



Foreword

Special Issue on Poly'2000, London

Experts from the Polymeric Materials community from four continents met in December, 2000 at the Third International Workshop, Poly'2000 in London. The Poly conference series is sponsored by ASME, IEEE-CPMT, SPE, SPIE, MRS, and IMAPS UK. Previous Poly Workshops were held in Paris (1998 and 1999).

The International Program Committee selected 30 papers from 14 countries for oral presentation. The General

Chairman of the Workshop, Ephraim Suhir, did a great job to establish the scientific program and to organize the meeting. He was assisted by his three co-chairs: K. Kishimoto, Tokyo; D. Lowrie, London; and B. Michel, Berlin.

Though a formal Workshop Proceedings is not published, there is a tradition of presenting the most valuable papers in the ASME Journal of Electronic Packaging. This special issue of JEP is carrying forward this tradition, and offers 12 selected papers from the Poly2000 program to its readership.

The topics of the Poly'2000 Workshop involve many of the fundamentals and application-oriented aspects of polymeric materials for microelectronics and photonics, from mechanics, physics to reliability and processing of

- polymers for harsh environment applications
- polymers employed in microelectronics and photonics engineering
- other microelectronics and photonics materials interacting with, or alternative to polymers

Even though there is a considerable understanding of polymeric materials problems in microelectronics, photonics, MEMS, and many other applications, new questions arise and have to be dealt with in detail, and especially with respect to reliability issues which require new concepts and new solutions. In detail, the following topics were covered:

- mechanical behavior and reliability of polymers
- new and emerging technologies for future electronic and photonic systems
- polymeric materials characterization
- thermal, mechanical, electrical and optical properties of polymers
- fracture mechanics of polymeric materials, interface cracking
- moisture sensitivity of polymeric materials
- polymer lightguides
- polymers for wireless applications
- aging and long-term reliability
- epoxy molding compounds and plastic packages of IC devices
- accelerated testing and plastic electronic packages
- mechanics, physics and chemistry of adhesion, adhesives and adhesively bonded joints
- stress concentration effects and design for reliability
- thermal management of systems employing polymeric materials
- response of polymeric materials to dynamic and thermal loading

We hope that you will enjoy the contributions of Poly'2000 as much as we did and find them stimulating reading.

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