

decrease in the system homogeneity. The changes in the real processing temperatures might be quite moderate (ca 2–3 °C), but maltodextrin is a cheap and easy-to-add modifier, and the milder processing conditions are advantageous for both technical applications (energy savings) and biomedical applications (beneficial for temperature-sensitive additives, such as antibiotics).

This publication is the first released by the project task group <https://iupac.org/project/2023-015-2-400/>

Glossary of terms for mass and volume in analytical chemistry (IUPAC Recommendations 2024)

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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.

<https://iupac.org/project/2021-018-1-500/>

Special CTI

The teaching of ethics and core values in chemistry

Jan Apotheker, editor

Chemistry Teacher International, 2024, Vol.6 Issue 4, Special issue

Chemistry Teacher International is beginning to earn a place within the journals related to chemistry education. The journal offers a platform for both research in chemistry education as well as good practices. As an open-access journal, it tries to involve researchers and teachers from all over the world. As a result, authors from all over the world, including African and Asian countries, have found a platform to publish their articles. CTI now has an impact factor of Clarivate JIF 2.2 and a Scopus Cite score of 3.1. With these scores,

CTI ranks well amongst most other journals related to chemistry education.

The publication of special issues focused on a specific subject is one of the ways groups within IUPAC can showcase their educational activities. CHEMRAWN published in June 2024 a special issue in CTI about the problems of E-waste. The Polymer Division did publish a special issue on polymer sciences in June 2021.

Towards the end of December 2024, a special issue (Volume 6 Issue 4) was published focusing on teaching ethics and core values in chemistry education. In Table 1 an overview of the titles of the articles is given.

This special issue salutes the formation of the Committee on Ethics, Diversity, Equity, and Inclusion (CEDEI) within IUPAC. IUPAC has a long-standing cooperation with amongst others, OPCW, about ethics within chemistry, culminating in the publication of the ‘The Hague Ethical Guidelines’ (Husbands & Suárez, 2016) in 2016. IUPAC endorsed them in 2016.

Within the European Union, the concept of ‘Responsible Research and Innovation’ (RRI), which has had an influence both on industry as well as education (von Schomberg, 2013; Mahaffy et al., 2014; Sutcliffe, 2011) was developed. RRI has six focal points, Ethics, Science Education, Gender Equality, Open Access, Governance, and Public Engagement. In Figure 1, the idea of Gender Equality is depicted. These focal points tie in with the activities of the IUPAC Committee on Chemistry Education (CCE). The publication of *Chemistry Teacher International* as an open-access journal is one of them.

Over the past two decades two developments have influenced the discussion on teaching ethics in chemistry education. Normal part of the curriculum of course is a discussion on academic integrity, normally linked to that a code of academic conduct in research. But ethical issues specifically linked to chemistry have not been a normal part of the curriculum. With the formulation of the principles of green chemistry (Anastas and Eghbali, 2010) sustainability became a focal point in chemistry research and development. Other developments like the ones described above led to the formulation of core values for chemists. chemists (Apotheker, 2023). These core values not only refer to working safely, but also towards sustainable use of substances, as well as the future use of raw materials. Another important aspect is the adherence to prevailing laws and regulations, including the expectations to report infringements to relevant authorities. Within OPCW this led ultimately to the formation of an Advisory Board on Education and Outreach. In this body, the double use of chemicals as well as chemical knowledge has been a topic of discussion. As a result of