

# **MEPTEC/SMTA Medical Electronics Symposium 2010**

**Day Two**

**Tempe, Arizona, USA  
23 September 2010**

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## MEDICAL ELECTRONICS SYMPOSIUM

### SUCCESSFUL STRATEGIES FOR THE MEDICAL ELECTRONICS SECTOR: STEADY GROWTH KEEPS THE MOMENTUM MOVING FORWARD

Day Two: Thursday September 23rd, 2010  
Arizona State University • Tempe Campus • Tempe, AZ

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8:30 am – 9:00 am      **Keynote: Hermetic, Radio-Transparent Micropackaging for Implantable Neural Prosthetics**  
*Charles Byers, Principal Scientist, Alfred Mann Foundation for Scientific Research*

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#### **Session 5: Materials & Design at the Board and Systems Levels**

*Session Chair: Randy Crutchfield, Principal Product Engineer, Medtronic, Inc.*

9:00 am – 9:30 am      **Using Modeling and Simulations to Enable Worst Case Analysis and Yield Estimation During Electrical Design**  
*Scott Hareland, Senior Principle Systems Engineer, Medtronic, Inc.*

9:30 am – 10:00 am      **Medical Device Design and Validation the FDA Way**  
*Daryl Mullins, AJ Associates*

10:00 am – 10:30 am      **Outsourcing Product Development to a Multidiscipline Team of Specialists: A Success Story**  
*Mike Silverman, Managing Partner, Ops A La Carte and Michael Keer, Founder and CEO, Product Realization Group*

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10:30 am – 11:00 am      **Break**

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#### **Session 6: Systems Assembly & Trends on Captive vs. Outsource**

*Session Chair: Ron Molnar, President, AZ Tech Direct*

11:00 am – 11:30 am      **Outsourcing Considerations Across the Assembly Spectrum**  
*William Sobkowicz, Manager, Engineering Solutions, Plexus Corporation*

11:30 am – 12:00 pm      **RoHS ReCast – Are You Ready?**  
*Krista Botsford, President, Botsford EcoTech Partners LLC*

12:00 pm – 12:30 pm      **System Integration Medical Cleaning Process Considerations**  
*Mike Bixenman, Chief Technology Officer, Kyzen Corporation*

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12:30 pm – 1:30 pm      **Lunch**

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##### **Session 7: Product Reliability, Safety & Regulatory Requirements**

*Session Chair: Dale Lee, Staff DFX Process Engineer, Plexus Corporation*

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|-------------------|---|
| 1:30 pm – 2:00 pm | <b>Multi-layer Ceramic Capacitor Accelerated Tests for Active Medical Implant Reliability Applications</b><br><i>Grady White, Physicist, National Institute of Standards and Technology</i> |
| 2:00 pm – 2:30 pm | <b>The Presence of Sulfur in Hospitals and How to Predict the Reliability of Medical Equipment in this Environment</b><br><i>Reinaldo Gonzalez, GE Healthcare</i>                           |
| 2:30 pm – 3:00 pm | <b>Real Reliability Concerns In the Medical Electronics World</b><br><i>Keith Sellers, Managing Scientist, Trace Laboratories</i>   |

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3:00 pm – 3:30 pm	<b>Break</b>
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##### **Session 8: Equipment & System Level End Product Applications**

*Session Chair: Tim Craumer, HEI, Inc.*

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|-------------------|--|
| 3:30 pm – 4:00 pm | <b>The Iterative Design Step of a Noninvasive Glucose Sensor</b><br><i>Jeff La Belle, Ph.D., Assistant Research Professor, Arizona State University</i>                |
| 4:00 pm – 4:30 pm | <b>Under the Hood of the Medical Electronics Equipment Market</b><br><i>E. Jan Vardaman, President &amp; Karen Carpenter, Senior Analyst, TechSearch International</i> |
| 4:30 pm – 5:00 pm | <b>Novel USB-Capable, WiFi-Enabled, Hospital Interconnectivity Device</b><br><i>Kirk Olson, HEI, Inc.</i>  |