

Undergraduate Chemistry Research at VCU

Why do it?

- Opportunity to put your course work into practice.
- Earn upper level academic credit in Chemistry.
- Gain experience needed for acceptance into professional or graduate school
- Learn laboratory techniques and chemistry concepts that aren't covered in regular courses.
- Observe the graduate student experience firsthand.
- Improve your written and oral communication skills through papers and presentations at regional and national meetings.
- Publish research papers in peer-reviewed journals – many undergraduate researchers contribute to at least one published paper during their time at VCU.

What are the options?

- ❖ Independent Studies
- ❖ Thesis Research
- ❖ Undergraduate Lab Projects
- ❖ Industrial Internships
- ❖ REU Programs

(over for detail)



The Department of Chemistry strongly encourages undergraduates to engage in short-term and long-term research projects. We are committed to enhancing VCU's intellectual climate and developing a community of undergraduate scholars by promoting and facilitating research opportunities for highly motivated students. Laboratory research is a fundamental component of chemistry education that works for all chemistry majors.

Research Opportunities :

- ❖ **Independent Study, CHEM 492:** Work with a faculty member to complete a project; sign up for 1-3 credit hours (~3-10 hrs/wk). Students have worked with faculty in the Chemistry & Biology Departments on the Monroe Park campus and also in Medicinal Chemistry & Biochemistry Departments on the MCV campus downtown.
- ❖ **Thesis Research, CHEM 498:** Complete a written thesis in the senior year based on 6 or more credits of Independent Study. Present your research to the Department in a seminar (1 credit, Spring semester)
- ❖ **Industrial Internships, CHEM 493:** Work in industry on an approved project; write a paper summarizing you results (1-3 Credits).
- ❖ **Research Experience for Undergraduates Program (REU):** Participate in a summer research program here at VCU or at other another university (see list below); program usually lasts 10 weeks, pays a stipend and provides room and board. Application is required.
(<http://www.has.vcu.edu/che/research/nsf.html> or <http://www.nsf.gov/crssprgm/reu/index.jsp>)

Other Universities with REU Programs:

1. University of Michigan: (<http://www.umich.edu/~reuchem/>)
2. Georgetown University: (<http://chemistryreu.georgetown.edu/>)
3. University of Florida: (<http://www.reu.chem.ufl.edu/>)
4. Georgia Tech: (<http://www.chemistry.gatech.edu/undergraduate/summer/index.php>)
5. Clemson State University: (<http://chemistry.clemson.edu/undergrad/SURP/>)
6. NC State University: (<http://www.ncsu.edu/chemistry/chemreu/index.html>)
7. Boise State University: (<http://chemistry.boisestate.edu/reu/>)
8. Princeton University: (<http://www.princeton.edu/reumolbiophysics/>)

(updated 7/2011)