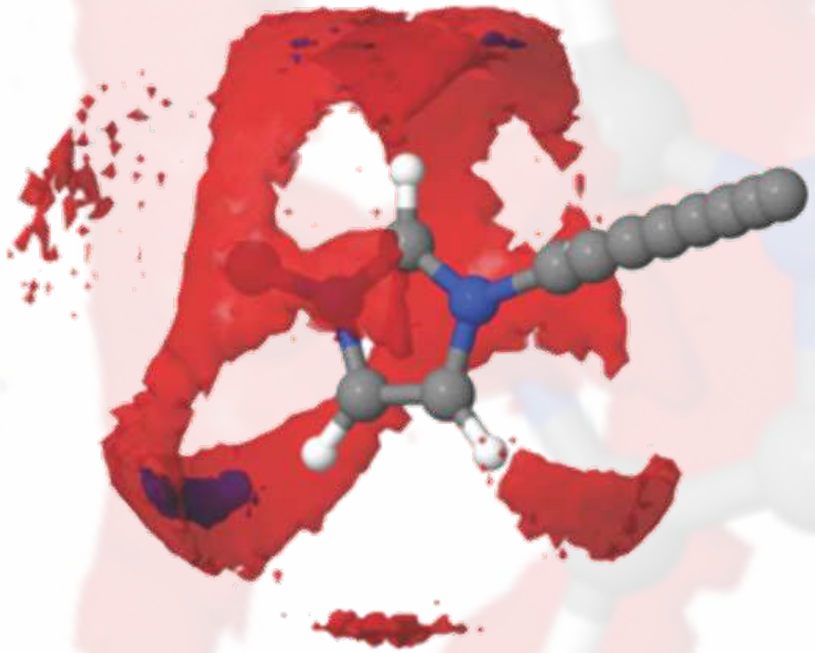

Conference

ROOM - TEMPERATURE IONIC LIQUIDS:

Effects of water on the structure and dynamics

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Transmisión Video-Streaming http://ciencias.univalle.edu.co

Medellín: 21-22 septiembre 2015 UDEA / **Bogotá**: 23 septiembre 2015 ACCEFYN

ROOM-TEMPERATURE IONIC LIQUIDS: EFFECTS OF WATER ON THE STRUCTURE AND DYNAMICS

Room-temperature ionic liquids (RTILs) are receiving increased attention due to their unique properties, including non-volatility and solvating capability, leading to a wide range of potential uses in catalysis, separation technology, photovoltaics and fuel cells.

Understanding how the structure and dynamics of RTILs change when water is added to them is essential. Until now, most of the information concerning the behavior of IL-water mixtures comes from numerical simulations.

While these can provide a very detailed picture of both the structure and dynamics of such mixtures, the potentials employed and their results need to be validated experimentally. The combined use of neutrons and high-energy x-rays has proved to be a powerful probe of the structure and dynamics of such complex condensed systems.

In this talk I will review recent studies of the dynamics and structure of aqueous solutions of room temperature ionic liquids with this approach and compare the results with state-of-the-art molecular dynamics numerical simulations.

Invita:

Facultad de Ciencias Naturales y Exactas de la **Universidad del Valle**

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