

Internal Seminar

Multi-Dimensional Solid-State NMR – Methods Development and Application to Materials

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In recent years, the scope of application of solid-state NMR to different areas has been witnessing a significant increase. Primarily, this is due to the possibility of routine use of proton NMR spectroscopy enabled by the availability of ultrafast MAS at speeds of 60 kHz and above. Side by side, solid-state NMR is also being increasingly used for the study of novel materials of significant application potential. The present talk is relevant to both the above aspects. In the first part, method developments that would enable effective use of proton NMR spectroscopy in the field of solid state are presented. In the second part, investigations on newly proposed fast ionic conducting materials are presented. Solid-state NMR studies together with X-ray diffraction and conductivity studies have been carried out which enable understanding the correlation between phase composition and properties of the materials.

Monday, May 13th 2019 1:30 PM (Tea/Coffee at 1:15 PM) Seminar Hall, TIFR-H