# **ERALDUS** (COOLER INSIDE, HOTTER OUTSIDE)

Mars Obiter Mission was made in 74 million USD, cheaper per kilometre than an auto rickshaw, even cheaper than a Hollywood movie about going to space. As ISRO did, in spite of investing in a new whole sole spacecraft launcher, they innovated the existing technique and used gravity along with the existing launcher to get away the from the grip of Earth's gravity, because nothing is cheaper than free.

It's high time that we stop talking about the discovery of zero and lets pace up and join the elite league of innovators, because INDIA IS INNOVATING. The need of the hour is Research "and" Development. It's just the beginning and we can do much more.

Actors and sportspersons have always been celebrities; we give you a platform to be part of a new consortium of celebrities, the makers, the dreamers, the inventors of things.

## NOW WHAT'S ERALDUS! ALL ABOUT?

It's about jacketing your mass, shielding loss of your energy.

Propose a unique *insulating setup to minimize the heat transfer rate* without using electricity in any form.

#### How?

- The insulating setup should resist loss of heat energy to the surrounding.
- Concepts and theories of thermodynamics and energy transfer would be put to use.
- The insulating setup should fit within a cube of 30 cm side.
- > The inner surface of the setup should not be water absorbing, or else, would lead to disqualification.
- Teams would be provided with a sample of fixed volume of ice.
- The minimum size of inner chamber of your prototype should be equivalent to a cube of side 12 cm.
- > The sample would be kept in the respective insulating setups by the teams.
- Water should not be a part of your prototype
- All the on bot operations have to be performed before the start bell rings.
- After that teams would not be allowed to touch their setups before the final bell rings.
- After the stipulated time period, the melted ice would be collected by the volunteers.
- The team, whose volume of melted ice would be least, shall be declared as winner.

#### GUIDELINES

- > Participants should be students of an undergraduate course in a registered institution, cross college entries are allowed.
- Maximum two participants are allowed in a team.
- No individual can be a part of two teams simultaneously.
- The registration fee for the event would be Rs 150 per team.
- > Sample to be insulated would be provided by the organizers.

#### JUDGING CRITERIA

- > Deviation from the proposed specifications would not be entertained.
- > The prototype in which least volume of ice is converted into water, in a time spam of 30 minutes would be declared as winner (Time can be exceeded, if needed).
- > Use of electricity in any form is strictly prohibited. However, you are free to use any Chemical or Mechanical operation, on bot.
- > In case of tie judging will be done on the basis of design of your prototype (weight, strength, stability, most innovative idea, cost effective design)

### QUERIES, WANNA RESOLVE?

Just write us at mechtechmeet@gmail.com

Or call

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