



## Highlights of the Chemistry Program

Students studying chemistry at St. Bonaventure learn in a hands-on environment that emphasizes personal interaction with faculty members who are devoted to excellent teaching in state-of-the-art teaching and research laboratory facilities.

Upper-division lecture classes are small, with fewer than 12 students per class; general and organic chemistry courses have fewer than 30 students per section. Laboratory sections are taught by faculty, rather than student assistants like many colleges.



Chemistry majors are strongly encouraged to begin collaborating with faculty on original research projects as early as the start of their sophomore year, and all departmental instruments are available for majors to use in their coursework and research projects. We believe this personal approach best develops a student's understanding of chemistry.

## New Facilities and Equipment

The Department of Chemistry showcases the rich history of St. Bonaventure and its vision for the future. The department is located primarily in De La Roche Hall. Dedicated in 1900, it is the oldest building in use on campus and the cornerstone of the University's historic core. In summer 2018, funded by generous contributions from donors, chemistry began another major upgrade of approximately \$500,000 of our teaching and research instrumentation to include:

- Shimadzu QP2010SE Gas Chromatograph - Mass Spectrometer (GC-MS)
- Multimode dual deca-core/quad-core Beowulf computing cluster – 18 Nodes
- Shimadzu UV-2600 UV-vis spectrophotometer with integrating sphere & thermal control
- 2 Shimadzu IRSpirit Fourier Transform-Infrared (FT-IR) spectrophotometers
- Shimadzu RF-6000 spectrofluorophotometer
- Shimadzu Quadrupole LCMS-2020
- Shimadzu AA-7000 Atomic Absorption Spectrometer

Those instruments enhance current equipment holdings, including, but not limited to:

- JEOL 400-MHz nuclear magnetic resonance (NMR) spectrometer
- MBraun Unilab Glove Box
- DeltaNu Advantage 532 Raman Spectrometer
- Pine WaveNow Potentiostat/Galvanostat
- Nicolet 670 high-resolution Fourier-Transform infrared (FT-IR) spectrophotometer

The combination of traditional, old-school personal interaction with faculty and new, state-of-the-art instrumentation and facilities gives students the opportunity to transform themselves from seekers of knowledge to creators of knowledge.

## Career Opportunities & Success Stories

Our chemistry graduates have been over 95% successful in obtaining science-related jobs, entry into health professional schools, and chemistry graduate programs over the past five years. Chemistry is the foundation of many scientific fields, so our graduates are prepared for a wide variety of careers, including the health professions (medicine, dentistry, pharmacy, optometry), the chemical industry, university academics, high school teaching, and service in the military.

In recent years, our majors have gone on to:

- Johns Hopkins Ph.D. chemistry program



## B.S. in Chemistry

[www.sbu.edu/chemistry](http://www.sbu.edu/chemistry) • Dr. Scott Simpson, Chair • [ssimpson@sbu.edu](mailto:ssimpson@sbu.edu) • (716) 375-2266

- SUNY Buffalo Ph.D. chemistry program
- University of Notre Dame Ph.D. program
- Virginia Tech Ph.D. chemistry program
- Medical School (SUNY Upstate, LECOM)
- Dental School (UB, LECOM)
- Massachusetts CPHS optometry program
- OSU School of Pharmacy
- Rochester Institute of Tech. MS in chemistry
- Johnson & Johnson
- ELANTAS (formerly Solvay & Cytec)
- Mallinckrodt Pharmaceuticals
- U.S. Drug Enforcement Agency

### Research Support

The SBU Department of Chemistry faculty receive support to conduct research from the following nationally recognized funding sources:

- National Science Foundation
- American Chemical Society's Petroleum Research Fund
- Alden Trust Fund
- Camille & Henry Dreyfus Foundation

These grants allow for students to get paid for research if working with a funded professor.

### Early Acceptance Programs

The SBU Department of Chemistry has articulation agreements that allow SBU Chemistry students to be automatically accepted to graduate programs in chemistry. These programs provide free tuition and a stipend (\$25,000+/year). SBU has agreements with:

- University of Rhode Island - Ph.D. program
- SUNY, University at Buffalo - Ph.D. program
- Montana State University - Ph.D. program
- Worcester Polytechnic Institute – Ph.D. program

### Learn more about chemistry at SBU

[www.sbu.edu/chemistry](http://www.sbu.edu/chemistry)

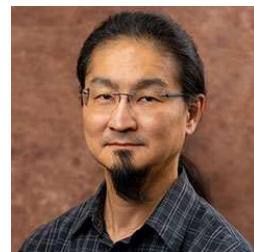
### Meet our Chemistry faculty

#### Katsu Ogawa (Organic/Inorganic Chemistry)

- Ph.D., Materials Chemistry, North Dakota State University
- B.S., Chemistry, Minnesota State University

##### Research Interests

- Two dimensional polymers for active materials in optoelectronic devices
- Development of chemosensors



#### AJ Rupprecht (Analytical)

- Ph.D., Chemistry, Duquesne University
- B.S., Chemistry, Saint Vincent College

##### Research Interests

- Novel acids for self-assembly on metal oxide surfaces
- Analytical applications of polymers
- Environmental impact of acid mine drainage



#### Scott Simpson (Physical/Inorganic/General)

- Ph.D., Chemistry, SUNY at Buffalo
- B.S., Chemistry, SUNY at Fredonia

##### Research Interests

- Understanding surface-adsorbate interactions
- Exploring catalysts via computations
- Identification of toxic pollutants



### Additional Chemistry Faculty

*Patrick Schneider (General Chemistry)*

*David Hilmey, Ph.D. (Organic Chemistry)*

*Alyssa Santos, Ph.D. (General /Physical Chem.)*