

## MS&T '13 Student Wrap-Up

Over 715 students attended the **MS&T'13 conference in Montreal, Quebec, Canada 27-31 October 2013**. In addition to the technical sessions, students had the opportunity to participate in and attend many Material Advantage activities.



Student programs kicked off with the **Material Advantage Chapter Leadership Workshop** on Sunday, 27 October. Over 60 chapter leaders learned about the four partnering societies and the major benefits each organization offers. They learned how to manage a Material Advantage chapter and shared ideas on how to increase membership and raise funds.

Students also competed in the **Material Advantage Student Speaking Contest** semi-finals, where contestants were narrowed down to four participants for the finals. All contestants received \$300 for travel expenses. The winners of the 2013 student speaking contest were:

Winner

Luke Shi

University of Illinois at Urbana-Champaign

"Materials Selection and Device Design for Robust Epidermal Electronics"

1st Runner-Up

Kelsey Jorgensen Northwestern University

"The Binary Join of the Transparent Conducting Oxides GITO and ZITO"

2nd Runner-Up (a two-way tie)

Austin Gerlt

Missouri University of Science & Technology

"Cerium-Based Anti-Corrosion Coatings on Aluminum Alloys"

Spencer Ferguson

Rutgers University

"Advanced Cement Materials with Reduced Environmental Impact"

Also on Sunday, entries for the undergraduate poster competition were displayed. Judging took place on Monday. On Tuesday, the poster entries for the graduate student poster contest were judged. The winners of the 2013 student poster contests were:

**Material Advantage Graduate Student Poster Competition:**

1st Place

Priscila Chaves Panta  
Federal University of Rio Grande do Sul  
"Mössbauer and Magnetic Behavior of Iron Oxide Nanoparticles  
Stabilized with Polyethylene Glycol"

2nd Place

HyunJeong Bae  
Korea Aerospace University  
"Silicon Carbide Coating on Carbon Fibers for Enhanced Oxidation Resistance Cf/SiC Composites"

3rd Place

Yun-Hyuk Choi  
Seoul National University  
"Direct Printing Synthesis of Self-organized Copper Oxide Hollow Spheres on Substrate Using  
Cu(II) Complex Ink and Their Highly Sensitive High-throughput Gas Sensor Applications"

**Material Advantage Undergraduate Student Poster Competition:**

1st Place

Andrew Robinson  
Washington State University  
"Using Al-PTFE Granular Composites and Natural Rubber for Semi-Reactive Armor"

2nd Place

Jaron Senecal  
Rensselaer Polytechnic Institute  
"Parameterization of a General Glass Dissolution Model: Accounting for shape effects in dilute dissolution conditions"

3rd Place (a two-way tie)

Nadia Ben Dahmane  
McMaster University  
"Boiling Water Quenching using the Galvanizing Simulator"

Timothy Fountain

South Dakota School of Mines & Tech  
"Friction Stir Welding of Grade-110 HSLA Steel"



The final activity on Sunday was the **Material Advantage Student Mixer**, always a highlight for the students. More than 450 students, most wearing their school colors, networked with each other, leaders from the four partnering organizations, representatives from companies participating in the Professional Career Pavilion, society members, and the Material Advantage staff liaisons.

Tuesday, Oct. 29 included the **Material Advantage Ceramic Mug Drop Contest**. In the Mug Drop Contest, students entered their mugs, fabricated from ceramic raw materials, which were then judged on both aesthetics and breaking thresholds.

Winner (Passing @ 45 cm drop)

Myranda Ferris  
Missouri University of Science and Technology

Most Aesthetic Mug

Jake Ivy

Missouri University of Science & Technology

The new **Ceramic Disc Golf Competition** was added to the MS&T conference this year. In all, 11 discs were entered in the contest.

Winners (3-way tie: all made the final 5 meter toss)

Mackenzie Merrick  
University of Connecticut

Brenden Mil-Homens  
University of Connecticut

Steven Ashlock  
Missouri University of Science & Technology

Most Aesthetic Disc

Austin Gerlt

Missouri University of Science & Technology



The mug drop and disc golf contest are organized by Keramos.

Students were provided lunch and encouraged to visit the companies in the career pavilion. Activities wrapped up with the **Material Advantage Student Awards Ceremony**, hosted by the Material Advantage Committee chair, Ron O'Malley. The winners of Material Advantage contests were congratulated and presented with awards.

In addition to the MS&T contest awards, the 2013 **Material Advantage Chapter of Excellence Awards** were announced. All active chapters were scored based on criteria for programming, career development, service, social activities and chapter management. The 2013 Chapters of Excellence winners, winning \$400 each, were:

Colorado School of Mines  
Missouri University of Science & Technology  
The Ohio State University  
Rensselaer Polytechnic  
University of Illinois Urbana-Champaign

The **Most Outstanding Chapter Award** went to Iowa State University.



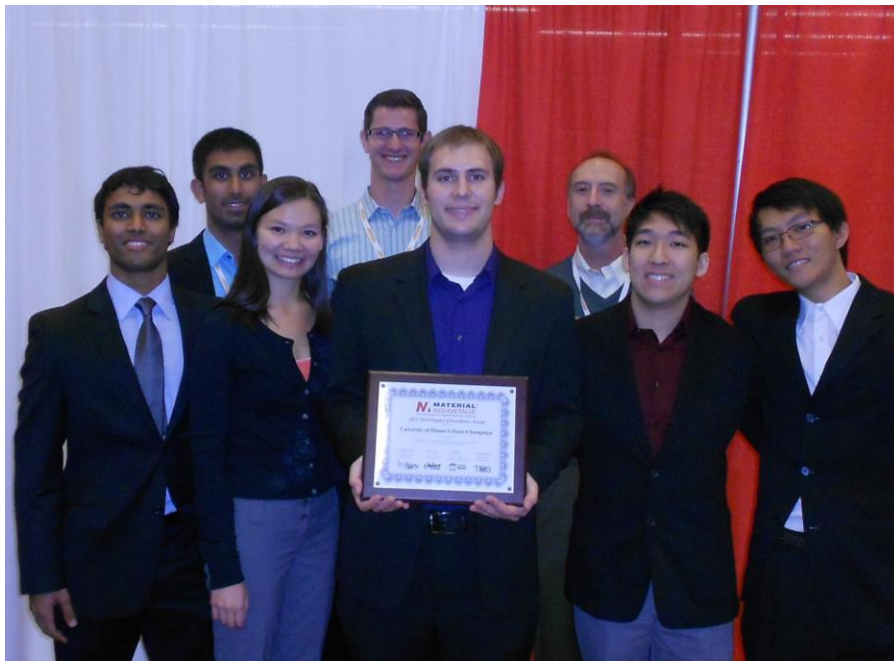


Iowa State University



Rensselaer Polytechnic





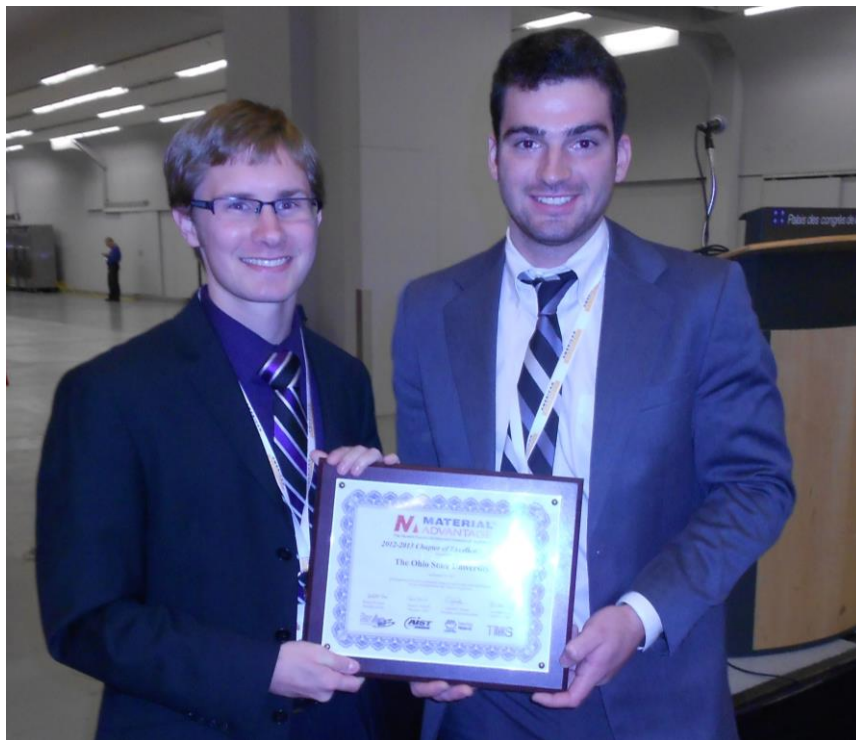
University of Illinois Urbana-Champaign



Missouri University of Science & Technology



Colorado School of Mines



The Ohio State University

CONGRATULATIONS to All of Our Winners!