AGENDA

Tuesday May 13, 2014 – Center for Integrated Manufacturing Studies –CIMS

8:00 am Registration and Continental Breakfast, Upper Lobby – SLA Hall – 2210/2220

8:30 am Introductory Remarks, Louise Slaughter Hall 2210, 2220

Invited Talks

Session Chairs: Sean Rommel and Santosh Kurinec

8:40 am “An Overview of the Latest Silvaco Software Tools for IC Process Simulation” - Dr. Steve Broadbent and/or Garrett Schlenvogt, Silvaco Inc.


9:50 am Coffee Break

10:10 am “Energy Harvesting Devices” - Dr Kathleen Vaeth, MicroGen Systems

10:40 am “Status of Si PV and CNSE PV Programs” - Ian Cooper, Director of Si Solar Technology, CNSE Rochester PV

11:05 am “Piezoelectric Aluminum Nitride Resonator MEMS” – Jeronimo Segovia, Carnegie Mellon

11:30 am Poster Session

11:50 pm Luncheon, Louise Slaughter Hall 2210, 2220 - Dinosaur Barbeque (a Rochester Tradition)
Tuesday May 13, 2014

Talks from RIT Microelectronic Engineering Students

Session Chair: Robert Pearson

1:30 pm “Crosslinkable Graphene Oxide-Polymer Hybrid Materials”
   – Dr. Jiandi Wan, RIT Microsystems – 2013 Texas Instruments - Douglass Harvey summer faculty development award recipient
1:50 pm “Self Aligned Memristive Crossbar Structures Using Shadow Evaporation”
   – Eric M. Pethybridge
2:00 pm “Investigation of a Self-Assembled Monolayer as a Cu Diffusion Barrier”
   – Anthony Aiello
2:10 pm “MEMS Peltier Cooler” – Brendan P. Merna
2:20 pm “Development, Fabrication, and Characterization of a Vertical-Diffused MOS Process for Power RF Applications” – Richard Li
2:30 pm “Surface cleaning of III-V PIN diodes to reduce I₀ for TFET applications”
   – Ian Manwaring
2:40 pm “Sidewall Image Transfer for High Aspect Ratio Fin Width Definition”
   – Lilah M. Cook
2:50 pm “MEMS Hall Effect Sensor” - Michell Graciani Melo Espitia

3:00 pm Coffee Break and Poster Session

Session Chair: Karl Hirschman

3:15 pm “SRAM cells for process validation”, Shaun Kumar, Global Foundries
3:30 pm “Optimization of Silicon Etch for High Aspect Ratio Fin FETs” – Michal Kucer
3:40 pm “Investigation of Sputter/Passivation on Electrical Characteristics of IGZO TFTs”
   – Nicholas R. Edwards
3:50 pm “MEMs Polysilicon Micro-bolometer Array” - Paige Gottschalk
4:00 pm “Black Si by RIE for Photovoltaics” – Jacob D. Lana
4:10 pm “Characterization of Conductive Oxides for MEMS Chemical Gas Sensors”
   – Alycia N. Roux
4:20 pm “Characterization of III-V Esaki diodes” – Christopher Ritchie
4:30 pm “Self Sufficient MEMS Sensor for Portable Applications” – Andrew R. Taylor

4:40 pm Poster Session

5:30 pm Adjourn