

# The More Eccentric the Idea, the Better for MRS

Recently I had the opportunity to read the letters of the English philosopher and economist John Stuart Mill (1806–1873). As I begin a year as President of the Materials Research Society, two of his quotations seem to resonate:

*"All good things which exist are the fruits of originality."*

and

*"That so few now dare to be eccentric marks the chief danger of our time."*

It is appropriate that MRS should examine itself in the context of both of these statements.

The applicability of the first quotation to MRS is obvious. In a period when materials research has become internationally recognized as one of the most enabling of technological activities, MRS stands out as the premier materials society which programs, publishes, and carries out other professional activities in truly original ways. The structure of the Spring and Fall Meetings, with different groups of meeting chairs reinventing the program twice each year, allows and even demands originality in the knowledge development the Society offers its members. At the same time, major publications of the Society—the *Journal of Materials Research*, the *MRS Bulletin*, and more than 500 Proceedings Volumes—capture the overwhelmingly interdisciplinary and multidisciplinary spirit and character of



research reported regularly at the meetings. To complement the excellence of the programs and publications, the basic committee structure of MRS is constantly evolving and strives to be inclusive in the goal to seek out original approaches toward supplying member needs. These approaches include electronic publishing on the MRS website of rapidly evolving news items and technologies such as the *MJ-NSR Nitride Journal*.

Yet, perhaps the biggest danger to the remarkable success which MRS originality has engendered is the success itself. The Society must continue to reinvent itself, to dare to be different, and to flirt

with failure on new, exciting, and indeed eccentric ventures. The second quotation by Mill must be taken as a challenge, lest it become hauntingly applicable to activities in years to come.

In broad terms, MRS must become even more dynamic and responsive to the newest developments in materials research. It must welcome all materials researchers to participate in ever-evolving types of programming and provide professional identity and services that will enable members throughout their careers. It must lead the world by having an international perspective in all of its activities, developing strategic alliances with other materials societies, and providing outreach on materials issues to the general public and leaders of society.

The paths by which MRS achieves such goals must come from member ideas. In later articles, I'll share some of the ideas being developed in the MRS Executive Committee and Council. What would you like to see MRS do? And in what ways would you like to participate? Please let me know, either directly by e-mail, phone, or fax or through the MRS Headquarters at 506 Keystone Drive, Warrendale, PA 15086-7573; 724-779-3003; fax 724-779-8313. In the spirit of Mill, the more eccentric the ideas, the better.

RON GIBALA  
1999 MRS President  
925-294-4751\*  
fax 925-294-3410\*  
rgibala@sandia.gov\*  
\*Through July 31, 1999

## Letters to the Editor

### Additional Information on Emergence of Chalcopyrites as Nonlinear Optical Materials

#### To the Editor:

This is with reference to the overview of the review article<sup>1</sup> on chalcopyrites as potential infrared nonlinear crystals. The objective of this letter is to provide some omitted information and additional data as an aid to more effective use of the crystals, as one of the authors (GCB) has been associated with the developments of chal-

copyrite crystals for nonlinear optical laser devices since the early 1970s. The first set of nonlinear optical work on these crystals started in the early 1970s almost simultaneously at Southampton University in the United Kingdom and in the United States at Stanford University along with Bell Laboratories. Whereas in Southampton, although a systematic study of a number of chalcopyrite crystals was taken up, only AgGaS<sub>2</sub> and AgGaSe<sub>2</sub> emerged.

While the overview highlighted the developments of chalcopyrites in the

United States (US) and former Soviet Union, the activities in the late 1960s and 1970s in the United Kingdom (UK) and elsewhere are no less important. They have significantly contributed for further developments in optical properties and device applications.<sup>2-6</sup>

Activities in the UK were so motivated that the topic eventually gave birth to a series of International Conference on Ternary and Multinary Compounds (ICTMC), the first of which was held in the University of Bath in 1973 followed by Strasbourg