# FINAL CALL FOR PAPERS

## **ABOUT EPTC**

The 19<sup>th</sup> Electronics Packaging Technology Conference (EPTC 2017) is an International event organized by the IEEE Reliability/CPMT/ED Singapore Chapter and sponsored by IEEE CPMT Society.

EPTC 2017 will feature technical sessions, professional development courses, forums, an exhibition, social and networking activities. It aims to provide a good coverage of technological developments in all areas of electronics packaging from design to manufacturing and operation. It is a major forum for the exchange of knowledge and provides opportunities to network and meet leading experts in the field.

Since its inauguration in 1997, EPTC has developed into a highly reputed electronics packaging conference in Asia and is well attended by experts in all aspects related to packaging technology from all over the world. EPTC is the flagship conference of the IEEE CPMT Society in Region 10.

# **CONFERENCE TOPICS**

You are invited to submit an abstract, presenting new developments in the following categories:

- Advanced Packaging: advanced flip-chip, 2.5D & 3D, PoP, embedded passives & actives on substrates, System in Package, embedded chip packaging technologies, panel level packaging, RF, Microwave & Millimeter-wave, power and Rugged Electronics Packaging etc.
- TSV/Wafer Level Packaging: wafer level packaging (Fan In/Fan Out), embedded chip packaging, 2.5D/3D integration, TSV, silicon & glass interposers, RDL, bumping technologies, etc.
- □ Interconnection Technologies: Au/Ag/Cu/Al wire-bond / wedge bond technology, flip-chip & Cu pillar, solder alternatives (ICP, ACP, ACF, NCP, ICA), Cu to Cu, wafer level bonding & die attachment (Pb-free) etc.
- Emerging Technologies: packaging technologies for MEMS, biomedical, optoelectronics, internet of things, photovoltaic, printed electronics, wearable electronics, photonics, LED, etc.
- Materials and Processing: advanced materials, 3D materials, photoresists, polymer dielectrics, solder materials, die attach, underfill, substrates, leadframes, PCB etc for advanced packaging, and assembly processes using advanced materials, etc.
- **Equipment and Process Automation:** new processes development, equipment automation, equipment hardware development/improvements, data analytics, in-situ metrology, etc.
- Electrical Simulations & Characterization: Power plane modeling, signal integrity analysis of package. 2D/2.5D/3D package level high-speed signal design, characterization and test methodologies, etc.
- Mechanical Modeling & Simulations: thermo-mechanical, moisture, fracture, fatigue, vibration, shock and drop impact modeling, chip-package interaction, reliability, virtual prototyping, etc.

- Thermal Characterization & Cooling Solutions: thermal modeling and simulation, component, system and product level thermal management and characterization.
- Quality, Reliability & Failure Analysis: component, board, system and product level reliability assessment, interfacial

adhesion, accelerated testing, failure characterization, etc. Others are also welcomed, e.g. market trends, environmental issues, legislation, patents, education, cost analysis, etc.

# **IMPORTANT DATES**

Online abstract submission start	31 <sup>st</sup> Mar 2017
Closing of abstract submission	Extended 31st July 2017
Notification of acceptance	7 <sup>th</sup> August 2017
Submission of manuscript	15 <sup>th</sup> September 2017

## ABSTRACT AND PAPER SUBMISSION

Abstracts are solicited which describe original and unpublished work. The abstract should be at least 500-750 words and must clearly state the purpose, methodology, results (including data, figures, graphs and photographs) and conclusions of the work. Key references to prior publications and how the work enhances existing knowledge should be included in the abstract as well. Authors can choose between oral or interactive presentation but the decision of the Organising Committee will be final. Only accepted papers which are presented (oral & interactive) in the conference will be published in the conference proceedings and in IEEE Xplore.

Authors must designate two appropriate categories (found under CONFERENCE TOPICS) for abstract review. All submissions must be in English and should be made via the online submission system found at http://www.eptc-jeee.net. The required file format is Adobe Acrobat<sup>®</sup> PDF or MS Word in one single file for each submission.

The abstracts must be received by 31st July 2017. Authors must include their affiliation, mailing address, telephone, and email address. Authors will be notified of paper acceptance and publication instructions by 7th August 2017. The final manuscript for publication in the conference proceedings and the presenter's registration are due on 15<sup>th</sup> September 2017.

### **OUTSTANDING TECHNICAL PAPERS**

Author(s) of Best Technical Paper (oral/interactive), Outstanding Technical Paper (oral) and Best Student Paper will receive an award at the next conference. More details can be found at http://www.eptc-ieee.net.

### CALL FOR EXHIBITION/SPONSORSHIP PARTICIPATION

A tabletop exhibition featuring suppliers of materials, equipment, software and service providers of microelectronics and electronic assembly industries, will be held during the conference. Potential exhibitors and sponsors may email exhibition@eptc-ieee.net and sponsorship@eptc-ieee.net for details.

EPTC 2017: website: http://www.eptc-ieee.net Email: secretariat@eptc-ieee.net Join us on: 🛅 Linkedin [EPTC OC] Follow us on: 🔛 Twitter [EPTC (@EPTCOC)]



IEEE Reliability/CPMT/ED Singapore Chapter

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Program Chair Jung Boo Yang Globalfoundries program@eptc-ieee.net



s Packaging Technology Conference Dec 2017, Grand Copthorne Waterfront Hotel, Singapore

IEEE CPMT Society's Flagship Conference in Asia Pacific Region

# PROGRAM HIGHLIGHTS

### **PROFESSIONAL DEVELOPMENT COURSES** 1

- MEMS Fabrication and Packaging, Dr. Liu Aiqun, School of Electrical & Electronic Engineering College of Engineering Nanyang technological university, Singapore
- Electronic Packaging for 5G Microwave and Millimeter Wave Systems, Dr. Rick Sturdivant, Department of Engineering and Computer Science & Department of Engineering and Computer Science, Azusa Pacific University, USA
- Fan-Out Wafer-Level Packaging and 3D Packaging, Dr. • John H Lau, ASM, Hong Kong
- small volume interconnect reliability and failure mechanisms for power/automotive package, Dr. Mervi Paulasto-Kröckel, Department of Electrical Engineering and Automation, Aalto University, Finland
- Advanced LED packaging technology and reliability, Dr. Shi-Wei Ricky Lee, LFASME, FIEEE, FInstP, LFIMAPS, Chair Professor of Mechanical & Aerospace Engineering, Hong Kong University of Science & Technology, Hong Kong

### **KEYNOTE SPEAKERS** 2.

- Dr. Wai Kooi Wong, Vice President, Quality And Reliability, Xilinx, "Extending Moore's Law with Advanced Packages"
- Dr. Rajendra Pendse, Vice President, R&D, Qualcomm, "Evolution of Packaging for Mobile Platforms - Past, Present and Future"

### **INVITED SPEAKERS** 3.

- Dr. Junsu Lee, Senior Packaging Scientist, Tyndall Research Institute, "Packaging of Integrated Silicon Photonic devices: Electrical, Optical, Thermal Challenges and Applications"
- Dr Napetschnig, Senior Staff Engineer, Infineon, Title • TBC
- Director, Dr. Seung Wook Yoon, Business Development, STATSChipPac Pte, Ltd., "Advanced eWLB FOWLP: Enabling Integrated Packaging Solutions"
- Dr. Guilian Gao, Xperi, "Enhanced Bonding Technology for Hybrid Integration in 3D Packaging Technology
- Prof. Avram Bar-Cohen, University of Maryland, TBC
- PANEL SESSION ON "Challenge of 5G-mm Wave Packaging & Opportunity" moderator - Dr. Rick Sturdivant, Department of Engineering and Computer Science, Azusa Pacific University, USA.

### VISIT TO URA SMART CITY EXHIBITION 5.

Registered conference delegates (optional) will be visiting the Singapore City Gallery. This wonderful exhibition narrates the story of Singapore's physical transformation over the past 50 years. Three floors of exhibition show the transformation of Singapore from village to the modern city of the future!

- Make time for highlights like the panoramic sights and sound show. A Day in Singapore or be awed by the architectural models or the various interactive and experiential exhibits in the gallery. Close to 200,000 people visit the gallery yearly.
- With 10 thematic areas and more than 50 audiovisual and interactive exhibits spanning more than three floors over 2,400 square meters, the Singapore City Gallery offers and exciting, multi-sensory learning experience in Singapore's planning journey.







All images and information about URA smart city exhibition are adapted from the official Urban Redevelopment Authority (URA) website. For more information please visit the official website (https://www.ura.gov.sg/uol/citygallery/).

EPTC 2017: website: http://www.eptc-ieee.net Email: secretariat@eptc-ieee.net Join us on: In Linkedin [EPTC OC] Follow us on: Santa Twitter [EPTC (@EPTCOC)]



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