



The University of California Advanced Solar Technologies Institute (UC Solar)

The University of California Advanced Solar Technologies Institute (UC Solar) is a new multi-campus research institute made up of faculty from the University of California's Merced, Berkeley, and Santa Barbara campuses. UC Solar was established with a \$2.25 million grant from the University of California Office of Research and officially launched in 2010.

Headquartered at UC Merced, UC Solar creates technologies that make solar energy systems more efficient, more affordable, and the best choice for the people of California and the world. In addition, UC solar educates and develops tomorrow's solar energy leaders and entrepreneurs.

Initial UC Solar research areas include advancing the state-of-the-art in solar concentration (for photovoltaic and thermal systems), employing nanotechnology in both collector/concentrator and device structures, and developing new devices that capture useable energy in the UV portion of the solar spectrum.

Currently, UC Solar-affiliated researchers at UC Merced are designing non-tracking solar concentrators, developing more efficient optics for indoor lighting, and designing and building a low-cost solar thermal cooling prototype. Participating researchers at UC Berkeley are focusing on achieving very high-efficiency devices using nanoneedles, nanowires and quantum dots, and researchers at UC Santa Barbara are developing materials to harness power in the ultraviolet portion of the solar spectrum.

Faculty and students conducting research within UC Solar have access to the expertise that has been developed in UC Merced's *Nonimaging Optics Laboratory*, UC Berkeley's *Microfabrication and Optoelectronics Laboratories* and UC Santa Barbara's *California Nanosystems Institute*.

Through collaboration with industry and other stakeholders, UC Solar researchers are tasked with creating solar technologies that can be brought to the marketplace quickly. UC Solar researchers partner with industry participants through the UC Solar Industry Consortium, which attracts companies that design, produce, implement, manage and invest in solar technologies.

The UC Solar Director is UC Merced Professor Roland Winston, and the UC Solar Co-Directors are UC Berkeley Professor Constance Chang-Hasnian and UC Santa Barbara Professor Umesh Mishra. For more information, contact UC Solar Director of Development Ron Durbin at rdurbin@ucmerced.edu or 209-228-4565, or visit the website at <http://ucsolar.ucmerced.edu>.

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