



Chemistry Connections

Fall 2009

A newsletter from the Department of Chemistry and Biochemistry at Bloomsburg University of Pennsylvania

Visit B.U.

- ☞ High school students can attend a BU Open House and visit the chemistry department from 1- 3:00 pm. For more information and dates, go to: http://www.bloomu.edu/prospective/open_house.php
- ☞ If you can't attend an open house program, please visit anytime. You can meet an admissions counselor, the Chemistry Dept, and get a tour of campus. Call (570) 389-4316 to make arrangements.
- ☞ You can contact the Dept. of Chemistry & Biochemistry at Bloomsburg University directly in several ways:
570-389-4895 (main number)
Dr. Michael Pugh, Dept. Chair:
570-389-4144;
mpugh@bloomu.edu
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570-389-5159;
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<http://departments.bloomu.edu/chem/default.htm>

Bloomsburg University is committed to equal educational and employment opportunities for all persons without regard to race, religion, gender, age, national origin, sexual orientation, disability or veteran status.



Students Present Research in Salt Lake City

Three Bloomsburg University students recently presented results of their research at an American Chemical Society national meeting in Salt Lake City. Dmitriy Mayorov (*West Tennent Senior High*), conducted research over several semesters with Dr. Greg Zimmerman. Dr. Philip Osburn supervised students Andrew Schmidt (*Mt. Carmel Area HS*) and Dan Bertschman (*Oley Valley HS*) on two different research projects. The students presented their research results in a poster format, answering questions from an audience comprised of students as well as chemical professionals from industry and academia. In addition to their presentations, the students were able to attend several conference presentations, including one by Nobel laureate Roald Hoffmann. Dr. Osburn had spent some time in class discussing Dr. Hoffman's career and the enormity of his contributions to the field of organic chemistry. It was an amazing experience for the students to listen to a man, who is considered a legend in his field, discuss topics that they had just a few days earlier put into practice in the classroom!

A scholarship fund established in memory of former chemistry faculty member, Dr. Wayne Anderson, made it possible for these students to travel.

BU Professor Named Fulbright Scholar

Dr. Gregory Zimmerman, an associate professor of physical chemistry at B.U., has been granted a Fulbright Scholarship to conduct research at the University of Guelph, in Guelph, Ontario. Dr. Zimmerman will spend nine months conducting research for a project relating to the development of new generation nuclear reactors.



As a Canada-U.S. Fulbright visiting chair, Dr. Zimmerman will examine the properties of corrosion products of nickel alloy pipes in closed water loops that are subjected to high temperatures and pressures. He will be working with Peter Tremaine at the University of Guelph, whose group is one of the only two groups in the world with the technical instruments capable of producing the temperatures and pressures needed.

Renovations Underway

Four years ago, the Hartline Science Center doubled in size with the addition of a new wing, adding offices, classrooms and laboratories. This past May, the original section of the building, constructed in 1968, began extensive renovations. When the project is complete, the original section will have modernized laboratories which will match the quality and standards found in the new wing. With the new Hartline Science Center wing and this newly renovated section, our future, as well as the future of our students, looks extremely bright.

Faculty Profile

Dr. Bruce Wilcox has been with the Bloomsburg University Department of Chemistry & Biochemistry since 1987. His educational credits include a BS in 1974 and an MS in 1977 from The State University of New York at Oswego and a PhD in 1987 from the University of Cincinnati. As an inorganic chemist, he teaches inorganic courses, as well as general courses for chemistry and non-chemistry majors. Dr. Wilcox also developed and teaches a course called The Chemistry Curriculum and the Teaching Laboratory which is offered to chemistry education majors and also to high school teachers seeking additional educational credits.

In his spare time he likes to do landscaping, gardening and woodworking. He is the treasurer of Eos Therapeutic Riding Center, which provides therapeutic horseback riding activities for children and adults with special needs. Dr. Wilcox and his wife Victoria (also a teacher) are the proud parents of a daughter Meredith and a son Christopher.



Dr. Bruce Wilcox

Memorandum Signed Between BU and PSU

Earlier this year, Bloomsburg University signed a Memorandum of Understanding (MOU) with The Pennsylvania State University to become affiliated with the Nanofabrication Manufacturing Technology Partnership (NMT).

With this MOU in place, the BU Department of Chemistry & Biochemistry is developing a nanotechnology option within the BS Chemistry degree program. After completing a minimum of five semesters at BU, students in this program will spend one semester, or summer, at the Penn State Center for Nanotechnology Education and Utilization facility. During this semester they will take six nanofabrication manufacturing technology courses (18 credits). Students will pay BU tuition rates and PSU will subsidize room and board by 50%. Completion of this program will allow BU chemistry students to be more competitive in gaining entrance to both industry and graduate schools where nanotechnology has become a rapidly growing discipline.

The NMT Partnership was established with support from the Commonwealth of Pennsylvania Department of Community and Economic Development to help address the need of PA industry for skilled nanofabrication workers.

Miscellaneous News

Heads-Up to Teachers

Registration for the annual ACS exam will be on-line next year, instead of sent through the mail, in an effort to streamline the process. More details to follow.

ALUMNI NEWS

Susan Dallabrida graduated cum laude from B.U. in 1993 with dual majors; a BS in Biology and a BA in Chemistry. After graduation, she went to Penn State University Hershey College of Medicine where she earned a PhD in Biochemistry and Molecular Biology. Susan conducted her post-doctoral studies at Children's Hospital Boston/Harvard Medical School. She was promoted to Instructor and became faculty there. She has received 13 awards including honors such as Young Alumni of the Year from B.U., Young Investigators Awards from the American Heart Association and American College of Cardiology, Basic Science Award from the International Society of Vascular Anomalies, and the David Bray Scholars in Medicine Award from Harvard Medical School. Most recently, she was awarded a Harvard Catalyst Pilot Award from the Harvard Clinical and Translational Science Center at Harvard Medical Center. These awards are highly competitive and a very prestigious accomplishment. With the Catalyst Award, her team is working to develop a novel peptide drug as a treatment for cardiac ischemia-reperfusion injury. For these efforts, Dr. Dallabrida is leading a team of investigators from six different institutes, and bridging basic science with clinical studies. She also has 15 publications in science journals, received 12 grants, and has 3 patents. She is the co-director and lecturer for a medical course at Harvard Medical School, conducts industrial and academic consulting work, and directs the basic science arm for correlative cardiovascular studies in multiple oncologic clinical trials.