COLLEGE OF ENGINEERING

The Graduate Studies and Research Committee (GSRC) at the college of Engineering gladly invite you to attend the seminar entitled:

Ongoing research on Ionic Liquids development and application

Presenter: Dr. Abdulaziz Elsinawi

Day and time: Tuesday 29/9/2020 at 10:30 am
12/2/1442

Abstract

Ionic liquids provide a unique class of materials, which inherently overcome some of the issues with regard to energy storage and heat transfer. Many of their physicochemical properties may be controlled by subtle and simple changes to their structure including density, viscosity, heat capacity and thermal conductivity. They have also been shown to interact strongly with nano-particles to provide enhancements in their thermal properties. In addition, ionic liquids lend themselves as energy storage materials by modifying existing energy storage systems to be formulated as ionic liquids and therefore providing tailored properties as well as increased safety or using phase transitions in ionic liquid media to provide effective heat storage inherently. Within this existing research, ionic liquids are being studied as the basis for heat transfer materials for a range of applications both at low and high temperature for applications such as solar energy conversion, HVAC (heating, ventilating, and air conditioning) as well as low temperature cooling.

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