

### Technology Transfer for Dummies: How to get to a Stable High-Yielding Process

Technology transfer can take on many forms including development lab to pilot production, pilot production to manufacturing, and fabrication facility to fabrication facility. The goal of a stable high-yielding process however is universal. Variations in equipment, materials, facilities, and believe it or not even environmental conditions can impact outcomes. In addition, increasing volumes can always elucidate previously unforeseen issues. Challenges associated with Technology Transfer and how to address them will be discussed.

Lead: Mary Ann Maher, Ph.D., President, Founder, **softMEMS**

### Back-end Challenges of MEMS and Sensors (packaging, testing, & reliability)

As complexity of MEMS & Sensor devices increases through integration, so do the back-end challenges including packaging and test. This group will discuss how we may work as an industry to solve common issues through standardization and best known methods and will specifically look at leveraging adjacent supply chains including semiconductor and flexible electronics.

Lead: Mike Mignardi, Manager, Technology Development, **Texas Instruments**

### Integration Opportunities (Technological & Business Considerations)

From the very beginning of the development of MEMS technology, the debate over the level of integration has been ongoing. The advantages and disadvantages of incorporating functionality at the device level will be discussed from a both a technological and a business perspective.

Lead: Peter Himes: General Manager, **SITRI Innovations and SITRI Ventures**

### Emerging MEMS, Sensors, and Systems Incorporating Them

As the MEMS and sensor industries mature and new technologies continue to emerge, applications and markets incorporating new sensors are rapidly growing. What types of new MEMS and sensors are being developed and challenges associated with the systems incorporating them will be addressed.

Lead: Nicole Kerness, Vice President, Sensor Design and Technology, **Kionix**

### Piezoelectric and Other Emerging Materials for MEMS and Sensor Applications

Bringing piezoelectric MEMS devices to market introduces associated challenges such as deposition process control, supply of source/target materials, metrology, testing and device reliability. How can we work together to identify best practices for the industry? What other new materials may be on the horizon for MEMS and sensors applications?

Lead: Dave Horsley, PhD., **Chirp Microsystems**