

# IOWA STATE UNIVERSITY

## OF SCIENCE AND TECHNOLOGY

**Ames, Iowa** - Iowa State University's (ISU) Material Advantage has been named the "Most Outstanding Chapter" six years in a row. The chapter's calendar overflows with events focusing on networking, collaboration and outreach, allowing the chapter to stand out. Each month, they bring in speakers from the materials profession or industry. "We try to provide variety," says chapter President Emily Kuster. "Our group has diverse interests, so we bring in everything from industry representatives from companies like Honeywell to professors with experience working in developing countries." *Shown below is a picture of the chapter receiving the sixth consecutive "Most Outstanding Chapter."*

### Networking

The Chapter's effort to create professional networking includes sending students to two national engineering



conferences: MS&T and TMS. This year, a record number of students made the trip from Ames, Iowa to Pittsburgh, Pennsylvania for MS&T. These 52 students learned about new technology and cutting edge applications in the Materials field and practiced networking skills. Learning networking skills and connection with industry professionals gives these students an advantage when job hunting. Fundraising Co-Chair Kate Lindley says, "MA gives me the opportunity to go to different conferences, meeting representatives at companies I may one day work for." The ISU faculty and staff encourage conference attendance. Faculty advisor for the chapter, Scott Chumbley, says, "Attending conferences gives students an excellent opportunity to meet practicing engineers in their field, not just in the professional setting of the talks and presentations, but socially as well, due to the various mixers and functions. Students hear exactly what problems companies are facing and what types of engineers they are looking for, they make professional contacts, land possible coops and internships, and start to build a portfolio of things they want to study and experience as they progress from a new engineering student to a trained professional seeking employment."

### Building Partnerships

Recognizing that materials engineers will work with other engineering disciplines in the future, the ISU chapter reaches out to other groups on campus. From having friendly competitions of capture the flag with the Aerospace Engineering Professional society to a more serious project collaboration with Engineer's Without Borders (EWB).



The EWB partnership provides the ISU students with real life engineering experience (again giving them an advantage after graduation). One project started when Anne Stockdale, former MA President, brought in a speaker to talk about

alternative career paths. After the meeting, she approached EWB and together the two groups applied for a grant from the Minerals, Metals and Material Society (TMS). Today, the two groups are working together to build a kiln in Mali, Africa. The kiln will aid in production of a water filtration system, better housing materials and cleaner stoves. *Above, on the left, is a picture of Anne Stockdale working with a local blacksmith in Mali, Africa.*

### **Local Outreach**

The ISU MA chapter also recognizes the importance of reaching out to younger and prospective students. “We plan to have over 30 outreach events this year,” adds Emily Kuster. “Our core outreach events include visual demonstrations of material phenomena—standing on tempered glass, shattering flash frozen racquetballs and making fiber optics. —These demos get people curious and talking and eventually attract some into an engineering career.”

*On the right is a picture of Tim Cullinan performing demonstrations at a local elementary school “Science Night.”*

