



Chemical Engineering Students Qualify for 2012 National Chem-Car Competition

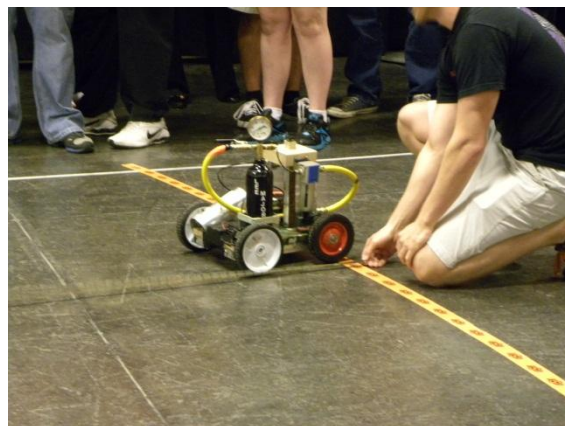


Dr. Heather Fahlenkamp, our advisor for the chemical reaction powered car teams, reports good news from the AIChE Regional Conference, April 1 & 2, 2012, at Washington University, St. Louis, Missouri. "We continued our streak of qualifying a car for the national competition. The "B Team" with Nick Cain, Osbert Luong, Matt Miskelly, Nate Nahmias, and Cason Sanders placed 2nd in the car competition and won the award for the Best Drive System."

Additionally, "Awards were given to the top five teams, and "Team Orange" with Katie Haning, Nick Russell, Gabriele Yuliana, Trey Simpson, and Michelle Loken placed fourth. "Team 9" with Caleb Sisco, Mark Smith, and Caleb Toews placed fifth. For the poster competition, "The Flux Capacitor" team with Buddy Evans, Caleb King, Cameron Pearce, William Scott, and Charles Short finished second. Therefore, all four teams that we took to regionals, won at least one award, for a total of five awards. We all had a great time at the conference and look forward to competing at the national competition."

The national competition will be associated with the AIChE annual conference, October 28- November 2, 2012, at the Pittsburgh Convention Center, Pittsburgh, PA.

The cars that students design are a bit larger than a shoe box. The objective is not to design an automobile, or to search for a new fuel system. Students can use any reaction system that they desire to either power or stop the car, and choices have included homemade batteries, hydrogen peroxide and yeast, vinegar and baking soda, iodine-starch chemical clocks, and acid etching. The objective is to make the car travel a certain distance carrying a certain weight, both of which are revealed just prior to the car runs. The car that stops closest to the finish line wins. So, it is not a race to see who can make the car go the farthest



or fastest. It is a contest to see which team can control the chemical reaction with the greatest precision.



School Head Russ Rhinehart comments, "I think this is the eleventh consecutive year of qualifying for national competition. 100% of our students are engaged in the competition, which integrates many aspects of the practice of chemical engineering (environmental, safety,

personnel health, process performance, budget, timing, team, design, and analysis) within an exciting and attention-getting event. Our web site conveys the news of our successes.”

He continues, “Chevron Phillips Chemical Company, LP sponsors the OSU participation in the event, and their involvement in the contest has proven benefits for all – OSU’s leadership nationally in integrating safety and environmental regulations, student experience and enrichment, School publicity and recruiting, and CP-Chem recruiting for both intern and fulltime positions.”



The OSU Chem-E-Car project is a multi-semester project that involves sophomore, junior, and senior chemical engineering students (approximately 110 students total this year). The junior chemical engineering students work in teams to design and construct a chemical powered “car”. Each junior team is assigned a senior mentor, who has experience with the Chem-E Car project from their junior year activities as a consultant for the project. Each junior team also works with a team of sophomore chemical engineering students to create a poster that gives an overview of the project, including a description of the chemical reaction or power source, unique features of the vehicle, design creativity, and the environmental and safety features. This year’s local competition was held on Tuesday, March 13 at the Wes Watkins center. Here is a link to the event, <http://www.youtube.com/watch?v=jHnUAa9ePyo>, filmed by OSU.

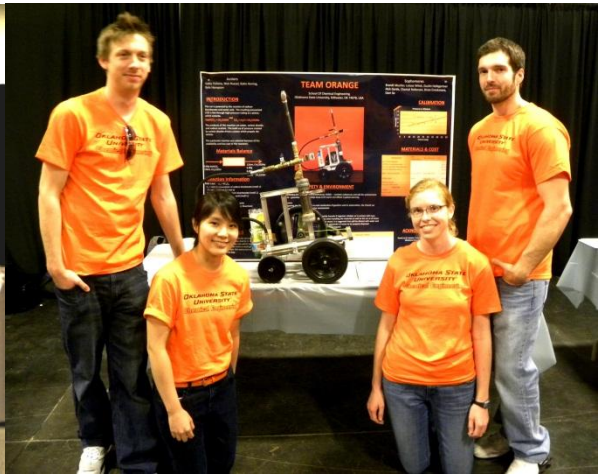
The sophomore teams competed in the poster competition, which was judged by Chevron Phillips representatives. The top three places in the poster judging are:



First Place: Chemtronics: Cassandra Cortez, Mason Dupre, Ryan Hellums, Ashlee Keenum, Paul Kent, Karley Peters, Griffin Radford, Think Tu, Holden Wright.

Second Place: Team 9: Victoria Adejumo, Jie Chong, Lindsay Groms, Daniel Hagan, Jacob Hukill, Adam Kopf, Travis Sperr, Ella Walker, Sean Wood.

Third Place: Team Orange: Biran Creekmore, Nicholas Garde, Dustin Hofegartner, Brandt Mueller, Chantal Rollerson, Dam So, Lukasz Witek



The junior teams competed in the car competition. For the car competition, the cars had to carry a load of 350 ml of water a distance of 65 ft. The following top four places for the car competition, went on to compete at the 2012 Mid-America AIChE Regional Conference at Washington University in St. Louis, MO:



First Place: The "B" Team: Nick Cain, Osbert Luong, Matt Miskelly, Nate Nahmias, and Cason Sanders, 65'2"

Second Place: Team 9: Daniel Dixon, Caleb Sisco, Mark Smith, and Caleb Toews, 64'6.75"

Third Place: Flux Capacitor: Buddy Evans, Caleb King, Cameron Pearce, William Scott, and Charles Short, 65'7"

Fourth Place: Team Orange: Kyle Hampton, Katie Haning, Nick Russell, and Gabriele Yuliana, 73'7"

For the regional car competition, the cars had to carry a load of 480 ml of water a distance of 53 ft. The "B" Team placed second with a distance of 52'9" and qualified to represent OSU at the 2012 National AIChE conference held on October 26-28 in Pittsburgh, PA. Team Orange placed fourth and Team 9 placed fifth in the car competition.

Dr. Fahlenkamp sends a, "Special thanks to Drs. Jim Smay and Karen High for providing additional support to the student teams, the ChE office staff for playing a significant role in planning the local event, and the interim department head, Dr. R. Russell Rhinehart, and the interim dean, Dr. Khaled Gasem, for their strong support of the project."



But we are especially grateful for the sponsorship and involvement of the folks at Chevron Phillips Chemical Co: Bill Beaulieu, Jason Kreider, Eric Netemeyer, Kevin Radle, Shannon Radle, Steve Satterlee, and Craig Williams.