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POETS by the numbers:

4 Universities - University of Illinois at Urbana-Champaign (lead), Howard University, Stanford University, University of Arkansas

- 31 Faculty
- 107 Student Researchers
- 38 Ph.D., 29 M.S., 9 B.S. Degrees Granted to date
- 35 Graduates working in industry to date
- 229 POETS publications
- 64 Technical Reports
- 3 Testbeds – Aerospace, Off-Highway, On-Highway
- 3 Full patents
- 3M+ in Associated Project Funding (2020-2021)

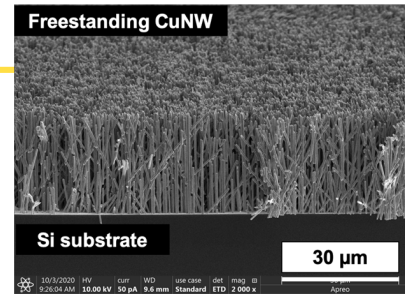
Recent POETS Projects (with Prof. Goodson)

- Development of Copper Nanowires (CuNWs) Thermal Interface Materials (TIMs) with (Cu, Ni)-Sn, Transient Liquid Phase (TLP) Bonding, for High-Temperature Power Electronics Applications
- Development of Thermal Circuitry for Electro-Thermal System-level Integration of Thermal (Self-)regulators, Diodes, Switches, and Capacitors

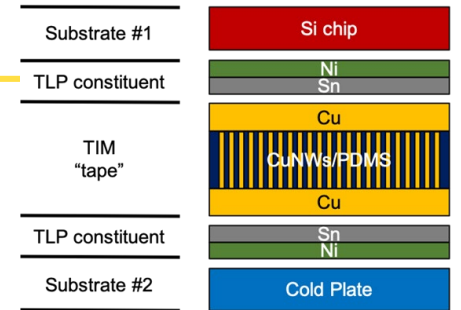
POETS & Related Research

Development of Copper Nanowires (CuNWs) Thermal Interface Materials (TIMs) with (Cu, Ni)-Sn, Transient Liquid Phase (TLP) Bonding, for High-Temperature Power Electronics Applications. Student: Hansen Qiao

Advisor: Prof. Kenneth E. Goodson (Stanford University). Collaborators: Dr. Chi Zhang, Prof. M. Asheghi, Prof. E. Pop (Stanford University); John Harris, Prof. D. Huitink (University of Arkansas)



Cross section view of CuNWs



Development of Thermal Circuitry for Electro-Thermal System-level Integration of Thermal (Self-)regulators, Diodes, Switches, and Capacitors - Ph.D. student Katherine Jiang, Dr. Tanya Liu, Advisor: Prof. Kenneth E. Goodson (Stanford University). collaborators: Profs. Andrew Alleyne and Nenad Miljkovic (UIUC)

