

**America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC)
 December 8, 2021 Virtual Event: Inspection/Monitoring to Meet Regulatory Requirements: Additive
 Manufacturing (AM) Standardization - Speaker Biographies**

		Hosts / Moderators
	<p>Brandon Ribic, Ph.D. Technology Director America Makes</p>	<p>Dr. Brandon Ribic was named Technology Director of America Makes in October 2019. Driven by the National Center for Defense Manufacturing and Machining (NCDMM), America Makes is the national accelerator for AM and the first of nine Manufacturing Innovation Institutes (MIIs) established and managed by the U.S. Department of Defense (DoD) as public-private partnerships. Prior to joining NCDMM, Dr. Ribic was a joining processes and additive manufacturing materials specialist at Rolls-Royce Corporation. He led the Materials Technology Center efforts in additive manufacturing (AM) process modeling and in-situ process monitoring. His research focused on welding and AM processes for various titanium and nickel superalloy gas turbine engine components. One of his most notable achievements is successfully developing, qualifying, and productionizing (TRL 7) the first ever CMSX-4 AM repair for Rolls-Royce.</p>
	<p>Jim McCabe Senior Director, Standards Facilitation American National Standards Institute</p>	<p>Jim McCabe serves as senior director, standards facilitation, at the American National Standards Institute (ANSI), where he directs collaborative standardization activities for emerging technologies. Recent projects have included:</p> <ul style="list-style-type: none"> • organizing meetings on standardization and the commercial space industry • spearheading the development of a standardization roadmap for unmanned aircraft systems (drones) to facilitate their safe integration into the U.S. national airspace • partnering with America Makes to develop a standardization roadmap for additive manufacturing (3D printing) <p>A member of the ANSI staff since 1995, Mr. McCabe has been recognized by America Makes with its Distinguished Collaborator Award, and by SES, the Society of Standards Professionals, with its Honorary Life Member award.</p>

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Speakers	
 <p>Robert Badrak Materials Consultant Weatherford (on behalf of AMPP: Association for Materials Protection and Performance)</p>	<p>Robert Badrak, PE, FASM, FNACE is a subject matter expert and consultant in materials and corrosion. He had been overseeing the materials engineering efforts for 20 years for Weatherford.</p> <p>He has been active in the field of materials for the energy sector for over 40 years and has been active in Additive Manufacturing for 12 years.</p> <p>Robert has an M.S.E. (metallurgical engineering) from the University of Michigan and a B.S. (chemistry) from Eastern Michigan University. Robert has 20 US patents and has written/delivered 40+ papers. He has written two chapters on oilfield corrosion for Engineering Handbooks.</p>
 <p>Eric Biedermann Engineering Manager Vibrant Corporation</p>	<p>Eric Biedermann is Vibrant Corporation’s Engineering Manager. He has more than a decade of experience in the engineering and application of resonance inspection solutions for critical components in the aerospace, power generation and automotive industries. Mr. Biedermann is responsible for Vibrant’s Application Engineering and Test Technician staff and manages its commercial and government projects. Mr. Biedermann holds a Bachelor of Science in Aeronautical/Astronautical Engineering from the University of Illinois at Urbana-Champaign and a Master of Science in Mechanical Engineering from Purdue University.</p>

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	<p>Mr. Duning is an Additive Manufacturing Research Engineer at the University of Dayton Research Institute (UDRI) specializing in additive manufacturing, in-situ process monitoring, machine learning applications, and advanced digital metrology methods. Mr. Duning's current role within AMTD is leading projects associated with automated processing of in-situ sensor data on additive systems. Additionally, Solomon has an extensive background including: reverse engineering, modeling of additive processes, and development of automated data analysis techniques. Due to his variety of expertise, Solomon has demonstrated the ability to successfully lead multi-disciplinary groups towards achieving a unified goal.</p>
<p>Solomon Duning Research Engineer, Additive Manufacturing Technology Development, Structural Materials University of Dayton Research Institute</p>	<p>Patrick Howard received a BSEE from Michigan Tech and a MSEE from the University of Minnesota. Since graduation, he has worked in Nondestructive Testing for GE at both the GE Global Research Center and GE Aviation focusing on digital inspection methods. Currently he is the Consulting Engineer for Inspection at GE Aviation working on inspection solutions for additive manufacturing and ceramic matrix composites.</p> <p>Patrick has been involved with standards development through ASTM since 2006. He served as the subcommittee chair for E07.11 on Digital Imaging and Communication in NDE (DICONDE) and is currently chairing the E07.99 subcommittee on Liaison improving E07's connections to other standard development organizations.</p>
	
<p>Patrick Howard Consulting Engineer Nondestructive Investigation GE Aviation</p>	

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Dr. Cambre Kelly
Vice President of Research and Technology
restor3D

Dr. Cambre Kelly is biomedical engineer, medical device entrepreneur, and additive manufacturing enthusiast. Cambre's passion is working at the intersection of advanced technology and medicine, having worked at numerous early and mid-stage MedTech companies translating and commercializing innovative medical devices. Cambre is an inventor on numerous patents and has commercialized multiple medical device products which have impacted thousands of patients. In her current role, as a co-founder of and Vice President of Research and Technology at restor3d, she leads research and advanced development projects. She is a member of the ASTM subcommittee for Additive Manufacturing, and ambassador for the Raleigh-Durham chapter of Women in 3D Printing organization.



Gene Kulesha
Senior Director, Advanced Engineering
Onkos Surgical

Gene Kulesha has been involved in medical device technology development and manufacturing for over 20 years. He started in manufacturing where he scaled and then managed various material technology production streams. He later transitioned to product development and commercialization of synthetic bone substitutes and allograft implants. Gene's responsibilities then expanded into leading the research, development, regulatory clearance and scale-up of various platform technologies used for fabricating advanced orthopedic implants. He led the teams at Stryker that researched, developed, and transferred additive manufacturing technologies, now ubiquitous in the company's flagship implant lines. Over ten unique products were developed and commercialized under his leadership. Gene is now the Sr. Director of Advanced Engineering at Onkos Surgical, a company passionately focused on oncology, where he leads their anti-microbial program and remains involved in additive manufacturing and other technology initiatives.

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Erin Lanigan
Materials Engineer | EM21,
Damage Tolerance Branch, Non-
Destructive Evaluation Team
NASA Marshall Space Flight
Center

Erin Lanigan is a Materials Engineer on the Non-Destructive Evaluation (NDE) Team at NASA Marshall Space Flight Center in Huntsville, Alabama. Her research areas include additive manufacturing structural integrity and certification, in-process monitoring, in-space manufacturing, novel applications of infrared flash thermography, radiographic sensitivity, and more. She dabbles in ultrasonics, penetrant, eddy current, acoustic emission, resonance testing, and other NDE methods as needed. She received her Bachelor of Science degree in Mechanical Engineering from the University of Kansas several years ago and is pursuing a Master of Science in Mechanical Engineering at the University of Alabama in Huntsville.



Nicholas Mulé
Director, Additive Manufacturing
Intelligence Center
Boeing Additive Manufacturing

Nicholas Mule is currently the Director of the Boeing Additive Manufacturing Intelligence Center. In this capacity, Nicholas develops the modeling, simulation and digital tools required to accelerate adoption and implementation of Additive Manufacturing across the Enterprise. Nicholas has 14 years of Aerospace product development experience and is a recognized leader in additive manufacturing with over 10 years of AM technology development and AM production transition experience in Aerospace. Nicholas holds a Bachelor's and Master's Degree in Mechanical Engineering from Cal Poly San Luis Obispo and Master's Degree in Business Administration from UCLA.

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	<p>Dr. Abdalla R Nassar is an Associate Research Professor and head of the Process Physics, Analytics, and Engineering Department within the Additive and Laser Manufacturing Division of the Applied Research Laboratory (ARL) at Penn State. Dr. Nassar has worked in the field of Additive Manufacturing of metals for nearly a decade. He has led and participated in numerous programs on powder bed fusion and directed energy AM. In 2020, Dr. Nassar was awarded the International Outstanding Young Researcher in Freeform and Additive Manufacturing Award for his contributions towards in-situ monitoring and control of AM processes, development of novel processing methods, and elucidating interactions in directed energy deposition and powder bed fusion AM. His work has also led to nearly a dozen invention disclosures, four issued patents, along with numerous publications on topics including sensing and control of AM, application of machine learning for quality monitoring, and deposition of dissimilar and functionally-graded materials.</p>
<p>Dr. Abdalla Nassar Associate Research Professor Head of Process Physics, Analytics, and Engineering Department, Applied Research Laboratory Pennsylvania State University</p>	<p>Dr. Toyserkani holds the Canada Research Chair position in Additive Manufacturing (AM) and has over 20 years of experience in different aspects of AM research and development. He established the first AM laboratory at a Canadian university – the Multi-Scale Additive Manufacturing (MSAM) Laboratory – which focuses on the development of the next generation of AM processes, in-situ monitoring and control of AM processes and applications.</p> <p>He is the director of a Pan-Canadian NSERC Strategic Network entitled “Holistic Innovation in Additive Manufacturing (HI-AM)”, that brings together leading AM experts from seven top Canadian universities, international universities and 14 industrial partners are involved in this network. He has been invited for >52 talks/panels in different countries. His research has been highlighted in many magazines and newspapers. He has 18 granted/pending patents on different aspects of AM. He has actively transferred his innovative technologies to industry. He has published 136 AM-related journal articles.</p>
	
<p>Dr. Ehsan Toyserkani Professor and Canada Research Chair in Additive Manufacturing University of Waterloo</p>	