

CHEM-E-SWITCH

Event description

Are you that budding engineer who gets super-excited while tinkering with chemicals? Are you amazed by the variety and versatility of reactions that happen to matter around us? Then this is the right platform for you to experiment with your ideas. Come and reproduce a mechanism with the help of your knowledge in chemistry and engineering skills in order to automate the switch of an electric circuit we've got ready for you. The aim is to make the mechanism turn off the switch of the circuit within the specified time. So bounce those exemplary ideas off your brain, 'coz the stage is set for Chem-e-switch.

Event Rules

- The participants will form teams of maximum three members.
- There will be only a single round.
- The chemical reaction and mechanism (along with the type of switch to be used) should be submitted to the organizers prior to the fest date (on or before 30th September 2017).
- The mechanism should be set up at the venue of the event only, but you must come with preparation.
- The electrical circuit (excluding the switch) and necessary chemicals will be provided by the organizers but other materials should be brought by the participants.
- The participants must be present at the venue on time.
- From the start of the reaction, the switch must be broken within a time of 2 minutes.
- No damage to be done to the circuit. No tampering to be done with any components of the circuit. The mechanism should be fully external to the circuit.
- There is no limitation on the size of the mechanism.
- No human intervention is allowed once the mechanism is made and reaction is fully triggered. It should automatically complete the task.
- No spilling of chemicals or leaving residues on surroundings is allowed.

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Note - The first half of the event will be utilized for building the mechanism (along with the chemical reaction) and practicing.
Judging will be done in the second half.

Judging Criteria

The teams will be judged on the following parameters:

1. The novelty and efficiency of the mechanism.
2. The involvement of chemical reaction in the mechanism.
3. Completion of the task with precision.

** Final decision in case of any dispute will be solely in the hands of the organizers.

Example

A weight can be tied to a string attached to a tethered Magnesium strip. The Magnesium strip is to be placed in Hydrochloric Acid. When enough Magnesium reacts, the strip will break and the weight will drop and open the switch.

Same design can be used replacing Hydrochloric Acid with Sulfuric Acid



Contact

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