West Virginia University
Eberly College of Arts and Sciences
C. Eugene Bennett Department of Chemistry
Program Learning Outcomes

The graduate programs in the C. Eugene Bennett Department of Chemistry provide rigorous training in chemistry. The central mission of the Graduate Program is to train the next generation of Chemists for productive careers in the global economy. Some of the learning outcomes below were adapted from the 2013 American Chemical Society Presidential Commission on Graduate Education in the Chemical Sciences. Students earning a Ph.D. in Chemistry will be able to:

1. Communicate chemical concepts orally and in writing.
2. Explain advanced chemical principles as they pertain to their specific field of research.
3. Analyze and critically evaluate the existing literature published within their field of research.
4. Independently design and execute original research that can address important scientific questions.
5. Generate quality data using a variety of experimental and/or computational techniques and interpret the meaning and implication of their data.
6. Effectively communicate their research in oral and written formats, including the ability to author manuscripts suitable for publication in peer-reviewed scientific journals.
7. Inquire about and prepare for various career opportunities with their advanced degree.
8. Learn and adopt best safety practices (chemical hygiene, personal protective wear, proper handling of chemical waste streams, etc.) in chemical research.
9. Learn and apply the ethical impact of personal and professional behavior.