JUM@P '11: Joint Users' Meeting at PSI 2011



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Soft and complex matter investigations using neutron imaging: An overview

Friday, 16 September 2011 16:00 (20 minutes)

Diffusion of solvents in and through soft and complex matter matrices is not only of fundamental interest but is also important for applications as wide-ranging as drug delivery and food packaging. Due to the relatively recent advent of digital detector systems and stable, high resolution scintillators, neutron radiography can now be used to follow in real time and in-situ solvent influx into such samples. In this presentation I will illustrate the potential of this technique to yield high quality quantitative data for a range of systems. These include biologically-relevant lipids, polymers and nanoporous materials. After presenting an overview of our results, I will discuss in detail some specific examples which illustrate several experimental and data analysis details particular to this type of sample.

Please specify poster or talk

talk

Please specify the session

Imaging (or Soft condensed matter)

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