

Twenty Years of Excellence

During 1993 we celebrate 20 years of excellence: excellence in materials research and excellence as a professional society—the Materials Research Society. As part of this celebration, the *MRS Bulletin* has invited former presidents of MRS to provide their perspectives on the society and on the development of materials research. We begin the feature this month with a contribution from our immediate past president, Slade Cargill.

In his article, Slade Cargill describes the various roles of MRS and puts its current environment in perspective. Here, I look back briefly over the past 20 years, in the hope of putting our future in better perspective.

By almost any measure, 20 years is a short time for a professional society. Yet, reflect on the changes in materials research over the last two decades. The field has come of age in almost every way. Twenty years ago many aspects of materials studies were highly descriptive and empirical. At the same time, materials education was limited mainly to a few focused areas (metallurgy and mining, for example, were highly developed).

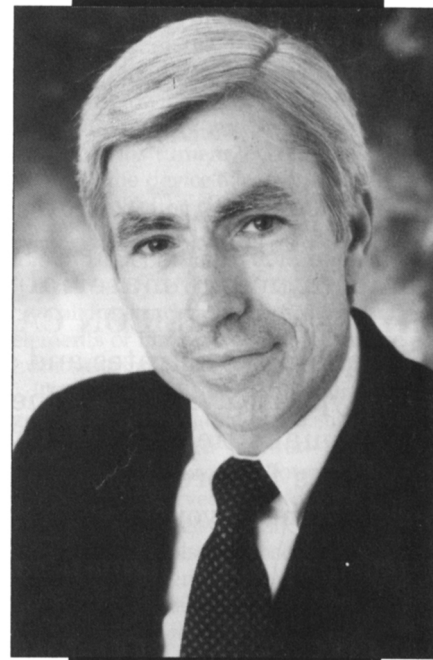
Today, we understand much more. In education, the emphasis has shifted to materials departments and the teaching of general principles (kinetics, structure, properties) by which all materials may be understood. These changes have been driven, in part, by the tremendous strides that have been made in our experimental probes. For example, few would have dreamed that today we would be able to image single atoms and measure forces between them. In addition, we have advanced significantly in our ability to deal with the complexity of real materials, and

in the power of our computational capabilities to describe such materials. The emergence of MRS has thus reflected the emergence of a unity—indeed of a “science”—for the field of materials.

While far from complete, the rapid pace and direction of this young science are unmistakable. It was within this context that, in the early 1970s, far-sighted colleagues in Pennsylvania, Massachusetts, and elsewhere started holding meetings, with the goal of creating a professional society that could fully exploit the benefits offered by an interdisciplinary view of materials research. In the later 1970s, several major new areas of research, among them laser annealing and the scientific basis of nuclear waste management, served to spur the growth of this new society and to create a wider community of interest in MRS meetings. Then came the 1980s, with its whirlwind of new materials discoveries. MRS grew in size by an order of magnitude (to 10,000) and, more importantly, firmly established its reputation as a dynamic organization.

Throughout its history, MRS has been characterized by its willingness to try new approaches. We have had energetic and highly talented scientists developing our technical programs, and have moved quickly to focus our symposia on the latest advances. Today, MRS organizational techniques are emulated by other societies, and materials is on everyone’s “critical technologies” list.

For the future, our challenge is to maintain MRS spirit and vitality. The “can-do” attitude of our members, volunteers, and staff remains the key to our future. We have emerged from our teenage years, with their rapid changes, to young adult-



A handwritten signature in black ink, which appears to read "Tom Picraux".

hood, with the increasing responsibility and leadership accompanying that transition. We all realize that staying at the forefront of new discoveries in materials research is the secret to our continued success. Surely the next two decades will hold as many surprises and advances for materials as have the last two. At the heart of that excitement is where we plan to be.

Tom Picraux

The *MRS Bulletin* invites readers to send letters to the editor. Letters must be signed and should include affiliation, address, and phone number. Short, typed letters are preferred. Mail or fax letters to:

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