



***Keynote speaker:***

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**Presentation: Electronics at the Edge: Flexible, Hybrid and Additive Approaches to Medical and Industrial Devices**

**Abstract:**

Flexible, hybrid and additive electronics enable the design and fabrication of sensors, data acquisition and analysis systems, communication and power systems that are consistent with applications that operate at the edge of the Cloud. Many such applications require thin, soft, conformal, or stretchable attributes for "wearability" in human healthcare or implantability in industrial or infrastructure systems that must survive extreme conditions. In this talk a selection of devices will be described that demonstrate that additive printing methods can offer reliable performance from low-cost manufacturing solutions for potentially high-volume applications.

**Bio:**

Mark D. Poliks is a SUNY Distinguished Professor of Materials Science and Engineering and Systems Science and Industrial Engineering at the Thomas J. Watson College of Engineering and Applied Science, Binghamton University, State University of New York.

He is the founding director of the Center for Advanced Microelectronics Manufacturing (CAMM), a New York State Center of Advanced Technology and home to the New York Node of the federally supported NextFlex Manufacturing USA. Poliks has made sustained contributions to the fields of electronics packaging, flexible and hybrid electronics that are relevant to a variety of medical and industrial applications. He has had significant experience in the electronics industry serving as a senior technical manager at the IBM Corporation and as director of R&D at Endicott Interconnect Technologies, Inc. He was the General Chair of the 69th IEEE Electronic Components and Technology Conference (ECTC). He is an elected member of the IEEE Electronics Packaging Society (EPS) Board of Governors, serves as the director of student programs and is an IEEE EPS Distinguished Lecturer.