Technical Meeting and Exhibition

MSST20

MATERIALS SCIENCE & TECHNOLOGY

OCTOBER 4 - 8, 2020

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

WHERE MATERIALS INNOVATION HAPPENS

Organizers:







MATSCITECH.ORG/MST20



PLENARY SPEAKERS

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

AIST ADOLF MARTENS MEMORIAL STEEL LECTURE

Nina Fonstein manager (retired), Automotive Product Development Group, Global R&D, ArcelorMittal, USA



TMS/ASM JOINT DISTINGUISHED LECTURESHIP IN MATERIALS AND SOCIETY



ACERS EDWARD ORTON JR. MEMORIAL LECTURE



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&T20 features the following events:

AIST STEEL PROPERTIES AND APPLICATIONS—

Technical developments related to ferrous metallurgy and steel manufacturing

ACERS 122ND 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

Your safety and well-being are our top priority! At this time, we are moving forward with MS&T20 as scheduled. The MS&T organizing societies are monitoring news and information related to COVID-19 on an ongoing basis and will follow guidance from the U.S. Centers for Disease Control and Prevention, the World Health Organization, and federal, state, and local governments. If plans should change, we will provide updates through the MS&T20 website and by e-mail to registrants, exhibitors, presenters, and other confirmed participants.

ADVANCE PROGRAM

REGISTER BEFORE SEPTEMBER 3, 2020 TO SAVE!







LECTURES AND AWARDS

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

Monday, Oct. 5 9 – 10 a.m.

John R. Hellmann, Pennsylvania State University, USA

ACERS RICHARD M. FULRATH AWARD SESSION

Monday, Oct. 5

2 - 4:40 p.m.

Shashank Priya, Pennsylvania State University, USA

Tomoaki Yamada, Nagoya University, Japan

Takeshi Kobayashi, National Institute of Advanced Industrial Science and Technology, Japan

Hiroshi Sato, TDK Electronics GmbH & Co OG, Japan

Edward P. Gorzkowski III, U.S. Navy Research Lab, USA

ACERS FRONTIERS OF SCIENCE AND SOCIETY— RUSTUM ROY LECTURE

Tuesday, Oct. 6 1 – 2 p.m.

James Adair, Pennsylvania State University, USA

ACERS GOMD ALFRED R. COOPER AWARD SESSION COOPER DISTINGUISHED LECTURE

Tuesday, Oct. 6 2 – 4:30 p.m.

John Kieffer, University of Michigan, USA

ACERS GOMD ALFRED R. COOPER YOUNG SCHOLAR AWARD PRESENTATION

Winners will be announced after selection by the Cooper Award Committee

ACERS BASIC SCIENCE DIVISION ROBERT B. SOSMAN LECTURE

Wednesday, Oct. 7 1-2 p.m.

Wayne Kaplan, Technion - Israel Institute of Technology, Israel

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.

- MS&T WOMEN IN MATERIALS SCIENCE RECEPTION Sunday, Oct. 4 5 – 6 p.m.
- ACERS 122ND ANNUAL MEMBERSHIP MEETING
 Monday, Oct. 5
 1 2 p.m.
- MS&T PARTNERS' WELCOME RECEPTION Monday, Oct. 5 5 – 6 p.m.
- AIST STEEL TO STUDENTS RECEPTION Monday, Oct. 5 6 – 8 p.m.
- ACERS ANNUAL HONOR AND AWARDS BANQUET Monday, Oct. 5 7:30 – 10 p.m.
- ACERS BASIC SCIENCE DIVISION CERAMOGRAPHIC EXHIBIT & COMPETITION
 - Monday, Oct. 5 Thursday, Oct. 8 various hours
- GENERAL POSTER SESSION WITH PRESENTERS
 Tuesday, Oct. 6 various hours
- TMS YOUNG PROFESSIONAL TUTORIAL LUNCHEON & LECTURE

Tuesday, Oct. 6 Noon – 12:45 p.m.

LATE NEWS POSTER SESSION

Want to share your latest research at MS&T? Submit an abstract for the Late News Poster Session! Topics can include any of those listed. Submit abstracts at programmaster.org/MST20.

Questions? Contact programming@programmaster.org. Abstracts due: **AUGUST 31, 2020**



ADVANCE PROGRAM

REGISTER BEFORE SEPTEMBER 3, 2020 TO SAVE!







SHORT COURSES

View the MS&T Short Course web page for dates, times.

SINTERING OF CERAMICS

Saturday, Oct. 3 9 a.m. – 4:30 p.m. Sunday, Oct. 4 9 a.m – 2:30 p.m.

Instructor: Ricardo Castro, University of California, Davis

HOTELS

Visit the Housing web page for detailed information on hotels and visa information.

WESTIN PITTSBURGH

ACerS Headquarters Hotel

\$229 plus tax/night single or double

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 travel grants and individual travel grants.

- UNDERGRADUATE STUDENT POSTER CONTEST
- GRADUATE STUDENT POSTER CONTEST
- CHAPTER OFFICER WORKSHOP
- UNDERGRADUATE STUDENT SPEAKING CONTEST
- STUDENT NETWORKING HAPPY HOUR
- ACERS STUDENT TOUR
- AIST STUDENT PLANT TOUR
- ACERS PCSA HUMANITARIAN PITCH COMPETITION
- CERAMIC MUG DROP CONTEST
- CERAMIC DISC GOLF CONTEST
- CAREER FAIR
- STUDENT AWARDS CEREMONY



OMNI WILLIAM PENN HOTEL

AIST and TMS Headquarters Hotel

\$219 plus tax/night single or double



COURTYARD BY MARRIOTT PITTSBURGH

\$209 plus tax/night single or double

DRURY PLAZA HOTEL PITTSBURGH-DOWNTOWN

\$179 plus tax/night single or double

HAMPTON INN AND SUITES PITTSBURGH

\$199 plus tax/night single or double

EXHIBITION

Meet and network with reps 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, career fair, and an exhibitor networking reception.

EXHIBIT SHOW HOURS:

Tuesday, Oct. 6

10 a.m. – 6 p.m.

Exhibitor networking reception: 4-6 p.m.

Wednesday, Oct. 7

9:30 a.m. - 2 p.m.

Visit the Exhibits web page for rates on booth rental, sponsorship, advertising rates, plus more details on marketing your company at MS&T20.

RESERVE YOUR BOOTH TODAY!

Gavin McAuliffe, Exhibit Manager
Corcoran Expositions, Inc.
200 W. Adams St., Suite 1000
Chicago, IL 60606
gavin@corcexpo.com | 1-312-265-9649

REGISTRATION

Visit the Registration page to see what your registration includes.

Rates	On or before Sept. 3, 2020	After Sept. 3, 2020
Member	\$660	\$810
Nonmember	\$810	\$960
Presenter (Speaker, Organizer, Session Chair) Member Presenter (Speaker, Organizer, Session Chair) Nonmember ¹	\$610	\$760 \$910
Undergraduate Student Memb	er² \$25	\$75
Undergraduate Student Nonmember ^{2,3}	\$25	\$75
Graduate Student Presenter, Member ²	\$110	\$160
Graduate Student Member ²	\$135	\$185
Graduate Student Presenter, Nonmember ^{2,3}	\$140	\$190
Graduate Student Nonmember	· ^{2,3} \$165	\$215
One-Day Member	\$535	\$685
One-Day Nonmember	\$685	\$835
Exhibit Only	\$25	\$25
ACerS Awards Banquet	\$100	\$100
TMS Young Professional Tutor Lecture	ial \$40	\$40

¹Nonmember fee includes a complimentary one-year membership to registrant's choice of one or more organizations: ACerS, AIST, and/or TMS.

²To qualify for the student rate, registrant must provide student ID. Please be prepared to present a current school ID when picking up your badge on-site.

³Nonmember student fee includes a complimentary one-year membership in Material Advantage (the ACerS/AIST/ASM/TMS joint student program).