



ECS Journals Take a Quantum Leap

by Mary E. Yess

Once upon a time, the ECS journals followed a very traditional path. BOE (Before the Online Era), the *Journal of The Electrochemical Society* was published in paper, one issue at a time, and carried by truck, boat, or plane to its final destination. Although the content of the *Journal* was of the highest quality, the timeliness of the receipt of that content was not its equal. The beginning of the new era came about for ECS with the launch of *Electrochemical and Solid-State Letters* in 1998. It was planned, and debuted, as the first rapid-publication peer-reviewed journal in electrochemical and solid-state science and technology, with new articles published almost daily. All this was accomplished in-house with a minimum of resources and with essential, but limited, functionality. The *Journal* soon joined *Letters* with an online edition of its own, but with papers published only one issue at a time and the paper edition being published first. Change could have continued along a slow and steady path, but dynamic online features beckoned, and the ECS journals took a “quantum leap.”

Beginning with the January 2001 issues, authors and readers can take advantage of a number of exciting and powerful new features in the ECS journals. These features are the result of ECS’s selection of the American Institute of Physics (AIP)¹ Online

Journal Publishing Service (OJPS) for the production and distribution of its technical serial publications. ECS journals can be accessed from both the ECS web site (<http://www.electrochem.org/>) and these additional online locations

Journal of The Electrochemical Society at <http://ojps.aip.org/JES/>
Electrochemical and Solid-State Letters at <http://ojps.aip.org/ESL/>

“E-First” Publication

Since its inception, *Letters* has been committed to publishing each article as it becomes available (electronic-first or “e-first”), without waiting for an entire issue to be finished. In the transition to the OJPS platform, *Letters* maintained its e-first publication path. A very significant change coming soon is that the *Journal* will go to an e-first publication process as well. Articles will be prepared for online publication and then posted as soon as they have been proofed by the author(s) and released by ECS. This provides authors and readers with the fastest possible delivery of accepted manuscripts.

Dynamic Online Journals

Each ECS journal on the OJPS platform is not just a replication of the paper edition. Each journal has dynamic features for both readers and authors, including

- citation links to referenced articles and to abstracts indexed in INSPEC, SPIN, and other databases;²
- HTML abstract displays and tables of contents, with links to article delivery options;
- a home page from which users may launch advanced searches of the ECS journals content;
- full-text HTML articles with links to figures, tables, and reference citations;
- full-text in PDF and PostScript formats; and
- a “virtual filing cabinet” for storing selected articles in a custom list for future reference.

For authors, there will be faster author proofing online and the ability to track submitted manuscripts. ECS journals already have exceptionally high ISI “impact factors” (see article on page 10 of this issue). With improved electronic distribution, more readers will have access to this important content. Plans are under way to establish an online peer review system, allowing for faster review of manuscripts, and faster time-to-publication for accepted papers.

Planning for Higher Value Online

During its research and planning phase, ECS carefully observed the state of scholarly journals and researched the options for publishing its journals online.

Key from the beginning was the desire to move the journals to higher-value online formats, not just online editions of the printed versions. SGML (Standard Generalized Markup Language) was identified early on as the composition format of choice, enabling more versatile outputs, hyperlinked references, and easier electronic distribution. SGML has since become the clear leader in versatile formats for electronic publishing.

It also has been recognized that, in order for non-profit, society-based journals to survive and continue to deliver the highest-quality products, they must form synergistic relationships with peer organizations. Thus, although there are now a number of commercial and other nonprofit vendors for SGML services, AIP was selected for its proven track

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record and its status as a peer society. AIP has a high level of technical expertise, a stable organization with innovative staff, and is recognized as a leader in the area of society-publishing initiatives.

Teaming with AIP enables the ECS journals to take advantage of the latest in electronic publishing, while remaining independent, nonprofit publications of ECS, with the ECS Editorial Board retaining full editorial and style control.

The ECS journals, on the OJPS platform at AIP, join the journals of peer societies such as the American Physical Society (APS), the American Vacuum Society, the American Society of Civil Engineers, ASME International, and the International Society for Optical Engineering (SPIE).

"We're extremely happy to be hosting these two prestigious ECS journals on our OJPS platform," said Darlene Walters, AIP's Vice President for Publishing. "They're a perfect fit with our existing content and, more important, they allow us to offer authoritative research in a new area at a time when our

coverage of all our scientific and engineering-related fields is growing. The extensive amount of new material in electrochemistry also adds value to the OJPS platform, not only for ECS members, but for anyone that visits our site."

Benefits for ECS Members

Access to the full online archive of ECS journals content continues to be a part of the ECS member benefits package. Currently, the ECS journals content is hosted on two different web sites. The 2001 content is hosted on the OJPS platform; it is currently available free on a trial basis, while ECS and AIP finalize all the necessary access control mechanisms. The pre-2001 online content continues to be hosted on the ECS web site. This includes the 1998, 1999, and 2000 issues of *Letters* and the 1999 and 2000 issues of the *Journal*. In mid-2001, all ECS online journals content will be available through OJPS, with the functionality of the 2001 content.

Once the access-control mechanisms on the OJPS site are complete, ECS members will be notified that they will need to register with AIP in order to access the content on the OJPS site. This will be a simple (free) registration process and ECS members will be guided through it step-by-step. ECS members should be sure to renew their membership to ensure access to the ECS journals online throughout the coming year.

New Page Numbering System

The e-first publication mode has required one change to the *Journal* and *Letters*, and that is a new page numbering scheme. Electronic publication, and

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all the concomitant abstracting and indexing processes, make it necessary to assign each page a permanent page number at the time of first posting. Further, because the papers appear in sections, the new page numbering scheme requires a section identifier as well. Starting with the January 2001 issues, an alpha-numeric page numbering scheme is being used for the *Journal*

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1. AIP is a not-for-profit membership corporation chartered in New York State in 1931 for the purpose of promoting the advancement and diffusion of the knowledge of physics and its application to human welfare. AIP's mission is to serve the sciences of physics and astronomy by serving its member Societies, by serving individual scientists, and by serving students and the general public. From the outset AIP published journals on behalf of its member societies, for example, *the Physical Review* for The American Physical Society. AIP's most widely read publication, *Physics Today*, was inaugurated in 1948. In 1995, AIP began publication of the first electronic online journal in physics, *Applied Physics Letters Online*.

2. INSPEC is the leading English-language bibliographic information service providing access to the world's scientific and technical literature in physics, electrical engineering, electronics, communications, control engineering, computers and computing, and information technology. The database contains approximately 6 million records dating back to 1969.

SPIN (Searchable Physics Information Notices) is the bibliographic database created by AIP. SPIN provides the most current indexing and abstracting of major American and Russian physics and astronomy journals. SPIN is updated daily with approximately 45,000 new records added annually.

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and *Letters*. The first section uses the letter 'A', the second section 'B', and so on. The letter is followed by sequential numbering. A similar scheme was used in the past by the *Journal for the Letters Section*, which used the alpha-numeric scheme of L1, L2, etc. Although this new page numbering system is different from the traditional numeric-only system, it is necessary so that the final version of each page can be produced, once and only once, at the time of electronic publication.

Leaping Ahead

ECS is keeping a keen eye on future developments, poised to take the next steps in disseminating the content of its technical journals and offering it in the best "containers" possible. A true end-to-end electronic workflow (from submission to peer-review to publication) is just a few paces away. Perhaps journals ultimately will move away from paper editions. Issue numbers, page

numbers, and other paper-container-related mechanisms will be left behind in favor of electronic citations. Downloading content to e-books and other portable digital assistants (PDAs) is already upon us. These leaps are doubly exciting for ECS and its members and authors, because so many are directly involved in the technology required to make it all happen: display technology and batteries for portable applications, to name just a few. Having taken this "quantum leap" to the OJPS platform, many smaller steps—in wider distribution, lower cost, author convenience, and speed—are now possible. ■

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