News & Update

New TMS Awards Website Launched; America COMPETES Reauthorization

New Website Makes TMS Award Participation Quicker and Easier



TMS supports more than 60 different professional awards, after having added eight new awards in the last four years. As a result, 162 different award recipients received recognition at the TMS 2013 Annual Meeting, with that number on track to grow in 2014 as more award opportunities are added, particularly for young professionals.

While highlighting outstanding accomplishments of TMS members is an obvious goal, the TMS Honors and Awards Program also plays an integral role in advancing the society's mission. Many award winners share their knowledge through special lecture opportunities, while others receive support to enhance their professional development through conference participation. All benefit from meaningful recognition before their peers, while also inspiring other materials scientists and engineers, at all phases of their careers, to strive for this same or higher level of excellence.

To encourage even greater engagement in this important program, TMS has completely renovated its honors and awards website to make participation more convenient. Features include:

 Consolidation of all awards programs in one location. Student scholarships and Young Leader awards, as well as division, society, and pinnacle awards, can all be accessed from one page. A side menu bar listing major award categories links to drop down menus of specific award names.

- Criteria and submission information are provided for every award, accessed from the drop down menu. Specific bylaws references, as well as a complete listing of current and past winners, are also included for each award.
- An online search capability makes it easy to find information, while the universal nomination form is readily accessible.

Go to *awards.tms.org* today to explore the new TMS honors and awards website and consider participating as a nominator, applicant, or awards committee member. For additional information, contact Deborah Price, TMS Awards & Recognition Specialist, at *price@tms.org*.

Wanted: Your Story on the Benefits of the America COMPETES Act



The TMS Public & Governmental Affairs (P&GA) Committee has formed a special subcommittee to address reauthorization of the America COMPETES (America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science) Act, which is up for reauthorization in 2013. The subcommittee is encouraging TMS members to support its efforts by sharing stories and perspectives on the benefit of this important legislation. America COM-PETES was first signed into law in 2007 and expires every three years.

Said Ed Herderick, TMS P&GA Chair, "The America COMPETES Acts of 2007 and 2010 have been key pieces of legislation for the TMS community by setting goals for research funding, outlining approaches for STEM education, and ensuring research excellence. Recognizing the critical nature of the upcoming reauthorization, we have brought this subcommittee together to act as a hub for TMS members to inform that legislative process. As chair of the P&GA committee, I hope that we, as a community, will come together and speak about the importance of this legislation."

David Bahr, Purdue University, chairs the new subcommittee and believes, based on his experiences as cochair of the TMS Congressional Visits Day program, that the work of the group will have an impact on reauthorization deliberations. "As we've seen with students during Congressional Visits Day, personal examples of how federal support has directly impacted an individual helps put a face to what sometimes seems to be large and abstract issues. The subcommittee hopes to help our professional members also raise their voices and note how important COMPETES has been in their local environment."

The subcommittee will discuss where TMS input will be most valuable regarding the legislation, identify individuals who can potentially serve as experts for provisions of the Act, and cultivate contacts for local visits and calls to members of Congress.

Nile Elam of LobbyIt, the legislative firm assisting in these efforts, stresses that it is critical to identify grants and initiatives that have worked and are necessary, since the Congressional committee deliberating the act wants to hear experiences about real outcomes. Said Elam, "It will be those stories that will give the committee better context about significant programs, and a lack of such examples could leave some programs vulnerable. Every dollar is being counted now and it is safe to assume that anything could be cut or reduced."

The new subcommittee is developing a process to relay these types of stories to members of Congress. If you have a story to share, contact Mary Samsa, TMS Foundation and Public Affairs Manager, *msamsa@tms.org*.

Preliminary Results of "Big Data" Survey Provide Perspective on Open Research Topics

TMS and the Materials Research Society (MRS) have released the preliminary results of the "big data" survey project that the two organizations jointly conducted in May. The goal of the effort was to gain insights into the materials science and engineering community's views on the subjects of open research and big data. Open research is defined, for this survey's purposes, as open sharing of the products of research with the public, including peer-reviewed journal articles, as well as technical data generated during the research process

More than 650 materials experts participated in the survey, with 64% of respondents based in North America, 17% from Europe, and 13% from Asia. The survey was developed by a select group of TMS and MRS volunteers.

Areport of the preliminary results can

be downloaded from the publications section of the Materials Innovation @ TMS website, at *matrialsinnovation* .*tms.org*. Highlights include:

- The top three motivations cited for sharing data on an open-access basis were: increased visibility of research/work (72% of respondents); the opportunity to receive feedback (67% of respondents); and the opportunity for others to analyze the data, potentially making other discoveries as a result (54% of respondents).
- The top three impediments to data sharing cited by the respondents were: the proprietary/restricted nature of their data (59%); the intellectual property rules within their organization/business (54%); data being stored within a propriety data format (42%).
- Respondents were divided almost evenly on two topics. To the question, "Should public release of the supporting research data be required on the date of publication where that data is used?", 46.7% of survey participants responded yes, while 42.8% said no. When asked, "Are additional actions necessary to ensure that materials science and engineering publications sufficiently describe the experimental and computational details associated with generating

digital data that are required for reproducibility?", 57.3% of the respondents indicated yes, and 42.7% said no.

- The leading uses for materials databases indicated by the respondents were: inputs for calculations (53.4%); interpretation or modeling of experimental data (52.8%), informing experimental design (43.4%); materials system selection (34.3%); and model validation (31.6%).
- When asked to compare centralized databases and storage systems, respondents noted that, for ease of data input and time efficiency, local storage systems were preferred. Centralized databases were perceived to be advantageous in their ability to facilitate data sharing, as well as providing ability to apply uniform data and metadata standards.

Additional analysis of the data obtained in this survey will be provided at a later date, including a detailed discussion of comments and answers to open-ended questions. In addition to spurring dialogue, planning, and activities within the materials science and engineering community, the final survey results will be provided to the President's Office of Science and Technology Policy in support of the U.S. Materials Genome Initiative.

TMS WELCOMES NEW MEMBERS

UNITED STATES

Please join us in congratulating the following new TMS members, approved by the TMS Board of Directors at its June meeting.

BRAZIL

Castro, Lucas Alves De, Universidade Federal De Minas

INDIA

Gupta, Akash, *TCS Ltd. TRDDC* Rao, Kasturi Venkateswara, *M/sMishra Dhatu Nigam Ltd.* Sampath Kumar, T.S., *Indian Institute of Technology*

IRAN

Lalpour, Abdollah

JAPAN

li, Seiichiro, National Institute for Materials Science

POLAND

Karabin, Maciej, Julifield Consulting

Bagri, Prashant, FLSmidth Balke, Nina, Oak Ridge National Laboratorv Bang, Woong Ho, Bailey Tool and Manufacturing Co. Brooks, Robert Mark, Temple University Carnahan, Norman F., Carnahan Corp. Chew, Huck Beng Esaki, Ian H., Waupaca Foundry Frerichs, Andrew E., NanoSteel Co. Galbraith, James A., Oceaneering Space Systems Ganz, Susan G., Schlumberger Garosshen, Thomas J., United Technologies Corp. Hansen, Cheryl, ESI Jarmakani, Hussam N.

Knutson, Julianne B., Knutson Enterprises Kuykendall, Tuesday, University of Washington Latiff. Robert H. Maita, Oscar A. McLaughlin, Matthew P., University of North Carolina Morgan, Michael L., Faurecia Qi, Liang, University of California Rahimi, Mehdi, Forged Products Inc. Sepehrband, Panthea, Santa Clara Universitv Tarkanian, Michael, Massachusetts Institute of Technology Wang, Guodun Woodhead, James M. Xu, Di, University of California