

COMMENT

“ACS Reagent Chemicals” expands

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The ACS Committee on Analytical Reagents (CAR) has been setting the requirements and developing validated test methods for determining the purity of reagents and standards used in analytical testing for more than 100 years. As the committee looks to the future, it strives to keep up with the latest tools and technologies to bring current standards to the scientific community as rapidly as possible.

The committee develops and publishes “ACS Reagent Chemicals,” which contains the official specifications for each chemical and the ACS test methods for all currently recognized ACS-grade materials. CAR continues to revise the content and update analytical methods to incorporate new technology that would improve analytical accuracy, introduce new ACS-grade reagents that are required to support the analytical community, and continue the drive toward green chemistry by replacing the use of known

nity to keep pace with scientific change.

The integration of “ACS Reagent Chemicals” into the journals platform creates a streamlined, mobile-friendly user interface and provides both HTML and printable PDF layouts for monographs. Additionally, both versions of each monograph have internal linking to methods and



other reagents referenced in the monograph’s text, which streamlines concatenation of all needed information for a particular reagent. The new interface also allows broader searching, with results from reference works, such as “ACS Reagent Chemicals,” as well as current research published in other resources. For users seeking a specific type of result, searches can be narrowed down to four content types: journal article, book chapter, C&EN article, and reference/standard.

plete rerelease of the book and without pages of notes that have to be tracked separately and manually inserted into each monograph. Each monograph already has its own DOI in the new system, and each change to a monograph will generate a fresh DOI—making tracking and citing the monograph easier. Additionally, each new version will have the dates for which

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it is valid clearly noted on the monograph. Major updates will be released six months before the new version becomes the version of record, leaving users ample time to update their procedures.

This new ability to rapidly revise and track changes allows for complete transparency and accessibility of the historical record for subscribers. Moving forward, new versions of each monograph will be indexed and hyperlinked in the resource. Finding a previous version of a monograph will be as simple as finding it in the record of changes on a monograph’s page and clicking the link

The electronic version of “ACS Reagent

carcinogenic reagents in the procedures whenever possible.

CAR is currently the only organization in the world establishing requirements and developing validated test methods for determining the purity of reagent-grade chemicals. CAR is an all-volunteer group consisting of experts from the chemical industry, academia, and government. The committee comprises four main subcommittees: Inorganic, Organic, New Reagents, and Validation.

The newly revised online edition of “ACS Reagent Chemicals,” which is based on the 11th print edition, improves the speed and simplicity with which the committee communicates updates and changes by bringing the entire reference resource to the award-winning ACS journals platform. No longer is a reference book that is refreshed every 10 years sufficient to keep up with scientific innovation; change occurs faster than that, and it happens at the reagent and method levels. This new resource is proof of our commitment to the commu-

The electronic version of “ACS Reagent Chemicals” also offers new benefits for librarians. It’s now easier to track usage statistics and compare them with those for other resources, an action not possible with a physical book or the previous electronic version. The introduction of the subscription-based model, with no user or use limits, also encourages people to frequently and easily check for updates to help maintain currency in the institution.

The revitalization of “ACS Reagent Chemicals” isn’t finished. Many new features are coming later in 2017 and early 2018. The chemical structures and equations featured in each monograph are being standardized for formatting and sizing, and reagents already included with multiple grades will be split and expanded to clarify which information applies to which grade. CAR will also consider new reagents and grades to fit the changing needs of industry.

Because this resource is now structured like a database, changes to individual monographs can be made without a com-

“ACS Reagent Chemicals” enhances the communication link between CAR and users by delivering content faster and with a transparency that was difficult to achieve in the past. It creates a more user-friendly platform for quality control and quality assurance, enabling individuals to obtain a continuous record and an awareness of the status of all ACS chemical monographs. Finally, it provides the speed required for members of the research community to promptly find the information they seek.

Special thanks go to the ACS Publications team for its contributions in creating the electronic platform for “ACS Reagent Chemicals.” Michael Woodruff, Michael Darr, Esther Ober, Jeff Fisher, and Angela Carlson did an outstanding job in developing and promoting this resource, and CAR is grateful to them for this accomplishment.

To get in touch with the committee, visit connect.acspubs.org/contact_reagents.

Views expressed are those of the author and not necessarily those of C&EN or ACS.