Welcome Letter

Welcome to ICCD 2004!

On behalf of the Program Committee, we would like to welcome you to the 22nd International Conference on Computer Design 2004! For the second consecutive year, the conference is being held in San Jose, California.

The International Conference on Computer Design encompasses a wide range of technical topics in the research, design, implementation, and verification of computer systems. Throughout its history, ICCD has retained its unique characteristics as the most diverse, multi-disciplinary venue for academic and industry practitioners to discuss practical and theoretical work in the field of computer design.

The conference technical program consists of technical papers submitted to the Program Committee for evaluation and selection, plus a number of Special Sessions and Invited Papers. The technical papers are submitted to one of five conference tracks: Computer Systems Design and Applications; Processor Architecture; Logic and Circuit Design; Tools and Methodology; and Verification and Test. The track committees are composed of technical experts in the discipline, who review and select the best submissions. On average, each paper receives four individual reviews. After the individual reviews are completed, each paper is discussed collectively by the track committee, to ensure equity and consistency in the selection process.

ICCD is truly an international conference, with participation from researchers and developers from academic institutions, research laboratories, and industry design and development groups throughout the world. This year, the Program Committee received paper submissions from 22 different countries. Of the 226 papers submitted, the track committees selected 84 regular papers (37%). In addition, the conference program includes an embedded tutorial on Formal Verification Strategies, and 6 invited papers in 2 special sessions: "Emerging Technologies" and "High-Performance On-Chip Communication". Additionally, there will be an unparalleled panel discussion at the conference banquet on "Grid Computing", with panel members addressing technical, business, and venture capital issues and opportunities.

This year, ICCD includes three keynote presentations at the conference's Plenary Session, from outstanding researchers in our field. Dr. Shekhar Borkar of Intel Corporation will be discussing "Gigascale System Design – Challenges and Opportunities". Professor Melvin A. Breuer from the University of Southern California will be presenting on "Error Tolerance". Professor Edward McCluskey from Stanford University will offer his unique perspective, "Digital Integration Circuit Testing for Art Historians and Test Experts". Having all three distinguished speakers sharing their insights will be a special occasion.

On behalf of the Organizing Committee, we would like to thank the track committee members, and especially the track committee chairs, for their dedication and diligence in selecting an exceptional set of technical presentations. The investment of their time and insights is very much appreciated.

On a personal note, we would like to thank our colleagues on the organizing committee for their efforts, their support, and their camaraderie. The efforts of Dr. Pranav Ashar, Vice Program Chair, Dr. Kee Sup Kim, Publicity Chair, Professor Peter-Michael Seidel, Publications Chair, and Dr. Kevin W. Rudd, Finance and Special Sessions Chair, are all very much appreciated. The insights and assistance from last year's conference chair, Professor Ken Shepard, were also instrumental in helping us with this year's conference logistics.

We are indebted to the support and guidance from the IEEE Computer Society and IEEE Publications staff. They patiently helped us learn how to organize and conduct an international conference. The support of the IEEE Circuit and Systems Society is also very much appreciated.

The superlative conference program at ICCD 2004 is a result of many individuals who contributed their time and expertise leading up to the event. The culmination of their efforts is the technical interchange, informal discussion, and personal communication that can only occur at the conference itself. In that regard, we hope you have a rewarding and enjoyable time at the conference. Welcome to ICCD 2004!

Ed Grochowski
Technical Program Chair

Tom Dillinger
General Chair