



Cicle de conferències de química*

"From molten salts to ionic liquids"

Professor Jairton DuPont

Laboratory of Molecular Catalysis
Institute of Chemistry - UFRGS
Porto Alegre RS Brazil

It is described a journey into a nanostructured universe to better understand the unique properties of ionic liquids (ILs) and their modern applications.

Because molten salts have been known for centuries and have found limited uses, we try to explain why modern nonaqueous ILs deserve increased interest and curiosity. It is discussed the characteristics that distinguish modern nonaqueous ILs and compare them with classical molten salts. Modern ILs form preorganized structures, mainly through hydrogen bonding, that induce structural directionality. In contrast, classical salts form aggregates only through ionic bonds. In other words, weak interactions order the structures in modern ILs, while charges order the structure within classical salts. This structural organization of ILs can be used as entropic drivers (the "IL effect") for the preparation of well-defined nanoscale structures with extended order, either in the bulk phase or at the gas/vacuum interface.

Divendres 10 de febrer de 2012,11:30h Sala d'Actes Facultat de Ciències i Biociències

*Aquesta conferència forma part de les <u>activitats formatives programades</u> pel seguiment del progrés del doctorand

