

2023 Multifunctional Additive Manufacturing Symposium



KEYNOTES & AGENDA

AGENDA

JUNE 6: OPTIONAL WORKSHOPS

- · Designing with Lattice Structures in nTop
- · AM part inspection with X-ray CT scanning

JUNE 7: SYMPOSIUM DAY 1

---Breakfast---

Featured Keynote: Alec Guay, nTop

"nTop 4- Advanced Lightweighting and

tailored DfAM Applications"
Speaker Sessions: Metal AM
Speaker Sessions: Polymer AM

---Lunch---

Speaker Sessions: AM Applications I Speaker Sessions: Printed Electronics &

Functional Materials

Networking Mingle: Social Hour with Drink

Ticket & Posters

---Dinner---

(Optional) Fun and Drinks at <u>Lock 32 Brewery</u>

on the Erie Canal!

JUNE 8: SYMPOSIUM DAY 2

---Breakfast---

Featured Keynote: Jeff Erenstone,

Operation Namaste

"3D Printing in Prosthetics: Perspectives Gathered from Practical Application of the

Technology in the Field"

Speaker Sessions: AM Composites

Speaker Sessions: AM with Non-traditional

Materials

---Lunch---

Speaker Sessions: AM Applications II

Speaker Sessions: AM Process Monitoring &

Post-Processing



KEYNOTE SPEAKERS

Alec Guay nTop



Jeff Erenstone Operation

Namaste





More information

Jade Myers
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More Talks being Added Daily!





Metal AM:

- Cold Spray: Spraying the Future, Howie Marotto, EWI
- Liquid Metal Jetting And Its Application In 3D Printing, Chu-heng Liu, Xerox
- Exploration of fundamental process deviations between powder- and wire-fed directed energy deposition, Jakob Hamilton, Iowa State University
- Open Architecture Binder Jetting, Dan Brunermer, B-jetting

Polymers:

- STEP A Disruptive Additive Technology, Arun Chowdry, Evolve Additive Solutions
- Bringing 3D Printing to the Factory Floor, Chris Labelle & Jesse Piraino, Mosaic

AM Applications I:

- Tooling Applications & Open Materials with Stratasys , Devon Judge, Stratasys
- 3D printing concrete at GE, Matteo Bellucci, GE Vernova
- Application Driven Design of Engineered Lattice Structures, Denis Cormier, RIT

Printed Electronics & Functional Materials:

- Soft Robotics Opportunities and Challenges for Additive Manufacturing, Deepak Trivedi, GE Research
- Direct-write additively printed electronics for mmWave frequency circuit elements, Steve Gonya, State University of New York at Binghamton
- High-temperature printed copper-based electronics, Shenqiang Ren, University at Buffalo
- Direct writing of printed electronics through molten metal jetting, Manoj Meda, Corning







THURS, JUNE 8TH

Keynote Address: Jeff Erenstone, Operation Namaste, "3D Printing in Prosthetics: Perspectives Gathered from Practical Application of the Technology in the Field"

Composite AM:

- High Speed Printing of Thermoplastic Composites, Steve Hoover, Impossible Objects
- High-Strength Lightweight Composite Lattice Structures, Pritam Poddar, PRISAM
- Lightweight and Composite Metal Parts from Fused Filament Fabrication (FFF), Jon Trenkle, Markforged
- Towards non-planar 3D printing of woven continuous carbon fiber reinforced thermoplastics, Nidhi Munaganuru, RIT

Additive with Non-traditional Materials:

- Ceramic Additive Manufacturing: Applications and New Materials, Beth Bornick, Lithoz America
- 3D Printing of Multiscale Multifunctional Aerogel Structures, Chi Zhou, University at Buffalo
- Designing for Additive Manufacturing A Clinical Perspective: A crossroads between emerging 3D printing technologies, material choices, and how to achieve effective implementation of DfAM in a clinical setting, Joe Fairley, Ascent Fabrication

AM Applications II:

- Using Printed Lattice Structures to Improve the Design of Upper Limb Prostheses, Jade Myers, RIT
- Additive Manufacturing for Education and Surgical Applications in Veterinary and Human Healthcare, Will Byron, Med Dimensions
- Myerson TruJetX3: A Technological Breakthrough in Digital Denture Production, Gene Rogalski, Myerson
- 3D biomodeling and additive manufacturing for virtual surgical planning, Valeria Marin-Montealegre, RIT

AM Process Monitoring & Post Processing:

- Multiplexed in-Process Monitoring for Metal Additive Manufacturing,
 Dom and Clare Murphy, Layer Metrics
- High-Speed Thermal Simulation for Metal Additive Manufacturing, Khushbu Zope, RIT
- Optimization of Metal AM Via Process Simulation, Kareem Tawil, RIT
- Porosity analysis via x-ray CT scanning, Dave Trauernicht, RIT