

Symposium Technical Chairs' Welcome Letter



Lee Levine

We would like to welcome everyone to the 46th Annual New England iMAPS Symposium. Thanks to all the Session Chairs, we've compiled an engaging program of technical talks on many of today's hot topics that will peak the interest of every attendee. We hope you take full advantage of the opportunity to interact with the speakers and each other in a learning environment that is only available at this unique one-day symposium. Below is a brief summary to help you on your way and don't forget to spend time in the exhibit hall, because after all, without the support of the exhibitors, this day wouldn't be possible.



Dave Saums

Advanced Electronics: Copper pillars, adhesive bonding, advanced dielectrics, fan-out wafer level packaging, cost-reducing production volume testing and thermal stability maps will all be included topics in the advanced packaging session.

Photonics and Optoelectronics Packaging: Holographic vibrometry for MEMS, Die bonding high-power laser diodes (HPLD), the IOT (internet of things) for industrial automation sensors, Quantum dots in long wavelength applications and new packaging strategies for integrated photonics are featured topics in the Optoelectronics session.

RF and Microwave - Innovations and Emerging Technologies: There will be two RF sessions, morning and afternoon. In the morning there will be two talks on GaN on Silicon for 5G applications, GaN Amplifiers for MMICs, TPG (graphite) for thermal management, and recent developments in capacitors

In the afternoon session, we will have presentations on the effects of high temperatures on LTCC dielectrics, thermoplastic polyimide (TPI) adhesives for RF, epoxy preforms for RF, and the hermetic sealing of metal packages.

Novel Packaging: New packaging for medical implants, organic packaging for applications with liquid exposure, medical imaging applications, a MEMS-based energy harvester, and commercial challenges for medical MEMS applications are all included in the Novel Packaging session.

Interconnects: High-reliability copper alloy bonding wire, a review of MIL-STD-883 visual inspection criteria, sintered silver die attach material, zero outgassing and residue underfill, and the use of Design of Experiments (DOEs) for understanding complex processes will be presented in this Interconnects session.

Printed Electronics: Phase shifters, photonic curing, tunable inks, testing and analysis of printed conductive inks, and 3-D printable additive manufacturing will all be topics in the printed electronics session.

Interactive Dialogue Session: This session format was introduced in 2018 and was exceedingly successful, as all presenters found that the format allowed for in-depth discussion, one-on-one and in groups, around each set of poster material. We will again have both industry and academic presentations on key selected topic, where each author will have a two-hour time period in which to answer questions and discuss the research topic and methodologies employed, for topics including research, manufacturing process development, and product applications.

Kind Regards,

Lee Levine

2019 iMAPS New England Symposium Technical Chairs

Dave Saums