

EDITORIAL

This issue begins the thirty-first year of publication for the *Journal of Computational Physics*. It seems obvious now that there should be a journal devoted to scientific computation. In fact, the rapid success of the *Journal of Computational Physics* in its early years suggests a receptive audience. However, what caused its creation can be understood only in the context of a time very different from the present. The journal's creators, Berni Alder, Sidney Fernbach, and Manuel Rotenberg, felt strongly that the very innovative computational work that had been developed at the Atomic Energy Commission laboratories during and after World War II should be brought into the open literature. They felt just as strongly that the *Journal of Computational Physics* should involve a broader scientific community to further the intellectual development and wider application of scientific computing. Since the large scientific computing community that we now take for granted simply did not exist then, it could not have been obvious who would subscribe to such a journal. It was a bold step for Academic Press to underwrite the startup of the *Journal of Computational Physics* and a visionary step for Alder, Fernbach, and Rotenberg to believe that a scientific computing community would grow up around the new journal.

In its first year of publication, the journal published twenty-nine articles and six notes in four issues. (By comparison, last year the journal published over two hundred articles in fourteen issues.) From the first issue, the scope of the journal has reflected the breadth of interests of the scientific community. The articles were by no means limited to topics of interest to the laboratories, nor were the authors limited to laboratory staff members. In those first four issues, there were articles not only on computational fluid dynamics, plasma physics, quantum mechanics, nuclear physics, and radiation transport, but also on atmospheric modeling. From the first, the journal has had a clear identity and a distinct "feel." The first and current issues are recognizably the same journal.

One can only speculate what computational physics would now be like without the *Journal of Computational Physics*. Certainly, the existence of a serious reviewed journal accelerated the acceptance of computational physics by the scientific and engineering communities. More than that, one can argue that the journal communicated the culture of scientific computing; that is, it communicated not only how to do specific problems, but also a sense of the excitement and potential of scientific computing. Now, the journal reflects the community it helped to create. We hope that it will continue to attract contributors with imagination and creativity in all areas of computational physics.

During the coming year, we will commemorate *JCP*'s thirty years in a retrospective mood. This is unusual for computing, which seems always to look to a future where computers are bigger and faster, and codes always work. Nevertheless, we wish to foster a sense that even a field as young as ours can have a history worth knowing by republishing, with commentary, selected articles from the past. We will also publish invited reviews on some of the most important developments in scientific computing during the past thirty years. Of course and as always, we will be here to publish excellent papers in computational physics.

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