2022 Nanoscale Internet-of-Things (Nano-IoT) Research Community Workshop

Tuesday, August 16, 2022

HYBRID: 233 Phillips Hall, Cornell University & via Zoom

SCHEDULE

9:00 a.m. Registration & Continental Breakfast (232 Phillips Hall, aka Phillips Hall Lounge)

10:00 a.m. Welcome, Christopher K. Ober, CNF Director (233 Phillips Hall & Zoom)

Nano-IoT Technical Presentations by Invited Speakers (233 Phillips Hall & Zoom)

10:15-10:45 a.m. Invited Speaker Abraham D. Stroock, Gordon L. Dibble '50 Professor, Smith School of Chemical and Biomolecular Engineering; "Programmable Plants and the Internet of Living Things"

10:45-11:15 a.m. Invited Speaker Mark Poliks, Center for Advanced Microelectronics Manufacturing, Binghamton University; "Flexing, Bending and Stretching Toward Advances in Electronics for Medical and Industrial Applications"

11:15- 11:45 a.m. Invited Speaker Scott Miller, Ph.D., Director of Technology, NextFlex; "Hybrid Electronics Process WiFi Enabled Controllers"

11:45 a.m. – 1:00 p.m. Lunch (232 Phillips Hall)

NNCI Nano-IoT Site Overviews (233 Phillips Hall & Zoom)

1:00-1:10 p.m. CNF Site Overview, Christopher Ober, Cornell University

1:10-1:20 p.m. KY-Multiscale Site Overview, Kevin Walsh, University of Louisville

1:20-1:30 p.m. MANTH Site Overview, Pat Watson, University of Pennsylvania

1:30-1:40 p.m. NNF Site Overview, Christian Binek, University of Nebraska, Lincoln

1:40-1:50 p.m. SENIC Site Overview, Oliver Brand, Georgia Institute of Technology

1:50-2:10 p.m. Concluding Remarks with Chris Ober

(Break)

Nano-IoT Panel & Discussion (233 Phillips Hall, In Person Only)

2:30-4:00 p.m. Panelist; Scott Miller, Mark Poliks, Abe Stroock, Pat Watson

Possible Topics and Questions:
1. Defining future Nano IoT research directions.
2. How will nanotechnology transform the IoT?
3. What does a facility have to have to support IoT, heterointegration, start to finish? What processing technologies will be needed for smaller versatile devices so we can move to the internet of everything?

4:00-4:30 p.m. Summary and Wrap Up