Call for Papers

Semiconductor Equipment and Materials International (SEMI) and the IEEE Components, Packaging, and Manufacturing Technology (CPMT) Society invite manufacturing professionals from around the world to submit abstracts for the IEMT at SEMICON West 2003. IEMT continues to be the leading technical conference for discussing solutions that improve the electronics manufacturing process. For equipment and materials suppliers, and device manufacturers, IEMT provides unparalleled opportunities for both electronics and microelectronics professionals to network and learn the latest in manufacturing strategies and methodologies to achieve manufacturing excellence. Abstracts are peer-reviewed and are selected based on a clear outline of problem, analysis, solution/results and conclusion. Presentations on original, non-commercial and non-published works are being solicited in the following areas:

**Environmentally Friendly Manufacturing (EFM):**
- Ultraclean technologies; Clean materials; Mini environments; Environmental factors; Carrier influence; Design for environment, recycling

**Cost Reduction:**
- Cost management; Cost of ownership; Benefit of ownership; Justification/ROI for capital expenditures; Supplier/Customer continuous improvement

**Test, Assembly and Packaging Factory Dynamics:**
- Continuous improvement processes; Qualification strategies; Extending current capabilities; Manufacturing line performance; Methods to determine capacity components and magnitudes; Capacity detractors and analyses of causes for detractors and cycle time losses (tool, operator, WIP, etc); Cycle time and fab/producer load/capacity relationships; Activities undertaken to reduce capacity detractors; Deployment and implementation of work method changes into mfgng, EMS/IC assembly, Semiconductor assembly

**Network Component and Systems Mfgng Technology:**
- OE/EO components and assembly; RF, Planar and Other lightwave circuits manufacturing and packaging; Wireless devices

**Advances in Wafer-Level and Chip-Scale Packaging:**
- Wafer bumping; Photolithography challenges; Singulation; Wafer breaking/scoring; Overmolding; Redistribution; 300 mm manufacturing challenges; Wafer thinning; 3D assembly

**Time-to-Market:**
- Design for manufacturability (DFM); Technology transfer, Quality functional deployment (QFD); Early mfgng involvement; Theory of constraints (TOC)

**Yield Enhancement:**
- Wafer level/board level inspection tools and techniques; Defect inspection methodologies; Wafer level reliability (WLR); Failure analysis; Yield modeling; Process defect reduction; Defect reduction in materials; Defect-to-yield correlations; Design for manufacturability; Product Yield Risk Assessment (PYRA); In-line inspection; Intelligent data analysis; Systematic yield problems

**Product Test and Test Process Optimization:**
- High speed testing; High bandwidth; Mechanical probing; SOC, SIP; Structural testing; Dynamic burn-in

**Offshore vs. Onshore Manufacturing:**
- Technology transfer and resources; Local content; Culture/Language barriers; Maintaining yield; Fabless and manufactureless

**MEMS Technology:**
- Manufacturing techniques; Novel materials and problems unique to specific projects; Meaning of volume manufacturing to MEMS suppliers; Implications of using smaller wafers and older tools

**Submission Details:**

Papers co-authored by a user and a supplier and/or academia that address practical solutions to real problems are highly encouraged. Abstracts are welcome from all those involved in electronics manufacturing including: manufacturers of electronics assemblies/products, merchant and captive IC manufacturers, equipment and materials suppliers, packaging foundries, contract assemblers, and academia and research institutions.

**Prospective authors are requested to submit the following by February 7, 2003:**
- A 250 word abstract, paper title, author name(s), company/affiliation(s), a 25-word biography of the principal author, and primary contact information. Correspondence is conducted electronically, via e-mail.

**Authors selected will be notified via e-mail by March 7, 2003.** A final camera-ready manuscript as an MS Word/WordPro file and IEEE copyright form must be submitted by May 2, 2003 in order to be published in the IEMT 2003 proceedings and presented at the conference.

Please submit your abstract to the following:

**IEMT/SEMI web site:**
- E-mail to: techspeakers@semi.org
- Postal mail or for further questions: Gloria Lou, Program Coordinator
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- San Jose, CA 95134 USA
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- Please note in subject line: IEMT 2003 Abstract Submission
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- **San Jose, California USA**
- **28th International Electronics Manufacturing Technology Symposium**
- **2003 Abstract Submission**
- **Call for Papers**
- **SEMICON/West**
- **July 16-18, 2003**