

FOCUS ON

SCHOOL TO CAREER

Careers in Chemistry

Are you interested in a career in the chemical or pharmaceutical industry, the health professions, teaching or research? A degree in chemistry will prepare you for careers in these fields by teaching you to apply the methods of science to understanding the world around you. The physical world, whether natural or synthetic, is composed of chemicals. Chemists constantly add to our knowledge of existing chemicals and create new chemicals. Much of this knowledge is put to practical use by providing new materials for clothing and shelter, advancing medical care, increasing our food supply, improving our environment, and supplying the energy needs of our society. According to the "2002-2003 Occupational Outlook Handbook," job growth will be concentrated in drug manufacturing and research, development, and testing services firms. A bachelor's degree in chemistry can prepare you for exciting careers in these and many other areas. You can start getting involved in chemistry now by taking courses in school and by participating in extracurricular enrichment activities.

Where To Study:

Meredith College offers two undergraduate degrees for women interested in pursuing careers in chemistry-related fields:

- The **Bachelor of Science in chemistry** combines coursework in physics, mathematics, and biology or computer science to prepare you for a career in the chemical industry, for graduate school, or for a variety of professional schools such as medicine or dentistry.
- The **Bachelor of Arts in chemistry** is a good option for students interested in combining their work in chemistry with another subject or with teacher licensure. Meredith College also offers minors in chemistry, chemical physics, and geography.

Meredith's chemistry department is housed in the college's new Science and Mathematics building, which opened for classes in January 2003. The building contains specialized labs and equipment for the study of chemistry. For more information, visit www.meredith.edu/build.

Median Salaries (with a bachelor's degree) in chemistry related careers

Career Opportunities:

Job titles of recent Meredith chemistry graduates include the following:

- High school chemistry and/or physics teacher
- Scientist at chemical company
- Medicinal chemist
- Lab technician
- Medical doctor
- Dentist
- Pharmacist

Median Salaries (with a bachelor's degree) in chemistry related careers

Chemist	\$55,000
Teacher	\$37,361 to \$42,080
Medical/Clinical	
Laboratory Technologist	\$40,510
Agriculture and Food	
Scientist	\$52,160
Environmental Scientist	\$44,180

*Source: Occupational Outlook Handbook, 2002-2003

How To Get An Early Start:

Meredith College offers summer science camps for 11 and 12-year-old girls interested in learning more about astronomy, biology and chemistry. Participants will work one-on-one with Meredith science faculty and award-winning middle school teachers while performing experiments and participating in group activities designed to explore the wonders of science. For more information about summer programs in science, contact the Office of Community Outreach, Meredith College, (919) 760-8353, or outreach@meredith.edu.

Financial Aid:

For more information on scholarships or financial assistance, call the Meredith College Office of Financial Assistance, 1 (800) MEREDITH, or the College Foundation of North Carolina, 1-866-866-2362.

This page and its content were produced by the Newspapers in Education department of The News & Observer Feb. 27, 2003. "School to Career" pages are archived online at www.nie.newsobserver.com

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Want to Know More?

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Profile- Kate Jarman

Meredith Honors student Kate Jarman is working on a chemistry research project that is out of this world. Since June 2002, Jarman and her chemistry professor, Reginald Shiflett, have been searching for new molecules in outer space.

Under Shiflett's guidance, Jarman uses a computer software program to create hypothetical molecules. She then cross-references the spectral information on the models with data from NASA, national astronomical laboratories, and other scientific resources.

"Our goal is to determine if one of the molecules modeled would exist in space," Jarman said. "We want to identify it and match it."

If they discover a molecule, Shiflett said, he and Jarman would prepare a research article about their project and submit it to scientific journals.

Jarman and Shiflett began the project, funded by Meredith's Undergraduate Research Program, last summer. Jarman, a GlaxoSmithKline Women in Science Scholar, spent 35 hours a week learning the molecular modeling software program, developing hypothetical molecules, calculating their spectral characteristics, reviewing scientific texts, and searching astronomical web sites.

Although she's still searching for a molecular match, Jarman said the project has helped her appreciate the relationship shared among scientific fields.

"I've been taking classes in biology and chemistry and this [research] brings them, and astronomy, together," she said.

The project also reinforces Jarman's reasons for attending Meredith.

"I was interested in small classes and being able to know my professors very well," she said.

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