

Role of AIChE Journal in the Chemical Engineering Profession

Two of the rare editorials during Morton Denn's tenure as Editor of *AIChE Journal* raised the question: what is the proper content of the *Journal* in the face of the diverse research activities in chemical engineering? The question remains unresolved, not only for this *Journal*, but for all the literature of the chemical engineering profession. Denn's February 1987 editorial expresses the clear opinion that "*AIChE Journal* should reflect chemical engineering research as it is" Like-minded thinking has spawned expanded programs and symposia at meetings of the Institute. This broadened scope embraces many new research lines for engaging chemical engineers and has brought many outside the field to these meetings.

In the main, however, chemical engineering literature, including the *AIChE Journal*, publishes only a segment of the research spectrum of the chemical engineering community. *AIChE Journal* can serve an important role to stimulating cross-fertilization and continuing redefinition of the field, only if it also publishes research exploring territory that might be viewed as far from the core of traditional chemical engineering. This expanded spectrum of topics includes work on materials, biotechnology, electrochemistry, applied molecular theory, surface science, applications of large-scale computing, new methods of analysis, new visualization and graphics techniques, advanced process control and design methods, and others.

Now is an excellent time for the chemical engineering profession to decide whether it wants to change significantly the representation of new areas in the chemical engineering literature. The fraction of chemical engineers engaged in such research activities is large, so this question affects many.

A journal can only publish from the papers that it receives. Authors, and the nature of the work they submit, are the principal determinants of the content of a research journal. Journals and editors have little *a priori* influence on the fields they represent; they function best as good umpires in a baseball game. They do the best job if a high level of uninterrupted play is maintained and little attention needs be focused on the umpire. The athletes perform for the audience. In an analogous way, authors' decisions about where to submit work for publication are influenced mainly by two factors. They want to reach the right audience and want optimum conditions for the handling of their manuscripts: fast, knowledgeable reviews, high standards, efficient responses, and speedy appearance of accepted manuscripts.

Both these factors now exist at *AIChE Journal*. The *Journal* is read by most of the profession. Morton Denn and the *Journal* editorial/production staff, particularly Managing Editor Haeja Han, have created a superb environment for handling manuscripts. I encourage you to check recent issues of the *Journal* and see the outstanding efficiency of the publication timetable. I will maintain the *Journal* as the most efficient medium for the publication of chemical engineering research. I will continue to encourage a wider spectrum of current chemical engineering research to be represented in the *Journal*, while maintaining current areas of strength. I will spare no effort to secure fast, knowledgeable review of work from diverse areas. I will work, with the Consulting Editors, to expand the readership of the *Journal* outside of the chemical engineering community and to develop the audience for work that is being done by chemical engineers. In the final analysis, however, the content of the *Journal* is largely up to you.

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Tirrell, who earned his undergraduate degree in chemical engineering from Northwestern University and his doctoral degree in polymer science and engineering from the University of Massachusetts, has held visiting appointments at the École Supérieure de Physique et Chimie in Paris, the Australian National University and at AT&T Bell Laboratories. He has been a Camille and Henry Dreyfus Teacher-Scholar, a Sloan Foundation Fellow and a Guggenheim Fellow. From 1986 to 1991, he was the incumbent of the Shell Distinguished Chair in Chemical Engineering at Minnesota. He is a recipient of the Institute's Allan P. Colburn Award and of the John H. Dillon Medal of the American Physical Society.