

Nanoscale Organisation and Dynamics Group

University of Western Sydney



Ionic Liquids

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Ionic liquids are organic salts molten around room temperature. Good solvents for both ionic and non-ionic materials, they have low vapour pressures and are therefore non-volatile and non-flammable (though still combustible). Toxicities are believed to be low. Consequently they are likely to be useful in large scale processes where non-flammable solvents are desirable e.g. for CO₂ extraction, H₂ pumps for filling stations, cellulose extraction, Li-based automobile batteries etc etc. They are readily recyclable: thus their (present) high cost is balanced by reuse. There is an intense international effort to characterise their properties and develop applications, particularly in Germany, China and Japan.

However they are also of interest to physical scientists as a “new” class of liquids linking glassy materials with molecular liquids. As well as some general aspects of ionic liquids, this seminar discusses work on the transport properties (viscosity, electrical conductivity and ion self-diffusion) at high pressures undertaken at UNSW, Canberra (ADFA) and NIAIST, Sendai, Japan.

Staff and students at all levels are welcome to attend.

Venue and Time:

This talk will be held on Monday 30 August at 2 PM at the Campbelltown Campus in Building 30, Small Lecture Theatre (30:G:213).

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