Progress or Not?

In this issue a revised version of the Information for Contributors appears on the inside front cover. The revisions are an attempt to move JEI’s processes further into the digital world. JEI will accept text and illustrations in digital form, along with a hardcopy version. More importantly, JEI, through SPIE, will begin offering a new service, namely, providing an anonymous ftp site where authors can store their images, so that readers can access them directly in the original digital form.

About a year and a half ago, I reported the first time my editorial was sent to the publisher by e-mail and run through to publication without being retyped. We have used this system ever since. Some of the revisions in the Information for Contributors are directed at giving authors the opportunity to take advantage of similar methods to reduce errors that can be introduced in rekeying manuscripts.

JEI will accept final versions of manuscripts and figures in digital form in a number of formats (see the Information for Contributors for a list). Unfortunately, we are not in a position to offer a complete digital alternative as yet. While we are prepared to take advantage of the possible gains in accepting digital inputs, the state of the art is not yet to the point where no paper is needed from authors. However, text in digital form will speed up the publication process. Articles in JEI usually contain numerous illustrations, as is appropriate for any imaging journal. Currently, one could describe the state of the art for digital illustration formats either as having no standards or as having too many. At this time, illustrations in digital form may take more work than those on paper. However, we need to gain experience on how to handle the diversity in the world of illustrations to make progress toward the day when the digital form will be the most precise way to transmit images.

Consider this issue of JEI, for example. Some of the illustrations are inserts supplied by the author to ensure that the images look just as he wants. We encourage this approach when exact appearance is critical. There is a large gap between this level of concern and the faith required to send images in digital form without a backup. That, along with the variations of illustration formats, is why we require that hardcopy accompany any digital inputs. Once color management systems are commonplace, perhaps the digital form will be as good as, or better than, paper to get accurate results.

It is still necessary to supply hardcopy to our referees. It is impractical at this point to insist that every referee must be able to read a wide variety of digital formats. Nevertheless, we recently had an author put his illustrations on a file server for a referee to view by anonymous ftp, in order to help evaluate the paper. This brings us to the important new service from SPIE. It is now possible for authors to have their illustrations placed on SPIE’s site for anonymous ftp if they feel that this would help readers of their papers. Once again, we need to caution that monitors are often uncalibrated. The digital form may eliminate many printing artifacts, but it can also introduce color errors much larger than the printed version.

These changes may sound trivial to some. Realistically, digital interchange of illustrations is not mature. We invite our authors and readers to join us in gaining experience in a new arena. As always, we invite your comments.