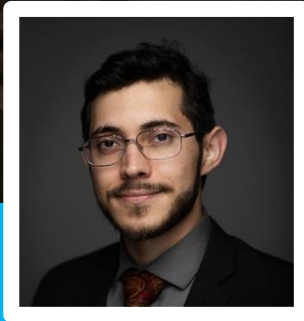
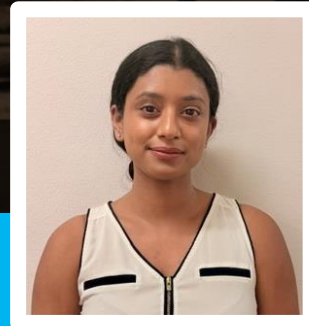


HelioStat Consortium Intern Seminar

August 18, 2026
1 PM MT / 3 PM ET



Ryan Flynn
Sandia National Laboratory



Nikhet Chowdhury
Sandia National Laboratory

Brought to you by the HelioStat Consortium Resource, Training, and Education (RTE) topic area

Domestic HelioStat Component Supply Chain Capabilities and Pathways to Improvements

A discussion of the supply chain for slew drives, a heliostat component, within the United States. The goal of the study is to determine the domestic U.S. capability for immediate deployment of heliostat technology and to provide recommendations to policy to enhance domestic supply chain development. Many components are mainly sourced from China and a few other countries. This information potentially lends itself as a significant first step toward the creation of final base heliostat designs for future deployment. Attendees will gain perspective on the current landscape and actionable strategies to strengthen U.S. supply chain resilience in heliostat manufacturing as well as some factors that influence the cost reduction of this technology in other countries where these components are cheaper and more readily available.

A Sensitivity Analysis of SOFAST 2.0 Estimation of Mirror Slope Errors

Mirrors are critical components of solar power systems and require accurate characterization for optimal performance of the system. Characterizing a solar mirror includes estimating its slope error, which can be completed using the deflectometry method, a technique for estimating mirror accuracy. SOFAST 2.0 is a Sandia open-source system that can provide an analysis of mirror slope error using computational deflectometry analysis, thus supporting industrial development of solar power mirrors. A sensitivity analysis can provide insight into the effect of variable deflectometry conditions on slope estimation. Thus, to improve our understanding of SOFAST mirror analysis uncertainty, we conduct a sensitivity analysis on mirror optic data collected using SOFAST 2.0 to assess its performance in mirror slope estimation, ultimately supporting mirror development and design.



U.S. Department of Energy

HelioCon

HelioStat Consortium for
Concentrating Solar-Thermal Power

HelioStat Consortium Seminar series host:
Brooke Stanislawski

Register on Zoom: <https://bit.ly/4whJyxi>