

IUPAC CPCDS WorldFAIR Chemistry project
Workshop on sustainable business modeling for digital standards development
In conjunction with the InChI Trust
March 2024

IUPAC digital standards sustainability workshop

Description

IUPAC has hosted a workshop in conjunction with the InChI Trust to outline a Roadmap and a Sustainability Blueprint for the development, adoption, and maintenance of digital standards as part of our collective recommendations for supporting chemical data reporting policy and practice on behalf of the global chemistry community. This workshop was an activity of the WorldFAIR Chemistry* project to engage with data initiatives across the community to advance chemistry standards in support of the FAIR data principles for machine-readable data exchange.

The chemistry community has over a century of experience in developing and refining standards for communicating high quality chemical information. The need for consistent reporting and exchange of chemical data and information globally is more compelling than ever before. Digital technologies expand the scope and opportunities and change the rules for development and dissemination. As we race to ensure the high level of integrity we rely on for chemical data, we face new approaches for working collaboratively and sustaining access. How do we maximize the opportunities to expand chemistry digital standards development? What deliverables and services are required to facilitate standards adoption? Which business models could be adopted to manage and resource pre-competitive community standards? Who are the key players in the chemistry data economy?

FAIR provides a framework to enable previously well-established chemistry standards to become accessible and applicable for automated programmatic reuse. However, further refinement of current processes and tools are necessary to establish digital workflows for sharing machine processable chemical data, particularly in interdisciplinary and cross-sector contexts. Sustainability for ongoing development, provision and curation of data resources is a perennial challenge for pre-competitive, community-based resources. We invited experienced stewards of chemical information to participate in a two-day value proposition & business modeling exercise for digital chemical standards outputs and services.

Themes:

- Fostering key stakeholder engagement in community digital standards sustainability in the chemical & related sciences
- Identifying collective pre-competitive approaches, business models & strategies for sustaining broadly applicable and interoperable chemistry data and information standards
- Creating roadmaps for stewardship & development of IUPAC and other community digital standards in the chemical sciences

- Strategizing for adoption and promotion and communicating value proposition for chemistry data standards

Details

What: Invited workshop, two days; supported by WorldFAIR*-IUPAC Chemistry project.

Why: sustainability perennial challenge for pre-competitive, community based resources; collective approach critical as broad agreement/engagement needed for interoperable data standard notations

Where: Cambridge, UK, hosted by the Cambridge Crystallographic Data Centre (CCDC)

When: March 25-26, 2024 (starting from Monday morning through Tuesday lunch)

Who: 36 participants from chemical data initiatives addressing sustainable digital standards development

Outcomes:

- Defined community, contributors and users, and other stakeholders.
- Defined parameters around values, both open and revenue generating.
- Articulated target resources & services to serve the broader community in using standards.
- Initiated market analysis and identified funding streams.
- Built into IUPAC roadmap for digital chemistry standards.

Resources: materials were distributed time ahead to get you familiarized with the workshop scope.

Meals and coffee breaks: Networking was encouraged and meals and coffee were provided

Schedule: attached

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