# European Chemical Sciences

EuCheMS Divisions/WPs: Report and a Look Forward

**Eckart Rühl** 

Freie Universität Berlin, Germany

## Divisions and Working Parties

- · Division of Analytical Chemistry
- · Division of Chemical Education
- . Division of Chemistry and the Environment
- · Division of Chemistry in Life Sciences
- · Division of Computational Chemistry
- · Division of Food Chemistry
- · Division of Inorganic Chemistry
- · Division of Nuclear and Radiochemistry
- · Division of Organic Chemistry
- · Division of Organometallic Chemistry
- Division of Physical Chemistry
- · Division of Solid State and Materials Chemistry
- Working Party on Chemistry and Energy
- . Working Party on Chemistry for Cultural Heritage
- Working Party on Green and Sustainable Chemistry
- · Working party on Ethics in Chemistry
- · Working Party on the History of Chemistry



## General Observations from the Reports

- Overall activity of the Divisions and Working Parties is on a constant high level.
- Activities require no budget from EuCheMS and it is impressive what can be done without funds.

 417 delegates of EuCheMS Member Societies were counted (without EYCN).

### **Thank YOU**

- EuCheMS as THE institution holding European Chemistry together.
- EuCheMS Member Societies for continuous support.
- Division and WP Chairs for their dedication to EuCheMS.
- Active members pushing the ideas of EuCheMS forward.



## Reports

 Distilled from written reports within a short time period.

Finally, I received ALL reports.

 Apologies for missing items, mistakes, or biased preferences.



## Division of Analytical Chemistry (DAC)

#### **Highlights and Future Plans:**

- EUROANALYSIS XVIII, Bordeaux (September 6-10, 2015)
- EUROANALYSIS 2017 (Stockholm)
- 43<sup>rd</sup> Annual Analytical Column (published in 5 journals in 2015): Metrology in Analytical Chemistry (by Ivo Leito, Estonia)
- 6 active Study Groups:

**Education in Analytical Chemistry** 

Quality Assurance and Accreditation

History

Bioanalytics

Chemometrics

Archeometry and Cultural Heritage

Chair: Paul Worsfold (UK) – 2011-2016

Vice-Chair:

Secretary: Wolfgang Buchberger (Austria)

Treasurer: Jiri Barnek (Czech Rep.)

Members: 36 Countries: 28

Long term activities: EUROANALYSIS Conf., DAC governance, enhancing visibility



### Division of Chemical Education

Chair: Iwona Maciejowska (Poland) 2014-17

Vice-Chair (East.Eur.): Dragica Tiviic (Serbia)

(West. Eur.): Mariann Holmberg (Finland)

Secretary: Paul Yates (UK) Members: 25+1 (DAC)

Countries: 26



- Divisional Conference Eurovariety 2015 (June 29-July 1, 2015 (Tartu/Tallin, Estonia)
   72 delegates from 33 countries (4 invited talks, 30 oral papers, 2 workshops, 10 posters)
- Progress in cooperation with ECTN and EC2E2N
   WP1: Towards Excellence in School and University Teaching
- Int. survey on how to get a degree in chemistry education is planned
- Knowledge-based platform on personal profiles of educators and range of topics related to teaching and learning of chemistry
- · Guidebook for pre-service training for chemistry teachers
- Divisional conference September 7-10, 2016 in Barcelona
- Long term activities: Cooperation with IUPAC Committee on Chemical Education



## Division of Chemistry and the Environment



#### AMERICAN CHEMICAL SOCIETY

**DIVISION OF ENVIRONMENTAL CHEMISTRY** 





#### CALL FOR PAPERS

Per- and Polyfluoroalkyl Substances Associated with Aqueous Film Forming Foams (AFFF): Chemistry, Remediation, and Regulatory Issues

251<sup>st</sup> American Chemical Society National Meeting & Exposition

San Diego, California

March 13-17, 2016



## Division of Chemistry and the Environment

Chair: Santiago Luis (Spain) 2015-17

Vice-Chair: -

Secretary: Willem de Lange (The Netherlands)

Treasurer: Members: 28
Countries: 24

- Environmental Science and Pollution Research (ESPR): extraordinary growth
- 15<sup>th</sup> International Conference on Chemistry and the Environment (Leipzig, September 20-24, 2015), >450 participants from >30 countries
- 16<sup>th</sup> International Conference on Chemistry and the Environment 2017 (Oslo, N)
- Specialist Conference on Contaminated Sediments (ContaSed 2015)
   Ascona (Switzerland) March 8-13, 2015 80 participants (with DAC and others)
- AFFF Symposium 2016: San Diego (March 13-17, 2016) W. Giger: co-roganizer
- Division Meetings: Helsinki Feb. 28, 2015 and Leipzig Sept. 19, 2015.



### Division of Chemistry in Life Sciences

Chair: Nick Westwood (UK) (2015-2017)

Vice-Chair:

Secretary: -

Treasurer: Luc Brunsveld (The Netherlands)

Members: 14 Countries: 14

- 6<sup>th</sup> European Conference on Chemistry for Life Sciences (Lisbon, June 10-12, 2015): 8 plenary lectures, 5 invited lectures, 60 talks, 17 countries represented.
- Co-ran a session with European Federation for Medicinal Chemistry
- Division Management meeting in Lisbon
- Advice for ECC-6
- Conferences: plan to run several smaller conferences in 2017 building towards a larger conference in 2019
- Establish a secure financial position for the EUCLS
- Increase activity to include additional events and tasks



## **Division of Computational Chemistry**

Chair: Antonio Laganà, (Italy) 2013-2016

Vice-Chair:

Secretary: Frank Oellien (Germany)

Treasurer: Members: 29
Countries: 26

- EUCO-CC10 Conference (Fulda, Germany: Aug. 31-Sept. 4, 2015):
   144 participants from 29 countries, 47 talks, 85 posters.
- Collaboration with ECTN is continued: DCC member societies are invited to analyze and adopt ECTN syllabus
- Proposal on Virtual Research Environment requires revisions and re-submission
- Spin-offs for software for use in training schools and sustainable entrepreneurship
- Sessions on Computational Chemistry at ECC-6 planned (unlike ECC-5).
- · Support of aggregation of several communities in a Virtual Research Community.
- Conference on Theoretical Chemistry: Nottingham (UK), June 20-22, 2016



## Division of Food Chemistry

Chair: Marco Arlorio (Italy) 2015-2017
Secretary: Michael Murkovic (Austria) 2015-2017
Treasurer: Irena Vovk (Slovenia) 2015-2017

Members: 64+1 Countries: 35

- · 15 conferences, 4 conf. planned
- Intense exchange with other organizations worldwide
- Challenge: re-design of delegate network
- Harmonization of scientific events
- Connections with other EuCheMS Divisions
- Design of a European Academic/ Technical Network based on food skills.
- Internat, contacts increased
- Sketch of white papers

- Cocotea 2015, 22 24 June, 2015, Aveiro (PT) http://www.cocotea2015.com/
  5° EuCheMS Chemistry Congress, August 31 August 4 September 2014, Istanbul, Turkey http://www.euchems2014.org/
  13° International Symposium: Prospects for the 3° Millennium Agriculture, 25 27 September 2014, Cluj Napoca, Romania
  In Vino Analytica Scientia; 14-17 July, 2015, Trento (IT)
  http://eventi.fmach.it/IVAS2015
  NUTRICON: Food Quality & Safety, Health & Nutrition 2014, 27-28 November, Skopje, Republic of Macedonia, http://www.keyevent.org/
  Recent Advances in Food Analysis (RAFA), 5-8 November 2015, Prague, Czech Republic
  NUTRICON 2015, 19-20 November 2015, Skopje, Republic of Macedonia
  1° IMEKOFOODS October 12-15 October, 2014 Rome (IT),
  http://imekofoods.enea.it/
  4° MS-Food Day 7-9 October 2015, Foggia (IT) http://www.msfooday.darepuglia.it/
- ISEAC 38 (38th International Symposium on Environmental Analytical Chemistry) 1'
  20 June 2014 2014 Lausanne (CH) http://www.iseac38.ch/
  Special Parallel Session on Food Safety, co-organized by DFB Center (Novara, IT), SAFE CONSORTIUM (Bruxelles, B) and GICA-SCI/EuCheMS at Euro Food Chem XVIII 13-16 October 2015, Madrid (Spain) http://www.eurofoodchemxviimadrid2015.com/
  5th EuroDrying2015, 21-23 October 2015, Budapest (HCS), http://www.eurodrying2015.mke.org.hu/
- 67th Congress of Chemists, 7-11 September 2015, Stary Smokovec (SK), http://www.plasticportal.eu/en/67th-congress-of-chemists/c/2836
- 5th Trans-Atlantic Fisheries Technology Conference (45th WEFTA), 12-15 October, Nantes (F) http://eventegg.com/taft-2015/
- 12th Chemical Conference Greece-Cyprus, 8-12 may 2015, Thessaloniki, Greece (GCS) http://greececyprus.blogspot.gr/



## Division of Inorganic Chemistry

Chair: Anna Trzciak (Poland)

Vice-Chair:

Secretary: Konrad Herbst (Denmark)

Treasurer: -Members: 16 Countries: 16

- Preparation of EICC-3 (EuCheMS Inorganic Chemistry Conference)
   Wroclaw, June 28-July 1, 2015 3 parallel sessions, 2 poster sessions, 230 participants
- Board Meeting during EICC-3 (Wroclaw): Cooperation between Organometallic Division and Inorganic Chemistry Division (esp. For ECC).
- Clear roadmap for future conferences:
   EICC-4 will be organized in 2017 in Kopenhagen
   EICC-5 in 2019 in Vienna



## Division of Nuclear and Radiochemistry

Chair: Nick Evans (UK) 2014-2016

Vice-Chair:

Secretary: Jan John (Czech Republic)

Treasurer:

Members: 23 Countries: 23

#### Highlights and Future Plans of DNRC:

- Preparations of ECC-6
- Preparation of 9th Int. Conf. on Nuclear and Radiochemistry (Helsinki, Aug. 29 – Sept. 02, 2016)
- DNRC has been appointed as the Formal Accrediting Body for the new EuroMaster Degree being created as part of the CINCH II project – Cooperation in education and training In Nuclear Chemistry (support within FP7)
- CINCH-II aims at mobilization of fragmented capabilities to implement courses and meet the nuclear chemistry postgraduate education and training needs of EU and has minimum requirements for EuroMaster in nuclear and radiochemistry.
- Division will evaluate Universities regarding minimum requirements.



## Division of Organic Chemistry

Chair: Ilan Marek (Israel)

since July 2015 Veronique Gouverneur (UK)

Vice-Chair: Secretary: Treasurer:

Members: 27 Member Societies: 27

- Election of new President and Executive Board (July 13, 2015, Lisbon)
- 7th EuCheMS Organic Division Young Investigator's Workshop (July 12-16, 2015, Lisbon) – 23 participants from 22 countries.
- 8th EuCheMS Organic Division Young Investigator's Workshop (2016: Huelva, Sp)
- Contributions to ECC-6 (Themes B, C, D, E, and H)
- Funding activities to secure the YIW events (Wiley, Synlett)
- Production of a glossy brochure to be used for raising funds.
- Next meeting: ECC-6



## Division of Organometallic Chemistry

Chair: Jan Cermak (Czech Rep.) 2014-17

Vice-Chair: Helena Grennberg (Sweden)

Secretary:

Treasurer: Kees Elsevier (since 2014)

Members: 22 Member Societies: 25

- XXI EuCOMC (July 5-9, 2015): Bratislava (Slovakia):
   220 participants (56 speakers, 134 posters)
   XX EuCOMC (June 30-July 4, 2013: St. Andrews (450 participants))
- Science Award for achievements in Organometallic Chemistry to Malcolm Green (Oxford)
- Contributions to ECC-6 (Sevilla): suggestions of speakers and themes
- 3<sup>rd</sup> Nordic Meeting on Organometallic Chemistry, Lund (March 11-12, 2015): 53 participants, 16 lectures – "zero budget"
- Next meeting: Iceland (2016)
- September 5-9, 2015: 10<sup>th</sup> Int. School of Organometallic Chemistry Camerino (Italy).



## Division of Physical Chemistry

Chair: Eckart Rühl (Germany) 2012-17 Vice-Chair: Salvatore Coluccia (Italy) 2015-17

Steering Committee: 7 members

Members: 23 Countries: 20

- Further increase in delegates and member societies (2015)
- Active Steering Committee with 7 members
- 1st European Conference on Physical and Theoretical Chemistry (Catania (Italy), September 13-18, 2015): about 170 participants >70 oral presentations and ca. 100 posters, EuCheMS President joined for the opening
- 2nd European Conference on Physical and Theoretical Chemistry 2017: France
- Use of a support scheme for national conferences (3 conferences were supported in Austria and Germany)
- Contributions to shape the ECC-6 program
- Discussion of educational activities and educational standards in physical chemistry during General Assembly (September 15, 2015)



## Division of Solid State and Materials Chemistry

Chair: Martin Jansen (Germany)

Vice-Chair: Paul Attfield (UK)

Secretary: Antoine Maignan (France)

Members of Ex. Board:5 Members: 21 Member Societies: 19

- 15<sup>th</sup> European Conference on Solid State Chemistry (ECSSC XV)
   Vienna (Austria, August 23-26, 2015) 350 participants, 9 plenary speakers, 36 oral presentations, 280 posters
- 16th European Conference on Solid State Chemistry (ECSSC XVI): Glasgow 2017
- Division's research should be stronger represented in EuCheMS (ECC, program committees, and the Executive Board.
- Gender issues: no female members in the int. Advisory Board of ECSSC to be changed



## WP on Chemistry and Energy

Chair: Nicola Armaroli (Italy) since 2011

Vice-Chair: Secretary: Treasurer:

Members: 15 Countries: 12

#### **Highlights and Future Plans:**

 Energy Science & Technology Conference and Exhibition (Karlsruhe, Germany, May 20-22, 2015).
 >600 participants
 Follow-up conference is discussed (July 3, 2015)

- · Challenge: Widening the number of societies and delegates
- Future: Organization of joint symposia with other Divisions/WPs at ECC-6
- Contributions to "Solar driven Chemistry" Discussion Meeting (Berlin, Oct. 9, 2015)
- Workshop on Endangered Chemical Elements at the European Parliament (September 22, 2015)
- Contributions to EuCheMS roadmaps on specific energy topics to be proposed to EU for funding in the frame of Horizon 2020.



scientific partners:



## WP on Chemistry for Cultural Heritage

Chair: Rocco Mazzeo (Italy)

Vice-Chair: Secretary: Treasurer:

Members: 14 Countries: 12

- 3<sup>rd</sup> Int. Congress in Chemistry for Cultural Heritage 2014 (Vienna, July 1-5, 2014)
   >150 participants
- Next conference: CheCH-2016 (Brussels, July 5-9, 2016)
- Meeting of Steering Committee: 2015 (Berlin)
- Long term: continuation of the core activities



## WP on Green and Sustainable Chemistry

Chair: Peitro Tundo (Italy)

Vice-Chair: Secretary:

Treasurer:

Members: 24 Member Societies: 20

- The WP is being to be considered to be promoted to a Division grade
- Most of the activities will be connected to this new status
- Discussion and projects among the new Division
- Congress will take place in Lisbon on October 4-8, 2015



## WP on Ethics in Chemistry

Chair: Hartmut Frank (Germany)

Vice-Chair: Secretary: Treasurer:

Members: 34 Member Societies: 12

#### **Highlights and Future Plans:**

- Symposium in Frankfurt (Sept. 25-26, 2015)
   Carl Djerassi In Memoriam
- · Topics:
  - Ethical Implications of Chemistry in Science, Industry, Society and Culture
  - The role of Chemists in ethical reflection and decision-making
  - Dimensions of Ethical and Social Implications of Chemistry

#### **Honorary Members**

Prof. Dr. Carl Djerassi Prof. Dr. Richard Ernst Prof. Dr. Roald Hoffmann



Department of Chemistry Stanford University eMail



Laboratorium für Physikalische Chemie ETH Zürich eMail



Dept. of Chemistry and Chemical Biology Cornell University eMail

+ Jan. 30, 2015



## WP on History in Chemistry

Chair¹: Dr Brigitte Van Tiggelen (Société Royale de Chimie, Frenchspeaking Belgian Chemical

Society, B), 2013

Vice-Chair: Professor Annette Lykknes (Norwegian Chemical Society), 2009 Secretary: Dr Ignacio Suay-Mattallana (Royal Spanish Society), 2015

Members<sup>2</sup>: Members: 26 active delegates, 150 members

**Countries**<sup>3</sup>: 21 countries represented by 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

- National delegations and representatives
- Working structure of the WPHC (board, taskgroups...)
- Connecting with other EuCheMS groups
  - DivChemEd
  - WP Ethics in Chemistry
  - WP Chemistry for Cultural Heritage
  - ...
- Connecting with other non EuCheMS groups (observers)
- Survey of the History of Chemistry in Europe
  - 2007 Report in the frame of Bologna reform
  - Extended beyond teaching
  - Ongoing preliminary results discussed in Aveiro

10<sup>th</sup> International Conference on the History of Chemistry Aveiro, Portugal, 9-12 Sept. 2015 Theme « Chemical Biography in the 21<sup>st</sup> Century" Attendance

60 participants, 21 countries, 3 continents 3 key-notes, 53 papers in parallel sessions Next ICHC (2017): Trondheim, Norway



## **European Young Chemists Network**



Chair: Fernando Gomollón Bel (Spain)

Vice-Chair:

Secretary: Camille Oger (France)

Treasurer: -

Members: 27 (>30,000)

Member Societies: 22

- EYCN Career Days at ECC-5 (Istanbul (Turkey))
- 10th Delegate Assembly in Berlin (April 2015) elections
- 2015 Soft Skill Training Workshop (Berlin)
- 2015 Career Days (Madrid)
- 2015 Young Chemists Crossing Borders (YCCB): 6 young chemists traveled to 250th ACS Meeting in Boston
- Collaboration with Evonik (5,000.- EUR per year) for the next 3 years (used for internships, travel grants, delegate assemblies, program activities, etc.)
- 1st European Young Chemists Conference (Guimaraes 2016)
- · Connections with industry
- · Application for European Funding
- Creating a base for Int. Young Chemists Network



## ECC-6 (Sevilla 2016)

- Peter Edwards and his team made an substantial effort for shaping the scientific program.
- All Divisions and Working Parties are active and successful on a European scale. The processes are transparent and the communication is quite good.
- Conveners: were appointed the acceptance level is partially not satisfactory. There is space for improving the concept further.
- Our goal must be to make this conference a success by motivating the communities to join this and future ECC-Conferences.
- Joining ECC-6 is a must for everyone for scientific and networking reasons.



### Other Observations

- Working Groups initiated by David Cole-Hamilton in Torun were quite important for improving the internal discussion culture.
   The results of this process will be communicated later.
- Joint activities between Divisions and Working parties should be encouraged and enhanced on various levels beyond ECC.
- Strength of EuCheMS and its Divisions and Working Parties is the dedication to responsible activities in Chemistry.



### Conclusions

- The EuCheMS Divisions and Working Parties are active and the number of delegates is slightly increasing.
- The scope of activities remains on an outstandingly high level.
- The activities of the Divisions and Working Parties has still space for improvements, e.g. by increasing joint activities.
- We should make a joint effort to get the chemistry communities to ECC-6 and ECC-7.

