## **News from the Chapters of IMAPS-Europe**



## https://imapseurope.org/

Although we are operating in strange situations across the world in response to the pandemic, and physical participation is not yet possible, the Chapter leaderships are very aware of their responsibilities to keep you informed and technically updated.

So, while some events have been deferred to later dates, solutions are being delivered by many Chapters in Europe.

Many events have moved to become Online Virtual events. These provide opportunities to participate directly from your home or office, without having to travel.

## Events planned to be delivered in 2020

### 17 June 2020

## This Is Not Your Father's Semiconductor Packaging - An EDA Perspective

The webinar presented by John Park of Cadence Design Systems
Semiconductor foundries are accelerating their offerings for advanced packaging. This sea change in the advanced packaging market brings several important new solutions to the industry as well as significant design and analysis challenges for the packaging engineer. Many packaging professionals are becoming aware that the typical design flows used today for BGA packages have gaping holes when targeting the newer 2.5D-/3D-IC packaging technologies. Get an overview of the trends and advancements for foundry-based 2.5D-IC, 3D-IC, and FOWLP solutions. Learn about the challenges and benefits of the modernized design flow for foundry-based packaging.

No participation fee is charged for students and IMAPS members. https://imaps.de/event/this-is-not-your-fathers-semiconductor-packaging-an-eda-perspective/

#### 26 June 2020

## Semiconductor Package Selection - Online event

Andy Longford, PandA Europe

https://www.imaps.org.uk/events/fundamentals-of-electronics-packaging-tutorial-semiconductor-package-selection-friday-26-june-2020-1300/

## 10 July 2020

## Modelling for Reliability/Lifetime Prediction – Online event

Chris Bailey, University of Greenwich

 $\underline{https://www.imaps.org.uk/events/fundamentals-of-electronics-packaging-tutorial-modelling-for-reliability-and-lifetime-prediction-friday-10-july-2020-1300/$ 

## 28-29 July 2020

#### **SMT**connect goes digital

https://imaps.de/event/smtconnect-goes-digital/

## 01 September 2020

#### **Electronics Goes Green 2020+**

## The Story of Daisy, Alexa and Greta

The upcoming Electronics Goes Green Conference 2020 is an outstanding event for the growing global community of scientists, product developers, business managers, and policy makers working on environmentally benign processes, products, systems, and business models in and for the electronics and ICT industry.

Due to the ongoing COVID-19 pandemic, we have decided to move the Electronics Goes Green 2020 Conference online. It will now be an **on-demand virtual event of pre-recorded presentations combined with a live event on 01 September 2020.** 

https://imaps.de/event/electronics-goes-green-2020/

## 15-18 September 2020

## ESTC 2020 goes virtual

## 8th Electronics System-Integration Technology Conference

As a response to the pandemic COVID-19 situation, ESTC 2020 moves to a 100% virtual platform, and the conference will be carried out live! You are therefore welcome to attend, independent of what travel restrictions may apply in September. The live format will allow interaction similar to an in-person conference. The digital format will give new possibilities, such as recording of presentations allowing to catch up presentations in parallel sessions. While the Executive Committee regrets that we cannot this time welcome you physically to beautiful Vestfold and the "Electronic Coast" of Norway, we are delighted to welcome you to an innovative, high-quality and broad-reaching ESTC 2020.

Details about registration are expected to be available before the end of June 2020. <a href="https://www.estc-conference.net/home">https://www.estc-conference.net/home</a>

## **16 September 2020**

## MicroTech 2020 Conference Goes Online: Advanced Packaging

Due to the ongoing exceptional circumstances resulting from the global Covid-19 pandemic, IMAPS-UK has moved the MicroTech 2020 to be <u>Online</u> on Wednesday 16th September 2020. In a move to further the promote the benefits of membership, the "MicroTech 2020 – Online" Conference will now become Free to Attend for IMAPS members.

Having already received a confirmation of support from many of our speakers, the excellent conference agenda will stay mainly unchanged. The MicroTech event will revert back to its more physical format in Spring 2021. Meanwhile, we look forward to seeing you at "MicroTech 2020 - Online" in September 2020.

https://www.imaps.org.uk/events/microtech-2020-online-advanced-packaging/

#### 5-8 October 2020

# **53rd International Symposium on Microelectronics San Diego, USA**

IMAPS-USA is consulting government agencies, event partners, and our stakeholders regarding the Covid-19 virus ahead of IMAPS 2020. We will keep attendees informed of any effects to the event. IMAPS remains committed to delivering the Symposium live this Fall in San Diego, and anticipates a robust, healthy event for all attendees, speakers, and exhibitors. We are exploring all options for alternative conference plans including various presentation formats, online tools, and other resources in the event that our traditional, in-person components of the Symposium are deemed unsafe or not possible to conduct in our customary manners and formats.

The 53rd International Symposium on Microelectronics is being organized by IMAPS North America (IMAPS-NA). The IMAPS-2020 Technical Committee seeks original papers that present progress on technologies throughout the entire microelectronics/packaging supply chain. The Symposium will feature 5 technical tracks, plus an Interactive Poster Session, that span the three days of sessions.

https://www.imaps.org/international\_symposium\_on\_mic.php

## 12 November 2020,

## **Making Sense of Sensors Workshop**

This Workshop, organised by IMAPS-UK, focuses on the packaging challenges presented by the many varied applications driving the growing use of Sensors in our world. Touching on Technologies & Assembly Processes common to all areas of the Microelectronics community, **Making Sense of Sensors** will provide insights into numerous packaging techniques. Highlighting packaging technologies, developments and opportunities, this technical workshop will provide a forum for networking, learning and sharing within this fascinating field. Topics presented will cover a wide range of industries and applications demonstrating the diverse nature of this sector and the wide array of packaging techniques that are applied. **Making Sense of Sensors** provides an opportunity to learn from leading Industry Experts and Equipment Manufacturers as they share their experiences and developments in this rapidly growing industry.

https://www.imaps.org.uk/events/making-sense-of-sensors-workshop-12-november-2020-cambridge/

### **28 November 2020**

#### 12ème Forum Power

#### From Nano to Macro Power Electronics & Packaging Workshop 2020



The Power Electronics workshop will be the next IMAPS-France event since the beginning of the Covid19-containment, and we are all looking forward to sharing new conferences and professional meetings as part of our association. We will remain vigilant about the health situation as it will be in October and November in order to put in place all the necessary means for the safe and serene conduct of this event in the interest of our speakers, listeners and partners.

Finally, the day will end under good "auspices", with a social event that blooms well the terroir (Guided visit of a historical site, an activity or a craft, ...), then a dinner with regional flavours

https://france.imapseurope.org/event/power-2019/

## Events deferred to 2021 and planned for 2021 include:

## **2-3 February 2021** 8ème Forum MiNaPAD



The postponement from 2020 to the new dates in February 2021 will be just before the start of the school holidays. This compromise is both technical, to keep the maximum conferences of the initial program and the maximum number of exhibitors, and financial since the Grenoble region postpones its grant until the beginning of 2021 (reduced entry will be offered to students)

## Save new dates MiNaPAD 2021

Call for Papers: June 2020

Speakers Notification: November 2020

Programme: December 2020

https://france.imapseurope.org/event/minapad-2020/

## 13-16 September 2021

## EMPC-2021, The 53<sup>rd</sup> Microelectronics and Packaging Conference The key event of 2021 and the flagship Conference of IMAPS-Europe

IMAPS Nordic hopes that all members, affiliated members, their loved ones and friends are safe in these troubling times. IMAPS Nordic is currently working on organising the next EMPC conference **next year** in Gothenburg, Sweden. We hope that by that time it will be safe to hold a conference where industry and academic colleagues and friends can once again enjoy each other's company and nurture existing networks and create new ones. The Covid-19 pandemic has shown us the need for reliable electronics to assure electronics communication when physical presence is not possible. A large responsibility lies, therefore, on the packaging community to ensure that electronics are packaged in a safe, reliable and cost efficient manner to allow more of the world's population to take advantage of all forms of electronic communications. We hope to see many of you in Gothenburg in September 2021.

https://imapseurope.org/planning-for-empc-2021/

## Events already held and in which many participated, include:

## 15-16 May 2020 ISSE-2020

The 2020 International Spring Seminar in Electronics Technology (ISSE) originally planned for 15<sup>th</sup>-16<sup>th</sup> May 2020 in Kosia, Slovakia, <a href="https://isse2020.fei.tuke.sk/">https://isse2020.fei.tuke.sk/</a>, was realised virtually this year. ISSE was attended remotely by global presenters and audience. In the current unfortunate situation, webex connected long-distance relationships and prize awards to colleagues.

## 28 May 2020

## Power and High Temperature Conference went Online—

'Electronics Manufacturing Challenges and Solutions for the Electric Revolution' IMAPS-UK held a free online one day Conference on Thursday 28 May 2020 on the topic of Power and High Temperature, where attendees learnt about the latest developments in materials and assembly processes to address the challenges of extending the temperature capabilities of micro-electronics for the Electric Revolution. The Conference attracted over 200 registrants from 16 countries and covered many aspects of designing, manufacturing and testing of power and high temperature electronics, where miniaturisation, thermal management, electrical performance and reliability are critical features that need to be optimised.

# FUNDAMENTALS OF ELECTRONICS PACKAGING TUTORIALS 15 May 2020

## The third in the series

## **Metallurgical Considerations for Electronics Packaging**

Electronics packaging involves a wide range of materials, including base and precious metals often in unusual combinations. Whilst many of the limitations of certain combinations, for example, Au wire on Al bond pads on devices, which can lead to bond failures through "purple plague" are known, the desire to place electronics in ever harsher environments means that an understanding of metallurgical interactions becomes more important for product reliability.

## 1 May 2020

#### The second in the series

#### The Future for Substrates

The future is being driven by our desires as users, for example: we want convenience, more videos, thin phones and a clean environment, all at low cost. In the end, this percolates down to our substrates. The presentation examined future substrate technology for circuits that may address our desires. Every substrate technology aims to eliminate waste and improve performance, this is showing up in the great fluidity in the structure of circuits. In the drive for waste reduction and cost saving, what will disappear: the substrate, solder, SMT components? The following topics were discussed: the constant fight between lower cost substrates and performance; the fluidity of future circuit structures; the potential rise of flexible substrates; the rise of substrates that can handle power and heat; from completely flat circuit assemblies to 3D shapes. It is important for us to try to estimate the future to prevent our businesses dying and to understand how to improve our products.

#### 17 April 2020

## The First IMAPS-UK Online Tutorial Sessions

## **Die Attach and Interconnects**

The presentation discussed the Die attach and Interconnects aspects which are two of the most critical processes for Semiconductor packaging and are therefore vital to get it right first

time to ensure quality and reliability. As every application has different requirements, there is also a wide range of die attach and interconnect technologies available. This first half of the session will focus on Pb-free die attach options, their processes and associated failure modes, including a review of the latest sinter materials. The second half of the session focused on interconnect technologies and their limitations, including a review of double sided bonding as an alternative for wire-bonds.

#### 11 March 2020

## IMAPS-UK Webinar 'Design For Manufacture'

#### A Free-to-Join Event

The sixth in a series of webinars organised by IMAPS showcasing presentations at previous IMAPS-UK events.

The presentation examined the different categories and types of Vibration/Environmental and Reliability tests and discussed why we use differing types of test and discuss where some types of test are applicable and where others are not. Also examined why we still physically test in the era of Computer Aided Engineering

## **06 February 2020**

## RELQUAL 2020 – Quality and Reliability of Electronics Assembly (Update of 04/10/19)

This workshop brought together an array of Industry experts and practitioners to present a comprehensive overview of Quality and Reliability aspects required for the development of Microelectronic assembly technologies including details relating to package and substrate options, die preparation, attachment and interconnection techniques.

## **20 January 2020**

**Microelectronics Packaging for Harsh Environments** 

IMAPS-UK Webinar

A Free-to-Join event