

TMS 2010

139th Annual Meeting & Exhibition

February 14 - 18, 2010, Washington State Convention Center, Seattle, Washington USA



6th Lead-Free Solder and Technology Workshop

Sunday, February 14, 8:30 a.m. to 5:30 p.m.

The focus of this workshop is new solder alloy compositions and their phase stabilities, as well as the impact of microalloying on solder joint microstructure and mechanical performance. This workshop is organized to create an industry roadmap for Pb-free solder technology in high reliability and consumer electronic packaging and interconnections, with current industry needs and concerns serving as a driving force for research.

Who should attend?

Those employed at industry-related companies, academic research groups, national laboratories, and members of consortia can come together and build on the materials science fundamentals necessary for further understanding and future industry applications.

Topics

- Future directions in new solder alloy compositions
- Impact of microalloying in Pb-free solders
- New Pb-free solder bump materials
- Mechanics of deformation in Pb-free solder joints
- Constitutive properties and mechanical shock behavior of Pb free solder joints
- High cycle bending and high cycle shear performance and failure mechanisms
- Pb-free board assembly related issues and solutions
- Sn grain orientation effects on long-term reliability

Speakers

- **Iver Anderson**, Ames Laboratory, USDOE
- **Nikhilesh Chawla**, Arizona State University
- **Fay Hua**, Intel
- **Sung-Kwon Kang**, IBM
- **Choong-Un Kim**, University of Texas, Arlington
- **Ning-Cheng Lee**, Indium Corporation
- **Katsuaki Sukanuma**, Osaka University
- **Ho-Ming Tong**, ASE

Panel Discussion

- **Laura Turbini**, Research in Motion
- **Darrel Frear**, Freescale
- **C. Robert Kao**, National Taiwan University
- **Thomas Bieler**, Michigan State University
- **John Osenbach**, LSI
- **Carol Handwerker**, Purdue
- **Kwang-Lung Lin**, National Cheng Kung University

Organizers

Tae-Kyu Lee (Lead organizer), Cisco, **Fay Hua**, Intel, **Darrel Frear**, Freescale, **Laura Turbini**, Research in Motion, **Iver Anderson**, Ames Laboratory-USDOE, **Srinivas Chada**, Whirlpool, **Carol Handwerker**, Purdue University, **Rajen Sidhu**, Intel

How to Register

Register by January 15, 2010 using the [online registration form](#) or download the [registration form \(PDF\)](#) and mail or fax with your payment. Cost is free for members and \$75 for nonmembers.

For More Information

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