ACS Local Section
North Jersey

Structure and Chemical Kinetics of Heterogenous Biomolecular Assemblies with Solid-State NMR

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Date: **February 17th, 2022**

Time: 7:00 pm EST via Microsoft Teams

Abstract
Solid-state NMR can be used to measure atomic-resolution structure and chemical kinetics in a broad range of systems, including those that lack periodicity, have defects, or other disorders. I will discuss biophysics studies where detailed local conformational information is attenable despite long-range (nm-μm) disorder. I will highlight our recent study of TIA1, a protein involved in several neurodegenerative diseases. Even in this large (43 kDa) and complex protein, we could obtain site-specific information necessary for understanding the protein's mechanisms and ligand binding. I will also discuss several Solid-state NMR methods development projects. I will introduce a class of recoupling pulse sequences that use an "interleaving" scheme to tune effective Hamiltonian scaling factors.

Connection Information
This will be a virtual meeting hosted via Microsoft Teams. A direct link to the meeting is located HERE. Further information can be found on the NMR Topical Group website (https://www.njacs.org/nmr-spectroscopy-topical-group). Please reach out to Jonathan Williams (jwilliams@njacs.org) or Tom Popp (thomas.osbornpopp@rutgers.edu) with any questions.

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