



ACS Local Section  
North Jersey

## Development of NMR Instrumentation to Study Complex Materials

**Speaker: Tom Osborn Popp, Ph.D.**

*NMR Topical Group Co-Chair 2022*

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Department of Chemistry &  
Chemical Biology



**Date: January 20<sup>th</sup>, 2022**

**Time: 7:00 pm EST via Microsoft Teams**

### Abstract

Many functional inorganic and biological materials are also highly complex in structure and composition on length scales of nanometers or greater. Solid state NMR is particularly well-suited to study these materials, due to its ability to observe local structure and site-specific dynamics. In this talk, I will share how solid-state NMR can be used to reveal new details about complex materials ranging from crystalline, porous metal-organic frameworks (MOFs) to arthropod silk and bacterial biomass. I will also describe new developments in solid state NMR instrumentation, including a new paradigm for magic-angle spinning (MAS) experiments: spherical MAS rotors.

### 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 ([jonathan.williams@bms.com](mailto:jonathan.williams@bms.com)) or Tom Popp ([thomas.osbornpopp@rutgers.edu](mailto:thomas.osbornpopp@rutgers.edu)) with any questions.

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*Presented by the NMR Topical Group – North Jersey ACS*