

LAM ONSITE REGISTRATION DESK HOURS

Wednesday, March 4: 7:00am-5:00pm • Thursday, March 5: 7:15am-12:00pm

WORKSHOP AGENDA LAM[®] 2015

Day 1 Focus: Process Chain & Process Integration

Wednesday, March 4th*

7:15am Early Morning Coffee Break - Sponsored by *LPW Technology*

8:00am **LIA Workshop Welcome**

Plenary Session: Paradigm Shift in Manufacturing
Chair: Milan Brandt; *RMIT University*

8:15am Keynote - **Additive Manufacturing - Recent Achievements and Future Challenges**
Christoph Leyens; *Fraunhofer IWS*

9:00am Presentation 2 - **GE's Approach to AM**
James Sears; *GE Global Research Center*

9:30am Presentation 3 - **Process Integration and Adaptive Finish Machining**
Daniel Schraknepper; *Fraunhofer IPT*

10:00am Morning Break - Sponsored by *Optomec*

Session 2: Design & Material
Chair: John Hunter; *LPW Technology Inc.*

10:30am Presentation 4 - **Functional and Lightweight Design**
Jannis Kranz; *Laser-Zentrum Nord GmbH*

11:00am Presentation 5 - **Tailoring Powders for Additive Manufacturing**
Satyajeet Sharma; *Oerlikon Metco*

11:30am Presentation 6 - **Development of New Steel Materials Utilizing the Rapid Cooling Rates of Laser Additive Manufacturing**
Harald Lemke; *NanoSteel Company*

12:00pm Lunch

Session 3: Process & Quality Assurance
Chair: James Sears; *GE Global Research Center*

1:30pm Presentation 7 - **Ultra-High-Speed Laser Material Deposition**
Thomas Schopphoven; *Fraunhofer ILT*

2:00pm Presentation 8 - **Powder-Gas Jet Characterization for Laser Material Deposition Systems**
Stefan Mann; *Fraunhofer ILT*

2:30pm Presentation 9 - **High-Speed Selective Laser Melting**
Max Schniedenarn; *Fraunhofer ILT*

3:00pm Afternoon Break - Sponsored by *DM3D Technology*

Session 4: Systems & Process Integration
Chair: Paul Denney; *Lincoln Electric Company*

3:30pm Presentation 10 - **Laser Material Deposition in Controlled Atmosphere**
Richard Grylls; *Optomec*

4:00pm Presentation 11 - **Laser Material Deposition Systems**
Sebastian Kaufmann; *Trumpf Laser- & Systemtechnik GmbH*

4:30pm Presentation 12 - **Direct Metal Laser Melting Systems**
Henner Schöneborn; *SLM Solutions*

5:00pm-6:30pm Exhibitor Reception - Sponsored by *Joining Technologies*

Day 2 Focus: Success Stories

Thursday, March 5th*

7:15am Early Morning Coffee Break - Sponsored by *Fraunhofer USA*

8:00am **LIA Opening Remarks**

Session 5: Worldwide Large-scale Initiatives
Chair: Wayne Penn; *Alabama Laser*

8:15am Keynote - **Aspects of the Impact of America Makes on Laser-Based Additive Manufacturing**
James McGuffin-Cawley; *Case Western Reserve University*

9:00am Presentation 14 - **RMIT Centre for Additive Manufacturing**
Milan Brandt; *RMIT University*

9:30am Presentation 15 - **Center for Digital Photonic Production CDP**
Tim Biermann; *Fraunhofer ILT*

10:00am Morning Break - Sponsored by *Cambridge Technology*

Session 6: Wear & Corrosion Protection
Chair: Thierry Marchione; *Caterpillar Inc.*

10:30am Presentation 16 - **LMD Processes for Improved Corrosion, Wear, and Thermal Properties**
Craig Bratt & Aravind Jonnalagadda; *Fraunhofer CLA*

11:00am Presentation 17 - **High-Speed Laser Cladding for Wear and Corrosion Protection**
Andre W.M. Jansen; *Plating Solutions B.V.*

11:30am Presentation 18 - **Production Laser Cladding for Wear and Corrosion Protection**
Wayne Penn; *Alabama Laser*

12:00pm Lunch - Sponsored by *IPG Photonics Corporation*

Session 7: Maintenance, Repair & Overhaul
Chair: Jim Cann, *Rofin-Sinar, Inc.*

1:30pm Presentation 19 - **Additive Manufacturing for Large Gas Turbine Applications: Opportunities & Challenges**
Allister James; *Siemens Energy Inc.*

2:00pm Presentation 20 - **Considerations in the Implementation of Laser Hot Wire Cladding for Repair and Life Extension**
Paul Denney; *Lincoln Electric Company*

2:30pm Presentation 21 - **Leveraging LMD's Capabilities for MRO Beyond Basics**
Daniel Hayden; *Hayden Corporation*

3:00pm Afternoon Break - Sponsored by *TRUMPF Inc.*

Session 8: Rapid Manufacture & Visions
Chair: Bill Shiner; *IPG Photonics, Inc.*

3:30pm Presentation 22 - **Additive Manufacturing in Automotive Applications: Chances and Today's Limitations**
Wolfgang Thiele; *BMW Group*

4:00pm Presentation 23 - **Advanced Manufacturing Supply Chain (AMSC)**
Bruce Colter; *Linear Mold and Engineering*

4:30pm Presentation 24 - **Organic AM: 3D Printing of Organs as Spare Parts for Human Beings**
Tim Biermann; *Fraunhofer ILT*

*Program Subject to Change