

## Symposium's Technical Chairs Welcome Letter



Dmitry Marchenko

We'd like to welcome everyone to the 43<sup>rd</sup> 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's 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. Enjoy!!!



Dr. Parshant Kumar

**RF and Microwave - Innovations and Emerging Technologies:** This session is all about the innovations and emerging technologies that are driving RF and microwave packaging industry. Returning by popular demand and includes talks from industry leaders such as CST, Ametek and Draper. The topics cover issues like EM coupling between buck converters and antennas, Low Loss Additive Materials and design challenges of millimeter-wave semiconductor packaging.

**3D and Beyond:** This session covers the latest advancements in 2.5/3D technology. A Novel way to produce 3D chip assemblies called Quilt will be presented by IIC. Presentation by Tufts will describe liquid metal interconnects use in studies of animals and soft robots. You will learn about the latest Draper work on Printed transceivers.

**High Reliability Interconnect** session gives an opportunity to hear about the latest advancements in heavy copper wire bonding for mass productions at Hesse. Rochester Electronics will discuss process optimizations on advanced aluminum wirebond tools. Tanaka will report on the use of submicron Au particles for Low Temperature Au-Au bonding. You will get a chance to hear the latest updates regarding Niobium wire from Auburn University.

**Medical Device Packaging:** Miniaturized medical electronics is becoming more and more widespread. To learn more about unique challenges of packaging medical devices, please attend this session. After the introductory talk we will discuss transistor-less, wireless implant work and brain activity monitors from Draper and Ultra-Low Power RF implants from IPDIA This session is too good to miss!

**SMT and Electronics Packaging:** Surface mount technology is alive and well in the New England area. This session looks at the results of a 20 year shelf life study of surface finishes done by ST and S. TAS Consulting will report on advancements in flexible electronics packaging, and you will get a chance to hear about Enthone's work on organic-metal final finishes.

**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. This session includes a presentation from the Army, which is pioneering the use of this technology within the DOD, and focuses on Next Flex – Flexible Hybrid Electronics initiative. Equipment suppliers Optomec and nScript will discuss their latest advancements in additive manufacturing systems.

**Nanoelectronics and Optoelectronics Packaging** session will include a presentation by Raytheon about efforts to integrate Si and III-V technologies. UMass Lowell will discuss their latest work in nanosolders and graphitic carbon nitride. This session also includes a special presentation by Northeastern University about the printing of microscale heterogeneous electronics and sensors

**Poster Session:** This year the competition in the poster session is really heating up. 500 dollars to the first place winner! The posters cover 3D printing, nanomaterials, biotech and counterfeit prevention! 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!!!

Kind Regards,

A handwritten signature in black ink that reads "Dmitry Marchenko".

Dmitry Marchenko

A handwritten signature in black ink that reads "Parshant Kumar".

Dr. Parshant Kumar