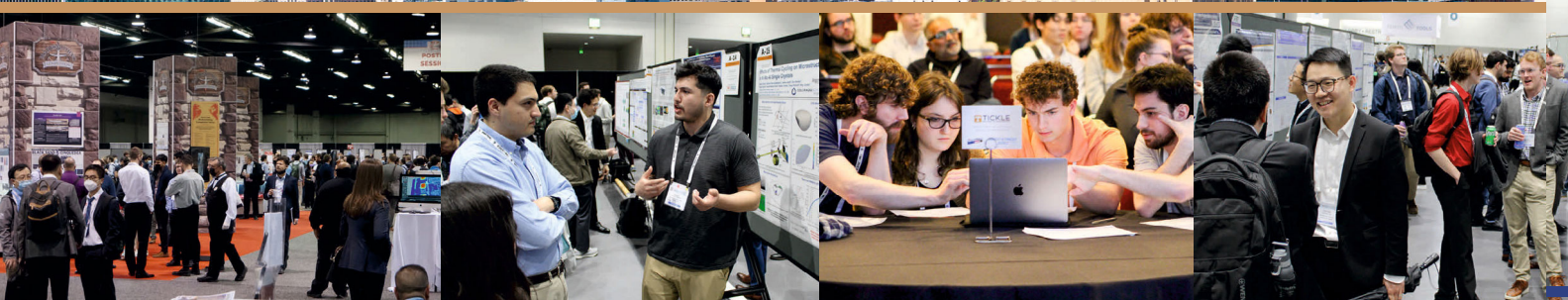


PREPARE FOR BLADESMITHING, MATERIALS BOWL, AND STUDENT POSTER COMPETITIONS AT TMS2024

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THE WORLD COMES HERE.
TMS2024
153rd Annual Meeting & Exhibition



Competitions are a vital part of the student experience at the TMS Annual Meeting & Exhibition. Preparing for and participating in these events can help students to learn about new topics, practice public speaking and networking skills, and attract the attention of professional TMS members.

The TMS 2024 Annual Meeting & Exhibition (TMS2024) is currently accepting applications for three competitions: the 2024 TMS Bladesmithing Competition, the 2024 TMS Materials Bowl, and the 2024 TMS Technical Division Student Poster Contest. All three events will be held at TMS2024, March 3–7 in Orlando, Florida.

Both undergraduate and graduate students are encouraged to work with classmates on a Bladesmithing entry, form a team to enter the Materials Bowl, or submit an abstract for the poster contest. You can learn more about all three competitions—and how to enter them—in this article. Entry forms and submission forms can be accessed through the Student Events section of www.tms.org/TMS2024.

Students participating in these competitions should also register for the conference at the discounted student rate and plan to join us in Orlando for TMS2024.

TMS BLADESMITHING COMPETITION



Examples of winning blades from the last TMS Bladesmithing Competition, held at TMS2022.

The TMS Bladesmithing Competition, held once every two years, is consistently one of the most popular events (among both students and professionals) at the TMS Annual Meeting. The competition challenges student teams from around the world to produce a blade by hand hammering or trip hammer forging and to document the development of their blade in a video, technical report, and poster. All of the finished blades will be on display in the TMS2024 Exhibit Hall for all meeting attendees to view.

This competition is a unique experience for students because it provides hands-on practice with concepts such as heat transfer, coke combustion, forging, welding, and quenching. Past competitions have resulted in impressive displays of swords, machetes, and knives of various shapes and sizes.

All team entries will be evaluated, and the winning blade will be awarded the TMS Wadsworth-Sherby Bladesmithing Grand Prize Medal, a commemorative volume of *Wadsworth-Sherby Collected Works on Damascus Steels & Related Topics*, and a \$2,000 cash prize. The second-place team will receive a \$500 cash prize; third place will receive \$250; and honorable mention will receive \$100. Additional citations may also be awarded in the categories of beauty, historical accuracy, creative use of materials, hands-on process, and resourcefulness, as well as for an outstanding report, poster, or video.



Team members from the Missouri University of Science and Technology accept the TMS Wadsworth-Sherby Grand Prize at the 2022 TMS Bladesmithing Competition.

“The judging rubric has been adjusted slightly this year to take some of the pressure off of the blade’s appearance and to emphasize creativity instead,” said Courtney Hammer, TMS Membership Programs Manager. “Some of the previous years’ entries were pretty elaborate, but if you’re new to Bladesmithing, please don’t let this intimidate you. This competition is less about complexity and appearance than it is about the science: why you choose particular materials, what temperatures you choose to heat them to, etc. The judges take all of these elements into account when they make their decisions.”

You can learn more about blade specifications, judging rubrics, and entry requirements at the www.tms.org/Bladesmithing website.

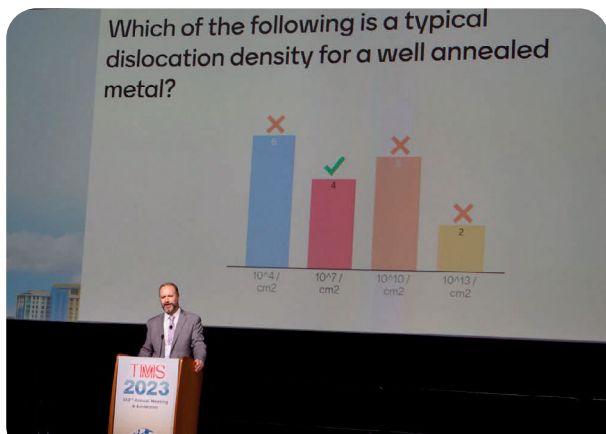
DEADLINE EXTENDED: ENTER THE TMS BLADESMITHING COMPETITION

The deadline to sign up for the 2024 TMS Bladesmithing Competition has been extended to **November 20**. To complete this step of the entry process, you will need the following items:

- **Acknowledgment Letter from Faculty Department Chair:** This signed, dated letter must include the faculty department chair’s name and contact information, a statement acknowledging that the student(s) team(s) intend to compete in the Bladesmithing Competition at TMS2024, the name of the team captain, and the names of the team members.
- **Team Information:** You’ll need to provide names and contact information for your team captain, faculty advisor, and team members.
- **Name for Your Blade:** Not sure yet what you want to title your entry? You can always enter a preliminary title for your blade now and update it later.

The entry form is available at www.tms.org/Bladesmithing.

2024 TMS MATERIALS BOWL



2023 TMS President Brad Boyce, host of the 2023 TMS Materials Bowl, reveals the results of a quiz question.

Each year, the TMS Materials Bowl brings students together for a fun event to kick off the first night of the TMS Annual Meeting. This fast-paced, materials-themed knowledge and trivia competition lets teams of students show off their knowledge of materials science and engineering—and of TMS—while competing for the title of Materials Bowl champion. In addition to gaining ownership of the Materials Bowl trophy, the winning team receives \$500 for their student chapter, along with \$250 for each member of the winning team. The second-place team receives \$500 for their student chapter.

Applications are currently being accepted for the 2024 TMS Materials Bowl, which will be held on Sunday, March 3, at TMS2024 in Orlando. Each team should consist of four students, with no more than one graduate student per team. The deadline to apply is February 2, 2024.

PREPARING FOR THE MATERIALS BOWL: ONE TEAM'S EXPERIENCE

At the TMS 2023 Annual Meeting & Exhibition in San Diego, California, Carnegie Mellon University (CMU) participated in its first TMS Materials Bowl, taking second place in the overall competition. Their team, the Titanium Tartans, consisted of members Chase Guida, Lukas Glist, Phylcia Ma, and Nicholas Lamprinakos. Guida, the team's captain, spoke with *JOM: The Magazine* about how his school assembled their four-person team and prepared for the competition.



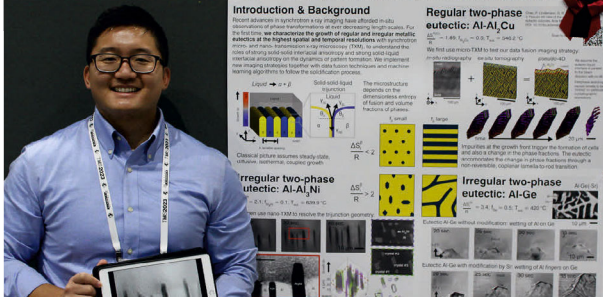
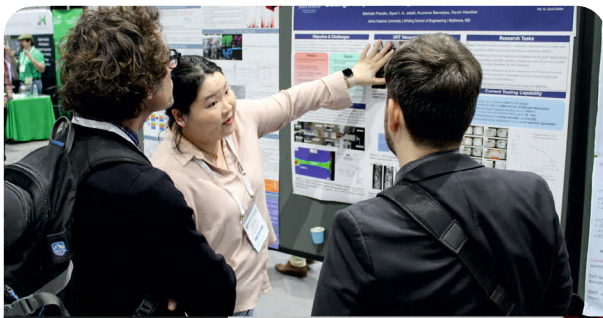
Carnegie Mellon University's Titanium Tartans team members, from left to right, Lukas Glist, Phylcia Ma, Chase Guida, and Nicholas Lamprinakos pose with 2023 TMS President Brad Boyce following the 2023 TMS Materials Bowl in San Diego.

"The secret to a great quiz bowl team is diversity, mainly in area of expertise," said Guida, who had prior experience leading a quiz-bowl team at his high school. Since all of the materials students at CMU were studying in the same program, however, their knowledge was all pretty similar. "Our professor made (in my opinion) a great call in separating our four attendees by year: one slot for a grad student, one for a junior or senior, one for a sophomore, and one to the best undergrad runner-up. I originally thought that limiting a whole slot to a sophomore would be detrimental, but I was wrong."

To fill these slots, they held a competition for anyone in the major who was interested. Professors posed questions on a number of different topics, and the top scorers from each category were invited to secondary rounds with their peers to determine who would represent the school in San Diego.

Once the team was assembled, Guida said they would have liked to hold practices, but the team members' busy schedules made it difficult. "We were relying on what we already learned, with the exception of the TMS trivia, which is a significant part of the competition," said Guida. "Our sophomore team member, Phylcia, learned all the TMS trivia, which helped us get every single TMS question correct. We undoubtedly would not have been on the podium without that."

2024 TECHNICAL DIVISION STUDENT POSTER CONTEST



2023 TMS Technical Division Poster Contest participants discuss their work during a poster session in the TMS2023 Exhibit Hall.

The 2024 Technical Division Student Poster Contest allows students to gain valuable recognition for their research. Posters are set up in a public display in the TMS2024 Exhibit Hall, where all attendees can view them, and presenters are invited to discuss their work with attendees during designated poster sessions that take place during exhibit receptions. It's a great way for students to gain visibility and recognition for their work.

When submitting poster entries, students will need to indicate which of the five TMS technical divisions most closely match their work: Extraction & Processing; Functional Materials; Light Metals; Materials Processing & Manufacturing; or Structural Materials. Up to ten awards will be given: one for an undergraduate poster and one for a graduate poster in each of the five divisions.

Please note that there are no cash prizes associated with the poster competition, but posters will be recognized publicly with a ribbon after the judging process is completed.

Poster abstracts can be submitted through the Student Events or Programming page at www.tms.org/TMS2024.

FUNDING YOUR TRIP TO TMS2024

Travel grants are available, both to student chapters and to individual students, to help offset the cost of travel to TMS2024. TMS offers each Material Advantage chapter an annual travel allowance of up to \$500 to attend the TMS Annual Meeting & Exhibition. In addition, a limited number of individual travel grants of up to \$500 each are available from the five TMS technical divisions. Individual grant applications are due November 15; chapter grant reimbursement requests must be submitted within two weeks following the meeting.

Learn more about applying for travel grants through the Student Events section of www.tms.org/TMS2024.

IMPORTANT DATES

November 20, 2023:
Bladesmithing Team Sign Up Deadline

January 10, 2024:
Technical Division Student Poster Contest Abstracts Due

January 14, 2024:
Bladesmithing Technical Report, Poster, Blade Photo, and Video Submission Deadline

February 2, 2024:
Materials Bowl Sign Ups Due

All competition entry/submission forms can be accessed through the Student Events page at www.tms.org/TMS2024.