

## Universal Instruments' APL Presents Technical Session at IDTechEx Show

**Innovative processes empowering the future of flexible substrates in electronics products.**

Universal Instruments' Advanced Process Lab (APL) will present a technical session entitled *Joining to Temperature Sensitive Substrates with Asymmetric Heating* at the IDTechEx Show at the Santa Clara Convention Center, CA, on November 15 - 16, 2017. Peter McClure, APL Process Research Engineer, will deliver the session as one of the Cornerstone Presentations in the Exhibition Theater on Thursday, November 16 at 1:20 p.m. Universal will also exhibit on BoothT18 at the IDTechEx Show, with experts from the APL on-hand to discuss next-generation technologies and provide insight to help attendees maximize competitive advantage.

McClure's presentation is derived from ongoing research of the APL's Advanced Research in Electronics Assembly (AREA) Consortium in cooperation with the industry's leaders. It will discuss the challenges associated with attaching components to temperature-sensitive substrates such as PET and TPU. It will reveal that conventional solder reflow oven processes cannot be used because they damage these high-tech flexible substrates. Instead, asymmetric heating processes in which the solder is heated independently of the substrate are being actively explored. One such process, Laser Selective Reflow (LSR), is being used to bond WLCSPs to these substrates. The presentation will investigate the use of LSR with a variety of low-temperature substrate materials and bond pad metallizations.

"The flexible electronics market is expected to roughly triple by 2022," said Jeff Knight, APL General Manager. "Trends such as this drive the research of the AREA Consortium, putting the APL at the forefront of the technology landscape. It's our pleasure to discuss these topics with our peers at events like the IDTechEx Show, giving us the opportunity to share knowledge on the next generation of materials and processes."

The IDTechEx Show presents the latest emerging technologies at one event, with nine concurrent technologies and a single exhibition covering 3D Printing, Electric Vehicles, Energy Harvesting, Energy Storage, Graphene, Internet of Things, Printed Electronics, Sensors, and Wearable Technology. Due to the strong overlap across these topics, over 3500 attendees and 245 exhibitors are exposed to the full relevant supply chains and customer and supplier bases.

Universal's APL offers comprehensive research, analytical and advanced assembly services which enable manufacturers to realize rapid product introduction, maximize yield and optimize reliability.

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To learn more about Universal's solutions for any electronics manufacturing challenge, contact Universal Instruments at 800-432-2607 or 607-779-7522 or visit [www.uic.com](http://www.uic.com). To find out how Universal's Advanced Process Laboratory can help your organization, please contact APL Director David Vicari at 607-779-5151 or [vicari@uic.com](mailto:vicari@uic.com).

### **About Universal Instruments**

Universal Instruments is a global leader in the design and manufacture of advanced automation and assembly equipment solutions for the electronics manufacturing industry. Universal Instruments delivers comprehensive solutions to a global customer base by leveraging exclusive process expertise combined with its innovative portfolio of flexible platforms for surface mount, insertion mount, advanced semiconductor packaging, and end-of-line automation. Universal Instruments is headquartered in Binghamton, N.Y., USA, with offices in Europe, Asia, and the Americas.

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