

UMC Fall Meeting
Monday, Nov. 29, 2010
Suffolk Room, Boston Marriott, Copley Place

Minutes (Prepared by H.M. Chan)

1) Welcoming comments by MRS President (David Ginley). He presented slides about the following:

- MRS meeting statistics.
- Partnership with Cambridge University Press. He asked for input on possible new books and other publications. In response to the question whether the field could accommodate more new journals, Dr. Ginley responded that the journal topics would be carefully targeted. He also stated that any publications would not be subject to more stringent copyright restrictions.
- Importance of advocacy and teaming with other societies – 2 Congressional Fellows reinstated. Nova Programming on Materials.
- MRS collaboration with materials groups in Africa.

2) Report on follow-up to the 2008 Gender Equity workshop (David Cahill).

Dr. Cahill sought input from the UMC members on the way forward on this topic. There was discussion that Gender Equity is the subject of many university committees, and in state schools, some aspects (e.g. leave) are subject to state laws, hence the role of UMC is not completely clear. It was suggested that perhaps UMC could act as depository of information to see what policies were currently in place. Other suggestions included awards for mentoring, or awards for women and minority students. The issue of other under-represented minorities was also deemed pressing, and it was suggested that endowed post-doc positions for promising minority candidates could be an effective way to increase the pipeline for faculty positions.

3) Report on Spring Meeting on ICME (R. LeSar)

Dr. LeSar briefly reviewed the topics covered at the UMC sponsored workshop on Computational Materials Science & Engineering that was held at Northwestern (June, 2010). Issues that were raised at the workshop included how to integrate the material into MSE curricula, and whether it was possible to develop a more systematic approach in terms of modeling platforms, codes, etc. He emphasized that industry is very interested in modeling and simulation, and that these would be useful tools for MSE students to master. Dr. LeSar said that a report on the workshop would be completed by Spring 2011.

4) UECC (Undergraduate Education Coordinating Committee) Report (L. Schwartz)

Rudy Buchheit is the UMC representative on this committee. Dr. Schwartz raised the possibility that the various materials related societies (ACerS, ASM, MRS, TMS, etc.) could host a common web site that focuses on UG education. The question was raised whether it would be useful for the UMC to discuss a common core curriculum for MSE. It was suggested that MSE depts.

could pool data on curricula, and student placement data (salaries, careers, etc.), as this information could be used to attract more students into the field.

ABET (S. Yalisove)

Dr. Yalisove announced that there will be an ABET workshop at the next MS&T meeting. He noted positive changes in ABET, linked to new executive director Michael Milligan. He mentioned that the ABET emphasis was now on a more holistic evaluation, and that in terms of program improvements, these could be based on input from many sources, not just 'outcomes assessment'. The UECC has administrative support from the professional societies, which could be used to help pool information. Suggestions included coordinating information on MSE curricula, and a sharing of ABET best practices.

5) NRC Survey (P. Davies)

Dr. Davies led a brief discussion on the NRC survey. He drew attention to the fact that in contrast to the other disciplines, the number of MSE awards that qualified for consideration was very small (only 4), and that awards from societies other than MRS were not represented. The belief was expressed that for the MSE discipline, the large number of professional societies makes it difficult to present a unified front for the purposes of advocacy.

5) DHS Advanced and High Performance Materials Database (G. Fischmann)

The Dept. of Homeland Security is seeking to establish a data base on advanced and high performance materials. There is interest in establishing what materials are available, even if they are in the early stages of development. DHS is also soliciting help with materials testing.

6) Goals and operation of UMC (G. Rohrer)

Dr. Rohrer initiated discussion on the goals and operations of the UMC. It was suggested that the UMC could benchmark itself with the corresponding organizations in other disciplines, and that greater progress could be made in achieving concrete outcomes by either populating the Policy Committee, or establishing sub-committees in the following areas: *Education and Accreditation, Data Collection and Advocacy*. The short institutional memory of the UMC, due to the turn around in membership, was identified as a barrier to the long range continuity of UMC initiatives. It was suggested that one important role of the UMC was to continue to invite representatives from the various funding agencies to learn about new directions in materials research. Dr. Rohrer and Dr. Snyder discussed streamlining of the UMC survey. It was suggested that attendance from Chairs from west coast schools could be strengthened by having the UMC meetings alternate between the Fall and Spring MRS meetings. E. Giannelis suggested that a suitable topic for the Spring UMC meeting could be "Teaching Design in MSE". It was felt that the UMC needed a strategic plan, and Dr. Rohrer undertook to prepare the initial draft.

7) Nova Series (D. Butt)

MRS has partnered with Nova to produce a series of 4 programs on materials: *Making stuff: Stronger, Smarter, Cleaner, Smaller*. The first episode, *MAKING STUFF: Stronger*, is slated to air on Wednesday January 19, 2011, followed by the other episodes for 4 consecutive weeks of viewing. It was suggested that MSE departments could organize recruiting or informational events around the programming, and encourage students to tune-in for extra credit.

8) Treasurer's Report (W. Johnson).

Dr. Johnson presented the treasurer's report of the UMC finances. The annual dues have been paid by 46 universities.

The meeting was adjourned at 5:30 pm.