

Team #47: Chem-E-Car

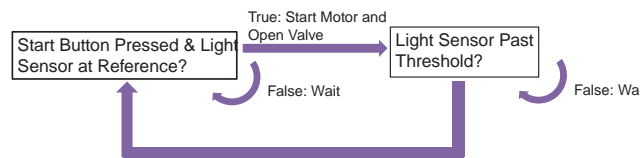
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To win the 2018 AIChE Chem-E-Car Competition by designing and building a chemically propelled car that travels a prescribed distance, quantifiable by a controlled change in a concentration of chemical reactants, while carrying a load.

Chem-E-Car Competition:

- Judges give a distance and load
- Closest to the target line wins
- Sponsored by AIChE

Type	Threshold/Detail	Specification Met
Time	< 2 minutes	<input type="checkbox"/>
Distance	15-30 meters	<input type="checkbox"/>
Size	< (40 x 30 x 20) cm	<input type="checkbox"/>
Load	0-500 mL water	<input type="checkbox"/>
Speed	> 0.25 m/s	<input type="checkbox"/>
Alignment	± 26 degrees from center	<input type="checkbox"/>



Category	Amount
Total	\$3,137
Parts and Manufacturing	\$1,671
Testing	\$940
Safety	\$525
Budget Surplus	\$1,863

- All engineering specifications were met
- Placed 4th in the Southern Regional Competition
- Placed 2nd in the Poster Presentation Competition
- The team had the most consistent performance
- Earned a spot in the 2018 National Chem-E-Car Competition
- With more testing, a better model can be created to win the National Chem-E-Car Competition

