

# TMS Materials and Society Committee: Working Toward a Sustainable Future

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There is a growing “green” current that is flowing through our beloved



TMS that is trying to be defined by the new TMS Materials and Society Committee. By the Society calendar you could say that the Materials and Society Committee is only one year old, but the wellspring of the collection of ideas is certainly several years older than that. I would say that the nucleation event took place in the minds of the participants in a symposium at the TMS 2004 Annual Meeting that was organized and keyed by a former TMS president, Diran Apelian. We were all made to think in a very broad way about the real impact of materials science and engineering (MSE) on the world’s people, their standard of living, and the outlook for the planet’s future. Each speaker in that symposium tackled a broad topic like housing, considering, for example, the evolution of building materials designed for energy efficiency, sustainability, and appropriateness for each local environment and climate.

In 2007 when TMS was celebrating the 50th anniversary of its founding, Prof. Apelian again offered an extensive written perspective (see the February 2007 issue of *JOM*) on the future of our profession and the challenges that lie ahead for MSE to serve the needs of global society. One key phrase that was offered to describe the challenge for all of us involved in pushing materials technology forward is “sustainable development.” He defined it as “the level of human activity that can meet

the needs of the present without compromising the ability of future generations to meet their own needs.” In other words, our own lifestyles, characterized by our consumption of goods and energy, cannot be separated from the outlook for the future lifestyles that will be imposed on our children and grandchildren by our actions.

Building from this perspective, the members of the Materials and Society Committee have the purpose to “strengthen TMS leadership in the area of resource sustainability, specifically focusing on materials resource recovery and recycling; energy and the environment; and sustainable materials design and processing.” In addition, the committee will coordinate TMS activities to make materials and society elements more pervasive in the society. We firmly believe that one of the hallmarks of materials scientists and engineers is our ability to be creative and innovative, responding to the societal needs that are presented to us. We should take on the challenge of sustainable materials development with the entrepreneurial spirit of the engineers before us to make the world a better place for the whole of society for many generations to come.

In fact, TMS members, lead by several of the members of our Materials and Society Committee, continue to advance the exchange of information in this vital area. One-fourth of the 58 symposia planned for the TMS 2010 Annual Meeting & Exhibition in Seattle, Washington, focus on recycling and environmentally conscious materials processing and on materials for renewable and sustainable energy technologies. In a prime illustration of out-

reach to other societies and of efforts to create materials solutions for societal problems, the TMS Foundation, at the request of the Materials and Society Committee, awarded its first grant for a project in Mali, Africa, submitted jointly by the Engineers Without Borders-USA (EWB-USA) and Material Advantage chapters at Iowa State University. Anticipating success, the Materials and Society Committee and TMS Foundation plan to make funding of an EWB-USA/Material Advantage project an annual endeavor. To recognize and encourage R&D in energy reduction and green initiatives, the TMS Foundation established the Vittorio de Nora Prize for Environmental Improvements this year and tasked the chair of the Materials and Society Committee to lead the selection committee, which selected Australian engineer Zeljka Pokrajcic as the first recipient of the prize.

The TMS Materials and Society Committee consists of a chair, a vice chair, and up to ten at-large members who are appointed by the TMS vice president and approved by the TMS Board of Directors. In addition, the committee consists of eight members who serve ex officio, including appointees from each of the five technical divisions, the vice chair of the Membership and Student Development Committee, the chair of the Public and Governmental Affairs Committee, and a representative from the TMS Foundation Board. We currently have some openings for at-large members and interested TMS members should contact the current TMS Vice President, Rusty Gray, to apply.

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