

AIChE

December 29, 2011

Dear Sir/Madam:

The American Institute of Chemical Engineers (AIChE) is pleased to respond to OSTP's November 3, 2011 Federal Register notice requesting comments on "Public Access to Peer-Reviewed Scholarly Publications Resulting from Federally Funded Research." We are gratified by the administration's consultation with stakeholders in the engineering community.

Founded in 1908, AIChE is a professional society of more than 40,000 chemical engineers in 92 countries, with approximately 90 percent of these members based in the U.S. Our members work in corporations, universities, and government using their knowledge of chemical processes to develop safe and useful products for the benefit of society.

Through its publications, meetings, research efforts and other programs, AIChE is a focal point for information exchange at the frontiers of chemical engineering research in such areas as nanotechnology, sustainability, new energy sources, biological and environmental engineering, and chemical plant safety and security. Our publications program includes four peer-reviewed journals, a monthly member magazine, books, databases, and electronic newsletters. Like many other scientific and engineering societies, we depend on the revenues generated by these publications to support activities that benefit practicing chemical engineers, researchers, students, and society.

While we certainly agree that taxpayers should benefit from the results of federally-funded research, learned societies like ours add significant value to the research papers submitted to our journals through rigorous peer review, quality control, and other activities in the publication process. Taxpayers may fund the research, but the societies and technical publishers fund the publication of this research. What we copyright and own is the value-added article, which is our work product. Expropriation of these value-added articles by the government without compensation would undermine copyright, intellectual property rights, jobs and exports, as well as the societies' ability to carry out important programs that benefit the nation.

Depriving the learned societies of revenue from their publications will reduce our resources for—and efforts to—grow and strengthen the science, technology, engineering and mathematics (STEM) workforce that the nation so desperately needs to meet important challenges and remain competitive. In fact, we have been increasing the resources we devote to preparing the next generation of chemical and biological engineers. Decreasing our ability to support the future STEM workforce seems to fly in the face of stated national priorities.

Additionally, there is no evidence that making access to the journal literature free will improve research productivity or the public weal. On the contrary, free access, like copyright piracy, may well have the opposite effect. Making societies' content freely available is likely to stifle opportunities as customers choose to access

free versions of journal articles rather than pay for the Version of Record. Just how will U.S. taxpayers benefit from the transfer of intellectual property owned by U.S. not-for-profit societies to every researcher, business and government abroad?

We strongly believe that the Federal Government, currently under such significant financial stress, **not** mandate the deposit of journal manuscripts in what will likely be a very expensive, if freely available, archive, regardless of format, process, or timing. Rather, the Federal Government should strive to provide public access to the information that it already controls and has a right to distribute — for example, research summary reports regularly received from grantees.

Learned societies and journal publishers have been good stewards of the literature. Indeed, since journal content delivery via the Web began in the mid-1990s, we have invested not only in the technology necessary to deliver increasing amounts of content via the Web, we have also worked to digitally recover existing print material, in many cases back to the first issue of a title. The online availability of so much content has accelerated and broadened availability of the peer-reviewed literature. Most academics and researchers access the necessary literature on their desktops via subscriptions or licenses maintained by their institutions.

Mandating a single approach to public access will stifle innovation in what is a rapidly changing environment, as engineering researchers explore new ways and new media to enhance and communicate their findings. The proposed action may well reduce the development of new tools, delivery vehicles and functionality to advance the future of engineering and the many enterprises our members serve.

We feel that we must ask if the government is—and should be—a credible provider of the kinds of publication services that not-for-profits societies and commercial publishers have created. Given overwhelming budget constraints, why would the government consider using taxpayer dollars to duplicate existing, well-functioning services?

Take PubMed Central, the repository for mandated NIH grantees, as an example. It is not a simple archive of articles but a sophisticated publishing platform requiring millions of dollars of investment. Have the full costs of similar repositories been developed in any consideration of an expansion of the NIH mandate? Will each funding agency develop its own processes and create its own platform to serve its special needs?

Rather than imposing an unfunded mandate on societies and publishers and taking on such very substantial costs, the Federal Government could:

- Make funds available for purchase of open access to published articles. (Several research funders already do this.) These costs are a small fraction of the investment in the research itself.
- License content from learned societies and make it available to specific audiences.
- Make the agency-collected and maintained output of taxpayer-funded research, including grant reports or research progress reports, freely available to the public. Work with learned societies and private sector publishers to make that content findable and link it to the journal literature.

What the Federal government should **not** do is take accepted or published articles from learned societies directly or through new mandates placed on grantees.

Most researchers acknowledge funder support they have received in their journal articles. Publishers are working to develop a means of standardizing funder information so it could be made easily available to funders. We believe that such community-wide solutions will be simpler and far less expensive to construct. Experience shows that publishers and the learned societies, and the partnerships they have created through

DOI and CrossRef are well positioned to ensure that journal articles are accompanied by standardized, high-quality metadata. Extending this approach to provide information about the agency, program, and even specific grants that funded the research seems like a straight-forward solution. Visitors will be able to follow links (enabled through the DOI) to and from the agency's or the publisher's platform, finding research reports, article abstracts that are freely available and the peer-reviewed, quality-controlled Version of Record.

Perhaps research funders would better serve the community by also partnering with publishers and learned societies to provide access to raw research data and to enable content mining that can drive interdisciplinary research and support the identification of new areas of discovery.

Unless research funders provide the resources to the societies and other publishers, we believe that these learned societies and publishers should continue to manage access to peer-reviewed papers within the duration of copyright. For accepted author manuscripts and published journal articles, in which we have made substantial investments, learned societies should be free to determine the business models under which their publications operate, including the time, if any, at which the final peer-reviewed manuscript or final published article are made publicly available.

Thank you again for this opportunity to comment.

Sincerely,



June C. Wispelwey
Executive Director
AIChE