



# GTU TECHFEST 2017

Gujarat Technological University,  
Established Under Gujarat Act No.: 20 of 2007

Website: [techfest.gtu.ac.in](http://techfest.gtu.ac.in)  
Email: [gtutechfest@gtu.edu.in](mailto:gtutechfest@gtu.edu.in)

Venue:  
L.D. College Of Engineering,  
Near Gujarat University,  
Ahmedabad - 380015,  
Gujarat.

## Colorogulation

*"solve it and pure it"*

### Abstract:

Quiz, color adsorption and final event of coagulation will have to be performed by each team. Test your knowledge in quiz, use your technical skills and remove the color and impurity of water. Nothing comes easy, be prepared for a tough fight.

### Problem Statement:

**For color adsorption:** Wastewater will be having color in it. Participant have to add their adsorbents in it and have to adsorb the color in 15 minutes. 10 minutes extra will be provided for settling of the sample. Those who qualify in this round will go for the final round.

**For coagulation:** Wastewater will be having colloidal impurities and team have to remove those colloidal impurity using given coagulant. Only one Coagulant would be given which are mentioned here. Alum, Ferric Chloride, Ferric Sulfate.(Coagulant will be any one of this. Participants will not have choice for selection of coagulant).Participants have to stir the sample manually with the stirrer provided.

### Specifications:

**Quiz:** Questions will be strictly based on environmental field.

**Color Adsorption:** Wastewater will be any colored water and participants have to adsorb the color by using all the provided adsorbents.

**Coagulation:** Wastewater with colloidal impurity will be given along with one coagulant and acid and base solution.



# GTU TECHFEST 2017

Gujarat Technological University,  
Established Under Gujarat Act No.: 20 of 2007

Website: [techfest.gtu.ac.in](http://techfest.gtu.ac.in)  
Email: [gtutechfest@gtu.edu.in](mailto:gtutechfest@gtu.edu.in)

Venue:  
L.D. College Of Engineering,  
Near Gujarat University,  
Ahmedabad - 380015,  
Gujarat.

## Rules:

### For color adsorption:

- All the materials and adsorbents will be provided. Participants can't bring their own adsorbents with them. If any participant caught doing so, they the team will be disqualified.
- 15 minutes will be provided for adsorption process and 10 minutes will be provided as settling time.
- Team have to buy all of the adsorbents (not any one specific adsorbent) in the proportion they think fit for color removal.

### For coagulation:

- Coagulant will be provided to the participants with acid and base solutions.
- 15 minutes for coagulation and 15 minutes for settling will be given.
- All the chemicals and lab wares will be provided. Participants are not allowed to bring any material relating to the event. If team is caught doing so then that team will be disqualified.

## Judging Criteria:

**Quiz:** Person having maximum points will be winner and will go for next round.

**Color adsorption:** Team having maximum removal of color from wastewater will be winner and can go for final round.

**Coagulation:** Team having maximum removal of turbidity and maximum amount of leftover solution will be considered winner.



# GTU TECHFEST 2017

Gujarat Technological University,  
Established Under Gujarat Act No.: 20 of 2007

Website: [techfest.gtu.ac.in](http://techfest.gtu.ac.in)  
Email: [gtutechfest@gtu.edu.in](mailto:gtutechfest@gtu.edu.in)

Venue:  
L.D. College Of Engineering,  
Near Gujarat University,  
Ahmedabad - 380015,  
Gujarat.

**Team size:** 3-4 participants/team

**Registration Fees:** Rs. 50 per participant.

**Event Managers:**

**Anjali Ramchandani**

Mobile Number: +91-9173030801

Email id: [chaitanyaluhar3@gmail.com](mailto:chaitanyaluhar3@gmail.com)

**Priyansh Mehta**

Mobile Number: +91-8000566009

Email id: [priyanshmehta96@gmail.com](mailto:priyanshmehta96@gmail.com)