



A Premier International Conference on Advanced and Emerging Issues in Microsystems, Packaging, Assembly, and Circuit Technology

IMPACT is jointly organized by IEEE EPS, iMAPS-Taiwan, ITRI and TPCA and collaborates with international organizations such as ICEP, JIEP (Japan), and iNEMI (U.S.A.). Over the course of the last several years, the conference has become a top tier conference in Asia - collecting 192 papers and attracting 593 attendees from 18 different countries; it has become a remarkable platform showcasing the latest technology research capability.

As the Conference Chair, Dr. Chih-I Wu remarked that the symposium highlights the theme of "IMPACT on Artificial Intelligence - Our Future," which includes the following intelligent innovative categories: automated driving systems, smart applications, robots, drones, autonomous vehicles, artificial intelligence, 5G, Heterogeneous integration, embedded components, and IoT devices – each with the potential for great impact in our lives. In addition, IMPACT hosts plenary speeches, special sessions, invitational talks, sponsored industrial sessions, posters, and outstanding paper presentations.

This year, IMPACT 2018 invited several well-known plenary speakers who spoke on a diverse range of topics, such as Dr. Ryan Chen (MediaTek), who gave a speech regarding "Edge AI Technologies-Now and Tomorrow." Dr. Ashish Sirasao (Xilinx Inc.) covered the topic of "Deep Learning on Xilinx FPGAs" and Dr. Toshihiko Nishio (SBR Technology) delivered a speech about "Packaging Technology Innovation and Trend towards 5G Era." Mr. Shunichi Kikuchi (Fujitsu Ltd.) gave a speech about "System Packaging Solutions for High Performance Computing in the Era of Big Data," while Dr. Seung Wook Yoon (STATS ChipPAC Pte Ltd) delivered a speech titled "Challenges and opportunities of advanced Packaging in Automotive Applications." Lastly, Dr. Charles E. Bauer (TechLead Corporation) attended IMPACT 2018 and presented a speech on the cutting-edge topic of "Printing in the Third Dimension: Design, Materials, Equipment and Applications in Electronics."

In addition to prominent plenary speeches, in order to further discuss emerging technologies, IMPACT 2018 also planned special forums such as Heterogeneous integration, automotive electronics, and AI and 5G, resulting in vibrant discussions in each case.

In recent years, we have seen the emergence of big data analysis, artificial intelligence,



International Microsystems, Packaging,
Assembly and Circuits Technology conference

and autonomous vehicles. With the decline of Moore's Law, our industry urgently requires a more economical way to construct large systems. Therefore, IMPACT organized a heterogeneous integration session, which was organized and chaired by Dr. Shin-Puu Jeng of TSMC and Dr. Robert Lo of ITRI, inviting 5 famous speakers in various areas. Rozalia Beica, DowDupont, who is also the chair of the technical working group of the HIR committee, delivered a speech titled "Heterogeneous Integration Roadmap-Enabling Technology for Systems of the Future" and gave guidelines for the electronics industry regarding expected future technologies and opportunities for innovation. Dr. Robert Lo shared some cutting-edge viewpoints regarding intelligent systems. The invited speaker, Dr. Shin-Puu Jeng, indicated that the multilayer 3D fan-out stacking package exhibits both vertical and lateral integration flexibility. As a result, heterogeneous integration with high bandwidth memory has brought fan-out technology to a brand-new milestone. Moreover, one of the distinguished speakers to IMPACT 2018, Dr. Suresh Ramalingam from Xilinx, addressed the topic of "FPGA Heterogeneous Packaging Applications: Trends and Challenges." During the presentation, Dr. Ramalingam mentioned that Xilinx has continually examined FPGA Heterogeneous packaging evolution while working together with TSMC in order to meet future demand. As a leading global provider of ICT, Huawei is devoted to more advanced integrated solutions across different domains. Dr. Boping Wu from Huawei introduced a novel package interconnect solution, which can potentially integrate large chip with higher performance. We firmly believe that through this session successfully addressed the assembly & packaging, test and interconnect technologies demands across the industry. We are also thrilled and pleased to announce that this specific session regarding heterogeneous integration technology attracted the participation of more than 100 participants.