

### Faculty Member Contact Information

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**Department:** Chemistry

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### Description of the URCA Assistant Position

This posting includes one funded position. In addition, the faculty member may be willing to mentor additional, unfunded students.

**How many unfunded students is this professor taking in addition to his/her one funded student?**   0  

(Students, if the faculty member will have both funded and unfunded students, he or she is free to select which student receives the funding. Funding cannot be split up between multiple students; only one student will receive it.)

### **Which of the following apply to this position?**

- This position is **only** open to students who have declared a major in this discipline. **M**
- This project deals with social justice issues. 
- This project deals with sustainability (green) issues. 
- This project deals with human health and wellness issues. **+**

**How many hours per week will your student(s) be required to work in this position?**   9  

(Minimum is 6 hours per week; typical is 9.)

**Will it be possible for your student(s) to earn course credit?**  Yes       No

**If yes, in which course?** CHEM 496

**If yes, for how many credit hours?** 2

**Location of research/creative activities:** Chemistry Labs, SIUE

### **Brief description of the nature of the research/creative activity:**

The student will analyze of the electronic spectrum of PtF to obtain rotational constants and vibrational parameters.

### **Brief description of student responsibilities:**

My Assistant will be responsible for the calibration and analysis of spectra. The student will identify rotational branches, combination differences and perturbations in the spectrum. The Assistant will assist with manuscript preparation, including tables and figures.

**URCA Assistant positions are designed to provide students with *research or creative activities* experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?**

At the end of this semester, my Assistant should be confident in her ability to identify rotational branches and vibrational progressions in the high resolution spectrum of PtF. Additional, the assistant will be able to create and present a poster at a professional conference.

### Requirements of Students

**If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours), please indicate all required days and times:**

Flexible.

**If the location of the research/creative activities involves off campus work, must students provide their own transportation?**

N/A

**Must students have taken any prerequisite classes? Please list classes and preferred grades:**

I require assistants to have completed Chem 361b and Chem 365b.

**Other requirements or notes to applicants:**

N/A