

# Soft and Hybrid Nanotechnology Experimental (SHyNE) Resource

## NSF ECCS-2025633

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**SHyNE**  
Soft and Hybrid Nanotechnology  
Experimental Resource

Northwestern  
University



THE UNIVERSITY OF  
CHICAGO

Northwestern

INTERNATIONAL INSTITUTE FOR  
NANOTECHNOLOGY



PRITZKER SCHOOL OF  
MOLECULAR ENGINEERING

THE UNIVERSITY OF CHICAGO

## Illuminate Your Research

EXPERT TECHNICAL  
STAFF

STATE-OF-THE-ART  
INSTRUMENTATION

HANDS-ON ACCESS

HIGH QUALITY  
TRAINING

### NANOSCALE CHARACTERIZATION

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

### NANOSCALE FABRICATION

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

### WORLD-CLASS EXPERTISE AND INSTRUMENTS

#### OPEN TO RESEARCHERS:

- Local, Regional, National, Global
- Industry, Academic, Government, Non-Profit

#### ACCESS MODES

##### Full-Service

*SHyNE Staff Provides Consultation and Executes Project*

##### Self-service

*On-site Training and Independent Usage*

##### Assisted Use

*On-site Staff-Assisted Usage*

## EDUCATION AND OUTREACH

- Nano-Journalism
- Industry Liaison
- Vendor Demos
- Short Courses
- K-12 Activities
- Chicago Museums
- Summer REU & RET



CONNECT WITH US:   



**Prof. Vinayak P. Dravid**  
Director, SHyNE Resource  
President Abraham Harris  
Chaired Professor of  
Materials Science & Engineering

## BEGIN YOUR PROJECT

[www.shyne.northwestern.edu](http://www.shyne.northwestern.edu)

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[shyne@northwestern.edu](mailto:shyne@northwestern.edu)



National Nanotechnology  
Coordinated Infrastructure

### KEY CAPABILITIES

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