

Solar-Powered Refrigeration and Cooling Systems

Department: Physics

Contact: Nathan Heston, nheston@calpoly.edu

Together with my students and collaborators from SunDanzer, I conduct research on solar powered refrigeration, cooling, and ice production systems. In 2019 we built a solar power ice-production and water purification system in the remote fishing village of Agbokpa, Ghana and we have continued collaborative work with Ashesi University in Ghana. This work has the possibility to impact food security and to reduce carbon emissions by taking advantage of a larger portion of energy generated by photovoltaic systems.