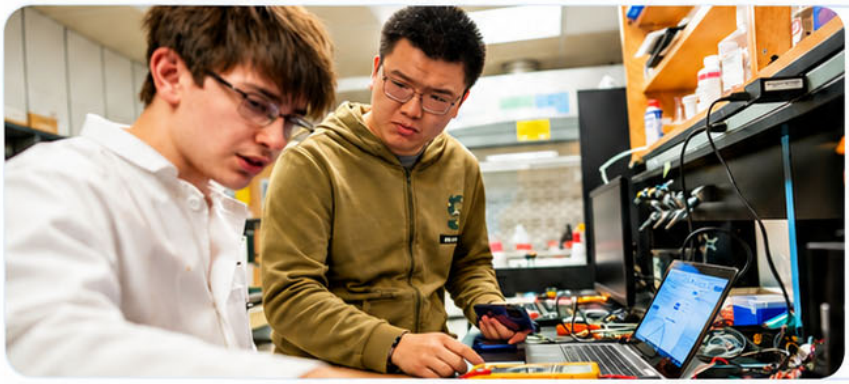
Zhao Nano Lab
UNIVERSITY OF GEORGIA

Undergraduate Research Opportunity



Experimental Research

Hands-on research in spectroscopy, nanofabrication, sensors, and quantitative analysis

Join **Zhao Nano Lab** to explore hands-on experimental research at the intersection of physics, materials, nanotechnology, sensing, and data-driven discovery. Undergraduate students can participate in real projects, develop practical skills, and contribute to publications and new technologies.

Future Project Directions

Small Equipment Design
Build low-cost experimental setups, fixtures, holders, and custom lab tools.

Nanofabrication
Assist with deposition, patterning, and fabrication of micro/nanostructures.

Sensor Development
Develop optical, SERS, hydrogen/gas, and related sensing platforms.

Machine Learning Development
Work on data analysis, spectral processing, and AI/ML models.

Theory & Simulation
Support modeling, numerical calculations, and interpretation of experimental results.

Characterization & Testing
Perform spectroscopy, microscopy, device testing, and performance analysis.

What You Will Learn

- Experimental design
- Data collection and analysis
- Instrumentation and prototyping
- Scientific coding and ML
- Teamwork and communication
- Research presentation and writing

Who Should Apply

- Physics, engineering, chemistry, materials science, computer science, or related backgrounds
- Motivated undergraduate students interested in hands-on research
- Experience is helpful but not required

Opportunities

- Research experience
- Mentorship
- Conference/poster presentations
- Possible publications
- Preparation for graduate study and careers

Interested? Contact Prof. Yiping Zhao

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Learn more about our research areas and student opportunities online.