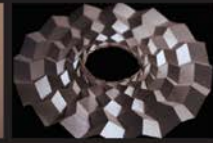
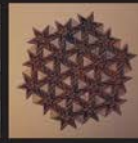




CCMR Symposium
June 16-17th, 2017



Atomic Origami: a Technology Platform for Nanoscale Machines, Sensors, and Robots

120 Physical Sciences Building (PSB), Cornell University

Friday June 16

- 8:00 – 8:30 am** **Breakfast & Registration – *PSB Clark Atrium***
- 8:30 – 9:00 am** **Welcome Remarks and Introduction – *120 PSB***
Melissa Hines, Director of the CCMR, Cornell Chemistry and Chemical Biology; with the Symposium Organizing Committee: Prof. Itai Cohen, and Prof. Paul McEuen, Physics, Cornell University.
- 9:00 – 9:45 am** **Sproull Lecture – Origami Design for Static Structures and Dynamic Mechanisms.**
Dr. Robert J. Lang, Robert Lang Origami.
- 9:45 – 10:10 am** **Paper, Crystal and my Old Pair of Jeans.**
Prof. Jiwoong Park, Chemistry and Molecular Engineering, University of Chicago.
- 10:10 – 10:35 am** **2D Materials for the Fabrication of Micron-Sized, Autonomous Origami Machines.**
Dr. Marc Miskin, Postdoctoral Associate, CCMR, Cornell University.
- 10:35 – 11: 00 am** **Coffee Break & Posters – *PSB Clark Atrium***
- 11:00 – 11:25 am** **Bidirectional Emissive Nanoparticle-Based LEDs to Enable Novel Modes of Light-Based Interactivity with a Display.**
Dr. Peter Trefonas, Corporate Fellow, Dow Electronic Materials Company.
- 11:25 – 11:50 am** **Origami-Based Engineering: Macro Applications as Inspiration for All Size Scales.**
Prof. Larry L. Howell, Mechanical Engineering, Brigham Young University.
- 12:00 – 2:00 pm** **Lunch and Poster Session – *PSB Clark Atrium***
- 2:00 – 2:25 pm** **Using DNA to Make Mechanical Metamaterials and Bimorphs.**
Prof. John Crocker, Chemical and Biomolecular Engineering, University of Pennsylvania.

- 2:25 – 2:50 pm** **Ultrathin Flexographic Printing.**
Prof. John Hart, Mechanical Engineering, Massachusetts Institute of Technology.
- 2:50 – 3:15 pm** **Development of High Value ChemBio Sensors: Industrial R&D Perspective.**
Dr. Radislav A. Potyrailo, Principal Scientist, Photonics Laboratory, GE Global Research.
- 3:15 – 3:30 PM** **Wrap up (including ideas winners!).**
- 4:00 - 6:00 pm** **OPTIONAL HIKE! (Buttermilk or Treman Park).**

Note: There will be a student competition for best idea – winners can come to the events Saturday morning.

Saturday June 17

For Speakers, Industry attendees, Student winners, and Cornell Faculty.

- 8:30 – 9:00 am** **Breakfast – *PSB 401***
- 9:00 – 10:00 am** **Breakout brainstorming session #1: Applications in biology, medical devices, sensors, materials additives, robotics...**
PSB 401
Facilitator: Prof. Paul McEuen, Physics, Cornell University.
- 10:00 – 10:30 am** **Coffee Break – *PSB 401***
- 10:30 – 11:30 am** **Breakout brainstorming sessions #2: Getting us there. Proof of concept milestones, enabling technologies, new materials...**
PSB 401
Facilitator: Prof. Itai Cohen, Physics, Cornell University.