

Metal Oxide-based Thermochemical Redox Processes for Producing Solar Fuels and Storing Thermal Energy



Dr. James E. Miller

Principal Member of Technical Staff, Sandia National Laboratories

Dr. Miller's presentation will provide an understanding of the opportunities, requirements, and challenges presented by metal oxide thermochemistry and show recent progress towards developing materials, components, and systems for thermochemical energy storage and CO₂/H₂O splitting.

James E. Miller is a chemical engineer who has been involved in energy, materials, and chemical processing research at Sandia National Laboratories for almost 25 years. His work has touched on diverse topics ranging from hydroprocessing, to catalytic oxidation, lignin depolymerization, treatment of radioactive waste and automobile exhaust, and desalination. In recent years his efforts have been largely directed towards metal-oxide based solar thermochemistry for the production of synthetic fuels from carbon dioxide and water and for thermochemical energy storage. Dr. Miller has co-authored over 100 technical documents, holds six patents, and is the recipient of two R&D 100 Awards.

Wednesday, November 2, 2016

11:30 a.m. Lunch

12:00 - 1:30 p.m. Lecture/Discussion

Wrigley Hall, Room 481

Arizona State University, Tempe campus

This event is hosted by Ellen B. Stechel,
Deputy Director, ASU LightWorks

RSVP: sustainability.asu.edu/events