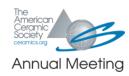


### WHERE MATERIALS INNOVATION HAPPENS

### **FEATURING:**









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# **2025 Chair and ACerS Representative**

Roger Narayan, North Carolina State University

### 2025 AIST Representative

Yash Injeti, Big River Steel

### **2025 TMS Representatives**

John Carpenter, Los Alamos National Laboratory Eric Lass, University of Tennessee, Knoxville

# UPCOMING MS&T SCHEDULE

Pittsburgh, Pennsylvania, USA October 4 – 7, 2026

Pittsburgh, Pennsylvania, USA October 24 – 27, 2027

Pittsburgh, Pennsylvania, USA October 22 – 25, 2028

### **TABLE OF CONTENTS**

Plenary Sessions	3
City Map	6
Conference Perks	8
Calendar of Events	9
Lectures	17
Special Events	18
Student Events	19
Upcoming Conferences	23
About the Organizers	25
Program at a Glance	26
Exhibit Directory	36
MS&T Anti-Harassment Policies	47

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### **PLENARY SESSIONS**



**DENGQI BAI**Principle Research Engineer,
SSAB Americas

# AIST Adolf Materns Memorial Steel Lecture

Microstructure Engineering for Advanced High-Strength Line Pipe Steels

Monday, September 29 8 – 9 a.m. GCCC, Short North Ballroom B

Line pipe steels are mostly used for oil and natural gas transmission pipelines. Due to high pressure and remote operating conditions, the requirements for mechanical properties of these steels are stringent. High operating pressure is necessary for high transmission efficiency. This calls for steel with high strength. Meanwhile, high toughness is also required for high-performance line pipe steels. Over the last 25 years, advanced high-strength line pipe steels with strength level as high as 120 ksi (827 MPa) have been developed to meet the demand. Similar to any other steel, microstructure is the key to producing the required mechanical properties. For different strength levels, microstructural constituents could be different. However, a fine grain structure is always desirable because grain refinement is the only microstructural parameter that contributes positively to both strength and toughness. Achieving a fine grain structure and appropriate microstructure for a given steel grade requires careful consideration in designing steel chemistry and thermomechanical processing. This presentation will discuss the concept of alloy design and the strategies for thermomechanical processing to achieve desirable mechanical properties for line pipe steels.

### **About Dengqi Bai**

Denggi Bai received his Ph.D. degree in Metallurgical Engineering from McGill University in 1995. He is a world-renowned physical metallurgist with expertise in steel plate products (especially line pipe, weathering, offshore, and ship building), and has made important contributions to understanding structure/property relationships in these products. In the line pipe area, he helped develop X80, X100, and X120. For the past 25 years, he has worked for SSAB (and the former IPSCO) in various research engineering positions. In these positions, he has had increasing responsibility for the development of as-rolled plate products. Since 2010, he has been very active mentoring students, including graduate students at the Colorado School of Mines, Missouri S&T, as well as SSAB Research co-ops and interns. Bai has been very active in AIST/ISS since he became a member in 1999. He helped organize international symposia at MS&T Conferences on Precipitation in Steels (2004) and High Strength Steels for Energy Applications (2012). He is the winner of the AIST Hunt-Kelly Award (2020), a two-time winner of AISI Medal Finalist Award (2022 and 2024), as well as a two-time winner of the Gilbert Speich Award for best paper on the application of physical metallurgy (2008 and 2018), and International Metallographic Society First Place Award (2015). He is the author of 64 publications, and he has two U.S. patents.





### **PLENARY SESSIONS**



TAYLOR D.
SPARKS
Professor of Materials Science &
Engineering, University of Utah

### **TMS Plenary Lecture**

Making Materials Science Go Viral!

Monday, September 29 2 – 3 p.m. GCCC, Short North Ballroom B

Materials science is everywhere: in the frames of our bikes, the chips in our phones, and the engines of our vehicles. But too often, the field remains invisible to the world. In a media landscape driven by streaming video, podcasts, and algorithmic discovery, how can we make sure materials science not only reaches new audiences but actually inspires them?

In this talk, I'll share what I've learned from a decade of experimenting with new ways to communicate materials science—through YouTube, the "Materialism" podcast, editorial innovation as Editor-in-Chief of *Integrating Materials and Manufacturing Innovation*, and even helping out behind the scenes on the Discovery Channel's Diesel Brothers. With close to 1,000 videos, podcasts, and digital posts created and shared, I've seen what it takes to make science not just informative but engaging—something people want to watch, listen to, and share.

Whether you're a student, professor, researcher, or editor, this talk will offer practical strategies and real-world examples for how storytelling, short-form video, and scalable digital platforms can help materials science break out of the PDF and into the world.

### **About Taylor D. Sparks**

**Taylor D. Sparks** is a Professor of Materials Science and Engineering at the University of Utah (UoU). He holds a B.S. in MSE from the UoU, M.S. in Materials from University of California, Santa Barbara, and Ph.D. in Applied Physics from Harvard University. He was a Royal Society Wolfson Visiting Fellow at the University of Liverpool, a recipient of the NSF CAREER Award, and a speaker for TEDxSalt-LakeCity. He is active in TMS, MRS, and ACerS societies. He is currently the Editor-in-Chief for the Integrating Materials and Manufacturing Innovation and the Director of Graduate Affairs for the John and Marcia Price College of Engineering. When he's not in the lab you can find him running his podcast "Materialism," creating materials educational content for his YouTube channel, or canyoneering with his four kids in southern Utah.





### **PLENARY SESSIONS**



### TATSUKI OHJI

Yokohama National University, Nagoya Institute of Technology, and National Institute of Advanced Industrial Science and Technology (AIST), Japan

### ACerS Edward Orton Jr. Memorial Lecture

Ceramics for Structural Applications – Overcoming the Challenges of This Formidable Material

### Tuesday, September 30 8 – 9 a.m. GCCC, Short North Ballroom B

Advanced ceramics have excellent heat, corrosion, erosion, and wear resistance and demonstrate superior mechanical properties under demanding conditions. However, their brittle nature and low fracture toughness have posed significant barriers to structural applications. Using silicon nitride—one of the most widely used engineering ceramics—as an example, this talk provides an overview of how ceramic engineers have attempted to overcome this obstacle over the last several decades. One of the most common and effective strategies of toughening ceramics is to deliberately introduce "weak parts" into a "hard" body and induce elastic bridging and frictional pull-out of constituent substances, e.g., elongated grains, thus optimizing the body's fracture resistance. Much research effort has been devoted to adjusting the characteristics of grain boundaries to function as "weak" parts and tailoring microstructures, e.g., sizes, shapes, and orientations of grains, through innovative processing routes, leading to markedly improved fracture toughness and other properties.



### **About Tatsuki Ohji**

**Tatsuki Ohji** is a Visiting Professor, Yokohama National University (YNU), Japan, and Nagoya Institute of Technology (NITech), Japan. He is also a Program Manager, Defense Innovation Science and Technology Institute (DISTI), Ministry of Defense, Japan, and an Emeritus Research Councilor, National Institute of Advanced Industrial Science and Technology (AIST), Japan. He served as the President of the American Ceramic Society during 2019-2020.

He obtained his B.S. and M.S. in mechanical engineering from NITech and Ph.D. in inorganic materials engineering from Tokyo Institute of Technology. He has authored more than 380 papers and 20 book chapters and edited more than 40 books and conference volumes. He has chaired more than 50 international conferences and symposia. His research interests include properties characterization of ceramics and related materials and their microstructural design for better performance.

A Fellow of ACerS, the American Association for the Advancement of Science (AAAS), ASM International, the European Ceramic Society (ECerS), and the Ceramic Society of Japan (CerSJ) and an Academician of the World Academy of Ceramics, he has received numerous awards and honors, including the Distinguished Life member (ACerS's highest honor), W. David Kingery Award, John Jeppson Award, Samuel Geijsbeek PACRIM International Award, and ECD Mrityunjay Singh Bridge Building Award all from ACerS, Richard Brook Award from ECerS, Special Contribution Award from the Chinese Ceramic Society, Bhagat Memorial Lecture Award from the Indian Ceramic Society, Honour Medal of Aurel Stodola from the Slovak Academy of Science, Lee Hsun Lecture Award from the Chinese Academy of Sciences, and Academic Achievement Award from CerSJ. He is a Governor of Acta Materialia Inc. and an Editor of Journal of the American Ceramic Society and Ceramics International.





# SHORT NORTH ARTS DISTRICT

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	•	Stauf's Coffee Roasters\$	В	31. Bakersfield\$\$
	_ 2	The Buckeye Lady\$		
	33	Condado Tacos\$		33. Forno Kitchen + Bar\$\$
	4	Service Bar /	•	. 34. Jeni's Splendid Ice Creams . \$\$
		Middle West Spirits\$\$\$	D	35. 698 Asian Kitchen\$\$\$
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	•	Bristol Republic\$\$	• a	37. Lincoln Social Rooftop\$\$
	• 7.	Fours on High\$\$	D	38. SoCal Kitchen + Bar\$\$\$
	œ	Terrace Bar\$\$		39. Lemongrass Fusion Bistro .\$\$
	တ် <b>8</b>	Seventh Son Brewing\$	• a	40. Brassica\$\$
	10,	. Budd Dairy Food Hall\$\$	D	41. The Pearl\$\$
	•	Fox in the Snow Cafe\$\$	BL	42. The Guild House\$\$\$
	• 12	Bodega\$\$	D	43. Soul at The Joseph\$\$
	• 13,	Northstar Cafe\$\$	BLD	44. Marcella's\$\$
	<b>8</b> 14	Katalina's\$\$	•	45. ROOH Columbus\$\$\$
	\$ 5	Oddfellows Liquor Bar\$	•	46. Hyde Park Prime
	16.	Mikey's Late Night Slice\$	D	Steakhouse\$\$\$\$
	17.	Fireproof Short North\$\$	D	47. Ginger Rabbit Jazz Lounge
	8	Ampersand Asian Supper	•	48. Woodhouse Vegan\$
		Club\$\$	• 	49. Greater Columbus
	19	Black Brick Bar\$\$		Convention Center\$
	20.	. Roaming Goat Coffee\$		50. Ruth's Chris Steak House\$\$\$
	• 21.	Hubbard Grille\$\$	•	51. Novak's Tavern & Patio\$\$
	22	Galla Park Social\$\$\$	• Q	52 Parlay Sporting Club
	23.	. Wine on High\$\$		and Kitchen\$\$
	24	DraftKings Sports & Social.\$\$		53. Brewcadia\$\$
	• 25.		9	54. Barley's Brewing Company
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	27.	Short North Pint House \$\$	D	55. Denmark\$\$
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	• 29	The Lox Bagel Shop\$\$	BL	57. FYR Short North\$\$\$
	30	. One Line Coffee\$	В	58. Stories on High\$\$

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# **ARENA DISTRICT**

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- 12. Rodizio Grill\$\$	13. Vine + Forge\$\$	👓 14. Goodale Station\$\$	15. Jeff Rubv's Steakhouse\$
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lcon Key: ● = Bar Only ● = Patio ● = Rooftop ● = Minority-Owned Business. <u>BLD</u> = On weekdays, regularly serves: Breakfast (B), Lunch (L), Dinner (D), Average entrée price. \$ = Under \$10, \$\$ = \$10-\$30, \$\$\$ = \$31-\$60, \$\$\$\$ = above \$61. Restaurant hours vary. **Bold** denotes Attendee Savings Pass participants.

Canopy by Hilton Columbus Downtown Short North Red Roof PLUS+ Columbus Downtown - Convention Center Sonesta Columbus Downtown

AC Hotel Columbus Downtown Hampton Inn & Suites

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**DOWNTOWN HOTELS** 

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A. Moxy Columbus Short North B. Graduate Columbus C. Le Méridien Columbus, The Joseph

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- NITRIDES
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- SHOT
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   SLUG
- GRANULES

- WIRE
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YAG Crystals

KTA

LiTaO3

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KDP

Cr:YAG

YSGG Crystals

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YAP Crystals

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### **CONFERENCE PERKS**

### **Your MS&T Full Conference Registration Includes:**

- MS&T Partners All-Conference Welcome Breakfast (Monday)
- Technical Sessions (Monday – Wednesday)
- Exhibition & Poster Session

- Tuesday Lunch Ticket (Full Conference Attendees/Students)
- Wednesday Lunch Ticket (Full Conference Attendees Only)

### **Nursing Mother's Room**

The GCCC has a designated nursing mother's room located on the Central Atrium. GCCC also has family restrooms located in Upper A-Pod (behind room A-210) and another in the Center Lounge restrooms near the South Café & Marketplace. These single-use areas are equipped with a seat, electricity, and a lockable door.

### **All-Gender Restroom**

The all-gender restroom at the GCCC will be on the 2nd level in B-Pod, and at the Hyatt on the 3rd floor, Regency North restrooms.

### **Complimentary WIFI**

There is complimentary WIFI at the Greater Columbus Convention Center. Access at network GCCC Free WIFI. It is free in all meeting rooms and public spaces except the Short North Ballroom and Exhibit Halls C/D.

### First Aid

- Saturday, September 27, 2025 8:30 a.m. 5 p.m. GCCC, Show Hall Office C
- Sunday, September 28, 2025 12 5 p.m. GCCC, B140
- Monday, September 29, 2025 7 a.m. 6 p.m. GCCC, B140
- Tuesday, September 30, 2025 7 a.m. 6:30 p.m. GCCC, B140



### Make the Most of MS&T25!

Scan the QR code to download the MS&T app.



Schedule is subject to change. Check the conference app for the most up to date information.

Friday, September 26, 2025

### **Committee and Business Meetings**

ACerS President's Council of Student Advisors (PCSA) Business Meeting 3 – 7:30 p.m. • Hyatt Regency Columbus, Franklin AB

Saturday, September 27, 2025

### **Committee and Business Meetings**

ACerS President's Council of Student Advisors (PCSA) Business Meeting 7 a.m. – 5:30 p.m. • Hyatt Regency Columbus, Franklin AB ACerS Board of Directors Meeting 8:30 a.m. – 5 p.m. • Hyatt Regency Columbus, Taft AB

### **Exhibition**

**Exhibitor Move-In: Custom-Builds Only** 8 a.m. – 5 p.m. • GCCC, Exhibit Hall C/D

Sunday, September 28, 2025

### **Conference Activities**

Registration
12 – 5 p.m. • GCCC, North Atrium
Society Lounges
12 – 5 p.m. • GCCC, North Atrium
Programming Support Desk
2 – 5 p.m. • GCCC, Outside C170

### **Committee and Business Meetings**

ACerS Keramos National Board and Business Meeting
7 – 8 a.m. • Hyatt Regency Columbus, Hyatt Restaurant
ACerS President's Council of Student Advisors (PCSA) Business Meeting
7 a.m. – 12 p.m. • Hyatt Regency Columbus, Franklin AB
ACerS Keramos Student Chapter Business Meeting
8 – 9 a.m. • Hyatt Regency Columbus, Taft AB
TMS Board of Directors Business Meeting (Restricted)
8 a.m. – 12 p.m. • Hyatt Regency Columbus, Union AB
ACerS Keramos Convocation & Business Meeting
9 – 11 a.m. • Hyatt Regency Columbus, Taft AB

### Sunday, September 28, 2025

### **ACerS Keramos Career Speaker**

11 a.m. - 12 p.m. • Hyatt Regency Columbus, Taft AB

**ACerS Publications Committee Meeting** 

12 – 3 p.m. • Hyatt Regency Columbus, Harding

**CGIF Board of Trustees Meeting** 

12 - 5 p.m. • Hyatt Regency Columbus, Taft D

TMS Technical Division Council (TDC) Meeting - Invitation Only

1:30 – 3:30 p.m. • Hyatt Regency Columbus, Knox

**JACerS Editor/AE Meeting** 

3 – 4 p.m. • Hyatt Regency Columbus, Harding

**TMS Program Committee Meeting - Invitation Only** 

4 – 6 p.m. • Hyatt Regency Columbus, Knox

### **Material Advantage Student Functions**

**Material Advantage Chapter (MAC) Officer Workshop** 

10 a.m. - 12 p.m. • Hyatt Regency Columbus, Franklin CD

**Undergraduate Student Speaking Contest Semi-Finals** 

1 – 3 p.m. • Hyatt Regency Columbus, Morrow/Fairfield

**Undergraduate Student Speaking Contest Finals** 

3 – 4 p.m. • Hyatt Regency Columbus, Fairfield

**Student Networking Mixer** 

6 – 7:30 p.m. • Hyatt Regency Columbus, Regency Ballroom

### **Posters**

**ACerS Basic Science Division Ceramographic Exhibit and Competition Poster Set Up** 

12 – 5 p.m. • GCCC, 1st Level Concourse - B Pod

### Monday, September 29, 2025

### **Conference Activities**

Registration

7 a.m. – 6 p.m. • GCCC, North Atrium

**Programming Support Desk** 

7 a.m. - 6 p.m. • GCCC, Outside C170

**Society Lounges** 

7 a.m. – 6 p.m. • GCCC. North Atrium

**MS&T Technical Sessions** 

8 a.m. - 5:30 p.m. • GCCC

### Monday, September 29, 2025

### **Exhibition**

**Exhibitor Move-In: Custom-Builds Only** 8 a.m. - 5 p.m. • GCCC, Exhibit Hall C/D **Exhibitor Move-In: All Exhibitors** 9 a.m. - 5 p.m. • GCCC, Exhibit Hall C/D **Exhibitor Badge-Lead Retrieval Collection** 12 – 5 p.m. • GCCC, North Atrium

**Committee and Business Meetings ACerS Education and Professional Development Council (EPDC)** 10 a.m. - 12 p.m. • GCCC, B144/145 **AIST University and Industry Relations Roundtable** 10:30 a.m. - 1 p.m. • Hyatt Regency Columbus, Franklin CD **TMS Executive Committee Meeting (Restricted)** 11:30 a.m. - 1 p.m. • Hyatt Regency Columbus, Champaign **IGNITE MSE ACerS Mentors Luncheon - Invitation Only** 11:30 a.m. - 1 p.m. • GCCC, D284 **Engineering Ceramics Division General Business Meeting** 12 - 1 p.m. • GCCC, B231 **Electronics Division General Business Meeting** 

12 - 1 p.m. • GCCC, B130

TMS Integrated Computational Materials Engineering (ICME) Committee Meeting 12:15 - 1:45 p.m. • Hyatt Regency Columbus, Knox

**AIST Foundation Board of Trustees** 

2 – 5 p.m. • Hyatt Regency Columbus, Franklin B

Energy Materials & Systems Division General Business Meeting

5:30 - 6:30 p.m. • GCCC, B231

### **Plenary Sessions**

**AIST Plenary Session** 8 - 9 a.m. • GCCC, Short North Ballroom B **TMS Plenary Session** 2 – 3 p.m. • GCCC, Short North Ballroom B

### Lectures

The Navrotsky Award for Experimental Thermodynamics of Solids 8 - 8:55 a.m. • GCCC, B142/143 **Next Generation Biomaterials - ACerS Bioceramics Division Award Session** 9 - 10 a.m. • GCCC, C171 **ACerS Richard M. Fulrath Award Session** 2:20 - 4:40 p.m. • GCCC, B131

### Monday, September 29, 2025

### **Material Advantage Student Functions**

AIST Student Plant Tour at Nucor Steel Marion
8 a.m. – 1 p.m. • GCCC, East Connector

Master the Job Hunt: Interviewing and Negotiation Essentials
3 – 4 p.m. • Hyatt Regency Columbus, Fairfield

### **Posters**

ACerS Basic Science Division Ceramographic Exhibit and Competition Display 8 a.m. – 6 p.m. • GCCC, 1st Level Concourse - B Pod

General Poster Installation
2 – 4 p.m. • GCCC, Exhibit Hall C/D

Undergraduate and Graduate Poster Contest Installation
2 – 4 p.m. • GCCC, Exhibit Hall C/D

### **Social Functions**

MS&T Partners' All-Conference Welcome Breakfast 7 – 8 a.m. • GCCC, Short North Ballroom A ACerS Annual Honor and Awards Reception 6 – 6:30 p.m. • Hyatt Regency Columbus, Regency South Foyer AIST Steel to Students Reception 6 – 8 p.m. • Hyatt Regency Columbus, Franklin CD ACerS Annual Honor and Awards Banquet 6:30 – 9 p.m. • Hyatt Regency Columbus, Regency Ballroom TMS Member Welcome & Get Involved Reception 8 – 9 p.m. • Hyatt Regency Columbus, Union AB Ballroom

### **Annual Meetings**

**ACerS 127th Annual Member Meeting** 1 – 2 p.m. • GCCC, B131

### **Professional Development**

**PE Curious: How Licensure Shaped Our Careers Sponsored by the TMS Professional Development Committee** 4:30 – 6 p.m. • GCCC, C161B

Tuesday, September 30, 2025

### **Conference Activities**

Registration

7 a.m. - 6 p.m. • GCCC, North Atrium

### Tuesday, September 30, 2025

### **Programming Support Desk**

7 a.m. – 6 p.m. • GCCC, Outside C170

**Society Lounges** 

7 a.m. - 6 p.m. • GCCC, North Atrium

**MS&T Technical Sessions** 

8 a.m. – 5 p.m. • GCCC

### **Exhibition**

### **Exhibit Hall Registration**

8 a.m. – 5 p.m. • GCCC, North Atrium

**Exhibitor Hall Access** 

8 a.m. - 6:30 p.m. • GCCC, Exhibit Hall C/D

**Exhibit Hall Show Hours** 

9 a.m. - 4:30 p.m. • GCCC, Exhibit Hall C/D

**The Advanced Materials Show Sessions** 

10 a.m. - 4:20 p.m. • GCCC, Exhibit Hall C/D

**MS&T Food Court (Ticketed Event)** 

12 - 2 p.m. • GCCC, Exhibit Hall C/D

**Networking Reception Hosted by Advanced Carbons Council** 

4:30 - 6 p.m. • GCCC, Exhibit Hall C/D

### **Committee and Business Meetings**

### **ACerS Meetings Committee**

10 - 11:30 a.m. • GCCC, B144/145

**Basic Science Division General Business Meeting** 

12 – 1 p.m. • GCCC, B232

**Glass & Optical Materials Division General Business Meeting** 

12 - 1 p.m. • GCCC, B130

**ACerS Member Services Committee** 

12 - 2 p.m. • GCCC, B144/145

### **TMS International Affairs Committee Meeting (Restricted)**

12 – 2 p.m. • Hyatt Regency Columbus, Champaign

**AIST Metallurgy-Processing, Products and Applications Technical Committee Meeting** 

12 – 2 p.m. • Hyatt Regency Columbus, Franklin CD

**ACerS Member Engagement Subcommittee Meeting** 

2 - 3:30 p.m. • GCCC, B144/145

Crafting Your Story: Using the CAR Framework to Communicate with Clarity and Impact (Pre-Registration Required)

4 – 5 p.m. • Hyatt Regency Columbus, Union AB

**TMS Steels Committee Meeting** 

5 – 6 p.m. • Hyatt Regency Columbus, Knox

### Tuesday, September 30, 2025

2 - 5 p.m. • GCCC, Exhibit Hall C/D

### **Plenary Session**

**ACerS Plenary Session** 8 – 9 a.m. • GCCC, Short North Ballroom B

### **Lectures**

ACerS Alfred R. Cooper Award Session
9:20 a.m. – 12 p.m. • GCCC, B132

TMS Frontiers of Materials Award Lecture
10:20 – 10:50 a.m. • GCCC, Room C162A

ACerS Frontiers of Science and Society - Rustum Roy Lecture
1 – 2 p.m. • GCCC, B131

### **Material Advantage Student Functions**

Mug Drop Contest Sponsored by FAMU-FSU College of Engineering
10:30 a.m. – 12 p.m. • GCCC, Exhibit Hall C/D

Disc Golf Contest
12 – 1 p.m. • GCCC, Exhibit Hall C/D

Student Awards Ceremony
2 – 3 p.m. • GCCC, Exhibit Hall C/D

**Posters General Poster Install** 8 - 9 a.m. • GCCC, Exhibit Hall C/D **Graduate Student Poster Contest Install** 8 - 9 a.m. • GCCC, Exhibit Hall C/D **Undergraduate Student Poster Contest Install** 8 - 9 a.m. • GCCC, Exhibit Hall C/D **ACerS Basic Science Division Ceramographic Exhibit & Competition Display** 8 a.m. - 5 p.m. • GCCC, 1st Level Concourse - B Pod **Graduate Student Poster Contest Judging** 10 - 11 a.m. • GCCC, Exhibit Hall C/D **Undergraduate Student Poster Contest Judging** 10 - 11 a.m. • GCCC, Exhibit Hall C/D **Graduate Student Poster Judging with Presenters** 11 a.m. - 12 p.m. • GCCC, Exhibit Hall C/D **Undergraduate Student Poster Judging with Presenters** 11 a.m. - 12 p.m. • GCCC, Exhibit Hall C/D **General Poster Session Viewing** 2 - 5 p.m. • GCCC, Exhibit Hall C/D **Graduate Student Poster Viewing** 

### Tuesday, September 30, 2025

**Undergraduate Student Poster Viewing** 

2 - 5 p.m. • GCCC, Exhibit Hall C/D

**General Poster Session Presentations** 

5 - 6 p.m. • GCCC, Exhibit Hall C/D

### **Social Functions**

**Energy Material & Systems Division and Electronic Division Reception** 

6 – 7:30 p.m. • Hyatt Regency Columbus, Grant/Harding

### Wednesday, October 1, 2025

### **Conference Activities**

Registration

7:30 a.m. – 3:30 p.m. • GCCC, North Atrium

**Programming Support Desk** 

7:30 a.m. - 5:30 p.m. • GCCC, Outside C170

**Society Lounges** 

7:30 a.m. - 3:30 p.m. • GCCC, North Atrium

**MS&T Technical Sessions** 

8 a.m. - 5:30 p.m. • GCCC

### **Exhibition**

**Exhibitor Hall Access** 

8 a.m. - 3 p.m. • GCCC, Exhibit Hall C/D

**Exhibit Hall Registration** 

8 a.m. – 3 p.m. • GCCC, North Atrium

**Exhibit Hall Show Hours** 

9 a.m. - 3 p.m. • GCCC, Exhibit Hall C/D

**Advanced Carbons Council Sessions** 

10 a.m. - 3 p.m. • GCCC, Exhibit Hall C/D

**MS&T Food Court (Ticketed Event)** 

12 - 2 p.m. • GCCC, Exhibit Hall C/D

**Exhibitor Move-Out (All Exhibitors)** 

3 - 8 p.m. • GCCC, Exhibit Hall C/D

### Wednesday, October 1, 2025

### **Committee and Business Meetings**

ACerS Young Professionals Networking Breakfast 7 – 8 a.m. • GCCC, D284

TMS/ACerS MS&T Taskforce Meeting
9 – 10 a.m. • GCCC, B144/145

### Lectures

**ACerS Basic Science Division Robert B. Sosman Lecture** 1 – 2 p.m. • GCCC, B131

### **Posters**

ACerS Basic Science Division Ceramographic Exhibit & Competition Display

8 a.m. - 12 p.m. • GCCC, 1st Level Concourse - B Pod

**Graduate Student Poster Contest Viewing** 

9 a.m. - 3 p.m. • GCCC, Exhibit Hall C/D

**General Poster Viewing** 

9 a.m. - 3 p.m. • GCCC, Exhibit Hall C/D

**Undergraduate Student Poster Contest Viewing** 

9 a.m. - 3 p.m. • GCCC, Exhibit Hall C/D

**ACerS Basic Science Division Ceramographic Exhibit Dismantle** 

12 - 1 p.m. • GCCC, 1st Level Concourse - B Pod

**General Poster Session Removal** 

3 - 4 p.m. • GCCC, Exhibit Hall C/D

**Graduate Student Poster Contest Dismantle** 

3 - 4 p.m. • GCCC, Exhibit Hall C/D

**Undergraduate Student Poster Contest Dismantle** 

3 - 4 p.m. • GCCC, Exhibit Hall C/D

### **LECTURES**

### **Monday, September 29**

ACerS The Navrotsky Award for Experimental Thermodynamics of Solids

8 - 8:55 a.m. • GCCC, Room B142/143

**Speaker:** Konrad Burkmann, Arizona State University

Next Generation Biomaterials - ACerS Bioceramics Division Award Session

9 - 10 a.m. • GCCC, Room C171

Global Young Bioceramicist Award
Antonia Ressler, Tampere University
Bioceramics Young Scholar Award
Sayoni Sarkar, ETH Zurich
Larry L. Hench Lifetime Award

Aldo Boccaccini, University of Erlangen-Nuremberg

# ACerS Richard M. Fulrath Award Session

2:20 - 4:40 p.m. • GCCC, Room B131

This session will feature the following presenters: American Academic

Lane Martin, Rice University

Japanese Industrial

Shota Daiki, Tokuyama Corporation

American Industrial

Nathan Orloff, National Institute of Standards and Technology

Japanese Industrial

Satoshi Mori, Niterra Co., Ltd.

Japanese Academic

Takashi Teranishi, Okayama University

### **Tuesday, September 30**

ACerS GOMD Alfred R. Cooper Award Session

9:20 a.m. - 12 p.m. • GCCC, Room B132

Speaker: Morten Smedskjaer, Aalborg University

2025 Alfred R. Cooper Young Scholar Award Presentations:

Jake Klucinec, University of Central Florida Chris Martin, Iowa State University Wuqian Zhang, Swarthmore College Harry Hawbaker, Coe College

# TMS Frontiers of Materials Award Lecture

10:20 – 10:50 a.m. • GCCC, Room C162A Speaker: Yu Zou, University of Toronto

# ACerS Frontiers of Science and Society – Rustum Roy Lecture

1 – 2 p.m. • GCCC, Room B131

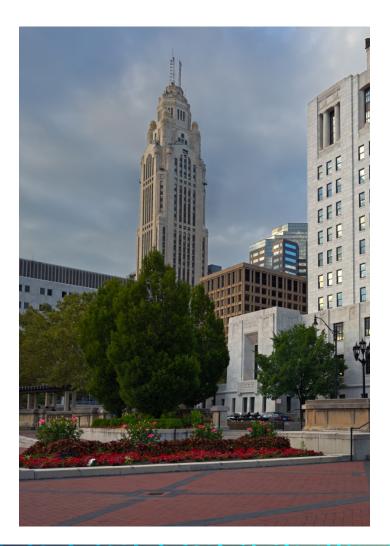
Speaker: Ungyu Paik, Hanyang University

### Wednesday, October 1

ACerS Basic Science Division Robert B. Sosman Lecture

1 – 2 p.m. • GCCC, Room B131

Speaker: Sossina Haile, Northwestern University



### **SPECIAL EVENTS**

### **Monday, September 29**

# MS&T Partners' All-Conference Welcome Breakfast

**7 – 8 a.m. • GCCC, Short North Ballroom A**Enjoy this opportunity to network and enjoy breakfast with professionals and peers in a relaxed environment.

# ACerS Basic Science Division Ceramographic Exhibit & Competition

8 a.m. – 6 p.m. • GCCC, 1st Level Concourse - B

# ACerS 127th Annual Membership Meeting

1 – 2 p.m. • GCCC, B131

The president reports on Society activities, and newly elected officers take their positions during the annual membership meeting. All ACerS members and guests are welcome.

# PE Curious: How Licensure Shaped Our Careers Sponsored by the TMS Professional Development Committee

4:30 - 6 p.m. • GCCC, Room C161B

Have you ever wondered if pursuing a Professional Engineer (PE) license is worth it? Join us for a candid, 90-minute panel discussion featuring licensed PE professionals from diverse backgrounds who will share their journeys to licensure, the challenges they faced, and how becoming a PE impacted their careers. Whether you're seriously considering taking the PE exam or just exploring your options, this session will give you real-world insight into the value of professional licensure in engineering. Bring your questions—we'll bring honest answers.

# **ACerS Annual Honor and Awards Banquet**

### **TICKETED EVENT**

# 6:30 – 9 p.m. • Hyatt Regency Columbus, Regency Ballroom

Enjoy dinner, conversation, and the presentation of Society awards. You can purchase tickets through the MS&T25 Registration platform.

### **Monday, September 29**

TMS Member Welcome & Get Involved Reception

8 – 9 p.m. • Hyatt Regency Columbus, Union AB Ballroom

### Tuesday, September 30, 2025

ACerS Basic Science Division
Ceramographic Exhibit & Competition
8 a.m. – 5 p.m. • GCCC, 1st Level Concourse - B Pod

Crafting your Story: Using the CAR Framework to Communicate with Clarity and Impact

### **REGISTRATION REQUIRED**

4 – 5 p.m. • Hyatt Regency Columbus, Union AB Whether you're speaking with a recruiter, preparing for an interview, or aiming to have more effective conversations with your advisor, being able to tell your story clearly and compellingly is a critical skill. In this interactive workshop, members of the Emerging Professional Committee will guide participants through the CAR (Circumstance, Action, Result) framework—a powerful tool for structuring narratives that highlight your strengths and achievements. The session will begin with an overview of the CAR method and as well as provide examples of how to apply it in professional contexts. Attendees will then break out into small groups to practice crafting and sharing their own stories, with opportunities for feedback from peers and facilitators. While this workshop is open to all MS&T attendees, pre-registration is required.

### **Networking Reception**

### 4:30 - 6 p.m. • GCCC, Exhibit Hall C/D

Join us for the drinks reception in the expo hall. A great opportunity to connect with fellow attendees, students, and exhibitors of The Advanced Materials Show. Sponsored by The Advanced Carbons Council (ACC). A global trade association that supports the production, adoption and use of engineered advanced carbons.

### Wednesday, October 1, 2025

ACerS Basic Science Division
Ceramographic Exhibit & Competition
8 a.m. – 12 p.m. • GCCC, 1st Level - Lower B Pod
Foyer

### **STUDENT EVENTS**

### Sunday, September 28, 2025

# Materials Advantage Chapter Officer Workshop

10 a.m. – 12 p.m. • Hyatt Regency Columbus, Franklin CD

### **REGISTRATION REQUIRED**

Network and share best practices! This year's Chapter Officer Workshop will take place on Sunday, September 28 from 10:00 a.m. to 12:00 p.m. This workshop provides a detailed introduction to the Material Advantage Student Program for Chapter officers.

Registration is required for this workshop as well as for MS&T. This workshop is for Material Advantage Chapter Officers only.

### **2025 Undergraduate Student Speaking Contest**

Semi-Final One: 1 – 3 p.m. • Hyatt Regency

Columbus, Fairfield

Semi-Final Two: 1 - 3 p.m. • Hyatt Regency

Columbus, Morrow

Finals: 3 – 4 p.m. • Hyatt Regency Columbus,

Fairfield

### **Student Networking Reception**

# Time: 6 – 7:30 p.m. • Hyatt Regency Columbus, Regency Ballroom

Join us for a lively evening of connection and conversation at the MS&T 2025 Student Networking Reception! This informal gathering offers students a valuable opportunity to meet peers from across the materials science community and engage with industry professionals in a relaxed, welcoming atmosphere. The reception is open to all students and faculty advisors—no tickets or reservations needed. Please note: An official MS&T conference badge is required for entry.

### Monday, September 29, 2025 AIST Student Plant Tour (Nucor Steel Marion)

**8 a.m. – 1 p.m. • GCCC, East Connector**AIST will offer students the opportunity to tour a local steel plant. Students registered for MS&T25 before August 18, 2025 will be contacted by e-mail to sign up. Advance registration is required.

# **IGNITE MSE Professional Development Symposium**

9 - 11:30 a.m. • GCCC, C161B

IGNITE MSE (International Gathering and Networking for Individuals to Explore Materials Science and Engineering) is a symposium designed to help students and early career professionals develop the knowledge, skills, and connections they need for career success. Invited speakers from academia and industry will cover topics such as navigating global work environments, choosing between academic and industry career paths, and participating in STEM outreach.

## Master the Job Hunt: Interviewing and Negotiation Essentials

3 – 4 p.m. • Hyatt Regency Columbus, Fairfield

### **REGISTRATION REQUIRED**

Navigating the job market after graduation can be challenging, but with the right skills, you can confidently land the position you want and negotiate a fair offer. In this interactive session, you'll learn how to prepare for and ace your job interviews by effectively communicating your strengths and experiences. We'll also cover essential negotiation strategies to help you advocate for your value and secure the offer you deserve. This is a can't-miss opportunity to learn best practices from a HR pro!

# AIST Foundation Steel to Students Recruiting Reception

**6 – 8 p.m. • Hyatt Regency Columbus, Franklin CD** Position yourself ahead of your peers by attending the Steel to Students Recruiting Reception held in conjunction with MS&T25! The reception is a golden opportunity to meet established professionals and hiring managers interested in investing in the next generation of the steel industry. Take advantage of the opportunity to network and maybe even secure an internship or job after graduation!

### STUDENT EVENTS

### Tuesday, September 30, 2025

### **2025 Undergraduate Student Poster Contest**

### GCCC, Exhibit Hall C/D

The purpose of this contest is to encourage undergraduate students to present their undergraduate research experiences and to improve their communication skills. The poster entered must be the work of an undergraduate and completed during the undergraduate education of the student. The work presented in the poster does not have to be performed at the student's home institution, but could be, for example, from a project performed as part of a co-op experience, a summer internship, or a Research Experience for Undergraduates (REU) project.

### **Undergraduate Student Poster Schedule:**

- Tuesday, September 30: Poster Installation 8 9 a.m.
- Tuesday, September 30: Judges Only Time 10 11 a.m.
- Tuesday, September 30: Poster Judging with Contestants 11 a.m. 12 p.m.
- Wednesday, October 1: Poster Removal 3 4 p.m.

### Tuesday, September 30, 2025

### **2025 Graduate Student Poster Contest**

### GCCC, Exhibit Hall C/D

The purpose of this contest is to encourage graduate students to present their graduate research experiences and to improve their communication skills. The poster entered must be the work of a graduate student and completed during the graduate education of the student. The work presented in the poster does not have to be performed at the student's home institution, but could be, for example, from a project performed as part of a co-op experience or a summer internship.

### **Graduate Student Poster Schedule:**

- Tuesday, September 30: Poster Installation 8 9 a.m.
- Tuesday, September 30: Judges Only Time 10 11 a.m.
- Tuesday, September 30: Poster Judging with Contestants 11 12 p.m.
- Wednesday, October 1: Poster Removal 3 4 p.m.

### Tuesday, September 30, 2025

### Ceramic Mug Drop Contest Sponsored by FAMU-FSU College of Engineering

10:30 a.m. - 12 p.m. • GCCC, Exhibit Hall C/D

The Ceramic Mug Drop contest allows students to demonstrate their prowess in designing and manufacturing a ceramic mug possessing high strength, mechanical reliability, and/or aesthetics. Mugs fabricated by students from ceramic raw materials are judged (separately) on aesthetics and then by dropping them from ever-increasing heights. The mug with the highest successful drop height will win! Please note that students who chose to make fiber-reinforced mugs may use individual commercial fibers in the construction of their mug, but the use of commercially woven mats is not allowed. Each participant may register their mug(s) onsite.

### STUDENT EVENTS

### Tuesday, September 30, 2025

### **Ceramic Disc Golf Contest**

12 - 1 p.m. • GCCC, Exhibit Hall C/D

The Ceramic Disc Golf Contest always draws a crowd! Students create discs from ceramic or glass materials to meet certain specifications, and the discs are thrown into a regulation disc golf basket. Each disc will be judged in the categories of farthest distance achieved and artistic merit (aesthetics). The disc that is successfully thrown into the disc golf basket from the farthest distance in the fewest number of shots will be named winner of the Ceramic Disc Golf Contest, and the most aesthetically pleasing/creative disc will be recorded as "Best Looking" disc. Each participant may register their disc(s) onsite.

### **Student Awards Ceremony**

2 - 3 p.m. • GCCC, Exhibit Hall C/D

Congratulate the winners of this year's contests:
Material Advantage Chapters of Excellence, Student
Speaking Contest, Graduate and Undergraduate
Poster Contests, Ceramic Mug Drop Contest, Ceramic Disc Golf Contest, TMS Superalloys Awards, AIST/
AISI Scholarships, and Keramos National Awards.

Crafting Your Story: Using the CAR Framework to Communicate with Clarity and Impact Sponsored by the TMS Emerging Professionals Committee

4 – 5 p.m. • Hyatt Regency Columbus, Union AB

### **REGISTRATION REQUIRED**

Whether you're speaking with a recruiter, preparing for an interview, or aiming to have more effective conversations with your advisor, being able to tell your story clearly and compellingly is a critical skill. In this interactive workshop, members of the Emerging Professional Committee will guide participants through the CAR (Circumstance, Action, Result) framework—a powerful tool for structuring narratives that highlight your strengths and achievements. The session will begin with an overview of the CAR method and as well as provide examples of how to apply it in professional contexts. Attendees will then break out into small groups to practice crafting and sharing their own stories, with opportunities for feedback from peers and facilitators. While this workshop is open to all MS&T attendees, pre-registration is required.





### **UPCOMING CONFERENCES**

The Making, Shaping and Treating of Steel: 101

October 7-8, 2025 | Birmingham, AL, USA

Sponsor: AIST

Specialty Melting, Refining and Casting – A Practical Training Seminar

October 7-9, 2025 | Birmingham, AL, USA

**Sponsor:** AIST

Hot Sheet and Plate Rolling Fundamentals – A Practical Training Seminar

October 13-16, 2025 | Mobile, AL, USA

Sponsor: AIST

Continuous Casting – A Practical Training Seminar

October 14-16, 2025 | Indianapolis, IN, USA

Sponsor: AIST

**AIST European Steel Forum 2025** 

October 21-23, 2025 | Bilbao, Spain

Sponsor: AIST

Steelmaking Refractories – A Practical Training Seminar

October 21-23, 2025 | Cincinnati, OH, USA

Sponsor: AIST

Artificial Intelligence in Materials Science and Engineering

October 27-29, 2025 | Online Course

Sponsor: TMS

**Environmental Solutions: Water Systems Management** 

October 28-30, 2025 | Louisville, KY, USA

Sponsor: AIST

Maintenance Solutions: Predict, Prevent, Perform

November 4-6, 2025 | San Antonio, TX, USA

**Sponsor:** AIST

Extraction 2025 Meeting & Exhibition (Extraction 2025)

November 16-20, 2025 | Phoenix, AZ, USA

Sponsor: TMS

Materials in Nuclear Energy Systems 2025 (MiNES 2025)

December 7-11, 2025 | Cleveland, OH, USA

Sponsor: TMS

Golden Jubilee Celebration of the 50th International Conference and Expo on Advanced Ceramics and Composites (ICACC 2026)

January 25-30, 2026 | Daytona Beach, FL, USA

Sponsor: ACerS

**Project Management 201** 

January 26-28, 2026 | Orlando, FL, USA

Sponsor: AIST

**Modern Electric Furnace Steelmaking** 

February 2-6, 2026 | Las Vegas, NV, USA

Sponsor: AIST

**Long Products Rolling** 

February 23-26, 2026 | Memphis, TN, USA

**Sponsor:** AIST

**Scrap Supplements and Alternative Ironmaking 10** 

March 9-11, 2026 | Orlando, FL, USA

Sponsor: AIST

TMS 2026 Annual Meeting & Exhibition (TMS2026)

March 15-19, 2026 | San Diego, CA, USA

**Sponsor:** TMS

Ceramitec

March 22-27, 2026 | Munchen, Germany

Sponsor: ACerS



### **UPCOMING CONFERENCES**

Refractories Ceramics Division and St. Louis Section Meeting (RCD 2026)

March 24-26, 2026 | St. Louis, MO, USA

Sponsor: ACerS

**ACerS Spring Meeting** 

April 12-16, 2026 | Bellevue, WA, USA

Sponsor: ACerS

AISTech 2026 – The Iron & Steel Conference & Exposition

May 4-6, 2026 | Pittsburgh, PA, USA

Sponsor: AIST

**Ceramics Expo** 

May 4-6, 2026 | Cleveland, OH, USA

Sponsor: ACerS

Offshore Technology Conference 2026 (OTC 2026)

May 4-7, 2026 | Houston, TX, USA

Sponsor: TMS

12th International Conference on High Temperature Ceramic Matrix Composites (HTCMC-12) and 3rd Global Forum on Advanced Materials and Technologies for Sustainable Development (GFMAT-3)

May 31-June 5, 2026 | San Diego, CA, USA

Sponsor: ACerS

**32nd Annual Crane Symposium** 

June 7-10, 2026 | Pittsburgh, PA, USA

Sponsor: AIST

Solid State Studies in Ceramic Science Gordon Research Conference

June 7-12, 2026 | South Hadley, MA, USA

Sponsor: ACerS

Structural Clay Products Division & Southwest Section Meeting 2026

June 8-10, 2026 | Canton, OH, USA

Sponsor: ACerS

**Global Steel Dynamics Forum** 

June 16-17, 2026 | New York, NY, USA

**Sponsor:** AIST

**TMS Specialty Congress 2026** 

July 6-10, 2026 | Anaheim, CA, USA

**Sponsor:** TMS

The Advanced Materials Show & The Advanced Ceramics Show (UK)

July 8-9, 2026, NEC, Birmingham, UK **Organized by:** Event Partners Ltd

American Conference on Neutron Scattering 2026 (ACNS 2026)

July 12-16, 2026 | Detroit, MI, USA

Sponsor: ACerS

The 12th Pacific Rim International Conference on Advanced Materials & Processing (PRICM12)

August 9-13, 2026 | Gold Coast, Australia

**Sponsor:** TMS

**AIST Women in Steel Conference** 

September 21-23, 2026 | Cleveland, OH, USA

Sponsor: AIST

The 11th International Symposium on Superalloy 718 and Derivatives 2026 (Superalloy 718 & Derivatives 2026) co-located at MS&T26

October 4-7, 2026 | Pittsburgh, PA, USA

Sponsor: TMS

Materials Science & Technology 2026 (MS&T26)

October 4-7, 2026 | Pittsburgh, PA, USA **Sponsors:** ACerS, AIST, and TMS



### **ABOUT THE ORGANIZERS**

### Organized by the leading materials societies:

The American Ceramic Society is the premier global membership organization for the technical ceramics and glass community. Celebrate with us Monday evening at the ACerS 127th Annual Honors and Awards Banquet for the induction of the 2025 Class of Fellows and awards presentations. The Society's prestigious award lectures will be presented at MS&T25: Frontiers of Science and Society - Rustum Roy Lecture, Edward Orton Jr. Memorial Lecture and Robert B. Sosman Lecture. All



attendees are welcome to attend the ACerS lectures. Be sure to stop by the society lounge to relax between the sessions, network with peers, hear what's new with the Society and much more.

Visit <u>www.ceramics.org</u> to learn more about ACerS.

The Association for Iron & Steel Technology (AIST) is a non-profit entity with over 17,500 members from more than 70 countries. AIST is recognized as a global leader in networking, education and sustainability programs for advancing iron and steel technology. Serving the entire iron and steel community,



including steel manufacturers, suppliers, consumers and academics, our mission is to advance the technical development, production, processing and application of iron and steel.

Visit www.aist.org to learn more about AIST.

The Minerals, Metals & Materials Society (TMS) is a member-driven international professional society dedicated to fostering the exchange of learning and ideas across the entire range of minerals, metals, and materials science



and engineering, from minerals processing and primary metals production, to basic research and the advanced applications of materials. Included among its more than 12,000 professional and student members are metallurgical and materials engineers, scientists, researchers, educators, and administrators from more than 80 countries on six continents.

Visit www.tms.org to learn more about TMS.

**Event Partners** works with associations, companies, and organizations on event delivery, from 360° managed services through to partnering with individual companies on assisting with their event participation. Our focus is always on providing maximum value to our audiences and participants ensuring each of our events represent the very best of each industry we operate in. In 2022, Materials Science and Technology (MS&T



best of each industry we operate in. In 2022, Materials Science and Technology (MS&T) began a partnership with the commercial exhibition firm Event Partners, to co-locate The Advanced Materials Show Exhibition at MS&T.

# Program At A Glance

Topic Area/Symposium	Date	Time	Room
Program Highlights			
AIST Plenary Session	MON	AM	Short North Ballroom B
TMS Plenary Session	MON	PM	Short North Ballroom B
ACerS Plenary Session	TUE	AM	Short North Ballroom B
MS&T25 Poster Session	TUE	PM	Exhibit Hall C/D
ACerS The Navrotsky Award for Experimental Thermodynamics of Solids	MON	AM	B142/143
ACerS Bioceramics Awardees	MON	AM	C171
ACerS Richard M. Fulrath Award Session	MON	PM	B131
ACerS GOMD Alfred R. Cooper Award Session	TUE	AM	B132
TMS Frontiers of Materials Award Lecture	TUE	AM	C162A
ACerS Frontiers of Science and Society - Rustum Roy Lecture	TUE	PM	B131
ACerS Basic Science Robert B. Sosman Award Lecture	WED	PM	B131
Additive Manufacturing			
Additive Manufacturing Modeling, Simulation, and Machine Learning: Microstructure,	Mechanic	s, and I	Process
AM Modeling - Mechanical Properties	TUE	AM	C150
AM Modeling - Artificial Intelligence and Machine Learning (AI/ML)	TUE	PM	C150
Poster Session	TUE	PM	Exhibit Hall C/D
AM Modeling - Microstructures and Thermal Analyses I	WED	AM	C150

## Additive Manufacturing of Ceramic-Based Materials: Process Development, Materials, Process Optimization and Applications

Ceramic Vat Photopolymerization Processes	TUE	PM	C161A
Poster Session	TUE	PM	Exhibit Hall C/D
Ceramic Direct Ink Writing Processes	WED	AM	C161A
Ceramic Powder Bed Processes	WED	PM	C161A

WED

C150

### Additive Manufacturing of Polymeric-Based Materials: Potentials and Challenges

AM Modeling - Microstructures and Thermal Analyses II

Revolutionizing Applications and Unleashing the Potential of Polymer-Based Additive Manufacturing	MON	AM	C160A
Exploring the Additive Manufacturing Frontier of Polymeric Composites	MON	PM	C160A

### Additive Manufacturing of Thick Films Using Dry Aerosol Processes: Process Development, Materials, Process Optimization and Applications

Solid Particle Aerosol Deposition	MON	PM	C150
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### September 28-October 1, 2025 Columbus, Ohio, USA

Tamia Area (Suran asium	Dete	Tiras	Dec
Topic Area/Symposium	Date	Time	Room
Additive Manufacturing, Directed Energy Deposition of Metals: Processing – Microstru Relationships	ıcture – M	lechanio	cal Property
Stainless Steels	MON	AM	C160B
Nickel Alloys	MON	PM	C160B
Monitoring, Modeling, and Functionally Grading / Arc Based DED and Copper Alloys	TUE	AM	C160B
Steels / Titanium and High Entropy Alloys	TUE	PM	C160B
Poster Session	TUE	PM	Exhibit Hall C/D
Additive Manufacturing: Design, Materials, Manufacturing, Challenges and Applicatio	ns		
Additive Manufacturing: Design, Materials, Manufacturing, Challenges and Applications - Session I	MON	PM	C151
Additive Manufacturing: Design, Materials, Manufacturing, Challenges and Applications - Session II	TUE	AM	C151
Additive Manufacturing: Design, Materials, Manufacturing, Challenges and Applications - Session III	TUE	PM	C151
Poster Session	TUE	PM	Exhibit Hall C/D
Additive Manufacturing: Design, Materials, Manufacturing, Challenges and Applications - Session IV	WED	АМ	C151
Additive Manufacturing: Design, Materials, Manufacturing, Challenges and Applications - Session V	WED	PM	C151
Additive Manufacturing: Development of Powders			
Foundations and Advances in Atomization Refractory Powder Production	TUE	AM	C160A
Bridging Lab Scale Innovation and Industrial Powder Needs	TUE	PM	C160A
Powder Engineering, Functionalization & Simulation for AM	WED	AM	C160B
Additive Manufacturing: Enhancement and Synergy with Traditional Methods			
Additive Manufacturing: Enhancement and Synergy with Traditional Methods I	MON	AM	C150
Additive Manufacturing: Equipment, Instrumentation and In-Situ Process Monitoring			
In-Situ Monitoring Methods and Instrumentation	WED	AM	C160A
Multi-Modal Monitoring, Data Integration, and Post-Process Analysis	WED	PM	C160A
Artificial Intelligence			
Autonomous Platforms for Designing and Understanding Materials			
Autonomous Platforms for Designing and Understanding Materials	TUE	AM	D282
Enhancing the Accessibility of Machine Learning-Enabled Experiments			
Advancing Materials Research with Foundational Models	MON	AM	D283
Integrating AI, Automation, and Workflow for Intelligent Research Pipelines	MON	PM	D180
Integrated Computational Materials Engineering for Physics-Based Machine Learning	Models		
Integrated Computational Materials Engineering for Physics-Based Machine Learning Models	TUE	АМ	D283
Poster Session	TUE	PM	Exhibit Hall C/D

# Program At A Glance

ic Area/Symposium	Date	Time	Room
Naterials Informatics for Images and Multi-Dimensional Datasets			
Materials Informatics for Images and Multi-Dimensional Datasets I	MON	AM	D282
Materials Informatics for Images and Multi-Dimensional Datasets II	TUE	AM	B233
	nd Data In	formati	cs
Poster Session	TUE	PM	Exhibit Hall C/D
Materials Processing and Fundamental Understanding Based on Machine Learning and Data Informatics I	WED	АМ	D283
Materials Processing and Fundamental Understanding Based on Machine Learning and Data Informatics II	WED	PM	D283
materials			
D Printing of Biomaterials and Devices			
3D Printing of Biomaterials and Devices	MON	AM	C172
Poster Session	TUE	PM	Exhibit Hall C/D
Next Generation Biomaterials			
Next Generation Biomaterials - ACerS Bioceramics Division Award Session	MON	PM	GCCC C171
Next Generation Biomaterials I	MON	AM	C171
Next Generation Biomaterials II	MON	PM	C171
Next Generation Biomaterials III	TUE	AM	C171
Next Generation Biomaterials IV	TUE	PM	C171
Poster Session	TUE	PM	Exhibit Hall C/D
Next Generation Biomaterials V	WED	AM	C171
Next Generation Biomaterials VI	WED	PM	C171
Next Generation Biomaterials VII	WED	PM	C170
amic and Glass Materials			
D Materials: Synthesis, Properties, and Applications			
Poster Session	TUE	PM	Exhibit Hall C/D
2D Materials: Synthesis, Properties, and Applications	WED	AM	B130
advances in Dielectric Materials and Electronic Devices			
Ferroelectrics	MON	PM	B142/143
Dielectrics for Catalysis, Energy Harvesting, and Other Applications	TUE	AM	B142/143
Additive Manufacturing and Perovskite Photovoltaics	TUE	PM	B142/143
Poster Session	TUE	PM	Exhibit Hall C/D
American Ceramic Society Journal Awards Symposium			
American Ceramic Society Journals Awards Symposium	TUE	PM	B130
ingineering Ceramics: Microstructure-Property-Performance Relations and Applicat	ions	•	
Poster Session	TUE	PM	Exhibit Hall C/[
Advanced Processing Technology / Corrosion Behavior of Ceramics / Modeling and Simulation	WED	AM	B240/241
Composites / Properties of Engineering Ceramics	WED	PM	B240/241



### September 28-October 1, 2025 Columbus, Ohio, USA

ic Area/Symposium	Date	Time	Room
classes and Optical Materials: Challenges, Advances, and Applications			
Glass Formation and Manufacturing	MON	AM	B132
Non-Oxide Glasses, Optics, and Glassy Electrolytes	MON	PM	B132
GOMD Alfred R. Cooper Award Session	TUE	AM	B132
Structure and Properties of Oxide Glasses	TUE	PM	B132
Poster Session	TUE	PM	Exhibit Hall C
Anufacturing and Processing of Advanced Ceramic Materials			
New Frontiers in Advanced Manufacturing of Ceramic Materials	MON	PM	B240/241
Advances in Ceramic Processing I: Sintering	TUE	AM	B240/241
Poster Session	TUE	PM	Exhibit Hall C
Advances in Ceramic Processing II: Applications	WED	AM	B142/143
hase Transformations in Ceramics: Science and Applications			
Phase Transformations in Ceramics I	WED	AM	B132
Phase Transformations in Ceramics II	WED	PM	B132
olid-State Optical Materials and Luminescence Properties			
Solid-State Optical Materials and Luminescence Properties	MON	AM	B230
Poster Session	TUE	PM	Exhibit Hall C
damentals and Characterization			
pplications of Uncertainty Quantification (UQ) in Science and Engineering			
UQ Applications in Materials and Engineering - Bayesian Calibration, Sparse Grid Surrogates, Meso-Scaling, Meta Analysis, Deep Kernel Learning	MON	PM	C162B
mergent Materials Under Extremes and Decisive In Situ Characterizations			
In Situ Technologies Combined with Extreme Conditions	MON	AM	C162A
Advanced Characterization of Fuel and Ceramic Materials Under Extreme Conditions	MON	PM	C162A
rain Boundaries, Interfaces, and Surfaces: Fundamental Structure-Property-Perform	mance Rel	ationshi	ps
Sintering & Grain Growth and Modeling	MON	AM	C161A
Surfaces and Heterointerfaces	MON	PM	C161A
Electronic and Mechanical Properties	TUE	AM	C161A
		ond VI	
ligh-Entropy Materials: Solid Solutions, Intermetallics, Ceramics, Functional Materia	ls and Bey		
ligh-Entropy Materials: Solid Solutions, Intermetallics, Ceramics, Functional Material Physics-Based Models	MON	AM	C170
	1	AM PM	C170 C170
	MON		
Physics-Based Models Experiments: Non-Alloys	MON MON	PM	C170
Physics-Based Models  Experiments: Non-Alloys  Data-Driven, Data Analysis, and Design	MON MON TUE	PM AM	C170 C170

# Program At A Glance

ic Area/Symposium	Date	Time	Room
icrostructural Control in Materials Processing: Role of Phase Transformation Pathy	vays		
Poster Session	TUE	PM	Exhibit Hall C/
Microstructural Control in Materials Processing: Role of Phase Transformation Pathways I	WED	AM	C162B
Microstructural Control in Materials Processing: Role of Phase Transformation Pathways II	WED	PM	C162B
and Steel (Ferrous Alloys)			
dvances and Challenges in Decarbonization of the Steel Industry			
Advances and Challenges in Decarbonization of the Steel Industry	TUE	PM	D282
dvances in Ferrous Process Metallurgy			
Simulations & Modeling	MON	AM	D281
Processing & Characterization	MON	PM	D281
Poster Session	TUE	PM	Exhibit Hall C
dvances in Metallic Coated Advanced Steels			
Advances in Metallic Coated Advanced Steels	MON	PM	D283
dvances in Understanding of Martensite in Steels III			
Poster Session	TUE	PM	Exhibit Hall C
Martensite in Steels III	WED	AM	D281
Developments in Plate and Line Pipe Steels			
Developments in Plate and Line Pipe Steels	TUE	PM	D281
lew Frontiers in Physical Metallurgy of Steels			
New Frontiers in Physical Metallurgy of Steels I	TUE	AM	D281
Poster Session	TUE	PM	Exhibit Hall C
teels for Sustainable Development IV			
Development of Steels with Enhanced Mechanical Properties for Sustainable Applications	TUE	AM	D181
Student Poster Session	TUE	PM	Exhibit Hall C
Steel Development Supporting Sustainable Manufacturing and Energy Infrastructure	WED	AM	D282
Steel Development Supporting Circular Economics and Recyclability	WED	PM	D282
ntweight Alloys			
dvances in Titanium Technology			
Characterization of Phase Transformation Pathways	TUE	AM	C172
Alloy Design & Material Discovery	TUE	PM	C172
Poster Session	TUE	PM	Exhibit Hall C
Deformation Mechanisms and Mechanical Properties I	WED	AM	C172
Deformation Mechanisms and Mechanical Properties II	WED	PM	C172



### September 28-October 1, 2025 Columbus, Ohio, USA

pic Area/Symposium	Date	Time	Room
aterials-Environment Interactions			
Advanced Coatings for Wear and Corrosion Protection			
Advanced Coatings for Wear and Corrosion Protection	MON	PM	D181
Poster Session	TUE	PM	Exhibit Hall C/D
Advanced Materials for Harsh Environments			
Poster Session	TUE	PM	Exhibit Hall C/D
Advanced Materials for Harsh Environments - Session I	WED	AM	D180
Advancement of Measurement Technologies for Harsh Environments			
Advancement of Measurement Technologies for Harsh Environments	MON	AM	D180
Poster Session	TUE	PM	Exhibit Hall C/D
Corrosion of Advanced Materials: Theory and Practice			
Corrosion of Advanced Materials: Theory and Practice I	TUE	AM	D180
Corrosion of Advanced Materials: Theory and Practice II	TUE	PM	D180
Corrosion, Protection and Damage Monitoring of Advanced Materials in Natural and S	pecific En	vironmo	ents
Deepened Understandings of Corrosion And Protection Mechanisms with a Focus on Novel Materials, the Change of Corrosive Media and Coating	MON	PM	D182
Development and Applications of Advanced Instrumentation, Characterization Techniques and Methods for Degradation Study	TUE	AM	D182
Poster Session	TUE	PM	Exhibit Hall C/D
High-Temperature Corrosion and Degradation of Materials			
High-Temperature Corrosion and Degradation of Materials	MON	AM	D182
Poster Session	TUE	PM	Exhibit Hall C/D
Materials Under Extreme Environment			
Poster Session	TUE	PM	Exhibit Hall C/D
Materials Under Extreme Environment I	WED	AM	D181
Materials Under Extreme Environment II	WED	PM	D181
Thermodynamics of Materials in Extreme Environments			
Thermodynamics of Materials in Extreme Environments	MON	AM	D181
Poster Session	TUE	PM	Exhibit Hall C/D
Understanding and Mitigating High Temperature Corrosion Processes Through Synero Computational and Manufacturing Techniques	gistic Inte	gration	of Experimental,
High Temperature Corrosion Challenges and Corrosion Resistant Coatings: An Industrial Perspective	TUE	PM	D181
			1

<b>Program A</b>	t A Glance	

ic Area/Symposium	Date	Time	Room
Inderstanding Corrosion-Related Cracking			
Corrosion at Elevated Temperatures and Cracking	TUE	PM	D182
Poster Session	TUE	PM	Exhibit Hall C/
Complex Corrosion Conditions and Cracking, Corrosion Fatigue and Beyond	WED	AM	D182
eling			
dvances in Multiphysics Modeling and Multi-Modal Imaging of Functional Materials			
Operator Learning / Phase-Field Modeling	MON	AM	B244/245
Poster Session	TUE	PM	Exhibit Hall C/
omaterials			
ontrolled Synthesis, Processing, and Applications of Structural and Functional Nano	materials		
2D Nanomaterials	MON	PM	B230
1D Nanostructures	TUE	AM	B230
Nanocomposites & Hybrid Materials	TUE	PM	B230
Poster Session	TUE	PM	Exhibit Hall C/
Growth and Property Control of Nanomaterials I	WED	AM	B230
Growth and Property Control of Nanomaterials II	WED	PM	B230
anotechnology for Energy, Environment, Electronics, Healthcare and Industry			
Nanotechnology for Energy, Environment, Electronics, Healthcare and Industry - Session I	MON	AM	B240/241
Poster Session	TUE	PM	Exhibit Hall C/
lear Energy			
dvanced Characterization of Materials for Nuclear, Radiation, and Extreme Environn	nents VI		
Advanced Characterization Session I	MON	AM	D280
Advanced Characterization Session II	MON	PM	D280
Poster Session	TUE	PM	Exhibit Hall C
eramic Materials for Nuclear Energy Systems			
Materials and Processes for Nuclear Energy Systems	MON	PM	D282
etallic Nuclear Fuel Design, Fabrication and Characterization			
Metallic Nuclear Fuel Design, Fabrication and Characterization I	TUE	AM	D280
Metallic Nuclear Fuel Design, Fabrication and Characterization II	TUE	PM	D280
Poster Session	TUE	PM	Exhibit Hall C/
rogressive Solutions to Improve Corrosion Resistance of Nuclear Waste Storage Ma	terials		
Iron Phosphate Glasses and Advanced Characterization Techniques for Nuclear Waste Forms	TUE	PM	D283
		PM	Exhibit Hall C/
Poster Session	TUE	FIVI	



### September 28-October 1, 2025 Columbus, Ohio, USA

Topic Area/Symposium	Date	Time	Room
Processing and Manufacturing			
Advances in Refractory High Entropy Alloys and Ceramics			
High-Temperature Mechanical Properties	MON	PM	B232
Structures and Mechanical Properties	TUE	AM	B232
High Entropy Ceramics	TUE	PM	B232
Alloy Processing and Mechanical Behavior	WED	AM	B232
Alloy Design and Modeling	WED	PM	B232
Alloy Phase Transformations at Elevated Temperatures			
Ni-Based Superalloys	MON	AM	B232
Poster Session	TUE	PM	Exhibit Hall C/D
Lightweight Composites, Materials & Alloys			
Microstructure and Processing	TUE	AM	B231
Microstructure and Properties	TUE	PM	B231
Poster Session	TUE	PM	Exhibit Hall C/D
Microstructure, Processing and Properties	WED	AM	B231
Processing and Mechanical Behavior	WED	PM	B231
Processing and Performance of Materials Using Microwaves, Electric and Magnetic Mechanical Work – Rustum Roy Symposium	Fields, Ultra	asound,	Lasers, and
Rustum Roy Symposium - Session I	MON	AM	B233
Rustum Roy Symposium - Session Ii	MON	PM	B233
Poster Session	TUE	PM	Exhibit Hall C/D
Sintering and Related Powder Processing Science and Technologies			
Flash and Ultra-Rapid Sintering: Mechanisms, Control, and Applications	TUE	PM	B233
Poster Session	TUE	PM	Exhibit Hall C/D
Field-Assisted Sintering and SPS: Mechanisms, Materials, and Applications	WED	AM	B233
Sintering Control: Linking Formulation, Simulation, and Material Properties	WED	PM	B233
Sustainability, Energy, and the Environment			
17th Symposium on Green and Sustainable Technologies for Materials Manufacturin	g and Proc	essing	
Green and Sustainable Technologies for Manufacturing Materials I	MON	AM	B242/243
Green and Sustainable Technologies for Manufacturing Materials II	MON	PM	B242/243
Green and Sustainable Technologies for Manufacturing Materials III	TUE	PM	B240/241
Poster Session	TUE	PM	Exhibit Hall C/D
Advancements in Molten Salt/Metal Technology in Energy Applications: From Atom	s to Plants		
Molten Salt Fundamentals, Properties, and Simulation	TUE	AM	B242/243
	1	T	

# Program At A Glance

opic Area/Symposium	Date	Time	Room
Advances in Materials and Systems for a Hydrogen Economy			
Hydrogen Fuel in Aerospace Sectors, and Progress in Hydrogen Production by Electrochemical Method - Technical Advances and Obstacles	MON	AM	B246
Complex Interactions of Materials, Components, and Systems for Hydrogen Production, Separation, Storage, Transport, and Utilization	MON	PM	B246
Hydrogen Fuel for Industrial Decarbonization and Advances in Energy Technologies - Material Issues	TUE	AM	B246
Poster Session	TUE	PM	Exhibit Hall C/D
Energy Materials for Sustainable Development			
Battery and Storage I	MON	AM	B234
Thermoelectrics I	MON	AM	B235
Battery and Storage II	MON	PM	B234
Thermoelectrics II	MON	PM	B235
Battery and Storage III	TUE	AM	B234
Thermoelectrics III	TUE	AM	B235
Battery and Storage IV	TUE	PM	B234
Thermoelectrics IV	TUE	PM	B235
Poster Session	TUE	PM	Exhibit Hall C/D
Battery and Storage V / Photovoltaics and Photocatalysis	WED	AM	B234
Thermoelectrics V/ Energy Harvesting, System and Application	WED	AM	B235
Energy Harvesting, System and Application	WED	PM	B234
Hybrid Organic-Inorganic Materials for Alternative Energy			
Hybrid Organic-Inorganic Materials for AlternativeEnergy I	TUE	PM	B246
Poster Session	TUE	PM	Exhibit Hall C/D
2 D Materials and Computational Design of Hybrid Organic-Inorganic Materials for AlternativeEnergy	WED	АМ	B246
Hybrid Organic-Inorganic Materials for AlternativeEnergy II	WED	PM	B246
Materials for CO2 Sequestration			
Materials for CO2 Sequestration	TUE	AM	B244/245
Phasing Out Carbon: Phase Transformation Challenges in Decarbonization Technolog	ies		
Phasing Out Carbon: Phase Transformation Challenges in Decarbonization Technologies	MON	PM	B244/245
Poster Session	TUE	PM	Exhibit Hall C/D



### September 28-October 1, 2025 Columbus, Ohio, USA

pic Area/Symposium	Date	Time	Room
Porous Materials for Energy and Environment Applications			
Porous Materials I	TUE	PM	B244/245
Poster Session	TUE	PM	Exhibit Hall C/D
Porous Materials II	WED	AM	B244/245
ecial Topics			
2025 Graduate Student Poster Contest			
2025 Graduate Student Poster Contest	TUE	PM	Exhibit Hall C/I
2025 Undergraduate Student Poster Contest			
2025 Undergraduate Student Poster Contest	TUE	PM	Exhibit Hall C/
ACerS Robert B. Sosman Award Symposium: Solid State Chemistry Meets Solid S	tate Ionics		
ACerS Robert B. Sosman Award Symposium	WED	AM	B131
GNITE MSE: Bridging Gaps in Innovation and Collaboration			
Poster Session	TUE	PM	Exhibit Hall C/
nnovative Materials Solutions for a Rapidly Evolving Market			
Innovative Materials Solutions for a Rapidly Evolving Market	TUE	PM	C162B
Materials and Manufacturing in Low Earth Orbit (and Beyond)			
Manufacturing of Organics/Biomaterials in Low Earth Orbit	TUE	AM	C161B
Materials Testing & Modeling for Space Applications	TUE	PM	C161B
Welding in Low Earth Orbit- History and Planned Experiments	WED	AM	C161B
Building Space Infrastructure in Low Earth Orbit and Beyond	WED	PM	C161B
Navigating Career Pivots at the Mid-Career and Beyond			
Navigating Career Pivots at the Mid-Career and Beyond	TUE	AM	C162B
TMS Frontiers of Materials Award Symposium: Harnessing Charged and Chemica and Functional Properties	al Defects for E	xceptio	nal Structural
TMS Frontiers of Materials Award Symposium I	TUE	AM	C162A
TMS Frontiers of Materials Award Symposium II	TUE	PM	C162A
TMS Frontiers of Materials Award Symposium III	WED	AM	C162A





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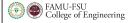
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# **Exhibitor List**





Across International LLC	610
AdValue Technology LLC	431
Advanced Carbons Council	311
Agilent Technologies	326
Alfred University	401
Amazemet	212
American Association for Laboratory	
Accreditation (A2LA)	323
American Carbon Company	623
American Isostatic Presses, Inc.	616
Angstrom Scientific Inc.	425
Applied Ceramics, Inc.	423
Applied Test Systems (ATS)	525
Applied Thermal Control	709
Bhawin LLC	224
Bruker	609
Bullen Ultrasonics, Inc	222
California Nanotechnologies Inc	405
Carbolite, a VERDER company	511
Center for Advanced Materials	
Processing	817
ceramitec	332
Color Master, Inc.	725
CompuTherm LLC	531
Dr. Fritsch FAST/SPS Sintering	405
Dragonfly	322
Ebatco	429
ELTRA, a VERDER company	511
FAMU-FSU College of Engineering	
MatSci Dept	304
FlackTek™	424
Freemelt	601
Fritsch Milling & Sizing, Inc	520

Genius Lab Gear	630
GeoCorp, Inc.	505
Goodfellow Corporation	611
GrindoSonic	516
Hauschild SpeedMixer	628
Hirox-USA, Inc.	708
ICDD	422
IDTechEx	514
INMATEC Technologies GmbH	729
JEOL USA	504
Kennametal, Inc.	624
Keyence Corporation of America	617
KRÜSS Americas	711
KS Analytical Systems	329
Kymera International	417
Lake Shore Cryotronics	415
Laser Thermal Analysis	320
LECO Corporation	409
Leica Microsystems	210
Linseis	625
Lithoz America	528
Lucideon	811
MaterialsZone	428
Microtrac, a VERDER company	511
MIPAR Image Analysis	717
Nabertherm Inc.	530
Nanum Nanotechnology	313
NETZSCH Instruments North	
America, LLC	715
Ningbo Chuangrun New Materials	·
Co., Ltd	325
Oxy-Gon Industries, Inc.	629
Pace Technologies	615

Plasmaterials, Inc.	714
Powder Processing and Technology	728
Powdertech International	622
Princeton Scientific Corporation	502
Proto	809
Psylotech Inc.	209
QATM, a VERDER company	511
Quantum Design	421
RETSCH, a VERDER company	511
Rigaku Americas	716
SCI Engineered Materials Inc	524
SCM	226
Semilab USA LLC	631
Seneca Ceramics Corporation	723
Sente Software Ltd.	522
Springer Nature	211
Sugino Corp.	621
Ted Pella, Inc.	509
Tescan	608
The Johns Hopkins University	
Department of Materials Science	
and Engineering	300
Thermcraft	710
Thermo-Calc Software	500
THINKY USA	529
Top Sieko USA, Inc.	430
Uncountable Inc.	324
Verder Scientific Inc	511
WAB Group	523
Walker Precision Engineering	411
X-Sight s.r.o.	815
Zircar Zirconia, Inc.	510

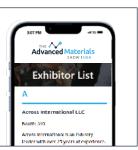
#### **FEATURED AREAS**

Conference Sessions	207
Event Partners Portfolio	605
Exhibitor Services	241
Networking Lounge	519
The Advanced Materials Jobs Board	603
VIP & Exhibitor Lounge	705



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## Floorplan







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## **Product Categories**





#### Additive Manufacturing

Amazemet - **212** Applied Ceramics, Inc. - 423 ceramitec - 332 Color Master, Inc. - **725** Freemelt - **601** INMATEC Technologies GmbH - **729** JEOL USA - **504** Kennametal, Inc. - 624 Lithoz America - 528 Lucideon - **811** Nabertherm Inc. - 530 Ningbo Chuangrun New Materials Co., Ltd - 325 Proto - **809** Thermo-Calc Software - 500

#### **Analysis Equipment**

THINKY USA - **529** 

Across International LLC - 610
Agilent Technologies - 326
Applied Thermal Control - 709 Bruker - **609** Dragonfly - **322** ELTRA, a VERDER company - 511 Fritsch Milling & Sizing, Inc - **520** Hirox-USA, Inc. - 708 JEOL USA - **504** KRÜSS Americas - 711 KS Analytical Systems - 329 Lake Shore Cryotronics - 415 LECO Corporation - **409** Leica Microsystems - **210** MaterialsZone - **428** Microtrac, a VERDER company - 511 MIPAR Image Analysis - 717 NETZSCH Instruments North America, LLC - 715 Princeton Scientific Corporation - 502 Quantum Design - **421** RETSCH, a VERDER company - 511 Rigaku Americas - **716** Semilab USA LLC - **631** Tescan - **608** Uncountable Inc. - 324 Verder Scientific Inc - 511

#### Associations/Media

Advanced Carbons Council - 311 American Association for Laboratory Accreditation (A2LA) - 323 ceramitec - 332 ICDD - **422** Springer Nature - 211

#### Carbon/Graphene/2D Materials

Advanced Carbons Council - 311 American Carbon Company - 623 Color Master, Inc. - 725 Goodfellow Corporation - 611 Quantum Design - **421** Springer Nature - 211 Sugino Corp. - 621

Ceramics AdValue Technology LLC - 431 Alfred University - 401 Applied Ceramics, Inc. - 423 ceramitec - **332** INMATEC Technologies GmbH - **729** Kennametal, Inc. - 624 Lithoz America - **528** Lucideon - **811** NETZSCH Instruments North America, LLC - 715 Powder Processing and Technology - 728 Powdertech International - 622 SCI Engineered Materials Inc - **524** Seneca Ceramics Corporation - 723 Thermcraft - **710** Zircar Zirconia, Inc. - **510** 

#### Coatings

Kennametal, Inc. - 624 Nanum Nanotechnology - **313** Ningbo Chuangrun New Materials Co., Ltd - **325** Princeton Scientific Corporation - **502** Zircar Zirconia, Inc. - 510

#### Composites

American Carbon Company - 623 Bullen Ultrasonics, Inc - 222 Goodfellow Corporation - **611** Nanum Nanotechnology - 313 Powdertech International - 622 Zircar Zirconia, Inc. - 510

#### Education

Alfred University - 401 Center for Advanced Materials Processing - 817 FAMU-FSU College of Engineering MatSci Dept - 304 Freemelt - 601 Nabertherm Inc. - 530 Sente Software Ltd. - **522** The Johns Hopkins University Department of Materials Science and Engineering - 300 X-Sight s.r.o. - 815

#### Lab Equipment/Instruments Across International LLC - 610

Agilent Technologies - 326 Amazemet - **212**Angstrom Scientific Inc. - **425** Applied Thermal Control - 709 Applied Test Systems (ATS) - 525 Carbolite, a VERDER company - **511** Ebatco - **429** ELTRA, a VERDER company - **511** FlackTek™ - **424** Fritsch Milling & Sizing, Inc - **520** Genius Lab Gear - **630** GeoCorp, Inc. - **505** Hauschild SpeedMixer - 628 Hirox-USA, Inc. - 708 Keyence Corporation of America - 617 KRÜSS Americas - 711 KS Analytical Systems - 329 Lake Shore Cryotronics - 415 LECO Corporation - 409 Leica Microsystems - 210 Linseis - **625** Microtrac, a VERDER company - **511** Nabertherm Inc. - **530** Oxy-Gon Industries, Inc. - **629** Plasmaterials, Inc. - **714**Princeton Scientific Corporation - **502** Proto - **809** Psylotech Inc. - 209 QATM, a VERDER company - **511** Quantum Design - 421 RETSCH, a VERDER company - 511 Rigaku Americas - **716** Semilab USA LLC - **631** Ted Pella, Inc. - **509** Tescan - 608 THINKY USA - 529 Verder Scientific Inc - **511** WAB Group - 523 X-Sight s.r.o. - 815

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#### Manufacturing/Processing Equipment

Linseis - 625 Lithoz America - 528 Oxy-Gon Industries, Inc. - 629 Plasmaterials, Inc. - 714 Powder Processing and Technology - **728** Sugino Corp. - **621** THINKY USA - **529** Top Sieko USA, Inc. - 430 WAB Group - 523 Walker Precision Engineering - 411

Nanomaterials AdValue Technology LLC - **431** Advanced Carbons Council - 311 American Carbon Company - 623 Bhawin LLC - 224 California Nanotechnologies Inc., - 405 FAMU-FSU College of Engineering MatSci Dept - 304 JEOL USA - **504** Nanum Nanotechnology - 313 Plasmaterials, Inc. - **714**Powdertech International - **622** The Johns Hopkins University Department of Materials Science and Engineering - **300** Springer Nature - **211** Sugino Corp. - **621** 

#### **Polymers**

Color Master, Inc. - 725 Goodfellow Corporation - 611

**R&D Services** Bhawin LLC - **224** Bullen Ultrasonics, Inc - 222 CompuTherm LLC - 531 Ebatco - **429** FAMU-FSU College of Engineering MatSci Dept - 304 FlackTek™ - 424 Goodfellow Corporation - 611 Hauschild SpeedMixer - **628** Laser Thermal Analysis - 320 Leica Microsystems - 210 Lucideon - 811 MaterialsZone - **428** MIPAR Image Analysis - 717
Oxy-Gon Industries, Inc. - 629
Seneca Ceramics Corporation - 723
Sente Software Ltd. - 522 The Johns Hopkins University Department of Materials Science and Engineering - **300** Thermcraft - **710** Thermo-Calc Software - 500

**Testing Equipment** Agilent Technologies - **326** Applied Test Systems (ATS) - **525** Bruker - **609** Carbolite, a VERDER company - **511** Dragonfly - **322** ELTRA, a VERDER company - **511** Genius Lab Gear - 630 GeoCorp, Inc. - 505 GrindoSonic - 516 Hirox-USA, Inc. - 708 KRÜSS Americas - 711 KS Analytical Systems - 329 Lake Shore Cryotronics - 415 Laser Thermal Analysis - 320 LECO Corporation - 409
MaterialsZone - 428
Microtrac, a VERDER company - 511 NETZSCH Instruments North America, LLC - 715 Psylotech Inc. - **209** QATM, a VERDER company - 511 RETSCH, a VERDER company - 511 Semilab USA LLC - 631 Tescan - **608** Thermcraft - 710 Verder Scientific Inc - 511 X-Siaht s.r.o. - 815

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Alfred University - 401 American Association for Laboratory Accreditation (A2LA) - 323 American Isostatic Presses, Inc. - 616

Applied Test Systems (ATS) - **525** Bhawin LLC - 224

Center for Advanced Materials Processing - 817

Dragonfly - 322 Ebatco - 429

Laser Thermal Analysis - 320

Linseis - 625 Proto - 809 Psylotech Inc. - 209 Rigaku Americas - 716

Other Product Categories

Advanced Ceramics Machining: Bullen Ultrasonics. Inc - 222

Alloy Design: CompuTherm LLC - 531

CIM - Ceramic Injection Moulding: INMATEC Technologies GmbH - 729

Computer Software, Modeling and Simulation: Thermo-Calc Software - 500

Crucibles: SCM - 226

**Other Product Categories** 

Fused Quartz, Sapphire, High Purity Powders, Refractory Metals: AdValue Technology LLC - 431

**Heat Treatment:** 

Carbolite, a VERDER company - 511

Hi Temperature Kiln Furniture: Applied Ceramics, Inc. - 423

High Purity Metals:

Ningbo Chuangrun New Materials Co., Ltd - 325

**Laboratory Information Systems:** 

Hauschild SpeedMixer - 628

Market Intelligence & Consultancy Services:

IDTechEx - 514

Materials for Thin Films and PVD: SCM - 226

Materials Modeling Software (for Multi-component Alloys):

Sente Software Ltd. - 522

Metallographic Equipment & Consumables:

Pace Technologies - 615

Metallography & Materialography Equipment:

QATM, a VERDER company - 511

#### **Other Product Categories**

Metallography & Materialography Equipment: QATM, a VERDER company - 511

Microstructural Analysis: Pace Technologies - 615

Physical Vapor Deposition Materials:

Plasmaterials, Inc. - 714 Sample Preparation: Pace Technologies - 615

Sintering: Dr. Fritsch FAST/SPS Sintering - 405

Sinter Presses:

Dr. Fritsch FAST/SPS Sintering - 405

Spark Plasma Sintering:

Dr. Fritsch FAST/SPS Sintering - 405 Software: CompuTherm LLC - 531

Specializing in Custom Designed Oxide Materials: Seneca Ceramics Corporation - 723

Sputtering Targets: SCM - 226

Toll HIP and CIP:

American Isostatic Presses, Inc. - 616

**Tolling Services:** 

Powder Processing and Technology - 728

## **Show Information**



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MS&T25

#### **Tuesday September 30 Exhibition** 9:00am - 4:30pm **Poster Viewing** 2:00am - 5:00pm **Advanced Materials Show Sessions** 10:00am - 4:20pm Mug Drop Contest 10:30am - 12:00pm **Poster Contest Judging** 10:00am - 12:00pm **Disc Golf Contest** 12:00 - 1:00pm **Networking Reception** 4:30 - 6:00pm **Wednesday October 1 Exhibition** 9:00am - 3:00pm **Poster Viewing** 9:00am - 3:00pm **Advanced Carbons Council Sessions** 10:00am - 2:55pm

#### Complimentary Wi-Fi 🛜



There is complimentary wi-fi access available in all the public spaces such as lobbies, concourses and pre-function areas, this does not include the exhibition hall.

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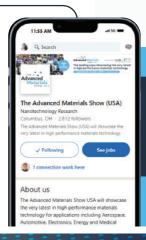
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### Contact Us

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Tuesday September 30 • 4:30 - 6:00pm

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The Advanced Carbons Council (ACC) is a global trade association that supports the production, adoption and use of engineered advanced carbons. Our mission is to connect and facilitate the cross sector fertilization of ideas, applications and business for all advanced materials producers and users.





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# Sessions Agenda





**Immerse yourself in a series of enlightening and thought-provoking presentations** from The Advanced Materials Show exhibitors and delve into the sector's most cutting-edge innovations.

The Advanced Materials Show Sess	ions • Day 1 • Tuesday September 30
Morning Sessions	Afternoon Sessions
10:00 - 10:15am Why Most of Your Scientists Hate Their Lab Coats (and What We Can Do About It) Derek Miller, Founder, Genius Lab Gear	13:45 - 14:00pm  Machining Methods – Ceramics and Other Hard, Brittle Materials  Eric Norton, Research and Early Innovation Manager, Bullen Ultrasonics, Inc
10:20 - 10:35am  Overcoming Scale-Up Challenges: How to Win and Jnlock Radical Performance Jamie Scaglione, Market Development Manager, Lucideon	14:05 - 14:20pm  Design Challenges of a High Temperature Rapid Cycle Furnace Module  Jeff Morse, Technical Sales, Zircar Zirconia, Inc.
10:40 - 10:55am  Agile Materials Processing: Seamlessly Scale from Grams to Tons Robert Umland, Global Director - Sales and Marketing, FlackTek	14:25 - 14:40pm  Addressing Critical Rare Earth Magnet Supply and Demand Challenges with Material Design and Manufacturing Innovations  Dr. Jack Howley, Technology Analyst, IDTechEx
11:10 - 11:25am  Combining Micro-mechanical Testing with Latest EBSD, microCT, and optical DIC & DVC Techniques. Matthew Struve, Business Development Manager, Psylotech Inc.	14:45 - 15:00pm  Material Science of Nb <sub>3</sub> Sn, an Enabler for Advanced Technology for Next-Generation Particle Accelerator Shreyas Balachandran, Associate Professor, Department of Mechanical Engineering, FAMU- FSU College of Engineering
11:30 - 11:45am  K-Sight: User-friendly Solution for Advanced and Complex Material and Engineering Testing Alexandr Zakl, Sales Engineer, X-Sight	15:05 - 15:20pm  Pandat Software Integrating CALPHAD, Microstructure Modeling and FEM for ICME Applications Dr. Kamalnath Kadirvel, Materials Scientist, CompuTherm LLC
11:50am - 12:05pm  Challenges Developing and Evaluating Materials in Controlled Atmospheres, e.g., O <sub>2</sub> /N <sub>2</sub> /inert-gas and /acuum, up to 2000°C.  oe Pinsonneault, Engineer, Oxy-Gon Industries, Inc.	15:25 - 15:40pm  Al-Assisted 3D Image Segmentation and Analysis of Porous Media  Dr. Zixiong Cao, Global Technical Sales, Dragonfly
LUNCH BREAK	15:45 - 16:00pm
view the latest	Discover Faster, Optimize Smarter, Deliver Better: How AI Is Transforming Advanced Materials R&D Dr. Assaf Anderson, Founder & CTO, MaterialsZone

Advanced Materials Sessions, scan this QR Code



or visit wwww.advancedmaterialsshowusa.com for the latest agenda updates.

16:05 - 16:20pm

Accelerating Energy Solutions with High-Entropy Materials: Leveraging Disorder, Computation, and AI

**Dr. Corey Oses**, Assistant Professor, Department of Materials Science and Engineering, **The John Hopkins University** 

## Sessions Agenda





**Hear from industry experts on the latest commercial trends** for advanced carbons including graphene, carbon fiber, CNT's, synthetic graphene and the use of sustainable/reclaimed carbons.

## Advanced Carbons Council Sessions • Day 2 • Wednesday October 1

10:00 - 10:25am

How to Choose the Right Material for Your Application

Terrance Barkan, Executive Director, Advanced Carbons Council



10:30 - 10:55am

Where Can Companies Turn to for Hands-on Application Development and Testing?

Monica Tisack, Executive Director, Mississippi Polymer Institute (MPI)



11:00 - 11:25am

The Importance of Characterization and Verification for Advanced Materials

Dr. Cary Hill, Director Nanomaterial and Emerging Containment Safety, ITA International



11:30 - 11:55am

Powering Performance with Graphite Innovation

Liesl Massey, Sr Manager Business Development and Strategic Marketing, NeoGraf



**LUNCH BREAK** 

Visit the Advanced Carbons Council on Booth 311 for more information.

13:00 - 13:25pm

Lab Bench to Factory Floor - Closing the Gap Between Research and Application

John Stafford, VP Business Development, TMTP



13:30 - 13:55pm

Nanum Functional Nanomaterials: Enabling Next-Gen Performance Across Coatings, Lubricants and Composites

Alexandre Caldeira, Commercial Strategy and Innovation Director, Nanum Technology Joyce Cruz, R&D Manager, Nanum Technology



14:00 - 14:25pm

Disperson of Carbon Nanotunbes Using an Agitator Bead Mill

Daniel Grskovic, President, WAB US Corp.



14:30 - 14:55pm

**Update on Standards for Advanced Carbons Materials** 

Terrance Barkan, Executive Director, Advanced Carbons Council



To view the latest

Advanced Carbon Council Sessions, scan this QR Code

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# See You Next Year!

October 6 - 7, 2026 • Pittsburgh, PA





Visit our booth #705 and find out more information on next year's expo!



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## **MS&T ANTI-HARASSMENT POLICIES**

The Material Science and Technology Conference (MS&T) is organized by a partnership of three leading materials science-related societies: ACerS, AIST, and TMS.

All three partner societies are committed to ensuring that all MS&T activities are free from discrimination, harassment, and/or retaliation of any form. The MS&T partnership does not tolerate harassment in any form of anyone attending an MS&T event.

Each Society has its Anti-Harassment/Code of Conduct policies posted on its website:

https://ceramics.org/wp-content/uploads/2021/03/Appendix-3-Anti-Harassment-Policy-Rev-Oct-2020.pdf

https://www.aist.org/about-aist/leadership-governance/governance-policies

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#### What to Do

Anyone who witnesses or is subject to any form of harassment has two options:

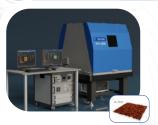
- 1. Immediately notify any MS&T staff members located at the MS&T registration area, information booths, or at one of the Society lounges. These MS&T staff members will immediately contact the MS&T leadership who will respond to you as soon as possible.
- 2. If you are a member of ACerS, AIST, or TMS, please consult the above-referenced policies to determine to whom and how best to report an incident.

The MS&T partnership respects the organizational sovereignty and decision-making practices employed by each partner. Therefore, each partner, based on employment of its own internal due process, has the right to deny or revoke participation in the MS&T event and/or any of its activities by any individual or business.



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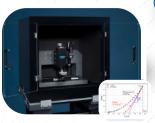


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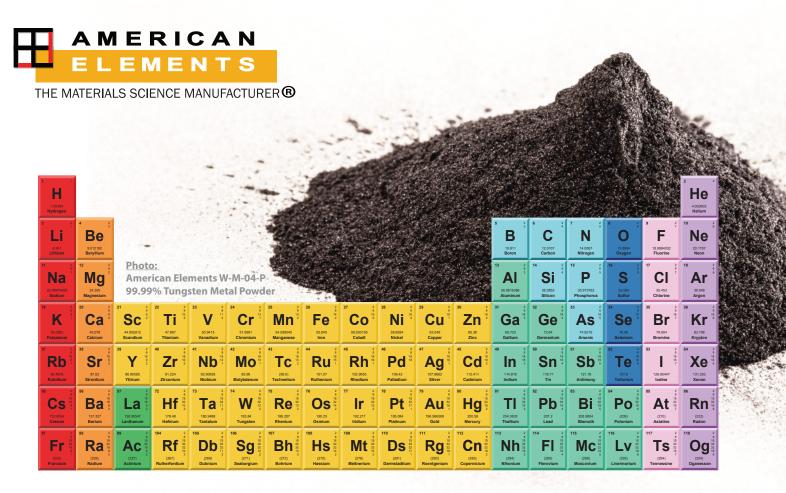
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