
OFFICIAL RULES FOR THE 2016 TULSA ENGINEERING CHALLENGE

Sponsored by the Tulsa Engineering Foundation

CHEMICAL SWITCH COMPETITION

Important Notice: Only Middle and Upper Divisions may enter.

OBJECTIVE

To turn off a light bulb using a chemical reaction

COMPETITION ENTRY REQUIREMENTS

Each registered entrant (individual or team) may submit one chemical switch into the competition. Each entry must be accompanied by design documentation. The design documentation must use the format at the end of these official rules. No entry will be accepted without complete design documentation. An entrant will have the opportunity to resubmit incomplete documentation. The design documentation will be used to judge the safety of the design.

The contest is limited to six entries per school.

CHEMICAL REACTION OPTIONS

The students may use any chemical reaction that can be safely operated indoors. Entries using open flames or reactions that release smoke or spray will be disqualified. The Officials have the right to rule that a chemical reaction is unsafe for indoor operation. Since no fume hood will be available, chemicals must not require the use of a fume hood. Any dilutions should be done before transporting chemicals to the site. A container for the disposal of acids will be provided, but entrants must make arrangements for the disposal.

JUDGING AND SCORING

For each entry the time required to turn the light bulb off will be recorded. The goal is to turn off the light as close to zero seconds as possible without turning it off before ten seconds. Time is equal to time in seconds.

Any entries that turn the light bulb off before ten

