



Keeping Current

When I was a graduate student I was told that once every week or two I was supposed to walk over to the library and browse the tables of contents of the journals. It was a matter of flipping through *Phys Rev*, *Phys Rev Letters*, *JOSA*, *Applied Optics* and any other journal that caught my fancy. (At that time, most of these journals hadn't been subdivided into multiple sections, so it was a lot easier.) I tended to approach this exercise as more of a "take your medicine" activity than a voyage of discovery. I did find new and interesting things during these excursions, although much of what I found was only tangentially related to what I was looking for. It was the serendipity of the occasion that generated the most useful discoveries, in much the same way that a trip through the stacks of a library (if they allow you to take one these days) makes you aware of related resources. Later, the trips to the library were abandoned. I could barely get through the journals I subscribed to or received as part of my membership in professional organizations. This mode of operation lasted for several decades.

As I described some time ago ("The Dead Tree Strategy," September 1998), I have converted my subscription to *Applied Optics* over to electronic format. In addition to subscribing to an electronic version, I have signed up for OSA's InfoBase notification service, so that I get e-mail notices whenever a paper is published in any OSA journal about certain aspects of diffractive optics and ultrafast optics. After some startup wrinkles, the service has worked well. The only difficulty I have encountered is the clunky method used to set up the keyword searches. Each keyword has to be chosen separately and it is restricted to the categories of the Optics Classification and Indexing Scheme (OCIS) database. So it's a blunt, but useful, tool for staying abreast in these fields.

Beyond this, my strategy is to pay more attention to SPIE conferences, now that I spend much less time on committees. I also poke about on the Web looking for items of current interest and I subscribe to the e-newsletters from *oe magazine*, *optics.org*, and "Optics in the News." Finally, there are the technical magazines,

Laser Focus World, *Photonics Spectra*, and *oe magazine*, to peruse and read.

But enough about me; what about you? How do you keep current? Where do you get your information for your work in optical engineering? What journals and magazines do you read? What web sites do you visit? Who do you talk to? What conferences do you attend? I ask these questions not because I expect to get an answer, nor as a rhetorical flourish, but rather to prompt you to do a quick inventory of your own current sources of technical information.

How would you like to get your information? I am not the only person curious about your inclinations. Those at SPIE involved in publishing this journal and its companions are also interested. Although printed journals will survive for some time to come, SPIE is planning to enter the brave new world of electronic publication. While SPIE's journals are currently available online, its conference proceedings will soon be available in electronic form. The difficult aspect of this enterprise is determining the means of distribution and compensation for access to this information.

Consider SPIE's proceedings (the "yellow books"). Although they are a valuable resource to the optical engineering community, they have some drawbacks. For a long time, it has not been easy to get to a copy of a proceedings paper unless you either attended the conference or had access to a technical library with a standing subscription for the series. More recently, the tables of contents, citations, and abstracts of the proceedings were put on the Web and hardcopies of individual proceedings papers can be ordered. In this day and age of instant downloads, this leaves a lot to be desired.

Indeed, it is these desires that concern the SPIE publications department as it prepares to launch an SPIE digital library. This project will store all publications in electronic form so that any journal or proceeding paper can be downloaded rapidly. Once individual papers are freed from the printed pages of journals and proceedings, how do you want to get your information? In place of a journal and five proceedings, perhaps you really need eight journal papers over the course of a year and five or so proceedings papers from each of the conferences you wanted to attend. Also, it would be nice to be notified about pa-

pers given at conferences of interest to you.

Considering the wide range of proceedings topics (one of their greatest attributes), it would certainly be nice to have all of the proceedings in the same place and to have them there even sooner than the paper publication. So the prospect is one for which you can control the amount and extent of your resources. The question is how will these services be delivered and paid for? What model would best fit most of the users of these information services?

Three models for distributing TV content are instructive: advertiser supported, cable and satellite subscription, and pay-per-view. One doubts whether papers containing information on diode lasers are going to be "brought to you by Universal Diodes, Inc.," and this would probably raise conflict-of-interest issues anyway. So the other two models and their variations are more realistic. Some of the subscription choices might be whether access to the SPIE digital library will be unlimited or limited (e.g., so many downloads per subscription period). Other considerations include access to the archive from prior years and how far back to go, indexing and linking, technology, pricing, etc. Or, there is the alternative that each paper can be downloaded individually, the equivalent of pay-per-view. All of this must be folded in with the benefits provided by Society membership. The task is daunting.

Since I have subscribed to the InfoBase alerting service, I find that I miss the ritual flipping through the journal and the quick scan of the table of contents for anything that might strike my fancy. (Of course, I don't have any trouble alerting myself to papers in this journal since every paper crosses my desk in print or electronic form at some point.)

It would be nice if, as part of the digital library, members and others who wish to subscribe could have the table of contents of selected SPIE journals and proceedings sent to them by e-mail when they are published. A value-added option might provide subscribers with an alerting service that would search both journals and proceedings based on individual profiles.

The overall effect of this effort will be to give our members and others in the optical engineering community the up-to-date information they need to be able to do their jobs effectively and to satisfy their curiosity about new developments. Stay tuned!

If you have a comment about SPIE's digital library, you can address it to Eric Pepper, SPIE Director of Publications, at eric@spie.org and copy me at oe@physics.gatech.edu.

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