



# CHEMISTRY

## DEPARTMENT HIGHLIGHTS

The Chemistry Department, which is composed of approximately 80 students majoring in Chemistry, has an active chapter of the Student Affiliates of the American Chemical Society. The department is housed in the newly renovated Wilker Hall and is part of the Thomas Family Center for Science and Innovation.

**Independent Study and Research.** Upper level students are often engaged in independent research with faculty members, working one-on-one in an area of chemistry of interest to the student. Students present their research findings both as oral presentations to the department and as posters at campus, regional and national scientific meetings.

**Instrumentation.** The department has a wide array of specialized instruments used in its educational and research programs. Equipment such as a nuclear magnetic resonance spectrometer, FT-IR spectrometer, ultraviolet/visible spectrometer, HPLC, atomic absorption, and gas chromatograph/mass spectrometer is available to students, and enhances the hands-on practical learning experience.

**Internships.** Summer Internships are encouraged for all chemistry majors. Internships give them an opportunity to spend 10 weeks exploring different aspects of chemistry to help find their area of expertise. Recent internships have included companies such as PPG, Sherwin-Williams, Avon Cosmetics, and Columbia Chemical. Students have also done research internships at

national colleges such as the University of Florida, Loyola University, Colorado State University, Purdue University, University of Akron, and the University of Michigan. Our department also is proud to have students chosen to participate in the prestigious Chester Summer Scholars Program in clinical laboratory research at MetroHealth Medical Center in Cleveland.

**Study Abroad.** Students majoring in chemistry often choose study abroad programs in England (University of Hull and Edge Hill University) or Australia (University of the Sunshine Coast). They find that participating in the programs at these institutions makes it possible to continue their coursework with little or no interruption as they advance toward graduation. Just in the past two years, chemistry majors have participated in the Discover Iceland and Seminar in Europe programs, and students have studied in Ireland, France, Italy, and Spain.

## AWARDS AND SCHOLARSHIPS

- Division of Analytical Chemistry Award
- American Institute of Chemists Award
- CRC Press Freshman
- Achievement Award
- Harry and Louise Kiefer Chemistry Scholarship
- Lubrizol Foundation Chemistry Award
- POLYED Award in Organic Chemistry
- Chemistry Department Memorial Scholarship

## WHAT CAN I Be WITH THIS MAJOR?

Chemical Researcher	Engineer	Science Teacher	Water Purification Chemist
Medical Professional	Meteorologist	Toxicologist	Pollution Control Officer
Crime Lab Analyst	Pharmacologist	Product Developer	Pharmaceutical Sales Rep.
Forensic Chemist	Pharmacy Student	Medical Student	Legal Professional

## RECENT INTERNSHIPS

Sherwin-Williams	Miami University
NASA Glenn Research Center	Chester Scholars Program
WIL Research Labs	Columbia Chemical
University of Michigan	Avon Cosmetics
University of Santa Clara	

## OUTCOMES

Because of the participation in internships and/or research during their undergraduate years, our graduates have been successful in obtaining full-time employment at Sherwin-Williams, PPG, Columbia Chemical, Essential Research, Pavco, and WIL Research Labs. We also have graduates attending the Ohio University School of Osteopathic Medicine, New York School of Dentistry, The Ohio State University School of Optometry, Stanford University, Penn State University, Indiana University, and Case Western Reserve University to name a few. Our students are readily accepted to professional and/or graduate schools as well as obtaining full-time employment in industrial companies.

A sampling of a few of our graduates:

**Kristen Balogh (2008)**  
Accepted to Ph.D  
Program for Molecular  
Pharmacology at  
University of Pittsburgh

**Erin Oliver (2008)**  
Coatings Division  
Chemist  
PPG

**Robert Mikan (2008)**  
Accepted to MD/MBA  
program  
Wright State University  
Medical School

**Rebekah Mitterko  
(2006)**  
Research Synthesis  
Chemist  
Lubrizol Corporation

**Jen Davin (2005)**  
Product Development  
Chemist  
Sherwin-Williams  
Corporation

**Andrew Booth (2001)**  
Chemist, ICI Paints

**Abby Campbell  
Whiting (2001)**  
Doctor of Optometry,  
Whiting Family Vision  
Care

**Ryan Sooy (1997)**  
Sales Representative  
Onyx Pharmaceuticals

**Patrick Coughlin (1999)**  
Chemistry Teacher,  
Gates Chili High School

**William Waters (1981)**  
Dentist, Riveredge  
Dentistry

## DEPARTMENT FACULTY

**Diana Barko, Ph.D.**  
Assistant Professor  
Case Western Reserve  
University  
Biochemistry

**Joseph Gorse, Ph.D.**  
Professor  
University of Arizona  
Analytical Chemistry, Capillary  
Electrophoresis, Environmental  
Analysis, and Biodiesel

**James McCargar, Ph.D.**  
Professor  
Kent State University  
Physical Chemistry, Chemical  
Physics, Chemical Education

**Raymond Shively, Ph.D.**  
Chair, Associate Professor  
Case Western Reserve  
University  
Organic & Inorganic Chemistry

**Stephen Tytko, Ph.D.**  
Associate Professor  
Northwestern University  
Organic Chemistry, Polymer  
Chemistry, Spectroscopy