

## COMING TOGETHER IN COLUMBUS FOR MS&T21

Kelly Zappas



After an out-of-the-ordinary year and a virtual meeting in 2020, the Materials Science & Technology (MS&T) Technical Meeting and Exhibition returns to a traditional in-person format in a traditional location for MS&T21. This 19th installment in the conference series will be held October 17–21 in Columbus, Ohio, making this the fourth time MS&T will be held in Ohio's state capital since 2011.

While the full conference experience—including networking and social activities—is designed primarily as an in-person event, the MS&T21 + On Demand registration option will give those who are unable to travel the chance to both present their work at the conference and view others' recorded presentations. The recordings will be available through November 30, 2021. More information on this option is available through the MS&T21 registration web page at [www.matscitech.org/MST21](http://www.matscitech.org/MST21).

### Three Meetings in One

MS&T21 will once again bring together members from TMS, The American Ceramic Society (ACerS), and the Association for Iron & Steel Technology (AIST) for an event that comprises three meetings in one: the TMS Fall Meeting, ACerS 123rd Annual Meeting, and the AIST Steel Properties & Applications event.



The overall conference technical program is developed by an MS&T21 Program Coordinating Committee, which is chaired this year by TMS representative Saryu Fensin, Los Alamos National Laboratory. The committee also includes ACerS Representative Taylor Sparks, University of Utah, and AIST Representative Daniel Baker, General Motors.

### IMPORTANT DATES TO REMEMBER:

**Housing Deadline:** September 23

**Meeting Dates:** October 17–21

**On-Demand Presentations Available Until:** November 30

Visit [www.matscitech.org/MST21](http://www.matscitech.org/MST21) for access and details.



Tresa Pollock

The MS&T21 technical program will feature 75 symposia in the following technical tracks:

- Additive Manufacturing
- Artificial Intelligence
- Biomaterials
- Ceramic and Glass Materials
- Electronic and Magnetic Materials
- Energy
- Fundamentals and Characterization
- Iron and Steel (Ferrous Alloys)
- Materials-Environment Interactions
- Modeling
- Nanomaterials
- Processing and Manufacturing
- Special Topics

Within this broader technical program, nearly 30 symposia in 11 topic areas will make up the TMS Fall Meeting at MS&T21. TMS's programming contributions explore the intersections of development, synthesis, and application and focus on topics of interest to TMS and its members.

For the most up-to-date information on technical programming plans, visit the Technical Program and TMS Fall Meeting sections of the MS&T21 website at [www.matscitech.org/MST21](http://www.matscitech.org/MST21).

## Tresa Pollock to Deliver TMS Plenary

Tresa Pollock will deliver the TMS plenary presentation as part of the MS&T21 plenary session on Tuesday morning, October 19. Pollock is Alcoa Professor of Materials at the University of California, Santa Barbara; a TMS Fellow; a former TMS President; and the current editor-in-chief of the *Metallurgical and Materials Transactions* family of journals published by TMS and ASM International

“Additive manufacturing promises a major transformation of the production of high economic value metallic materials, enabling innovative, geometrically complex designs with minimal material waste,” Pollock’s abstract reads. Her talk, “New Superalloys in the Co-Ni Design Space for 3D Printing,” will identify the overarching challenge to design alloys that are compatible with the unique additive processing conditions while maintaining material properties sufficient for the challenging environments encountered in energy, space, and nuclear applications.

Superalloys with approximately equal parts of nickel and cobalt offer new design pathways, enabling improved control of solidification and phase transformations that are critical to 3D printing, according to her abstract. The presentation will discuss the role of new experimental, computational, and data-centric design tools in discovering new alloys in this domain; the unique properties of Co-Ni alloys; and future challenges for the exploration of the Co-Ni design space.

Pollock will be joined at the MS&T21 plenary by speakers from AIST and ACerS. AIST’s presenter, Anil K. Sachdev of General Motors Global Research & Development, will discuss “Iron – The Ubiquitous Element.” The ACerS plenary speaker, Clive Randall, is the director of the Materials Research Institute at The Pennsylvania State University and will talk about “Turning Down the Heat in Sintering to Enable the Unification of all Materials.”

## THE EXHIBIT HALL IS BACK!



The return of an in-person MS&T also means the return of the Exhibit Hall! Attendees are welcome to browse products and services by a variety of companies on Monday, October 18, through Wednesday, October 20. All in-person attendees are invited to join their fellow attendees and exhibitors alike at the Exhibit Networking Reception on Tuesday, October 19. Visit the Exhibit page at [www.matscitech.org/MST21](http://www.matscitech.org/MST21) for exhibit hours and more details.



## New Diversity, Equity, and Inclusion Event Introduced

The first in a series of annual diversity, equity, and inclusion engagement events at MS&T is scheduled for Sunday, October 17, at MS&T21. The Wikipedia Edit-a-Thon for Diversity in Materials Science and Engineering is a collaborative event designed to increase the visibility of underrepresented scientists and engineers in the disciplines served by the MS&T partner societies.



Because the contributions of the broad diversity of materials scientists and engineers are often buried or overlooked on Wikipedia resources, attendees are invited to combat

these biases by helping to make the achievements of underrepresented materials scientists and engineers more readily discoverable.

Representatives from 500 Women Scientists, the organization that pioneered the concept of Wikipedia Edit-a-Thons to advance diversity, equity, and inclusion in STEMM (science, technology, engineering, math, and medicine), will lead a tutorial on Wikipedia as a useful tool and an editing demonstration. Facilitators will guide participants through their first edits at their own pace, using biographies, resources, and examples that will be provided as part of the workshop. Participants are encouraged to use these newfound skills to continue the work after the event has ended.

To participate, sign up in advance through the MS&T21 website to reserve your spot, and bring a charged laptop to the event. This program is co-organized by ACerS, AIST, and TMS, and the event organizing committee is chaired by Natasha Vermaak, Lehigh University and TMS Diversity, Equity, and Inclusion Committee chair.

## Planning for MS&T21 and Beyond

Registration and hotel reservations are now available through the MS&T21 website. TMS members are encouraged to book housing at the Hyatt Regency Columbus, the TMS headquarters hotel for MS&T21 and the site of various TMS networking and social activities. For the best rates, be sure to book through the MS&T21 website by September 23.



For more information, visit the Registration & Travel section of [www.matscitech.org/MST21](http://www.matscitech.org/MST21).

As preparations continue for the 2021 conference, plans are also moving forward for MS&T22, which is scheduled for October 9–13, 2022, in Pittsburgh, Pennsylvania. Symposium proposals have been collected for MS&T22, and the MS&T Program Coordinating Committee is currently working on finalizing program plans. MS&T22 will open its call for abstracts this fall.