### **WTS 2003**

#### Wireless Telecommunications Symposium 2003

May 2, 2003



California State Polytechnic University, Pomona

**Kellogg West Conference Center** 

#### WELCOME TO WTS 2003

Welcome to the Wireless Telecommunications Symposium 2003. In its second year of production the WTS has become a nationally recognized event. We hope that you find this year's event to be an informative and enjoyable experience.

The Symposium's goal is to foster an information exchange between industry and the academic community relating to advances in the exciting, but challenging, field of wireless telecommunications. The WTS recognizes the multi-faceted and multi-disciplinary nature of wireless telecommunications and networking, as reflected in its diverse program, which includes topics on technology, applications, management, and public safety and security. This goal is very much in keeping with Cal Poly Pomona's mission of advancing learning and knowledge by linking theory and practice, and the fact that the College of Business and the College of Engineering are co-hosting the event.

We are very fortunate to have a distinguished group of speakers for our WTS 2003 event. They are truly leaders and experts in wireless telecommunications. We are very grateful to them for making time available to speak to us today. We are also grateful to the CIS Department, the Engineering Technology Department, SWIFT, the IEEE student chapter, the IEEE Foothill Section and Microsoft Corporation for their contributions and support.

On behalf of the WTS Committee - welcome to WTS 2003!

Dr. Steven Powell and Dr. Lyle McCurdy Co-Chairs, WTS Committee

<b>Schedule of Events</b>	
Registration & Opening Remarks	
8:00 am - 9:15 am	Registration and Breakfast
9:15 am - 9:30 am	Opening Remarks: Dean Eduardo Ochoa, College of Business Dean Edward Hohmann, College of Engineering
Keynote Speaker	
9:30 am - 10:30 am	<b>Keynote Speaker</b> - Dr. Irwin Mark Jacobs, Co-founder, Chairman of the Board and CEO, QUALCOMM
10:30 am - 10:45 am	Networking Break
Technical Session - Wireless Technology	
10:45 am - 11:15 am	Dr. George Rittenhouse, Director of Wireless Research, Bell Laboratories "A Strategic Look at the Mobile Communications Industry"
11:15 am - 11:45 am	Dr. Minoru Etoh, CEO and President, NTT DoCoMo USA Laboratories "The Mobile Multimedia Frontier in 3G and Beyond"
Keynote Luncheon & Speaker	
11:45 am - 1:45 pm	Announcements and Remarks: Dr. Steven Curl, Chair, CIS Department Prof. Gerald Herder, Chair, Engineering Technology Department Dr. Donald Bell, Director of International Programs, College of Business

	Dr. Rajan Chandra, Interim Director of Graduate Programs, College of Engineering <b>Keynote Speaker</b> - Neil Cox, EVP Telecommunications Integration Sector, SAIC, "The Evolution of Wireless Businesses and the Challenges That Lie Ahead"
Technical Session – Wireless Applications	
1:45 pm - 2:15 pm	Kenneth Dulaney, Vice President, Research Area Director, Gartner Research "Wireless LANs and PANs: Broadband Between the Wires"
2:15 pm - 2:45 pm	Dr. Daniel Devasirvatham, ViP - Technology, Wireless Systems Group, SAIC "Some Wireless Applications and Challenges"
2:45 pm - 3:00 pm	Networking Break

Technical Session - Wireless Public Safety and Security

Manager, Motorola

Responders"

Peter Hambuch, Strategic Business

"Wireless Interoperability for First Line

# Dr. A. Michael Berman, VP - Instructional & Information Technology, Cal Poly Pomona 3:30 pm - 4:00 pm "Managing Enterprise Wireless Authentication in a Highly

3:00 pm - 3:30 pm

Reception

**Heterogeneous Environment"** 

4:00 pm - 6:00 pm Reception & Social

#### **Speaker Biographies**



**Dr. Irwin Mark Jacobs**, Co-founder, Chairman of the Board and CEO of QUALCOMM Inc., world leader of Code Division Multiple Access (CDMA) digital wireless technology. In 1994, Dr. Jacobs received the National Medal of Technology Award, which is the highest award bestowed by the President of the United States for extraordinary achievements in the commercializing of technology or

the development of human resources that foster technology commercialization.



**Neil E. Cox**, Executive Vice President of the Telecommunications Integration Sector, Science Applications International Corporation (SAIC). SAIC is the nation's largest employee-owned research and engineering firm providing information technology, systems integration and e-business products and services to commercial and government customers in telecommunications, transportation,

energy, financial services, health care, national security and the environment. Before joining SAIC, Neil Cox was the president of Ameritech's SecurityLink, which served over one million residential, commercial and governmental customers throughout the United States, Canada, Puerto Rico and Mexico.

**Dr. George Rittenhouse,** Director of Wireless Research, Bell Laboratories. Dr. Rittenhouse heads several projects, including MIMO system development, network optimization, wireless IP networks, and fourth generation wireless. In 2001 he received the Bell Labs Fellow award. He has numerous publications and patents in the areas of wireless systems and circuits.

**Dr. Minoru Etoh**, CEO & President, NTT DoCoMo USA Laboratories. Dr. Etoh was Director of Signal Processing at NTT DoCoMo Laboratory, simultaneously serving as Adjunct Lecturer at Osaka University. In 2002, Dr. Etoh was promoted to President & CEO of DoCoMo Communications Laboratories USA, Inc., where he is now conducting several research groups in charge of mobile network architecture design, cryptography, terminal software, audio, speech and video coding technologies, and media delivery over mobile networks. He is also Professor of Nara Institute of Science and Technology.

**Kenneth Dulaney**, VP, Research Area Director, Gartner Research. Mr. Dulaney's research areas include notebook computers, industrial handhelds, PDAs, cellular phones, wireless communications, mobile software and device management strategies. In 2002, he was recognized by Adweek magazine as one of the top 20 technology industry analysts. Prior to joining Gartner, Mr. Dulaney worked at GRiD Systems, where he served as director of marketing, portable computing. He was a key participant in the development of the first pen-based computer, for which he received several patents.

**Dr. Daniel Devasirvatham**, VP - Technology, Wireless Systems Group, Science Applications International Corp. (SAIC), and Chair of the Homeland Security Task Force of the Wireless Communications Association. Dr. Devasirvatham is an internationally recognized authority in his field. He is widely published and has been an invited speaker at numerous organizations and international conferences.

**Peter A. Hambuch**, Strategic Business Manager, Motorola. Mr.Hambuch is working with Public Safety Customers to understand market trends, communications options, new technologies, and Federal Grants and Funding. His prior position was Director of Engineering for the Western Region in the U.S.

**Dr. A. Michael Berman** is the Vice President for Instructional and Information Technology at Cal Poly Pomona. Dr. Berman serves as the Chief Information Officer for the campus, and his Division manages the campus networks, operates software and servers, and provides support for instructional technology. Dr. Berman received an M.S. and a Ph.D. in Computer Science from Rutgers University, and a B.A. in Economics from Pomona College.

## WTS 2003 Cal Poly Pomona Contributors













#### WTS 2003 Sponsors



IEEE Foothill Section, Upland California





www.calpolyswift.com

#### About SWIFT

**SWIFT** (Students With Interest in the Future of Telecommunications) is a student club primarily serving students from the CIS Department's Telecommunications Track. SWIFT's objective is to enhance and enrich the students' learning experience and to prepare students for careers in the telecommunications industry. Some of the ways in which SWIFT attempts to achieve this objective include: inviting speakers to Cal Poly to discuss the latest technologies, industry practices, and recruiting efforts; holding "hands-on" workshops on such topics as installing a wireless LAN and building a computer; and hosting social events.



#### Institute of Electrical and Electronic Engineers California State Polytechnic University, Pomona

www.csupomona.edu/~ieee

Our mission: To encourage, develop and stimulate Cal Poly Pomona students in their academic and professional careers and to assist them in achieving the goals of becoming better members of society and excellent engineering leaders.