

**IUPAC**INTERNATIONAL UNION OF
PURE AND APPLIED CHEMISTRY

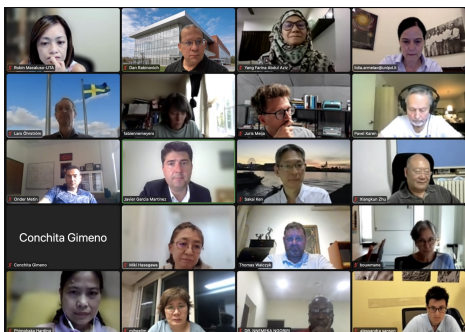
Inorganic Chemistry Division Division II

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Introduction

The IUPAC Inorganic Chemistry Division deals with all aspects of inorganic chemistry, including bioinorganic, coordination, and organometallic chemistry, inorganic polymeric materials, and various aspects of the periodic table. It also advises the Chemical Nomenclature and Structure Representation Division (Div. VIII) on matters dealing with inorganic compounds and materials. The Division's [Interdivisional Subcommittee on Materials Chemistry](#) and its [Commission on Isotopic Abundances and Atomic Weights \(CIAAW\)](#) also play important roles in the range of activities supported by IUPAC to advance its mission and vision.

"Almost thirty years ago the criteria that are currently used to verify claims for the discovery of a new element were set down by the comprehensive work of a Transfermium Working Group, TWG, jointly established by IUPAC and IUPAP. The recent completion of the naming of the 118 elements in the first seven periods of the Periodic Table of the Elements was considered as an opportunity for a review of these criteria in the light of the experimental and theoretical advances in the field." Since late 2016, IUPAC's Division II (Project No. 2017-014-2-200) has been collaborating with IUPAP to establish a new Joint Working Group (JWG), consisting of six members determined by the Unions, for the creation of new terms and criteria in the confirmation of new elements. The provisional findings were published by S. Hofmann *et al.* (*Pure Appl. Chem.* **2018**, *90*, 1773-1832) and finalized in 2019 taking into consideration public feedback.



Screen shot taken during a break-out session at the virtual off-year meeting of Division II, held on 28-29 June 2022. Pictured from left to right starting from the top row: Robin Macaluso (USA), Dan Rabinovich (USA), Yang Farina Abdul Aziz (Malaysia); Lidia Armelao (Italy); Lars Öhrström (Sweden); Fabienne Meyers (USA); Juris Meija (Canada); Pavel Karen (Norway); Onder Metin (Turkey); Javier García Martínez (Spain); Ken Sakai (Japan); Xiankun Zhu (PRC); Conchita Gimeno (Spain); Miki Hasegawa (Japan); Thomas Walczyk (Singapore); Elisabeth Bouwman (Netherlands); Phimpaka Harding (Thailand); Mi Hee Lim (Korea); Nnaemeka C. Ngobiri (Nigeria); Alessandra Sanson (Italy).

Impact and Visibility

For the general public, the most significant outcome of the division's work is arguably the evaluation and advice it provides pertaining to the proposed names and symbols for new elements, which have been approved for addition to the periodic table. For the scientific and educational community, the work on isotopic abundances and atomic weights is also of fundamental importance as these numbers are continuously refined and updated. The most recent version of the IUPAC Technical Report "Standard Atomic Weights of the Elements 2021" was published in *Pure and Applied Chemistry* on May 2022: <https://doi.org/10.1515/pac-2019-0603>

Special Issue of PAC

The Division is sponsoring a special issue of *Pure and Applied Chemistry* dedicated to Dr. Mary L. Good (1931-2019), a pioneer and leader in inorganic chemistry and the first woman elected as head of an IUPAC technical division.



Division II Newsletter

The Division publishes an annual newsletter that includes divisional news, highlights and updates of projects, and information about upcoming conferences of potential interest to inorganic chemists. Our most recent newsletter was published in December 2022.

Newsletter

Division II Membership 2022-2023

Name	Position	Term	NAO
Prof. Lidia Armelao	TM-President	2022-2025	Italy
Prof. Lars R. Öhrström	TM-Past President	2022-2023	Sweden
Prof. Daniel Rabinovich	TM-Secretary	2020-2023	United States
Prof. Elisabeth Bouwman	TM	2022-2023	Netherlands
Prof. Jorge Colón	TM	2020-2023	Puerto Rico
Prof. María Concepción Gimeno	TM	2022-2023	Spain
Prof. Mi Hee Lim	TM	2022-2023	South Korea
Prof. Philippe Knauth	TM	2020-2023	France
Dr. Juris Meija	TM	2020-2023	Canada
Prof. Thomas Walczyk	TM	2022-2023	Singapore
Prof. Yang Farina Abdul Aziz	AM	2022-2023	Malaysia
Prof. Mayoro Diop	AM	2020-2023	Senegal
Prof. Robin Macaluso	AM	2022-2023	United States
Prof. Ken Sakai	AM	2022-2023	Japan
Dr. Alessandra Sanson	AM	2022-2023	Italy
Prof. Xiangkun Zhu	AM	2022-2023	China/Beijing
Prof. Murad Aldamen	NR	2022-2023	Jordan
Prof. Haim Cohen	NR	2022-2023	Israel
Prof. Phimpaka Harding	NR	2022-2023	Thailand
Prof. Miki Hasegawa	NR	2022-2023	Japan
Dr. Rosalie Hocking	NR	2022-2023	Australia
Prof. Pavel Karen	NR	2022-2023	Norway
Dr. Lukas Krivosudsky	NR	2022-2023	Slovakia
Dr. Andrew Logsdail	NR	2022-2023	United Kingdom
Prof. Onder Metin	NR	2022-2023	Turkey
Dr. Nnaemeka Ngobiri	NR	2022-2023	Nigeria

IUPAC Projects

The scientific work of IUPAC is conducted largely through a formal Project system in which proposals from scientists around the world are peer-reviewed. The records of all current and completed projects are accessible through a searchable database hosted by IUPAC (<https://iupac.org/projects>).

General Criteria for Projects

IUPAC projects should address at least one of the goals listed in the *Strategic Plan* and satisfy at least one of the following key criteria:

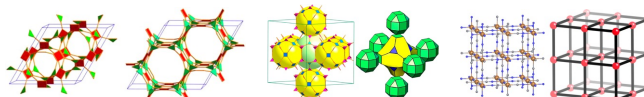
- Meet the needs of chemists worldwide.
- Contribute to the role of chemistry as a benefit for humankind.
- Include a diverse team of international experts, such as those IUPAC can assemble.

Sample Division II Projects

EXAMPLE

Project: 2014-001-2-200

Terminology guidelines and database issues for topology representations in coordination networks, metal-organic frameworks and other crystalline materials. TGC: Lars Öhrström (Chalmers University of Technology, Sweden). A full paper describing many issues pertaining to the project was published in the ACS journal *Crystal Growth & Design* (**2018**, *18*, 3411-3418).



Project: 2018-030-2-200

Toward a comprehensive definition of valence. TGC: Pavel Karen, (Univ. Oslo, Norway)



Project: 2015-053-1-200

Survey of definitions and use of common solid-state chemistry terminology. TGC: Robin T. Macaluso (Univ. of Texas at Arlington, USA).



Project: 2022-016-1-021

Effective teaching tools and methods to learn about e-waste. TGC: Francesca M. Kerton (Memorial University of Newfoundland, Canada). This project involves cooperation between three standing committees (CHEMRAWN, CCE, and COCI) and two divisions (Divisions II and VI).

