

Symposium's Technical Chairs Welcome Letter



Tom Green

We'd like to welcome everyone to the 42nd Annual New England IMAPS Symposium. Thanks to all the Session Chairs we've pulled together a stellar program of technical talks on a variety of topics that will peak the interest of every Attendee. Now it's your job to engage the speakers and each other in a learning environment that's only available at this unique one day symposium. Take the time to learn something new and network with your peers. Below is a brief summary of each session 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. Enjoy!



Dmitry Marchenko

RF and Microwave - Innovations and Emerging Technologies: This session is all about the innovations and emerging technologies that are driving the RF and Microwave packaging industry. This two-part (morning/afternoon) session is returning by popular demand and includes talks from industry leaders such as NATEL Engineering, Vishay and OMMIC. The topics range from multilayer ceramic capacitors for RF, Low Temperature Co-Fired (LTCC) design to next generation high powered Gallium Nitride (GaN) devices for millimeter wave bands.

Advanced Technologies 2.5/3D Packaging: This session covers the latest advancements in 2.5/3D technology. Through Silicon Vias (TSVs) are changing the landscape for high density 3D packages. The impact of this technology and other aspects of 2.5/3D integration technology and applications are presented in this session with plenty of time for Q &A. Copper pillars and the challenges of underfill is another important topic for the packaging community.

MEMS and Nano Technology for UAV, Energy, security and Biomedical: MEMS applications are blossoming – from multiple airbag sensors, flow control and stability control in automobiles to gyroscopes, microphones and tuners in handheld devices. New sensor systems – optical, bio and other – are now gaining traction. Nanomaterial applications are starting to blossom in the electronics industry, from stencil coatings to fillers in underfills, surface finishes, and tin whisker mitigation coatings – the list is growing fast. This session represents the best of both worlds!

SMT and Electronics Packaging: Surface mount technology is alive and well in the New England area. This session looks at some of the important IPC plating specifications along with critical reliability issues such as Solder Fatigue in Tin-Lead and Silver-Tin-Copper Solders. Also included is special presentation about Electromagnetic Compatibility Testing in All-Electric Vehicles.

Printed Electronics is a set of printing methods used to create electrical devices on various substrates and this disruptive technology is being adopted by many different industries, with strong leaders right in our region. A presentation from the Army, which is pioneering the use of this technology within the DOD focuses on additive manufacturing and integration of electronics. Optomec will report on latest technology to enable Internet of Things IoT.

Cu Wire and Advanced Interconnect Technology session offers unique opportunities to discuss barriers for using non-conventional wirebond interconnect methods and recent promising study results. You have opportunity to hear about latest advancements in wirebond aging studies and 3D modeling of common RF topologies for Wide Band Gap Power Module applications

Poster Session: This year the competition in the poster session is really heating up. \$500 dollars in cold cash to the first place winner! The posters represent a divergent set of technical topics that all fit under the umbrella of our symposium. The students are our future so please set aside some time to go and talk with each of them to learn what's new on the horizon.

We welcome your feedback and have a wonderful day!!!

A handwritten signature in black ink, appearing to read "Tom Green".

Thomas J. Green

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Dmitry Marchenko