



2nd INAE Youth Conclave

IIT Kharagpur

Pre-Conclave : 23rd - 25th March 2018
Finals: 10th -12th August 2018



“Submission Guidelines for the teams selected for the final event to be held in INAE Youth Conclave during 10th-12th August, 2018 at IIT, Kharagpur”

Submission Deadline – 20th July 2018

REVISED Problem Statement:

Source Segregation is key to any effective waste management system. India is urbanizing at a fast rate and the challenges in managing our municipal solid waste is also increasing with urbanization. Due to the mixing of all types of wastes at source it is, costly, difficult and inefficient to segregate it at dumpyard level. Conventional methods for Source Segregation of waste involves three dustbins to be used which is not a good option in the emerging and existing cities where many families are living in smaller apartments. Your objective is to design a low cost device for Source Segregation of waste at family level which lives in a high rise apartment (consider scenario of a metro city where the sizes of apartments affordable for middle class is getting smaller and smaller) and to suggest the system for waste reduce-reuse-recycle and flow of waste till it leaves the apartment.

1. The device should be framed according to the household needs of a family of 5 persons.
2. Your device can either be mechanical or electrical but use of chemicals is discouraged.
3. Working model or simulation need to be demonstrated.
4. The durability of the device will be an important criterion to consider.
5. You need to follow the government waste management rules and regulations.
6. You have to submit a report of 20 -25 pages A4 size in both docx and pdf format.
7. References used (at least 10) should be mentioned





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Judging Criteria

- Cost of the device
- Efficiency of the device is awarded, any hazards due to it are penalized.
- Size of the device
- User Friendliness
- Durability of the device and materials used in devices

Report Format

- Abstract
- Product/design description
- Process description
- Process flow diagram with process parameters
- Product innovativeness
- Market/commercialization potential
- Technical feasibility
- Cost and energy evaluation
- Patent status (apply, license, if any)
- Reference should be present at the end of the proposal and must follow the referencing style of "Journal of Waste Management"
- The report should be printed in 12pt Times New Roman font single line spacing and the proposal should not exceed 25 pages (excluding the table of contents and references).
- Completed applications must be submitted in both .doc format and PDF format.
- All text and figures must be on A4 paper (21 cm × 29.7 cm) size.
- Proposal must include 5" × 7" color photographs or videos of the prototype of the proposed product/design.
- Additional images throughout the report are optional
- The information of each participant in the team such as name, school and university, class/grade and contact information (phone number and email address) should be submitted as a separate document in the given application format and should not appear within the abstract and proposal.

