



25th International Conference on Electronic Packaging Technology

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<http://www.icept.org>

Course subject:

Moisture Reliability, Failure Mechanisms and Modeling in Semiconductor Packaging

Course leader: Xuejun Fan—Lamar University, Beaumont, TX

Speech Description/Objective:

- Introduction
- Moisture-Induced Failure Mechanisms
 - Failures during Reflow (Procon Test)
 - Failures in Unbiased HAST
 - Corrosion (biased HAST)
- Case Study 1: Material Selection
- Case Study 2: Package Design
- Moisture Diffusion Modeling
- Summary

Introduction of Speaker:

Xuejun Fan is a Regents' Professor of Texas State University System, and a Mary Ann and Lawrence E. Faust Endowed Professor at Lamar University, Beaumont, Texas. Dr. Fan is an IEEE Fellow, and an IEEE Distinguished Lecturer. He received the Outstanding Sustained Technical Contribution Award in 2017, and the Exceptional Technical Achievement Award in 2011 from Electronic Packaging Society of IEEE. Dr. Fan is a co-chair of Modeling and Simulation in Heterogeneous Integration Roadmap committee. Dr. Fan was a Senior Staff Engineer at Intel from 2004 to 2007 with Q&R Division in Chandler, Arizona.