HORIZON

Opportunity:

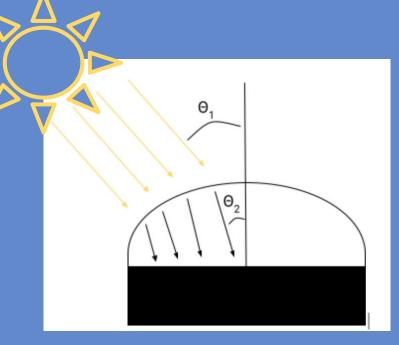
- Modifying the angle of incident light leads to increased power generation.
- Sun-tracking systems are tend to be 40% or more costly than fixed systems.

Solution:

 HORIZON modifies the incident angle using the shape of the lens and refractive index of PMMA to boost power generation.

<u>Benefits</u>:

- Single-axis sun-tracking systems increase efficiency by 30% over fixed systems.
- HORIZON will mimic the function of sun-tracking systems without the substantial costs associated.



 $I_{f} = I_{i} \cos(90 - \Theta)$ $\Theta_{2} < \Theta_{1}$ $I_{f,2} > I_{f,1}$