## **¿MAPS NEW ENGLAND**

## **Chapter Technical Meeting**

Tuesday, September 12, 2017
Boxboro Regency Hotel & Conference Center
242 Adams Place, Boxborough, Massachusetts

"MEMS Packaging - What's the Problem?"

Dr. Stephen Bart, Director of MEMS Transducer Development - MKS Instruments



Abstract – MEMS devices have been in commercial production for over 20 years now. They are used in a wide variety of products from extremely high volume consumer products, such as smart-phones, to sophisticated military equipment. This breadth of applications has spawned a variety of complex packaging requirements, very difficult to meet with standard electronics packaging technologies. We will examine some of the requirements and solutions that have been developed to successfully package MEMS products.

Bio - Dr. Stephen Bart received the B.S. and Ph.D. degrees in electrical engineering from the Massachusetts Institute of Technology in Cambridge, Massachusetts. His doctoral research involved the electromechanical analysis and design of micro-fabricated electrostatic motors and pumps, where he developed the first friction models for a MEMS actuator. He has spent 25 years in the field of sensors and MEMS. He worked for many years at Analog Devices, Inc., where he designed the MEMS sensor in their well-known family of airbag accelerometers, which have over 500 million sensors in the field. In later years he was a product development manager for accelerometer and gyro products for consumer applications. Stephen also held several positions at Coventor, Inc., where he worked in the areas of MEMS product design and advanced CAD tools for modeling and simulation of MEMS systems. Stephen joined MKS Instruments in 2011 to lead the development of MEMS based pressure sensors and other sensor devices.

## **SCHEDULE** (times approximate)

5:30 PM Registration, Socializing, Networking & Cash Bar 6:30 PM Dinner

**Technical Presentation** 

7:30 PM

**Information & Registration**