A TRAVEL PROGRAM TO BRISTOL ENGLAND FOR EDUCATORS:

**Green Chemistry: New Technologies and How to Present Them in the Classroom**

50 HOURS OF ACT 48 CREDIT | June 25–July 5, 2011 in England

Ideal for in-service teachers with a background in chemistry | Available on a first come, first serve basis to ten qualified applicants | Applicants must submit their educational preparation related to chemistry and the courses in their present and past teaching assignments

Green Chemistry: New Technologies and How to Present Them in the Classroom is a course covering new developments in chemistry. After preparatory work involving background material and lab technique review, students will spend 10 days in southwest England at the University of Bristol. Sessions in Bristol include presentations on Earth’s climate from a British scientist expert in atmospheric chemistry, green materials to make life more energy efficient and hands-on experience in purifying and characterizing biofuels with analysis using gas chromatography, mass spectrometry, infrared and nuclear magnetic resonance. Field trips with lectures on related chemistry will be scheduled to a coal mine, perfume factory, and a British secondary school while in session. Free time will be available on the weekend for exploring London. Students will find that this course can enhance their chemistry background and give them the opportunity to analyze results using the sophisticated technology of a major research university.

**Faculty:**

**Penn State Abington:** Dr. Ann Schmiedekamp, Professor of Physics, 217 Woodland, 215-881-7572 or ams@psu.edu.

**University of Bristol, School of Chemistry:**

Dr. Dudley Shallcross, Professor of Atmospheric Chemistry; Mr. Tim Harrison, School Teacher Fellow

**Expenses**

Students will be responsible for international program costs which include round trip airfare, local transportation, fees at the University of Bristol, ACT 48 credits and all lodging (which includes breakfast). All other meals with the exception of the July 1 banquet are the responsibility of the student. International program costs for this program are estimated at $3,100.

Passports and Visas: A valid passport is required for international travel. United States citizens do not require a visa to travel to Great Britain. Non-U.S. citizens may require a visa in addition to their passport and should check with their embassy.

**Information Session: Nov. 29, 2010**

Join us for an Information Session on November 29 at 5 p.m. at PennStateAbington@611, our off-campus conference center located at:

1475 Old York Road/Route 611
Abington, PA 19001

Faculty from the University of Bristol will be in attendance to answer any of your questions.

For more information, contact the Office of Continuing Education at 215-881-7400.