

IEEE EPS Thermal and Mechanical Technical Committee

Chair: Dereje Agonafer

Website: under construction: <https://cmte.ieee.org/eps-tmm/>

The Thermal Management and Thermomechanical Design Technical Committee is concerned with all aspects of thermal, thermo-mechanical, electro-thermal phenomena related to electronic/microelectronics packaging and electrical systems. The subjects of interest include:

- Electronic Cooling and Thermal Management of Component and System
- Thermal Design and Analysis
- Coupled Electro-Thermal Phenomena
- Thermal and Thermomechanical Measurements
- Thermal Mismatches and Stresses
- Temperature Induced Fracture and Moisture Stresses in IC Package
- Thermomechanical Design and Analysis of Component and System
- Thermomechanical Computer Aided Design and Engineering
- Co-Design
- Heterogeneous Integration

We have over 30 people in the committee with several more to be added. The role of the committee members is to suggest session topics of interest for the annual ECTC meeting always held in the end of May. There is also a committee meeting which members are encouraged to attend during the annual ECTC meeting. Also, ITherm has always co-located on a bi-annual basis with ECTC, but now that ITherm is an annual conference, it will always be held in conjunction with ECTC. ITherm is under the umbrella of this committee.

Recent Activities

Cristina Amon, "Thermal Management of EVs with an Overview of Engineering Challenges and Our Work on Batteries and Chargers," Avram Bar-Cohen Memorial Awardee Seminar, October 28, 2020

Ravi Mahajan, "How Advanced Microelectronics Packaging Continues to Drive Heterogeneous Integration," Richard Chu ITherm Awardee Seminar, July 21, 2020

Technical Committee

Dereje Agonafer, University of Texas at Arlington, Chair

Ravi Mahajan, Intel, Co-Chair

Sushil Bhavnani, Auburn University

Baris Dogruoz, Cisco

Patrick McGinn, Coolit

Ernie Parker, Crane

Satish Chaparala, Applied Materials

Veerendra Mulay, Facebook Inc

Mark Seymour, Future Facilities

Arun Gowda, Georgia Tech

Yogendra Joshi, Georgia Tech

Madhusudan Iyengar, Google

Timothy Chainer, IBM Corporation

Thomas Brunschwiler, IBM Corporation

Michael J. Koneru Ramakrishna, IBM Corporation

Koneru Ramakrishna, IEEE

Denise Manning, IEEE

Madhusudan Iyengar, Google

Ashish Gupta, Intel

Chong Leong, Micron

Xuhui Feng, NREL

Ali Heydari, Nvidia

Justin A. Weibel, Purdue

Satish Kandlikar, RIT

Roger Schmidt, Syracuse University

Mehdi Asheghi, Stanford University

Kenneth Goodson, Stanford University

Yatharth Vaishnani, TAMU

Mark Ramakrishna, Thermacore, Inc.

Masaru Ishizuka, Toyama

Y. C. Lee, University of Colorado

Toni Mak, University of Massachusetts at Lowell

Patrick Mccluskey, University of Maryland

Cristina Amon, University of Toronto

Ankur Jain, University of Texas at Arlington

Alfonso Ortega, Villanova University