# First Call for Papers

# Electronic System-integration Technology (ESTC) Conference

## *September 15 – 18, 2014, Helsinki, Finland*

**www.estc2014.eu (http://141.30.122.181)**

*It is our pleasure to announce that the 5th ESTC Conference, the premier European event in the field of microelectronics packaging and integration, will be held 15th – 18th of September, 2014, at Finlandia Hall in Helsinki, Finland. This international event brings together both academics as well as the industry leaders to discuss and debate the state-of-the-art and the future trends in packaging and integration technologies. ESTC provides a perfect opportunity to hear the latest news and developments in the field. So mark the dates down on your calendar now!*

## Background

The ESTC conference is organized by IEEE-CPMT in association with IMAPS-Europe. The 2014 event continues the line of prestigious events since the birth of the conference in Dresden, Germany in 2006, and followed by Greenwich, Berlin, and Amsterdam every even year. ESTC is truly an international event as people from 26 countries attended the 4th ESTC conference in Amsterdam.

## Call for Papers

ESTC 2014 seeks original papers describing research in all areas of electronic packaging. You are invited to submit abstracts that provide non-commercial information on new developments and knowledge in the areas including, but not limited to examples given for each technical track:

**3D integration and embedding technologies:** Challenges and solutions in 3D integration, embedded, and wafer level packaging, micro-bonding, TSVs, TEVs, advanced substrates and interposers, etc.

**Advanced and Emerging Technologies:** allotropes of carbon (CNTs, graphene, DLC, etc.), emerging packaging concepts and technologies, microfluidics,

bio-electronics, flexible and stretchable electronics, etc.

**Assembly and Manufacturing Technology:** novel assembly technologies, manufacturing aspects to novel packaging, wafer level processing, etc.

**Materials for Interconnect and Packaging:** new materials and processing – e.g. phase change, piezoelectric, self-organizing, and memory materials, dielectric materials, advanced interconnection metallurgies, etc.

**MEMS/NEMS packaging:** challenges and solutions in processing, integration, and packaging, new packaging approaches, bonding technologies: wafer bonding, micro-bonding, etc.

**Modeling in Electronics:** Thermal, mechanical, and electrical modeling and experimental verifications, signal and power integrity, etc.

**Optoelectronic Packaging:** Fiber optical interconnects, optical sensors, LEDs and other photonic devices, optical chip-scale and heterogeneous integration, lasers, etc.

**Power Electronic Packaging:** high performance packaging (low RDS(on); high temperature), Si power diode and thyristor devices, wide bandgap power semiconductor devices (e.g. SiC, GaN, GaAs), novel cooling solutions, etc.

**Printable electronics:** printed/jetted (transparent) conductors, touch sensors, screens and displays (e.g. OLED), paper electronics, 3D printing, PV, etc.

**Reliability:** challenges at different levels of investigations (system, board, package and joint), characterization and test methods, interconnection reliability; characterization, and next generation/novel packaging reliability.

## Abstract Submission

You are invited to submit a 300-500 word abstract that describes the scope, content and key points of your proposed paper. Abstracts must include results and graphics. The official language of all presentations is English. Please visit [www.estc2014.eu](http://www.estc2014.eu) to find more information and to upload your abstract. Submission of abstracts will be opened 1.1.2014 and the abstracts are **due 28.2.2014**. All abstracts must be submitted electronically at the conference web site.

All submitted abstracts will be reviewed by the committee to ensure a high-quality conference. Authors will be notified of paper acceptance with instructions for publication by 18.4.2014.

If you have any questions, please contact: Gilles Poupon, Program Chair of the 5th ESTC, via email (firstname.lastname@cea.fr).

## Publication of Papers

All oral and poster presentation papers will be included in the conference proceedings and made available at the IEEE Xplore Digital Library (ieeexplore.ieee.org).

In order to be included in IEEE Xplore the paper must be original and not previously published, and avoid inclusion of commercial content.

## Best Paper Awards

ESTC will select the best paper presentation. The author(s) will receive a personalized ESTC award and share a check for EUR 1 000.

ESTC will select the best poster whose author(s) will receive a personalized ESTC award and share a check for EUR 1 000.

## Professional Development Courses

In addition to abstracts for papers we call proposals from individuals interested in teaching educational professional development courses (4 hours) on the topics described in the Call for Papers. Proposal should be submitted to Gilles Poupon, the Program Chair of the 5th ESTC, via email ([firstname.lastname@cea.fr](mailto:firstname.lastname@cea.fr)) also by **28.2.2014**.

## Important Dates:

• Abstract submission: **28.2.2014**

**•** Notification of acceptance: **18.4.2014**

**•** Papers in the final form: **20.6.2014**

# We look forward to welcoming you to the fourth IEEE-CPMT Electronics System-integration Conference ESTC 2014 in Helsinki!

Mervi Paulasto-Kröckel Toni Mattila Gilles Poupon

*General Chair Executive Chair Program Chair*