

## "Microencapsulated Phase Change Materials (MPCMs) for Energy Efficiency Enhancement"

## Presented by Dr. Ehsan Languri

## Abstract

Thermal energy storage and energy conversion research has recently gained renewed interest with great growth potential. In this seminar, a successful application of micro-encapsulated phase change material slurries to ground source heat pump as an enhanced heat transfer fluid will be presented. Thermal energy storage and conversion present research opportunities in many areas including Heating, Ventilation and Air Conditioning (HVAC).

## About the Speaker

Dr. Ehsan Languri earned his Ph.D. degree in Mechanical Engineering from University of Wisconsin in Milwaukee, in 2011, where he worked on transport in porous media. His Ph.D. worked was followed by two Postdoctoral Fellow appointments in renewable energy conversion and micro-encapsulated phase change materials for energy storage at University of Wisconsin in Milwaukee and Texas A&M University, respectively. He joined Applied Research Associates (ARA), a major Department of Defense contractor, as a Senior Mechanical Engineer where he led the CFD efforts of SMART Energy Group for over two years. Dr. Languri joined Tennessee Tech University as an Assistant Professor in August 2014 where he and his research team primarily focus on energy conservation and storage systems as well as desalination technologies.

Date: Thursday, November 13, 2014 Time: 12 P.M. – 1 P.M. Bring your own lunch; beverages and snacks to be provided. Location: Prescott 225