ICAM26

International Conference on Advanced Manufacturing

Research to Application through Standardization

Value Chain: Feedstock Innovation: Characterization, Specification, and Reuse

amcoe.org/icam2026

SYMPOSIUM CO-ORGANIZERS

Ronald Aman
Amaero, USA

Javier Arreguin
GE Aerospace - AP&C, Canada

Martin Dopler
Metalpine, Austria

Francisco Medina
University of Texas at El Paso, USA

José Muñiz
Equispheres, Canada

Amir Nobari
Tekna, Canada

Paul Prichard
Oak Ridge National Laboratory, USA

Alber Sadek
EWI, USA

ASTM STAFF CONTACT

Jie Lin Ng
ASTM International

Additive manufacturing (AM) feedstocks are available for a broad range of material types and come in various forms (e.g., powder, wire, filament, inks). New offerings are continuously introduced to the market with varied and unique characteristics. In some cases, the impact of feedstock characteristics on the process and part quality are not fully understood quantitatively. Therefore, a proper understanding of AM feedstock characteristics and the quantification of their performance during manufacturing is essential for the production of AM parts with repeatable quality, be it for fresh or reused feedstock materials. New characterization methods, acceptance criteria, and standards need to be developed for the complete and reliable characterization of feedstock materials.

Topics of interest include but are not limited to:

– Influence of feedstock characteristics on the final part quality

– Advances in feedstock characterization methods and technologies

– Advances in powder production technologies

– New materials and alloys

– Economics and cost models of AM feedstock

– Developments/requirements for feedstock storage, handling, conditioning, and reuse strategies

– Developments in AM feedstock sustainability

– Standardization needs for AM feedstock

– Qualification processes for AM feedstock suppliers

– Customization of traditional (off the shelf) feedstock compositions for AM

– Metrics for feedstock qualification based on industry sector

– Simulations of feedstock performance characteristics (i.e., flowability, spreadability, rheology, etc.) and influence on AM process results.