ISSUE: December 2020

3D-PEIM Brings Together Experts In Power Electronics Packaging Design And Manufacturing Processes

The Third International Symposium on 3D Power Electronics Integration and Manufacturing (3D-PEIM) will be held June 21-23, 2021 in Osaka, Japan. PSMA, the sponsor of this biennial event, thanks Osaka University for their commitment to being the 3D-PEIM 2021 host. Registration will open on February 15, 2021. Based on the unknown status of the COVID-19 next June, we have cautiously decided to have an in-person/online hybrid event. Further details will be available in January.

The 2021 3D-PEIM Symposium will be led by general chair Prof. Tsuyoshi Funaki of Osaka University, Japan. Technical program co-chairs Prof. Katsuaki Suganuma, Osaka University, Japan; Dr. Minora Ueshima, Daicel, Japan; and Prof. Guo-Quan Lu, Virginia Tech, USA.

The 3rd biennial 3D-PEIM Symposium has successfully reinvited all of the original 2020 program world-class experts, representing a far-reaching range of disciplinary perspectives to advance future development of 3D power electronics systems. The symposium encompasses additive, embedded, co-designed, and integrated packaging technologies with sessions that address mechanical, materials, reliability, and manufacturability issues using small, smart, power-dense components and modules. Attendees are professionals and academics engaged in the R & D of power electronics packaging design, and manufacturing processes.

This symposium provides attendees *an excellent opportunity* to gain insight or broaden expertise in 3D power electronics packaging and integration. As in the past, we will arrange the symposium schedule to provide ample time between sessions for attendees to share ideas, progress, and challenges with leading members of universities, companies, and international associations and societies. On the last day of the symposium, attendees will be invited for a guided tour of the Osaka University Laboratory for Power Electronics and Electrical Energy and the Graduate School of Engineering Gallery.

General chair Professor Tsuyoshi Funaki states, "I am glad we are the first to host the 3D-PEIM Symposium outside the USA. It is very appropriate that 3D-PEIM 2021 is held here because there are many power device and peripheral packaging material manufacturers in Japan. Hopefully, the COVID-19 threat will be over so that we can provide an amazing on-site experience for all attendees. We have reassembled the world's prominent experts in power electronics packaging manufacturing that we had planned for our postponed 2020 symposium. I also believe that all attendees will gain significantly advanced packaging knowledge through discussions at this event".

Other organizing committee members are

- Brian Narveson, Narveson Consulting—steering committee chairman and finance chairman
- Prof. Patrick McCluskey, University of Maryland—past general chairman and assistant to general chairman
- John Bultitude, Kemet—publications chairman
- Arnold Alderman, Anagenesis—publicity chairman
- Prof. Doug Hopkins, North Carolina State University—past general chairman and advisor
- Joe Horzepa—executive director of PSMA.

Because we are offering virtual attendance, the schedule below shows three time zone times in the program for those attendees and presenters attending online. The day starting and ending times example is shown below. Due to time zones' challenges, all sessions will be recorded and available to registered attendees after the symposium.

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The technical sessions are listed in the table below.

	JST - Japan Standard Time	US EDT - US Eastern Daylight Time	CEST - Central European Summer Time	Session Title	Chair/Co-Chair, Affiliation
DAY 1	9:00 AM - 12:15 PM	8:00 PM - 11:15 PM	2:00 AM - 5:15 AM	S1: Plenary I	Tsuyoshi Funaki, Osaka University, Japan
				S2: System Integration & Thermal Management	Christina DiMarino, Virginia Tech, USA
				Lunch	
	1:30 PM - 5:55 PM	12:30 AM - 4:55 AM	6:30 AM - 10:55 AM	S3: Multiphysics Design & Tools	Michihiro Shintani, Nara Institute of Sci. & Tech, Japan
				S4: Additive Manufacturing	Patrick McCluskey, University of Maryland, USA; Douglas Hopkins, North Carolina State
				S1: Plenary I	Tsuyoshi Funaki, Osaka University, Japan
DAY 2	9:00 AM - 12:20 PM	8:00 PM - 11:20 PM	2:00 AM - 5:20 AM	S5: Plenary II	Katsuaki Suganuma, Osaka University, Japan
				S6: Manufacturing Technologies	John Bultitude, Kemet, USA
				Lunch	
	1:30 PM - 5:55 PM	12:30 AM - 4:55 AM	6:30 AM - 10:55 AM	S7: Materials	Jason Rouse, Sekisui Products, Japan
				S8: Heterogeneous Integration	Cyril Buttay, Laboratoire Ampère, Lyon, France
				S5: Plenary II	Katsuaki Suganuma, Osaka University, Japan
DAY 3	9:00 AM - 12:15 PM	8:00 PM - 11:15 PM	2:00 AM - 5:15 AM	S9: Quality & Reliability	Steven Martell, Nordson Sonoscan, USA
				S10: Sponsors Session New in 2021!	Minoru Ueshima, Daicel, Japan
				Lab Tour	Tsuyoshi Funaki, Osaka University, Japan

The symposium will also include

- Tabletop demonstration exhibitions
- Networking & Laboratory Tours—Osaka University

Further announcements and the complete symposium agenda will be posted on the 3D-PEIM Website.

Attendees at the 2016 and 2018 symposiums have noted some of the things they appreciated about the event:

- "The 3D-PEIM brings together a unique set of participants—those involved in power packaging who actually know and care about manufacturing and reliability."
- "Most valuable is the breadth of topics. I don't consider myself an expert on many topics presented so, touching on multiple topics is very helpful."
- "The keynote speeches were most valuable, providing an excellent recent update on embedded technologies."

We look forward to your joining us either in-person or online in June 2021. If you wish to be a media, technical, or exhibit partner, or need further information, contact http://www.3d-peim.org/contact/ or email the symposium sponsor PSMA.

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