

Technical Committee (TC) – Electrical Design, Modeling, and Simulation (EDMS)

The Electrical Design, Modeling, and Simulation technical committee of the Electronics Packaging Society (EPS) addresses the electrical aspects of package and system design. The TC name is descriptive of the scope of issues of interest to the members. The committee strives to balance the industry and academic participation to guide the members of the EPS society in this area. The TC chairs are Dr. Dale Becker, IBM, Prof. Stefano Grivet-Talocia, Politecnico di Torino, and Prof. Rohit Sharma, IIT Ropar.

Recently, EDMS has initiated a joint industry – academic effort to establish a “Package Benchmark Suite.” This effort is chaired by Dr. Fei Guo of AMD and Prof. Ali Yilmaz of UT-Austin and has about 15 active participants. Initial package designs are nearing availability through this effort to represent signal distribution and power distribution. Dr. Kemal Aygun presented a detailed overview of this effort as a session and led a productive planning meeting in October 2019 at the EPEPS conference in Montreal.

EDMS is the technical committee home for three meetings co-sponsored by EPS:

- The Electrical Performance of Electronic Packaging and Systems (EPEPS) Conference typically held in October in North America. The 29th Conference is scheduled for October 4-7 in San Jose, California.
- The Signal and Power Integrity (SPI) Workshop held in Europe typically in May. The 24th workshop is slated for Cologne, Germany on May 17-20, 2020.
- The Electrical Design of Advanced Packaging and Systems (EDAPS) Symposium held in Asia in December. The 2020 Symposium is the 19th annual meeting and is scheduled for Dec. 14-16, 2020 in Shenzhen, China.

There is another workshop in the planning stage that we hope to announce soon.

A two-part special section in the Transactions on CPMT was published in the September and October 2019 issues with invited papers from presenters in EPEPS, SPI, and EDAPS. The special section guest editors were the 2019 chairs of the respective conferences, Prof. Mahai Telescu, Dr. Xiaoxiong (Kevin) Gu, and Prof. Rohit Sharma. The title was a Special Section on Packaging and Interconnects: Cutting-Edge Solutions in Modeling, Design, and Characterization.”

Two chapters of the Heterogeneous Integration Workshop (HIR) are actively supported by EDMS members. In leadership roles, Prof. Jose Schutt-Aine chairs the Co-Design Technical Working Group and Dr. Dale Becker co-chairs the High-Performance Computing and Data Center Technical Working Group with Prof. Kanad Ghose as chair.

EDMS has also been cooperating and participating in the development of IEEE P370 standard that is sponsored by the EMC Standards Development Committee. That standard is in draft form and on track to be adopted soon.

The TC holds its annual meeting during the EPEPS conference. In addition, a meeting is held during the ECTC conference and in 2020, we are working on scheduling meetings at SPI and EDAPS. Keep an eye out for those announcements if you are attending those conferences.

There are more initiatives that we are interested in pursuing such as an EPS Certificate for training in the area of EDMS and providing seminars. For your EPS chapter meetings, consider inviting one of our distinguished lecturers to present.

If you are interested in more information, are interested in participating and joining EDMS, please contact Dale Becker at wbecker@us.ibm.com.