



51st Sudbury Regional Science Fair

51e Expo-sciences régionale de Sudbury

www.srsf.ca

Participant Registration Package Guide d'inscription du participant

Laurentian University: Fraser Auditorium
Université Laurentienne: Auditorium Fraser

April 4 avril, April 5 avril – 2020

Contact/Personne contact: Mr. Chris Polischuk
Email: poliscc@sudburycatholicschools.ca
Fax/Télécopieur: 705-566-9603



Youth Science Canada
Sciences jeunesse Canada



Please read carefully – Veuillez lire attentivement
Safety Guidance for the Science Fair
Guide de sécurité pour l'expo-sciences

Here are important safety rules during the science fair day. A complete and detailed outline of the rules and regulations can be found in the registration document. If you have any questions, please contact the Sudbury Regional Science Fair.

Voici des règlements de sécurité importants pour la **journée de l'expo-sciences**. Une liste complète et détaillée est incluse dans le document d'inscription. Si vous avez des questions, veuillez contacter l'Expo-Sciences régionale de Sudbury.

Yes



Students are encouraged to have picture and videos of their project to showcase an experiment



Display your poster and any equipment or instruments in **your allocated space only**

Oui



Les étudiants sont encouragés à démontrer des photos et vidéos de leur projet et de l'expérience



Démontrez votre projet, équipements et instruments dans **votre espace désigné seulement**

No



No demonstrations or live experiments are allowed



No utilisation of instruments or operation of equipment is allowed

Non



Les démonstrations et les expériences ne sont pas permises



L'utilisation d'instruments ou l'opération d'équipements ne sont pas permises

The safety check coordinator will make any final decisions on questionable matters.

Le coordonnateur de sécurité a l'autorité sur les décisions finales.

Memorandum to: Sudbury Regional Science Fair - **Participants**
From: Mr. Chris Polischuk, Chairperson, SRSF Registration
Date: January 2020
Re: **Online Registration Procedures**

Participants (Note: participants must be under age 21 and registered in grade 7 to 12 at their school)

These instructions are for Science Fair Participants. Participants are responsible for registering their project for the science fair using the online registration system. If you have difficulty, please consult your school's, or board's, science fair contact person.

Please pay close attention to the following instructions, and in particular, to the timelines and deadlines for registration. All sections of the online registration profile must be completed in order to register your project.

Websites

SRSF **Registration** website: <https://secure.youthscience.ca/sfiab/sudbury>

Sudbury Regional Science Fair Website: www.srsf.ca

Instructions (**Complete ONE Registration PER PROJECT****)**

1. In order to register, you will need the following:
 - a. A valid email address to receive your Registration Number and other important communications.
 - b. The Participant Registration Password. Get this from your school's/board's science fair contact, or email Mr. Chris Polischuk (polisc@sudburycatholicschools.ca)
 - c. All pertinent information to allow you to complete the online project profile and safety checklist. This information is relatively straightforward and should be easily provided.
2. Once you've received confirmation that your project is to be entered in the Sudbury Regional Science Fair, go to <https://secure.youthscience.ca/sfiab/sudbury>
3. Click on the link Login/Register and select "I am a Participant". Enter your valid email address. Click Begin.
4. On the next page, enter the Registration Password you acquired from your science fair contact. Click Submit.
5. After you click Submit, the registration system will send you an email confirming your establishment of a project profile and will include a Registration Number. The registration number is your password to your project profile. Note that emails sent by the system may show up in folders other than Inbox (e.g. bulk, spam, junk, etc...).
6. Using your email address and registration number, you can now login to your profile and complete all of the required information. You do not have to do all of the profile at once. You can log on at your convenience to complete the profile. The only restriction to this is the timelines and deadlines (see below).
7. The registration system will guide you through the entire registration process. It is suggested that you keep any documentation used in this process for your personal records. Also, visit the SRSF website and the Registration website often to ensure you are receiving all pertinent communications and updates.
8. **Important:** After completing each page in the profile, you must click the Save ... Information bar at the bottom or the information you've entered will not be saved.
9. **SPECIAL AWARDS:** As soon as you've completed all of the registration items, you will be able to self-nominate your project for Special Awards. You can nominate your project for a maximum of 5 special awards. Please be sure that your project meets the criteria for each special award selected.
10. Once all sections are complete, you must print the signature page, obtain the required signatures, and scan/email **OR** mail **OR** fax the signature form to: Mr. Polischuk, Chairperson, SRSF Registration
c/o St. Charles College
1940 Hawthorne, Sudbury, ON, P3A 1M8
FAX: 705-566-9603

Your forms must be received, post marked by March 24, 2020.

Selecting Project Division: Please refer to the attached division descriptions to ensure your project is registered properly. The Sudbury Regional Science Fair Committee reserves the right to change the division of projects entered in the fair. Every effort will be made to notify participants in a timely manner.

Students not present when a judge is scheduled to visit their exhibit will not be judged or eligible for that particular award. Participants required to be absent from the exhibition hall on Saturday can indicate prior to the close of registration the specific times they are unavailable for judging and the judging committee will make every effort to accommodate these participants. Notification must be emailed to Mr. Chris Polischuk by March 24th, 2020.

Timelines and Deadlines

Registration system opens

March 1st, 2020

Registration system closes

March 24th, 2020

Memorandum to: Sudbury Regional Science Fair - **Participants**
From: Mr. Chris Polischuk, Chairperson, SRSF Registration
Date: January 2020
Re: **Rules and Schedule for Science Fair Weekend**

Important Rules to Consider

(Keep this sheet for future reference)

Please consult the following websites for further details: Youth Science Canada - www.youthscience.ca/

Canada Wide Science Fair – <http://cwsf.youthscience.ca/welcome-cwsf>

1. Participants must be under age 21 and registered in grade 7 to 12 at their school.
 2. Project materials are for display purposes ONLY. No project materials are to be consumed, applied to skin, or otherwise demonstrated through contact to humans including participants, judges, or visitors during the science fair. *Wherever possible, simulate or photograph materials.*
 3. **Please note that if your project involves, in any way, humans or animals as subjects of study, your project must conform to Youth Sciences Canada’s ethics policies in order to be eligible to advance to the Canada Wide Science Fair. Projects that do not meet these requirements will not be eligible to advance to the Canada Wide Science Fair, regardless of any awards received at the Sudbury Regional Science Fair. The specific policy documents to consider are 4.1.1.1, 4.1.1.2, and 4.1.2. These documents can be found on the following website: <http://www.youthscience.ca/policy-directory>.**
 4. Vertebrate animals (including fish) will not be allowed in the display. Please simulate/photograph all “questionable” materials!
 5. Project Display SIZE - Projects are limited to width of 1.2 m, depth of 0.8 m, and height of 3.5 m (including table height). Projects should include a backboard depicting your scientific method.
 6. DIVISION - The Judge-in-Chief, in consultation with the Registration Chairperson, reserves the right to change a project’s division. (SRSF Divisions: Life Sciences, Physical Sciences, Engineering, and Computer Sciences). Refer to the Description of Science Fair Divisions memo in this package for descriptions.
 7. You must provide your own surge protection for electronic equipment. The Sudbury Regional Science Fair is not liable for loss or damage to your equipment.
 8. Prizes will only be awarded to high quality exhibits. Therefore, a prize may not be given in a category.
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Science Fair Weekend Schedule

**Registration, Set-up
And Safety Inspection:** Saturday, April 4, 2020 from 8:00 a.m. to 8:45 a.m.

Drop your exhibit off at the main entrance to the Fraser Auditorium, and then move your vehicle to the parking area. The Registration desk is in the lobby. You must have your name tag and exhibit location to be allowed in the exhibit area. All entrants must have completed their set up by 8:45 a.m.

After you have set up your project a safety inspection must be done. Set up must include the entire project. No additional materials may be added after the safety check. Failure to comply with these rules will mean disqualification.

Judging: Exhibitors must be with their project from 8:00 a.m. to 4:00 p.m. on Saturday, April 4, 2020.
Important notes: Judges will be following a schedule, so students will only have ten minutes to present their project. Parents/Guardians are kindly requested to leave the display area from 9:00 a.m. to 12:00 p.m. to allow judging to occur.

Lunch: A pizza lunch will be provided for participants. **For students with special food requirements**, you have three options: 1) eat pizza provided; 2) alternative lunch provided by SRSF to meet your dietary requirements; or 3) bring your own lunch. If you desire an alternative lunch (option #2) or will be bringing your own lunch, please inform Mr. Chris Polischuk by March 24^h, 2020. Students will not be permitted to change their selection on the fair day.

Open to Public: Saturday, April 4, 2020 1:00 p.m. - 4:00 p.m.
Sunday, April 5, 2020 12:45 p.m. - 1:30 p.m.
Exhibitors are expected to be with their project during Sunday’s public viewing.

Awards Presentation: **(We kindly request that participants and parents sit in the lower section of the auditorium).**
Fraser Auditorium, Sunday, April 5, 2020 1:30 p.m.

Exhibit Dismantling: Sunday, April 5, 2020 3:00 p.m. - 4:00 p.m.

Memorandum to: Sudbury Regional Science Fair - **Participants**
From: Mr. Chris Polischuk, Chairperson, SRSF Registration
Re: **Description of Science Fair Divisions**

The following descriptions of science fair divisions are adapted from the Youth Sciences Foundation website which are used in the administration of the Canada Wide Science Fair. Please refer to the YSF website for further information (<http://www.youthscience.ca/>).

SRSF DIVISION: Life Science

a) A life science project examines some aspect of the life or lifestyle of a non-human organism.

Life science projects include botany and zoology, as well as psychology and kinesiology of non-human organisms. Examining plant growth or animal behaviour are examples of life science. Some phenomena, such as digestion, involve both life science and physical science. The selection of division will depend on whether the young scientist's intent was to study the chemistry of the process, or the role of the process in the life of the animal (eating, production of enzymes, handling of wastes, etc.)

b) A health sciences project examines some biomedical and/or clinical aspect of human life or lifestyle and its translation into improved health for humans, or more effective health services and products. Projects related to the health of specific populations, societal and cultural dimensions of health, and environmental influences on health are also included in this division.

Health sciences projects include those related to human aging, genetics, cancer research, musculoskeletal health, arthritis, circulatory and respiratory health, nutrition, neurosciences, mental health, psychology, metabolism, human development, infection and immunology.

Projects involving animal research that have a direct application to humans are included in this division.

SRSF DIVISION: Physical Sciences

A physical and mathematical sciences project studies abiotic phenomenon to understand the relation between identified factors, perhaps including a cause and effect relationship, or the use of mathematical models or mathematics to solve theoretical problems.

Physical science projects include fields such as physics, and chemistry and astronomy. Comparison testing of products is included in this division.

Mathematical science projects seek to demonstrate applications of mathematics (i.e. the search for a mathematical model) or to solve a theoretical problem. For example, in attempting to predict the shape of cacti, the use of mathematics would be central to the project. The problem provides a context for the exploration of pattern and the search for a mathematical model. Some areas of investigation in this category include algorithms, operational research (applications of mathematical and computing science to solve planning or operational problems), and statistics.

SRSF DIVISION: Engineering

An engineering project applies physical knowledge to solve a problem or achieve a purpose. A complete engineering project will include an outline of the need, the development of the innovation and some work on introducing the innovation to the community; however, many engineering projects focus on just the development phase.

Engineering projects normally focus on a new process, or a new product. A study of Bernoulli's principle would be Physical Science, while the application of such a principle to improved aerodynamics and wing design would be engineering.

SRSF DIVISION: Computer Sciences

Computing and information technology projects concentrate primarily on the development of computing hardware, software or applications, including programming languages and algorithms, software design and databases as well as the storage, transmission and manipulation of information.

Projects using computers to store and analyze data are normally entered in the division suggested by the focus of the experiment or study. However, if the project's focus is primarily on the application of computing to the problem and the data are of secondary significance, the project should be entered in this division.

Memorandum to: Sudbury Regional Science Fair - **Teachers and Participants**

From: Mr. Chris Polischuk, Chairperson, SRSF Registration

Re: **Project Safety Checklist**

Please note that if your project involves, in any way, humans or animals as subjects of study, your project must conform to Youth Sciences Canada's ethics policies in order to be eligible to advance to the Canada Wide Science Fair. Projects that do not meet these requirements will not be eligible to advance to the Canada Wide Science Fair, regardless of any awards received at the Sudbury Regional Science Fair. The specific policy documents to consider are 4.1.1.1, 4.1.1.2, and 4.1.2. These documents can be found on the following website: <http://www.youthscience.ca/policy-directory>. If you have questions concerning the ethics policies, please do not hesitate to contact Chris Polischuk at poliscc@sudburycatholicschools.ca

Project materials are for display purposes ONLY. No project materials are to be consumed, applied to skin, or otherwise demonstrated through contact to humans including participants, judges, or visitors during the science fair. *Wherever possible, simulate or photograph materials.*

Project Safety Checklist

Registering Participants will be required to complete this checklist online in order to finish the registration process.

Human Experimentation

1. Does your project involve human subjects? If so, you must provide additional information if you wish to be eligible for the Canada Wide Science Fair. See the procedures outlined in Policy Documents 4.1.1.1, 4.1.1.2, and 4.1.2. on the website: <http://www.youthscience.ca/policy-directory>

Animal Experimentation

Unless your project involves observing animals in their natural habitat, you must provide additional information if you wish to be eligible for the Canada Wide Science Fair. See the procedures outlined in Policy Documents 4.1.2.2 on the website: <http://www.youthscience.ca/policy-directory>. You must also complete the required information on the Signature Page.

2. Does your project involve the use or study of live animals?
3. Were any procedures which could harm or distress the animals used?

Hazardous Materials.

The use of hazardous materials including firearms, volatile and explosive materials, boilers and pressure vessels, flammable or poisonous chemicals, radio isotopes, pressurized containers, pesticides, prescription drugs or over-the-counter medications must be supervised by a qualified adult. See the procedures outlined in Policy Documents 4.2.1 on the website:

<http://www.youthscience.ca/policy-directory>

4. Does your project involve the use of hazardous materials? If yes, you must also complete the required information on the Signature Page.

BioHazards

You cannot use biological toxins, cultures, cell or tissue samples, recombinant DNA molecules, synthetic nucleic acid molecules, or animal viruses, unless under the supervision of a qualified researcher in a research institution or hospital. See the procedures outlined in Policy Documents 4.2.2 on the website:

<http://www.youthscience.ca/policy-directory>.

5. Have you used biohazards? If yes, you must also complete the required information on the Signature Page.

Displays at the Regional Science Fair

6. Did more than two people work on the project?
7. Does the exhibit conform to the rules on maximum size (no more than 3.5m high, 1.2m side to side or 0.8m front to back)?
8. Is the exhibit self-standing and stable?
9. Are live animals being displayed?
10. Are any animal parts being displayed?
11. Are any open flames, torches, or heating devices being used in your display?
12. Are any pressurized containers used in your display?

13. Are any flammable or poisonous chemical (solid, liquid, gas) or drugs being displayed?
14. Are any radioisotopes being displayed?
15. Are any firearms used in your display?
16. Are any live plants or plant tissues being displayed?
17. Are soils containing organic materials being displayed?
18. Are decomposable organic materials being displayed?
19. Are microbiological organisms in your display?
20. Are cultures present or being displayed?
21. Are any biological toxins present or being displayed?

Note: The display of hazardous materials in questions 9 – 21 is not allowed. If you answered Yes to any of questions 9 – 21, you can simulate their use with non-hazardous materials or show what you did on a video.

Electrical and Mechanical Hazards

22. Are all hazardous moving parts protected?
23. Are all electrical power cords CSA approved and grounded?
24. Is an insulating grommet used where service enters an enclosure(s)?
25. Are all non-current carrying parts connected to the ground lead?
26. Are all voltages generated less than 10kV?
27. Are all exposed live parts at a potential of less than 36 V to ground and all currents low so as not to pose any danger if touched?
28. Have any X-ray, laser, or other high-energy radiation sources that you are displaying been registered and approved by provincial authorities? (Important, these devices cannot be operated during public display).

Please note that your project must conform to the Youth Science Canada Policies in order to advance to the Canada Wide Science Fair. Projects that do not meet the above requirements will not be able to advance to the Canada Wide Science Fair regardless of any awards received at the Sudbury Regional Science Fair.