

**AGENDA**  
**UNIVERSITY OF CALIFORNIA, DAVIS**  
**ELECTRICAL AND COMPUTER ENGINEERING**  
**INDUSTRIAL AFFILIATES CONFERENCE**  
**JANUARY 29, 2010**

- 8:00 A.M. – 8:45 A.M.**                                 **CONTINENTAL BREAKFAST, REGISTRATION**  
Poster Session I - Kemper Hall Lobby
- 8:45 A.M. – 8:50 A.M.**                                 **OPENING REMARKS - 1065 KEMPER HALL**  
PROFESSOR BRIAN KOLNER, INDUSTRIAL AFFILIATES COMMITTEE
- 8:50 A.M. - 9:15 A.M.**                                 **CHAIR’S REPORT**  
ECE DEPARTMENT CHAIR, PROFESSOR RICHARD A. KIEHL
- 9:15 A.M. – 10:00 A.M.**                                 **FACULTY PRESENTATION I - 1065 KEMPER HALL**  
PROFESSOR CHARLES HUNT  
**THE CHALLENGE OF HIGH-QUALITY, ENERGY-EFFICIENT LIGHTING**
- 10:00 A.M. - 10:20 A.M.**                                 **COFFEE BREAK & POSTER SESSION II -KEMPER HALL LOBBY**
- 10:20 A.M. - 11:20 A.M.**                                 **GRADUATE STUDENT PRESENTATIONS I - 1065 KEMPER HALL**  
Justin Wenck: "Power Electronics, Memories, and Wireless Sensor Miniaturization"  
Senhua Huang: "Distributed Power Control for Cognitive User Access based on Primary Link Outage Feedback"  
Avinash P. Nayak: "Fabrication of Devices at Room Ambient on Arbitrary Substrates: Plastics, Glass, Fabrics, Rubber and Even Human Hair"
- 11:20 A.M. - 12:20 P.M.**                                 **KEYNOTE SPEAKER - 1065 KEMPER HALL**  
Dr. Thomas N. Theis, Director, Physical Sciences, IBM Research, T.J. Watson Research Center  
**In Quest of the “Next Switch”: Prospects for Greatly Reduced Power Dissipation in a Successor to the Silicon Field Effect Transistor**
- 12:20 P.M. - 1:30 P.M.**                                 **LUNCH – KEMPER HALL LOBBY/1127 KEMPER HALL**
- 1:30 P.M. - 2:15 P.M.**                                 **FACULTY PRESENTATION II - 1065 KEMPER HALL**  
Professor Stephen O’Driscoll  
**Adaptive Circuit Design for Implantable Medical Devices**
- 2:15 PM - 3:00 P.M.**                                 **LAB TOURS - KEMPER HALL LOBBY**
- 3:00 PM – 3:20 P.M.**                                 **COFFEE BREAK & VOTING FOR BEST POSTER – KEMPER HALL LOBBY**
- 3:20 P.M. – 4:20 P.M.**                                 **GRADUATE STUDENT PRESENTATIONS II - 1065 KEMPER HALL**  
  
Ramin Banan Sadeghian: "An Ultra-Selective Electronic Nose based on Field Ionization on Semiconducting Nanowire Arrays"  
Chi Law: "A High Gain 60 GHz Power Amplifier with 20 dBm Output Power in 90nm CMOS"  
Muhammad Zia: "Improving Bandwidth Efficiency of Hybrid ARQ under Orthogonal Space-Time Block Codes Without Diversity Loss"
- 4:20 p.m. – 4:45 p.m.**                                 **Closing Remarks & Best Poster Prize – 1065 Kemper Hall**
- 5:00 P.M.**   **RECEPTION WITH FACULTY & STUDENTS – KEMPER HALL LOBBY**