

**1) Undergraduate Research Experience, Laboratory Assistant
(Instrumentation Project)**

Posting Date: April 10, 2007

Department: Physics

Campus Address: SI 124

Job Title & Description: Undergraduate Research Experience, Laboratory Assistant

Skills Needed: Applicants must be declared Physics, Chemistry, Chemical Engineering majors/minors. Completion of University Physics I, and II (PHY 241/3, PHY 242/4) by the end of Spring 08 is required. Completion of an advanced physics lab course/s (e.g. PHY 335; PHY 360, PHY 411, PHY 440) is a plus. Preference will be given to Physics Majors/Minors and university Honors/Scholars.

This position involves optimization and re-design of a new Light Scattering Spectroscopy experimental set up. You will learn to work with modern optical systems by setting up, aligning, testing, and interfacing the equipment. Taking and interpreting initial data will be a part of the project.

Pay Rate: \$10/hour

This position requires a FWS award

All eligible (NWS and FWS) students may apply

Days & Times Needed: flexible

Period needed: Start date: not sooner than May 26, but not later than July 7, 2008

Hours Per Week: 30 hours/week for 8 weeks or 40 hours/week for 6 weeks

**How to Apply: Send resume and cover letter to:
Dr. Kiril A. Streletzky
Physics Department, SI 124, 216-687-2433
e-mail: k.streletzky@csuohio.edu**

You will be contacted if selected for an interview.

2) Undergraduate Research Experience, Research Laboratory Assistant
(Michelle Project)

Posting Date: April 14, 2007

Department: Physics

Campus Address: SI 124

Job Title & Description: Undergraduate Research Experience, Research Laboratory Assistant

Skills Needed: Applicants must be declared Physics, Chemistry, Chemical Engineering majors. Completion of University Physics I, II, and Modern Physics (PHY 241/3, PHY 242/4, PHY 330) by the end of Spring 08 is required. Completion of an advanced physics lab course (e.g. Modern Physics Lab, PHY 335; Optics Lab, PHY 440, etc) is preferred. Preference will be given to current honors students in CSU's Honors Program and/or Physics Majors/Minors. Some experience in working with delicate physics equipment, glassware, chemicals, and data analysis is required.

This position will use Light Scattering Spectroscopy to explore structure, dynamics, and water content of a surfactant micelles. The position will involve experimental optics, some basic polymer bench chemistry, work with scientific literature, and a lot of data taking and analysis.

Pay Rate: \$11-\$12/hour

This position requires a FWS award
 All eligible (NWS and FWS) students may apply

Days & Times Needed: flexible

Period needed: Start date: May 26, 2007

Hours Per Week: 30-35 hours a week for 12 weeks

How to Apply: Send resume and cover letter to:
Dr. Kiril A. Streletzky
Physics Department, SI 124, 216-687-2433
e-mail: k.streletzky@csuohio.edu

You will be contacted if selected for an interview.

**3) Undergraduate Research Experience, Lab Assistant
(Polymeric Nanoparticles Project/Chemistry)**

Posting Date: April 22, 2008

Department: Physics/Chemistry

Campus Address: SI 248

Job Title & Description: Undergraduate Research Experience, Lab Assistant

Skills Needed: Applicants must be declared Physics, Chemistry, Chemical Engineering or Bioengineering majors. Completion of Introductory Physics sequence (PHY 231/2 or 241/242) and Chemistry lab (Analytical, Physical, or Instrumental analysis) by the end of Spring 08 is required. Preference will be given to current honors students in CSU's Honors Program. Experience in working with glassware/chemicals and data analysis is required. Knowledge of AFM, UV Visible Fluorescence methods is preferred.

This position will involve a direct work with Physical Chemistry/Physics methods (AFM, UV/Visible Fluorescence, DLS) both at the Chemistry and Physics Depts of CSU. The project's goal is to explore loading capability of a potential drug delivery system: polymer microgel nanoparticles. The project will require basic polymer bench chemistry, ability to learn quickly/use efficiently the abovementioned methods, a lot of data taking and analysis.

Pay Rate/Range: \$10/hour

This position requires a FWS award
 All eligible (NWS and FWS) students may apply

Days & Times Needed: flexible

Period needed: Start date: May 19, 2008

Hours Per Week: up to 40 hours a week for 12 weeks

**How to Apply: Send resume and cover letter to:
Dr. Kiril A. Streletzky, Physics Department, SI 124
e-mail: k.streletzky@csuohio.edu**

You will be contacted if selected for an interview.

**4) Lab Research Assistant (graduate or undergraduate)
(Polymeric Nanoparticles Project/Physics)**

Posting Date: April 28, 2008

Department: Physics

Campus Address: SI 248

Job Title & Description: Lab Research Assistant (graduate or undergraduate)

Skills Needed: Applicants must be declared Physics, Chemistry, Chemical Engineering or Bioengineering majors. Completion of Introductory Physics sequence and Chemistry labs (Analytical, Physical, or Instrumental analysis) by the end of Spring 08 is required. Experience in working with glassware/chemicals, data analysis, and some knowledge of Dynamic Light Scattering method is required.

This position will involve Dynamic Light Scattering experiments and their analysis methods on a potential drug delivery system: polymeric microgel nanoparticles.

Pay Rate/Range: \$12/hour

This position requires a FWS award
 All eligible (NWS and FWS) students may apply

Days & Times Needed: flexible

Period needed: Start date: May 20, 2008

Hours Per Week: up to 40 hours a week for 4-6 weeks

**How to Apply: Send resume and cover letter to:
Dr. Kiril A. Streletzky, Physics Department, SI 124
e-mail: k.streletzky@csuohio.edu**

You will be contacted if selected for an interview.

**5) Light Scattering Laboratory Research Assistant
(Polymer Solutions Dynamics Project)**

Posting Date: May 1, 2008

Department: Physics

Campus Address: SI 124

Job Title & Description: Light Scattering Laboratory Research Assistant

Skills Needed: The preference will be given to applicants who are current members of CSU's Honors or Scholars Programs. Completion of University Physics I, II, and Modern Physics (PHY 241, PHY 242, PHY 330) by the end of Spring 08 is required. Some work experience (even as a project) in active research lab is required. Completion of one of the advanced physics lab courses (PHY 335, PHY 360, PHY 411, PHY 455) is strongly preferred.

This research assistant position involves Dynamic and Static Light Scattering experiments on concentrated polymer solutions. You will work with modern optical techniques and data analysis based on polymer dynamics theories. The position involves some work with the literature and writing a technical report about the results.

Pay Rate/Range: \$12/hour

This position requires a FWS award

All eligible (NWS and FWS) students may apply

Days & Times Needed: flexible

Period needed: May 12 – Aug 22, 08

Hours Per Week: up to 40 hours/week for 15 weeks

**How to Apply: Send resume and cover letter to:
Dr. Kiril A. Streletzky
Physics Department, SI 124, 216-687-2433
e-mail: k.streletzky@csuohio.edu**

You will be contacted if selected for an interview.