## **PRODYOGIKI '19**

## **ChemBoat**

So called "soap boats" have been known for decades and can be used to demonstrate the Marangoni effect. Marangoni effect is the mass transfer along an interface between two fluids due to a gradient of the surface tension. Huh!! Seems too complicated. Well come and see yourself by taking part in our even "CHEMBOAT".

### **Event Description:**

- The event consists of a team of 2 members and has been divided into 3 rounds
  - Round 1: A short quiz will be conducted which will have questions related to general sciences. The more questions a team answers, the more virtual P-Bucks the team receives.
  - Round 2: With P-Bucks in hand, the teams now have to buy chemicals and materials (which be provided on spot), by which they can make a boat.
  - Round 3: The motive of the final round is to make a boat using these materials and use the chemicals to boost the boat.

#### **Rules:**

- Round 1:
  - The quiz will contain 20 MCQs. The quiz must be attempted within 20 minutes.
  - Any participant found using internet will be immediately disqualified.
  - The more questions a team answers correctly, the more P-Bucks that team receives.
  - To qualify for Round 2, teams must correctly answer at least 7 questions

#### Round 2:

- Any team can buy any chemical and material as long as that team has enough P-Bucks in hand.
- The teams now have to make a boat by using the materials that they bought.
- By using the chemicals, they will boost their boats.
- Team whose boat will cover the given distance in shortest time will win.
- Boat must not have any mechanical/electrical part (e.g. motors, turbines)
- Mechanical push/pull is not allowed

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- Chemicals will be poured using droppers and only limited volume of chemical can be used in one go.
- Only one boost will be allowed.
- o In case of tie, the decision of the judges will be final.

## **Judging Criteria:**

Team whose boat will cover the given distance in shortest time will win