

Upcoming: AICHe Career Fair on Oct 25

Our 3rd annual AICHe Career Fair will be on October 25 in the Ackerman Grand Ballroom. Current confirmed attending companies are: Anheuser Busch, Applied Biosystems, BEHR, Biogen IDEC, BP, Chevron, Clorox, ConocoPhillips, ExxonMobil, and Frito Lay.



Chem-E-Car Team members: (left to right) Selma Lee, Bert Liu, Alex Brinkmann, Jammie Peng, Jennie Pang

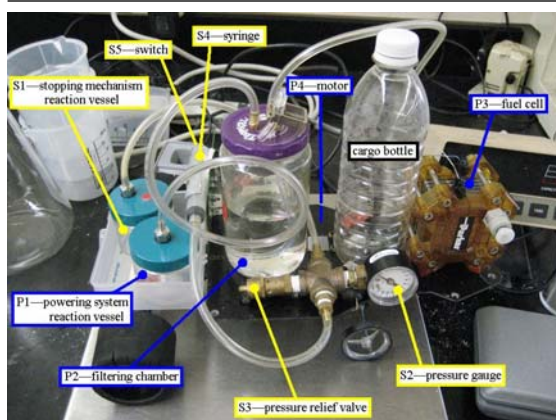
UCLA will be hosting the 2008 Western Regional Conference

The AICHe student chapter at UCLA is proud to be hosting the 2008 Western Regional Conference. We are looking for sponsoring companies for the Chem-E-Car Poster Competition / Meet the Sponsors Fair.

Upcoming: 2007 National Chem-E-Car Competition

The objective is to design and construct a car that is powered with a chemical energy source that will carry a specified load (0-500 ml water) over a given distance (50-100 ft) and stop, and neither the load or the distance is known until the day of the competition. The spirit of the competition is to inspire innovative ways to provide an alternate source of fuel.

The 2007 National AICHe Conference and Chem-E-Car Competition will be held on November 3-4 at Salt Lake City, Utah. We are currently experiencing financial difficulties in transportation and accommodation expenses. Donations to help out would be greatly appreciated.



Chem-E-Car Team

Powering system (blue/dark P labels): We use a hydrogen fuel cell to generate electric current to power the car. A reaction of 1 M hydrochloric acid and magnesium (P1) produces the hydrogen for the fuel cell. ($Mg + 2 HCl \rightarrow H_2 + MgCl_2$). The hydrogen produced is then bubbled through water in a 500 mL filter chamber (P2) in order to remove acidic vapor from and add moisture to the hydrogen gas. Finally, the filtered hydrogen gas enters the fuel cell (P3) to generate power for the motor (P4).

Stopping mechanism (yellow/light S labels): Our stopping mechanism involves a syringe and a switch. A reaction of 1 M acetic acid and sodium bicarbonate (S1) produces carbon dioxide ($NaHCO_3 + CH_3COOH \rightarrow NaCH_3COO + H_2O + CO_2$). Because the gas-producing reaction builds up pressure, a pressure gauge (S2) and a pressure relief valve (S3) are installed for safety. The pressure built up by the reaction causes the syringe (S4) to expand. As the syringe expands, it pushes and flips the switch (S5) which cuts off the circuit of the car's motor, thereby stopping the car.

This year's team is led by Selma Lee and Bert Liu. If you are interested in the progress of the car or offering advice to the team, please visit the team's LiveJournal or email the Co-Chairs.