

TMS: A Professional Society Changing with an Evolving Profession*

Diran Apelian

“Nothing endures but change.”

—Heraclitus (540 BC–480 BC)



TMS, the professional society for the minerals, metals, and materials community, is entering the second half of its first century as the world is entering the 21st century. The global environment that we face today is far different from the one our elders witnessed 50 years ago when TMS was being established. It has been said that one thing that is constant is change itself; the changes we are experiencing and will be facing in the near future are both exciting and challenging.

As your president, throughout this year I would like to engage us in a discussion of pertinent issues facing our profession and our society. I plan to do so through various media: a monthly commentary in *JOM*, a blog on the TMS homepage, a discussion board that will be posted on our website, and occasional podcasts. We need to engage our members and strengthen our volunteer organization (both present and future volunteers) by effective use of Web 2.0.

WEB 2.0

What do I mean by Web 2.0? A good definition is given by Dario de Giudibus of IBM: “Web 2.0 is a knowledge-oriented environment where human interactions generate content that is published, managed, and used through network applications in a service-oriented architecture.”

Our esteemed editor, James J. Robinson, puts it in simpler terms: “Web

2.0 makes each of us authors of the web, limited only by our willingness to make an effort. Web 2.0 changes us from downloaders to uploaders and from browsers to the browsed. Web 2.0 requires no authoring skills or tools—fools can (and do) participate as eas-

ily as the wise.” You don’t even have to own a computer if you can get to a library or Internet café. The rise of social networking and net traffic are a testament that we are all connected, and that the content is driven by bottom-up conversations rather than top-down.

One of the most poignant reasons for joining a professional society is the networking opportunities it provides, the professional friends we make, and being part of a professional community. Materials Technology@TMS is certainly one way in which TMS is engaging its members to form digital communities; however, there are others. It will be important for us to explore ways in which we can be relevant and engage the next generation of MSE professionals. On the other side of the coin, the content that is being created on the net is not necessarily accurate. One generally hopes that what is being accessed through wikis and various different sites is correct; but do we really know that? There is a role for professional societies to be guardians of the knowledge conduit. How one executes this is up for discussion. I certainly do not have the answers, and these are issues that the TMS Board of Directors is addressing.

THE NEW PROFESSIONAL

Another significant challenge we face is that the field of minerals, metals, and materials is expanding significantly. Compared to two to three decades ago, the field has broadened. Just to cite a few examples, we have materials scientists and engineers working in the fields of food processing, biomaterials, fuel cells, nanotechnology, nano-structured materials, microelectromechanical systems, computational sciences, advanced polymers, drug de-



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President's Blog

www.tms.org/president

Throughout his year as president, Diran Apelian will post comments and discussion questions on a blog through the TMS web site. Here, readers are invited to post comments to Apelian. In particular, this month, the president encourages comments on the following questions:

- *What do you see as the most important challenges facing TMS over the next year?*
- *Do you find the approach of a blog a useful means of communication and providing feedback? Other suggestions?*
- *What topics would you like me to discuss in the future?*



President's Podcast

www.tms.org/president

In addition to the president’s blog and discussion board area, readers will be able to download brief podcasts, in which Apelian discusses the topics presented in the Presidential Perspective articles in more detail.

livery and pharmaceutical science, cell biology, biotechnology and bioengineering, etc. We need to ask ourselves, "What are the ways in which TMS can be the voice of the profession and address the needs of professionals working in this broadened MSE field?" This is a strategic issue your board will address during this year.

MATERIALS AND SOCIETY

Lastly, I strongly believe that we at TMS have an opportunity and a responsibility to address the societal needs of the world in which we live. Our world faces burgeoning needs regarding energy resources, transportation, housing, food distribution/packaging for the masses, recycling, and health care/health care delivery, not to mention climate change and environmental issues.

These serious societal needs are an opportunity for the materials community to influence research agendas, public policy, public opinion, and career decisions by young people. It is crucial for us as a professional society to address how materials technology can effectively and proactively address the com-

plex technological, professional, educational, societal, environmental, infrastructural, and economical issues that not only challenge the sustainability of today's world situation but improve it for those living in developing countries and secure it for future generations.

I am delighted that the theme at the TMS 2008 Annual Meeting in New Orleans, Louisiana, was Materials and Society. The five special sessions we held were a great success, and just a beginning. It is my hope that we can capture the imagination of our members—across all ages—and celebrate the power of MSE as an enabler and as part of the solution to the challenges facing society.

COMMENTS?

Please share your opinion by visiting my blog page at www.tms.org/president. I'd love to hear your thoughts about the above issues and other matters of importance to our society.

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