It is our privilege to welcome you to the 45th IEEE International Test Conference (ITC) sponsored by the IEEE Computer Society and the IEEE Philadelphia Section. This year the conference is being held in a new venue, the Washington State Convention Center in downtown Seattle, Washington during the week of October 20, 2014. In addition to learning opportunities, ITC is a great place to socialize with your professional colleagues in a fun-filled atmosphere, make new friends and catch up with people you already know.

Most likely you already know that ITC is the world’s premier conference dedicated to technologies that ensure robust operation of electronic systems. ITC addresses outstanding design, validation and test challenges—ranging from immediate concerns blocking progress today to major obstacles in future technologies. ITC covers the complete cycle from design verification, design-for-test, design-for-manufacturing, post-silicon validation and debug, manufacturing test, diagnosis, failure analysis and yield improvement, system testing at the hardware-software interface, error detection and testing in the field (including adaptation to variations induced by manufacturing and operating conditions), hardware security and trust, then all the way back to process and system design improvements.

You will find that we have the largest and most powerful slate of invited speakers in the history of our conference, and a great set of peer-reviewed papers and presentations that were all subjected to a very rigorous selection process, necessitated by the high volume and high quality of submissions. New this year, we have assembled a plenary panel for late Wednesday afternoon with distinguished academic and industrial experts that played key roles in the history of our field. We also have two exciting keynote speeches and two days of tutorials taught by the leading experts in their respective fields.

The 2014 technical program has 87 presentations (including invited talks) covering various topic areas, three panel sessions (including the plenary panel), an elevator talk session, a session dedicated to the IEEE TTTC E.J. McCluskey Doctoral Dissertation Award, two discussion sessions and a poster session. Two specialized workshop offerings will cover 3-D Test, and Defect and Adaptive Test Analysis. There will also be several open technical activities and meetings held throughout the conference. These meetings include standards working groups and other topics.

As always, and what sets ITC apart, is the broad and diverse exhibitor floor comprised of EDA, hardware and test solution providers covering almost any test need. The exhibit floor is where you can see theory put into practice. Participating in demos and talking to the exhibitors is an integral part of the ITC experience, and one that lets you compare competing test solutions quickly and efficiently. The exhibit floor area will be the site for the poster session as well as the corporate forum that will highlight new and exciting developments in test equipment, services, tools and methodologies. Returning in 2014 is the Exhibit Hall ITC Passport Program. Stamped passports can be turned in for an opportunity to win prizes.

On behalf of the 2014 International Test Conference steering committee, program committee and all the dedicated volunteers who are key to making the program complete, we welcome you to this year’s exciting technical program and exhibits.