

## **Seminar**

### **Advancing solid-state NMR methods for applications to nucleic acids**

**Rajat Garg**

**University of Wisconsin Madison, WI**

Solid-state NMR (ssNMR) spectroscopy has emerged as an indispensable tool to probe macromolecules such as microcrystalline enzymes, amyloid fibrils, and membrane proteins. While ssNMR structure calculation protocols for proteins have matured significantly, their application to nucleic acids has been limited. To this end, working here at NMRFAM, we have developed structure calculation protocol for determining the structure of an RNA quadruplex using ssNMR. During my talk, I will present these results along with ways to improve spectral resolution using (low power) supercycled TPPM decoupling and software protocols developed for data analysis of ssNMR data of biomolecules.

***Wednesday, Apr 16<sup>th</sup> 2025***

***16:00 Hrs (Tea / Coffee 15:45 Hrs)***

***Seminar Hall, TIFRH***