

ADVANCE PROGRAM

REGISTER BEFORE
SEPTEMBER 15, 2022 TO SAVE!

Technical Meeting and Exhibition

MS&T22

MATERIALS SCIENCE & TECHNOLOGY

DAVID L. LAWRENCE CONVENTION CENTER | PITTSBURGH, PA, USA

OCTOBER 9-12, 2022

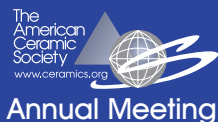
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Co-locating with

THE
Advanced Materials
SHOW USA

THE
NANOTECHNOLOGY
SHOW

WHERE MATERIALS INNOVATION HAPPENS

Featuring:



TMS FALL MEETING

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PLENARY SPEAKERS

Visit the MS&T Plenary Speakers web page to view the complete abstracts and bios.

ACERS EDWARD ORTON JR. MEMORIAL LECTURE



Sanjay Mathur

Director and Chair, Institute of Inorganic Chemistry,
University of Cologne, Germany

AIIST ADOLF MARTENS MEMORIAL STEEL LECTURE



Matthias Militzer

ArcelorMittal Dofasco Chair in Advanced Steel
Processing, University of British Columbia

TMS DISTINGUISHED LECTURESHIP IN MATERIALS AND SOCIETY



Iver E. Anderson

Senior Metallurgist, Division of Materials Sciences
and Engineering, Ames Laboratory (USDOE)
and Adjunct Professor, Materials Science and
Engineering Department, Iowa State University



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PROGRAM AT A GLANCE

Materials Science & Technology (MS&T) is where materials innovation happens! Each year, MS&T's long-standing, recognized forum brings together scientists, engineers, students, suppliers, and business leaders to discuss current research and technical applications to shape the future of materials science and technology.

The event's unmatched technical program fosters technical innovation at the intersection of materials science, engineering, and application—addressing structure, properties, processing, and performance across the materials community.

Join other materials science experts from three leading materials societies to discuss the latest advancements in your field. MS&T22 features the following events:

ACERS 124TH ANNUAL MEETING

Advancing the industry with the latest research in ceramics and glass

AIST STEEL PROPERTIES AND APPLICATIONS

Technical developments related to ferrous metallurgy and the steelmaking process

TMS FALL MEETING

Exploring the intersections of development, synthesis, and application

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COVID-19 STATEMENT

MS&T, The Advanced Materials Show USA, The Nanotechnology Show and the Partner Associations (ACerS, AIST, Event Partners and TMS), working in partnership with the MS&T22, The Advanced Materials Show USA and The Nanotechnology Show venues, are complying with guidance from the Centers for Disease Control and relevant state and local authorities in an effort to provide a safe and healthy environment for attendees during the ongoing COVID-19 pandemic. However, COVID-19 is an extremely contagious disease and it is not possible to eliminate the risk of spreading or contracting COVID-19.

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LECTURES AND AWARDS

Visit the MS&T Special Lectures web page to see all lectures and awards, including dates and times.

MONDAY, OCT. 10 9–10 A.M.

ACERS/EPDC ARTHUR L. FRIEDBERG CERAMIC ENGINEERING TUTORIAL AND LECTURE

Lisa Klein, Rutgers University, USA

MONDAY, OCT. 10 2– 4:40 P.M.

ACERS RICHARD M. FULRATH AWARD SESSION

Jacob Jones, North Carolina State University, USA

Tobias Schaedler, HRL Laboratories, LLC, USA

Takuya Hoshina, Tokyo Institute of Technology, Japan

Shoichiro Suzuki, Murata Manufacturing Co., Ltd., Japan

Masatake Takahashi, NEC Corporation, Japan

TUESDAY, OCT. 11 8–10:40 A.M.

ACERS ALFRED R. COOPER AWARD SESSION

2022 Cooper Distinguished Lecture

Liping Huang, Rensselaer Polytechnic Institute, USA

2022 Alfred R. Cooper Young Scholar Award Presentation

Winners will be announced after selection by the Cooper Award Committee

TUESDAY, OCT. 11 1–2 P.M.

ACERS FRONTIERS OF SCIENCE AND SOCIETY — RUSTUM ROY LECTURE

Yury Gogotsi, Drexel University, USA

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LECTURES AND AWARDS (CONT.)

TUESDAY, OCT. 11 2–4:40 P.M.

MS&T22 PLENARY SESSION

ACERS Edward Orton, Jr. Memorial Lecture

Sanjay Mathur, Director and Chair, Institute of Inorganic Chemistry, University of Cologne, Germany

Topic to be announced

AIST Adolf Martens Memorial Steel Lecture

Matthias Militzer, ArcelorMittal Dofasco Chair in Advanced Steel Processing, University of British Columbia

Microstructure Engineering of High-Performance Steels

TMS Distinguished Lectureship in Materials and Society

Iver E. Anderson, Senior Metallurgist, Division of Materials Sciences and Engineering, Ames Laboratory (USDOE) and Adjunct Professor, Materials Science and Engineering Department, Iowa State University

Materials Research on Clean Energy: For the Sake of Our Grandchildren

WEDNESDAY, OCT. 12 1–2 P.M.

ACERS BASIC SCIENCE DIVISION ROBERT B. SOSMAN LECTURE

William Fahrenholtz, Missouri University of Science & Technology, USA

Ultra-High Temperature Ceramic Research at Missouri S&T

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TECHNICAL PROGRAM

Visit the MS&T Technical Program web page to view the complete technical program and topics.

- ➔ ADDITIVE MANUFACTURING
- ➔ ARTIFICIAL INTELLIGENCE
- ➔ BIOMATERIALS
- ➔ CERAMIC AND GLASS MATERIALS
- ➔ EDUCATION
- ➔ FUNDAMENTALS AND CHARACTERIZATION
- ➔ IRON AND STEEL (FERROUS ALLOYS)
- ➔ LIGHTWEIGHT ALLOYS
- ➔ MATERIALS-ENVIRONMENT INTERACTIONS
- ➔ MODELING
- ➔ NANOMATERIALS
- ➔ NUCLEAR ENERGY
- ➔ PROCESSING AND MANUFACTURING
- ➔ SUSTAINABILITY, ENERGY, AND THE ENVIRONMENT
- ➔ SPECIAL TOPICS

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SPECIAL EVENTS

Visit the MS&T22 website to view more details on workshops and social and networking events.

SUNDAY, OCT. 9 1–5:30 P.M.

TMS ADDITIVE MANUFACTURING MATERIALS AND PROCESSES WORKSHOP

SUNDAY, OCT. 9 6–9 P.M.

LIFT & THERMO-CALC 'ICME FOR CERAMICS' KICK-OFF EVENT AT MS&T22

SUNDAY, OCT. 9 5–6 P.M.

MS&T WOMEN IN MATERIALS SCIENCE RECEPTION

MONDAY, OCT. 10 1–2 P.M.

ACERs 124TH ANNUAL MEMBERSHIP MEETING

MONDAY, OCT. 10 4–5 P.M.

IMPROVE YOUR NETWORKING SKILLS EVENT BY TMS

MONDAY, OCT. 10 6–8 P.M.

WELCOME AND GENERAL POSTER RECEPTION HOSTED BY THE MS&T PARTNERS

MONDAY, OCT. 10 6–8 P.M.

AIST STEEL TO STUDENTS RECRUITING RECEPTION

MONDAY, OCT. 10 7:30–10 P.M.

ACERs ANNUAL HONOR AND AWARDS BANQUET

MONDAY OCT. 10 – WEDNESDAY, OCT. 12
VARIOUS HOURS

ACERs BASIC SCIENCE DIVISION CERAMOGRAPHIC EXHIBIT & COMPETITION

TUESDAY, OCT. 11 NOON–2 P.M.

TMS EMERGING PROFESSIONALS TUTORIAL LUNCHEON & LECTURE

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STUDENT ACTIVITIES

Visit the MS&T Student Activities web page to see complete descriptions of all student events, including details for applying for Material Advantage chapter grants and individual travel grants.

- ➔ UNDERGRADUATE STUDENT POSTER CONTEST
- ➔ GRADUATE STUDENT POSTER CONTEST
- ➔ UNDERGRADUATE STUDENT SPEAKING CONTEST
- ➔ STUDENT NETWORKING MIXER
- ➔ ACeRS STUDENT TOUR
- ➔ CERAMIC MUG DROP CONTEST
- ➔ CERAMIC DISC GOLF CONTEST
- ➔ PROFESSIONAL HEADSHOT PHOTOS
- ➔ STUDENT AWARDS CEREMONY
- ➔ AIST STUDENT PLANT TOUR
- ➔ AIST STEEL TO STUDENTS RECRUITING RECEPTION
- ➔ STUDENT SOCIAL MEDIA CONTEST

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HOTELS

Hotel Reservation Deadline: **September 15, 2022**

For best availability and immediate confirmation, make your reservations online at matscitech.org/mst22.

OMNI WILLIAM PENN (ACerS Headquarters)	\$229.00 + tax
WESTIN CONVENTION CENTER (AIST & TMS Headquarters)	\$235.00 + tax
DRURY PLAZA HOTEL PITTSBURGH DOWNTOWN	\$189.00 + tax

Rates listed above are for single or double occupancy.

Ways to Book Hotel Reservations

Online: <https://book.passkey.com/go/MST2022> for new reservation OR to modify or cancel an existing hotel reservation.

Telephone: Agents available 9:00 a.m. to 4:00 p.m. Mountain Time, Monday through Friday

Toll-free (US): 800-219-6547
International: +1 385-766-1657

U.S. Government Rate

Rooms are extremely limited; proof of federal government employment must be shown at check-in or higher rate will be charged. U.S. Government rate is the prevailing government rate.

Credit Card Deposit: All reservation requests must be accompanied by a credit card guarantee for a deposit of one night's room and tax for each room reserved. Your credit card WILL NOT BE CHARGED during this initial stage and will be held as a GUARANTEE only.

Acknowledgments: Orchid Events will send reservation acknowledgements within 24 hours via email if booked online or by telephone. If you do not receive your acknowledgement in this time frame, contact Orchid Events. You will not receive a written confirmation from the hotel.

Cancellations & Changes: Any reservation cancelled within 72 hours of arrival date will be charged one night's room and tax. Please refer to your reservation acknowledgement for your individual hotel cancellation policy.

Through September 29, 2022, changes and cancellations can be made online or by contacting Orchid Events via e-mail at help@orchid.events. After September 29, 2022, contact your hotel to make changes and/or cancellations.

Questions or Special Requests? For questions or special requests, please contact Orchid Events at 800-219-6547 or e-mail to help@orchid.events. Special requests are not guaranteed. Hotels will assign specific room types upon check-in, based on availability.

Hotel Suites If you are interested in booking a hotel suite, please email help@orchid.events. There are a limited number available at a discounted rate for MS&T attendees.

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OCTOBER 11-12, 2022 EXPO DATES

EXHIBITION

This year MS&T is co-locating with the world-class, free-to-attend exhibitions: The Advanced Materials Show and The Nanotechnology Show. Showcasing companies at the forefront of the advanced materials and nanotechnology industry and featuring exhibitors who are established end users, global manufacturers, and pioneering innovators. Alongside the prestigious MS&T conference, the exhibition hall will feature a free 2-track conference where renowned industry leaders will discuss ideas and insights on the latest commercial and technology developments in the advanced material and nanotechnology sectors.

Other attractions include mug drop competitions, a ceramics disc golf competition and an exhibitor networking reception.



EXHIBIT SHOW HOURS

TUESDAY, OCTOBER 11, 2022

Show Hours	9 a.m.–6 p.m.
Exhibitor Networking Reception	4 p.m.–6 p.m.

WEDNESDAY, OCTOBER 12, 2022

Show Hours	9 a.m.–5 p.m.
Exhibitor Move-Out	5:30 p.m.–10 p.m.

*Times are tentative and subject to change

For additional information about exhibiting, sponsoring or advertising at MS&T, The Advanced Materials Show and The Nanotechnology Show, visit the Exhibits web page www.matscitech.org/MST22 or contact:

Zak Towner, The Advanced Materials Show, Event Sales Director
+44 (0) 1273 286398
mailto: zak.towner@event-partners.org

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Spaces are filling up fast!



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REGISTRATION

Visit the Registration page to see what your registration includes.

Rates	On or before	After
	Sept. 15, 2022	Sept. 15, 2022
Member	\$660	\$810
Nonmember	\$810	\$960
Undergraduate Student Member	\$25	\$75
Undergraduate Student Nonmember	\$25	\$75
Graduate Student Member	\$135	\$185
Graduate Student Nonmember	\$165	\$215
One-Day	\$685	\$835
Expo Visitor	\$0	\$0

MS&T conference registration includes access to the MS&T Technical Meeting & MS&T Exhibit Featuring The Advanced Materials Show USA and The Nanotechnology Show.

Expo Visitor registration includes access to the MS&T Exhibit Featuring The Advanced Materials Show USA and The Nanotechnology Show. For more information visit their websites: nanotechnologyshow.com and advancedmaterialsshowusa.com

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