

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

<u>Time</u>	<u>Speaker, Event / Topic Information</u>
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

<u>Time</u>	<u>Speaker, Event / Topic Information</u>
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)

<u>Time</u>	<u>Speaker, Event / Topic Information</u>
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