



### *Symposia Summary*

## **Biological Materials Science**

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The 2011 Biological Materials Science Symposium featured seven sessions of programming, more than 65 presentations, a student poster contest, and a workshop on Biomimetic Materials held at the San Diego Zoo. In addition to an excellent lineup of speakers, workshop attendees were treated to hands-on animal demonstrations, such as three-banded armadillos that rolled into armor-protected balls, and a behind-the-scenes tour of the San Diego Zoo.

During the week, student participation was high, 19 student talks. The National Science Foundation Biomaterials Program and the Army Research Office Materials Science Division funded their participation in part through travel stipends and cash awards for the Biological Materials Science Student Poster Contest. First place in the graduate division of the Poster Contest (\$500) went to Robert Kane of Notre Dame University for “Novel Hydroxyapatite Reinforced Collagen Scaffolds with Improved Mechanical Properties Prepared by Porogen Leaching,” while second (\$300) and third (\$200) place awards went to Dmytro Khvostenko of Oregon State University and Pavan Challa of the University of Louisiana at Lafayette, respectively. In the undergraduate division, first place (\$500) went to Sumit Goenka of the Visveswaraya National Institute of Technology (VNIT), Nagpur, India, for “Silver Substituted Hydroxyapatite with Enhanced Mechanical and Tribological Properties” while second (\$300) and third (\$200) place awards went to Jacqueline Ohmura and Neil Jindal, both of Ohio State University.

The tone was set for the symposium with a humorous and inspiring keynote from Tony Tomsia, Lawrence Berkeley National Laboratory, on nature-inspired materials for bone repair, while John Nychka, University of Alberta, ended the first day by riveting the audience with his visual displays, while discussing how to mimic leaf surfaces. Roy Bloebaum, University of Utah, taught the audience about the Zen of total joint replacements—be the implant, be the bone, be the interface. And, David Kisailus, University of California at Riverside, explained how tiny mollusks called chitons can literally eat away large ocean rocks with their magnetic teeth.

—Submitted by Jamie M. Kruzic