

December 1995

Electronic Peer Review System Reduces Publication Time

Lorrin Garson

Follow this and additional works at: <http://jdc.jefferson.edu/scitechnews>

[Let us know how access to this document benefits you](#)

Recommended Citation

Garson, Lorrin (1995) "Electronic Peer Review System Reduces Publication Time," *Sci-Tech News*: Vol. 49: Iss. 4, Article 3.
Available at: <http://jdc.jefferson.edu/scitechnews/vol49/iss4/3>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in *Sci-Tech News* by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

ELECTRONIC PEER REVIEW SYSTEM REDUCES PUBLICATION TIME

**By Lorrin Garson,
American Chemical Society**

It's the difference between a shoe box and a computer. Literally.

In the hierarchy of science research reliability, information published in scholarly journals resides on top, due to an unwavering reputation of accuracy and authority. Scholarly journals developed this distinction by subjecting all submitted manuscripts to a test of peer approval prior to publication. This peer review process involves critical reading, editing and confirming of information contained in each article by leading scholars in the science community.

As the largest science association in the world and publisher of 29 science periodicals, the American Chemical Society (ACS) has developed an extensive network of reviewers. ACS operates from more than one hundred offices worldwide, spreading thin the ability to communicate and exchange information without wasting resources and time. Consequently, before technological advances, peer review was for us an essential yet burdensome process.

Peer review once involved endless typing and trading of forms, often causing paperwork to overshadow actual scientific input. Individual editors, already separated by geographical distance, each possessed a personal

system of tracking manuscripts, including one editor who kept handwritten notes on index cards stored in shoe boxes. But those days of antiquated methods are past, and the ACS has enlisted the computer age to help modernize the peer review process.

ACS developed Peer Review Plus, a custom-designed software program that introduces uniformity and efficiency to the peer review process. This new system saves thousands of hours in journal production times, allowing ACS to generate higher quality publications much more quickly.

Peer Review Plus operates from ACS' central database, considered the "host," which contacts each night the editors' computers, called "remotes." The "host" collects all changes to the author and reviewer data files and, after processing the information, returns the updated data to the "remotes." This overnight process provides editors with current information, on-line and easy to access.

Now, the editor who receives a manuscript on a specific subject can quickly search the database for scientists in that field to determine the most appropriate reviewers. The system can not only list potential reviewers, it can show when that person last reviewed an

article so that the workload is spread evenly. Once reviewers are assigned, editors can track the status of a manuscript until it is published or rejected.

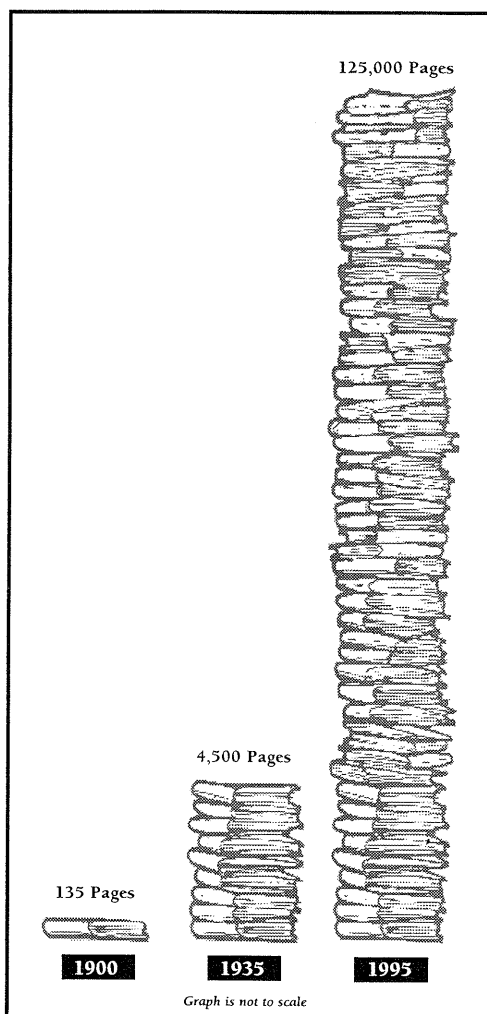
The electronic system also includes a 25,000 author and review record capacity, automatic updating of data and electronic mail, and the ability to generate a variety of statistical reports.

On any given day, ACS may send out manuscripts to 300 different reviewers. Before Peer Review Plus was implemented, this task would have taken one person a week to accomplish. With its advanced review process reducing production times, ACS can be more responsive to the special library community—who support ACS' readers. The overall quality of our journals has increased to the extent that we are attracting the best of editors, authors and reviewers.

Because editors find the system such a benefit, use has expanded rapidly. Currently, there are more than 190 workstations connected to the Peer Review Plus system from over 100 journal offices. That's nearly double the number of workstations than just three years ago when ACS first started installing the computers.

Lorin Garson is Chief Technology Officer for the American Chemical Society's Publications Division. He can be reached at lgarson@acs.org.

THE PAGES OF HISTORY



An increase in page budgets for journals published by the ACS spurred the development of an electronic peer review system to reduce publication time.