



8<sup>TH</sup> NATIONAL  
**SCIENCE BEE**  
2019

## Module Guidelines

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# Chemathon



## INTRODUCTION

In chemathon you will be given an opportunity to step into the shoes of a Chemical Engineer. The most important part of the job is process design and therefore you will be setting up a Sulphuric Acid Plant (Contact Process).



## PROCEDURE

Modelling Part:

Make sure:

- Each Stage should be labelled, with proper arrows
- The plant should include the Converter, Furnace & the absorber Column
- Sulphuric Acid showering in the absorber should also be highlighted
- Model should be assembled correctly on which marking would be done
- Start off the process with Sulphur and air
- Overall neatness and creativity will be credited

Report Part:

In the report you must include:

- Brief introduction of Sulphuric Acid (Composition, formula & applications etc.)
- Overview of the contact process
- Chemical Equations at each stage
- Process Conditions in the Converter (T, P)
- Catalyst used

Materials provided:

- Empty 1 liter Milk Boxes (4/team)
- Straws (15/team)
- Glace Paper
- Tape
- Cardboard
- Chart papers
- Scissors
- Glue
- Shashlik Sticks



## RULES AND REGULATIONS

- The task must be performed within a limited time.
- Teams should be present on time
- No external help of any kind is allowed.
- Breaking rules may lead to disqualification.
- Decisions taken by ushers and event heads will be final and not challengeable.
- Reports would be hand written and writing should be neat and eligible
- Any query during the module will be handled by module head.