ICAM25

International Conference on Advanced Manufacturing

Research to Application through Standardization

October 6-10 | Las Vegas, NV

Industrial Sector: Medical

The medical industry has for many years been and remains a key sector that takes advantage of additive manufacturing (AM) as a mainstream fabrication technology. AM's unique capability to rapidly and on-demand fabricate devices with complex, personalized (e.g., patient-specific) geometries that benefit from an increasingly diverse array of materials has enabled the ever-growing adoption of this technology in the facilitation of new medical applications. However, despite a growing number of applications and the tremendous opportunities that AM offers, the full potential of utilizing AM in the medical industry has yet to be fully explored.

Advancements in point-of-care manufacturing, regenerative medicine, hybrid manufacturing strategies – merging of AM with other modalities or materials, medical education, health monitoring, diagnostic tools, and surgical planning are enabling the broader adoption of AM within the medical industry. In addition, the expanded use of AM within the medical industry requires special attention in the development of new standard and regulatory protocols for imaging, inspection, qualification, and quality assurance to utilize these manufacturing methods in commercial applications.

TOPICS OF INTEREST INCLUDE BUT ARE NOT LIMITED TO:
– Novel Materials for AM Biomedical Applications
– Hybrid Forming - "AM + X"
– Materials State Awareness in Medical AM
– Design & Manufacture of Medical Models, Prosthetics, and Implants
– Performance of Additively Manufactured Biomedical Parts
– Post-processing of AM Medical Devices
– Porous Structure/Lattice Design & Performance
– Advancements in Biofabrication & Regenerative Medicine
– Role of AM in Medical Education & Surgical Planning
– AM at the Point-of-Care
– Clinical Case Studies of AM applications
– AR/VA/MR in the Surgical Deployment of AM Devices
– Qualification & Certification Challenges
– Standard & Regulatory Developments

Symposium Organizers

– **Amit Bandyopadhyay**, Washington State University, USA
– **Sophie Cox**, University of Birmingham, UK
– **David Dean**, The Ohio State University, USA
– **Matthew Di Prima**, U.S. Food and Drug Administration, USA
– **Laura Gilmour,** LG Strategies, LLC, USA
– **Ryan Kircher**, rms Company, USA
– **Sean McEligot**, Mayo Clinic, USA

Submit an abstract

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