

HWHSEF 2001

*Fair Dates: April 4-7, Sheridan College,
Trafalgar Road Campus, Oakville*
Registration Dates: February 14 (noon) to March 7 (noon)

Calling all students in grades 7 through OAC! It's time to gear up for the 2001 Science and Engineering Fair, taking place April 4 - 7, 2001 at Sheridan College in Oakville. Project registration will be available online between February 14 and March 7 on the Fair 2001 website: hwhsef.mcmaster.ca.

Call for Entries

Projects can be entered in one of the following categories: Life Sciences, Biotechnology, Physical Sciences, Engineering Sciences, Mathematics and Computer Science, and Earth and Environmental Sciences.

Group projects are limited to two students, and each school is limited to eight projects per level (Junior, Intermediate and Senior). For detailed information please check our website, or ask your teacher.

Prizes and Awards

There are many exciting prizes and awards to be won, including cash prizes totalling thousands of dollars, and trips to the Canada-wide Science Fair (to be held in Kingston, May 12 - 20, 2001) and the International Science and Engineering Fair (to be held in San Jose, California). The trips are all expenses paid, and include adult chaperone arrangements. In addition, participants can win certificates, merit awards, trophies, scholarships and gift certificates.

Rules and Regulations

The 2001 Fair is open to students registered in grades 7 to OAC in schools within the regions of Hamilton-Wentworth and Halton, including independent or private schools, as well as home schools. It is not necessary to have participated in a school science fair prior to entering.



The Gyroscopic Sundial
Scott Smith, Best in Fair at Hamilton and a HWHSEF Exhibitor at Intel ISEF Detroit 2000

There's a maximum of two students per project, and each school is restricted to eight projects per level at which it is eligible to participate. The levels are:

Junior (grades 7 & 8)

Intermediate (grades 9 & 10)

Senior (grades 11 to OAC)

All Intermediate and Senior students must complete a research plan prior to experimentation. Please see the website (hwhsef.mcmaster.ca) for details and the required forms.

All levels are eligible to compete in each of the six categories:

Life Sciences

Biotechnology

Physical Sciences

Engineering Sciences

Mathematics and Computer Science

Earth and Environmental Sciences

Please enter early, as places are limited and entries may be turned away once the limit is reached. Registration begins February 14 at noon. A project abstract must be included with the registration. Be sure to have the permission form completed and signed, and faxed back to us (see the registration section of our Web page for more details). Students must be present for afternoon judging. Exceptional circumstances must be discussed with the Judge-in-Chief prior to registration.



2000 HWHSEF Canada-Wide Science Fair Exhibitors: (From the Left) Ben Leung, Sean Coughlin, Steve Olynyk, Colin O'Flynn, Chris Mauro



HWHSEF 2000 Team to Canada-Wide Science Fair, London (Back) Tom Crawford Delegate/Chaperone, (From Front Left) Ben Leung, Sean Coughlin, Colin O'Flynn, Chris Mauro, Steve Olynyk

Safety and Ethical Considerations

Safety and ethical considerations must be adhered to for all projects. Please see our website for details.

- Electrical components such as switches and wiring must be of an approved variety.
- Projects requiring 110V power must use a grounded plug.
- No water or gas sources of any type are available.
- Any equipment incorporating lasers or other potentially harmful radiation must meet provincial regulations.
- No living vertebrate animals shall be displayed in exhibits.

- Any project involving vertebrate animals, human subjects, tissue or DNA may be required to meet additional regulations. Contact the Judge-in-Chief or check the website for further details prior to experimentation.

- All displays must be freestanding, and fit within the space provided. Maximum dimensions are:
 - Height: 274 cm (including provided table)
 - Width: 122 cm (side to side)
 - Depth: 76 cm (front to back).

Fair 2001 Schedule:

Wednesday, April 4
Project set-up beginning at 4 p.m. in the J.M. Porter Athletic Recreation Centre, Sheridan College (1430 Trafalgar Road, Oakville.)

Thursday, April 5
Judging of projects, all day. Students must be present for judging during the afternoon.

We are considering providing bus transportation between Sheridan and Hamilton on April 5th and 6th. Watch our website for more details.

Friday, April 6
Student Activities Day! Sign up for a variety of exciting activities and excursions as part of your registration. Lunch will be provided.

Saturday, April 7
Projects will be open for viewing by the public, followed by the Awards Ceremony.

Fair 2000 Review

Over 300 students participated in the 40th Hamilton-Wentworth & Halton Science & Engineering Fair in April 2000, held at Mohawk College in Hamilton. Five students went on to participate in the Canada-wide Science Fair, held at the University of Western Ontario in London, while two students earned spots on Team Canada, which competed at the International Science & Engineering Fair in Detroit.

The winning entries included:

HDSEF Committee trophy:

(Primary school accumulating the most points)

St. Matthew School, HCDSB

Herb Gildea Memorial trophy:

(Secondary school accumulating the most points)

St. Mary's High School, HWCDSB

IISF trip award winners:

"The Gyroscopic Sundial," Scott Smith, St. Mary's High School, *HWCDSB*

"Robotic Revolution II," Michael Belshaw, St. Mary's High School, *HWCDSB*

CWSF trip award winners:

"Autonomous Robot," Colin O'Flynn, Ryerson, *HWDSB*

"SunTracker 2000," Steve Olynyk, Ben Leung, John T. Tuck, *HDSB*

"Indecent Exposure: Biological Effects of EMF," Sean Coughlin, St. Mary's High School, *HWCDSB*

"The Sky is the Limit," Christopher Mauro, St. Mary's High School, *HWCDSB*

Alternate CWSF Entry:

"Hard Packed," Eric Potter, St. Matthew, *HCDSB*



HWHSEF 2000 Exhibit at Mohawk College

Activity Day 2001...can't wait!

Activity Day will be held on Friday, April 6, 2001 ALL DAY starting at Sheridan College at 8 a.m. The day is FREE OF CHARGE to science fair participants and is comprised of a series of fun activities. Some are educational but most are just plain old fun! The day is intended to give each student a break from the hectic pace of the fair.

Activity Day 2001 is still under construction; however, to give you an idea of what the day is about, let's take a quick look at last year. The day began with drop-off at 8:30 a.m. and ended with pick-up at five p.m. The morning consisted of a series of field trips or a popsicle stick bridge building event. The students signed up for their activities when they registered for the fair online. They gave first, second and third choices and activities were assigned on a first-come, first-served basis. (All events are usually space restricted.) Field trips included swimming, hiking the trails at the Royal Botanical Gardens and Dundas Valley Trails, and behind-the-scenes tours of Copps Coliseum, Hamilton Place and Theatre Aquarius. We also had the opportunity to fly over our region with the Young Eagles. Although these flights were cancelled at the last minute due to poor weather, the students were still treated to an exciting tour of the Canadian Warplane

Heritage Museum. A hot dog and hamburger lunch was provided for the students back at the host site. (Special diets and allergies must be noted upon registration.) In the afternoon, the students watched the bridge breaking competition and a fabulous live chemistry show complete with explosions and shooting flames. They took part in a trivia contest, tours through the host site and watched a video to close out the day. Over 270 students participated in this interesting day.

Plans are underway for 2001, and organizers are busy lining up the day's events. The Young Eagles group has once again expressed interest in taking the students on flying tours over the region. As most people are aware, Sheridan College is home to a brand new, world-class animation and digital media facility and the hope is to get the students in to see what it's all about. And with all the great venues Oakville has to offer, I know the organizers will put together a fantastic day for the students. All science fair participants are invited to attend and of course we're always looking for volunteers to help plan and conduct the day. Keep your eyes on our website at hwhsef.mcmaster.ca for updates, and if you can lend a hand, please contact us through the website. See you at the Fair!

Don Wiles, Chair, Student Activities
HWHSEF 2001

WANT TO HELP?

The Hamilton-Wentworth/Halton Science & Engineering Fair owes its continuing success to the efforts of hundreds of volunteers from our education and business communities. You can help too! For more information, contact us at hwhsef@mcmaster.ca, or see other contact information below.

Are you a Teacher?

We encourage your comments, suggestions and participation in making our science fair even more beneficial to students and teachers alike. Our education system is undergoing change, and we welcome your input to ensure we continue to provide a meaningful and relevant experience to your students. Please contact our Outreach Program Chair at hwhsef@mcmaster.ca, or see other contact information below.

Would you like to be a Judge?

In order to ensure a fair and balanced judging process, we try to have every project judged by at least three qualified judges. However, given the high quantity and quality of entries, each judge only has time to effectively judge a small number of projects. We generally require 150 judges each year, who are prepared to devote a day of their time to the process. Judges bring their skills and experience to bear in assessing the merits of entries, and also provide feedback to the students. If you are interested in judging and have at least a high school education and some relevant experience, we would like to hear from you. We offer training to all judges. Please contact our Judge-in-Chief at hwhsef.judging@mcmaster.ca.

Are you a Science Fair Alumnus?

Did you enjoy and benefit from your experience at a science fair in the past? Perhaps you are interested in helping other students enjoy a similar experience. If you could spare some time, or simply want to keep in touch with what's going on each year, we'd certainly like to hear from you. We'd be



*Science Fair Exhibits
at Mohawk College*

happy to add you to our mailing list. Contact our Alumni Chair at hwhsef.alumni@mcmaster.ca.

Interested in Sponsorship?

You, or someone you know, might be interested in helping us in other ways. The Science Fair is made possible by donations that take many forms: operating funds, donations and loans of equipment and supplies (from food to photocopiers), offers of services of all types (from printing to busing) and prizes and awards, to name a few. We provide recognition of our donors at various levels, and can provide receipts for tax purposes. If you want to know more, please contact our Funding Chair, at hwhsef@mcmaster.ca.

CONTACT INFORMATION

1. Website (hwhsef.mcmaster.ca)

Look at our Website for more information on all aspects of Fair 2001, including:

- Category definitions, judging criteria, prizes and awards sponsors
- Rules and Guidelines, Activities Day, Project dimensions
- Sample abstracts, registration form, safety regulations, instructions
- Science fair links

2. Electronic Mail (hwhsef@mcmaster.ca)

We will be monitoring our e-mail on a daily basis. It's one of the best ways to ask questions and get prompt replies.

3. Voicemail: Hamilton: 905-974-7975
Oakville: 905-693-7076

You can leave a message at either of these numbers and someone will get back to you as soon as possible.

4. Paper Mail

Our regular mailing address is:

Hamilton-Wentworth and Halton
Science & Engineering Fair
c/o McMaster University, JHE343C
1280 Main Street West
Hamilton, ON L8S 4K1