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.

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.