Zhao Nano Lab

Department of Physics and Astronomy
University of Georgia

UNIVERSITY OF GEORGIA

GRADUATE STUDENT RECRUITMENT

SmartIPL

Smartphone-Based Instrumentation and Innovative Physics Laboratories

Join the Zhao Nano Lab to develop SmartIPL platforms and next-generation laboratory experiments for physics, engineering, chemistry, and interdisciplinary education and research.

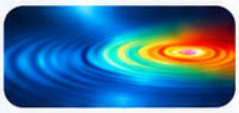


Future Research Projects



SmartIPL Platform Development

New smartphone-based instruments, open hardware/software, and modular lab systems



Physics Laboratory Expansion

Smart experiments for mechanics, thermal physics, wave/sound, fluid dynamics, and E&M



Electronics & Circuits

Smart measurements and hands-on labs for circuit analysis, sensors, and devices



SmartIPL for Sports

Motion tracking, biomechanics, and performance analysis using smartphones



Interdisciplinary Applications

Extend SmartIPL to engineering (e.g., materials, mechanical, biomedical) and chemistry (e.g., spectroscopy, reaction monitoring)

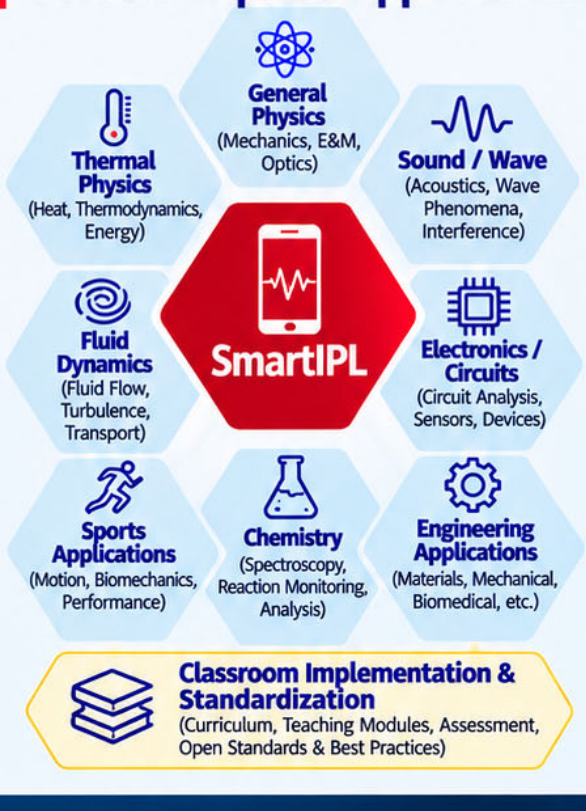


NEW

Classroom Implementation & Standardization

Develop curriculum, teaching modules, and assessment; establish open standards, best practices, and a shared SmartIPL resource ecosystem

Research Topics & Applications



Why Join Us?

- Pioneer smart instrumentation and innovative laboratory education
- Interdisciplinary research across physics, engineering, chemistry, and sports science
- Access to advanced facilities and collaborative resources
- Strong publication record and career development

We Are Looking For

- Motivated Ph.D. students
- Backgrounds in physics, engineering, computer science, chemistry, or related fields
- Interest in instrumentation, experiment design, and educational technology
- Eagerness to develop open-source tools and real-world applications

Apply Now

Learn more about our research and applications at:

www.zhao-nano-lab.com