

# Foreword

## Special Section on EuroSimE

**T**HIS Special Section includes selected papers from presentations at the IEEE International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Aix-en-Provence, France, April 2003.

The annual EuroSimE conference was initiated in 2000, with major sponsorship from the European Commission and technical co-sponsorship from the IEEE CPMT Society. It was designed to meet the growing needs and challenges in these rapidly progressing fields. Since then, EuroSimE has demonstrated worldwide appeal with participants from more than thirty countries spanning over all continents. Beginning in 2004, EuroSimE becomes a fully IEEE-CPMT conference.

The selected papers in this special section cover a broad technical scope including carbon nanotube applications in microelectronics; micromechanical modeling of stress evolution induced during cure in a particle-filled electronic package polymer; mechanical FEM simulation of bonding process on Cu low K wafers; validating the finite-element model of a piezoresistive ceramic pressure sensor; influence of material combinations on delamination failures in a cavity down TBGA package; *in-situ* micro-digital image speckle correlation technique for characterization of material properties and verification of numerical models; microstructure evolution of tin-lead solder; and reliability analysis and design for the fine

pitch flip chip BGA packaging. All these papers represent the state-of-the-art and future development trends for all of the disciplines associated with this conference.

We hope that this special section can be helpful for your work. We would also like to have your feedback and suggestions for improving our work, and to provide you with valuable references in the future. Papers from EuroSimE 2004 can be found in the IEEEExplore online database.

The next EuroSimE will be held in Berlin, Germany, on April 17 (courses) and 18–20, 2005 (conference and exhibition). We invite interested professionals to visit the EuroSimE website: [www.eurosime.com](http://www.eurosime.com).

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Mr. van Driel is a Guest Editor for the IEEE TRANSACTIONS ON COMPONENTS AND PACKAGING TECHNOLOGIES and is a member of the Organizing Committee for the annual EuroSimE Conference.



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Dr. Fan received the second-prize from Henry Fok Ying-Tung Education Foundation, Hong Kong, for his Excellence in Research in 1994, and was a Nominee for the Ten Chinese Outstanding Youth in 1991. He is a Technical Committee Member of the International Conference

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Dr. Zhang Chairs and participates in several international conference committees (EuroSimE, ECTC, EPTC, ICEPT, MicroMat, etc.) and academic societies (IMAPS Benelux, IEEE-CPMT, etc.). He serves as Guest Editor for the *Journal of Electronic Packaging* and various IEEE TRANSACTIONS. He also leads and participates in several related R&D activities and initiatives in Europe.