

Contact Information: Dr. Xiaocun Lu
Department of Chemistry & Biochemistry
Clarkson University

CU Box 5810, 8 Clarkson Ave., Potsdam, NY 13699

Phone: (315) 268-4411 Email: xlu@clarkson.edu

Website: www.LuResearchGroup.com

Multiple Fully Funded Ph.D. & Postdoctoral Opportunities in Biomaterial Sensors, Cell Imaging, and Cell Mechanical Sensing Available Immediately

The Department of Chemistry & Biochemistry at Clarkson University is seeking highly motivated candidates for multiple fully funded Ph.D. & postdoctoral scholar positions in the Laboratory for Photonics-Mechanics-Chemistry Synergy (PhotoMeChem), directed by Dr. Xiaocun Lu. These positions are available immediately and offer a unique opportunity to engage in cutting-edge research in mechanoresponsive biomaterials, biomechanics, and bioimaging..

Research Areas and Projects

- Design and synthesis of molecular mechanical sensors.
- Investigation of mechanical transduction pathways across multiple scales in biomaterials.
- Development of nanosensors for biomechanics and cell mechanics.
- · High-resolution Fluorescence Imaging.
- Conducting simulations using Density Functional Theory (DFT) and Molecular Dynamics (MD).

Minimum Qualifications

Postdoctoral Applicants

- Ph.D. in Chemistry, Bioengineering, Chemical Engineering, Materials Science, or related fields, conferred within the last five years.
- Demonstrated expertise in biomaterials, cell imaging, or cell mechanics is preferred.
- Strong academic record and communication skills.
- Experience with cell imaging, cell mechanics, or fluorescence imaging is highly desirable.
- Candidates who can start before February 1, 2026, will receive priority consideration.

Ph.D. Applicants

- B.S./M.S. in Chemistry, Chemical Engineering, Materials Science, Bioengineering, or related fields.
- Research experience in biomaterials, cell imaging, and cell mechanics is preferred.
- Strong academic record and proficiency in the relevant research areas.
- Applicants who are available to start before January 15, 2026, will receive priority consideration.

About the Lu Research Group and Clarkson University

The Lu Research Group at Clarkson University is an interdisciplinary team focused on the intersection of chemistry, biomaterials, biomechanics, and bioimaging. Dr. Xiaocun Lu, an Associate Professor at Clarkson University, leads this collaborative research effort. The group's work spans from molecular design to advanced simulation techniques, contributing to innovations in mechanoresponsive materials, biomechanics, and advanced ultrasound imaging. More information is available on the group webpage, click here.

Clarkson University, located in Potsdam, New York, offers a vibrant academic environment in a classic college town setting. Potsdam is known for its family-friendly atmosphere and modest cost of living, making it an attractive place for students and researchers alike

Application Instructions

Please submit the following to Dr. Xiaocun Lu (<u>xlu@clarkson.edu</u>). Applications will be reviewed on a rolling basis until the position is filled. <u>Due to the high volume of applications</u>, only candidates whose backgrounds align with the specific research needs of the group will be contacted for further consideration.

<u>Postdoctoral Applicants</u>: Please submit the following to Dr. Xiaocun Lu (<u>xlu@clarkson.edu</u>). Applications will be reviewed on a rolling basis until the position is filled.

- 1. Cover letter detailing your research interests, experience, and career goals.
- 2. A detailed CV, including a full publication list.
- 3. Three representative first-author publications.
- 4. Contact information for three references.

<u>Ph.D. Applicants</u>: Please send the following materials to Dr. Xiaocun Lu (<u>xlu@clarkson.edu</u>). Application review will begin immediately and continue until the positions are filled.

- 1. CV/Resume
- 2. Contact information for three references.
- 3. Academic transcripts.
- 4. A brief description of your research background and interests.
- 5. Proof of English language proficiency, TOEFL or IELTS (for international applicants)

This is an exciting opportunity to contribute to innovative research in a dynamic and supportive academic environment. We look forward to receiving your application!