

2020 INTERNATIONAL SCIENCE AND ENGINEERING FAIR IN VIENNA REQUIREMENTS AND RULES

Participation

All middle school and high school students from international schools in and around Vienna are eligible to enter the 2020 International Science and Engineering Fair which will be held this year at the Vienna International School (VIS).

What you will need to do when participating in the Science Fair

1. Decide what project you want to do
2. Discuss with Science Fair Coordinator
3. Register online:
<https://win-iaea.org/science-fair/>
4. Do the necessary work for the project
5. Prepare your report
6. Prepare your display
7. Discuss your project with the judges at the Science Fair
8. Present your project to the public at the Science Fair

Divisions

The projects will be divided into categories within two divisions (Senior and Junior). Each division will be judged separately. If a project is a team entry, all members of the team must qualify for the same division. The divisions are organized by class or grade level as follows:

The Senior Division is for students from Grades 9 - 12 (approximately 13-18 years old); and the Junior Division is for students Grades 6 - 8 (approximately from 10-14 years old).

The Science Fair Coordinator for each participating school is responsible to confirm the appropriate placement of each individual or team into the correct division.

Categories

The theme of the 2020 Science and Engineering Fair is **Vienna: Cradle of Science**. It would be appreciated if your project follows that theme, but it is not required.

Projects entered in the fair will be divided into categories in each division as listed below. Students should specify the category of their project at the time of registration. However, the Science Fair officials may revise or change the project categories depending on content or number of entries received in a category.

Senior Division

Computer Science and Mathematics
Biological Science
Chemistry and Physics
Earth and Space Science
Environmental Science
Engineering and Technology
Health and Human Behaviour

Junior Division:

Computer Science and Mathematics
Earth and Space Science
Environmental Science
Health Science
Human Behaviour
Life Science, Animals
Life Science, Plants
Machines and Technology
Physical Principles

Prizes will be awarded in both Junior and Senior Divisions for the best project in each category and for the best project in each division.

Fair schedule

16 March 2020		Registration completed (including abstract)
20 March 2020	(1800–2000)	Set up Project display at VIS
21 March 2020		
	(0830–1000)	Judging of projects without students
	(1000–1200)	Discussion of project between judges and students
	(1200–1400)	Lunch and special presentations for students
	(1400–1600)	Presentation of projects to the public
	(1700–1900)	Awards Reception VIS Cafeteria

Registration

Students who want to participate in the Science Fair MUST complete an online registration (<https://win-iaea.org/science-fair/>) **with an abstract, preferably in English**, on or before the registration due date (16 March 2020). A registration is required for each project. Each project may have up to three team members. A student may enter only one project or be a team member of only one project. All students who register by the deadline and participate in the fair will receive a free Science Fair souvenir, be invited to the Awards Reception and be eligible for additional awards and prizes. Any registration changes should be made in consultation with the appropriate School Coordinator. No changes will be accepted after the change deadline date.

Project

The project must be the work of the team members alone. Participants can obtain guidance from others, but the participants must do the work themselves. The repetition of a previous project is not permitted; however, extension of work done for a previous Science Fair may be accepted if noted on the registration form and the relevant report is identified and displayed separately at the fair. Senior level students submitting projects involving human subjects, non-human vertebrates, pathogenic agents, controlled substances, recombinant DNA or human/animal tissue must note this fact during the registration process and will be required to supply further information about their project in advance of the Science Fair, in order to ensure that the project adheres to the rules and to pertinent laws.

Special restrictions

Projects involving human subjects, vertebrate animals, pathogenic agents, controlled substances, hazardous chemicals or devices, human/animal tissue or recombinant DNA must be approved by a Science Review Committee. All projects in these categories must be so identified during registration. No live animals, preserved vertebrate animals or parts, including embryos, may be exhibited at the fair. No photographs or drawings of surgical techniques, dissection, autopsies or other laboratory techniques depicting vertebrate animals in other than normal conditions may be displayed. No human parts can be exhibited except hair, teeth or nails. No projects involving illegal or controlled substances are allowed.

Report requirements

All project displays must be accompanied by a report.

The text of the report should be less than 10,000 words in length. The report should, preferably, be written in English. Reports from a French, Japanese or Russian School may be submitted in French, Japanese or Russian respectively as long as they are accompanied by a summary in English. The report should include a title page, table of contents, abstract, description of activities, results and conclusions, and a bibliography. The exact format of the report will depend on the type of project (i.e. research, demonstration, information or design). Other documentation for the project (notebooks, photographs, working papers) may be displayed but is not required.

Project displays

- **Set up and disassembly:** All projects entered in the Science Fair must include a display. The display must be set up between 19:00 and 21:00 hrs on the Friday evening before the Science Fair (20 March 2020). It must be suitable for placing on a table or free standing on the floor. If it includes a display board, the board must be free standing (without outside support). The display must be dismantled and removed by 17:00 hrs on the day of the Science Fair.
- **Size:** The display size is normally limited to 76 cm deep, front to back, 122 cm wide, side to side, and 274 cm high, bottom to top and displayed on a table. Any exceptions to the size requirements and the need for additional space should be indicated at the time of registration.
- **Electrical power:** If power is required for the display, it must be noted at the time of registration. Normally, 220-volt single phase (50 Hz) power will be available. Each exhibit can use a maximum of 500 watts. All displays which require electrical power must include a 3-meter long grounded extension cord with multiple sockets supplied by the entrant.
- **Safety:** Anything that could be hazardous for public display is prohibited (but displays could include photographs if the project activities involve any of these). Displays may not include:
 - live disease-causing organisms; microbial cultures, fungi, or mold (live or dead), or unknown specimens;
 - food, either animal or human;
 - syringes, and similar devices;
 - flames;
 - highly flammable material in any form;
 - dangerous chemicals, including caustics and acids;
 - tanks containing combustible gases;
 - anything producing high temperature (> 100 °C) or high pressure (> 10 psi/68.9 kPa);
 - unsafe wiring or unshielded high voltage equipment;
 - exposed wiring or electrical contacts carrying more than 12 volts;
 - material regulated by quarantine;

Note: Any project display deemed to be unsafe by the judges must either be modified to satisfy them or removed from the Science Fair.

Discussing your project with the judges

Fair participants must be present on Saturday morning of the fair to discuss their project with the judges. Each project team will be interviewed separately by at least three judges. The judges will ask you to describe and explain your project. If you would like to discuss your project in a language other than English (e.g. French, German, Japanese or Russian), indicate this at the time of registration. An attempt will be made to provide judges or interpreters who speak your language.

Presenting your project to the public

After the judging, participants are encouraged to discuss their projects with the general public who will be attending the fair between 14:00 and 15:00 hrs. Projects should not be removed until after the public viewing ends at 15:00 hrs. The judges may retain the project reports until the Awards Reception.

Judging and awards

On the day of the fair, all projects will be judged by science and engineering professionals from Vienna's international scientific community. After judging is completed, each student will receive a certificate and a ribbon for one of three ratings: superior — yellow ribbon, excellent — blue ribbon, or honourable mention — red ribbon.

At a Reception immediately following the public presentation of the Science Fair projects., awards will be given for the best project in each category and for the best in each division. Additional awards will be presented for projects that deserve special recognition. There will also be a special Women in Nuclear (WiN) award for special recognition of a female student in both the Junior and Senior divisions.

Publication

The Science Fair organizers reserve the right to publish part or all of a project report.