

Newsletter 2016(1) of the Inorganic Chemistry Division Division II

Editors Note: Below you will find the 2016 Newsletter; it was compiled thanks to your kindness to send material. So keep sending your items, including pictures, or suggested topics for future issues, via email to <u>ohrstrom@chalmers.se</u>. Please circulate this newsletter to your NAO:s and other interested parties. Kindest regards, Lars Öhrström.

Division II Members 2016-2017

President: <u>Reedijk, Jan</u>; Vice President: <u>Öhrström, Lars</u>; Secretary: <u>Leskelä, Markku</u>; Titular members: <u>Loss, Robert</u>; (Past President) <u>Armelao, Lidia</u>; <u>Ding, Tiping</u>, <u>Karen, Pavel</u>; <u>Rabinovich, Daniel</u>; <u>Walczyk, Thomas</u>; <u>Wieser, Michael</u> Associate members: <u>Drabik, Milan</u>; <u>Sakai, Ken</u>; <u>Trendafilova, Natasha</u>; <u>Meesuk, Ladda</u>; <u>Abdul Aziz</u>, <u>Farina</u>; <u>Colón, Jorge</u> National representatives: <u>Galamba Correia, João</u>; <u>Kalmykov, Stepan</u>; <u>Mathur, Sanjay</u>; <u>Kiliç, Adem</u>; <u>Hasegawa, Miki</u>; <u>Knauth, Philippe</u>; <u>Yoon, Kyung Byung</u>; <u>Diop, Mayoro</u>; <u>Darkwa, James</u>; <u>Leigh, Jeffery</u>

Division II Subcommittees and Commissions currently in operation are the following:

Interdivisional Subcommittee on Materials Chemistry Commission on Isotopic Abundance and Atomic Weights, CIIAW Stable Isotope Reference Material Assessment Subcommittee on Isotopic Abundance Measurements

Brest off-year Division Meeting & related items

The division off-year meeting saw a number of new members introduced to IUPAC work in general and the division in particular. In this respect we were lucky to have IUPAC Secretary General Richard Hartshorn with us for part of the meeting. We discussed the reports on "Standard Atomic Weights of Elements 2013" and "Isotope Compositions of the Elements 2013" from the CIAAW submitted by Juris Meija. Note that the CIAAW has their own website: http://ciaaw.org Another important item was the four new elements and their names and symbols were discussed at some length. Jan Reedijk also reported from the Nobel Symposium on Chemistry and Physics of Heavy and Superheavy Elements, Lund, Sweden, June, 2016. The minutes have been distributed to the members



L to R: Tiping Ding (China), Markku Leskelä (Finland), Thomas Walczyk (Switzerland), Pavel Karen (Norway), Miki Hasegawa (Japan), Philippe Knauth (France), Mayoro Diop (Senegal), Jan Reedijk (The Netherlands), Lars Öhrström (Sweden), Lidia Armelao, (Italy), Richard Hartshorn (IUPAC SG), Ken Sakai (Japan), Jorge Colón (Puerto Rico), Daniel Rabinovich (USA) Scheduled 2017 Meeting of Division II. The Division Committee will meet during the <u>IUPAC</u> <u>General Assembly and World Chemistry Congress</u> <u>in São Paolo</u>, Brazil, July 7-14 2017. Exact dates to be determined, but probably around 7-9

Project Progress & News

Div. II currently has 20 primary active projects (16 continuing, 4 new), and 3 secondary active projects (in which Div II is participating). A few highlights: Project 2014-024-1-200 Development and Global Dissemination of an IUPAC Interactive Electronic Isotopic Periodic Table and Supporting Resources for the Education Community In collaboration with CCE the new interactive electronic periodic table of the elements and isotopes has been officially released at an educational conference in Malaysia in August. https://iupac.org/isotopesmatter 2011-035-1-800 Terminology and Nomenclature of Inorganic and Coordination Polymer Chair Richard Jones (Div VIII) This project is bigger than originally thought but is progressing steadily. The task group met in August and a draft of recommendations, albeit still with missing pieces, is in progress. Project 2008-040-1-200 Towards Comprehensive Definition of Oxidation State Chair Pavel Karen.

The PAC report is now the 13th most downloaded article from *Pure and Applied Chemistry*. (The editor also notes with some satisfaction that six articles on the top-20-list have their origin in Div. II.)

New Projects

The Constitution of Group 3 of The Periodic Table will deliver a recommendation on the composition of group 3 of the Periodic Table as consisting either of Sc, Y, Lu and Lr, or Sc, Y, La and Ac. Chair Eric Scerri.

<u>Solid-State Chemistry Terminology</u>, a new project with chair Robin Macaluso, YO in 2013.

Naming of New Elements

After the provisional recommendations and the public review period of 5 months staring in June, Jan Reedijk and Lars Öhrström, in close collaboration with the secretariat, PAC editors and presidents of IUPAC and IUPAP, continued with the final version of Recommendations of new names and symbols and preparations for the official naming of the four new elements. The names became final after the Bureau's decision on 28th Nov., and were formally announced with an IUPAC press release on 30th Nov. (with a preprint of the Recommendations). Work at individual NAO-level is now underway to assess and translate these names into any of our languages. First to have pronounced a verdict seems to be Spanish Royal Society of Chemistry, settling on nihonio, moscovio, tennesso and oganessón and the Slovak Chemical Society has announced their choice of nihónium, moskóvium, tenés & oganesson. The process, and the names, will be discussed by Jan Reedijk in an forthcoming article in Chemistry International.

Wikipedia and Division II

With the names of the new elements becoming official we should all check Wikipedia in our local languages.

Division related articles (selection)

"The Three-letter Element Symbols: Meddling Manner or Diplomatic Defusing?" L. Öhrström, <u>N.E.</u> <u>Holden, Chemistry International</u> 38 (2), 4-8, 2016 "Tackling the Big Challenges of the Future - The Role of Chemistry" <u>J. Garcia Martinez</u>, Chemistry International 38 (3-4) 10-13, 2016 <u>The Solar Army</u>, Harry Gray's Legacy to the Children of the World, J. Colón, Chemistry International 38 (6) 10-13, 2016

The Division in the News

A ChemViews article, <u>Updated Atomic Weights:</u> <u>Time to Review Our Table</u> reported on the work of the CIAAW and their latest updates.

Division II Elections for 2018-2019

Preparations for the next elections are now underway. IUPAC Secretary General has approved the following nomination committee: Lars Öhrström (chair), Kazuyuki Tatsumi, (Japan, molecules, ex. div.II & IUPAC pres.) Robin Macaluso, (USA, materials, CCE & Div.VIII, former div.II YO), Juris Meija, (Canada, atoms, ICTNS & Chair CIAAW) and Alessia Bacchi, (Italy, molecules & materials, Pres. Eur. Cryst. Assoc.) Nomination deadline is 15th February. Please see <u>https://iupac.org/iupacelections-for-the-2018-2019-term/</u>

Other IUPAC nominations

Award for Distinguished Women in Chemistry or Chemical Engineering, deadline – 15 January 2017 IUPAC-SOLVAY International Award for Young

Chemists, deadline – 1 February 2017

<u>IUPAC Centenary Logo competition</u>, deadline – 1 February 2017

PhosAgro/UNESCO/IUPAC Green Chemistry for Life research grants. deadline – 28 February 2017

IUPAC Sponsored Conferences

The 12th Solid State Chemistry conference (SSC 2016) was held during September 18th -23rd in Prague, the Czech Republic. The conference was a forum to bridge the gap between scientific understanding and technical requirements and applications, so that the enormous future potential of solid state chemistry, materials and technologies, can be realized effectively. The SSC 2016 attracted an extremely wide audience with 101 scientists attending from 24 countries. The specific topics included: Preparation and synthesis, - Phase and properties characterization, -Nanomaterials, nanocomposites and catalysis, -Magnetic, metal and alloy materials, - Optical and photovoltaic materials, - Theoretical approaches to solid-state chemistry. The delegate of IUPAC -Milan Drábik, gave a presentation on the scope and modes of key and vital activities of the Union.



Division AM Milan Drábik in action at the SSC 2016

Upcoming: The XXVI International Conference on Coordination and Bioinorganic Chemistry (ICCBIC) will be held in Smolenice Castle on June 4-9, 2017. More information: <u>http://www.iccbic.stuba.sk</u>

News of Division Members

Philippe Knauth and Jorge Colón were nominated as AM:s of the new IUPAC <u>Green Chemistry</u> <u>Interdivisional Committee</u>.

Division II on Twitter

<u>Twitter</u> is becoming an interesting arena for communicating and discussing scientific news. As far as the editor is aware we have the following present and former division members on twitter: <u>@JorgeColon</u> @javiergarciamar & <u>@Larsohrstrom</u>.

Please update the editor on other users, or go online, create an account and send him tweet!

Membership of the Inorganic Chemistry Division Committee 2016-2017

Name	Status	Term	NAO
Prof. Jan Reedijk	TM – President	2014-2017	Netherlands
Prof. Lars Öhrström	TM – Vice President	2014-2017	Sweden
Prof. Markku Leskelä	TM – Secretary	2012-2017	Finland
Prof. Lidia Armelao	TM	2016-2017	Italy
Prof. Tiping Ding	TM 2nd term	2014-2017	China/Beijing
Prof. Pavel Karen	TM	2016-2017	Norway
Prof. Robert D. Loss	TM – (Past President)	2016-2017	Australia
Prof. Daniel Rabinovich	TM (project coordinator)	2016-2017	United States
Prof. Thomas R. Walczyk	TM 2nd term	2014-2017	Switzerland
Prof. Michael Wieser	TM 2nd term	2014-2017	Canada
Prof. Natasha Trendafilova	AM	2016-2017	Bulgaria
Prof. Ken Sakai	AM-2nd term	2014-2017	Japan
Prof. Y Farina Abdul Aziz	AM	2016-2017	Malaysia
Prof. Jorge Colón	AM	2016-2017	Puerto Rico
Dr. Milan Drábik	AM	2016-2017	Slovakia
Prof. Ladda M. Meesuk	AM	2016-2017	Thailand
Prof. Philippe Knauth	NR	2016-2017	France
Prof. Sanjay Mathur	NR	2016-2017	Germany
Prof. Miki Hasegawa	NR	2016-2017	Japan
Prof. Kyung Byung Yoon	NR	2016-2017	Korea
Prof. João Galamba	NR-2nd term	2014-2017	Portugal
Prof. Stepan N. Kalmykov	NR-2nd term	2014-2017	Russia
Dr. Mayoro Diop	NR	2016-2017	Senegal
Prof. James Darkwa	NR	2016-2017	South Africa
Dr. Adem Kiliç	NR	2016-2017	Turkey
Prof. Jeffery Leigh	NR	2016-2017	UK
10 TMs, 6 AMs, 10 NRs			
AM = Associate Member			
NR = National Representativ	ve		
TM = Titular Member			

Young Observers at the GA in Busan 2015 Guillermo Ahumada (Chile) Claudio Verani (USA) Luisa Whittaker-Brooks (USA)

Emeritus members on the mailing list: Dr. Norman E. Holden, United States Prof. Kazuyuki Tatsumi, Japan (past div II president, past IUPAC president)