Gustavus Chemistry Department

Gretchen Hofmeister will be hiring an additional student--either a sophomore or junior chemistry major--this summer as a research coworker on a project involving synthetic organic and organometallic chemistry.

Research Description

My general research interests lie in the areas of metal-mediated organic synthesis and macromolecular chemistry. I am particularly interested in using metals for catalyzing and controlling the stereoselectivity of polymerization reactions and enantioselectivity of additions to double bonds. I am also interested in metal binding and small-molecule recognition by macromolecules. Students who work with me will gain experience in organic and organometallic synthesis (including air-sensitive chemistry), various types of chromatography, and $^1$H,$^{13}$C, and two-dimensional NMR spectroscopy. See the following webpage (only accessible via Gustavus machines) for a more detailed description of the projects: http://www.gac.edu/~ghofmeis/research/restopics01.pdf

Dates of the Program: May 30 through August 7 for a total of 10 weeks. These dates are somewhat flexible, and exact starting and ending times can be arranged with Gretchen.

Stipend: $3,500 for 10 weeks. In addition, the College will pay for room on campus.

Expectations of Summer Research Students:

A research position in this summer research program is a full-time position. You should not plan on taking a second job during the same period.

Following the summer of research, you will be asked to prepare a written report and you may present your research in the chemistry seminar program. If you would like, you may continue research with Gretchen as an independent study the following year, and you may present your research at state or national research meetings in the future.

Deadlines and How to Apply:

Write a one-page letter explaining why you would like to participate in this research and submit it to Gretchen by 5 PM, Friday, March 29. Describe in your letter relevant coursework and independent study projects you have completed. In addition, list one faculty member who would be willing to serve as a reference for you.

Gretchen will review the applications and send out offer letters the week of April 8; acceptances are expected by April 9.

Reasons to Participate in a Summer Research Program:

Research transforms chemistry students into chemists--it is the opportunity for students to contribute their ideas and experiences to the field of chemistry. Because chemistry is an experimental science, research is essential for understanding and appreciating the field of chemistry, both as it has evolved over time and as it is currently developing. In addition, research experience is excellent preparation for graduate school or independent work in any other area. Finally, it is fun!