



# Cori Bucherl

Graduation Date:	December 2009
Hometown:	Indianapolis, Indiana
ChE Co-Op Employer:	NASA Kennedy Space Center
Co-Op Program:	5-session

## **Why did you choose Purdue and to participate in the ChE Co-Op program?**

Both of my parents attended Purdue, which is why 17-year-old me did *not* want to come here. However, after participating in the STEP program (engineering camp, basically) the summer before my senior year of high school, I couldn't help myself... I became set on attending Purdue. Not only did it boast an excellent history of engineering achievement, but I would receive in-state tuition, access to hundreds of clubs, activities, and potential new friends, a beautiful campus, and a one-year deferral for choosing which engineering discipline to pursue. After much uncertainty I finally chose ChE and I have not regretted it. I wanted to take part in the co-op program even before coming to Purdue because a close family friend a year older than me was an AAE co-op and loved it. A few high-schooler-centric info sessions later and I was convinced that the job experience, increasingly challenging projects, and financial perks were well worth graduating a little later than the traditional college student.

## **What types of experience did you get as a ChE Co-Op with NASA Kennedy?**

In short, KSC is responsible for guaranteeing mission success of various unmanned science missions as well as all ground operations involved in launching the Space Shuttle. This simple description does not even begin to describe the various tasks performed there, so I will only scratch the surface by describing what I did. My first two sessions were with the Launch Services Program, where teams of NASA and contractor personnel seek to ensure the successful launch of unmanned space missions. However, my work within the group was more theoretical than that; I worked with a computer program to model combustion properties of various propellants through a rocket nozzle. The reference database I constructed was to be used in the development of a comprehensive launch vehicle modeling program. For my final two sessions, I performed research in the Corrosion Technology Laboratory, part of the NASA-KSC R&D program. Over the course of two summers, I worked with chemical corrosion inhibitors for a self-healing corrosion-mitigating coating and with the refractory concrete used to line the flame trench of the Shuttle Launch Pad. Aside from stimulating challenges at work, I participated in many tours of KSC, seized some really cool photo opportunities, saw 4 Shuttle launches (they're SPECTACULAR!), jumped out of a plane, and made many good contacts and great friends.

## **What do you think are the benefits of participating in the ChE Co-Op program?**

In addition to the benefits I expected – work experience, responsibility, money – I received a few others. Some of these included opportunities to develop time management, confidence in technical capabilities, and efficient modes for asking questions and seeking solutions. On a broader scope, I truly feel that my co-op experience taught me a lot about myself, the world, and how I fit in it, and I am sure that I have become a better engineer and person for having done it.