

July 27th, 2011

Dear Colleagues,

As I step down as the UMC chair, and Helen Chan takes over, I have decided to write a very brief Year End Report. This report is meant to summarize our activities and keep everybody up to date, especially those who could not participate in the meetings. In this letter, I will recount our meetings, new committee structure, and our cooperation with MRS and TMS, our activities related to ICME, and our plans for the future with respect to the Materials Genome Initiative.

As usual, we had two meetings. On Nov. 29th, we met in Boston for an afternoon. In addition to several informative sessions regarding ABET and the NOVA "Making Stuff" series, we also discussed changes to our annual benchmarking survey, mainly to simplify the questions and streamline it. The goal is to make the data more accurate and to increase participation. We also reviewed data on enrollment over the past decade indicating a 30 % increase in enrollment in MSE programs, which is great news for our discipline. We also met in Washington DC on June 20th and 21st. During this meeting, we had briefings from NSF, OSTP, DOE, ARL, AFRL, ONR, and NIST. The main topic of the meeting was the Materials Genome Initiative, which is discussed in more detail below. The minutes and agendas of both meetings are available at <http://www.umatcon.org/files/minutes.shtml>.

One change in the UMC is that we have established and populated a policy committee with seven members beyond the executive committee. The duties of the policy committee are to recommend issues for study, recommend agenda items and topics for the UMC meetings, assume responsibility for conducting special meetings and preparing special reports, prepare policy stands, and serve as a focal point to identify critical issues for attention of the University Materials Council. The goal of activating this committee now is to broaden participation in UMC and to be consistent with our charter. The current membership of the policy committee is Viola Acoff, Darryl Butt, Doreen Edwards, Emmanuel Giannelis, David Martin, Mike Kaufman, and Simon Phillpot. I should add that in addition to Helen Chan and I, the Executive Committee consists of Rudy Buchheit (First Vice-Chair), Robert Hull (Second Vice-Chair), Peter Green (At-Large Member), Justin Schwartz (At-Large Member), and Bill Johnson (Treasurer). At each spring UMC meeting, we elect at least one new member to the executive committee and would be happy to have nominations at any time during the year.

Last year we entered into two parallel agreements with professional societies, MRS and TMS. You can read these agreements at: <http://www.umatcon.org/files/reports.shtml>. In the most general sense, these agreements open up lines of communication between the UMC and the professional societies and provide a framework for cooperation on issues of mutual interest. More importantly, both societies will provide us with up to \$10,000 of in kind staff

support. This administrative support is valuable for the planning of logistics for meetings, supporting web based information transfer, and publicizing our activities. We are just beginning to decide how to use this resource and, while the discussion is on going, I am sure it will be productive in the long term.

At the end of last year, we held a successful workshop on Integrated Computational Materials Engineering (ICME) education at Northwestern University. The workshop attracted participants from 28 different materials programs. It included a discussion of the status of computational materials education, a review of available resources, and some examples of success stories. A report from the workshop is not yet complete. However, preliminary recommendations involve coordinating resources and developing cyber-infrastructure for education, supporting an ICME workshop for faculty, and coordinating forums for continuing the discussion. As a representative of the UMC, I presented an account of our ICME related activities at the First International Congress on ICME on July 13th, 2011 (this too is available on the UMC web site).

Finally, I was very excited to hear President Obama announce the Materials Genome Initiative a few days after our meeting in Washington last month. This initiative is inclusive of, but somewhat broader than ICME alone, because its domain spans the range from accelerated materials discovery to device manufacturing. Over the next few years, it will be important for the UMC to support this initiative in any way possible. There are tremendous educational challenges, particularly in creating environments within the universities that foster innovative, interdisciplinary design. In fact, at the spring meeting, we resolved to make this a focus of our activities. The executive committee has drafted a letter to the President outlining our support for this initiative that will be sent in the near future. A workshop on this topic is one idea for our spring meeting in 2012.

Let me close by saying that it has been an honor to serve as Chair of the UMC and I would like to thank all of you who volunteered and assisted in the UMC's activities.

Best Wishes for a successful 2011/2012 academic year.



Gregory S. Rohrer
Immediate Past Chair
University Materials Council