

## Preface

The ISTFA conference proceedings are an integral part of technical libraries, failure analysis (FA) laboratories and related industries. In this 29<sup>th</sup> edition, you will find a comprehensive reference of the state-of-the-art research, development, tools and techniques presented at ISTFA 2003.

The theme of this year's conference is "Technology Readiness", which has several facets. Most of the attendees at this conference use or are familiar with the International Technology Roadmap for Semiconductors (ITRS), which presents technology forecasts as well as requirements for the means to analyze and characterize these developing technologies. Even in times of prosperity, we have been concerned that we are behind in our efforts to ensure on-time readiness of critical analytical capabilities to support a diverse array of new technologies including sub-100nm device geometries, Cu+low-k interconnect stacks, stacked die packages, MEMS and nanotechnology. It has been a constant challenge to balance the demands of quarterly revenue goals and limited resources with the clear need for continued longer-term development. The current recession in our industry has added yet

additional pressure to these readiness efforts and has caused us, as an industry, to carefully consider how we execute on development projects. In addition, the increased realization on a global scale of the threat of terrorism has established new priorities for the semiconductor technology industry. Initiatives in worldwide intelligence collection and sharing, surveillance, security monitoring and counter-terrorism all represent new requirements and new opportunities for the semiconductor industry.

For the many volunteers that have worked to organize ISTFA 2003, the proceedings are part of the climax of a year of hard work. An organization such as ISTFA relies on the energy and dedication of its volunteers. In return, the experience provides an opportunity for valuable networking, refining organizational skills, broadening technical knowledge and for career growth. I encourage anyone interested in participating to get involved. This will be time well spent.

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