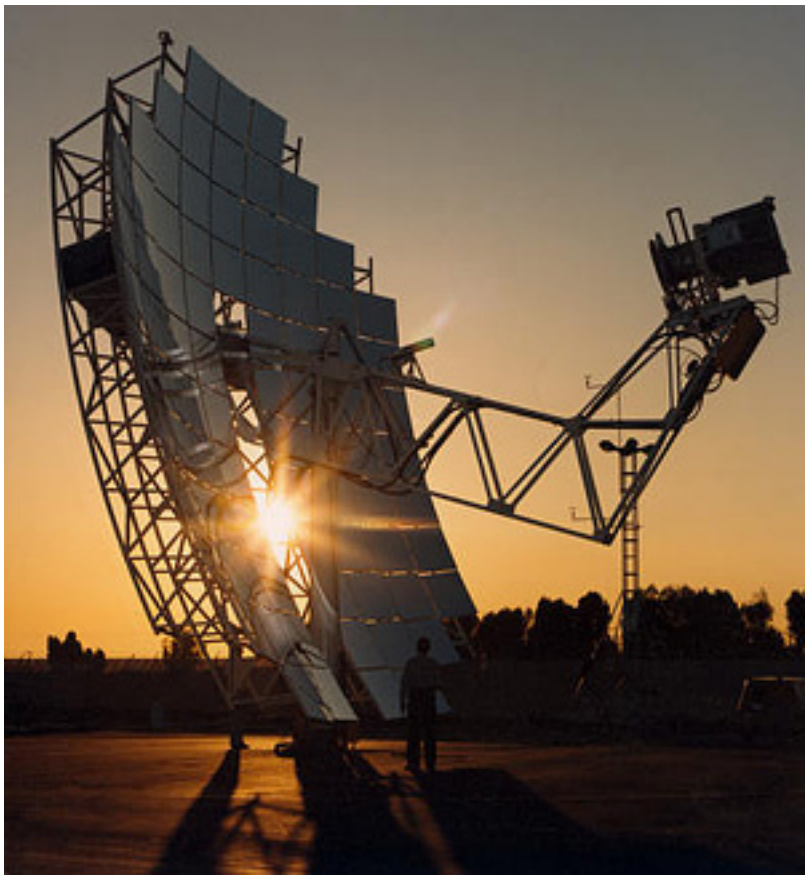
Alabama to Fund Initiative to Explore Solar Capture, Photovoltaics Based on Novel Panchromatic Dyes



The State of Alabama is slated to fund a 2-year research and development program on advanced solar energy capture and organic photovoltaics. The University of Alabama will explore the advanced energy capture properties of Lightwave Logic's Perkinamine class of dyes and other novel proprietary structures inspired by the original Perkinamine design.

The Perkinamine-based dyes possess a panchromatic absorption (absorbing light across a wide range of wavelengths) from the near infrared to the visible spectrum and into the near ultraviolet. This property enables these dyes to efficiently capture a wide range of solar radiation.

The dyes have also been developed to provide exceptional thermal stability and environmental stability that allows integration into existing electronic material manufacturing protocols that often require high temperature (250 ºC) processing. The electro-optic applications of Perkinamine dyes rely on laser irradiation to produce the desired non-linear optical responses and were developed to be phenomenally photostable (non-bleaching).

Anthony J. Arduengo III, Saxon Professor of Organic and Inorganic Chemistry at University of Alabama and leader of the UA initiative commented, "While the ultimate goals of our previous non-linear optic collaboration and this new photovoltaic effort are separate, their mutual reliance on similar synthetic feedstocks and methodology will provide considerable synergy for material production and process development. If successful, this effort will open vast opportunities for application of Lightwave's materials and technology to solar energy capture."

Lightwave Logic is a development stage company with electro-optical and Third-order polymer technology that holds advantages over conventional copper-based technology. The speed and cost advantages together with the flexibility of form factor will enable new applications and devices that can "change the way people live their live," according to the company.

http://smartenergyportal.net/