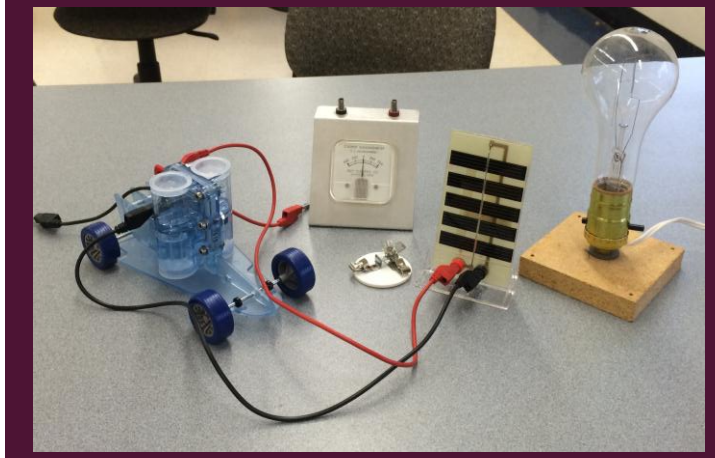
SUNY POTSDAM
YOUTH SUMMER SCIENCE CAMP

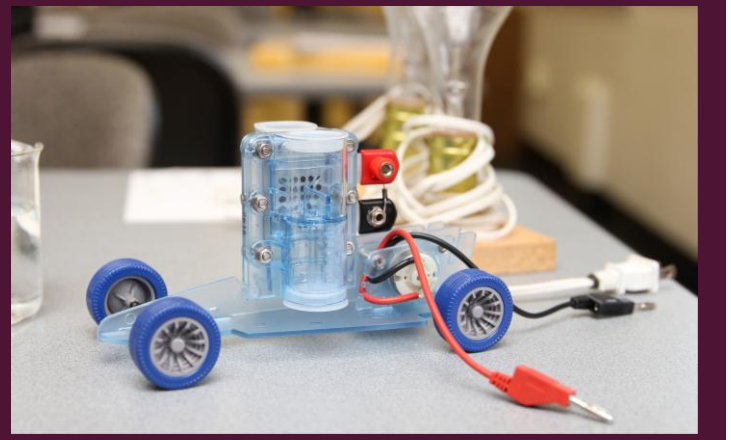
TUESDAY, JULY 29TH – THURSDAY JULY 31ST 2014 – SUNY POTSDAM CAMPUS

DEPARTMENTS OF CHEMISTRY AND SECONDARY EDUCATION

ECONOMIC • ENVIRONMENTAL • SOCIAL

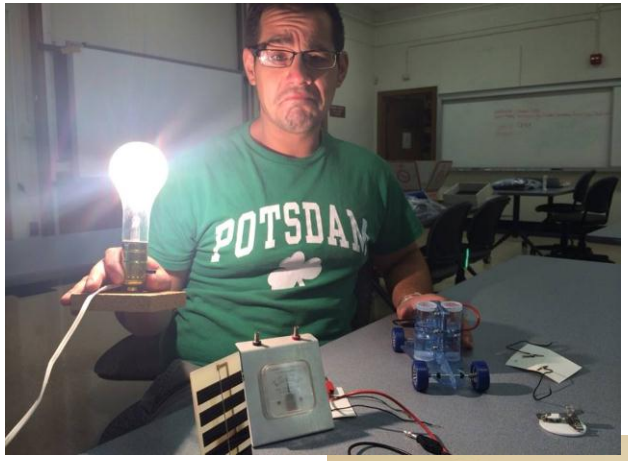
Potsdam SUSTAINABILITY

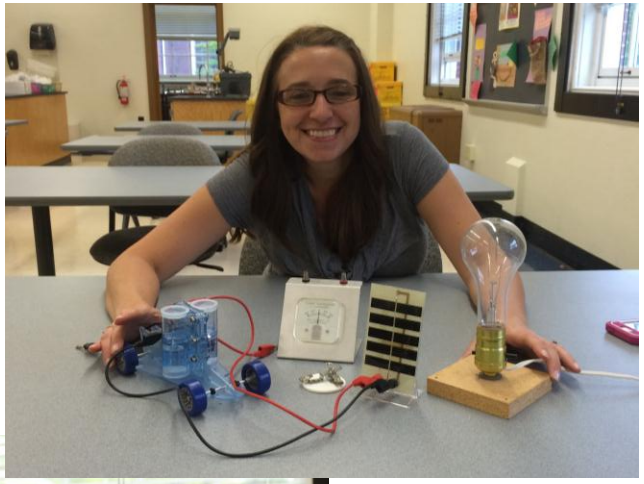




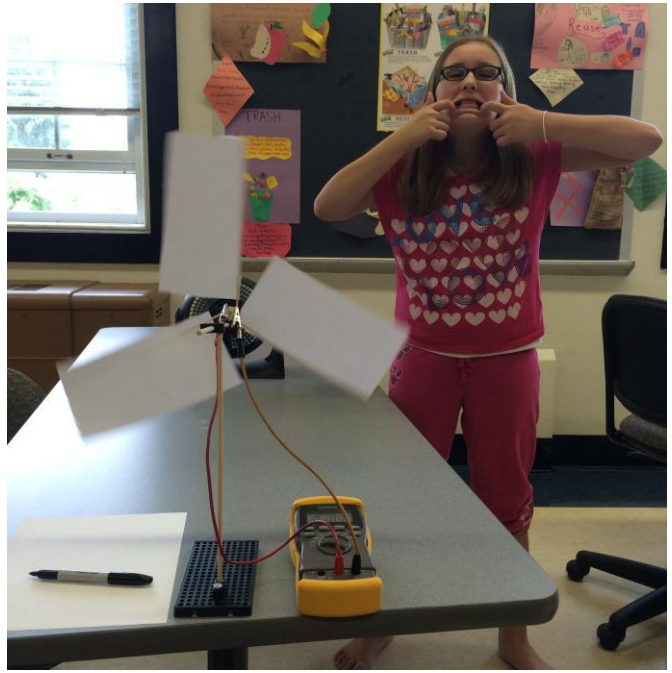
OUR CAMP: THE MISSION AND OUR INSTRUCTORS

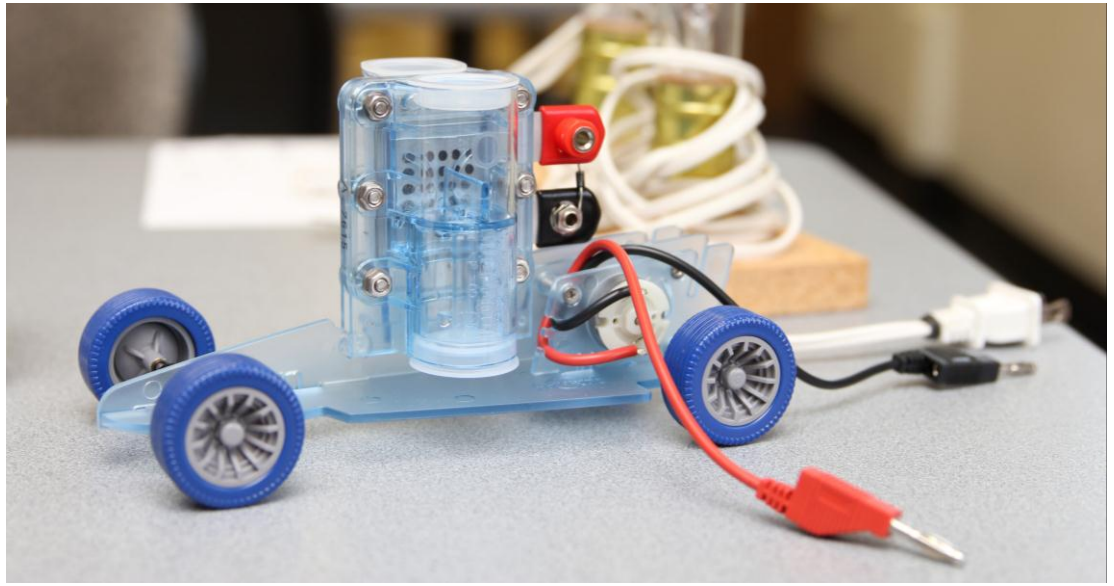
- This was the premier year of the SUNY Potsdam Summer Science Camp, lead by John Proetta and Melissa Cummings, from the departments of Secondary Education and Chemistry, respectively.
- Outreach extended to the Potsdam Middle School, targeting students 4th – 8th grade.
- Camp met for 3 hours (9am-12pm) through the dates of July 29th-31st.
- Three learning modules focused on Renewable Energy, Rocketry and Space, and Food Science

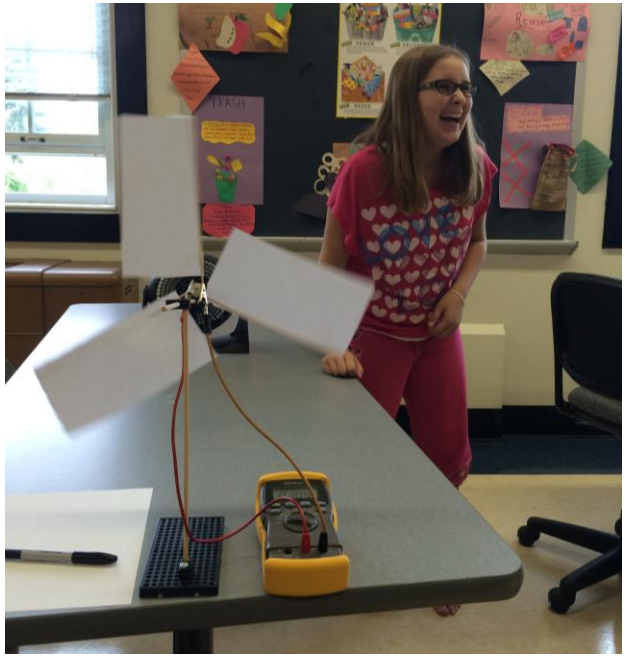




RENEWABLE ENERGY:
SOLAR CELLS, FUEL CELLS, AND WIND TURBINES

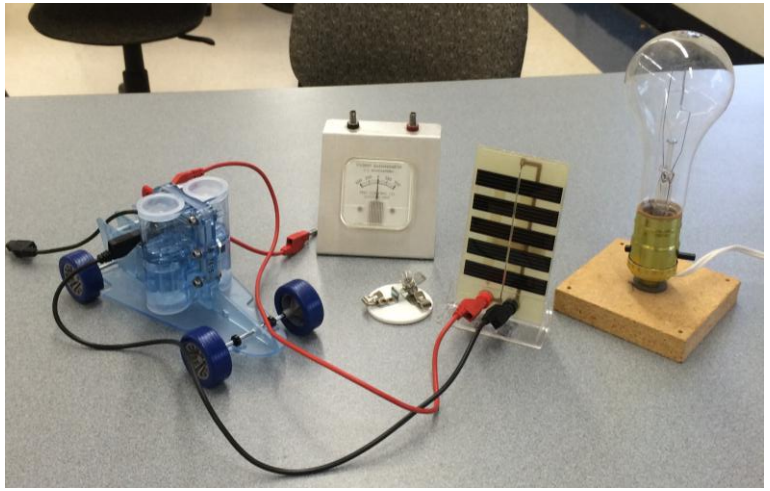






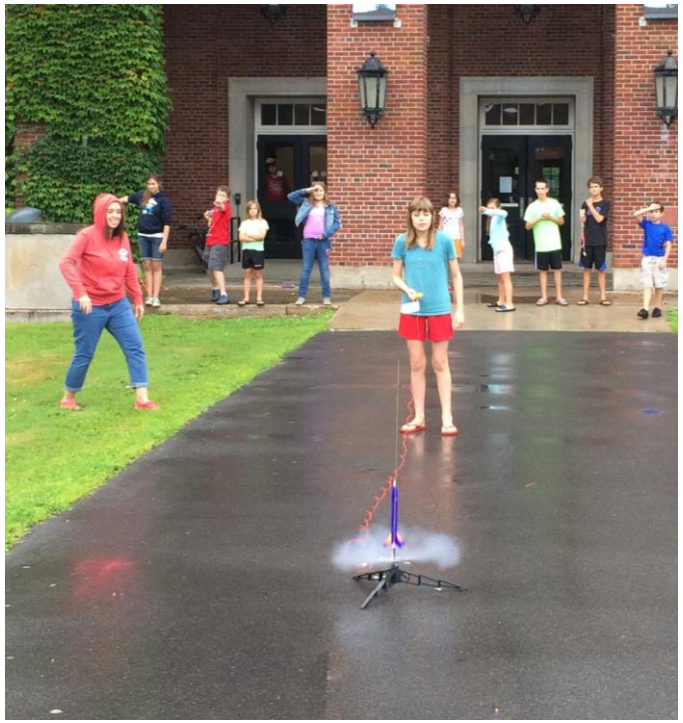
- Students were introduced to green, renewable energy sources using photovoltaic solar cells, dye-sensitized solar cells, hydrogen fuel cells and wind turbines.
- Through a number of demonstrations and activities, the students investigated renewable energy sources and designed their own wind turbine. Using a voltmeter, we found which student had the most effective turbine.

RENEWABLE ENERGY: SOLAR CELLS AND FUEL CELLS



- One of the more visual demonstrations involved showing the students how fuel cells can be coupled with solar technology to split water and form hydrogen and oxygen. Here, the students were able to see the formation of H_2 and O_2 as we captured solar energy to promote the electrolysis of water.
- The activity showed the doubled ratio of H_2 to O_2. The hydrogen produced was then used to power a small car and a small fan.

ROCKETRY, TRAJECTORY, AND SPACE



- Space and rocketry were introduced to the students through a rocket building module. This proved to be a really successful activity that kept the students interested.
- Students were able to design their rockets for flight and blast them off in the quad. ALL 13 launched and deployed successfully.

ROCKETRY, TRAJECTORY, AND SPACE