

This issue of the *Journal of Electronic Packaging* has six papers selected from the second international conference on thermal issues in emerging technologies theory and applications. This conference (ThETA2) was held in Cairo, Egypt, December 17–20, 2008. The objectives of the conference are to encourage dissemination of information and research in areas related to transport and emerging technologies in various domains. The main conference objective is to address the growing impact of thermal issues on many advanced and emerging technologies including Microelectronics, Nanotechnology, Smart Materials, Micro-Electro-Mechanical Systems, Biomedical Engineering, and Green Energy. The importance of transport in these areas is becoming a dominant factor in determining the performance of such technologies. The ThETA2 conference was very successful and attracted many prominent researchers from the US, Europe, and the Far East to participate and interact with researchers from the Middle East, in general, and Egypt in particular. The seven papers presented in this special issue represent some of the best ideas presented at the conference, and deemed worthy of archival publication in the JEP after the papers were reviewed again by the JEP with Professor Mohamed-Nabil Sabry serving as the special guest editor for the issue. The ThETA2 executive committee consisted of Bernard Courtois, TIMA Lab., Grenoble, France, Yogendra Joshi, Georgia Inst. Technology, USA, Waturu Nakayama, Tokyo Inst. Technology, Japan, Mohamed-Nabil Sabry, U. Française d' Egypte, Bahgat Sammakia, Binghamton U., USA, and Mamdouh Shoukri, McMaster U., Canada. The chairmen for the conference were Mohamed-Nabil Sabry and Bernard Courtois.

The track organizers were Dereje Agonafer for cooling of electronic systems, Moustapha Hafez for thermal issues in mechatronics, Clemens Lasance for thermal modeling and simulation of electronic systems, Olivier Lebaigue for two phase flows, Yasutaka Nagano for fuel cells, micro gas turbines, and new energies,

Alfonso Ortega for physics of thermal transport, Peter Rodgers for thermal issues in the reliability of electronic systems, Ali Shakouri for advanced experimental methods in heat transfer, Kevin Skadron for temperature aware computer systems, and Mohamed Zikri for thermal issues in materials. The steering committee for the conference consisted of Zakaria Ghoneim, Ain Shams University, Egypt, Hany Khater, Cairo University, Egypt, Ashraf Sabry, Cairo University, Egypt, and Amr Serag Eldin, American University in Cairo. The conference was sponsored by the ASME, the JSME, and the French University of Egypt. Overall the conference was very well attended and generated very positive discussions amongst researchers from the US, Europe, the Middle East, and the Far East.

The ThETA2 papers presented in this issue cover a broad range of topics such Solid-State Microrefrigeration in Conjunction with Liquid Cooling, Coordinated Optimization of Cooling and IT Power in Data Centers, Study on a Pulsating Heat Pipe with Self-Rewetting Fluid, A Thermo-Mechanical solver for multilayer power electronic assemblies, and Reliability Evaluation on Deterioration of Power Device using Coupled Electrical-Thermal-Mechanical Analysis. These papers represent some of the best from ThETA2, and we hope that the readers of the JEP will find them as interesting and enjoyable as much as the ThETA2 attendees did. The editorial board at the JEP plans to continue to select the best papers from different ASME sponsored conferences and workshops and to present them in special issues to its readership.

**Bahgat Sammakia**  
**Editor**  
**Mohamed-Nabil Sabry**  
**Guest Editor**