

with the movement toward FAIR data, will be used to promote the idea that units of measurement are not second class citizens in science, but rather the most important aspect of what is needed to make data FAIR.

The DRUM Task Group and with colleagues from the CIPM's Digital SI Task Group have recently published a comment article in *Nature* 'Stop squandering data: make units of measurement machine-readable' describing some of the pervasive challenges caused by "sloppy or missing units" (<https://doi.org/10.1038/d41586-022-01233-w>).

The article provides an overview of current activities globally, the role of DRUM and the Digital SI Expert Group. It also includes a Call for Action 'to create interoperable data with machine-readable quantities and units of measurement' and invites colleagues to contact the Task Group to get involved.

This IUPAC project ties directly into the ongoing work to develop a 'digital first' 5th edition of the Green Book on quantities and units in Chemistry (project 2019-001-2-100).

For more information and comments, contact Task Group Chair Jeremy Frey
<j.g.frey@soton.ac.uk>
<https://iupac.org/project/2022-009-1-100>

IUPAC Green Book—Update and More

The so-called IUPAC Green Book: Quantities, Units, and Symbols in Physical Chemistry, provides a readable compilation of widely used terms and symbols from many sources together with brief understandable definitions. The 4th edition has been updated with the new SI and will be published soon along with an abridged edition.

Its content has been reviewed in consultation with the IUPAC divisions and committees, to identify which aspects should be retained (e.g. should all the data tables be retained), what areas needed revision, shall be enhanced or deleted, and which topics needed to be added (e.g. perhaps less emphasis on data tables, and more information on NMR, nanoscience, computational chemistry and simulations, non-equilibrium thermodynamics and statistical mechanics etc.). That edition is being finalized and shall be available later this year.

The following edition is now being conceived as a Digitally Native Book. The task group plan to carefully evaluate the methodology used with the preparation of earlier traduction (e.g. the Portuguese version) which created an XML version and tested the software infrastructure to derive the print versions. This would in principle enable the production of more versatile Web based versions of the Green Book in addition to the printed book. This would also facilitate semantically marked up content very suitable to link to the evolving Gold Book and provide an online resource to be used by others in generating correct text for other publications which use the material in the Green Book (i.e. symbols and units).

The task group is now seeking input from the community at large while examining the possible content of the 5th edition of the Green Book and is inviting everyone to fill in a survey to help gather community views on what should be included in the 5th edition. The survey will remain open until September 2022, but early replies will be very useful in planning the 5th edition project.

For access to the survey and more information and comments, contact Task Group Chair Jeremy Frey <j.g.frey@soton.ac.uk>
<https://iupac.org/project/2019-001-2-100>

Call for Proposals

Any individual or group can submit a project proposal to IUPAC, with or without current affiliation with an IUPAC body. Projects can be submitted at any time.

For detailed information, see the Guidelines for Completion of the Project Submission Form. Frequently Asked Questions on Project Submission and Approval Process are also available on the Union's website at www.iupac.org/projects. The proposal template is straightforward and is arranged so that it presents "up front" the project's intended impact (purpose), the intended stakeholders and beneficiaries, the dissemination plan, and how the effectiveness of that plan can be evaluated. More recently, specific guidelines have been added for the management of scientific data and digital outputs.

The revised form and guidelines are available at
<https://iupac.org/projects/project-submission-form-and-guidelines/>



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