

2016 IEEE MTT-S Latin America Microwave Conference (LAMC 2016)
Puerto Vallarta, Mexico, Dec. 12-14, 2016

Special Sessions

SS-6: RF Applications of 3D Additive Manufacturing: Materials, Processes and Opportunities (We-4)

Day: Wednesday, December 14
Room: Violeta/Tulipan
Time: 13:40–15:30

Organizers:

Thomas M. Weller and Eduardo A. Rojas-Nastrucci (University of South Florida)

Abstract:

Digital additive manufacturing (AM) is being increasingly studied for its potential applications at microwave and mm-wave frequencies. Several different AM techniques are available and each offers its own advantages and challenges. The presentations in this session will cover issues that span the development of novel microwave materials that are compatible with AM; AM techniques that include fused deposition modeling, micro-dispensing, polymer-jetting and aerosol spraying; and how AM is being successfully applied to manufacture new and high performance microwave circuits and antennas. Our intent is to provide a working level of understanding for those new to AM while also covering finer details and challenges for those with experience in the area.

Time	ID	Paper#	Title / Authors / Affiliations
13:40 to 14:10	We-4-1	-	Additive Manufacturing of Microwave Electronics based on Functional Nanocomposites Materials Jing Wang University of South Florida, USA
14:10 to 14:40	We-4-2	-	3D Printed Microwave and THz Devices using Polymer-Jetting Technique Hao Xin University of Arizona, USA
14:40 to 15:10	We-4-3	-	Microwave and Mm-Wave Applications of 3D Multi-Material Digital Printing for Antennas and Circuit Components Thomas Weller University of South Florida, USA
15:10 to 15:30	We-4-4	185	Metallic 3D Printed Ka-Band Pyramidal Horn using Binder Jetting E. A. Rojas-Nastrucci, J. Nussbaum, T. M. Weller, N. B. Crane University of South Florida, Tampa, USA