

**Technical Officer | SHyNE Resource**  
NUANCE Center - Northwestern University

NUANCE, Northwestern University's Atomic and Nanoscale Characterization Experimental Center, is seeking candidates for a Technical Officer (TO) position for SHyNE Resource, a 10-year, \$10.5M NSF facilities infrastructure program. [NUANCE](#) manages over 100 instruments in service for characterization, analysis, and fabrication for over 1000 unique users from 145 faculty groups in 35 departments across Northwestern. As the Midwest node of the NSF's National Nanotechnology Coordinated Infrastructure ([NNCI](#)) network, Soft-Hybrid Nanotechnology Experimental ([SHyNE](#)) Resource provides operational support to 5 other open-access research facilities (IMSERC, NUCAPT, SQI, Cohen XRD, PLD) at Northwestern and the Pritzker Nanofabrication Facility (PNF) at University of Chicago. Through these enhanced outreach efforts, NUANCE and SHyNE annually works with over 200 external researchers from regional academic, non-profit, government, and commercial/industrial organizations.

The preferred candidate will have expertise in advanced fabrication, characterization, and analysis techniques/skills and have demonstrated the ability to facilitate hands-on laboratory courses and assist in developing curricula related to advanced electron microscopy and/or micro-/nanofabrication. The candidate will be familiar with software for simulation, modeling, and tomographic reconstruction, as well as other software-related advanced imaging/spectroscopy analysis. The successful candidate will be customer-oriented and demonstrate the ability to coordinate with technical staff to solve innovative problems in atomic and nanoscale characterization and fabrication.

The selected candidate will regularly engage and consult with potential users on experiment design and research in electron microscopy and cleanroom fabrication. There are ample opportunities for professional development executing the position duties, including:

External User program

- Explore and engage with potential regional External Users (generate and maintain client database);
- Demonstrate Center value proposition to potential External Users;
- Oversee External Users' multi-facility access, agreements (NDAs, Master Services Agreement, etc.).

Facilities management

- Assess equipment needs, develop and submit sponsored research proposals;
- Coordinate collaborative research in User facilities;
- Execute strategic planning, data management, reporting,

Community Engagement

- Manage community engagement programs (REU/RET, Museums, Nano-Journalism, etc.);
- Liaise with NNCI sites and coordinating office, NU Alumni and Corporate Relations;
- Oversee Center Web/Social Media communications.

The preferred candidate will have the following qualifications:

- Obtained a PhD in physical or life sciences and/or engineering field;
- 5+ years' professional experience managing open-access research facilities;
- Demonstrated progressively greater responsibilities in research environment;
- Experience and/or strong interest in the business of university research and education;
- Ability to travel domestically and occasional evening/weekend events.

Complete applications will include 1) Introduction letter, 2) Curriculum Vitae, and 3) Contact information for three references (names, position, postal & email addresses, phone number). Materials will be submitted as a single PDF to: [nuance@northwestern.edu](mailto:nuance@northwestern.edu)

*Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.*