R. Srinivasan and R. Knight Receive Alpha Sigma Mu Fellow Award

Alpha Sigma Mu, the International Professional and Academic Honor Society for Materials Science and Engineering, awarded Raghavan Srinivasan and Richard Knight the Alpha Sigma Mu Fellow award. The award is given to professionals from the materials science community in the middle of their careers who have distinguished themselves in industry, government, education, and management and/or service to the honorary society over a significant period of time.

Srinivasan is a professor in the Materials Science and Engineering Department at Wright State University in Dayton, Ohio. His research interests lie in high-temperature deformation, materials behavior modeling, and materials engineering. Srinivasan received the Excellence in Research Award from the College of Engineering and Computer Science, Wright State University, in 1994 and was nominated for the Wright State University Brage Golding Distinguished Professor in Research in 2004. He has been a member of TMS since 1987.

Knight is an auxiliary professor in the Materials Science and Engineering Department at Drexel University in Philadelphia, Pennsylvania, and director of the university’s Center for the Plasma Processing of Materials. He has received numerous awards, including the College of Engineering Dean’s Graduate Award for his conference proceeding paper “Splatting of Thermally Sprayed Polymer Particles” and the Drexel University Myers Award for Distinguished Service. He has been a member of TMS since 2002.

Knight received his award May 1 at a materials science and engineering department alumni event at Drexel. Srinivasan is scheduled to receive his award October 26 before the Alpha Sigma Mu Lecture at the Materials Science & Technology 2009 Conference in Pittsburgh, Pennsylvania.

Three TMS Members are Re-elected to IMA’s Board of Directors

Alain Dery, Horst Friedrich, and Derek C. Roberts were re-elected to the International Magnesium Association’s (IMA) Board of Directors at the organization’s annual membership meeting during the 66th Annual World Magnesium Conference in San Francisco, California. The IMA is an international trade organization representing the producers, processors, fabricators, and marketers of magnesium, along with suppliers to the industry.

Dery is manager of Alloys Procurement North America at Rio Tinto Alcan in Montreal, Canada. He was re-elected to a two-year term as vice president.

Friedrich and Roberts were re-elected each to three-year terms as member representatives. Friedrich is director of DLR at the Institute of Vehicle Concepts in Stuttgart, Germany, and Roberts is vice president of operations for VSMPO-AVISMA in Leetsdale, Pennsylvania.

Sophie Williams Receives IOM³ Silver Medal

The Institute of Materials, Minerals & Mining presented Sophie Williams the Silver Medal Award in July. She has been a member of TMS since 2006.

Williams holds a Royal Academy of Engineering Fellowship in the School of Mechanical Engineering at the University of Leeds, United Kingdom. She received the award for research on bioengineering, in particular on the tribology of hip replacements.

The Silver Award is given annually to an IOM³ member under the age of 30 in recognition of an outstanding contribution to the broad field of materials science, engineering, and technology, including promotion of their subject on a national or international basis.

TMS Remembers Members Who Have Passed

TMS would like to express the deepest sympathy to the families of several long-time members who have passed away. Each of the members had contributed to the field of materials science and engineering.

Those members are:
- Henry F. Andrejasik, member since 2002
- Yrjo Anjala, member since 1992
- William L. Bruckart, member since 1941
- Gordon M. Cameron, member since 1987
- Trygve Foosnas, member since 1989
- Volker Ruth, member since 1990

IOM³ President Barry Lye presents Sophie Williams with the Silver Medal Award. Photo Credit: Moz Bulbeck
Meet a Member: Diana Lados: Casting Creations in Aluminum & Photography

By Francine Garrone

When Diana Lados began playing tennis at the young age of 4, she was learning to perfect her game with a wooden racket. By the time she was a championship player at 14, Lados had moved on to an aluminum racket. Already, the science and aesthetics of aluminum had made their mark on her game and, ultimately, on her life.

Looking back on her championship year, Lados, an assistant professor in the Mechanical Engineering Department and director of the Integrated Materials Design Center at Worcester Polytechnic Institute (WPI) in Massachusetts, associates her understanding of materials in tennis, and their evolution, with materials used in other applications, particularly aerospace materials. Shortly after starting her doctoral research at WPI and many years after winning her tennis trophy, Lados developed a passion for casting the same material that her racket was made from—aluminum—and creating beautiful artwork. Her hobby soon became an artistic inspiration that benefited from her studying materials science and having an understanding of the metal. “While preparing my research samples, I would see interesting shapes that I thought I could bring to life in a different way,” Lados said. “I never made parts from scratch but rather re-shaped or accentuated the existing pieces of cast aluminum alloys from our foundry.”

By “post-processing” pieces of cast aluminum that she finds in WPI’s foundry, Lados creates such artwork as “The Egg” (Figure 1). Post-processing includes bending, hammering, coarse or mirror polishing, and selective area etching. At times, Lados paints the pieces with vibrant colors or glues several pieces together to create the final shape to enhance specific features of the piece. “Most pieces represent objects or beings often with stylized features to create different effects and emphasize certain characteristics,” she said. “There are also a few abstract pieces that challenge the viewer’s imagination.”

To date, Lados has created more than two dozen pieces of cast aluminum artwork. Each of her works ranges in size from a few inches to several feet tall. She said she gives her artwork to friends to be placed in their homes and gardens.

On occasion, Lados has used her creativity to shed light on certain features of her cast aluminum artwork using another one of her hobbies—photography. “Both cast aluminum creations and photography require imagination and a good sense of proportion and three-dimensional space visualization,” she said. “They are great ways to use technical knowledge and tools for artistic manifestations.”

Lados’ photography not only captures her cast aluminum artwork but also landmarks, nature, churches, as well as many objects and “catch the moment” shots. “I started with an old 35 millimeter Leica camera over 20 years ago, and in recent years, I began to explore more with digital photography,” Lados said. “I was always inclined to observe things, place them in a context, and pay attention to details.”

Currently, Lados is preparing an exhibit with 72 of her photographs to be displayed in the Gordon Library at WPI. Work from her “Nature, Color, and Life in South America” and “Architecture Around the World” collections will be featured. “In a way, both of these interests have enabled me to look at the world around us with a different perspective, add new dimensions to it, and appreciate the beauty, form and context,” Lados said.

Figure 1: Al-7%Si-Mg (A356) alloy egg. The question is: Which came first? The cast Al egg or the cast Al hen?

Figure 2: Machu Picchu, Urubamba Valley, Peru—"The Lost City of the Incas."