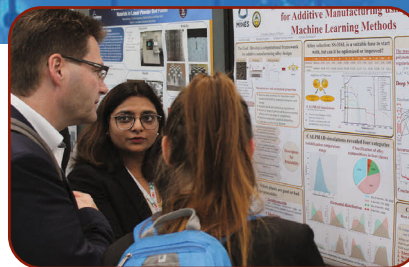


Celebrating the Return of the In-Person Annual Meeting at TMS2022



Kelly Zappas

TMS is an organization with a long and distinguished history, but it is also one that enables innovative partnerships among its members and provides a forum for developing emerging technologies.



After holding a fully virtual edition of the TMS Annual Meeting in 2021, TMS is pleased to convene our community in person once more with the TMS 2022 Annual Meeting & Exhibition (TMS2022), to be held February 27–March 3, 2022, at the Anaheim Convention Center and the Anaheim Marriott in Anaheim, California. This event will mark the comeback of our most popular meeting format, as well as a return to a host city that TMS has not visited since 1996.

TMS is an organization with a long and distinguished history, but it is also one that enables innovative partnerships among its members and provides a forum for developing emerging technologies. Nowhere is this blend of the classic and the innovative more clear than in the plans for TMS2022.

Classic: Meeting in Person. After last year's fully virtual annual meeting—necessitated by a global pandemic—TMS2022 is being planned primarily as an in-person event, offering a more conventional TMS annual meeting experience for attendees that includes networking events and social activities. TMS is committed to the well-being of its attendees and is taking steps to ensure that all health and safety recommendations are followed and additional services provided to help attendees feel comfortable during this transition back to in-person events.

Innovative: Adding a Virtual Option. Because meeting in person will still not be an option for some attendees, TMS2022 will also offer a virtual registration option. Virtual attendees will receive access to recorded on-demand presentations and the complete published conference proceedings from TMS2022, as well as select live-streamed featured sessions and a virtual poster session. This option results in a bonus benefit for in-person attendees, who will also receive access to on-demand presentations.

Classic: An Expansive Technical Program. More than 90 symposia are planned in 14 topic areas organized by the five TMS technical divisions and developed by TMS committees and volunteer members. Session hopping to sample all that TMS has to offer and to gain a broad overview of topics has always been encouraged.

Innovative: Live Streaming of Select Featured Sessions. To enhance the experience for virtual attendees, TMS will, for the first time, stream several selected keynote or featured sessions for remote participants to view in real time. Plans are still being finalized to determine which sessions will be live streamed and when; visit the TMS2022 website for updates.

Classic: Celebrating 150 Years of the TMS Annual Meeting. TMS celebrates its 150th Anniversary Year in 2021–2022, which will conclude with a selection of special features at TMS2022. These events recognize the long history of TMS and its parent organization, the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME), which was founded when it held its first meeting to share and discuss research in 1871.

Innovative: New Events and Activities. The TMS annual meeting has evolved significantly over the years, and it continues to grow and adapt in both big ways and small. This year's new events include a Sunday night opening reception and a Monday morning breakfast for attendees, as well as an updated Celebration Dinner to follow the TMS-AIME Awards Ceremony, to name a few.

No matter how you choose to participate—whether in-person or virtual—registration is now open for TMS2022. Discounted registration rates will be available through January 18, 2022. Visit www.tms.org/TMS2022 to register today.

TMS2022 Welcomes Co-Located Events

Three co-located events are planned as part of TMS2022, and all meeting registrants will have full access to the technical programming for these conferences.



The Fourth Summit on Diversity in the Minerals, Metals, and Materials Profession (DMMM4) will be co-located with TMS2022, March 2–3, with all programming included as part of TMS2022 registration. Participants will learn novel, actionable, and measurable approaches to improving diversity, equity, and inclusion (DEI) in the workplace and profession, while also gaining the skills, knowledge, and inspiration needed to implement them.

The event begins with the DMMM4 Preview and Networking Mixer on Tuesday evening, March 1. The next morning, participants can attend the Fresh Coffee, Fresh Ideas: Diversity and Inclusion Breakfast before programming begins with an interactive, opening keynote session. Concurrent sessions will take place on Wednesday afternoon and Thursday morning on the following topics:

- Career Development Tools and Strategies
- STEM Outreach Case Studies and Best Practices
- The Invisible Pipeline: Recruitment/Retention of Underrepresented Minorities
- Combating Biases in STEM

In addition to a selection of inspiring speakers, DMMM4 sessions will also feature small group activities and engaging, hands-on learning experiences.

On Thursday, the event ends with the DMMM4 Celebrate Diversity Luncheon at noon, followed by the closing plenary session, Engaging Those with Physical, Cognitive, or Sensory Challenges.

Visit www.tms.org/TMS2022/DMMM4 for more details.



No pyrometallurgical smelter can operate without some form of tapping system. It is the one thing all smelters have in common: a meeting point of science, technology, and skill. Furnace Tapping 2022 provides a forum to discuss topics related to this subject. This symposium will feature technical programming, a social event, and its own published conference proceedings, which are included in the TMS2022 registration fee. Learn more about this symposium at www.tms.org/TMS2022/FurnaceTapping.

Furnace Tapping 2022 is sponsored by TMS and The Southern African Institute of Mining and Metallurgy.

PubZone Networking Reception

Participants in both Furnace Tapping 2022 and REWAS 2022 are invited to meet up for a social evening at the **PubZone Networking Reception** on Monday, February 28, at a local Anaheim restaurant (location to be announced).



The 7th installment of the REWAS conference series will focus on Developing Tomorrow's Technical Cycles. This unique, transdisciplinary conference covers the latest technical and societal developments enabling sustainability within our global economy with a special focus on **Recycling** and **Waste** management. It will feature a plenary session, several technical symposia, a social event, and a two-volume proceedings publication.

Planned symposia within REWAS 2022 include:

- Diran Apelian Honorary Symposium
- Cast Shop Technologies: Recycling and Sustainability Session
- Sustainable Production and Development Perspectives
- Recovering the Unrecoverable
- Automation and Digitalization for Advanced Manufacturing
- Decarbonizing the Materials Industry

A detailed look at these symposia can be found at www.tms.org/TMS2022/REWAS.



Sumun L. Pendakur



Lawrence Fung

DMMM4 Keynotes

Opening Keynote

Date: Wednesday, March 2, 2022

Time: 8:30 a.m.

“The Marathon Mindset: DEI at the Core of Everything”
Sumun L. Pendakur, Diversity, Equity, and Inclusion Strategist

Closing Keynote

Date: Thursday, March 3, 2022

Time: 2:00 p.m.

“Maximizing the Potential of Neurodiversity in the Employment and Educational Settings”

Lawrence Fung, Director, Stanford Neurodiversity Project, Stanford University

Featured Sessions at TMS2022

Throughout the week at TMS2022, the Society will hold the following sessions and events to honor colleagues and hear from invited lecturers.



Honorary Symposia

Distinguished members of the TMS community will be honored at four symposia planned during TMS2022.

The TMS Light Metals Division (LMD) will honor **J. Wayne Jones**, professor emeritus at the University

of Michigan, at a symposium entitled, Failure, and a Career That is Anything But. Throughout his career, Jones has been a devoted teacher. Just as he has helped to develop alloy systems toward maturity, he has helped many generations of students and researchers to achieve academic maturity.

The LMD will also honor **Halvor Kvande**, professor emeritus at the Norwegian University of Science & Technology, with the session, Primary Aluminum Industry—Energy and Emission Reductions, part of the Aluminum Reduction Technology symposium. This session highlights both Kvande's contributions to the industry and improvements and challenges related to energy and emissions in primary aluminum production.

The TMS Structural Materials Division (SMD) is planning the symposium Seeing is Believing—Understanding Environmental Degradation and Mechanical Response Using Advanced Characterization Techniques to honor **Ian M. Robertson**, professor and dean of the College of Engineering at the University of Wisconsin-Madison.

Finally, Magnetics and the Critical Materials Challenge, sponsored by the TMS Functional Materials Division (FMD), will honor **Matthew J. Kramer**, who is division director for Materials Sciences and Engineering at Ames Laboratory. The symposium will cover all aspects of advanced synthesis and characterization of high-performance functional materials.

Luncheon Lectures at TMS2022

The TMS technical division luncheon events allow division members to network, honor outstanding members, and hear from an invited speaker selected by division leadership. Anyone can listen to the lecture portion of these events, but tickets are required to receive a lunch and can be purchased for \$40 through the registration form.



Kevin Hemker

Kevin Hemker will deliver the featured presentation at the SMD Luncheon on Monday, February 28. Hemker is the Alonzo G. Decker Chair and professor of mechanical

engineering at Johns Hopkins University, known for his work explaining the underlying, atomic-level details that govern the mechanical response, performance, and reliability of disparate material systems. He served as TMS president in 2018 and is a Fellow of the Society.



Paul E. Krajewski

Paul E. Krajewski, General Motors Global Research and Development Center, will headline the Extraction & Processing Division (EPD)/ Materials Processing & Manufacturing Division (MPMD) luncheon on Tuesday afternoon with his talk, "An Automotive View of Sustainability." As the automotive industry shifts to an electric and autonomous future, materials will be a key part of that transformation. This talk will establish the framework for thinking about sustainability from initial material production, through vehicle applications, and finally to post-vehicle use or re-use.



Markus A. Reuter

Award Lectures

The following award recipients will be honored with featured lectures at TMS2022:



David Dreisinger

David Dreisinger, University of British Columbia, will be the EPD Distinguished Lecturer. His presentation is titled, "Rare Earth and Critical Material Recovery from Peralkaline Volcanic Ores: Minerals Processing, Hydrometallurgy and Solvent Extraction Separation."

Anton Van der Ven, University of California, Santa Barbara, will deliver the William Hume-Rothery Award lecture, "Study of Ferroelectricity and Phase Transitions in Hafnia," as part of the Hume-Rothery Symposium on Connecting Macroscopic Materials Properties to Their Underlying Electronic Structure: The Role of Theory,



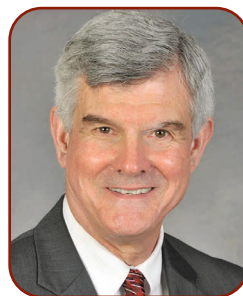
K. Lu

Computation, and Experiment. **K. Lu**, Chinese Academy of Sciences, will deliver the Institute of Metals/Robert Franklin Mehl Award lecture, “Schwarz Crystal Structures in Extremely Fine-Grained Metals,” as part of the Ultrafine-grained and Heterostructured Materials symposium.



Huajian Gao

Huajian Gao, Nanyang Technological University, and **George Pharr**, Texas A&M University, will be the William D. Nix Award Lecturers at TMS2022. Gao’s research has been focused on the understanding of basic principles that control mechanical properties and behaviors of materials in both engineering



George Pharr

and biological systems. Pharr will deliver the talk, “Nanoindentation—The Next Generation,” which will focus on new and emerging nanoindentation measurement tools and techniques.



Tao Sun

Tao Sun, University of Virginia, has been named 2022 Young Innovator in the Materials Science of Additive Manufacturing Award recipient. As part of his award, he will deliver the talk, “The Critical Roles of Keyhole in Laser Powder Bed Fusion,” during the Additive Manufacturing Keynote Session.

Exhibit and Networking Events

The TMS2022 Exhibit Hall will be open for three days: Monday, February 28, through Wednesday, March 2. During this time, all TMS2022 attendees are invited to browse displays and meet with exhibitors throughout the day and then join colleagues in the exhibit hall for social and networking events in the evenings.



Bladesmithing and Networking Opportunities

A highlight of the TMS2022 Exhibit will be the **2022 TMS Bladesmithing Competition**, a display of blades forged by student teams with behind-the-scenes videos showing how the entries were made. Attendees will have the chance to browse the display and competition winners will be announced at a special ceremony later in the week.

On Monday evening, attendees can celebrate the opening of the TMS2022 exhibit at the Exhibit Opening Reception and Poster Session. On Tuesday, the Exhibit Hall Happy Hour and Poster Session will draw attendees back to view new posters, speak with exhibitors, and interact with colleagues. Both events will feature appetizers, beverages,



and networking opportunities.

To learn more about which exhibitors you will meet and to view an interactive floor plan, visit www.tms.org/TMS2022/Exhibit. If you would like your company to be represented at TMS2022, please contact Gavin McAuliffe, TMS2022 Exhibit Manager, Corcoran Expositions, at gavin@corcexpo.com. Sponsorship opportunities are also available. Contact Mary Michalik, TMS2022 Sponsorship Manager, Corcoran Expositions, at mary@corcexpo.com.

Proceedings Publications

All virtual and full-conference registrants will receive electronic access to the complete published conference proceedings, which include the following volumes:

- *12th International Symposium on High-Temperature Metallurgical Processing*



- *Characterization of Minerals, Metals, and Materials 2022*
- *Furnace Tapping 2022*
- *Light Metals 2022*
- *Magnesium Technology 2022*
- *Metal-Matrix Composites: Advances in Processing, Characterization, Performance, and Analysis*
- *Rare Metal Technology 2022*
- *REWAS 2022: Developing Tomorrow's Technical Cycles (Volume I)*
- *REWAS 2022: Energy Technologies and CO₂ Management (Volume II)*
- *TMS2022 151st Annual Meeting & Exhibition Supplemental Proceedings*

Hard copy editions of these books will also be available for sale through the TMS Bookstore and onsite at TMS2022.

New Networking Events for 2022

For 2022, TMS will add two new all-conference networking events to the annual meeting. First, on Sunday evening, the conference will open with a Welcome Reception. Attendees can come together to socialize and share refreshments before technical programming begins on Monday. Plan to arrive early on Sunday, so that you'll have time to settle in, visit Registration to pick up your badge and meeting materials, and meet attendees you'll be seeing throughout the week at the welcome reception.

The next morning, attendees are invited to a Welcome Breakfast, prior to the start of technical programming. It's another chance to interact with your fellow attendees and start your morning off right.

Planning Your Travel

In 2022, the TMS Annual Meeting & Exhibition will return to Anaheim, California, for the first time since 1996. This southern California city is part of the Los Angeles metropolitan area and home to a number of theme parks, including Disneyland, making it an accessible location for travelers. To join your colleagues in Anaheim, begin your planning today at www.tms.org/TMS2022.

Book Housing

Deadline: February 11, 2022

Attendees are strongly encouraged to book hotel rooms through the TMS website to benefit both themselves and the conference. TMS reserves discounted rooms at hotels convenient to the convention center for meeting attendees. When attendees book rooms in these room blocks, they are supporting TMS and helping to offset the costs of the conference, while securing the best rates on rooms.

The Anaheim Marriott will serve as the headquarters hotel for TMS2022 and will be the location for committee meetings, social events like the TMS-AIME Awards Ceremony & Celebration Dinner, and other key meeting activities, including all of the DMMM4 programming and events. Book your room through the TMS2022 website for the best rate and stay where the meeting happens.

Apply for Family Care Grants

Deadline: January 18, 2022

The TMS Family Care Grant Program is designed to help individuals who are incurring extra family-care expenses (e.g., childcare, eldercare, or care of a family member with disabilities) as a result of attending TMS2022. The program can also apply to attendees who require personal assistance

at the meeting due to a disability.

A limited number of grants—up to \$500 each—will be available to help offset expenses. The deadline to submit an application is January 18, 2022, but grants are assigned on a first-come, first-served basis, so applicants are encouraged to apply early.

Register Today

Discounted Registration Deadline: January 18, 2022

Register for the conference and purchase tickets for any additional social and networking events by January 18, 2022, to receive the best rate on registration. Discounted rates are also available for current TMS members, so be sure to update your TMS membership before you register.

Make your plans today and join us—in person or virtually—at TMS2022.

