

EDMONTON DISTINGUISHED LECTURE SERIES IN CHEMISTRY AND SEE PRESENTATION

Dr. Daniel G. Nocera

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will speak on

"The Chemistry of Solar Energy and Its Storage for the Non-Legacy World"

Abstract: The possibility of generating terawatts of carbon-free energy, and thus providing society with its most direct path to realizing a low greenhouse gas future, may be realized by making solar PE available to the 6 billion new energy users by high throughput manufacturing. Notwithstanding, current options to harness and store solar energy at the individual level are too expensive to be implemented, especially in a non-legacy world. The imperative to science is to develop new materials, reactions and processes that enable personalized solar energy to be sufficiently inexpensive to penetrate global energy markets and especially the non-legacy world. Personalized energy at low cost presents new basic research targets. Because personalized energy will be possible only if solar energy is a 24/7 available supply, the key enabler for personalized energy is inexpensive storage. Studies in the Nocera group have led to the creation of a new catalyst that captures the functional elements of photosynthesis and in doing so provides a highly manufacturable and inexpensive method to effect a carbon-neutral and sustainable method for solar storage – solar fuels from water-splitting. By developing an inexpensive 24/7 solar energy system for the individual, a carbon-neutral energy supply for 1×6 billion becomes available.

DATE: Tuesday, 16 March 2010
TIME: 3:30 p.m.
PLACE: ETLC 1-007

Other Events:

March 15, 7:30 pm, Telus 150, University of Alberta

“Personalized Energy for 1 (\times 6 Billion): A Solution to the Global Energy Challenge”

Panel Discussion with Eddy Isaacs (CEO, Energy and Environment Solutions, Alberta Innovates) and Murray Gray (CRC Professor of Engineering, University of Alberta) to follow March 15 event.