

# PROFESSIONAL PREFACE

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*The Newsletter for Student Members of The Minerals, Metals & Materials Society*

## TMS AWARDS SUPERALLOYS SCHOLARSHIPS AT MS&T'11

At this fall's Materials Science and Technology 2011 conference (MS&T'11), TMS presented the International Symposium on Superalloys Scholarship to two Material Advantage students. The two \$2,000 scholarships are funded annually by the Organizing Committee of the International Symposium on Superalloys and are available to undergraduate and graduate students majoring in metallurgical and/or materials science and engineering with an emphasis on all aspects of the high-temperature, high-performance materials used in the gas turbine industry and all other applications.

This year's winners were:

### Phillip Draa, University of Florida



*"I am proud to represent the High Temperature Alloys Group at University of Florida in receiving this scholarship. I believe this scholarship indicates our lab group has provided me with good insight into high temperature materials and is preparing the group members well for the world of superalloys. Material Advantage is a great avenue to professionally network and keep up with the latest technological advances in our field. I would like to thank the scholarship committee and Material Advantage for selecting me and helping advance my career."*

### Morris Satin, Case Western Reserve University



*"I am very grateful to be receiving this award especially in such a challenging and cutting-edge field. Superalloys have allowed us to design and build modern devices that can withstand some of the most challenging conditions in history and it is an honor to be invited to join those who are experts in that field. Being a member of Material Advantage has really helped me get a better understanding of what it is to be a materials engineer and has provided a great support network. It is great to know that all the men and women in the materials industry support students and allow us to be part of our strong materials community."*

## MORE SCHOLARSHIPS FROM TMS

The Superalloys Scholarship is one of 17 scholarships offered by TMS. In total, the society awards students more than \$40,000 each year for excellence in all areas of materials science and engineering.

The following scholarships are now accepting applications for 2013:

- J. Keith Brimacombe Presidential Scholarship (one \$5,000 award)
- Henry DeWitt Smith Scholarship (two \$2,500 awards)
- Electronic, Magnetic & Photonic Materials Division Gilbert Chin Scholarship (one \$2,000 award)
- Extraction & Processing Division Scholarship (four \$2,000 awards)
- International Symposium on Superalloys Scholarship (two \$2,000 awards)
- Light Metals Division Scholarship (three \$4,000 awards)
- Materials Processing & Manufacturing Division Scholarship

(two \$2,500 awards)

• Structural Materials Division Scholarship (two \$2,500 awards)  
For more information, visit [www.tms.org/Students/Scholarships.aspx](http://www.tms.org/Students/Scholarships.aspx).

The deadline to apply for 2013 scholarships is March 15, 2012.

## STUDENT CHAPTER AWARD WINNERS

In addition to individual scholarship winners, several Material Advantage student chapters were recognized for their outstanding achievements at MS&T'11 in October. To apply for 2012 chapter awards, visit [www.tms.org/Students/studentchapters.aspx](http://www.tms.org/Students/studentchapters.aspx).

### Outstanding Student Chapter and Chapters of Excellence

Each year, the Material Advantage program recognizes student chapters that plan excellent programming, career development, service, and social activities, while demonstrating responsible chapter management. With the highest judge's score, this year's winner of the Most Outstanding Student Chapter Award was:

- Iowa State University

In addition, the Material Advantage program recognizes five student chapters annually in the Chapters of Excellence Contest. Each winning chapter receives a \$500 cash award. This year's Chapter of Excellence winners were:

- Missouri University of Science and Technology
- Rensselaer Polytechnic Institute
- University of Illinois at Urbana-Champaign
- Washington State University
- Virginia Polytechnic Institute and State University

Want to see your chapter's name on this list next year? Draw on the resources and talents of your student chapter members to plan excellent events, and submit a nomination form to the Material Advantage program, along with your chapter's annual report and officer list, by June 1.

### World Materials Day Award

The World Materials Day Award recognizes outreach projects by Material Advantage student chapters that inform K-12 students about the field of materials engineering and encourage these young students to learn more about the study of materials. In the past, winning chapters have shared materials science and engineering with younger students through demonstrations, presentations, workshops, recruitment projects, sponsorship of science fairs, and social events.

The 2011 World Materials Day Chapter Awards went to the following schools:

- Florida International University
- Iowa State University

Each winning chapter received a check for \$500 and a plaque from the International Organization of Materials, Metals, and Minerals Societies. Entries for the 2012 World Materials Day Award must be submitted by June 1.

## MS&T PHOTOS ON FLICKR

Photos of award winners and other student events from MS&T'11 are now available through Flickr. View these photos at [www.flickr.com/photos/tmsevents](http://www.flickr.com/photos/tmsevents).

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## REGISTRATION OPENS FOR TMS 2012



Registration is now open for the TMS 2012 Annual Meeting & Exhibition, which will be held in Orlando, Florida, March 11–15. Last year, the TMS Annual Meeting attracted more than 4,000 attendees, includ-

ing a large student population. But it's more than a gathering of materials scientists and engineers. It's also:

- **A Real-World Classroom:** Learn what students and professionals in your field are studying and working on *right now* by attending technical presentations related to your area of expertise.
- **A Job Fair:** Network with potential employers and other leaders in the field at the conference's technical presentations and social events.
- **A Meeting of Your Peers:** Exchange notes with students from other schools on chapter activities, research, and more. It's never too early to begin building a network of colleagues.
- **A Vacation:** This year's conference is held in Walt Disney World, Florida, so between conference activities, you can relive your childhood at one of the theme parks or catch a few minutes by the pool.
- **An Opportunity to Shine:** From the Materials Bowl to the Student Poster Contest, the TMS Annual Meeting offers many opportunities for students to win valuable recognition (and cash) for their work.

Register by February 15 through the TMS 2012 website ([www.tms.org/tms2012](http://www.tms.org/tms2012)) to get the best rate on the conference. Student members who register early pay only \$75 to attend.

## PLAN AHEAD FOR TMS 2012

To make the most of your experience at the TMS 2012 Annual Meeting, it pays to plan ahead. In addition to registering early, take the following steps to make sure you don't miss out on any opportunities the meeting has to offer:

- **Book a Hotel:** The conference will be held at the Walt Disney World Swan and Dolphin Resort. By booking rooms through the conference website, you can take advantage of special room rates for meeting attendees at the Swan and Dolphin and nearby Disney Caribbean Beach and Coronado Springs resorts. Book as early as possible to ensure the best rates through the "Housing and Travel" section of the TMS 2012 website.
- **Seek Out Travel Funding:** Traveling to a conference can be expensive, but remember that you don't have to finance the trip entirely on your own. TMS provides travel grants to active Material Advantage student chapters, and often, schools have special funds set aside to finance special projects. Check with your Material Advantage student chapter advisor or department head about potential funding from your school.
- **Plan for TMS Student Activities:** Each year, the TMS Annual Meeting includes a suite of activities geared specifically toward student needs, including a career forum to provide students with a taste of what's ahead professionally, the Materials Bowl and student poster contests, and a networking mixer where students can relax, have fun, and talk with professionals and other students in a casual atmosphere.

## ENTER TMS 2012 STUDENT POSTER CONTEST

The TMS Technical Division Student Poster Contest, held each year at the TMS Annual Meeting, will award \$6,000 to undergraduate and graduate students in each of the five TMS technical divisions. Undergraduate and graduate students are invited to submit posters of

their research for the competition, which accepts work related to the five technical divisions of TMS:

- Electronic, Magnetic & Photonic Materials Division (EMPMD)
- Extraction & Processing Division (EPD)
- Light Metals Division (LMD)
- Materials Processing & Manufacturing Division (MPMD)
- Structural Materials Division (SMD)

To enter, submit an abstract through ProgramMaster, which can be accessed through the TMS 2012 home page ([www.tms.org/tms2012](http://www.tms.org/tms2012)). Choose the EMPMD, EPD, LMD, MPMD, or SMD Technical Division Student Poster Contest from the list of approved symposia, and submit an abstract. All entries must be submitted by December 15.

## PRACTICE FOR THE MATERIALS BOWL ON FACEBOOK

The TMS Materials Bowl, held each year at the TMS Annual Meeting, is a quiz-show-style competition that asks students to draw on a broad spectrum of materials knowledge. See how you would have fared in past competitions—and practice for the 2012 contest—through the TMS Facebook page. Each week, TMS posts questions from past Materials Bowls, including these:

- What is the term referring to the measurement of a material's ability to deform when pressure is applied and then return to its original shape when pressure is removed?
- What is the process that takes advantage of the thixotropic properties of aluminum when it's in liquid plus, or two-phase, region of the phase diagram?

Find the answers to these and more Materials Bowl questions on the TMS Facebook page. Links to all of TMS's social networking sites can be found at [www.tms.org](http://www.tms.org). The deadline to submit team applications for the Materials Bowl is December 15. See the "Student Activities" section of the TMS 2012 website ([www.tms.org/tms2012](http://www.tms.org/tms2012)) for more on this competition.

## DECEMBER GRADUATES: APPLY FOR TMS PROFESSIONAL MEMBERSHIP

If you are graduating in December—or if you have graduated with a materials degree in the past year—you are eligible for a complementary one-year professional membership in TMS through the Recent Graduate Program. Your complementary membership will include such benefits as:

- A one-year print subscription to *JOM* (twelve issues)
- On-line access to the prestigious *Metallurgical and Materials Transactions A and B* and *Journal of Electronic Materials*, as well as twenty additional materials science and engineering publications
- Discounts on meetings and publications
- Access to job-search tools and professional development resources
- Networking opportunities, such as joining a technical committee or using the TMS Membership Directory

Simply complete the Recent Graduate application form through the TMS Student Member website ([www.tms.org/Students/students.aspx](http://www.tms.org/Students/students.aspx)) to enjoy a full year of member benefits. The TMS Recent Graduate Program also offers reduced-rate memberships for graduates in their second and third years following graduation.

## FOR MORE INFORMATION . . .

. . . on scholarships, competitions, and other TMS student activities: [www.tms.org/Students/students.aspx](http://www.tms.org/Students/students.aspx)

. . . on student events at the TMS 2012 Annual Meeting: [www.tms.org/tms2012](http://www.tms.org/tms2012)

. . . on anything related to your student membership through the Material Advantage Program:

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