- "Hydrogen production and conversion to chemicals: a zero-carbon puzzle?" by Mario Marchionna SAIPEM – Milano,
- "Shaping the future of green hydrogen: De Nora's electrochemical technologies for fueling the energy transition" by Michele Perego *et al.* De Nora Industries – Milano,
- "Perovskite: a key structure for a sustainable hydrogen economy" by Alessandra Sanson National Research Council – Faenza,
- "Advanced polymer electrolyte membrane water electrolysis for power to gas applications" by Antonino Salvatore Aricò *et al.* National Research Council – Messina.

The proceedings in Italian are published in a dedicated issue of "La Chimica & l'Industria" edited by the Italian Chemical Society (issue 5/2023) <https://www.soc.chim.it/it/riviste/chimica_industria/catalogo>.

https://www.degruyter.com/journal/key/pac/96/4/html

Lectures and session discussions of the Avogadro Colloquia took place in the iconic Marconi Hall of the Consiglio Nazionale delle Ricerche (CNR), Piazzale Aldo Moro, in Roma.

IUPAC Provisional Recommendations

Provisional Recommendations are preliminary drafts of IUPAC recommendations. These drafts encompass topics including terminology, nomenclature, and symbols. Following approval, the final recommendations are published in IUPAC's journal *Pure and Applied Chemistry* (PAC) or in IUPAC books. During the commentary period for Provisional Recommendations, interested parties are encouraged to suggest revisions to the recommendation's author. https://iupac.org/recommendations/under-review-by-the-public/

Glossary of Terms for Mass and Volume in Analytical Chemistry

A glossary of terms and definitions for concepts in the use of mass and volume in analytical chemistry is presented. These include definitions for analytical methods of measurement (gravimetry, volumetry, and titrimetry) and supporting terms. Terms are updates of earlier recommendations or Orange Book entries.

Comments by **31 August 2024**

Corresponding Author: David Brynn Hibbert b.hibbert@unsw.edu.au

Definition of materials chemistry

Materials chemistry is focused on the design, preparation and understanding of innovative materials with useful properties. It is an emerging area of research where definitions are not well established. This document defines the area of materials chemistry for the benefit of chemistry communities and the general public worldwide interested in this discipline. This Recommendation defines the term "materials chemistry" as "Scientific discipline that designs, synthesizes and characterizes materials, with particular interest upon processing and understanding of useful or potentially useful properties displayed by such designed materials."

Comments **by 31 July 2024**

Corresponding Author: Milan Drábik drabik@fns.uniba.sk