Rachel J. Detwiler

Editor's Message

Science or Science Fiction?

Exchanging ideas is an integral part of doing science. Scholarly journals provide a forum for academics to get their work in front of their peers, who examine it and build on the ideas they find useful in future research projects. Manuscripts undergo peer review: academics or professionals who are knowledgeable about the specialized topic evaluate them on the basis of their content and presentation.

Peer review is more than just quality control; reviewers' comments help the authors improve the presentation of the data. Although we ask reviewers to ignore the quality of the writing, in practice writing is inseparable from the thought process behind it. The outline of a manuscript mirrors the steps of the scientific method: the introduction includes the motivation, background information, and hypothesis; the subsequent sections report on the experimental procedures, data, and observations; the discussion digests and evaluates the data; and the conclusion presents, well, the conclusions induced from the data. Once a paper is published, readers can point out any errors that escaped the attention of the reviewers or editors, disagree on the experimental methodology or the interpretation of data, and otherwise hold the authors accountable.

PCI Journal provides a similar forum, but for a broader readership—precast concrete producers and their consultants and customers as well as academics. The look of the peer-reviewed papers is designed to appeal to the nonspecialist reader while still being serious enough for the academic, who may perceive reader-friendliness as frivolity. The cover story and Project Spotlights highlight practical applications of technology and draw the attention of uninitiated readers to the peer-reviewed papers. We actively solicit stories about real projects and help inexperienced authors express their ideas.

The question of which manuscripts should be published can be hotly debated. Some maintain that we should publish every manuscript deemed by even one reviewer to have value to the industry to avoid rejecting work that may one day revolutionize the industry. Unfortunately, when revolutionary ideas first appear it is very hard to distinguish between genius and crackpot. All we can hope to determine is whether the experiments were properly designed and executed and the conclusions are well substantiated by the data—that is, whether the work meets the basic requirements of good science.

We specifically ask reviewers whether the conclusions are well supported by the data presented. In practice that is a subtlety that even knowledgeable people can't always discern. If even one reviewer identifies conclusions that are not well supported by the data, we ask the authors to rewrite or delete them. We don't accept manuscripts until all of the reviewers agree that the conclusions are sound. We want readers to be able to rely on the information in these pages. Some of our papers go on to form the basis of building codes and bridge codes, and not just within the United States. They need to be better than just science fiction with less literary merit.

Please send correspondence to journal@pci.org or Precast/Prestressed Concrete Institute, c/o *PCI Journal*, 200 West Adams Street, Suite 2100, Chicago, IL 60606.

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