the 6th EuCheMS Chemistry Conference in Seville, present oral communications, participate in the EYCN satellite event – some of them as invited speakers – and visit some local chemical industries. To further develop our international connections, we are currently working with YCC-ACS, IUPAC, and many other societies around the world to create the International Younger Chemists Network (IYCN), a new project that celebrated its first official meeting in Seville. We are also organising a bigger kick-off event for IYCN during next year's IUPAC conference in São Paulo (Brazil).

In brief, 2016 has been full of projects and challenges for EYCN. 2017 will be a year of change, as we will elect a new board during our Delegates Assembly in Crete (Greece). But we'll keep moving forward, working on new connections and creating better opportunities for young chemists in Europe and beyond.

Chair:	Fernando Gomollón Bel, 2015 – 2017
Secretary:	Camille Oger, 2015 – 2017
Members:	29 delegates, around 35.000 members (estimated) around Europe
Countries:	Austria, Belgium, Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, The Netherlands, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom

7th EuCheMS Chemistry Congress



LIVERPOOL, UK
26–30 AUGUST 2018

Molecular frontiers and global challenges

Network • Exchange ideas and knowledge • Discuss key issues • Build collaborations

PROGRAMME THEMES

- Catalysis
- Chemistry in the life sciences
- Energy, environment and sustainability
- Inorganic chemistry advances
- Materials, interfaces and devices
- Organic chemistry advances
- Physical and analytical chemistry advances

KEY DEADLINES

- Abstract submission from Spring 2017
- Registration from late 2017

Register your interest in the congress and find out more
www.euchems2018.org



