ONGC Energy Centre



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3rd National Competition 2017 Development of Solar Chulha

Research & Innovation in Energy is an initiative by ONGC Energy Centre (OEC) to facilitate and encourage students and young researchers to come forward with out-of-box ideas, or innovative working prototypes in the area of energy. ONGC Energy Centre (OEC) functions under the aegis of the ONGC Energy Centre Trust, set up by ONGC, and is mandated to undertake or assist/collaborate in research for developing and/or improving the energy mediums and sources, especially in clean and renewable energy options.

ONGC Energy Centre announces the 3rd National Competition 2017, on Design, Development and Demonstration of Solar Chulha, suitable for indoor cooking of Indian food (including frying, baking and chapati making).

OEC invites applications/entries from young students from academic and research institutions, who have ideas on development of a working prototype of Solar Chulha.

Participants are encouraged to involve industry partner for scaling up of the product.

The broad performance features expected from Solar Chula among other things include:

- i) Solar Chulha should work on solar energy (solar thermal or PV) or any other renewable energy as source of energy which can be easily accessed or made available in any house hold kitchen.
- ii) It should be possible to keep the chulha all time inside the kitchen for cooking purposes (including frying, baking and chapati making), similar to traditional commercially available cook stoves which work on LPG or other fuels.
- iii) It should be possible to use the Solar chulha on need basis any time during the day/night (24X7) basis.
- iv) It should be suitable for built up of materials which are easily available and can be disposed safely and can be mass produced with economies of scale.
- v) The solar chulha must meet safety requirements for use in any house hold.
- vi) It should be able to provide sufficient meals for a family of five. During the night time it will work on stored energy with energy storage, preferably with cycle life of around 2500 or even more.

vii)Participants may be required to demonstrate the performance of Solar Chulha in Delhi before final selection.

Any student pursuing Graduation/Post Graduation/Ph.D., from a recognized academic and/or research institution, with a maximum age of 32 years (As on 1st January, 2017), will be eligible to participate in the competition.

The top three entries selected through this Competition will receive Price of Rs. 10 Lakhs, Rs. 5 Lakhs and Rs. 3 Lakh respectively. They may also get an opportunity for further scale up of the Project. Each shortlisted entry will be given a Certificate of Participation for the team.

Interested young students/researchers fulfilling the eligibility criteria can intimate their interest to participate by providing initial information (as per Part A1 & Part A2 of the Annexure of OEC formats) latest by <u>15th December, 2017</u> to <u>oec_trie@ongc.co.in</u> mentioning subject as **Application/Entry for 3rd National Competition 2017**. The last date for submission of complete entry (Part B, Part C1 & C2) in OEC formats is **15th May, 2018** (Please see details at <u>http://www.ongcindia.com/wps/wcm/connect/ongcindia/home/ongc-energy-centre</u> under News/Tenders/Advertisement tab - 3rd National Competition 2017)

Email:- <u>oec_trie@ongc.co.in</u>

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3rd National Competition 2017

Guidelines for the Competition

- 1. The applicant/team is required to apply by filling the Part A (template given as excel sheet) of the Competition latest by 15th December, 2017.
- 2. The Part B and C along-with Mentor Certificate is required to be submitted latest by 15th May, 2018.
- 3. Undergraduate, postgraduate and PhD students/teams are eligible to participate in the competition.
- 4. Participants are encouraged to involve industry / entrepreneurs in the Project if considered necessary.
- 5. Any student or researcher, who wishes to participate in the 3rd National Competition-2017, should not have competed 32 years of age as on 01.01.2017.
- 6. To ensure participation in the Competition, the completed Part A (as per Excel sheet) should be submitted online latest by 15th December, 2017.
- 7. The Part A in Excel sheet should be sent by E-mail to with Subject as "Entry for 3rd National Competition 2017".
- 8. Please provide correct and factual information to each item.
- 9. It is mandatory to submit Mentor Certificate as per the format to participate in the competition.
- 10. Involvement of entrepreneur or industrial partner is encouraged. In such cases role of the partner and support should be clearly spelled out.
- 11. Each team must use the submission template provided by OEC to create the proposal.
- 12. Team must submit only one proposal for the competition.
- 13. Each team must review the proposal thoroughly before submission. Teams will not be allowed to change any information after submission
- 14. No licenses under any technology, trade secrets, "know-how", or any copyrights, patents, trademarks or other intellectual property rights of OEC, its affiliates or any third party are granted to entrants under the competition.
- 15. In Finals stage, prizes will be awarded and paid to all the members of the team. The Team Leader is obliged to make payment in the applicable amount to each member of his or her team. OEC will not in any way be responsible for the division of the prizes among the members of the team.
- 16. Taxes are the sole responsibility of the teams receiving prizes. Prizes may be subject to reporting for tax and other purposes, and the applicable team-members agree to supply OEC with any necessary information to affect the same and to fully cooperate in fulfilling all applicable legal requirements.
- 17. By submitting a project report, all teams warrant and represent that to the best of their knowledge, their report is original and does not violate or misappropriate any third party trade secret, "know-how," copyright, patent or other intellectual property right. Entrants also warrant and represent that there are no obligations of any nature, legal or otherwise, which would prohibit, restrict, or interfere with their participation in the

competition or submission of their design report, and agree to obtain any necessary clearances, authorizations and/or approvals prior to participation.

18. OEC reserves the right to cancel, terminate, modify or (temporarily) suspend this competition.

Click here to view the formats 3rd National Competition 2017 on Solar