



February 11-14, 2019 | Kauai, Hawaii | Kauai Marriott Resort

Monday, February 11th *Designates Distinguished Speaker

TIME	LOCATION	REGISTRATION
12:00p-5:30p		Plenary Session Chair: Charles Bauer, Ph.D., TechLead Corporation
3:00p-3:35p		A Hybrid PCB Verification Methodology with Geometrical Checks & Simulations Minoru Ishikawa, Mentor Graphics
3:35p-4:10p		Next Era in Electronics - Moore's Law for Packaging *Rao Tummala, Ph.D., Georgia Institute of Technology
4:10p-4:25p		REFRESHMENT BREAK
4:25p-5:00p		Real-Time Reliability Testing Advancements on Production Electronic Hardware *Mike Bixenman, MBA, DBA, KYZEN Corporation
5:00p-5:35p		Voyaging: A Look into the Past to Steer Toward the Future Dennis Chun, Kaua'i Community College
5:45p-6:45p		WELCOME RECEPTION

Tuesday, February 12th

TIME	LOCATION	Session 1 - Processing Technologies	Session 2 - Advancements in Vision Systems
8:30a-9:00a		From Wafer Processing to Advanced Packaging: Broadening the Applications for TSVs Beyond the High End Richard Hollman, ASM NEXX	Industry 4.0 for Advanced Inspection Ragnar Vaga, Yxlon International GmbH and Keith Bryant, Independent Business Consultant
9:00a-9:30a		Heterogenous Integration Chris Bailey, University of Greenwich	I/O Planning and Cross-Hierarchical Optimization for Advanced Electronic "Systems 4.0" Anna Fontanelli, Monozukuri S.P.A.
9:30a-10:00a		Advanced Package Wiring Technology Solution for Heterogeneous Integration Koukou Suu, Ph.D., ULVAC, Inc.	Thermal Scanning Probe Lithography for Nano-Fabrication Heiko Wolf, Ph.D., IBM Research - Zurich
10:00a-10:15a		REFRESHMENT BREAK	
10:15a-10:45a		3D System Level Post Layout Analysis & Test for High Density Advanced Packaging Keith Felton, Mentor a Siemens Business	
11:00a-11:45a		Symposium Keynote I New Era of Device Science Jun Mizuno, Waseda University	
11:45a-12:45p		LUNCH BREAK	
	LOCATION	Session 3- Advanced Process & Materials	Session 4 - Operations & Supply Chain
12:45p-1:15p		Tin Whiskers 101: Causes, Risks & Mitigation 2019 *Ronald Lasky, Ph.D., P.E., Indium Corporation	Managing 21st Century Workforce Kewal Verma, Ph.D., M.Tech. & Olayide Abosedo Aina, MBA, DM, Aster Global Inc.
1:15p-1:45p		Impact of Stencil Quality & Technology on Solder Paste Printing Performance *Jonas Sjoberg, Indium Corporation	A Hybrid MultiCloud System for Effective Supply Chain Product Information Dissemination N. Nagaraj, Ph.D., P.E., Papros, Inc.
1:45p-2:15p		Indium Research Chris Bailey, University of Greenwich	Selection & Qualification of a Local Rework Supplier *Phil Isaacs, IBM Corporation
2:15p-2:30p		REFRESHMENT BREAK	
	LOCATION	Session 5 - Demanding Requirements for Harsh Environments	
2:30p-3:00p		Functional Safety Compliance & the Key Role & Readiness of the EDA Tools *Dwight Howard, APTIV	
3:00p-3:30p		Reliability Engineering Techniques for Consumer Products *John Cooper, P.E., Ops A La Carte, LLC	
3:30p-4:00p		New Automotive Autonomous Driving Challenges for the Microelectronic Components *Kirsten Weide-Zaage, Ph.D., University of Hannover	
4:00p-4:45p		Harsh Environment, High Reliability Requirements Panel Moderator: *Dwight Howard, APTIV Panelists: TBD	

Wednesday, February 13th

TIME	LOCATION	Session 6 - Material Technology	LOCATION	Session 7 - Trends in Advanced Packaging & Interconnects
8:30a-9:00a		High Thermal Conductive Adhesive Sheet with Low Dielectric Constant *Masao Tomikawa, Toray Industries		Partially Liquid Interconnects with Au-Ge System - Mechanical Strength and Electrical Resistance Andreas Larsson, M. Sc., TECHNIA S
9:00a-9:30a		High Performance High Density Liquid Crystal Polymer Circuits with Embedded Active and Passive James Rathburn, HSIO Technologies		Cu Paste for Molded Interconnect Devices *Yoshinori Ejiri, Ph.D., Hitachi Chemical Co., Ltd.
9:30a-10:00a		TRIZ Based Design of TFT-LCD for LC-Projectors Yutaka Takafuji, Tokyo City University		Copper Electrolytic Process Applications for Filling BMVs, X-Through Via Holes and Pattern Plate *Maria Nikolova, Ph.D., MacDermid Enthone
10:00a-10:15a	REFRESHMENT BREAK			
10:15a-10:45a		The Digital Twin: Virtualization of Electronics Development & Design *Dwight Howard, APTIV		Conductive Adhesive Films (ACFs and NCFs) Materials for Electronics Packaging Applications Kyung Paik, Ph.D., KAIST
11:00a-11:45a	Symposium Keynote II What Does My Shirt Tell Me? The Integration of Electronics in Clothing Kaspar Jansen, Ph.D., Delft University of Technology			
11:45a-12:45p	LUNCH BREAK			
	LOCATION	Session 8 - Materials & Methods in Harsh Environments		
12:45p-1:15p		Recent Advances in Reactive Monitoring of Air Corrosivity *Prabjit Singh, Ph.D., IBM Corporation		
1:15p-1:45p		Water Film Formation on PCBA Surface & Humidity Robustness of Electronics Rajan Ambat, Ph.D., Technical University of Denmark		
1:45p-2:15p		Impact of Process-Related Flux Contamination on the Electronics Reliability Issues Under Detrimental Climatic Conditions Kamila Piotrowska, Ph.D., Technical University of Denmark		
2:15p-2:45p		iNEMI Project on Process Development of BiSn-Based Low Temperature Solder Pastes - Part V: Post Mechanical Shock Failure Analysis on Mixed BGA - SAC Solder Joints of POP Components *Raiyo Aspandiar, Ph.D., Intel Corporation		
2:45p-3:00p	REFRESHMENT BREAK			
	LOCATION	Session 9 - X-Ray & Inspection	LOCATION	Session 10 - Definition of Cleanliness
3:00p-3:30p		Acoustic Micro Imaging & X-Ray Analysis for More Thorough Evaluation of Microelectronic Devices *Janet Semmens, Nordson Sonoscan		Cleanliness: A Moving Target *Terry Munson, Foresite, Inc.
3:30p-4:00p		A Practical Way to Limit Counterfeits *Cameron Shearon, Raytheon Company		The Forgotten Benefits of Clean Assemblies in Harsh Environments *Mike Konrad, Aqueous Technologies
4:00p-4:30p		X-Ray Advances for Semicon *Keith Bryant, YXLON International		Using Conformal Printed Electronics for 3D Printed Antenna Systems Building Blocks *Sammy Shina, Ph.D., P.E., University of Mass Lowell

Thursday, February 14th

TIME	LOCATION	Session 11 - A Look to the Future		
8:30a-9:00a		How AI is Changing the Way We Make Things *Bill Cardoso, Ph.D., Creative Electron Inc.		
9:00a-9:30a		Memory Market Trends & Directions Kim Il Ung, SK Semiconductor		
9:30a-10:00a		2019 iNEMI Roadmap Highlights: Collaborative Gap Closure Opportunities Marc Benowitz, iNEMI		
10:00a-10:15a	REFRESHMENT BREAK			
10:15a-11:00a		Title TBD Makiko Nagao, Toppan		
11:00a-11:45a	Symposium Keynote III AI Influenced Material Science & the Design of Adhesives for Electronics Bob Allen, IBM Corporation			
12:00p	Conference Concludes			
6:00p-9:00p	Private Luau			