



CO-LOCATED WITH:

**MS&T22**  
MATERIALS SCIENCE & TECHNOLOGY

# SHOW GUIDE

Showcasing the very latest in high-performance materials technology and nanotechnology for cutting-edge commercial applications

**October 11 – 12, 2022**

David L. Lawrence Convention Center, Pittsburgh, PA

Sponsored by:

# WORLD-CLASS CONFERENCE

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**Welcome to The Advanced Materials Show and The Nanotechnology Show Conference! We are delighted to have you back and would like to invite you to join us in welcoming our new co-located partner, the renowned MS&T event series.**

In these pages you will find brand new sessions and speakers delivering fresh insight on the most important issues for materials and nanotechnology end users and their whole value chains. Moreover we hope you will agree that this conference is a key opportunity for industry peers to gather, network and discuss the brightest and best developments in materials and nano innovation, manufacturing and application.

After an exciting first iteration in New Jersey in 2021, our industry-focused programs for 2022 address materials and nanotechnology R&D, product commercialization, application-led innovation and strategic conversations that encompass the shifting global landscape, for both end-users and materials and nanotechnology manufacturing industries.

You will find the pivotal themes of sustainability, supply, affordability and performance thread through every session as the whole industry moves towards achieving more with less when it comes to global resources, something both sectors are well placed to contribute to given their superior performance at a smaller scale.

We are covering an exciting array of application-led developments too with sessions addressing R&D within materials and nanotechnology for aerospace, automotive and e-mobility, energy storage, coatings, defense, aerospace, electronics and sensors.

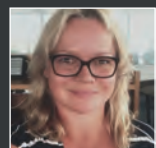
New for 2022, the program features a 'Pitch Perfect' session, showcasing some of the best and brightest new companies in short, Shark Tank-style pitches to a panel of leading strategic and financial investors. This has been included with a view to gaining critical and constructive feedback for the pitcher, potentially winning them investment and utilising the expert panel's insight to demonstrate to all in attendance how to commercialize a product, understand your value proposition and move up a level in the industry.

With a diverse array of session formats and speakers from across the value chain this is going to be a lively couple of days. We hope you have a fantastic week!

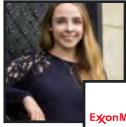
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**Olivia Ryan-Hill**  
Conference Director  
Event Partners Ltd



## FEATURED SPEAKERS



**Anna Ivashko**  
Researcher  
**ExxonMobil**



**Dr. Chris Brown**  
Executive Director  
Materials Discovery  
**Schrödinger**



**Dr. Lirong Bao**  
Global Science &  
Technology Director,  
Aerospace Materials  
**PPG**



**Kjirsten Breure**  
President  
**HydroGraph**  
**Clean Power**



**Dr. Mano Manoharan**  
Chief Technologist -  
Industrialization  
**GE Aviation**



**Chiara Venturini**  
Director General  
**Nanotechnology**  
**Industries**  
**Association**



**Colin Greenspon**  
Co-Founder  
**Narya**



**Dr. Bryce Anzelmo**  
Director of Product  
Management  
**Lyten**



**Dr. Hari Harikumar**  
VP & GM Advanced  
Carbon & Membranes  
**CHASMTek**



**Dr. Leroy Magwood Jr.**  
Chief Technologist Officer  
**XG Sciences**

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Ask our speakers questions and vote for the ones you want to hear answered - straight from your phone with Slido!  
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# CONFERENCE AGENDA • DAY 1

## TRACK 1 • ADVANCED MATERIALS TRACK

**Keynote: Building a Resilient, Sustainable Materials Industry Amidst Global Upheaval**

9:30 AM - 10:45 AM • **TRACK 1**

**Dr. Mano Manoharan**, Chief Technologist, GE Aviation

**Dr. Ed Rakiewicz**, Research Fellow, PPG



**Pitch Perfect: On Stage Investment Showcase for Transformative Materials and Technologies**

11:15 AM - 12:30 PM • **TRACK 1**

**Jay Amarasekera**, Senior Technology Manager, SABIC Ventures

**Colin Greenspon**, Co-Founder, Narya

**Hongkai He**, Managing Partner, Taihill Venture

**Kelli Booth**, Co-Founder, Early Charm Ventures



**Meeting the Increasing Demand for Advanced Materials in Electric Vehicles**

1:45 PM - 3:00 PM • **TRACK 1**

**Kurt Swogger**, CEO, Molecular Rebar Design



**Transforming Energy Storage with Innovative Materials**

3:20 PM - 4:30 PM • **TRACK 1**

**Dr. Bryce Anzelmo**, Director of Product Management, Lyten

**Andy Holwell**, Manager Business Sector Industrial Research, Zeiss

**Dr. Jordan Swisher**, Director of High-Throughput Experimentation, Stoicheia



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## TRACK 2 • NANOTECHNOLOGY TRACK

### Keynote: Understanding the Macro Factors that Will Accelerate Nanotechnology Uptake

9:30 AM - 10:45 AM • **TRACK 2**

**Kjirsten Breure**, President, HydroGraph Clean Power

**Landon Mertz**, CEO, Cerion Nanomaterials

**Paul Ferguson**, Dir. of Business Development – Advanced Carbons, CHASMTek



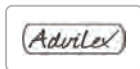
### Overcoming Perceived Environmental and Toxicological Concerns Around Nanotechnology

11:15 AM - 12:30 PM • **TRACK 2**

**Dr. Leroy Magwood Jr.**, CTO, XG Sciences

**Chiara Venturini**, Director General, The Nanotechnology Industry Association

**Dr. Robert Janssen**, Partner, Advilex Regulatory Compliance



### The Technical Challenges of Scaling Up Manufacturing and Integration

1:45 PM - 3:00 PM • **TRACK 2**

CHAIR: **Anna Ivashko**, Researcher, ExxonMobil

**James Sherrill**, CEO, General Graphene

**Dr. Matt Weimer**, R&D Scientists, Forge Nano

**Dr. Richard Collins**, Research Director, North America Lead, IDTechEx

**Dr. Hari Harikumar**, VP & GM Advanced Carbon & Membranes, CHASMTek



### How to Successfully Commercialize Nano and Other Advanced Materials

3:20 PM - 4:30 PM • **TRACK 2**

CHAIR: **Dr. Ken Malone**, CEO, Materic

**Terrance Barkan**, Executive Director, Graphene Council

**Haley Keith**, Founder and CEO, MITO Materials

**Paul Glass**, VP Engineering + Business Unit Director, B2C Products, Setex Technologies



# CONFERENCE AGENDA • DAY 2

## TRACK 1 • ADVANCED MATERIALS TRACK

### Additive Manufacturing and Advanced Materials - Taking a More Sustainable Approach to Manufacturing?

9:30 AM - 10:40 AM • TRACK 1

**Shawn Allan**, VP, Lithoz America

**Dr. Fan Zhang**, Physicist, U.S. Department of Commerce National Institute of Standards and Technology (NIST)



### Maximizing Digital Tools in Materials Development, Fabrication and Integration

11:10 AM - 12:20 PM • TRACK 1

CHAIR: **Dr. Richard Collins**, Research Director, North America Lead, IDTechEx

**Anna Ivashko**, Researcher, ExxonMobil

**Dr. Chris Brown**, Executive Director, Materials Discovery, Schrödinger



### Advances in Coatings for Industrial Applications

1:30 PM - 2:45 PM • TRACK 1

**Dr. Sean Clancy**, Director of Coatings, HZO

**Dr. Rakesh Kumar**, VP - Technology, SCS Coatings

**Penelope Burnham**, Vice President North America, Nycote Laboratories Corporation US



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## TRACK 2 • NANOTECHNOLOGY TRACK

### Disruptive Materials for Electronic Devices and Sensors at the Micro and Nano Scale

9:30 AM - 10:40 AM • TRACK 2

**Stephen Farias**, CTO, Materic

**Richard Ploss**, CEO, ACS Material, LLC

**Dr. Anis Rahman**, Chief Technology Officer and President, Applied Research & Photonics



### Managing Critical Temperature and Pressure Extremes for the Aerospace Sector

11:10 AM - 12:20 PM • TRACK 2

**Dr. Lirong Bao**, Global Science & Technology Director, Aerospace Materials, PPG



### Driving Materials and Nanoscale Innovation for Defense Applications

1:30 PM - 2:45 PM • TRACK 2

**Landon Mertz**, CEO, Cerion Nanomaterials



*Conference agenda subject to change*

