



THE OHIO STATE UNIVERSITY



Solid-State NMR Researcher at CCIC/National Gateway Ultrahigh Field NMR Center



Position Description:

Solid-state NMR researcher at the shared Campus Chemical Instrument Center (CCIC) NMR facility and the National Gateway Ultrahigh Field NMR Center (Gateway) at the Ohio State University that houses the first 1.2 GHz NMR spectrometer in the nation. The individual in this research role will independently lead their assigned research initiatives and projects related to supporting the state-of-the-art facility instrumentation, and will implement, develop, and apply state-of-the-art solid-state NMR methods on CCIC/Gateway 1.2 GHz, 800 MHz, and DNP 600 MHz NMR spectrometers for structural and dynamic studies of proteins, RNA/DNA, polymers, and materials. The individual will be considered a research expert in solid-state NMR instrumentation and train, advise, and actively assist in research efforts of CCIC/Gateway NMR researchers/users, including graduate students and postdocs, on the use of NMR spectrometers, processing, and analysis of NMR data; initiate and lead projects and collaborations with internal users and external users from both academia and industry that take advantage of CCIC/Gateway NMR resources; participate as instructor in practical NMR workshops, publish research in peer-reviewed journals; present research and showcase CCIC/Gateway NMR at conferences (talks or posters); participate in grant writing for the addition, upgrade and replacement of CCIC/Gateway NMR hardware; reach out and promote NMR capabilities to OSU and national CCIC/Gateway NMR users by email, up-to-date website information, journals and social media; actively participate in CCIC/Gateway NMR seminars. The individual will assist with spectrometer maintenance, scheduling and monthly billing with other CCIC/Gateway NMR staff; collaboratively work with other CCIC/Gateway NMR research scientists to achieve the research missions of CCIC/Gateway NMR; promote and ensure a safe, clean, and secure facility; perform other duties as assigned by CCIC/Gateway NMR director or associate director/staff lead.

Required/Desired Qualifications:

Ph.D. in Chemistry, Biochemistry, Physics, or related area with 5-6 years demonstrated ability as a productive researcher in the field of solid-state NMR. Extensive experience with the operation of Bruker NMR spectrometers, including Topspin and other common NMR software. Excellent computer skills (Linux operating systems, Windows, macOS); ability to work in close vicinity of strong magnetic fields and perform cryogen fills of NMR magnets; excellent communication skills to effectively interact with faculty and other researchers in a professional manner. Experience with dynamic nuclear polarization solid-state NMR, experience with NMR hardware and maintenance and RF electronics, and postdoctoral research experience are desirable but not required.

Questions: Contact Chris Jaroniec (jaroniec.1@osu.edu) or Alex Hansen (hansen.434@osu.edu).

Position ID: R101914

Link: https://osu.wd1.myworkdayjobs.com/OSUCareers/job/Columbus-Campus/Researcher--CCIC-Gateway-NMR_R101914-1