**Chem-E-Car**

**About us**

From thermal to nuclear, energy has seen almost all transformations. In this over-brimming world, it is highly probable to not get refined fuel for the car to run. To bustle on it, AZeotropy 2015 brings to you Chem-E-Car, for ingenious people who are never tired

of playing with chemicals! Applying physics to fluids is what Chemical Engineering is about. So gear up and testify your Chemical Engineering spirit because if you can conquer Chem-E-car then you are well on your track.

**PS**

OBJECTIVE: To design and construct a car that is powered with an on bot

chemical energy source that will carry a specified load over a given distance and stop closest to the specified finish line in an optimized timing.

**Affiche**

**ABOUT US**

AZeotropy 2015 brings to you Affiche, the poster presentation competition, for the ingenious and technical people who are never tired of research!

“Research is to see what everybody else has seen,

and to think what nobody else has thought”

-Albert Szent-Gyorgyi

The Symposium provides the opportunity to the undergraduate students to present their hard work of sleepless nights of research work through a poster. The event is a great platform for students to present their research work and research skills to the highly experienced scientists and industrialists of those fields.

**PS**

OBJECTIVE: To design a poster of the research work undertaken by you through a project and present it in the Symposium of AZeotropy 2015 at IIT Bombay.

The competition aims at encouraging research among the undergraduate students.The event is also a great opportunity for students to explore the potential and diversity of research projects in Chemical Engineering.

**DSI: Disaster Scene Investigation**

**About:**

We don’t want another Bhopal Gas Tragedy, do we?

Get your team together and investigate a disaster scene. Couple your engineering knowledge with observation skills because that’s all you need to solve this mystery.

"The world is full of obvious things which nobody by any chance ever observes."

-Sherlock Holmes

**PS:**

OBJECTIVE: To investigate a disaster scene and deduce:

All the possible faults that may cause the disaster/

All the possible causes that have caused the disaster

Remember:

1. Details matter
2. Partners are indispensable

### There is more than one way to approach a problem

**Theme Based**

**About:**  
Biology, Biological Engineering, Biomedical Engineering, Pharmaceutical Engineering, Biomaterials, Biotechnology, Systems Biology,...  
This ain't for doctors, is it?! AZeotropy, IIT Bombay presents "Chemical Engineering in Healthcare", the theme of today and the days to come!  
  
**P.S.:**  
Undertake Chemical Engineering Analysis of a part of the human body. May involve mathematical modelling and control analysis. Stay tuned for the official release of problem system.

**IDP - Industry Defined Problem**

**About**

This is AZeotropy’s regular competition. Solve the industry’s specific problem

and win a handsome prize for it.

\*\* To be given after the PS is finalized

**Q-viz-it**

**About**

Q-viz-it is AZeotropy’s Online Quiz. Apply your engineering knowledge and

enjoy a fun and intellectually stimulating quiz.

And as an added incentive, the winners get an industrial visit to BASF.

For the first time, we also have a special quiz exclusively for IITB students.

This is an individual competition. Just Register for the competition and login for

the quiz.

For more details, refer to the PDF.

**Chem-E-Timer**

**About**

This is a first time event. Try your hand at making a challenging model which

incorporates multiple mechanisms into it like measuring time and triggering trap

Problem Statement

Make a model which incorporates a Chemical/Mechanical device to measure

time and trigger open a trap door after a pre-set time, and Simultaneously carry

out a Chemical Reaction,

The more accurate your time and higher the yield, the better your chances at

winning.

**Simulati** (COMSOL)

**About:**

COMSOL Multiphysics is a powerful interactive environment used to model and solve all kinds of scientific and engineering problems. With COMSOL Multiphysics you can easily extend conventional models for one type of physics into multiphysics models that solve coupled physics phenomena - and do so simultaneously.

For more details on COMSOL, visit: <http://www.comsol.co.in>

**PS:**

You will have to solve a couple of Chemical Engineering related problems using COMSOL trial version during elimination round. PS will be released just before the elimination round.