



# 2024 CNF ANNUAL MEETING

TUESDAY, SEPTEMBER 17, 2024

## SCHEDULE

LOCATION: STATLER HOTEL, CARRIER BALLROOM

- 8:00am - 8:45am **Registration & Breakfast**
- 8:45am - 9:00am **Welcoming Remarks**
- Judy Cha, CNF Director**  
*Women in Science*
- Ron Olson, CNF Director of Operations**  
*Overview of CNF*
- 9:00am - 9:45am **KEYNOTE ADDRESS**  
**Beth Keser, VP of Manufacturing Technology**  
[Zero ASIC Corporation](#)  
*“Chiplets and the Future of Electronic Packaging”*
- 9:45am - 10:00am *Break*

*Session Chair – Chris Alpha*

- 10:00am - 10:15am **Damian Helbling, Associate Professor**  
School of Civil and Environmental Engineering, Cornell University  
*“Aqueous Emissions of Organofluorine-Containing Chemicals from Electronics Manufacturing”*  
[Helbling Research Group](#)
- 10:15am - 10:30am **Chenyun Yuan, Ph.D. Candidate** (PI: Christopher Ober)  
Materials Science & Engineering, Cornell University  
*“Stochastics-Controlled, PAG-Free, Water-Developable EUV Photoresists Based on Sequential Polypeptoids”*  
[Ober Research Group](#)
- 10:30am - 10:45am **Giancarlo D’Orazio, Ph.D. Student** (PI: Sadaf Sobhani)  
Sibley School of Mechanical and Aerospace Engineering, Cornell University  
*“Micro-Additive Manufacturing of CO2 Reduction Reactor Membranes”*  
[Sobhani Research Group](#)
- 10:45am - 11:00am **Scout Fronhofer, Ph.D. Student** (PI: Lois Pollack)  
Department of Applied and Engineering Physics (AEP), Cornell University  
*“3D-printed Microfluidic Mixers for Time-Resolved X-Ray Scattering of Niomolecules”*  
[Pollack Research Group](#)
- 11:00am - 11:15am *Break*

---

**Session Chair – Phil Infante**


---

- 11:15am - 11:30am **Noah Clay, Vice President of Sensor Technology**  
[VOC Health Inc.](#)  
**“Developing Carbon Nanotube Sensors for Early Stage Cancer Detection”**
- 11:30am - 11:45am **Zhongmou Chao, Schmidt Postdoctoral Fellow (PI: Susan Daniel)**  
 Chemical and Biomolecular Engineering, Cornell University  
**“Recreating the Biological Steps of Viral Infection on a Cell-Free Bioelectronic Platform to Profile Viral Variants of Concern”**  
[Daniel Research Group](#)
- 11:45am - 12:00pm **Quynh Sam, Ph.D. Candidate (PI: Judy Cha)**  
 Materials Science and Engineering, Cornell University  
**“Nanomolding of Two-Dimensional Materials for Next-Generation Electronics”**  
[Cha Research Group](#)
- 12:00pm - 12:15pm **CNF EQUIPMENT OVERVIEW**  
 Ron Olson, *CNF Director of Operations*
- 12:15pm - 1:10pm *Buffet Lunch, Carrier Ballroom Foyer*

---

**Session Chair – Garry Bordonaro**


---

- 1:10pm - 1:30pm **Allison Godwin, Dr. G. Stephen Irwin '67, '68 Professor in Engineering Education Research, Associate Director CNF**  
 RF Smith School of Chemical and Biomolecular Engineering, Cornell University  
**“Education and Workforce Developments and Impacts”**  
[Godwin Research Group](#)
- 1:30pm - 1:45pm **Youn Jue (Eunice) Bae, Assistant Professor**  
 Chemistry and Chemical Biology, Cornell University  
**“Spin-photon Coupling Using Superconducting Resonator”**  
[Bae Research Group](#)
- 1:45pm - 2:00pm **Gustavo Alvarez, Graduate Research Assistant (PI: Zhiting Tian)**  
 Mechanical & Aerospace Engineering, Cornell University  
**“Polarity-Dependent Thermal Conductivity in Wurtzite Aluminum Nitride Under External Electric-Field”**  
[Tian Research Group](#)
- 2:00pm - 2:15pm **EK Kim, PhD Candidate (PI: Grace Xing)**  
 Electrical and Computer Engineering, Cornell University  
**“Aluminum Nitride Based High-Electron-Mobility Transistors for RF Power Amplification”**  
[Xing Research Group](#)
- 2:15pm - 2:30pm **Zhengdong Gao, PhD Candidate (PI: Qiang Lin)**  
 Electrical and Computer Engineering, University of Rochester  
**“On Chip LiNbO<sub>3</sub>/InP Microcomb Laser”**  
[Lin Research Group](#)

2:30pm - 2:45pm **Joseph Dill, Graduate Research Assistant (PI: Grace Xing)**  
 School of Applied & Engineering Physics, Cornell University  
***“Low- and High-Field Transport of Holes in GaN: Towards pFETs for GaN CMOS”***  
[Xing Research Group](#)

2:45pm - 3:00pm *Break*

---

*Session Chair – Jeremy Clark*

---

3:00pm - 3:15pm **Amit Lal, Professor**  
 Electrical and Computer Engineering, Cornell University  
***“AI Applied to the Cornell NanoScale Facility”***  
[Lal Research Group](#)

3:15pm - 3:30pm **Jaehong Choi, Graduate Research Assistant (PI: Greg Fuchs)**  
 Applied & Engineering Physics, Cornell University  
***“Low-barrier Nb/ZrOx/Nb Josephson Junction”***  
[Fuchs Research Group](#)

3:30pm - 3:45pm **Eric Yelton, Graduate Student (PI: Britton Plourde)**  
 Physics, Syracuse University  
***“The Effects of Radiation on Superconducting Qubits”***  
[Plourde Research Group](#)

3:45pm - 4:00pm **Ben Ash, Undergraduate Research Assistant (PI: Peter McMahon)**  
 Applied & Engineering Physics, Cornell University  
***“A Two-Dimensionally Programmable Photonic Chip for Information Processing”***  
[McMahon Research Group](#)

---

**EVENING SESSION**  
**LOCATION: DUFFIELD HALL ATRIUM**

---

4:00pm - 5:00pm *Cleanroom tours & Poster Set-up*

5:00pm - 7:00pm **POSTER SESSION & VENDOR SHOWCASE**  
*User Presentations, Poster Awards, and the Nellie Yeh-Poh Lin Whetten Memorial Award will be given out at 6:30 p.m.*

---

***Don't forget to stop by the Goldman Lounge to try CNF's VR content!***

---