



MEGALITH'11

DEPARTMENT OF CIVIL ENGINEERING IIT KHARAGPUR



Fly Ash a resource material

At present time India is witnessing a new phase in development, and construction provides the direct means for development. With this development it is necessary to develop a material which is economical, effective and environment friendly. Fly ash is one such material incorporated in India. Produced mainly from thermal power plant as remains of burned coal, it has a large use in various aspects. By utilizing the waste it is a part of green technology with economical benefits.

The event will be held in 3 phases:

1. Online Submission:

In this round basic knowledge of Fly ash in various civil engineering aspects is required. A report on the industrial and domestic use of Fly ash discussing all the pros and cons with respect to:

- Effect on environment and society
- Economic feasibility
- Technical feasibility

Last date of submission: 15th December

Submission Format:

- Report should not be more than 10 pages.
- It must be in .pdf format.
- It must contain names of the team members.
- Content must be in Arial font of size 12.
- Figures and tables may be used.
- Online and other sources should only be used as references. Any direct resemblance may lead to disqualification of the team.
- All references should be listed at the end of the report.

2. On Spot Presentation:

Participants have to give a paper presentation on the improvement of the soil properties using the fly ash as an admixture.

Properties to be improved:



MEGALITH'11

DEPARTMENT OF CIVIL ENGINEERING IIT KHARAGPUR



- a) Geotechnical strength of the soil:
 - Optimum moisture content.
 - Plasticity Index.
 - Direct Shear stress.
 - Tri-axial Stress.
 - Vane Shear stress.
- b) Improvement of Agricultural Properties:
 - The percent variation of different chemical compound like nitrogen and phosphorus.
 - Permeability of soil.

3. Quiz Round :

A quiz will be held covering the entire aspects of Fly ash. It will consist of 2 rounds:

- I. On general properties and applications of Fly ash.
- II. Questions will be related to Fly ash material will be given during quiz.

Rules and Regulations:

1. On the basis of the report submitted top 10 teams will be selected and called for giving presentation in IIT Kharagpur.
2. Maximum team members: 5.
3. Last date for submission of 1st phase report: 15th December.
4. Participants must submit their presentation for 2nd phase or must bring it as .ppt file with them in a pen drive.
5. In 2nd phase presentation teams will get a maximum of 15 minutes exceeding which will result in loss of marks, followed by a 2 min Q/A session by judges.
6. Marks obtained in both 2nd and 3rd phase will be added to decide the winners of the event.
7. All submissions are to be done at submissions@megalith.co.in with the subject of mail as "Flyash_Submission_Teamname".
8. Decisions of judges will be final and binding.

For any queries contact:

Suman Kumar : suman@megalith.co.in : 9775550012