ABSTRACT

TITLE:	Solar Heat to Chemical Fuels
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PRESENTED AT:	4th Annual Natural & Behavioral Sciences Undergraduate Research Symposium Program

ABSTRACT: The solar thermochemical production of hydrogen from water via a metal oxide cycle has provided great interest to the greatly insolated "sunbelt" regions of the southwestern United States and other developing regions of the world. Used in conjunction, concentrated solar heat can generate enough thermal energy to split the water molecule into its constituent hydrogen and oxygen using a zinc catalyst. Hydrogen, an energy vector can be produced with virtually zero net greenhouse emissions. This method of hydrogen production provides an intriguing insight into the future of chemical fuels and a cleaner energy future.