

## THERMI Award

Each year, SEMI-THERM honors a person as a Significant Contributor to the field of semiconductor thermal management. The THERMI award is intended to recognize a recipient's history of contributions to crucial thermal issues affecting the performance of semiconductor devices and systems.

The voting body of past THERMI winners and the current year General Chair are pleased to present the 2019 THERMI Award to:



**Dr. Peter Raad**

**Southern Methodist University**

Dr. Raad will be giving a presentation:

‘Reflections on a Journey of Developing Means to Characterize Hot Spots in Cool Chips’

Peter E. Raad is a professor of mechanical engineering at Southern Methodist University (SMU) in Dallas, Texas. He first joined SMU in 1986 and has previously served as the associate dean of its School of Engineering. From 2000 to 2012, he founded and directed the Hart eCenter at SMU, a university-wide center to address the impact of the interactive networked technologies on society. During that time, he also founded and directed The Guildhall at SMU, a first of its kind, graduate program in digital game development. Raad has received over \$2.8 million in funding support for his research in tsunami mitigation and in metrology of submicron electronics. In 2006, he founded TMX Scientific, a company to innovate and commercialize deep submicron thermal measurement systems and ultrafast thermal computational engines. Raad's work in the thermal management field includes the development of innovative deep-submicron thermal metrology techniques and systems, as well as novel coupling of computations and measurements to provide transient, three-dimensional temperature fields in electronic structures with inaccessible internal features.

His honors include the Allan Kraus Thermal Management Medal (2014); the Harvey Rosten Award for Excellence in the Physical Design of Electronics (2006); the ASME North Texas Section Engineer of the Year (1999-2000); the Next-Gen's Top 25 People of 2007 (most influential in the video gaming industry); and Outstanding Graduate (four times) and Undergraduate (three times) Faculty Awards at SMU.

He has published over 55 journal articles and given more than 100 conference and invited talks. He holds U.S. and international patents in thermal metrology and computational characterization of multiscale integrated circuits. He is a Fellow of ASME and a Senior Member of IEEE. He received his BSME (with honors, 1980), MS (1981), and PhD (1986) in mechanical engineering from the University of Tennessee - Knoxville.

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