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</table>
AMUG CONFERENCE
AMUG Conference begins Sunday at 4:00pm and concludes Thursday night at 10:00pm. See Agenda at a Glance pages 4-5.

REGISTRATION AND BADGE PICKUP
REGISTRATION HOURS
Sunday, May 2: 10:00am - 8:00pm
Monday, May 3: 7:00am - 8:00pm
Tuesday, May 4: 7:00am - 5:00pm
Wednesday, May 5: 7:00am - 6:00pm
Thursday, May 6: 7:00am - 11:00am

All pre-conference Training and Certification Courses require additional registration and fee. See page 10.

AMUGEXPO HOURS
AMUGEXPO AND DINNER
Sunday, May 2: 4:00pm - 10:00pm
AMUGEXPO
Monday, May 3: 10:00am - 1:30pm
AMUGEXPO, TECHNICAL COMPETITION, AND DINNER
Monday, May 3: 6:00pm - 10:00pm

Diamond and Platinum booths open all week - see daily schedule for times.

AMUGexpo is part of the AMUG Conference. Separate tickets or attendance for the AMUGexpo are not available. AMUGexpo is open to all registered conference attendees.

OFF-SITE EVENT AND DINNER
Conference attendees have full access to all conference activities including the AMUG Tuesday-night Off-Site Event and Dinner (surprise location!). Conference attendees have the option of bringing a guest for an additional fee, which can be purchased at the registration desk.

Off-Site Event and Dinner: Tuesday, May 4
Board Buses: 6:00pm
Buses Leave: 6:30pm promptly

You must wear your conference badge to board the bus. We suggest you wear closed-toe shoes and comfortable clothing appropriate for indoor and outdoor activities.

DINING
Your AMUG Conference attendee pass includes all meals from Sunday evening through Thursday evening.

BOARD OF DIRECTORS ELECTION
The AMUG Board of Directors election will take place via the AMUG mobile app or in-person ballot. Paid conference attendees are eligible to vote. Voting will take place Sunday, May 2 at 4:00pm to Monday, May 3 at 11:59pm.

More information on page 7.

BUSINESS MEETING
The AMUG Business Meeting will take place Wednesday, May 5 at 11:00am. The Business Meeting is for AMUG Conference attendees only. The Board of Directors for 2021-2022/2023 will be announced at the meeting. All AMUG Conference attendees are considered AMUG Members, even first-time attendees. Please make sure to attend!
NEW! ASTM
ASTM Certification Course (2 day course)
Quality Assurance for Additive Manufacturing
8:00am-5:00pm
More info on page 10

NEW! TOOLINGU | SME
Additive Manufacturing – Technician Review Program (2 day course)
8:00am-5:00pm
More info on page 10

NEW! ASTM
ASTM Certification Course (continuation)
Quality Assurance for Additive Manufacturing
8:00am-3:00pm
More info on page 10

NEW! TOOLINGU | SME
Additive Manufacturing – Technician Review Program (continuation)
8:00am-3:00pm
More info on page 10

AMUG CONFERENCE ACTIVITY BEGINS
REGISTRATION OPEN
10:00AM-8:00PM

SPEAKER CENTER AND APP DESK OPEN
10:00AM-8:00PM

CONFERENCE PROGRAM
New Member Welcome
3:00pm-4:00pm
First-time conference attendees welcome and introduction to the AMUG Conference.

AMUGexpo and Networking Dinner
EXPO OPEN
4:00pm - 10:00pm
Join us Sunday night for the AMUGexpo Opening. Enjoy a buffet dinner and beverages as you tour the AMUGexpo. ALL EXHIBITS OPEN
<table>
<thead>
<tr>
<th>MONDAY, 3 MAY 2021</th>
<th>TUESDAY, 4 MAY 2021</th>
<th>WEDNESDAY, 5 MAY 2021</th>
<th>THURSDAY, 6 MAY 2021</th>
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<tbody>
<tr>
<td><strong>REGISTRATION OPEN</strong></td>
<td>7:00am-8:00pm</td>
<td><strong>REGISTRATION OPEN</strong></td>
<td>7:00am-6:00pm</td>
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<tr>
<td><strong>SPEAKER CENTER AND APP DESK OPEN</strong></td>
<td>7:00am-4:30pm</td>
<td><strong>SPEAKER CENTER AND APP DESK OPEN</strong></td>
<td>7:00am-4:00pm</td>
</tr>
<tr>
<td><strong>BREAKFAST</strong></td>
<td>7:00am-8:00am</td>
<td><strong>BREAKFAST</strong></td>
<td>7:30am-8:00am</td>
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<tr>
<td><strong>CONFERENCE PROGRAM</strong></td>
<td>8:00am-9:30am</td>
<td><strong>CONFERENCE PROGRAM</strong></td>
<td>8:00am-9:00am</td>
</tr>
<tr>
<td>AMUG Opening Address</td>
<td>Insights and Highlights</td>
<td>AMUG Board of Directors Election Process</td>
<td>DINO Awards Announced</td>
</tr>
<tr>
<td>Building the Future of AM</td>
<td>9:30am-10:00am</td>
<td>2021 AMUG Scholarship Recipients</td>
<td>8:30am-9:00am</td>
</tr>
<tr>
<td>2021 AMUG Scholarship Recipients</td>
<td>Presentations from Guy Bourdeau and Randy Stevens Scholarship recipients.</td>
<td>Scholarship recipients.</td>
<td>The 2019 AMUG Technical Competition Winners will provide a presentation on their winning applications</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td>10:00am-10:30am</td>
<td><strong>Break</strong></td>
<td>10:00am-10:30am</td>
</tr>
<tr>
<td>AMUGexpo</td>
<td>EXPO OPEN</td>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
<td>AMUG Business Meeting</td>
</tr>
<tr>
<td>10:00am - 1:30pm (note: sessions begin at 1:30pm)</td>
<td>10:30am - 12:00pm</td>
<td>11:00am-12:00pm</td>
<td>11:00am-12:00pm</td>
</tr>
<tr>
<td>Networking Lunch</td>
<td>1:30pm - 2:30pm</td>
<td>Break</td>
<td>2:30pm-3:00pm</td>
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<tr>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
<td>2:30pm-3:00pm</td>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
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<tr>
<td>1:30pm - 2:30pm</td>
<td>3:00pm - 4:00pm</td>
<td>1:30pm - 2:30pm</td>
<td>3:00pm - 4:00pm</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td>2:30pm-3:00pm</td>
<td><strong>Break</strong></td>
<td>2:30pm-3:00pm</td>
</tr>
<tr>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
<td><strong>Board Buses for Off-Site Dinner</strong></td>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
<td>AMUG, Sponsor Sessions and Training Lab Sessions</td>
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<tr>
<td>3:00pm - 5:30pm</td>
<td>6:00pm - 6:15pm</td>
<td>3:00pm - 4:00pm</td>
<td>3:00pm - 5:30pm</td>
</tr>
<tr>
<td><strong>AMUGexpo, Technical Competition and Networking Dinner</strong></td>
<td><strong>AMUG, Sponsor Sessions and Training Lab Sessions</strong></td>
<td><strong>AMUG, Sponsor Sessions and Training Lab Sessions</strong></td>
<td><strong>AMUG, Sponsor Sessions and Training Lab Sessions</strong></td>
</tr>
<tr>
<td>EXPO OPEN with Technical Competition</td>
<td>6:00pm - 10:00pm</td>
<td>6:00pm - 10:00pm</td>
<td>3:00pm - 5:30pm</td>
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<tr>
<td>ALL EXHIBITS OPEN</td>
<td>ALL EXHIBITS OPEN</td>
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**CONFERENCE CONCLUDES**
COMING SOON!

Mobile App to launch in April 2021 to all registered attendees!

DOWNLOAD THE EVENTSCRIBE APP

Search for "eventScribe" in the Apple App Store or Google Play Store.

INSTALL and OPEN the app then SELECT the event:

"AMUG 2021"

CLICK the icon to launch your app

LOGIN to the AMUG MOBILE APP

To start using the event app, select “Login” and enter:

Username (email address you registered with for the conference)

and

Access Key (your conference registration number)

TAKE NOTES ON PRESENTATION SLIDES

Presentations supplied by the speakers will be available the day of the presentation. Note that presentations may differ from what is shown in the presentation room.

Find the presentation you need and interact with the presentation by drawing on slides or highlighting text. Use the note-taking mode to type your notes next to each slide. Access your notes and print them out by clicking the “My Notes” on the home screen or “Online Personal Summary” in the hamburger menu (≡).

No mobile device? No Problem. As long as you have an internet connection, you can take notes on presentations through your laptop via this link:

https://tinyurl.com/amug2021

COMING SOON!

AMUG MOBILE APP

AMUG full-conference attendees receive access to all contents within the app including all course materials, presentations, recording and evaluations. The Conference Proceedings will be accessible via the mobile app and AMUG website.

Exhibitors and Expo Staff receive access to non-course materials (AMUGexpo Floor plan and information, no presentation/slide access).

EVALUATIONS

Speaker and Conference evaluations are accessible through the mobile app or through the online planner.

BOARD ELECTIONS

2021 will begin the new process for AMUG Board of Directors elections. See page 7 for more information.
AMUG Board of Directors
NEW ELECTION PROCESS

AMUG Board of Directors—Nomination and Election
The AMUG Board of Directors has nine Director positions; seven elected positions and two appointed position. Four of the Directors also serve as Officers of the organization.

Elections are held annually during the AMUG Conference. The election ballot consists of individuals that have submitted a self-nomination and have passed a screening by the AMUG Nominating Committee. The nomination period for the 2021 elections is now closed.

2021 Election
Below are the nine board positions. Elections will be held during the AMUG Conference on May 2 and May 3 via the AMUG Mobile App and in-person ballots. Candidates for the Board of Directors will be presented to the AMUG membership via the AMUG website and Mobile App in April. The newly elected Board of Directors will be announced May 5, 2021.

<table>
<thead>
<tr>
<th>BOARD OF DIRECTORS - 2021 ELECTION</th>
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<tr>
<td>OFFICER/DIRECTOR POSITIONS</td>
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<tr>
<td>President</td>
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<tr>
<td>Vice President</td>
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<tr>
<td>Treasurer</td>
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<td>Secretary</td>
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</table>

| DIRECTORS POSITIONS | SEAT AVAILABLE | TERM OF OFFICE (YEARS) | ELECTED OR APPOINTED |
| Director, Education and Conference | 1 | 2 | Elected |
| Director, Business Development | 1 | 2 | Elected |
| Director, Membership | 1 | 1* | Elected |
| Director, Event and Hospitality | 1 | 1 | Elected |
| Director at Large | 1 | 1* | Appointed |

*These positions will serve through June 30, 2022. Thereafter, these positions will have 2-year terms.
NEW! ASTM Certificate Course

Quality Assurance for Additive Manufacturing

This course is aimed at individuals with existing experience in AM who wish to understand the routes to releasing products requiring quality assurance and control (such as aerospace). Note that safety aspects will not be covered (this is covered in other training courses).

Date/time: Saturday, May 1, 2021 (8:00am – 5:00pm) & Sunday, May 2 (8:00am – 3:00pm)

Cost: $649/person (when registering before April 4, 2021)
     $799/person (when registering after April 4, 2021)

Register: On ASTM's website (here)

Instructors:
  - Martin White, Head of Additive Manufacturing Programs – Europe Region, ASTM International
  - Shane Collins, VP and General Manager North America Operations, Additive Industries

As additive manufacturing continues to mature as a production manufacturing method, it becomes more important than ever to demonstrate quality assurance to create quality products.

This course will provide guidance for what is key to control quality output and demonstrate compliance to requirements. The approaches here will be based on ASTM Additive Manufacturing Standards and how they can be combined with the 'traditional' manufacturing toolkit, including:

- Quality Management Systems for Additive Manufacturing
  - “Make a plan, stick to the plan”
  - Facility (machine qualification, supply chain, post-processing)
  - Process
  - Materials
  - How can standards help?
- Linking Quality to Certification & Qualification
  - Fundamental requirements for regulated industries
  - Demonstration of Suitable Qualified & Experienced Personnel – People are key
  - Lean Manufacturing Methods – Driving towards ‘right first time’
    - “Haven’t we done this before?”
  - Configuration Management & Change Control – What is essential?
- How can we track performance, prevent deviations, and what to do if quality deviates?
  - How do we use NDT, in-process monitoring, and other AM tools?

The 2-day course will be followed by an exam that will be conducted 2 weeks after the training event, held online. After successful completion of the course and passing marks for the exam, the participants will receive the ‘ASTM AM Quality Assurance Certificate’.

NEW! Additive Manufacturing—Technician Review Program

1 1/2 day of instruction; 1/2 day exam

The Technician certification is ideal for a candidate with a two-year associate’s degree in additive manufacturing or is currently enrolled in a college program, and/or has one or more years of working experience in a manufacturing-related field.

Successful (passing) completion of the exam yields the designation of Certified Additive Manufacturing-Technician (CAM-T). The exam will be administered on Sunday, May 2.

Date/time: Saturday, May 1 (8:00 am – 5:00 pm) & Sunday, May 2 (8:00 am – 3 pm)

Cost: $895/person

Register: coming soon

The certification covers key roles and responsibilities for an additive manufacturing technician, the additive manufacturing process chain, design for additive manufacturing, materials and process selection, secondary processes, and key safety considerations.

The prep course is a discussion-oriented and interactive session in which participants receive comprehensive application-based knowledge of the 3D printing industry. Covering key roles and responsibilities for an AM technician, the AM process chain, design for AM, material and process selection, secondary processes, and key safety considerations, you will begin to understand how to apply AM in your organization.

The certification exam consists of 120 multiple-choice questions.

Objectives

- Summarize the AM process chain, materials, technologies and economic drivers
- Evaluate designs for AM covering general guidelines, file formats, build factors and optimization strategies
- Evaluate differentiating factors when selecting AM materials and processes
- Describe the end to end manufacturing chain from build preparation to quality assurance
- Explain how to leverage AM to support various traditional manufacturing methods
- Describe the impact of AM on the manufacturing environment and key risk and safety considerations

Pre-Conference Training and Certification

The programs listed below are available only to AMUG Conference attendees and are NOT included with AMUG Conference registration. Participation requires separate registration and is at an additional cost.
### Saturday, May 1, 2021

<table>
<thead>
<tr>
<th>AMUGexpo Lower Level</th>
<th>Pre-Conference Programs</th>
<th>AMUG Programs</th>
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<tbody>
<tr>
<td>8:00am-8:30am</td>
<td>NEW! ASTM Certificate Course</td>
<td>AMUGexpo Sponsor and Exhibitor Set-up continues</td>
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<tr>
<td>8:30am-9:00am</td>
<td>Quality Assurance for Additive Manufacturing</td>
<td>AMUG Program Set-Up with Volunteers</td>
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<td>9:00am-9:30am</td>
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Cost: $649/person (before April 4, 2021) $799/person (after April 4, 2021)

Registration information at: [https://www.amug.com/2021_train_certify/](https://www.amug.com/2021_train_certify/)

### Sunday, May 2, 2021

<table>
<thead>
<tr>
<th>AMUGexpo Lower Level</th>
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<td>9:30am-10:00am</td>
<td>Sunday, May 2 8:30 am - 3:00 pm</td>
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ASMT Certification | SATURDAY AND SUNDAY
NEW MEMBER WELCOME | 3:00PM-4:00PM
NEW MEMBER WELCOME | 3:00PM-4:00PM
NEW MEMBER WELCOME | 3:00PM-4:00PM
NEW MEMBER WELCOME | 3:00PM-4:00PM
NEW MEMBER WELCOME | 3:00PM-4:00PM
NEW MEMBER WELCOME | 3:00PM-4:00PM
### AMUG Expo and Technical Competition

- **6:00pm - 10:00pm**
  - Dinner and Networking | Orlando Ballroom, Lower Level

### AMUG Board of Directors Election Process

- **Orange Ballroom, Lower Level**

### AMUG Opening Address

- **8:00am - 10:00am**
  - Carl Dekker, AMUG President
  - Insights and Highlights - Todd Grimm, AMUG AM Industry Advisor

### AMUG Expo Area

- **10:00am - 1:30pm**
  - Orlando Ballroom, Lower Level
  - AMUG Expo Area OPEN

### AMUG Program

#### Room: Lake Highland

- **Lobby Level**

#### Track: Aerospace/Transportation

- **1:30pm - 2:30pm**
  - Divergent Adaptive Production System
    - Michael Kenworthy
    - Simon Pun
    - Divergent Technologies

#### Track: AM Metal Technologies

- **1:30pm - 2:30pm**
  - Rapid Build Quality Inspection Method for Metal AM
    - Matthew Donovan
    - Jabil

#### Track: Scanning & Metrology

- **1:30pm - 2:30pm**
  - An Introduction to Metrology and 3D Scanning
    - Giles Gaskell
    - Hexagon
    - Derek Ellis
    - Authentise

### Roundtable Panel

- **1:30pm - 2:00pm**
  - Subject Matter Experts
    - Moderator: Shannon Van Deren, Layered Manufacturing and Consulting
    - Panelists:
      - POC – Brent Wright, Eastpointe Orthotics and Prosthetics
      - Polymer Printing – Mike Littrell, C Ideas
      - Metal Printing – Ryan Kircher, Additive Industries
      - Quality/Regulatory – Dawn Lissey, Empirical Tech
      - Ceramic Printing – Dror Danai, XJet

### Breakout Sessions Begin

#### Monday, May 3, 2021

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00am - 10:30am</td>
<td>Break</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>10:00am - 2:30pm</td>
<td>AMUG Expo Open</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>12:00pm - 1:15pm</td>
<td>Networking Lunch</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
</tbody>
</table>

**Breakout Sessions**

1. **10:00am - 2:30pm**
   - **Divergent Adaptive Production System**
     - Michael Kenworthy
     - Simon Pun
     - Divergent Technologies

2. **1:30pm - 2:30pm**
   - **Rapid Build Quality Inspection Method for Metal AM**
     - Matthew Donovan
     - Jabil

3. **1:30pm - 2:30pm**
   - **An Introduction to Metrology and 3D Scanning**
     - Giles Gaskell
     - Hexagon
     - Derek Ellis
     - Authentise

**Roundtable Panel**

1. **1:30pm - 2:00pm**
   - **Subject Matter Experts**
     - **Moderator**: Shannon Van Deren, Layered Manufacturing and Consulting
     - **Panelists**:
       - POC – Brent Wright, Eastpointe Orthotics and Prosthetics
       - Polymer Printing – Mike Littrell, C Ideas
       - Metal Printing – Ryan Kircher, Additive Industries
       - Quality/Regulatory – Dawn Lissey, Empirical Tech
       - Ceramic Printing – Dror Danai, XJet

**Soft Touch Tooling - A Process Redefined**

- **3:30pm - 4:00pm**
  - Andrew Roderick
  - Extol, Inc.

**Beyond Jigs and Fixtures, Bringing Additive to the Shop Floor**

- **3:30pm - 4:00pm**
  - Paul DeWys
  - Forerunner 3D Printing

**Use of Pellet-Fed Additive Manufacturing Machines**

- **4:00pm - 4:30pm**
  - Eric Johnson
  - John Deere

**Post Processing Metal Parts Panel**

- **4:30pm - 5:30pm**
  - Agustin Diaz, USM Surface Engineering
  - Steve Alviti, Bel Air Finishing Corporation
  - Wolfgang Hansal, REMA Additive Manufacturing
  - Jeff Mize, PostProcess

**Fast and Clear DLP 3D Printing Transforms Aligner and Retainer Business Models**

- **5:00pm - 5:30pm**
  - Eric Wu
  - Wu Orthodontics

**Polymer Part Design and the Need for Long-Term Material Performance Studies**

- **5:00pm - 5:30pm**
  - Todd Menna
  - Element New Berlin

**CAD Design Guide for Fused Deposition Modeling, Polyjet, Stereolithography Technology Restrictions**

- **2:00pm - 2:30pm**
  - Brandon Slack
  - Lockheed Martin

**3D Printing for Robotic End of Arm Tooling**

- **2:00pm - 2:30pm**
  - Richard Savage
  - Savage Automation

**Adoption and Industrialization Challenges at Lockheed Martin**

- **3:00pm - 4:00pm**
  - Prabhjot Singh
  - Lockheed Martin Space

**In-process Inspection and Quality Assurance**

- **3:00pm - 4:00pm**
  - Moderator: Ryan Hayford, Hayford Consulting
  - Panelists:
    - Darren Beckett, Sigma Labs
    - Thomas Spears, Open Additive

**Can 3D Printing Change Lives? Perspective from a Clinician and Patient**

- **3:30pm - 4:00pm**
  - Brent Wright
  - Digital Designer

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30pm - 2:00pm</td>
<td>CAD Design Guide for Fused Deposition Modeling, Polyjet, Stereolithography Technology Restrictions</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>2:00pm - 2:30pm</td>
<td>3D Printing for Robotic End of Arm Tooling</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>2:30pm - 3:00pm</td>
<td>Break</td>
<td>Location: Foyer, Lower Level</td>
</tr>
<tr>
<td>3:00pm - 4:00pm</td>
<td>Adoption and Industrialization Challenges at Lockheed Martin</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>3:00pm - 4:00pm</td>
<td>In-process Inspection and Quality Assurance</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>3:30pm - 4:00pm</td>
<td>3D Scanning Workshop</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>3:30pm - 4:00pm</td>
<td>Can 3D Printing Change Lives? Perspective from a Clinician and Patient</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>3:30pm - 4:00pm</td>
<td>Soft Touch Tooling - A Process Redefined</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>3:30pm - 4:00pm</td>
<td>Beyond Jigs and Fixtures, Bringing Additive to the Shop Floor</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
</tbody>
</table>

** transition **

- **4:30pm - 5:30pm**
  - **Fast and Clear DLP 3D Printing Transforms Aligner and Retainer Business Models**
    - **Moderator**: Eric Wu, Wu Orthodontics

**Polymer Part Design and the Need for Long-Term Material Performance Studies**

- **5:00pm - 5:30pm**
  - **Moderator**: Todd Menna, Element New Berlin

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
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<td>Break</td>
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<td>Orlando Ballroom, Lower Level</td>
</tr>
</tbody>
</table>

**4:30pm - 5:30pm**

- **3D Scanning Panel Discussion**
  - **Moderator**: Eric Wu, Wu Orthodontics
  - **Panelists**:
    - Agustin Diaz, USM Surface Engineering
    - Steve Alviti, Bel Air Finishing Corporation
    - Wolfgang Hansal, REMA Additive Manufacturing
    - Jeff Mize, PostProcess

**Fast and Clear DLP 3D Printing Transforms Aligner and Retainer Business Models**

- **4:30pm - 5:30pm**
  - **Moderator**: Eric Wu, Wu Orthodontics

**Polymer Part Design and the Need for Long-Term Material Performance Studies**

- **5:00pm - 5:30pm**
  - **Moderator**: Todd Menna, Element New Berlin
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<th>Time</th>
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</tr>
</thead>
<tbody>
<tr>
<td>12:00pm-1:15pm</td>
<td>Networking Lunch</td>
<td>Orlando Ballroom, Lower Level</td>
</tr>
<tr>
<td>1:30pm-2:30pm</td>
<td>Breakout Sessions Begin</td>
<td><strong>Platinum Sponsor Program</strong>&lt;br&gt;FLORIDA BALLROOM 1-3 Lower Level&lt;br&gt;PLATINUM SESSIONS&lt;br&gt;Transforming Photopolymer DLP 3D Printing from Prototyping to Production&lt;br&gt;Al Siblani&lt;br&gt;EnvisionTEC&lt;br&gt;&lt;br&gt;<strong>Diamond Sponsor Program</strong>&lt;br&gt;ORANGE BALLROOM TBA Lower Level&lt;br&gt;Diamond Speaking Session&lt;br&gt;TBA&lt;br&gt;BASF&lt;br&gt;&lt;br&gt;<strong>Diamond Training Session</strong>&lt;br&gt;ORANGE BALLROOM TBA Lower Level&lt;br&gt;Diamond Training Session&lt;br&gt;TBA&lt;br&gt;ExOne</td>
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<tr>
<td>2:30pm-3:00pm</td>
<td>Break</td>
<td>Location: Foyer, Lower Level</td>
</tr>
<tr>
<td>3:00pm-4:00pm</td>
<td>Platinum Sponsor: AddUp Solutions&lt;br&gt;Advanced Materials and Techniques for Polymer Pellet Extrusion&lt;br&gt;Rahul Kasat&lt;br&gt;Titan Robotics, Ltd&lt;br&gt;&lt;br&gt;Diamond Sponsor: DMG MORI&lt;br&gt;Direct Print Clear Aligner Simplified – LuxAlign Dental Software&lt;br&gt;Michael Strohecker&lt;br&gt;LuxCreo</td>
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<tr>
<td>4:00pm-4:30pm</td>
<td>Transition</td>
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<tr>
<td>4:30pm-5:30pm</td>
<td>Platinum Sponsor: RP America&lt;br&gt;Improving Manufacture Readiness for the Warfighter&lt;br&gt;Elisa Tiepel&lt;br&gt;Essentium Materials&lt;br&gt;&lt;br&gt;Diamond Sponsor: Dyndrite Corporation&lt;br&gt;TA&lt;br&gt;Dyndrite Corporation</td>
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</tr>
<tr>
<td>5:30pm-6:00pm</td>
<td>All Sessions Closed</td>
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</tr>
<tr>
<td>6:00pm-10:00pm</td>
<td>AMUGexpo and Technical Competition</td>
<td>Dinner and Networking</td>
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</table>
TUESDAY, MAY 4, 2021

### AMUG PROGRAM

<table>
<thead>
<tr>
<th>ROOM</th>
<th>LAKE HIGHLAND Lobby Level</th>
<th>LAKE SHEEN Lobby Level</th>
<th>LAKE NONA Lobby Level</th>
<th>LAKE MIZELL Lobby Level</th>
<th>LAKE EOLA Lobby Level</th>
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</thead>
<tbody>
<tr>
<td>TRACK</td>
<td>Aerospace/Transportation</td>
<td>AM Technologies</td>
<td>Scanning &amp; Metrology</td>
<td>Education &amp; Training</td>
<td>Casting</td>
</tr>
</tbody>
</table>
| 10:30am - 11:00am | Additive Manufacturing Ecosystem Applied Towards Application Development for Unmanned Aerial System | State of Knowledge: Environmental Impacts of Metal Additive Manufacturing | Inspection and Process Optimization with Industrial CT | Quality Management Workshop: How to Use the 8 Ms | \n| 11:00am - 11:30am | Steve Fournier, General Atomic’s Aeronautics Systems Inc. | Sherry Gandhe, Additive Manufacturer Green Trade Association | Roger Wende, Volume Graphics GmbH | Ivan Madera, MorFED | \n| 11:30am - 12:00pm | Stuck in the Middle - Bridging the Gap to Production | Pinnacle Industrial X-Ray Laboratory (PiXL) | | Michael Pecota, Peakgo Consulting | \n
### NETWORKING LUNCH | Location: The Promenade

<table>
<thead>
<tr>
<th>ROOM</th>
<th>LAKE HIGHLAND Lobby Level</th>
<th>LAKE SHEEN Lobby Level</th>
<th>LAKE NONA Lobby Level</th>
<th>LAKE MIZELL Lobby Level</th>
<th>LAKE EOLA Lobby Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRACK</td>
<td>Aerospace/Transportation</td>
<td>AM Technologies (Non-Metal)</td>
<td>Materials</td>
<td>Education &amp; Training</td>
<td>Casting</td>
</tr>
</tbody>
</table>
| 1:30pm - 2:30pm | \n| 2:30pm - 3:00pm | Developing and Transitioning Best AM Practices for Technological Dominance for Our Warfighters | Benefits of Continuous Fiber for the Energy Sector | | | \n| 3:00pm - 4:00pm | | | | | \n
### BREAK | Location: Foyer, Lower Level

<table>
<thead>
<tr>
<th>TRACK</th>
<th>Medical</th>
<th>Materials</th>
<th>Education &amp; Training</th>
<th>Casting</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00pm</td>
<td>FDA Registered versus ISO 13485 Certified and Maintaining Good Standing</td>
<td>Important Plastics Material Considerations for Successful Open Platform 3D Printing</td>
<td>Incorporating Combustible Dust Controls into the Facility Design for Additive Manufacturing Processes</td>
<td>3DP/AAM Ceramic Cores for Investment Casting Applications</td>
</tr>
<tr>
<td>6:00pm - 6:15pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00pm - 10:00pm</td>
<td>AMUG Off-Site Dinner and Networking Event</td>
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</tr>
</tbody>
</table>

### PRELIMINARY AS OF MARCH 17, 2021

General Sessions and Breakouts open to all Conference Attendees

Speakers, Dates and Times subject to change without notice - updates made through mobile app

Speakers, Dates and Times subject to change without notice - updates made through mobile app
## Preliminary As of April 1, 2021
Subject to change

### Breakout Sessions Begin

<table>
<thead>
<tr>
<th>Room</th>
<th>PLATINUM SPONSOR PROGRAM</th>
<th>DIAMOND SPONSOR PROGRAM</th>
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</thead>
<tbody>
<tr>
<td><strong>FLORIDA BALLROOM 5-7</strong>&lt;br&gt;Lower Level</td>
<td><strong>LAKE HART</strong>&lt;br&gt;Lobby Level</td>
<td><strong>ORANGE BALLROOM TBA</strong>&lt;br&gt;Lower Level</td>
</tr>
<tr>
<td><strong>PLATINUM SESSIONS</strong></td>
<td><strong>PLATINUM SESSIONS</strong></td>
<td><strong>DIAMOND SPEAKING SESSION</strong></td>
</tr>
<tr>
<td>10:30am-11:00am</td>
<td>CLOSED</td>
<td>Diamond Sponsor: Dyndrite Corporation</td>
</tr>
<tr>
<td>11:00am-11:30am</td>
<td>CLOSED</td>
<td>PP-CP: Solving Challenges in Flexible Resin Casting</td>
</tr>
<tr>
<td>11:30am-12:00pm</td>
<td>CLOSED</td>
<td>Platinum Sponsor: HP</td>
</tr>
<tr>
<td>12:00pm-1:15pm</td>
<td>NETWORKING LUNCH</td>
<td>Location: The Promenade</td>
</tr>
<tr>
<td>1:30pm-2:30pm</td>
<td>Platinum Sponsor: HP</td>
<td>Diamond Sponsor: EvOne</td>
</tr>
<tr>
<td>2:30pm-3:00pm</td>
<td>BREAK</td>
<td>Location: Foyer, Lower Level</td>
</tr>
<tr>
<td>3:00pm-4:00pm</td>
<td>Platinum Sponsor: Rosler Metal Finishing</td>
<td>Platinum Sponsor: Markforged</td>
</tr>
<tr>
<td>4:00pm</td>
<td>ALL SESSIONS CLOSED</td>
<td>Diamond Sponsor: LucCreo</td>
</tr>
<tr>
<td>6:00pm-6:15pm</td>
<td>Board Buses for Off-Site Dinner and Networking Event</td>
<td></td>
</tr>
<tr>
<td>7:00pm-10:00pm</td>
<td>AMUG Off-Site Dinner and Networking Event</td>
<td></td>
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</tbody>
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**TUESDAY MAY 4, 2021**

**SCHOLARSHIP RECIPIENTS**

**INTERNATIONAL REPORT 9:00AM-10:00AM**

**DINO AWARDS 8:30AM-9:00AM**

**TODD GRIMM T.A. GRIMM & ADVISORS**
<table>
<thead>
<tr>
<th>BOOTH AREA</th>
<th>DIAMOND &amp; PLATINUM ACCESSIBLE</th>
<th>DIAMOND &amp; PLATINUM</th>
<th>DIAMOND &amp; PLATINUM</th>
<th>DIAMOND &amp; PLATINUM</th>
<th>DIAMOND &amp; PLATINUM</th>
<th>DIAMOND &amp; PLATINUM</th>
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<tbody>
<tr>
<td>7:30am - 8:30am</td>
<td>BREAKFAST</td>
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<tr>
<td>8:30am - 9:30am</td>
<td>DRIVING INNOVATION</td>
<td>PRESEN TATION BY 2019 TECHNICAL COMPETITION WINNERS</td>
<td>Bonnie Meyer, AMUG TechComp Chair</td>
<td>ADVANCED CONCEPTS Jason Luxos, Carbon - digitally printed helmet liner components and Riddels SpeedFlex Precision Diamond Helmet</td>
<td>ADVANCED CONCEPTS Jadran Stojadinovic, Ford - additive-manufactured aluminum brake components</td>
<td>Plastics and Composites Industry Council - additive-manufactured aerospace components</td>
</tr>
<tr>
<td>9:30am - 10:00am</td>
<td>DRIVING INNOVATION</td>
<td>INNOVATORS SHOWCASE</td>
<td>WITH DR. HANS LANGER</td>
<td>Hybrid Live and Recorded Presentation with Dr. Langer, EOS Group and Todd Grimm, AMUG AM Advisor</td>
<td>Diamond &amp; Platinum USA - additive-manufactured automotive components</td>
<td>Diamond &amp; Platinum USA - additive-manufactured automotive components</td>
</tr>
<tr>
<td>10:00am - 10:30am</td>
<td>BREAK</td>
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<tr>
<td>10:30am - 11:00am</td>
<td>DRIVING INNOVATION</td>
<td>2021 TECHNICAL COMPETITION WINNERS AN NOUNCED</td>
<td>Bonnie Meyer, AMUG TechComp Chair</td>
<td>Orange Ballroom, Lower Level</td>
<td>Orange Ballroom, Lower Level</td>
<td>Orange Ballroom, Lower Level</td>
</tr>
<tr>
<td>10:30am - 11:00am</td>
<td>AMUG Business Meeting - 2021-2022/2023 AMUG Board of Directors Announced</td>
<td>Orange Ballroom, Lower Level</td>
<td>Orange Ballroom, Lower Level</td>
<td>Orange Ballroom, Lower Level</td>
<td>Orange Ballroom, Lower Level</td>
<td>Orange Ballroom, Lower Level</td>
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<tr>
<td>11:00am - 2:30pm</td>
<td>AMUG Business Meeting - 2021-2022/2023 AMUG Board of Directors Announced</td>
<td>Orange Ballroom, Lower Level</td>
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<td>Orange Ballroom, Lower Level</td>
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<tr>
<td>12:00pm - 1:15pm</td>
<td>NETWORKING LUNCH</td>
<td>The Promenade</td>
<td>The Promenade</td>
<td>The Promenade</td>
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**BREAKOUT SESSIONS BEGIN**

**AMUG PROGRAM**

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<td>TRACK</td>
<td>AM Metal Technologies</td>
<td>Medical</td>
<td>Software</td>
<td>Materials</td>
<td>Casting</td>
</tr>
<tr>
<td>1:30pm - 2:30pm</td>
<td>Current Status, Myths, and Challenges of Directed Energy Deposition Processes</td>
<td>TBA</td>
<td>ROUNDTABLE PANEL</td>
<td>Flame Retardant Materials</td>
<td>Lightweighting an Aircraft Casting: A Case Study</td>
</tr>
<tr>
<td>MODERATOR</td>
<td>Adam Penna, All Digital AM</td>
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<tr>
<td>PANELIST</td>
<td>Carl Johnson, Additive Manufacturing, Norsk Titanium</td>
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<tr>
<td>PANELIST</td>
<td>Yatharth Bandar, Mytrio</td>
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<tr>
<td>PANELIST</td>
<td>Lucas Breuer, Additive Manufacturing, Optomec</td>
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</tbody>
</table>

| TRACK              | AM Metal Technologies | Medical | Software | Education & Training | Casting |
|--------------------| AM Metal Technologies | Medical | Software | Education & Training | Casting |
| 3:00pm - 4:00pm    | Optimizing Refractory Metals for Additive Manufacturing | Faith Oehlerking | H.C. Starck Solutions | Choosing to Print with Metal | Practical Approaches to IoT and Additive Manufacturing | Design for 3D Printing Tips, Tricks and Techniques | Using Ceramic 3D Printing with Investment Casting |
| MODERATOR          | Shannon Van Deren, Layered Manufacturing and Consulting | | | | |
| PANELIST           | Tim Warden, Vertex Manufacturing | | | | |
| PANELIST           | Shane Collins, Additive Industries | | | | |
| PANELIST           | Scott Volk, KMM | | | | |
| PANELIST           | Paul Bates, ASTM | | | | |

| TRACK              | AM Metal Technologies | Medical | Software | Education & Training | AM Technologies (Non-Metal) |
|--------------------| AM Metal Technologies | Medical | Software | Education & Training | AM Technologies (Non-Metal) |
| 4:30pm - 5:30pm    | Part Evaluation Workshop | Tad Steinberg | Siemens Energy | 3D Printing Workflow and MES Panel | Design for Large Format Extrusion Additive Manufacturing | Infrastructure Scale Additive Manufacturing: Contemporary Concepts and Challenges in Concrete 3D Printing |
| MODERATOR          | Kevin Ayers, Danfoss | | | | |
| PANELIST           | Derek Ellis, Authentic | | | | |
| PANELIST           | Shane Fox, Link3D | | | | |
| PANELIST           | Alexandre Donnandieu, 3YOURMIND | | | | |
| PANELIST           | Dave Flynn, Materialise | | | | |

| TRACK              | AM Metal Technologies | Medical | Software | Education & Training | AM Technologies (Non-Metal) |
|--------------------| AM Metal Technologies | Medical | Software | Education & Training | AM Technologies (Non-Metal) |
| 5:30pm - 6:00pm    | PM | | | | |
| 6:00pm - 10:00pm   | AMUG Dinner and Networking | Location: The Promenade | | | | |

**ALL SESSIONS CLOSED**
**WEDNESDAY MAY 5, 2021**

**PRELIMINARY AS OF APRIL 1, 2021**
Subject to change

<table>
<thead>
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<td>NETWORKING LUNCH</td>
<td>The Promenade</td>
</tr>
<tr>
<td>1:15pm-1:30pm</td>
<td>BREAKOUT SESSIONS BEGIN</td>
<td></td>
</tr>
<tr>
<td><strong>ROOM</strong></td>
<td><strong>PLATINUM SPONSOR PROGRAM</strong></td>
<td><strong>DIAMOND SPONSOR PROGRAM</strong></td>
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<tr>
<td>1:15pm-2:30pm</td>
<td>FLORIDA BALLROOM 5-7; Lower Level</td>
<td>Lake Hart; Lobby Level</td>
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<tr>
<td></td>
<td>PLATINUM SESSIONS</td>
<td>DIAMOND SESSIONS</td>
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<tr>
<td></td>
<td>Platinum Sponsor: MSC</td>
<td>TBA</td>
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<tr>
<td></td>
<td>Design Delivery: An Integrated Additive Manufacturing Workflow</td>
<td>TBA</td>
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<tr>
<td></td>
<td>Jeff Robertson</td>
<td>DSM Additive Manufacturing</td>
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<td></td>
<td>Hexagon</td>
<td>BASF</td>
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<td></td>
<td>Key West A-C; Lower Level</td>
<td>TBA</td>
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<tr>
<td>2:30pm-3:00pm</td>
<td>BREAK</td>
<td>Location: Foyer, Lower Level</td>
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<tr>
<td>3:00pm-4:00pm</td>
<td>ORANGE BALLROOM TBA; Lower Level</td>
<td>LAKE HART; Lobby Level</td>
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<tr>
<td></td>
<td>PLATINUM SESSIONS</td>
<td>DIAMOND SESSIONS</td>
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<td></td>
<td>Platinum Sponsor: DSM Additive Manufacturing</td>
<td>TBA</td>
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<tr>
<td></td>
<td>Powder Development Considerations in Metal Fusion Printing</td>
<td>TBA</td>
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<td></td>
<td>Dave Jankowski</td>
<td>Ultimaker</td>
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<td>Xact Metal</td>
<td>DMG MORI</td>
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<td></td>
<td>LuxCreo</td>
<td>Dyndrite Corporation</td>
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<tr>
<td></td>
<td>Key West A-C; Lower Level</td>
<td>TBA</td>
</tr>
<tr>
<td>4:00pm-4:30pm</td>
<td>BREAK</td>
<td>Location: Foyer, Lower Level</td>
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<tr>
<td>4:30pm-5:30pm</td>
<td>ORANGE BALLROOM TBA; Lower Level</td>
<td>LAKE HART; Lobby Level</td>
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<td>PLATINUM SESSIONS</td>
<td>DIAMOND SESSIONS</td>
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<td></td>
<td>Platinum Sponsor: Ultimaker</td>
<td>TBA</td>
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<tr>
<td></td>
<td>Gel Dispensing Printing: High-Speed, Large-Volume</td>
<td>TBA</td>
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<td></td>
<td>Jeffery Freeman</td>
<td>BMF</td>
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<td>Massivit</td>
<td>Dyndrite Corporation</td>
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<tr>
<td>5:30pm-6:00pm</td>
<td>BREAK</td>
<td>Location: Foyer, Lower Level</td>
</tr>
<tr>
<td>6:00pm-10:00pm</td>
<td>AMUG Dinner and Networking</td>
<td>The Promenade</td>
</tr>
</tbody>
</table>

**INNOVATOR SHOWCASE**
9:00AM-10:00AM

**2019 TECHNICAL COMPETITION WINNERS**
8:30AM-9:00AM

**BUSINESS MEETING**
11:00AM-12:00PM

**2022 AMUG BOARD ANNOUNCED**

**DR. HANS LANGER**
FOUNDER AND FORMER CEO, EOS GMBH
CHAIRMAN, EOS GROUP

**PRELIMINARY AS OF APRIL 1, 2021**
Subject to change
### AMUG Program

#### Breakout Sessions Begin

<table>
<thead>
<tr>
<th>TIME</th>
<th>ROOM</th>
<th>TRACK</th>
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<tbody>
<tr>
<td>10:30am - 11:00am</td>
<td>LAKE HIGHLAND</td>
<td>Aerospace/Transportation</td>
<td>Medical</td>
<td>Materials</td>
<td>Education &amp; Training</td>
<td>AM Technologies (Non-Metal)</td>
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<tr>
<td></td>
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<td>ROUNDTABLE PANEL</td>
<td>Polymers in Medical</td>
<td>Characterization of Ceramic Powders to Improve Performance in Powder-Bed Additive Manufacturing</td>
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<td>MODERATOR</td>
<td>T. Bell</td>
<td>Filip Franciqui</td>
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<td>Siemens</td>
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<td>11:00am - 11:30am</td>
<td>LAKE SHEEN</td>
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<tr>
<td>11:30am - 12:00pm</td>
<td>LAKE NONA</td>
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<td>12:00pm - 1:15pm</td>
<td>LAKE EOLA</td>
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<tr>
<td>1:30pm - 2:30pm</td>
<td>LAKE HIGHLAND</td>
<td>Aerospace/Transportation</td>
<td>Medical</td>
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<td>Future and Potential Uses of Additive Manufacturing Using Laser Metal Deposition in Automotive</td>
<td>Regulatory Panel</td>
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<td>MODERATOR</td>
<td>Tamer KARAGÖZ</td>
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<td>Cokuluz Holding</td>
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<td>2:30pm - 3:00pm</td>
<td>LAKE SHEEN</td>
<td>Aerospace/Transportation</td>
<td>AM Metal Technologies</td>
<td>Safety-Critical Performance Properties of AM Materials</td>
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<tr>
<td>3:00pm - 4:00pm</td>
<td>LAKE NONA</td>
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<td></td>
<td>Let's All Go Home in One Piece Every Night</td>
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<tr>
<td>4:00pm - 4:30pm</td>
<td>LAKE MIZELL</td>
<td>Aerospace/Transportation</td>
<td>AM Metals Safety</td>
<td>Safety-Critical Performance Properties of AM Materials</td>
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<tr>
<td>4:30pm - 5:30pm</td>
<td>LAKE EOLA</td>
<td>Aerospace/Transportation</td>
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<td>AM Metals Safety</td>
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<td>6:00pm - 10:00pm</td>
<td>Closing Dinner</td>
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**Breakout Sessions**

- **ROUNDTABLE PANEL**: Polymers in Medical
  - **MODERATOR**: Zac Holcomb, Additive America
  - **PANELIST**: Ben Johnson, 3D Systems
  - **PANELIST**: Eric Romano, DSM
  - **PANELIST**: Evan Hochstein, Stratasys

- **WORKSHOP**: Particle and Chemical Emissions from Desktop 3D Printers with Different Technologies
  - **Speaker**: Qian Zhang
  - **Company**: Underwriters Laboratories Inc.
  - **Title**: Particle and Chemical Emissions from Desktop 3D Printers with Different Technologies

- **WORKSHOP**: Failed Prints Mini-Expo
  - **Speaker**: Marlyn Black
  - **Company**: Underwriters Laboratories Inc.
  - **Title**: Failed Prints Mini-Expo

- **WORKSHOP**: Using Traditional Plastic Assembly Technologies to Extend the Boundaries of AM
  - **Speaker**: Kyle Harvey
  - **Company**: Exotl, Inc.
  - **Title**: Using Traditional Plastic Assembly Technologies to Extend the Boundaries of AM

- **WORKSHOP**: Foundry In a Box, Pouring of Molten Metal into Sand and Ceramic
  - **Speaker**: David Rittmeyer
  - **Company**: Hoosier Pattern
  - **Title**: Foundry In a Box, Pouring of Molten Metal into Sand and Ceramic
### Preliminary as of April 1, 2021
Subject to change

<table>
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<tr>
<th>Time</th>
<th>Location</th>
<th>Details</th>
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</table>
| 10:30am-11:00am | LAKE CONCORD Lobby Level                      | Platinum Sponsor Program: LuxCreo  
Practical Guidance for Designing 3D Printed Elastic Products for High-Volume Manufacturing  
Michael Strohecker  
LuxCreo |
| 11:00am-11:30am | LAKE HART Lobby Level                         | Diamond Sponsor: DMG MORI  
TBA  
DMG MORI |
| 11:30am-12:00pm | ORANGE BALLROOM TBA Lower Level               | Closed session  
ExOne Users Group Meeting  
ExOne  
Closed session |
| 12:00pm-1:15pm | NETWORKING LUNCH | Location: AMUGexpo area, Orlando Ballroom, Lower Level  
Diamond Sponsor: ExOne  
The Future of Manufacturing: Technology, Materials, and Design  
Garrett Harmon  
Essentium Materials |
| 1:30pm-2:30pm  | Break                                         | TBA  
BASF |
| 2:30pm-3:00pm  | 3:00pm-4:00pm                                 | Diamond Sponsor: Dyndrite Corporation  
TBA  
Dyndrite Corporation  
BASF |
| 4:00pm-4:30pm  | Transition                                    | TBA  
BASF |
| 4:30pm-5:30pm  | 5:30pm-6:00pm                                 | Closed session  
Closing Dinner  
Closing Dinner  
Location: Hilton Orlando Pool |
| 5:30pm-6:00pm  | Closing Dinner | Location: Hilton Orlando Pool |

**Note:** Subject to change.
AMUG EXPO HOURS

SPONSORS AND EXHIBITORS

Sunday, May 2, 2021  4:00pm - 10:00pm
Monday, May 3, 2021  10:00am - 1:30pm
Monday, May 3, 2021  6:00pm - 10:00pm

Exhibitors and Gold sponsors move out on Monday night. Make sure to plan your time at the conference to see them all!

DIAMOND AND PLATINUM SPONSORS ONLY

Diamond and Platinum booths are open
- Tuesday, May 4  10:30am - 12:00pm
- 1:30pm - 4:00pm
- Wednesday, May 5  1:30pm - 5:30pm
- Thursday, May 6  12:00 - 1:30pm (lunch)

AMUG PREPARATIONS

• We have arranged for one way entrance and exits. Please pay attention to the signs.
• Sponsors and Exhibitors may limit the amount of individuals they would like in their booth at one time. Look for each booth’s social distancing requirements and respect the Sponsor’s and Exhibitor’s request.
• Sponsors and Exhibitors are responsible for cleaning high-touch points within their assigned booth space.
• Sponsors and exhibitors are responsible for adhering to their corporate guidelines. AMUG will not monitor or enforce corporate guidelines of participants.
• Please respect the Sponsor’s and Exhibitor’s request within their booth.

For more information regarding AMUG preparations for the AMUG Conference, download the AMUG Preparations Guide on the AMUG website at www.amug.com
AMUGexpo
Orlando Ballroom, Hilton Orlando

NOTE: BOOTH SELECTION STILL IN PROGRESS
The AMUG organization has been building the user group for 32 years. As an all-volunteer organization, the AMUG Board works with individuals globally to increase awareness and build a strong additive manufacturing community. If you are interested in joining the expanding AMUG team, contact our Nominating Committee at nomcom@amug.com.
# AMUG TEAM

AMUG relies on the support of volunteers, and active participation in committees is one way to contribute. Below are the committees and the members that make them work.

## AGENDA & PROGRAM
**Co-Chairpersons:** Gary Rabinovitz, Reebok
**Members:**
- Andrew Allshorn, AT 3D-SQUARED LTD
- Jamie Cone, BD
- Jordan Weston, MSOE

**Contact:** Agenda@amug.com

## DINOS SELECTION
**Chairperson:** Gary Rabinovitz, Reebok
**Members:**
- Todd Grimm, T.A. Grimm & Associates
- Kim Killoran, Stratasys
- Jason Lopes, Carbon
- Larry Monahan, BD
- Stefan Ritt, SPEE3D
- Graham Tromans, G.P. Tromans Assoc.
- Shannon Van Deren, Layered Manufacturing

**Contact:** DINO@amug.com

## EVENT & HOSPITALITY
**Chairperson:** Thomas Sorovetz, FCA US LLC
**Members:**
- Claire Belson, Emerson
- Abbey Delaney, BigRep

**Contact:** Events@amug.com

## EXPO (AMUGexpo)
**Chairperson:** Mark Wynn, Yazaki North America
**Members:**
- Andrew Allshorn, AT 3D-SQUARED LTD
- Jamie Cone, BD
- Matt Mitchell, Yazaki North America
- Thomas Murphy, Shapeways

**Contact:** Expo@amug.com

## RECOGNITION
**Chairperson:** Mark Barfoot, EWI

**Contact:** Awards@amug.com

## REGISTRATION
**Chairperson:** Kevin Zaras, DSM Additive
**Members:**
- Vince Anewenter, MSOE
- Leslie Frost, GE Additive

**Contact:** Registrar@amug.com

## SCHOLARSHIP
**Chairperson:** Brett Charlton, BD
**Members:**
- Claire Belson, Emerson Automation Solutions
- Maddie Frank, University of Wisconsin – Milwaukee
- Clay Guillory, Titan Robotics
- Jim Harrison, Cimquest
- Zac Holcomb, Additive America
- Shuku Kamara, MSOE
- Rajeev Kulkarni, 3D Systems
- Bob Markley, 3rd Dimension Industrial 3D Printing
- Thomas Murphy, Shapeways

**Contact:** Scholarship@amug.com

## SPONSOR & EXHIBITOR
**Chairperson:** Jamie Cone, BD
**Members:**
- Andrew Allshorn, AT 3D-SQUARED LTD
- Bruce Bradshaw, 6K Additive
- Jay Dinsmore, Dinsmore, Inc.
- Youping Gou, Castheon
- Ed Graham, ProtoCAM
- Evan Kirby, Materialise
- Larry Monahan, BD

**Contact:** VicePresident@amug.com

## TECHNICAL COMPETITION
**Chairperson:** Bonnie Meyer
**Members:**
- Bruce Bradshaw, 6K Additive
- Jay Dinsmore, Dinsmore, Inc.
- Youping Gou, Castheon
- Ed Graham, ProtoCAM
- Evan Kirby, Materialise
- Larry Monahan, BD

**Contact:** TechComp@amug.com

## TRACK LEADER
**Chairperson:** Jordan Weston, MSOE
**Members:**
- Ted Anderson, GE Additive
- Giles Gaskell, Hexagon Manufacturing Intelligence
- Edward Graham, ProtoCAM
- Paul Hogan, Christie Digital
- Colton Rooney, BMI Corporation
- Nate Schumacher, Midwest Prototyping
- Tom Sorovetz, FCA US
- Shannon VanDeren, Layered Mfg. & Consulting

**Contact:** TrackLeader@amug.com

## EXECUTIVE
**Chairperson:** Carl Dekker, Met-L-Flo
**Members:**
- Vince Anewenter, MSOE
- Gary Rabinovitz, Reebok
- Thomas Sorovetz, FCA

**Contact:** President@amug.com

## FINANCE
**Chairperson:** Vince Anewenter, MSOE
**Members:**
- Carl Dekker, Met-L-Flo
- David Leigh, EOS North America
- Gary Rabinovitz, Reebok

**Contact:** Treasurer@amug.com

## GOVERNANCE
**Chairperson:** Leslie Frost, GE Additive
**Members:**
- Vince Anewenter, MSOE
- Carl Dekker, Met-L-Flo

**Contact:** Secretary@amug.com

## INTERNATIONAL
**Chairperson:** Stefan Ritt, SPEE3D
**Members:**
- Andrew Allshorn, AT 3D-SQUARED LTD
- Graham Tromans, GP Tromans Associates
- Nora Cibula, GE Additive
- Dror Danai, XJet

**Contact:** International@amug.com

## MARKETING
**Chairperson:** Kim Killoran, Stratasys
**Members:**
- Todd Grimm, T.A. Grimm & Associates
- Kristen Eisinger, EOS
- Danny Levy, Influnt Energy
- Tuan TranPham, AREVO

**Contact:** Marketing@amug.com

## MEMBERSHIP
**Chairperson:** Andrew Allshorn, AT 3D-SQUARED LTD
**Members:**
- Andrew Graves, DSM Additive Manufacturing
- Jennifer Johns, Bristol University
- Derek Ellis, Authenticise
- Tryggve Rogers, Danfoss
- Nate Schumacher, Midwest Prototyping

**Contact:** Membership@amug.com

## NEW MEMBER
**Chairperson:** Derek Ellis
**Members:**
- Matthew Gray, Boeing
- Jim Harrison, AM Expert
- Nick Liciari, CATI
- Dana McCallum, Carbon

**Contact:** NewMember@amug.com

## NOMINATING
**Chairperson:** Paul Bates, ASTM International
**Members:**
- Mark Abshire
- Tim Gornet, University of Louisville
- David Leigh, EOS North America
- Steve McDonald, L3 ISR Systems
- Harold Sears, Ford Motor Co.

**Contact:** NomCom@amug.com

## PARTNERSHIP
**Chairperson:** Gary Rabinovitz, Reebok
**Members:**
- Todd Grimm, T.A. Grimm & Associates
- Elizabeth Goode, GoodeInk

**Contact:** Partners@amug.com

## OPERATIONS COMMITTEES

## VOLUNTEER
**Chairperson:** Leslie Frost, GE Additive
**Members:**
- Kevin Ayers, Danfoss
- Gary Rabinovitz, Reebok
- Renee Bourdeau

**Contact:** Volunteer@amug.com
2021 AMUG CONFERENCE

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DMG MORI

Dyndrite

ESSENTIUM

ExOne

LuxCreo
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- Tethon 3D
- XYZPRINTING Inc.

**GOLD SPONSORS**
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- Materialise
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- Rapid Prototyping Services
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- The TCT Group
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