

Internal Seminar

Aqueous and Non-aqueous dispersions of MoS₂ nanosheets

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Stability of exfoliated two dimensional materials are usually explained using empirical parameters, such as Hansen's and Hildebrandt. However, these parameters lack the fundamental insight of interactions going between the nanosheets and the solvent media. In the present talk, experimental methods, such as NMR spectroscopy, would be explored to shed lights on various aspects of the dynamics between nanosheet and the solvent system, and classical molecular dynamics simulations would be used to rationalize the observed results. It would also be demonstrated that how MD simulations, can predict the formation of novel engineered materials. A very brief description of aberrations on image formation in electron microscopes would be discussed along with its correction from exit wave reconstruction using PHASOR, a simple image phase reconstructing program written in MATLAB.

Tuesday, Aug 7th 2018

5:30 PM (Tea/Coffee at 5:00 PM)

Seminar Hall, TIFR-H