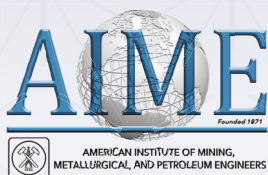


HONORING AND GUIDING OUR FUTURE LEADERS: MEET THE 2024 TMS YOUNG LEADERS

Kaitlin Calva



How do you identify a young leader? Of course, for leadership awards such as those offered to young professional TMS members, there are criteria such as age or years past receiving a terminal degree; membership and activity requirements; and a clear demonstration of one's accomplishments, to name a few. But what *really* makes a leader?

The TMS Young Leaders Professional Development Awards, International Scholar Awards, Early Career Faculty Fellow Awards, Frontiers of Materials Awards, and Young Innovator in the Materials Science of Additive Manufacturing Awards distinguish these early career TMS members not solely by their impressive technical successes. To receive one of these awards is an endorsement of one's potential to advance their organization or institution, TMS, and society at large. The experiences offered through these awards programs—like attending TMS committee or board meetings, organizing symposia, or traveling to partner society meetings around the world—are meant to guide these

individuals toward leadership roles in the future.

The individuals recognized in the following pages all displayed a growth mindset and have sought opportunities for collaboration and change. They desire to better themselves, through strengthening their non-technical skills or pushing their technical field forward, while also encouraging others to grow alongside them. They face challenges with optimism and enthusiasm and are prepared to work for a better future. They go beyond checking boxes and filling out an application. TMS and the TMS Foundation see the immense value in what these individuals can bring to our minerals, metals, and materials science and engineering community.

Each of the individuals noted in the following pages were presented with their awards at the TMS 2024 Annual Meeting & Exhibition (TMS2024), March 3–7, in Orlando, Florida, USA. Be sure to add these new colleagues to your professional network, and join us in congratulating the following recipients.



DONATE TO THE TMS FOUNDATION

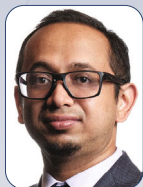
The TMS Foundation is dedicated to the development of the next generation of minerals, metals, and materials scientists and engineers. Without the generosity of our donors, the opportunities highlighted in this article for early career professionals would not be available.

To support this important work, visit www.TMSFoundation.org to learn more or make a donation. For questions or to discuss your donation personally, contact TMS Foundation staff at TMSFoundation@tms.org or 1-724-776-9000.

YOUNG LEADERS PROFESSIONAL DEVELOPMENT AWARDS

This award helps early career professionals participate more actively in TMS. Recipients receive funding to attend the TMS Annual Meeting & Exhibition, where they are invited to join in Society leadership activities.

Extraction & Processing Division (EPD)



Sougata Roy

Assistant Professor, Iowa State University

"TMS has played a major role in enhancing my knowledge and professional network in the fields of advanced material and manufacturing. I worked as both lead and co-organizer

for the Agile Additive Manufacturing by Employing Breakthrough Functionalities Symposium. It's great to see the wide range of technical experts from various scientific disciplines connected via the TMS Foundation and their contributions to science and engineering."



Matthew Zappulla

Scientist, Los Alamos National Laboratory

"I am grateful to the TMS EPD Nominations & Awards Committee for recognizing my work and for supporting the next generation of scientific leaders.

I am committed to using my leadership skills to inspire and mentor other young scientists. I am thankful for the support of my mentors, colleagues, and family, and I look forward to using this award to further my career and make a meaningful contribution to the materials science community."

Functional Materials Division (FMD)



Changhong Cao

Assistant Professor, McGill University

"TMS is a fantastic and welcoming community to be part of and it felt like going home every time I attended TMS events. It is a great honor and pleasure to receive this award, which is also a

great encouragement for early career researchers like myself to make continuous contributions to professional societies."



Ling Li

Associate Professor, Virginia Polytechnic Institute and State University

"Participating in TMS conferences has consistently been an exciting opportunity for me to delve into new research topics and engage with

experts from all over the world. I feel fortunate and appreciative of the generous support from the TMS community and I also look forward to contributing my efforts to further the ongoing growth of TMS."

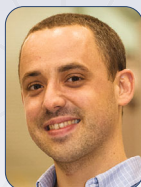


Steven Naleway

Associate Professor, University of Utah

"I have been attending TMS Annual Meetings since 2013 and began serving on the Biomaterials Committee in 2016. TMS and the connections that it has afforded me have been very helpful as I grow my academic career and I am excited about the new opportunities that this award will invite."

Light Metals Division (LMD)



Thomas Dorin

Senior Research Fellow, Deakin University

"This honor not only acknowledges my technical achievements but also provides an unparalleled opportunity for professional growth by facilitating active participation and networking within

the TMS community. I am deeply grateful for this recognition and excited about the prospects it offers for my future engagements in the domain."



Sridhar Niverty

Materials Scientist, Pacific Northwest National Laboratory

"TMS provides a fantastic platform for industry leaders, scientists, engineers, and students to discuss the latest R&D and collaboratively tackle materials

science challenges. I am excited to contribute in this role to promote greater inclusivity and participation and work towards the continued success of TMS."



Brian Zukas

Senior Smelting R&D Engineer, Alcoa Corp.

"As an engineer in the aluminum industry, TMS and the Light Metals Division have been an invaluable resource in my career. I am looking forward to

the opportunities this award offers to increase my engagement with and contributions to TMS."

Materials Processing & Manufacturing Division (MPMD)



Brady Butler
Materials Engineer, U.S. Army Research Laboratory, and Visiting Assistant Professor, Texas A&M University

"Over the years, TMS has provided me with resources to pursue my education, a forum to discuss my research, and the opportunity to collaborate and network with the finest professionals in my field. I am deeply honored and grateful to accept this award."



Arunima K. Singh
Assistant Professor, Arizona State University

"The opportunities this award offers to network with accomplished professionals, attend specialized workshops, and gain exposure to cutting-edge research are invaluable for my professional development. With unwavering enthusiasm, I look forward to contributing my skills and passion to the growth and prosperity of the materials science community."



Emma White
Senior Scientist, DECHEMA Research Institute

"Since my first meeting in 2011, TMS has provided critical, foundational support and opportunities for scientific advancement as I started and established my professional career in materials science. TMS has become my professional home society for inspiring and informative interactions at the leading edge of the materials science field. I am thrilled to have the chance to engage with leaders and be mentored by them as I become even more involved in TMS professional and technical activities and volunteerism through this award."

Structural Materials Division (SMD)



Anne Campbell
R&D Staff, Oak Ridge National Laboratory

"My involvement with TMS started in 2008 as a graduate student at my first professional conference and has continued to grow since then. I am looking forward to using this opportunity to expand my leadership potential within TMS and its functional and technical committees."



Grace X. Gu
Assistant Professor, University of California, Berkeley

"I am honored to receive this award and look forward to further engagement in TMS and the SMD. TMS has provided me with many opportunities to connect with other researchers in the field, participate in professional development activities, and form new collaborations. I am grateful to be a part of this amazing community."



Zachary Sims
Research Assistant Professor for Advanced Materials, University of Tennessee, Knoxville

"Since joining in 2015, TMS has been a place I could rely on to meet fellow materials professionals with whom I could establish positive relationships and together create world-changing innovation. Whatever comes next for me, I know TMS will continue to be a key factor in my success as a researcher and materials professional."

ARE YOU A YOUNG LEADER?

Are you an active TMS member who wants to learn more about how the Society works? Do you want to be more involved in planning TMS symposia, events, and other activities? Are you excited about preparing for and shaping the future of the minerals, metals, and materials science and engineering community? You might be a TMS Young Leader.

Recipients of the TMS Young Leaders Professional Development Awards and TMS Young Leader International Scholar Awards are innovative individuals who represent the future of the minerals, metals, and materials community. A common thread among these individuals is their dedication to advancing their professional careers and leadership skills, including being active as TMS volunteers and aiding in the facilitation of TMS strategic initiatives.

If you, or someone you know, fit these criteria, visit www.tms.org/Awards to learn more and apply. Applicants must be TMS members in good standing who are age 40 or younger. Awardees must also demonstrate a desire to play an active role in TMS and the potential to advance volunteer leadership roles within the Society.

The deadline to submit applications for the 2025 Young Leaders Awards is August 15, 2024.

TMS YOUNG LEADERS INTERNATIONAL SCHOLAR AWARDS

This award functions as an exchange program that provides early-career professionals with the opportunity to present their work at international conferences.

TMS Young Leaders International Scholar to the Japan Institute of Metals and Materials (JIMM)



Jessica Krogstad
Associate Professor of Materials Science and Engineering, University of Illinois Urbana-Champaign

"Over the years, TMS has been a constant source of inspiration and opportunities to expand my horizons both technically and personally. This is due, in large part, to the amazing people that make TMS the welcoming and intellectually stimulating society that it is. It is for these reasons that I am so humbled and excited to represent TMS at the upcoming JIMM meeting."

TMS Young Leaders International Scholar to the Korean Institute of Metals and Materials (KIM)



Anne Campbell
R&D Staff, Oak Ridge National Laboratory

"I am very honored to be selected as the inaugural recipient for the TMS Young Leaders International Scholar Program with the Korean Institute of Metals and Materials. The collaborations between researchers in the U.S. and South Korea will certainly lead to the deployment of advanced nuclear reactors that will help with world-wide reduction in carbon emissions. I will use this opportunity to support the continuation of current, and development of new, collaborations between the U.S. and South Korea for materials needs for future carbon-free energy sources."

JIMM AND KIM SCHOLARS SPEAK AT TMS2024

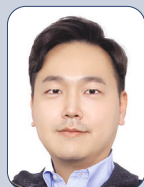
The following scholars, selected by JIMM and KIM, delivered presentations at the TMS 2024 Annual Meeting & Exhibition in Orlando as part of the Young Leaders International Scholar Award Program.

JIMM Young Leaders International Scholar to TMS



Asuka Suzuki
Nagoya University, Assistant Professor
Presentation: "Machine-Learning Approaches to Control the Microstructure and Properties of Laser Powder Bed Fused Metallic Components"

KIM Young Leaders International Scholar to TMS



Jahyun Koo
Korea University School of Biomedical Engineering, Assistant Professor
Presentation: "Electrochemically Controlled Drug Delivery Valve that Exploits Crevice Corrosion"

EARLY CAREER FACULTY FELLOW

This award recognizes assistant professors, invites them to make nontechnical presentations at the Emerging Professionals Tutorial Lecture at the TMS Annual Meeting & Exhibition, and asks them to program a symposium at the TMS Annual Meeting & Exhibition the year following the award presentation.



Diletta Giuntini
Assistant Professor, Eindhoven University of Technology

Presentation: "Merging Fields and Perspectives: Multidisciplinarity and Internationalization in Materials Science"

"TMS has been one of my very first professional homes, and I treasure every milestone that I was able to achieve thanks to their support. Being recognized with the Early Career Faculty Fellow Award is an immense honor. I will do my very best to continue contributing to this thriving international community of brilliant materials scientists and engineers."



Atieh Moridi
Assistant Professor, Cornell University

Presentation: "The Power of Instability: Non-Equilibrium Dynamics in Additive Manufacturing and Professional Development"

"I'm deeply grateful to the TMS Honors & Professional Recognition Committee for this remarkable honor. I'm indebted to the bright students I work with every day, as well as the nominators and mentors who have guided me along the way. I look forward to this journey of continued learning and collaboration within TMS."

FRONTIERS OF MATERIALS AWARD

Recipients of this award are selected to organize symposia on hot or emergent technical topics at the TMS Annual Meeting & Exhibition.



Pinar Acar

Assistant Professor, Virginia Polytechnic Institute and State University

Symposium: Physics-Informed Machine Learning for Modeling and Design of Materials and Manufacturing Processes

Keynote Presentation: "Inverse Design for Crystal Plasticity Model Identification via Physics-Informed Neural Networks"

"Thank you very much to TMS for this honor and opportunity of organizing a symposium. I am very much looking forward to the fruitful discussions we will have with the TMS community on this emerging and exciting field of materials research."



Takaaki Koyanagi

R&D Staff, Oak Ridge National Laboratory

Symposium: Novel Ceramics Processes for Nuclear Applications

Keynote Presentation: "Development of Next-Generation Silicon Carbide

Composites for Nuclear Energy"

"It is a great honor for me to receive the Frontiers of Materials Award. I would like to thank my co-workers and collaborators who helped my career. I am thrilled to organize a special symposium at TMS2024."

YOUNG INNOVATOR IN THE MATERIALS SCIENCE OF ADDITIVE MANUFACTURING AWARD

Recipients of this award are invited to deliver a talk at the Additive Manufacturing Keynote session held at the TMS Annual Meeting & Exhibition.



Minh-Son Pham

Senior Lecturer, Imperial College London

Presentation: "Meta-Crystals: Synergistic Combination of Materials Science and Additive Manufacturing"

"TMS has been my professional home where I learn and meet many brilliant minds who inspire me in pursuing research in materials science and advanced manufacturing. Being recognized through this award is a great honor. This award is a credit to the excellent works in physical metallurgy and additive manufacturing I have had with Ph.D. students and collaborators with whom I have had the privilege to work."

Kaitlin Calva is an independent contractor providing writing support for TMS and JOM: The Magazine.



Emerging Leaders Alliance

APPLY FOR THE 2024 EMERGING LEADERS ALLIANCE CONFERENCE

TMS is now accepting applications for the 2024 Emerging Leaders Alliance (ELA) Conference. This program provides interdisciplinary training for future leaders of the science and engineering community. TMS is one of eight partner societies supporting the ELA conference.

Each year, the TMS Foundation sponsors attendance for up to seven TMS members, typically between ages 24-40, with rising or current leadership positions within their organizations. To apply for one of the seats at the September 2024 conference, please send a letter of interest, one to two letters of recommendation, and a resume or CV of no more than five pages to Deborah Hixon, TMS Awards Program Manager, at hixon@tms.org.

The deadline to apply is May 15, 2024.

For a first-hand look from TMS members at the skills gained through this experience, read the February 2024 *JOM* article, "Not Your Average Training Program: TMS Members Go Above and Beyond at ELA Conference."