

12. Solar Product Design

Concept:

Solar energy is radiant light and heat from the Sun that is harnessed using a range of ever-evolving technologies such as solar heating, photovoltaic cells, solar thermal energy and many more. **Solar power** is the conversion of energy from sunlight into electricity, either directly using photovoltaic (PV), indirectly using concentrated solar power, or a combination.

Objective:

Solar energy technology use is expanding rapidly. The Solar Photovoltaic (PV) sector is the largest and fastest growing renewable energy employer worldwide with an increasing need for experts that can support this growth. To enhance your knowledge in solar circuits is the main objective of this event. Participants can take any solar product development and can design the solar system with optimising the various parameters such as battery, panels, power generation and utilisation etc.

Rules:

1. 2 members per team.
2. Consists of 2 rounds.
3. First round consists of multiple choice questions (MCQ's) based on basics of solar energy.
4. Participants selected from the first round will be allowed to second round.
5. In Second round design and execution of developed solar product will be asked to the participants. You can have your own problem definition in solar domain otherwise we will provide you.
6. The solar model can be developed and presented with power point presentation. The working videos can be presented in case of online competitions.

Judging Criteria:

Sr. No.	Criteria	Marks
1	Product Design and Innovation	30
2	Fabrication and Results	40
3	Knowledge about the components and use of the developed solar product	30
Total Marks		100

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