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Preface

by Ed Cole Jr., 2007 IRPS General Chair

For all the IRPS Management Committee and Board of Directors I am delighted to present this 45th edition of the IRPS Proceedings. The technical information contained in this volume results from the combined efforts of many people, most notably the authors whose work has been selected for publication and is described in detail in the pages that follow. The proceedings' papers and the authors' platform and poster presentations at the symposium form the heart of the IRPS.

In addition to the authors, these proceedings also represent the efforts of many technical and management committee members who volunteer their skills, time, and energy, along with the assistance, guidance, and hard work from our invaluable consultants. Together, they continue to make the IRPS *the* leading forum for publishing, presenting, and discussing recent advances across the wide range of subjects directly concerning microelectronics reliability. To the authors, volunteers, and consultants, I give my thanks for helping make the 2007 IRPS a success and maintaining the IRPS an essential venue serving the worldwide microelectronics reliability community.

It is also my pleasure to introduce our 2007 keynote speaker, Dr. Thomas Hussey, Chief Scientist of the Air Force Office of Scientific Research. Each year the IRPS keynote speaker discusses a forward-looking, sometimes wide-ranging view of our field. Tom's presentation, "Basic Research for the Air Force of the 21st Century" will address government/industry funding and activities across a broad spectrum of topics, including microelectronics sustainability and reliability.

We are fortunate to be taking advantage of a brand new facility at the Phoenix Convention Center this year. The amenities of this site permit all of the official IRPS activities to held "under one roof" in very appealing and convenient surroundings. In addition to the platform presentations and workshop discussions, poster presentations on Wednesday evening offer another opportunity for reviewing current work in microelectronics reliability. The IRPS Poster Session is an important element of the technical program, and poster summaries are included in these proceedings.

These proceedings, together with the companion color CDROM, should become a valuable piece of your reference library for a long time to come. A virtual IRPS 2007 on DVD-ROMs will be available soon after the Symposium (check www.irps.org for availability) that contains video, audio, and presentation material for all of the platform technical presentations. The entire IRPS team hopes that you enjoy this symposium and will continue to join us and contribute to future meetings.

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