

PUBLISHING: ENSURING AND EXPANDING ACCESS TO HIGH QUALITY SCIENCE

The American Chemical Society (ACS) supports universal access to the results of scientific research via publishing models that are sustainable and ensure the integrity and permanence of the scholarly record upon which scientific progress is based. The ACS does not support unfunded mandates placing constraints on authors or the research enterprise – or interfering with our ability to fulfill the Society’s mission as a provider of indispensable information to the world’s community of chemistry professionals.

The Society reaffirms the following principles which are essential to ensuring and expanding access to high quality science. These principles are aligned with those of the [Brussels Declaration on STM Publishing](#) as set forth by STM (formerly the International Association of STM Publishers), to which the American Chemical Society was an early cosignatory in 2007.

- **Central to its mission, the ACS seeks to maximize the dissemination of knowledge through economically self-sustaining publishing models.**

Sustainable access to the authoritative scientific record as embodied in peer-reviewed journal articles is essential to basic research innovation and to ensure the United States remains a competitive global economic leader. The broad visibility of content in ACS journals helps scholars to achieve new scientific breakthroughs and leads to practical applications directly benefiting human health and welfare.

- **The ACS organizes, manages, and financially supports the process of independent peer review essential to maintaining the integrity of the scientific research record.**

The Society’s peer-reviewed journals contribute to an informal, yet widely recognized, ranking process used by funding bodies and the academic community to assess research quality, impact, and priority—key factors used to allocate funding resources, evaluate personal research achievement, and enable professional advancement. Toward that end, the ACS invests heavily in a worldwide network of expert scientific journal editors, highly trained staff, and specialized technology resources. Policies that undermine the integrity of peer review, such as Green open access with no embargo, are a concern to the Society.

- **The ACS launches, sustains, promotes, and develops journals for the benefit of the scholarly community.**

Successfully coordinating these activities requires a significant financial and human resource investment. It is by deriving economic value from the published article that ACS can sustain its efforts to transform the author’s original creative work into a final published work with value to science professionals. Taxpayers and funding agencies support the underlying research, but not

the cost to create articles describing and interpreting the research, or expenses associated with independent peer review and publication of the results. Sustained investments in ACS journals result in many recognitions of excellence for selecting, refining, and showcasing the world's most impactful research in chemistry and related sciences.

- **The Society's current licensing models and open access options deliver broad and significantly increased scholarly access to scientific research.**

ACS has developed, and continues to develop, innovative and accessible publishing models, policies, and practices to support the scholarly communication process and to broaden public access to, and understanding of, scientific information. While ACS journals are globally accessible, the Society recognizes special situations faced by institutions in developing countries and those located in areas with economic hardship and provides equitable solutions for these regions. Where subscription access is unavailable, ACS offers "pay-per-view" individual article purchase options, as well as interlibrary loan privileges that enable free access to the public.

For those authors or their funding agencies wishing to sponsor immediate public access to research, ACS offers a suite of [fee-based open access licensing options](#) whereby the final article of record is made available immediately upon publication, free to any reader.

- **Copyright protects the intellectual property and investment of both authors and the Society.**

ACS strives to strike an appropriate balance between enabling public access and ensuring it can sustain its publishing activities. All bibliographic information that describes our published journal content, including the complete abstracts of all published ACS research articles, is freely available on our website for the benefit of professional scientists and the public alike. In its [Journal Publishing Agreement](#) with authors, the Society grants back to ACS authors broad rights for the re-use of various versions of their published work for non-commercial purposes. ACS also provides all authors the option of enabling unlimited access to the final published article after an appropriate interval post-publication, via special web links that may be openly shared by authors through our [ACS Articles on Request](#) program.

- **The ACS supports the creation of rights-protected archives that preserve scholarship in perpetuity.**

Consistent with its own mission as a scholarly scientific society, the ACS has created and maintains a digital legacy archive of the historical published content contained in the Society's journals. In keeping with publishing industry best practices for digital archiving, the Society has also deposited and keeps current its legacy published journal content with a trusted third-party archive, [Portico](#), which is committed to long-term preservation of the scholarly record.

- **The ACS endorses the view that researcher-validated primary data should be made freely available.**

ACS Publications makes openly available any and all supporting information and data authors provide to accompany articles they publish in ACS journals. Through a cooperative arrangement

with [FigShare](#), such supporting information is made freely accessible and citable by the global research community.

The Society also supports an enabling role for governmental and other funding agencies to identify standards and best practices for the management of primary scientific data generated via taxpayer or other research grant funding that supports independent investigators. This role could include, for example, establishment of standards for the interoperability of data repositories with the published research literature, and support for public-private cooperative arrangements to promote scientific information access.

The cross-publisher initiative [CHORUS](#) (Clearinghouse for Open Research of the United States), which operates in cooperation with a number of U.S. federal funding agencies, is one example whereby ACS has played a leadership role in enabling seamlessly linked and networked access to scientific information.

- **Publishing in a variety of media has associated costs.**

Each key stakeholder in today's scholarly communication system fills a unique role in which it is most experienced and best suited. Scientific publishers, such as the American Chemical Society, fund the infrastructure enabling the certification, dissemination, and preservation of research articles through an independent process of peer review and publication in scientific journals. This includes investment in web-publishing technologies and platforms, innovation with dissemination methods, and publishing models to ensure reader access to research is wider and faster than ever before.

- **Initiatives that mandate the open deposit of accepted manuscripts must ensure a means for publishers to recover the significant investments they make in high quality scientific communication.**

The ACS, along with numerous other scientific societies, opposes policies mandating the free dissemination of peer-reviewed journal content without regard to enabling publishers to recoup their investments.

Successfully accommodating free access to accepted manuscripts, often characterized as Green open access, ultimately depends on sustained subscriptions or other revenues to fund the costs of publication. Policies that do not fund, or prevent publishers from investing in the ongoing publication of high-quality scientific articles, are detrimental to the research community, the progress of science, and the public good.

- **ACS supports sustainable open access policies providing the flexibility required to protect and enhance the scholarly publishing environment.**

Because the practices of scientific disciplines can, and do, differ, and because each scientific publisher follows different publication models, ACS cautions that "one-size-fits-all" open access mandates risk undermining the sustainability of scientific communication. ACS supports ongoing and independent analyses of the cost/benefit impact of public access mandates on taxpayers, researchers, and scientific journal publishers and the disciplines they serve. Such analyses should

include a careful assessment of the public needs open access proposals seek to address, the impact on scientific information quality, and the long-term costs to the respective funders. Policymakers must also consider the costs entailed by various research agencies themselves in developing, procuring, and managing major new electronic information systems, as well as redundancies and competition with alternatives in the private sector.