

### Faculty Member Contact Information

**Name:** Sarah Luesse

**Department:** Chemistry

**E-mail Address:** sluesse@siue.edu

**Phone Number:** 618-650-3564

**Campus Box:** 1652



### 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?**   1  

(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?** 1-2

**Location of research/creative activities:** SL 2209

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

The student will work in a chemistry research laboratory, gaining experience with common synthetic organic techniques as we work to develop new reaction methods. This project involves setting up reactions, purifying products, and analyzing obtained data related to cyclization reactions.

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

My Assistant will be responsible for working alongside the research mentor in the laboratory, setting up reactions and analyzing products. The Assistant will perform literature searches for related procedures, and then apply these methods in the lab. The student will be responsible for keeping a complete record of the findings, complying with all safety procedures, and performing hands-on experimentation in the lab.

**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 the semester, the research Assistant should have gained experience with common organic laboratory techniques, methods of analysis, and scientific literature search techniques. This project will specifically provide insight into what is required to develop a new chemical reaction, with applications that are significant to materials production, pharmaceutical research, and agricultural chemical production. The student will have the data to present in a poster format for a science-related 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:**

No time restrictions.

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

No off-campus work is required.

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

I require my students to have taken Chem 121A and 121B, along with the laboratory course 125A and 125B, having earned at least a B for each course. Completion of Chem 241A is recommended, but not required.

**Other requirements or notes to applicants:**

I would prefer students who are interested in multiple semesters of involvement in a laboratory setting.