Alex Wesley: From May 20th – July 31st, 2008, Alex was a research experience undergraduate at the East China University of Science and Technology (ECUST) in Shangai, China under the guidance of Professor Guorong Chen who is renowned for his work on biocomposite materials. He was involved in a variety of projects involving



glass material for optical applications by assisting other Master and Doctorate students. These projects included:

- Absorption and Fluorescence of Chalcogenide Glasses Doped with Bi, Dy, and Tm
- An Investigation of Oxide Glasses Co-Doped with Tb, Sm, Er, and Tm for functionality in White Light Emitting Diodes (LEDs
- An examination of Gem and Jade and the Thermal Properties of Oxide Glasses
- Solar Cells and Upconverting Chalcogenide Glass
- Mesoporous Nanospheres

Alex found living and working in China a unique experience, with a myriad of things that are different between the United States and China including food, transportation, language, and education. "The food is vastly different ... my favorite Chinese foods were the bread sticks for breakfast (pronounced yolteo) which cost .40 RMB each (\$0.058), and varieties of noodle soups (pronounced mian|tao) for lunch and dinner, which cost 3.50 RMB (\$0.51) ..."

The subway and bus system allows you to get any where in the city cheaply. "With the Shanghai subway I can travel across Shanghai for less than a dollar. Taxis are the preferred method if you need to get somewhere that cannot be reached by foot and/or subway or if you want to travel directly to a place. Taxis have a flat fee of 11 RMB (\$1.60) ... for shorter distances, bike is the preferred method of travel. A good bike, with multiple locks being a necessity, costs about 500 RMB (\$72). Driving in Shanghai is very hectic with many people simply disregarding the rules of the road and incessantly honking of the horn. Also a license to drive in Shanghai costs over \$1000 ..."

The language, Mandarin, is drastically different than English, so Chinese is rather difficult. "There are very few cognates, however the sentence structure at the basic level is rather simple (no verb conjugation, however words have to be added to indicate tense). A perfect grasp of the language is not a necessity in a University environment however, because all students have studied English for more than 10 years.... However you should always make an effort to learn the language out of respect, and outside the University very little English is spoken, so learn the basic words, and try to keep a dictionary handy".

The education system here also differs from that in the United States. "There is a placement test at the end of middle school and high school which single handedly, decides which students get to go to the top schools. In technology studies the first three and a half years of undergraduate study are similar to that of the US, in that the students take classes. However, in the second half of the 4th year students conduct research in labs. I think this is very useful experience that aids students in their future work. Masters and Doctorate study are very similar to that in the United States".

Alex took advantage of his time in China to travel around the area, and extended his trip so he could also visit Hong Kong and experience the 2008 Olympic Games in Beijing. ".....Places I visited in China included ...**Shanghai**, largest City in the world. Much more loud and busy than the Lehigh Valley. Visited many sites including Nanjing Road, Hua Hai Road, Pudong, the Bund, Old Shanghai, and Chenghuang Temple; **Nanjing**, beautiful city, home of Professor Chen. Visited Xuanwu Lake, Sun-Yat Sen Mausoleum, the observatories in the surrounding mountains, and a memorial to the 300,000 people in Nanjing that were murdered during WWII.; **Hangzhou**, great history, visited West Lake, Leifing Pagoda and Lingyin Temple; **Suzhou**, visited Lion Forest Garden and Suzhou Museum; **Sanya**, beautiful beaches ...; **Haikou**, visited Hairui Tomb; and **Shenzhen** ..."

Alex concludes .. "all people are more alike than different, and in this sense it was very easy to adjust to life in China. Everyone I knew here was incredibly nice. The students were very similar to American students, so we had many common interests. I will forever treasure my time in China and hope to return in the future, although my Professor says I cannot return as a student to him until my Chinese gets better!"