

Preliminary Program

Innovative Materials & Methods for Additive Manufacturing III (IM2AM)

January 11 - 15, 2026

Savannah, Georgia

Conference Chair:

Brett Compton, University of Tennessee at Knoxville, USA

Conference Co-Chairs:

Eric Eastwood, KCNSC, USA

Nikhil Gupta, New York University, USA

Daniel Schmidt, Luxembourg Institute of Technology

Joamin Gonzalez-Gutierrez, Luxembourg Institute of Technology

Pedro Cortes, University of Texas at El Paso, USA



Engineering Conferences International

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Sunday, January 11, 2026

17:00 – 18:00	Conference check-in
18:00 – 19:00	Welcome reception
19:00 – 21:00	Dinner and Social Hour

Monday, January 12, 2026

07:00 – 08:20 Breakfast

08:20 – 08:30 Conference Welcome – Conference Liaison and Chairs

Session 1: Polymers

Session Chair: TBA

08:30 – 09:00 **Coalescence model verification and investigation of unique feedstocks for polymer powder bed fusion**
Camden Chatham, Savannah River National Laboratory, USA

09:00 – 09:20 **Tailor made polyolefin and polymer blend feedstocks for powder bed fusion**
Mark Dadmun, University of Tennessee, USA

09:20 – 09:50 **Energetic mass mocks produced by powder bed fusion**
C. Garrett Campbell, Sandia National Laboratories, USA

09:50 – 10:20 **Functional binders for bind jet additive manufacturing**
Dustin Gilmer, University of Tennessee, USA

10:20 – 10:50 Coffee Break

Session 2: Metals

Session Chair: TBA

10:50 – 11:20 **Manufacturing process of tooling molds using an additive/subtracting L-DED platform**
Pedro Cortes, The University of Texas at El Paso, USA

11:20 – 11:50 **Multi-modal detection of subsurface porosity for directed energy deposition**
Eric MacDonald, The University of Texas at El Paso, USA

11:50 – 12:20 **Fusing in-situ data for AM qualification: A strategy to reduce mechanical testing**
Yash Parikh, EOS of North America, Inc., USA

12:20 – 12:50 **In-situ thermomechanical processing in Waam stainless steels for microstructure control**
Shramana Ghosh, ORNL, USA

12:50 – 14:20 Lunch

Free time / *ad hoc* sessions

19:30 – 21:30 **Poster Session** and Social Hour

Tuesday, January 13, 2026

07:00 – 08:30 Breakfast

Session 3: Process Development

Session Chair: TBA

08:30 – 09:00 **Advancing direct ink writing through material formulation and multifunctional printhead design for complex architectures**
Jochen Mueller, Johns Hopkins University, USA

09:00 – 09:30 **Accelerating direct ink write (DIW) design: Functional fillers, data optimization, and prediction**
James Tata, Los Alamos National Lab, USA

09:30 – 10:00 **Quality-by-design for high solids material extrusion additive manufacturing**
Blair Brettmann, Georgia Tech, USA

10:00 – 10:30 **Shaping the future of batteries with additive manufacturing**
Alexis Maurel, The University of Texas at El Paso, USA

10:30 – 11:00 Coffee Break

Session 4: Thermoplastic

Session Chair: TBA

11:00 – 11:30 **Hot-end co-extrusion of multiple thermoplastics for programmable and tough composite additive manufacturing**
Taemin Kim, KAIST, South Korea

11:30 – 11:50 **Elastic–plastic fracture analysis of multilayer 3D-printed PETG/PLA composites: Influence of layered architecture on fracture toughness and energy absorption**
Chayan Kosambia, IIT Bombay, India

11:50 – 12:20 **Material characterization and process mapping for thermoplastics and thermosets in additive manufacturing using FGF and DIW technologies**
Zac DiVencenzo, JuggerBot 3D, USA

12:20 – 12:50 **Mapping of interfacial heterogeneities in high-performance engineering thermoplastics and composites during additive manufacturing via synchrotron X-ray diffraction**
Hilmar Koerner, Air Force Research Laboratory, USA

12:50 – 14:20 Lunch

Excursion

Wednesday, January 14, 2026

07:00 – 08:30 Breakfast

Session 5: Smart and Cellular Materials

Session Chair: TBA

08:30 – 09:00 **Developing principles for process parameter optimization for additive manufacturing of thermosetting syntactic foams**
Caleb Beckwith, New York University Tandon School of Engineering, USA

09:00 – 09:20 **LPBF lattice structures for impact energy absorption in automotive applications**
Marcello Cabibbo, Marche Polytechnic University, Italy

09:20 – 09:40 **Flexible strain sensors with additive manufacturing hybrid graphene-based nanocomposites**
Shani Ligati Schleifer, Ben Gurion University of the Negev, Israel

09:40 – 10:10 **Advancing dielectric polymer composites for high-performance thermal management via microstructure engineering and additive manufacturing**
Randall Erb, Northeastern University, USA

10:10 – 10:40 Coffee Break

Session 6: Novel Polymers and Characterization

Session Chair: TBA

10:40 – 11:10 **Closing the loop: Waste-derived and biomass-filled circular materials for regenerative 3D-printed housing and sustainable additive manufacturing**
Ramona Fayazfar, Western University, Canada

11:10 – 11:40 **Adapting vitrimers to additive manufacturing**
Daniel F. Schmidt, Luxembourg Institute of Science and Technology

11:40 – 12:10 **Advanced metrology of thermoset composites in direct ink writing: Structural instability and residual stress**
Stian Romberg, University of Tennessee, USA

12:10 – 12:30 **Multi-step frontal polymerization of fiber distributed thermoset composites for agile manufacturing**
A. B. M. Tahidul Haque, University of Alabama, USA

Lunch on your own and free time

Session 7: High Throughput Screening

Session Chair: TBA

17:30 – 18:00 **High-throughput compositional and processing mapping for additive manufacturing of extreme ceramics**
Christopher Hansen, University of Massachusetts Lowell, USA

18:00 – 18:30 **Studying-Polymers-On a-Chip (SPOC): Automated, high-throughput screening of polymer membranes for diverse energy applications**
Johanna Schwartz, Lawrence Livermore National Laboratory, USA

18:30 – 20:30 **Conference Banquet and Social Hour**

Thursday, January 15, 2026

07:00 – 08:30 Breakfast

Session 8: Ceramics

Session Chair: TBA

08:30 – 09:00 **Printing rocks: New materials and opportunities in ceramic AM**
Luke Hanner, KCNSC, USA

09:00 – 09:30 **Accelerating, debinding and achieving large-scale additively manufactured ceramic structures**
Amy Peterson, University of Massachusetts Lowell, USA

09:30 – 10:00 **Effect of carbon fiber addition and sintering temperature on thermal and mechanical properties of ZrB₂ produced via material extrusion**
Connor Wyckoff, AV, Inc, USA

10:00 – 10:30 **Material extrusion additive manufacturing of polymer-derived ceramic composites**
Brett Compton, University of Tennessee, USA

10:30 – 11:00 Coffee Break

11:00 – 12:00 Conference Wrap-up / Next steps