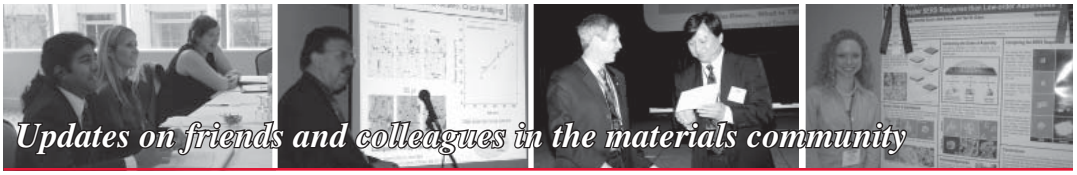
Member News



TMS Board of Directors Seeks Nominees

TMS is soliciting nominees for the position of Vice President/President/Past President—also known as the Presidential Rotation—on its Board of Directors for the 2013–2016 term. In the first year of the term, the elected individual will function in the position of Vice President, serving in the place of the President, when necessary, and assisting the President in implementing policies and programs of the Board of Directors. The second year, the individual will serve as President—the chief elected officer of TMS—representing the entire membership in carrying out the professional and business activities of the Society. The term closes with the Past President role.

To access a complete job description and qualifications for this office, as well as a nomination form, log on to the TMS Members Only home page and select "Committee Home Pages" under "Member Networking" on the left menu bar. From there, navigate to "General Committees" and select "Nominating Committee." The materials are in the Document Archive.

The nomination form and supporting documents—including three to five supporting letters from TMS members and a one page description of the nominee's past and present service in TMS—must be submitted by January 31, 2012. Elections take place in August, and the new board members take office at the following annual meeting. For additional information, contact Nancy Lesko, TMS executive and governance assistant, at nlesko@tms.org.

A Piece of Aluminum History

TMS thanks John Green, JASG Consulting, for the donation of a historical artifact that he had acquired when he headed research and development for Martin Marietta, from which he retired in 1996. The piece (photo right) is a replica of a presentation gift to Guinea upon the opening of the Boke Bauxite Mine in West Africa. The piece was designed as a metaphor of the aluminum production cycle. The body of the African elephant is made from bauxite. The tusks are alumina and the figure is mounted on a bed of miniature aluminum ingots. Martin Marietta played a lead role in the opening of the mine, which has evolved into one of the world's major sources of bauxite. The piece will be displayed at TMS headquarters in Warrendale, Pennsylvania.

Visitors to TMS headquarters will be able to view this artistic representation of aluminum processing.

Keep *JOM* at Your Fingertips with Free Springerlink App

Your TMS journals—*JOM, Journal of Electronic Materials*, *Metallurgical and Materials Transactions A* and *B*, and the soon-to-be-published *Integrating Materials and Manufacturing Innovation*—are all just a tap away with the new Springerlink App. In addition to TMS publications, the app will give you access to the more than 5.5 million scientific documents in the Springerlink database, all keyword searchable from your iPhone, iPod touch, or iPad. Other features include personalized notifications and the ability to save and share documents. The Springerlink App is free and available now at the iTunes Store at *www.apple.com/itunes*.

TMS Members Receive FeMet Grants

The Association for Iron & Steel Technology (AIST) Foundation and the American Iron and Steel Institute's (AISI) Ferrous Metallurgy Education Today (FeMET) Initiative has awarded Curriculum Development Grants for the 2011–2012 academic year to three TMS members. They are: Sivaraman Guruswamy, professor, University of Utah; John Nychka, assistant professor, University of Alberta; and Marian Kennedy, assistant professor, Clemson University. Each of these represented grant renewals from 2010. The program objective is to utilize students to assist in the editing and updating of textbooks and/or other course materials for use in ferrous metallurgy education, while increasing industry awareness within the academic community.

Lifeng Zhang, professor, and a team of materials science and engineering research students from Missouri University of Science Technology have also been selected for this year's FeMET Design Grant for their proposal, "The Impact of Advanced High-Strength Steels (AHSS) and Embedded Electronic Components on the Recyclability of Automobiles." Their proposal was submitted in response to the 2011–2012 FeMet design theme, "The recyclability of automobiles—past, present and future—i.e., the impact of advanced high-strength steels and embedded electronic components."

Meet a Member: Tony Rollett "Pulls Out All the Stops"

By Lynne Robinson

It was hard for Tony Rollett to avoid hearing organ music as a boy growing up near the epicenter of Oxford University, where his father taught mathematics. Now a Carnegie-Mellon University (CMU) professor of materials science and engineering, Rollett noted that most of the university's 39 colleges had chapels, and most of those had organs, all of which could be sending forth music on any given day for rehearsals, concerts, or services.

His initial exposure to music, however, was actually a piano that his family had inherited from his mother's aunt that came with an abundance of sheet music. Rollett started taking piano lessons at 11, but switched to organ lessons at 15 because he found it more intriguing. The transition from one keyboard-based instrument to another he said, "was interestingly complicated. Piano music has two lines of music to read, while organ music has three, since there is a part for the feet to play. For a long time, I could get my right hand to do the right thing, and my feet to do the right thing, but my left hand kept following my feet. It was hard to separate the functions."

Although music was an important part of his life—between studying organ and singing in school choirs—Rollett felt that his professional pathway was charted through science. "I recognized, even as a youth, that to make a living in music, you had to be really, really good and really, really lucky," he said. He decided to apply to Cambridge University's science program, and then just to see what would happen, auditioned for a choral scholarship at Cambridge's Clare College the semester before he was to take the university's entrance exam. To his surprised delight, he won the scholarship. Not only did this mean he "could sing and do science at the same time," but it also waived his entrance exam requirement, while giving him access to "easily the best organ at Cambridge" and private lessons from Dame Gillian Weir, one of the world's foremost organ recitalists.

Tony Rollett prepares to play the organ housed at Carnegie-Mellon University. Performing music, he notes, shares similar principles with teaching: "If you regard performing as just an occasion to play when other people are in the room, you will not be effective."

"Organ lessons for me up until that time were detailed reviews of pieces of music," said Rollett. "Gillian Weir's approach was 'make music and let's talk about it.' It was a total shock to my system, but a marvelous way to learn."

Weir also introduced Rollett to her husband, Lawrence Phelps, who owned a pipe organ construction business in Erie, Pennsylvania. Upon graduating with a degree in metallurgy and materials science from Cambridge, Rollett said he "thought it would be interesting to build pipe organs" and moved to the United States to work for Phelps. "I learned at least as much engineering from that experience as from anything that I ever did before graduating Cambridge," he remarked.

It was also while installing one of Phelps's instruments at a college that Rollett met his future wife, Rebecca, who was studying organ there. "I started to explain to her how pipe organs worked and she stopped me and said 'I'm an organist and actually know this stuff.' That's pretty much how it's gone ever since," he laughed.

After about two years, Rollett left pipe organ building behind to pursue his scientific career. What he never gave up, however, was the music, even while pursuing his doctorate at Drexel University with three small children at home. "Something I hate to see is people who spend a lot of time learning and playing an instrument, and then they just drop it," he said.

These days, Rollett can often be found traveling throughout western Pennsylvania on the weekends as a guest church organist, noting that he tends to "drag out big, smashy romantic things" as his favorite pieces. He also sings with the Pittsburgh Camerata, a professional *a cappella* choral ensemble, conducted by his wife. The Rollett family musical traditions are likewise continuing through his youngest son, Edmund, who is a professional horn player with the Mexico City Philharmonic Orchestra.

Performing music, said Rollett, offers strong parallels to his work as a professor, refining abilities that are important to communicating complex information and topics. "It's really, really important to engage your audience and not just stand up and talk. There needs to be an element of entertainment. And, there's a certain amount of adrenaline that's involved."

Each month, *JOM* profiles a TMS member and his or her activities both in and out of the realm of materials science and engineering. To suggest a candidate for this feature, contact Maureen Byko, *JOM* editor, at *mbyko@tms.org*.