Soft and Hybrid Nanotechnology Experimental (SHyNE) Resource
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SHyNE
Soft and Hybrid Nanotechnology Experimental Resource

Northwestern University

THE UNIVERSITY OF CHICAGO

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BEGIN YOUR PROJECT
www.shyne.northwestern.edu

NANOSCALE CHARACTERIZATION

SHyNE facilities offer a huge array of characterization tools that span length scales across several orders of magnitude from atomic/molecular studies all the way to macroscopic structures. Our advanced instrumentation, accompanied by our expert technical staff, offers powerful options in the areas of:

- Composition Analysis
- Electrical/Mechanical
- Life Sciences Analysis
- Structural Analysis
- Surface Analysis

NANOSCALE FABRICATION

SHyNE combines and streamlines access to the nanofabrication facilities at Northwestern University and the University of Chicago. Dedicated and experienced micro/nanofab technical staff and researchers are available to help you design and execute your projects. With a combined cleanroom footprint of nearly 18,000 square feet and expertise in silicon, III-V, MEMS, and emerging applications, we are eager to take on your project.

- Dry Etching
- Lithography
- Packaging, Testing and Measurement
- Thermal Processing
- Thin Film Deposition
- Wet Processing

Expert Technical Staff

State-of-the-Art Instrumentation

Hands-on Access

High Quality Training

Illuminate Your Research

KEY CAPABILITIES

- Atom Probe Tomography
- Atomic Force Microscopy
- Electrical Characterization
- X-Ray Photoelectron Spectroscopy
- Materials Characterization
- Molecular Characterization
- Cleanroom Fabrication
- Advanced Metrology
- Raman Spectroscopy
- Electron Microscopy
- Thin Film Deposition
- Mass Spectrometry
- Peptide Synthesis
- X-Ray Diffraction

ACCESS MODES

- Self-service
  Training and Independent Usage
- Assisted Use
  On-site Staff Assisted Usage
- Full-Service
  SHyNE Staff Provide Consultation and Execute Project

SHYNE OPEN-ACCESS USER FACILITIES

NUANCE
Atomic and Nanoscale Characterization Experimental Center

J.B. Cohen XRD Facility

SQI
Simpson Querrey Institute

INSERC
INTEGRATED MOLECULAR STRUCTURE EDUCATION and RESEARCH CENTER

NUCAPT
Northwestern University Center for Atom-Probe Tomography

Pritzker Nanofabrication Facility

NUFAB
NORTHWESTERN UNIVERSITY MICRO/NANO FABRICATION FACILITY

Northwestern
INTERNATIONAL INSTITUTE FOR NANOTECHNOLOGY

THE INSTITUTE FOR MOLECULAR ENGINEERING

National Nanotechnology Coordinated Infrastructure