

Materials Innovation Committee Leads Interdisciplinary Collaboration

Charles H. Ward

Editor's Note: The Materials Innovation Committee is one of many administrative and technical committees meeting during the TMS 2014 Annual Meeting & Exhibition, February 16–20, in San Diego. Most of these meetings are open to TMS members who are interested in exploring if a particular committee matches their interests. For additional information on volunteering with TMS, visit TMS Volunteer Central at www.tms.org/volunteer.



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You may have heard about TMS's Materials Innovation Committee (MIC), and you may have even wondered how the committee fits within TMS. So I'll fill you in on how the MIC came to be, what it's all about, and what we've been doing in its short existence.

The spark was lit in June 2011 when President Obama announced the U.S. Materials Genome Initiative (MGI). If you're not familiar with the MGI, its goal is to dramatically reduce the time and cost of developing and deploying materials—largely by embracing the concept of Integrated Computational Materials Engineering (ICME). It's not often a president announces a major government initiative focused completely on materials, so TMS quickly jumped on the opportunity. It established, among several decisive actions, the member-driven ad hoc Materials Innovation Initiative Steering Committee. The committee determined that there were a number of enduring and over arching areas that needed to be addressed in responding to MGI, and that they were more pervasive than covered by any existing committee.

The TMS Board of Directors ap-

proved the establishment of the MIC in February 2012, charging it to help implement the strategic direction provided by, and making recommendations to, the Board of Directors in the area of materials and manufacturing innovation as guided by goal five of the 2015 TMS Strategic Plan. Although the MIC is an administrative committee, we obviously partner with a number of TMS technical committees, such as the ICME committee. The specific objectives of strategic goal five, and of the committee, are to: enhance TMS's position as the home for ICME; be recognized as the organizational hub for intersociety activities in the materials/manufacturing innovation area; and establish new initiatives, products, and services for meeting industry needs in materials/manufacturing innovation.

One of the MIC's first actions was a recommendation to the Board of Directors to establish a TMS MGI Fellow in the Office of Science and Technology Policy. Meredith Drosback was selected for this position and since then has been instrumental in the operation of the MGI Subcommittee of the National Science and Technology Council. The MIC subsequently recommended her term be extended past her original 12 month appointment to February 2014 (*JOM*, 65 (9) (2013), p. 1082).

At the TMS 2013 Annual Meeting & Exhibition (TMS2013), the Materials Innovation, Public & Governmental Affairs, and Materials & Society Committees cosponsored the *Acta Materialia* Materials and Society Award Special Symposium, Global R&D Trends: Implications for Material Sciences. This highly successful symposium drew 450 attendees. The MIC also

sponsored the TMS 2013 Materials Innovation Plenary: Innovation in Materials and Manufacturing.

You may have noticed a rapidly growing trend within several technical disciplines and national governments to take action to preserve and share the research data generated through experimental and computational research. To gauge our community's perspective on this topic, the MIC established a very productive partnership with the Materials Research Society (MRS) to cosponsor a community-wide survey on "Big Data" as it pertains to materials science and engineering. The survey held this past spring included 650 participants (*JOM*, 65 (9) (2013), p. 1073). While the challenges faced in preserving and sharing materials data are great, the survey showed the materials community is ready to begin a discussion on how we might address these issues.

Finally, the MIC plays a role in helping assure a level playing field for all potential TMS partners in the materials/manufacturing innovation arena. Since TMS is an attractive potential partner for many programs, TMS and the MIC strive to ensure the society remains engaged in work supporting our strategic goals, while providing all potential partners associated with our more than 12,000 members an equal opportunity to team.

I hope you stay tuned over the next year as we develop additional activities that support TMS and MIC objectives.

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