

Social Distance Science Fair

Fuel Cell Store, Magical Microbes, and H-TEC Education are teaming up to bring you some STEMulating activity during this hectic time.

We are challenging kids of all ages, to create a renewable energy based Science Fair project, and present it to us via video or slide show! Below you will find the detailed rules and regulations that will govern this Science Fair. Each Class will have winners based on judging by employees from Fuel Cell Store, Magical Microbes, and H-TEC Education.

The purpose of these rules is to:

- Protect the rights and welfare of the student researcher.
- Protect the rights and welfare of all participants.
- Ensure adherence to all regulations.
- Ensure the use of safe laboratory practices.
- Protect the environment.

Classes

- Class 1: Ages 9 & under
- Class 2: Ages 10-13
- Class 3: Ages 14-18

Eligibility and Limitations

1. Students must not have reached the age of 19 on or before September 1, 2020.
2. Student project boards, slide show, video, and abstract must be in English.
3. Each student is only allowed to enter only one project.
4. Team projects are not allowed.
5. All entries must fall into one of the following categories:
 - a. Alternative Fuels
 - b. Computational Energy Science
 - c. Fuel Cells and Battery Development
 - d. Microbial Fuel Cells
 - e. Solar Power
 - f. Hydro Power
 - g. Nuclear Power
 - h. Sustainable Design
 - i. Thermal Power
 - j. Wind
 - k. Combination of 2 or more of the above categories
 - l. Other renewable energy sources
6. A research project may be part of a larger study performed by professional scientists, but the project presented by the student must be their own portion of the completed study.

Requirements

1. All projects must adhere to local, state, and U.S. Federal laws, regulations and permitting conditions. Any projects done outside the U.S. must adhere to the laws of the country and jurisdiction in which the project was performed.
2. All projects must abide by the ethics statement below.
3. Introduction or disposal of non-native, genetically-altered, and/or invasive species (e.g. insects, plants, invertebrates, vertebrates), pathogens, toxic chemicals or foreign substances into the environment is prohibited. It is recommended that students reference their local, state or national regulations and quarantine lists.
4. All participants are required to submit a presentation to sciencefair@myhtec.com. Each presentation must clearly explain how the Scientific Method was followed. Students from Class 2 and 3 are required to submit a 250-word, one-page abstract that summarizes the work in addition to their presentation. Photos of students carrying out experimentations are highly encouraged, but are not necessary. Presentations can be in the form of:
 - a. Video presentation of 15 minutes or less
 - b. Slide show
 - c. Other digital medium
5. **Entries must be received by 11:59 pm PT April 24, 2020.**
6. Winners will be announced April 30, 2020.
7. 1st place winners in each class will receive a personalized trophy, \$100 Amazon Gift Card and a [BioGlo aquarium](#). 2nd place

winners in each class will receive a personalized trophy and a [DoughLab STEM Kit](#).

8. A project notebook are not required, but strongly encouraged. These do not need to be submitted to the judging team.

Ethics Statement

Student researchers, as well as adults who have a role in their projects, are expected to maintain the highest ethical standards. These include, but are not limited to:

- **Integrity.** Honesty, objectivity, and avoidance of conflicts of interest are expected during every phase of the research. The project should reflect independent research done by the student(s), and represent only one year's work.
- **Legality.** Compliance with all federal, country, state and local laws is essential. All projects must be approved by a Scientific Review Committee (SRC), and when necessary must also be approved by an Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), and/or Institutional Biosafety Committee (IBC).
- **Respect for Confidentiality and Intellectual Property.** Confidential communications, as well as patents, copyrights, and other forms of intellectual property must be honored. Unpublished data, methods, or results may not be used without permission, and credit must be given to all contributions to research.

- **Stewardship of the Environment.** It is the responsibility of the researcher(s) and the adults involved to protect the environment and its organisms from harm. All projects involve some amount of risk. Everyone is expected to recognize the hazards, assess the risks, minimize them, and prepare for emergencies.
- **Animal Care.** Proper care and respect must be given to vertebrate animals. The guiding principles for the use of animals in research includes the following "Four R's": Replace, Reduce, Refine, Respect.
- **Human Participant Protection.** The highest priority is the health and well-being of the student researcher(s) and human participants.
- **Potentially Hazardous Biological Agents (PHBAs).** It is the responsibility of the student and adults involved in the project to conduct and document a risk assessment, and to safely handle and dispose of organisms and materials.

Scientific fraud and misconduct are not condoned at any level of research or competition. This includes plagiarism, forgery, use or presentation of other researcher's work as one's own and fabrication of data. Fraudulent projects will fail to qualify for competition in affiliated fairs and ISEF. Society for Science and the Public reserves the right to revoke recognition of a project subsequently found to have been fraudulent.

If you have any questions, please feel free to reach out to us a sciencefair@myhtec.com.