

Information for PROJECT EXHIBITORS

Updated 1/1/10 - all information subject to change without notice.

FORMS REQUIRED

- Fill out your registration online, and submit your abstract there as well.
- You must print, fill out, and send in the Parent Consent Form
- You must print, fill out, and send in the Medical Information Form
- You must print, fill out, and send in the Media Release Form
- As a Project Presenter, you must also print, fill out, and send in the appropriate Intel ISEF Forms.

REGISTRATION

Registration is the first afternoon of the event.

SET UP

All project exhibits will be in the Exhibit Hall. After you have registered, you may bring your project to the Exhibit Hall. **Do not bring your project into the Exhibit Hall until you have registered with the Academy.** AFTER you have completed your registration and found where you are to set up your project, bring it in and set it up. **Your project must be set up before dinner. The exhibit hall will be secured at that time.** Only Safety and Display Committee members will be allowed to enter the Exhibit Hall during dinner.

The Safety and Display Committee members will be available during set-up hours to assist you with your project display. Projects will be checked for compliance during and after dinner. Students may check their projects for approval after dinner. Projects that comply will be given a card to display at their booth during judging. Projects that do not comply will receive a red card. If your project was "flagged" for non-compliance, you must take your red card to the Safety and Display Committee member at the information table outside the exhibit hall. The committee member will then assist you in clearing the violation. If a violation can not be cleared-up, the project will fail to qualify for judging.

As an Intel ISEF affiliated science fair, the MAS State Fair requires that all projects comply with the Intel ISEF Safety and Display Rules. These rules can be found in the Intel ISEF Rules and Guidelines Manual. This manual can be viewed on-line or downloaded from <http://www.sciserv.org/>

ELECTRICITY

- Electricity will be available if NEEDED for equipment ESSENTIAL to the project *and* if you request it on your registration form.
- There is a **\$15.00** charge for electricity.
- You must reserve and pay for electricity in advance.
- There are no refunds if you decide not to use electricity after you have paid, and there will be no electricity available unless you pre-pay when you send in your registration.
- If you decide to use electricity in your exhibit, please bring a *grounded* (one with three prongs) 20-ft. extension cord and a power strip if you need more than one outlet.

DISPLAY AND SAFETY RULES

Please make sure your project display meets all ISEF rules. Here are some pointers. The following is taken directly from the ISEF web site display and safety page. The **bolded underlined** items are the most common violations we have at the state science fair. Please do everything you can to abide by these rules. Remember

pictures say a thousand words! Instead of bringing in items, **TAKE PICTURES!**

Not Allowed at Project or in Booth:

1. Living organisms, **including plants and fruit flies!**
2. **Taxidermy** specimens or parts
3. **Preserved** vertebrate or **invertebrate animals**
4. Human or animal food **including popcorn**
5. Human/animal parts or body fluids (for example, blood, urine) (**Exceptions:** teeth, hair, nails, dried animal bones, histological dry mount sections, and completely sealed wet mount tissue slides)
6. Plant materials (living, dead or preserved) usually which were part of the scientific experimentation and which are in their raw, unprocessed, or non-manufactured state (Exception: manufactured construction materials used in building the project or display)
7. **Laboratory/household chemicals including water** (Exceptions: water integral to an enclosed apparatus or water supplied by the Display and Safety Committee) **Please note this includes bottles with residue and toothpaste!**
8. Poisons, drugs, controlled substances, hazardous substances or devices (for example, firearms, weapons, **ammunition**, reloading devices)
9. Dry ice or other sublimating solids
10. Sharp items (for example, **syringes, needles, pipettes**, knives)
11. Flames or highly flammable materials
12. Batteries with open-top cells
13. Awards, medals, business cards, flags, **acknowledgements (this means you can not say "Thank you to Dr. Jones on your display, an acknowledgement can be made in the paper)"** etc. (Exception: The current year Intel ISEF medal may be worn at all times.)
14. Photographs or other visual presentations depicting vertebrate animals in surgical techniques, dissections, necropsies, or other lab procedures
15. Active Internet or e-mail connections as part of displaying or operating the project at the Intel ISEF

Allowed at Project or in Booth, BUT with the Restrictions Indicated

1. Soil or waste samples **if permanently sealed in a slab of acrylic**
2. Postal, Web and e-mail addresses, telephone and fax numbers **of finalist only**
3. Only photographs (that is, visual depictions) of the Finalist, the Finalist's family, photographs taken by the Finalist, and/or photographs for which credit is displayed (such as from magazines, newspapers, journals, etc.) **if not deemed offensive** by the Scientific Review Committee, The Display and Safety Committee or Science Service
4. Any apparatus with unshielded belts, pulleys, chains, or moving parts with tension or pinch points **if for display only and not operated**
5. Class II lasers if:
 - a. Operated only by the Finalist.
 - b. Operated only during Display and Safety inspection and during judging
 - c. Labeled with a sign reading "Laser Radiation: Do Not Stare Into Beam."
 - d. Enclosed in protective housing that prevents physical and visual access to beam.
 - e. Disconnected when not operating.
6. Class III and IV lasers **if for display and not operated**
7. Large vacuum tubes or dangerous ray-generating devices **if properly shielded.**
8. Pressurized tanks that contained non-combustibles **if properly secured.**
9. Any apparatus producing temperatures that will cause physical burns **if adequately insulated**

Electrical Regulations at the Intel ISEF

- 1) Finalists requiring 120 or 220 Volt A.C. electrical circuits must provide a UL-listed 3-wire extension cord which is appropriate for the load and equipment.
- 2) Electrical power supplied to projects and, therefore, the maximums allowed for projects is 120 or

220 Volt, A.C., single phase, 60 cycle. Maximum circuit amperage/wattage available is determined by the electrical circuit capacities of the exhibit hall and may be adjusted on-site by the Display and Safety Committee. For all electrical regulations, "120 Volt A.C." or "220 Volt A.C." is intended to encompass the corresponding range of voltage as supplied by the facility in which the Intel ISEF is being held.

- 3) All electrical work must conform to the National Electrical Code or exhibit hall regulations. The guidelines presented here are general ones, and other rules may apply to specific configurations. The on-site electrician may be requested to review electrical work on any project.
- 4) All electrical connectors, wiring, switches, extension cords, fuses, etc. must be UL-listed and must be appropriate for the load and equipment. Connections must be soldered or made with UL-listed connectors. Wiring, switches, and metal parts must have adequate insulation and overcurrent safety devices (such as fuses) and must be inaccessible to anyone but the Finalist. Exposed electrical equipment or metal that is liable to be energized must be grounded or shielded with a non-conducting material or with a grounded metal box or cage to prevent accidental contact.
- 5) Wiring which is not part of a commercially available UL-listed appliance or piece of equipment must have a fuse or circuit breaker on the supply side of the power source and prior to any project equipment.
- 6) There must be an accessible, clearly visible on/off switch or other means of disconnect from the 120 or 220 volt power source.

Maximum Size of Project at the Intel ISEF

- 30 inches (76 centimeters) deep
- 48 inches (122 centimeters) wide
- **108 inches (274 centimeters) high including table**

JUDGING

Judging will be held on the second day of the event. Times vary based on your scientific Discipline. Additional judging for special awards will be held during regular judging and during public viewing that afternoon. If your project fits the criteria for any of this year's special awards, we suggest you stay by your project during the public viewing.

LUNCH

Judging day includes a lunch break for student presenters. There are several restaurants to choose from in the area near the hotel.

AWARDS CEREMONY

All students are expected to be at the Awards Ceremonies that night and the following morning. Students do not need to purchase meal tickets in order to attend the ceremonies.

SAMPLE JUDGING FORM

Projects are judged according to the criteria in each of the groupings listed below, listed in order by relative weight.

The Process of Science

- Is the project or the approach original?
- What has been the student's role in the use of Facilities and Resources?
- Is the data analyzed appropriately?
- Has the student conducted an appropriate review of relevant prior work?
- How does the experimental design and data relate to the aims of the work?
- Are the conclusions appropriately related to the experimental design?

Effectiveness of Communication

- Does the abstract [submitted prior to judging] concisely outline the project, data and conclusions?
- Does the visual communication of the presentation convey the study clearly and completely?
- Is there a clear flow of ideas and information in the written communication?
- Does the student explain the overall project lucidly?
- In each category is the project, or appropriate parts of the project, concisely and clearly presented?
- Is there a layperson's explanation of the project, to include purpose, methods, and conclusions?

Context of the Project

- Why is the overall project important?
- What impact do the results of the project have on the general field of study?
- What directions might the research take in the future?
- What new experiments might be proposed to follow-up on the research presented?

Scope of Understanding

- How well does the student respond to probing and provocative questions
- Does the student appreciate the interdisciplinary aspects of the research
- Does the student understand the potential impact of the work?