

ADVANCE PROGRAM

REGISTER BEFORE
SEPTEMBER 2, 2021 TO SAVE!

Technical Meeting and Exhibition

MST21

#MST21

MATERIALS SCIENCE & TECHNOLOGY

OCTOBER 17 – 21, 2021

GREATER COLUMBUS CONVENTION CENTER | COLUMBUS, OH, USA

WHERE MATERIALS INNOVATION HAPPENS

Featuring:



TMS FALL MEETING

MATSCITECH.ORG/MST21

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PLENARY SPEAKERS

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

AIST ADOLF MARTENS MEMORIAL STEEL LECTURE



Anil K. Sachdev

Principal Technical Fellow and Lab Group Manager at GM
Global Research and Development

TMS PLENARY SPEAKER



Tresa Pollock

Alcoa Professor of Materials at the University of California,
Santa Barbara

ACERS EDWARD ORTON JR. MEMORIAL LECTURE



Clive Randall

Director of Materials Research Institute at The
Pennsylvania 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&T21 features the following events:

AIST STEEL PROPERTIES AND APPLICATIONS

Technical developments related to ferrous metallurgy and the steelmaking process

ACERS 123RD ANNUAL MEETING

Advancing the industry with the latest research in ceramics and glass

TMS FALL MEETING

Exploring the intersections of development, synthesis, and application

COVID-19 UPDATE

MS&T and the Partner Associations (ACerS, AIST, and TMS), working in partnership with the MS&T21 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 MS&T21 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. An inherent risk of exposure to COVID-19 exists in any public place where people are present, and efforts to mitigate the risk of exposure to COVID-19 may not be sufficient to prevent spreading or contracting COVID-19.



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LECTURES AND AWARDS

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

MONDAY, OCT. 18 8:10–8:55 A.M.

THE NAVROTSKY AWARD FOR EXPERIMENTAL THERMODYNAMICS OF SOLIDS

MONDAY, OCT. 18 9–10 A.M.

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

Elizabeth Opila, University of Virginia, USA

MONDAY, OCT. 18 2–4:40 P.M.

ACERs RICHARD M. FULRATH AWARD SESSION

Surojit Gupta, University of North Dakota, USA

Elizabeth Paisley, Sandia National Laboratory, USA

Tsuyoshi Honma, Nagaoka University of Technology, Japan

Kenichi Okazaki, Semiconductor Energy Laboratory, Japan

Hirokazu Sasaki, Shoei Chemical, Inc., Japan

TUESDAY, OCT. 19 1–2 P.M.

ACERs FRONTIERS OF SCIENCE AND SOCIETY — RUSTUM ROY LECTURE

Alexander Michaelis, Fraunhofer Institute for Ceramic Technologies & Systems IKTS, Germany

Advanced Ceramics for Energy and Environmental Technology

TUESDAY, OCT. 19 2–4:40 P.M.

ACERs GOMD ALFRED R. COOPER AWARD SESSION COOPER DISTINGUISHED LECTURE

ACERs GOMD ALFRED R. COOPER YOUNG SCHOLAR AWARD PRESENTATION

Winners will be announced after selection by the Cooper Award Committee

WEDNESDAY, OCT. 20 1–2 P.M.

ACERs BASIC SCIENCE DIVISION ROBERT B. SOSMAN LECTURE

Wayne Kaplan, Israel Institute of Technology, Israel

Combining Atomistic and Continuum Approaches to Interfaces

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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
- ELECTRONIC AND MAGNETIC MATERIALS
- ENERGY
- FUNDAMENTALS AND CHARACTERIZATION
- IRON AND STEEL (FERROUS ALLOYS)
- MATERIALS-ENVIRONMENT INTERACTIONS
- MODELING
- NANOMATERIALS
- PROCESSING AND MANUFACTURING
- SPECIAL TOPICS

SPECIAL EVENTS

Visit the MS&T Special Events web page to see all special events, including dates and times

SUNDAY, OCT. 17 3–5 P.M.

WIKIPEDIA EDIT-A-THON FOR DIVERSITY IN MATERIALS SCIENCE AND ENGINEERING

SUNDAY, OCT. 17 5–6 P.M.

MS&T WOMEN IN MATERIALS SCIENCE RECEPTION

MONDAY, OCT. 18 1–2 P.M.

ACERs 123RD ANNUAL MEMBERSHIP MEETING

MONDAY, OCT. 18 5–6 P.M.

WELCOME RECEPTION HOSTED BY THE MS&T PARTNERS

MONDAY, OCT. 18 6–8 P.M.

AIST STEEL TO STUDENTS

MONDAY, OCT. 18 7:30–10 P.M.

ACERs ANNUAL HONOR AND AWARDS BANQUET

MONDAY OCT. 18–THURSDAY OCT. 21
VARIOUS HOURS

ACERs BASIC SCIENCE DIVISION CERAMOGRAPHIC EXHIBIT & COMPETITION

TUESDAY, OCT. 19 VARIOUS HOURS

GENERAL POSTER SESSION WITH PRESENTERS

TUESDAY, OCT. 19 NOON–2 P.M.

TMS YOUNG PROFESSIONAL TUTORIAL LUNCHEON & LECTURE

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LATE NEWS POSTER SESSION

Want to share your latest research at MS&T? Submit an abstract for the Late News Poster Session! Deadline has been extended to August 2nd, 2021. Posters can cover any of the technical topic areas listed on page 5. Submit abstracts at programmaster.org/MST21.

Questions? Contact programming@programmaster.org.

STUDENT ACTIVITIES

Visit the MS&T Student Activities web page to see complete description 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**
- **ACerS PCSA HUMANITARIAN PITCH COMPETITION**
- **CERAMIC MUG DROP CONTEST**
- **CERAMIC DISC GOLF CONTEST**
- **CAREER FAIR**
- **STUDENT AWARDS CEREMONY**
- **AIST STUDENT PLANT TOUR**
- **AIST STEEL TO STUDENTS RECRUITING RECEPTION**

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EXHIBITION

Meet and network with representatives from companies specializing in materials science and engineering related products and services. Attractions on the show floor include poster sessions, mug drop competition, ceramic disc golf competition and an exhibitor networking reception.

EXHIBIT SHOW HOURS

TUESDAY, OCTOBER 19, 2021

Show Hours 10 A.M.–6 P.M.

Exhibitor networking reception: 4–6 P.M.

WEDNESDAY, OCTOBER 20, 2021

Show Hours 9:30 A.M.–2 P.M.

For additional information about exhibiting, sponsoring or advertising at MS&T21 visit the Exhibits web page at matsitech.org/MST21 or, email sales@matscitech.org, or call:

Mona Thiel, ACerS
+1.614.794.5834

Stacy Varmecky, AIST
+1.724.814.3066

Vicki Dean, AIST
+1.724.814.3018

Trudi Dunlap, TMS
+1.724.814.3174

RESERVE YOUR BOOTH TODAY!



HOTELS

Hotel Reservation Deadline:

September 23, 2021

For best availability and immediate confirmation, make your reservations online at matscitech.org/mst21.

HILTON COLUMBUS (ACerS Headquarters)
\$210 USD + tax

HYATT REGENCY COLUMBUS
(AIST & TMS Headquarters)
\$210 USD + tax

RED ROOF INN
\$169 USD + tax

DRURY INN & SUITES CONVENTION CENTER
\$179 USD + tax

Rates listed above are for single or double occupancy.

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.

Cancellation

Reservations cancelled less than 72 hours prior to 12 p.m. EDT of scheduled arrival date will be charged one night's rate and tax.

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REGISTRATION

Visit the Registration page to see what your registration includes.

Rates	On or before	After
	Sept. 2, 2021	Sept. 2, 2021
Member	\$660	\$810
Nonmember	\$810	\$960
Participant (Speaker, Organizer, Session, Chair) Member	\$610	\$760
Participant (Speaker, Organizer, Session, Chair) Non-member	\$760	\$910
Undergraduate Student Member	\$25	\$75
Undergraduate Student Non-member	\$25	\$75
Graduate Student-Presenter-member	\$110	\$160
Graduate Student-Member	\$135	\$185
Graduate Student-Presenter-Non-member	\$140	\$190
Graduate Student Non-member	\$165	\$215
One-Day Member	\$535	\$685
One-Day Non-member	\$685	\$835
Exhibit Only	\$25	\$25
On Demand (virtual) Presenter Member	\$610	\$610
On Demand (virtual) Presenter Non-member	\$760	\$760
On Demand (virtual) Graduate Student Presenter Member	\$110	\$110
On Demand (virtual) Graduate Student Presenter Non-member	\$140	\$140

Please note that this year, MS&T is offering two options for registration:

- **MS&T21 Full-Conference Registration:** This option is for attendees who wish to participate in the on-site meeting in Columbus, Ohio at face-to-face events. Registration includes access to technical presentations, exhibits, networking activities and social events. This registration rate also includes access to on-demand presentations.
- **MS&T21 + On Demand (Virtual On-Demand Participation):** This option is for those who are unable to travel to Columbus to participate in the in-person event but still wish to present their work at the conference and view others' presentations. Presentations will be available to view through November 30, 2021.

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