Fall 2013 IAB & Research Review - Agenda

Research Review Posters & Plenary (CLOSED)
Members, Researchers, and By-Invitation Visitors with 12-month NDA

18 September 2013
Sutardja Dai Hall, Banatao Auditorium + Blum Hall

Time	Speaker, Event / Topic Information
08:00	**Registration & Continental Breakfast** Sutardja Dai Hall, Atrium
08:45	**John Huggins** Open Research Review Welcome & Announcements
08:50	**Session I Chair: Ali Javey**
08:55	**Plenary 1: Michael Lorek** Standard CMOS-Based, Fully Integrated Stick-On Electricity Meters for Building Sub-Metering [BPN705]
09:10	**Plenary 2: Erh-Chia Yeh** One-Step Point-of-Care Quantitative Nucleic Acid Detection based on Digital Plasma Separation [BPN679]
09:25	**Plenary 3: Alina Kozinda** Carbon Nanotube Films for Energy Storage Applications [BPN606]
09:40	**Morning Research Overviews (4 Faculty Groups)** **Clark T.-C. Nguyen, Kris Pister, Ming C. Wu, Luke P. Lee**
10:20	**MORNING POSTER SESSIONS (4 Groups)** **100 and 110 Blum Hall**
11:20	**Session II Chair: Bernhard E. Boser**
11:25	**Plenary 4: Robert Schneider** Capacitive-Piezoelectric Micromechanical Filters [BPN682]
11:40	**Plenary 5: Ryan Going** Photo-MOSFET with Single Crystalline Germanium on SOI by Rapid Melt Growth [BPN609]
11:55	**Lunchtime Research Overviews (4 Faculty Groups)** **Liwei Lin, Bernhard E. Boser, Ali Javey, Dorian Liepmann** Current BioMEMS and Microfluidics Research
12:35	**LUNCH** 100 Blum Hall
13:20	**MIDDAY POSTER SESSION (4 Groups)** **100 and 110 Blum Hall**
14:25	**Session III Chair Ming C. Wu**
14:30	**Plenary 6: Dr. Niels Quack** 3D Imaging: Sub-mm Resolution Ranging using a Chip-scale MEMS FMCW LIDAR Source
14:45	**Plenary 7: Richard Przybyla** Ultrasonic 3D Rangefinder on a Chip [BPN485]
15:00	**Plenary 8: Kevin Chen** Macroscale Flexible Sensor System [BPN698]
15:15	**Afternoon Research Overviews (4 Faculty Groups)** **Michel M. Maharbiz, Albert P. Pisano, David A. Horsley, Richard M. White**
15:55	**AFTERNOON POSTER SESSION (4 Groups)** **100 and 110 Blum Hall**
16:55	**SESSION IV Chair: Albert P. Pisano**
17:00	**Plenary 9: Dr. Jim Cheng** Nanoprinting of MEMS and Electron Devices [BPN394] [BPN658] [BPN693]
17:15	**Plenary 10: JoJo Chang** Magnetic Microcoils: A Versatile Technology Platform for Microfluidics [BPN645]
17:30	**Plenary 11: Dr. Ayden Maralani** SiC Semiconductor Devices and ICs as Gate/Base Drivers in Power Electronics [BPN638] [BPN644] [BPN614]
17:45	**END SESSION** Voting Completion & Announcements
18:15	**Mixer and Awards Banquet** Hearst Memorial Mining Building, Moore Lobby

BSAC Industrial Advisory Board/ Executive Committee
Closed Session, Members Only, to review research directions and Center operations

19 September 2013
Hearst Memorial Mining Building, Room 290

Time	Speaker, Event / Topic Information
07:45	**Light Continental Breakfast** 290 Hearst Memorial Mining Building
08:30	**John Huggins** Convene IAB: Topical Agenda
08:40	**Richard Tsina** Plenary Topic Results & Voting Comments
08:50	**ALL** Discussion of Center
10:30	**John Huggins** Close IAB

BSAC Workshop: Piezo MEMS (CLOSED)
Members, Researchers and By-Invitation Visitors with 12-month NDA

19 September 2013
Sutardja Dai Hall, Banatao Auditorium

Time	Speaker, Event / Topic Information
11:00	**David A. Horsley** Overview of Topic and Session
11:15	**Clark T.-C. Nguyen** Raising the Q's of Piezoelectric Resonators
11:45	**Sayeef Salahuddin** On the Possibility of Mechanically-Driven Ferromagnetic Resonance
12:15	**Liwei Lin** Electrospun FiberPiezo for Energy Harvesting
12:30	**LUNCH**
13:30	**Michel M. Maharbiz / Dongjin Seo** Neural Dust: Ultrasound to Enable Chronic Brain-Machine Interfaces
14:00	**David A. Horsley** Piezoelectric Micromachined Ultrasonic Transducers
14:30	**Albert P. Pisano** Aluminum Nitride/SiC Harsh Environment Sensor Cluster for Infrastructure Monitoring
15:00	**Adjourn**

MIG Workshop: Illuminating the Fog: MEMS and Sensors, Enablers for the Internet of Things
19 September 2013
Sutardja Dai Hall, Banatao Auditorium (OPEN to all MIG members, Visitors, and BSAC Members)

Time	Speaker, Event / Topic Information
15:30	**Karen Lightman** Open Session
15:45	**Dr. Flavio Bonomi** **Vice President, Advanced Architecture Research, CISCO** The Cloud, Fog Computing, Wireless Networks and the Internet of Things
16:30	**Al Heshmati** **Sr. Director, Software Systems, InvenSense** Sensor Fusion of the Future
17:00	**Break**
17:15	**Dave Rothenberg** **Marketing Director, Movea** Data Fusion, Context Awareness and Indoor Navigation: A Marketer's Perspective on Sensor-Based Mobile Apps and Services
17:45	**Mike Stanley** **Manager, Smart Sensor Fusion, Freescale** Power Impacts on Sensor and Sensor Fusion Design
18:15	**Conclusions and Wrap**
18:30	**Mixing Reception** Kvamme Atrium, Sutardja Dai Hall
20:00	**Adjourn**