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**