Rhodes College
—1848—

CHEMISTRY

Rhodes Chemistry majors who enter the work place immediately after graduation, find satisfactory employment. For those who choose the graduate school path, all majors pursuing graduate level chemistry or biochemistry have received substantial stipends to pay for their graduate school studies. With this kind of record, students interested in chemistry can be assured that Rhodes will prepare them for success. There are approximately 10 chemistry majors in each graduating class. Students can expect small classes, sophisticated equipment and knowledgeable professors from the Chemistry Department at Rhodes.

Curriculum

Majors:

Bachelor of Science, Chemistry

Chemistry majors may choose to pursue either a Bachelor of Arts or Bachelor of Science degree with the latter requiring the completion of additional upper level courses. Within the B.S., students may opt to take the Chemistry or the Biochemistry track. Majors take courses in topics such as Organic Chemistry, Inorganic Chemistry, Physical Chemistry and Instrumental Analysis.

During the sophomore year, a student may undertake laboratory-based research through a Directed Inquiry. During a student's junior and senior years, research is available through the 451-452 courses. Typically, 66% of chemistry majors will leave Rhodes with research experience. Junior and senior chemistry majors also are required to develop their presentation skills through presenting and defending various research topics.

In addition to the courses available at Rhodes, students may take advantage of a dual degree engineering program between Rhodes and Washington University in St. Louis. Through this option, students may complete three years of course work at Rhodes and two years of course work at Washington University earning a Bachelor of Science in chemistry from Rhodes and a Bachelor of Science in engineering from Washington University. This opportunity offers the benefits of specialization and the depth of a liberal arts education.

Pre-Medicine

For students interested in attending medical school or other graduate schools in a health profession, Rhodes provides a Health Professions Advisory Committee to counsel and assist students in the application and selection process.

Faculty

The faculty members within the Department of Chemistry teach a wide range of courses. The professors have a wide range of experience and many areas of specialization. Lectures and labs are taught by faculty. Rhodes does not utilize graduate teaching assistants.

David Y. Jeter, Professor of Chemistry; Ph.D., University of North Carolina, Chapel Hill. Specialty: *Inorganic chemistry*.

Darlene M. Loprete, Professor of Chemistry; Ph.D., University of Rhode Island. Specialty: *Biochemistry*.

Jon Russ (Chair), Associate Professor of Chemistry; Ph.D., Texas A&M University. Specialty: *Analytical/ Geochemistry*.

Mauricio Cafiero, Assistant Professor of Chemistry; Ph.D., University of Arizona. Specialty: *Physical chemistry*.

Loretta Jackson-Hayes, Assistant Professor of Chemistry; Ph.D., University of Tennessee, Memphis. Specialty: *Pharmacology*.

Julie C. D. Le, Assistant Professor of Chemistry; Ph.D., The University of Texas. Specialty: *Organic chemistry*.

Dhammika S. Jayawardene Muesse, Assistant Professor; Ph.D., University of Memphis. Specialty: *Analytical chemistry*.

Patrick Sheridan, Visiting Assistant Professor of Chemistry; Ph.D. Tulane University. Specialty: *Organic chemistry*.

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Equipment and Facilities

Because Rhodes only offers undergraduate education, chemistry majors have full access to the equipment and facilities. Classrooms and laboratory space are located in Kennedy Hall, a 22,000- square-foot facility.

The curriculum and equipment are current and innovative. Some of the major pieces of instrumentation available to Chemistry majors include:

- Gemini 200 Fourier Transform Nuclear Magnetic Resonance (FT-NMR) Spectrometer
- Nicolet 5 PCIR Fourier Transform Infrared (FTIR) Spectrophotometer
- Hewlett-Packard GCD 1800A Gas Chromatograph Mass Spectrometer (GC-MS)
- Saturn (Varian) 3900/2100 Gas Chromatograph Mass Spectrometer (GC-MS)
- Hewlett-Packard 8452 Diode Array Ultraviolet-Visible (UV/Vis)
- Spectrophotometer
- 16 processor 64 bit Opteron Parallel Computing Cluster
- Two Cary 50 Scanning UV/Vis Spectrophotometers
- Two Gas Chromatography systems with Electron Capture detectors (GC-ECD)

Outside the Classroom

66% of students conduct independent research. With the rigorous requirements of class work during the academic year, many students choose to undertake research projects during the summer. In addition to opportunities within the department, Chemistry majors also have access to research at a broad selection of universities during the summer months. Chemistry students frequently participate in internships during their education at Rhodes.

Graduates

68% pursue graduate degrees

Over the last 12 years, Chemistry majors have enjoyed a 100% acceptance rate into graduate school programs and a 90% acceptance rate into medical schools. Slightly more than half of these students choose medical school over graduate school. Following graduation from Rhodes, students have gone to such institutions as Vanderbilt University, Washington University, Emory University, University of Tennessee, University of Wisconsin, Cornell University, Indiana University, Florida State University, Cal Tech, University of Washington, University of Arizona and the University of North Carolina.

28% take full-time jobs

Recent graduates have taken research and technologist positions at such institutions as St. Jude Children's Research Hospital, UT-Memphis, Schering-Plough and Roche Biomedical. There is a near 100% employment rate of majors seeking employment in the chemical industry.

4% follow interests outside of their field of study

For More Information

Please contact the Department of Chemistry at (901) 843-3910 or Admissions at 1-800-844-5969. You can also explore the department's Web page at rhodes.edu/academics/1554.asp.