

Francisco Medina Jr.

Technology Leader Additive Manufacturing



TECHNICAL EXPERTISE

Frank Medina is the Technology Leader for additive manufacturing (AM) at EWI. He has 17 years of AM and electron beam melting (EBM) experience, collaborating with research scientists, engineers, and medical doctors to develop new equipment and devices.

BACKGROUND AND PROJECT EXPERIENCE

While completing his graduate studies at the University of Texas at El Paso (UTEP), Frank developed new applications for stereolithography, designing experimental test procedures for material compatibility at Sandia National Labs. He later co-founded and directed the Rapid Design and Manufacturing Lab/W.M. Keck Center for 3D Innovation at UTEP, a laboratory focused on multi-disciplinary biomedical, materials, and manufacturing research. At UTEP, he helped create and manage a rapid prototyping recharge center, managed over \$10 million of equipment and instrumentation, and designed new manufacturing equipment and fixtures for micro- and multi-material applications. In 2013, Frank joined Arcam AB at Oak Ridge National Laboratories as a senior specialist in materials development where he managed Arcam's relationship and R&D activities in North America. His responsibilities included developing, validating, and industrializing material process themes for Inconel 718 technology, as well as teaching advanced EBM training and EBM application support courses.

Frank's collaboration with scientists and engineers led to the development of new manufacturing techniques, as well as the design and development of medical products used in spine surgery. He is published extensively in journal and conference periodicals and has received numerous honors. Frank taught engineering and design for medical modeling at both UTEP and El Paso Community College, and currently teaches AM training courses across the country. He holds eight patents and has four patents pending.

Frank is based at Buffalo Manufacturing Works, EWI's laboratory facility in Western New York.

EDUCATION

B.S. Mechanical Engineering, The University of Texas at El Paso
 M.S. Mechanical Engineering, The University of Texas at El Paso
 Ph.D. Material Science and Engineering, The University of Texas at El Paso

PROFESSIONAL AFFILIATIONS

Society of Manufacturing Engineers
 Materials Research Society
 ASTM International
 TMS



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