Project Title: Development of a Photonic Curing System for Solu ton-Processed Electrodes in Low-Cost Solar Cells

Project Summary: Conduc tve inks for electrodes are crucial in the development of emerging solar cell technologies. Tradi tonal hea tng methods, such as using hea tng stages or ovens, can cause unwanted solvent interac tons with underlying layers, poten tally degrading the ac tve materials in the solar cells. Infrared photonic curing, which involves using infrared illumina ton, provides a targeted hea tng approach that minimizes such interac tons by selec tvely hea tng the target conduc tve ink.

This projec
maintaining precise temperature control to avoid damaging the underlying layers. The developed system will be validated by applying it to the fabrica ton of