

OFFICIAL PROGRAM

BASEF 2008

Sheridan College Institute of
Technology and Advanced Learning

March 26 to March 29, 2008

48th Annual

Bay Area Science & Engineering Fair

Sponsored by:



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Big ideas.

Infinite possibilities.



Because we believe
in big ideas and
infinite possibilities,
ArcelorMittal Dofasco
is proud to be a part of the
Bay Area Science
and Engineering Fair
sponsored by
ArcelorMittal Dofasco.



TABLE OF CONTENTS

Welcome to Sheridan	2
Message from BASEF Chair	3
Message from Honourary Co-Chairs	4,5
Schedule of Events	6
BASEF History Page	7
A Beginners Introduction to BASEF	9
Emergency Safety and Security Procedures	10
Map of Sheridan	13
Organizing Committee	15
2008 Sponsors	16
BASEF Projects	17
Activity Day	18
Merit Awards Judges	19
Special Awards Judges	21
Exhibitors Index	23
Floor Layout	26
Exhibitor Listing	29
Special Awards	43
Merit Awards	54
Grand Prize & Trip Awards	56



*Best Wishes to
All Participants!*

Sheridan Institute of Technology and
Advanced Learning is pleased to welcome
you to the **48th Annual Bay Area
Science and Engineering Fair.**

I CHOOSE



Sheridan

www.sheridaninstitute.ca



A MESSAGE FROM THE BASEF CHAIR

Ray Kranyak

This is the 48th consecutive year of operation for the Bay Area Science and Engineering Fair (BASEF). Through the years the faces and the names may have changed, but the mission remains the same: to encourage young people in science and engineering.

BASEF is a registered charity that is completely driven by volunteers. I would like to acknowledge the tremendous efforts of this year's Organizing Committee members. They have met every month since September 2007 and have spent many more hours working individually on their own tasks. Many will have taken a week of holidays from their own full time jobs for this week of the Fair. No wonder BASEF is Canada's #1 Regional Science Fair. They are all amazing volunteers. Please thank them whenever you get the chance.

A very sincere thank-you to our Honourary Co-Chairs, Joyce Savoline, Member of Provincial Parliament for Burlington and Education Critic, and Hamilton Mayor Fred Eisenberger. They continue to support our cause and promote our students whenever they get the opportunity to do so.

A special thank-you is given to the over 200 professionals who served as this year's Merit and Special Awards Judges. These dedicated individuals devoted a full day of their time to meet, encourage and speak with the student exhibitors about their projects.

Last year in our community, we experienced some changes, Dofasco, a long time BASEF supporter had become part of the ArcelorMittal family of companies. I am proud to say that with the new name, ArcelorMittal Dofasco has returned for the third consecutive year as the BASEF 2008 Title Sponsor. I would also like to thank our one new sponsor and the over 35 returning sponsors who make it possible for BASEF's students to excel in science and engineering. Please support our sponsors wherever possible. Thank you also to our Special Awards donors. This year the total value of prizes, special awards, scholarships and trip awards is expected to top \$120,000.

Every year the host site for BASEF plays a critical role in our success. I must extend a very special thank you to the staff at Sheridan College. It has taken the better part of a year to plan and stage BASEF 2008. Sheridan staff has been part of our organizing committee making every step of the journey easier and for this we are truly grateful.

Last but certainly not least, I thank the day-to-day volunteers, nearly 100 in total, who help us with duties such as project registration, safety checks and chaperoning Activity Day that occur over the four days of the Fair.

Students, (along with your parents, teachers and mentors) please recognize and enjoy the results of your hard work. Meet new friends, share your results and above all, capture the passion that will lead you toward new discoveries that will build a better world of tomorrow. This small planet, Earth, which we call home, is counting on you. I congratulate you all on a job well done and wish you all the best of luck.

Raymond T. Kranyak, Chairman, BASEF 2008



A MESSAGE FROM HONOURARY CO-CHAIR Burlington MPP Joyce Savoline

It is an honour and privilege to once again act as Honourary Co-Chair of the Bay Area Science and Engineering Fair. I understand the value and have supported the Fair for many years and now as a Member of Provincial Parliament and Education Critic, it confirms my belief that government has a role in supporting and encouraging volunteers and organizations who commit to stimulating the creativity, innovation and love of learning in our youth.

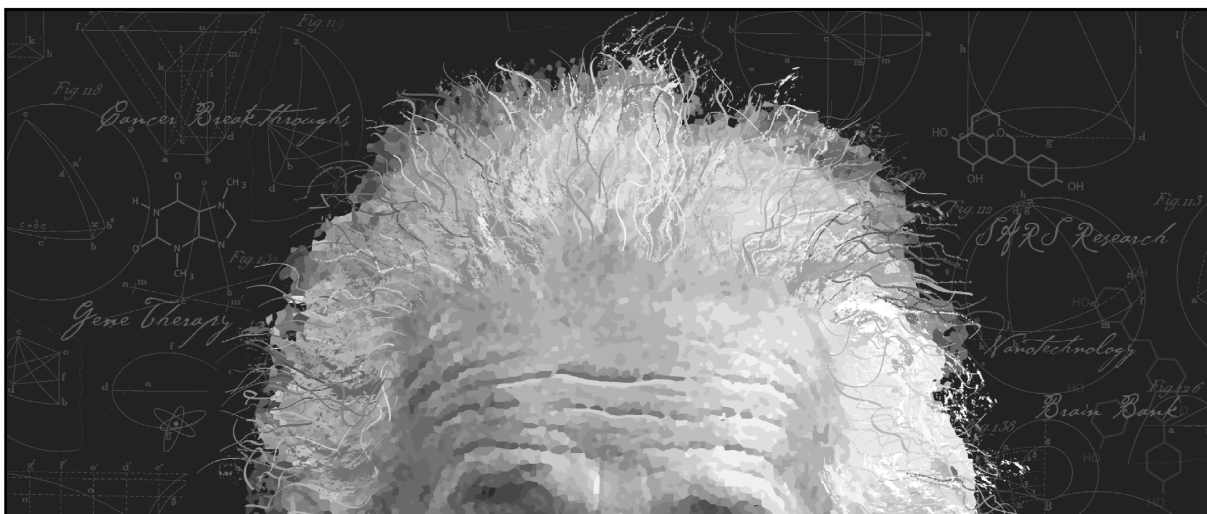
I want to thank and congratulate the volunteers of BASEF for providing this opportunity to showcase our students' skills and talents in science and technology. Students who have entered into the Fair are all winners, and my appreciation goes to the parents and teachers of these young participants for their encouragement and nurturing.

It goes without saying that a program of this magnitude does not happen without the generosity of corporations and individuals in our community who also value the work of this Fair.

Today's youth are tomorrow's leaders.

Sincerely,

Joyce Savoline
MPP (Burlington)



Bright Minds Come to Hamilton



McMaster University and the City of Hamilton are working hard to attract and keep some of the world's brightest minds right here in Hamilton. In collaboration with our partner hospitals, we are exploring ways to create a new economic future based on biosciences. Biotechnology and biosciences hold enormous promise for economic and social benefits. By building on our research strengths and leveraging our intellectual, human and capital resources, we will create a globally competitive biotechnology industry in this part of the world. Hamilton and McMaster – partnering to ensure a healthier future for our community.



Hamilton

For more information contact: **McMaster University** • 905-525-9140 ext. 27270 • www.mcmaster.ca **City of Hamilton** 905-546-4222 • www.hamilton.ca

A MESSAGE FROM HONOURARY CO-CHAIR
Hamilton Mayor Fred Eisenberger



It is with great pleasure that I extend my warmest greetings on behalf of the City of Hamilton and to welcome you to the 48th Annual Bay Area Science and Engineering Fair (BASEF).

It is a privilege for me to continue as Honourary Co-Chair for this exciting and creative educational event.

Our youth represents the future and I want to congratulate the organizers of BASEF for providing these students with the opportunity to showcase their scientific and engineering interests and innovations.

I would also like to acknowledge the dedicated hard work of the many parents, teachers, judges, organizers, volunteers and sponsors who have helped to make BASEF the success that it is.

To everyone involved in this year's science and engineering fair I applaud your commitment and dedication and wish you continued success in the future.

Sincerely,

A handwritten signature in blue ink that reads "Fred Eisenberger". The signature is written in a cursive style with a long, horizontal flourish at the end.

Fred Eisenberger
Mayor



BASEF 2008 Schedule of Events

Sheridan Institute, Oakville, Ontario

Wednesday, March 26, 2008

Project Setup

4:00 pm	On-site registration, project setup, safety check, ID photos
8:00 pm	On-site registration closes

Thursday, March 27, 2008

Student Activity Morning / Project Judging Afternoon

8:00 – 8:45 am	Students gather in the Student Centre
9:00 – noon	Activities in Student Centre and Lecture Theatre
12:00 – 12:45 pm	Students will eat their packed lunches in the Student Centre. Students will not be permitted to leave the Student Centre.
12:45 – 1:00 pm	Students arrive at their projects for judging and interviews
1:00 – 4:00 pm	Students must remain at their projects for judging interviews
4:00 – 4:30 pm	Judging completed, goody bags distributed, students dismissed

Thursday, March 27, 2008

Schedule for Judges

8:00 am	Judges arrive in the cafeteria
8:30 am	Judges' welcome and assignment of projects
9:00 am	Judges begin project judging without students present
11:45 am	Start of judges' luncheon
1:00 pm	Afternoon judging and interviews with students
4:00 pm	Afternoon judging with students completed
4:30 pm	Judging scores finalized.

Friday, March 28, 2008

The fair is closed to students and the public.

Saturday, March 29, 2008

Public Viewing and Awards Ceremony

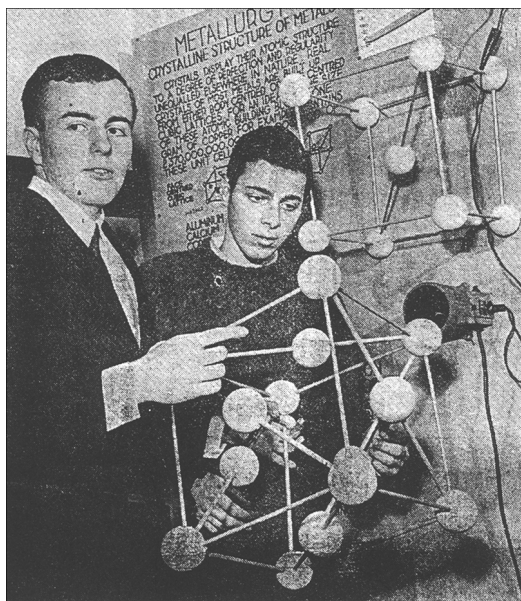
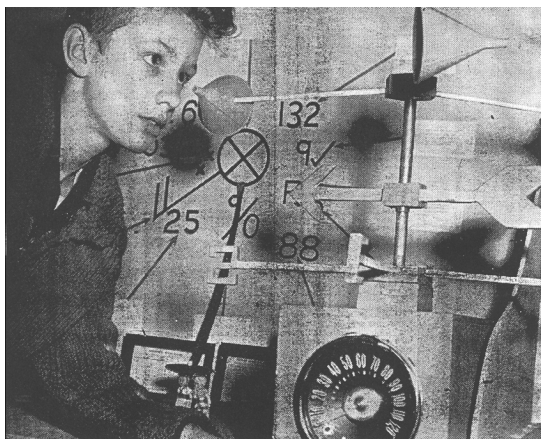
9:00 am	Athletic Centre gym open for Public Viewing. All students should be present and at their projects.
11:30 am	VIP Luncheon (by invitation only)
12:00 noon	End of Public Viewing. Gym will be locked until after Awards Ceremony.
12:30	Buses start loading
12:45	Buses start leaving for Awards Ceremony
1:00 pm	St. Volodymyr Cultural Centre opens for Awards Ceremony
1:30 – 3:30 pm	Awards Ceremony
3:30 pm	End of Awards Ceremony. Buses return to Sheridan. Projects may now be removed from the gym.
4:00 – 5:00 pm	Meeting for Trip Award Winners, their parents/guardians and trip chaperones in the Athletic Centre gym. (Note: Winning students and their projects must be available for this meeting.)

BASEF 2008: 48th Consecutive Annual Fair

The Hamilton Science Fair was established in 1960 as a "showplace for the scientific talents of district teenagers". While the name has evolved over the years, BASEF continues to promote project-based science and student research through outreach programs and an annual science fair competition. BASEF is one of the leading and most successful regional science fairs in Canada. BASEF students have won Best in Fair at the national Canada Wide Science Fair for the past two consecutive years.



A teenager's nightmare — a 1904 telephone. One of the exhibits gave a surprise to Nerina Sinelli and Eva McKenna. It showed how the phone works.



Grade 12 Westdale students Douglas Hallett and Brian Laskin, both 16, demonstrate the crystalline structure of metals.

Hamilton Spectator advertisement: March 24, 1961

SCIENCE FAIR

The objective . . . to encourage the development of scientific aptitude in secondary school students throughout Hamilton and district.

All exhibits have been created by a student or group of students, in Grades 9 to 13 from Hamilton and district private and public schools, in the following categories.

GENERAL PHYSICS
ELECTRONICS
NUCLEAR SCIENCE
CHEMISTRY

BOTANY
HEALTH
ZOOLOGY
GEOGRAPHY AND
PHYSIOGRAPHY

MATHEMATICS
ENGINEERING
(applied science)
METALLURGY

PANEL OF JUDGES

Dr. Henry Ednison Duckworth, B.A., B.Sc., Ph.D., F.R.S.C., Professor and Chairman Dept. of Physics, McMaster University, has consented to head the panel of judges consisting of . . .
Dr. Martin W. Johns; Mr. G. P. Adamson; Mr. S. M. Jones; Mr. Derek Edwards; Mr. Leslie Laking; Dr. Herman Kleerekoper; Dr. Hugo Ewart; Mr. J. Wingfield; Mr. S. M. Young; Dr. N. D. Lane; Dr. W. W. Smeltzer.

AN EXHIBITION OF SECONDARY SCHOOL STUDENTS' SCIENTIFIC PROJECTS

THE ARMOURIES

200 JAMES ST. N.

TONIGHT

6 P.M. TO 10 P.M.

TOMORROW

9 A.M. TO 9 P.M.

BRING
YOUR
FAMILY
AND
FRIENDS

ADMISSION FREE!

ALSO:

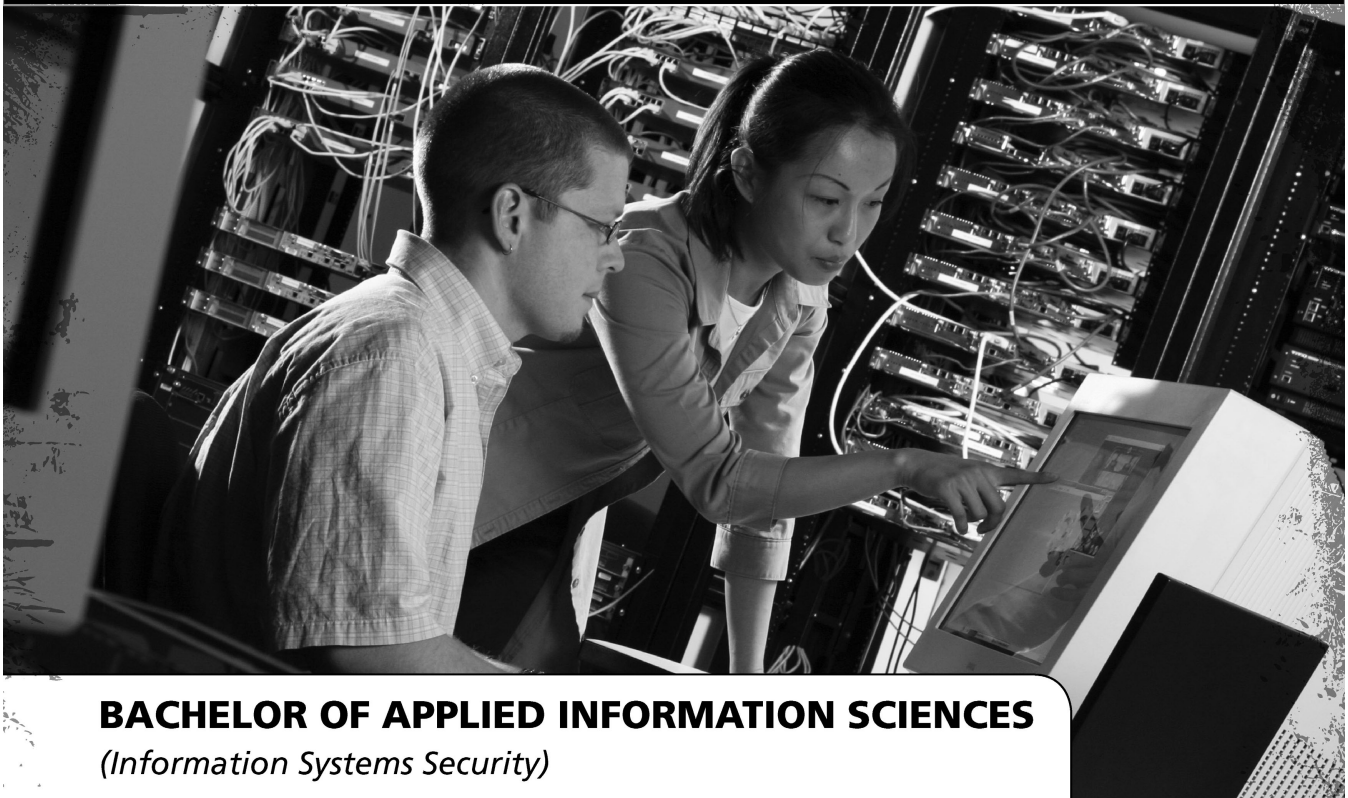
Interesting, informative exhibits, displays and live presentations by the following education conscious groups and companies: The Hamilton Police Safety Division, The Hamilton Fire Prevention Bureau, The Bell Telephone Co. of Canada, The Imperial Oil Co. Ltd., Ontario Hydro, St. John Ambulance Assoc. These professional type displays will undoubtedly be of interest to participants and visitors. Plus: "ADVENTURES IN SCIENCE", a half hour film presentation.

SPONSORED BY

THE HAMILTON JUNIOR CHAMBER OF COMMERCE
In Association with THE HAMILTON SPECTATOR

The Hamilton Spectator has been a sponsor of the fair from the beginning. BASEF gratefully acknowledges their continued support and permission to use the advertisement from 1961 and photographs of some 1960s fair participants.

Interested in an exciting future in Information Systems Security?



BACHELOR OF APPLIED INFORMATION SCIENCES (Information Systems Security)

Focusing on the systems security aspects of information science, this degree program offers a strong academic foundation in computer science with aspects of security such as database security, network and ecommerce security and resource protection covered in depth.

The program has the added benefit of an 8-month paid internship that gives students hands-on training in the field that enhances their ability to get the job they want.

Graduates have the skills needed for such varied careers as:

- Information Systems/Database/Network Security Architects
- Ecommerce Application Developer
- Information Systems Security Consultant
- Public Key Infrastructure Expert

For more information, please visit:
www.sheridaninstitute.ca

I CHOOSE

Sheridan

A Beginner's Introduction to BASEF

The fair takes place over a period of four days in late March/early April of every year. On line student registration starts in February and closes approximately 3 weeks before the fair. This allows the fair organizers enough time to ensure that registration documents are complete and project safety/ethical guidelines are met. We also want to ensure that the official Fair Program accurately reflects all exhibitor information.

Fair Schedule:

Project Set Up/Safety Checks: Wednesday, 4:00 pm - 8:00 pm

Judging without students present: Thursday, 9:00 am - noon

*Student Activity Events: Thursday, 8:30 am - noon**

Judging with students present: Thursday, 1:00 pm - 4:00 pm

Public Viewing: Saturday, 9:00 am - noon

Awards Ceremony: Saturday, 1:30 - 3:30 pm

*Project Take Down: Saturday, 3:30 pm
(After awards ceremony ONLY!)*

***Please note: To accomodate concerns regarding transportation and school absences, Student Activity events will be held at Sheridan College on Thursday morning before judging in the afternoon.**

Levels and Divisions

Students compete for **Merit Awards** within 3 separate grade levels and in one of the six project divisions.

Levels (three):

Junior: Grades 7-8

Intermediate: Grades 9-10

Senior: Grades 11-12

Divisions (six):

Biotechnology,
Earth and Environmental Sciences,
Engineering & Computing Sciences,
Health Sciences (Human),
Life Sciences (Non Human),
Physical & Mathematical Sciences
(A flow chart on the BASEF web site is designed to help you determine the division of your project.)

Teams: Students may compete individually or as a two-member maximum team. Team members must be in the same level.

Merit Awards

Merit Awards recognize the tremendous amount of research and effort that has gone into the projects entered. All projects are judged by a minimum of four independent judges. Gold, silver and bronze medals, and honourable mention certificates (along with cash awards) are awarded in **each** division of **each** level based on the following scoring.

Gold: over 90% and in top 7.5% of division

Silver: over 80% and in next 10% of division

Bronze: over 75% and in next 12.5%

Honourable Mention: over 75% and not in the top 30% of division.

Special Awards

Special awards are donated by organizations and groups to recognize deserving projects that deal with topics of interest to the donor. At BASEF 2007, over \$19,000 in cash and scholarships were awarded.

Grand Prize Trip Awards

Grand Awards are given to the top projects in the fair, based on merit award scores. The Grand Trip Awards are all-expenses paid trips to the national and international science fairs. Chaperones from BASEF provide additional mentoring to these students and accompany them on the trips. All students are eligible to win a place on Team BASEF and go on to compete at the Canada Wide Science Fair (CWSF). Only high school students are eligible to win trips to the Intel International Science and Engineering Fair (IISEF), held in the United States.

Grand Prize Awards

Best in Fair Pinnacle awards are presented to the top three projects in the fair, based on Merit award scores. Each winner receives an engraved plaque and a trophy for display at their school.

Susan Joyce Memorial Awards are given to the top projects in each of the six categories, Junior level.

Roy Middleton award is given to the top Junior level project.

Herb Gildea Trophy is awarded to the high school accumulating the most points from the number of entries and merit awards won.

BASEF Committee Trophy is awarded to the elementary school accumulating the most points.

Merit Award Judging Criteria

Projects are judged out of a total score of 100, broken down into five sections. The sections are weighted as follows:

Scientific Thought/Creativity: 45%

Project Display: 10%

Project Notebook: 20%

Abstract: 5%

Interview: 20%

The judging forms and criteria are available on the BASEF website in the Judges section.

Our Gold medalists (scoring over 90%) enter projects that are well designed from inception to completion. The research and experimentation is complete, the work is well documented in their notebooks, and their displays are an attractive summary of their complete project. They are knowledgeable about their work and are able to enthusiastically explain it to the judges because they practice their presentations and prepare for the interviews.

Project Resources

The "Science Success!" student and teacher materials are available for download at www.basef.ca and include an extensive reference list. Additional recommended site: www.sciencebuddies.org

SAFETY AND SECURITY PROCEDURES

Bay Area Science and Engineering Fair (March 26 - 29, 2008)

The following emergency procedures and personal safety tips apply to Sheridan's Trafalgar Campus. Please review and familiarize yourself with them so you know how to respond quickly and appropriately in the event of an emergency.

FIRE SAFETY

In Case of Fire

1. If the Fire Alarm sounds move quickly and calmly to the nearest exit and **"VACATE THE BUILDING"**.
2. In some building the alarm is a pulsed sound like a loud car alarm and in others it is bells. Be aware that either sound is the Fire Alarm.

If You Discover a Fire

1. Leave the fire area immediately assisting with the evacuation of the occupants where applicable. Close the doors to the area behind you.
2. Activate the building fire alarm system using the closest fire alarm pull station as you leave the fire area.
3. Once outside move at least 50 ft. away from the building.
4. Do not return to the building until it is declared safe to do so by the Fire Department.

PERSONAL SAFETY

Emergency Intercoms and Phones

In addition to regular College telephones there are three types of emergency phones or intercoms for contacting Security directly should you require assistance.

1. **Yellow Emergency phones:** These are located in the hallways throughout the College. Press the button to speak directly to a Security Officer.
2. **Bell Pay Phones:** Can be used to call 911 without charge
3. **Outside Emergency Intercoms:** These are recognizable by a blue light. Press the red button to speak directly to a Security Officer.

Emergency Contacts

1. **Police/Fire/Ambulance** – "9-9-1-1" on College Phones or "9-1-1" on Bell Pay Phones
2. **Call Sheridan Security** from the Yellow Emergency Phones or desk phones, or the Outside Emergency Intercoms at "4044"

Non-Emergency Situations

1. Main Security Desk-----Dial 4044 on College phones
2. Main Security Desk-----Dial 905-815-4044 on other phones

FIRE ALARM PROCEDURES FOR PERSONS WITH DISABILITIES

Note: Persons with Disabilities must have a buddy who is to accompany them during an emergency evacuation.

Trafalgar Campus

At the Trafalgar Campus the A, B and D-wing alarms ring together, the C & E-wing alarms ring together and H, J & K wing alarms ring together. AA (SOCAD), G-wing, Student Centre, Porter Building (Athletic Centre), SCAET and the DayCare Centre are all separate buildings and each has an individual alarm system.

A-wing:

- If you are on the 1st floor of the A-wing, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are on the 2nd floor of the A-wing, accompanied by your buddy, go to the nearest stairwell and wait for the Fire Department to escort you to safety.

AA-wing (SOCAD):

- AA-wing (SOCAD) is a one floor at ground level building. Accompanied by your buddy go to the nearest exit and leave the building.

B-Wing:

- If you are on the 1st floor of B-wing, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are on the basement level, the 2nd or 3rd floors of B-wing, accompanied by your buddy, go to the stairwell by the elevator. Have your buddy call Security and inform them of your location. Do not use the elevator. Wait in the stairwell by the elevator for the Fire Department to escort you to safety.

C and E-wing:

- If you are on the 1st floor of the C or E-wing, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are in the C or E wing on the 2nd floor, accompanied by your buddy, go to the C to B-wing bridge and into the B-wing. If the B-wing is not in alarm you can stay in the B-wing. If the B-wing is in alarm go to the front entrance and leave the building.

G-wing:

- If you are on the 2nd floor of the G-wing, accompanied by your buddy, proceed to the G to E-wing bridge to the 2nd floor of the E-wing. If E-wing is not in alarm you can stay in E-wing. If E-wing is in alarm go to the B-wing via the ramp from the 2nd floor of the E-wing that leads to the C to B-wing bridge. You can stay in B-wing if it is not in alarm. If B-wing is in alarm leave the building by the front entrance.
- If you are on the basement level, 1st, 3rd or 4th floors of G-wing wait in the stairwell by the elevator. Do not use the elevator. Have your buddy call Security to inform them of your location. Wait in the stairwell by the elevator for the Fire Department to escort you to safety.

H-Wing

- If you are on the HB (basement level) of H-wing and the D-wing is not in alarm you can leave the HB area through the double doors leading into the basement of the D-wing (by HB04) and wait there until the alarm in H-wing is over or until the Fire Department says it is safe to return to the H-wing. If D-wing is in alarm as well then accompanied by your buddy stay by the stairwell and have someone notify Security or the Fire Department of your location.
- If you are on the first floor of H-wing you can leave the building through the exit by H119 and go down the ramp and outside to the front of the B-wing.

J-Wing

- If you are on the first floor of the J-wing proceed to the front entrance and leave the building.
- If you are on the second or third floors of the J-wing, accompanied by your buddy, proceed to the stairwell by the elevator and wait for the Fire Department to arrive. Have someone alert Security or the Fire Department of your location.

K-wing

- K-wing is a one-story wing. If the alarm rings proceed to the nearest exit. In the case of the VON clients they will exit the building via the outside patio and wait there until the Fire Department arrives. If necessary they will evacuate the patio via the stairs to the Grounds.

SCAET:

- If you are on the 1st floor of SCAET, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are on the 2nd floor of SCAET, accompanied by your buddy, go to the 2nd floor of C-wing. If C-wing is not in alarm you can stay in C-wing. If C-wing is in alarm go to the C to B-wing bridge into B-wing. If B-wing is not in alarm stay there. If B-wing is in alarm go to the front entrance and exit the building.
- If you are on the 3rd or 4th floor of SCAET wait with your buddy in the stairwell by the elevator. Do not use the elevator. Have your buddy call Security to inform them of your location. Wait in the stairwell with your buddy for the Fire Department to escort you to safety.

Porter Building (Athletics Centre):

- If you are on the 1st floor of the Porter Building, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are on the 2nd floor wait in the nearest stairwell for the Fire Department to escort you to safety.

Annie Smith Building:

- If you are on the 1st floor of the Annie Smith Building, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are on the 2nd floor wait at the top of the stairs for the Fire Department to escort you to safety.

Student Centre:

- If you are on the 1st floor of the Student Centre, accompanied by your buddy, go to the nearest exit and leave the building.
- If you are on the 2nd floor wait in the stairwell by the elevator. Do not use the elevator. Have your buddy call Security to inform them of your location. Wait in the stairwell for the Fire Department to escort you to safety.

Day Care Centre:

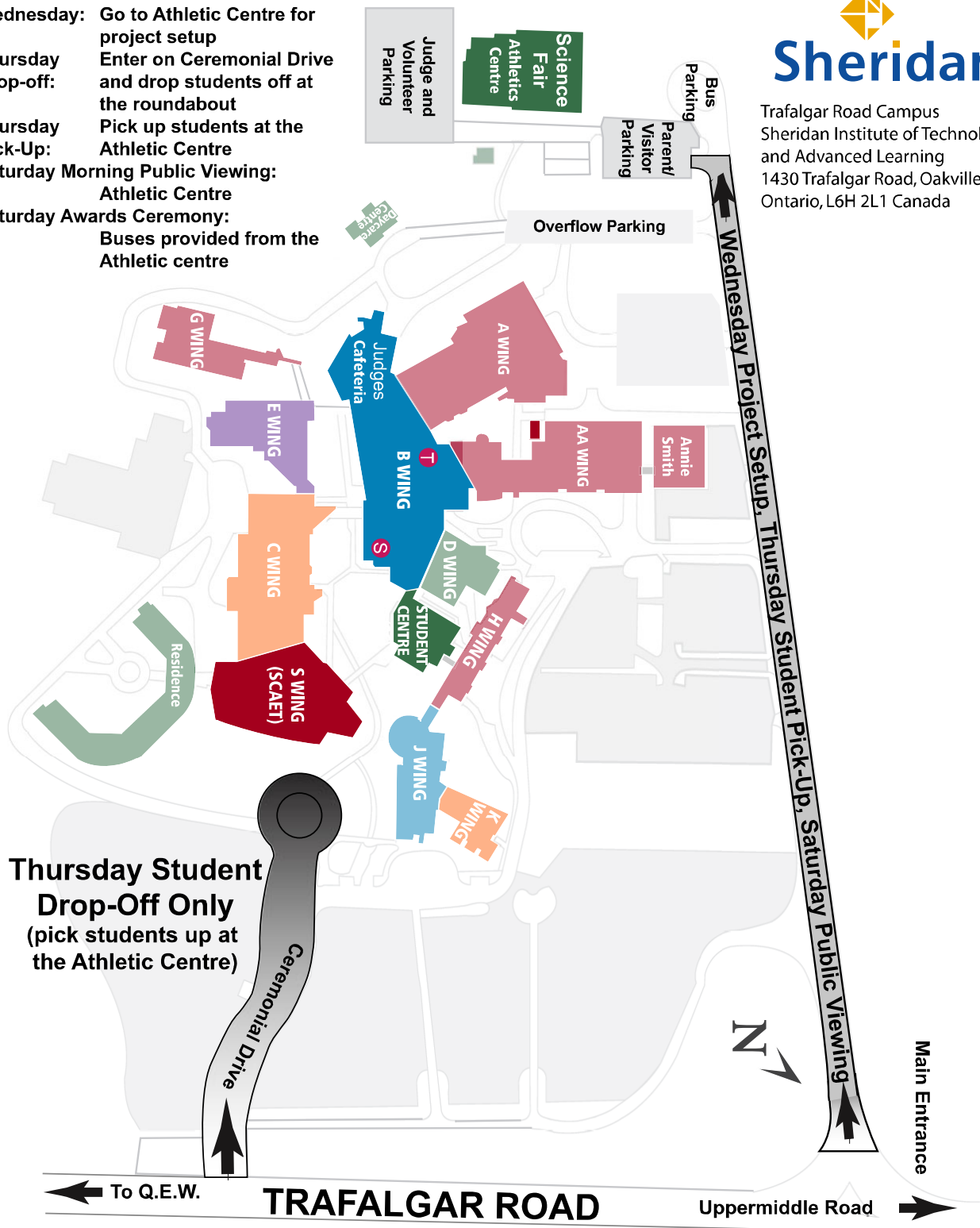
- The Day Care Centre is a one-story ground level building. If the alarm rings you can exit the building through one of the entrances at either end of the building or you can exit into the playground area if it is safe to do so.

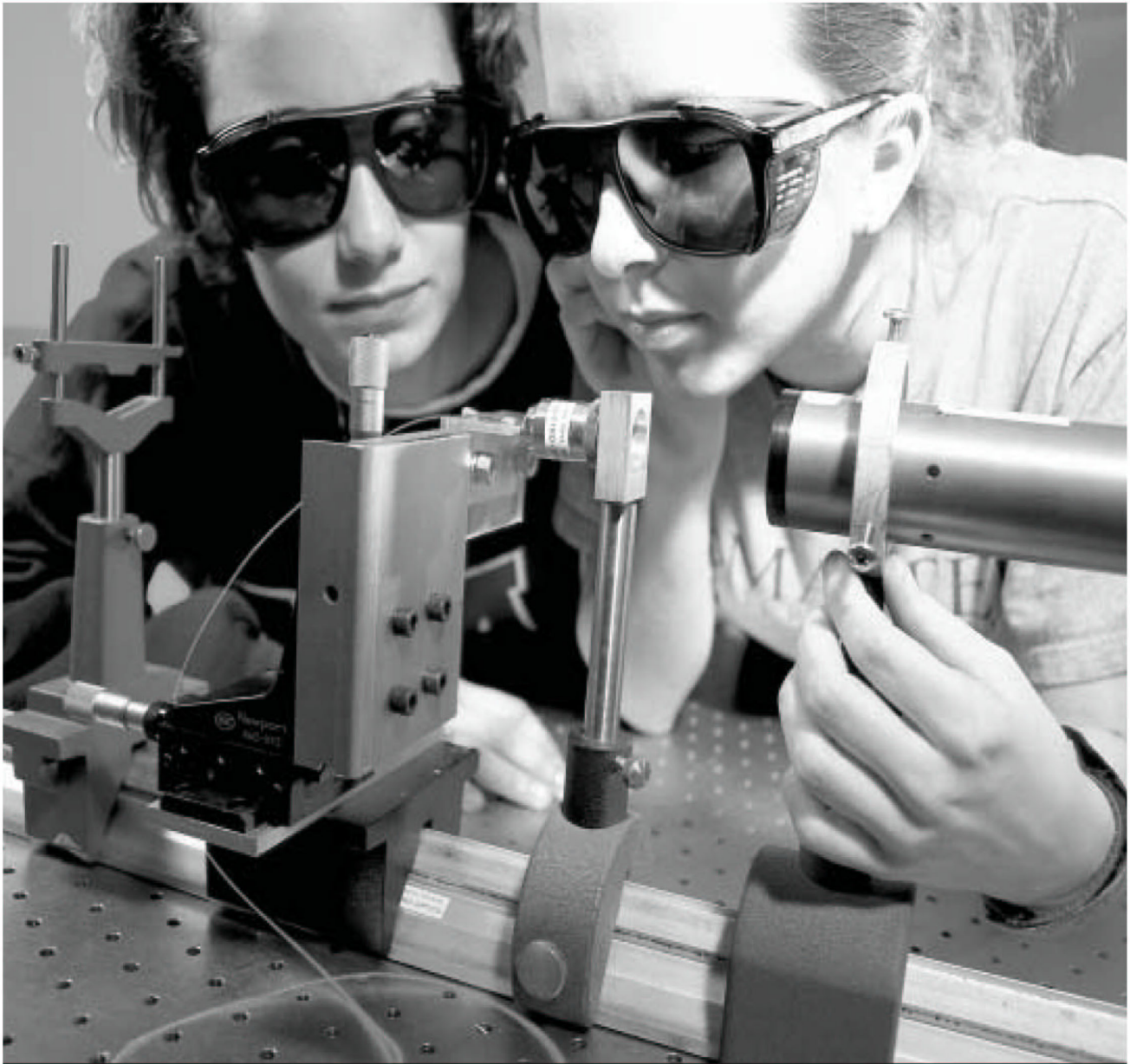
Drop-Off and Pick-Up Instructions

- Wednesday:** Go to Athletic Centre for project setup
- Thursday**
Drop-off: Enter on Ceremonial Drive and drop students off at the roundabout
- Thursday**
Pick-Up: Pick up students at the Athletic Centre
- Saturday Morning Public Viewing:** Athletic Centre
- Saturday Awards Ceremony:** Buses provided from the Athletic centre



Trafalgar Road Campus
Sheridan Institute of Technology
and Advanced Learning
1430 Trafalgar Road, Oakville,
Ontario, L6H 2L1 Canada





Inspiring innovation & discovery

Explore the possibilities at McMaster!

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Mary Querques

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Wuchow Than

VOLUNTEER RECRUITING AND SCREENING

Ola Lunyk-Child, Gary Closson,
Valerie Hughes

PHOTOGRAPHY AND GRAPHICS

Wayne Bowdish, Jim Hamilton, Al
Bates, John Novak, Marcel
Smolinski

PROGRAM

Alinamaria Rodriguez

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Barbara Takasaki, Gabriela
Midence

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Collins
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Sheridan: Michael Arthur
McMaster University: Andy
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In Memoriam

Susan Margaret Tuchtie Joyce

**A valued member
of the BASEF Organizing Committee**

**Retired Principal
Hamilton Wentworth District School Board**

SPONSORS 2008

TITLE \$15000 +

ArcelorMittal Dofasco

DIAMOND \$10,000 +

The Hamilton Spectator
Primary Fluid Systems
Sheridan Institute of
Technology & Advanced Learning

PLATINUM \$5,000 +

Bell Canada
McMaster University
Mohawk College of Applied Arts &
Technology

GOLD \$2,500 +

Lifetouch

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Halton Catholic District School Board

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School Board
Hamilton Wentworth District School
Board
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Association
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FRIEND \$100 +

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The BASEF Project

Bay Area Science and Engineering Fair

Background

- One of the largest and longest running science fairs in Canada
- For all students in grades 7-12 from Halton, Hamilton, Brant, Haldimand and Norfolk
- BASEF is a registered charity relying entirely on volunteers and sponsors

Purpose

To encourage youth in science, engineering and technology by:

- Organizing and staging an annual fair
- Offering Outreach activities to promote "Project Based Science"
- Promoting BASEF to any and all captive audiences

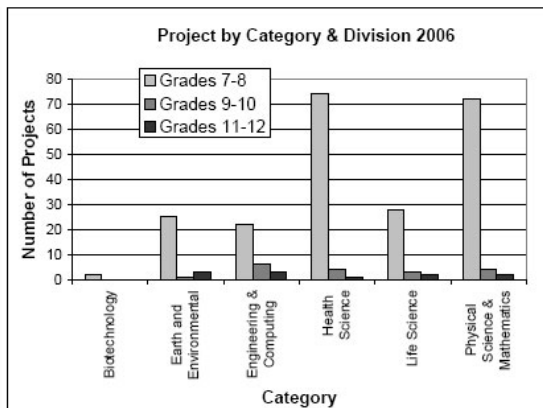
Hypothesis

- Students gain valuable academic and life skills.
- Students compete for thousands of dollars in cash, scholarships and awards including all expense paid trips to the national and international science fairs.

Materials

- 1) Dedicated teachers
- 2) Motivated students
- 3) Supportive parents
- 4) Enthusiastic volunteers
- 5) Generous sponsors

Observations



Results



Team BASEF 2007 at CWSF, Truro, NS



Team BASEF 2007 at IISEF, Albuquerque, NM

Conclusions

BASEF 2007

- 394 students from 62 schools with 274 projects
- Over \$125,000 in awards
- 20 BASEF students won Grand Prize Trip Awards

Our students are going places!

Discussion

All students should be given the opportunity to participate in science fairs. Students learn invaluable academic and life skills through researching, experimenting, displaying and presenting their projects. The judging process and public viewing allow students to practice their "people" skills and gain self confidence and a sense of accomplishment for a job well done.

Get in touch with the scientist in you
basef.ca

Acknowledgements

BASEF is only made possible through the continuing support of our teachers, students, parents, volunteers and sponsors.

ACTIVITY DAY

Thursday, March 27, 2008

8:00 am– 8:45 am
8:45 am – 9:00 am

9:00 am - Noon
Noon – 12:45 pm

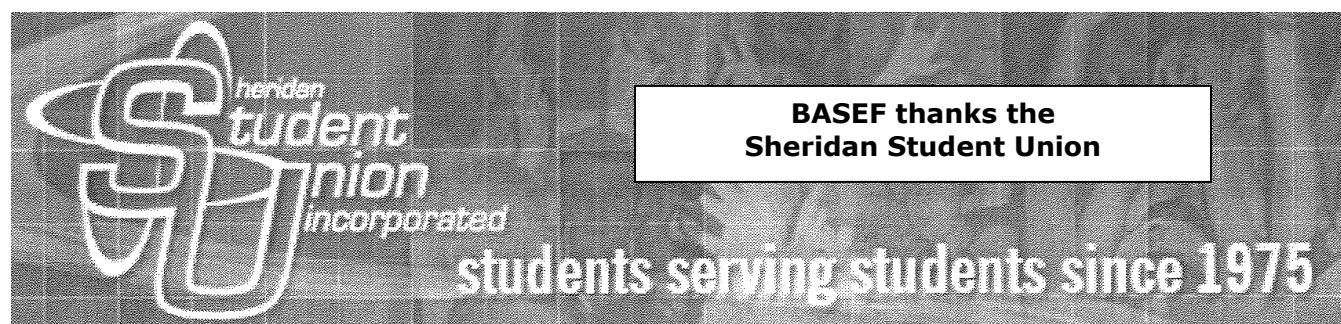
Student Activity Morning

Students gather in the Student Centre
Students moved to assigned Activity location
(Track assignment will be done at registration)
Activity Day Presentations
Students must eat their packed lunch in Student Centre
Outside viewing of hybrid vehicles will be available just outside the Lecture Hall. Viewing prior to first presentation, during rotation, or at Lunch. This will be dependant on the availability of the vehicles and the outside weather.

Activity Day Schedule

Time	Student Centre (Track A)	Lecture Theater (S Wing) (Track B)
9:00	Introductions - Bell Sponsor	Introductions - Bell Sponsor
9:00 - 9:30	Fireball Show - McMaster University	HyMotion - Plug in Hybrids and Battery Technology
9:40 - 10:00	Fireball Show - McMaster University	The Geothermal Energy Sensation - An old story for new times
10:10	Quick Break to Allow Fireball Show Cleanup	The Geothermal Energy Sensation - An old story for new times
10:20 - 10:50	Reg Husbands on "Bellows Expansion Joints"	"How to Obtain a Patent"
10:50	Rotation Time	Rotation Time
11:00 - 11:30	"COO-I CHe-m CaBaReT" - Dr. Randy Dumont of McMaster University.	HyMotion - Plug in Hybrids and Battery Technology
11:30 - 12:00	"COO-I CHe-m CaBaReT" - Dr. Randy Dumont of McMaster University.	MDA Corporation: Robotics Technology Presentation
12:00 - 12:45	Lunch - Cafeteria or Student Centre only	Outside Viewing of Displays from Hymotion - Weather and volunteer resource dependant

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MERIT AWARD JUDGES

Arnold, Rhodes Sheridan, retired	Feltham, Diana Hamilton Wentworth DSB	Kretz, Colin McMaster – student	Meehan, Nancy Hamilton-Wentworth Occasional Teacher Local
Baxter, Matt	Feswick, Jeff D. Historia Building Restoration Inc	Lantz, Sarah RWDI AIR Inc.	Mejia, Diego Hamilton Police Service
Bedi, Amrinder Kaur Hamilton Wentworth DSB	Franks, Jenn	Lasowski, Fran Sanofi Pasteur	Michalopoulos, Olga Halton District School Board
Billeci, Mena Hamilton Health Sciences	French, Craig Mitel Networks	Lewis, Justin AVAR Environmental Inc.	Michell, Bradley Emco Wheaton Corp.
Boscarino, Cathy Hospital for Sick Kids	Gainham, Chris City Of Hamilton: Water and Wastewater	Li, Angela SNC Lavalin Inc.	Morgan, Kevin Hamilton EMS
Bruin, Jenny McMaster University	Garrett, Jim McMaster University	Lin, Dolly Meng Han McMaster – student	Morin, Shane Xerox
Cahill, Lindsay McMaster University	Gou, Harry ArcelorMittal Dofasco	Logan, Karen Self Employed	Muser, Paul Self employed, SUPIMA HOLDINGS INC.
Closson, Gary Sheridan, retired	Gulak, Benjamin Jeffrey Poss	Lonz, Steve Region of Peel	Niro, Gino EngOL Inc.
Collins, Dianne ArcelorMittal Dofasco	Hartlen, Rebecca	Lopez, Ken Retired	Ormond, Peter Environmental Consultant
Cote, Charles Mississauga	Hiam, John Robert TechMat Consulting	MacEwen, Kenny SNC Lavalin Inc.	Orton, Geoff Hamilton Wentworth DSB
Crane, Maureen ArcelorMittal Dofasco	Howard, David L.H. Schwindt & Company Inc.	Martinez, Leyden	Ouwehand, Anna Halton District School Board
Cuthbert, Heather McMaster University	Howarth, Jillian Halton District School Board	Maxymuik, Peter Primerica	Paquette, Michel L-3 Wescam
de Boer, Cheryl City of Hamilton, Public Works	Johnson, Ross Sandwell Consulting Engineers Ltd	McAnanama, James L-3 Wescam	Parris, David ArcelorMittal Dofasco
Dominy, Cliff Dominy Analytics (self employed)	Johnson, Warren retired, high school teacher	McNair, Eric Hamilton-Wentworth DSB (retired)	Pattison, Susan McMaster University
Effinger, Daniel L-3 Wescam	Kahama, Rebecca Kings Christian Collegiate	McNally, Mike C&M McNally Engineering Corp.	Pettinggill, Tom Sheridan, retired
Ellithorn, Trixie (Karen) Medical Technologist (retired)		McQueen, Rose St Joseph's Hospital	

MERIT AWARD JUDGES continued...

Prieur, Adam
McMaster – student

Procwat, Ray
McMaster University

Rashid, Ferid
William Osler Health
Centre

Rutherford, Alan
McMaster University
Medical Centre

Sanders, Robert
Retired

Scanga, Vanessa
University of Toronto

Shanishchara, Ketan
SNC Lavalin Inc.

Shepard, Beverly
Retired

Skolnik, Tomislav
ArcelorMittal Dofasco

Smith, Greg
McMaster University

Stack-Durward,
Donna
HWCD SB

Stefanchuk, Brian
Mohawk College

Stevens, Donald
Retired

Stewart, Kelly
SNC Lavalin Inc.
Stogianens, Diane
Global, R&D
Consulting

Stratford, Graham
Sheridan, retired

Stubbs, Peter
Dofasco, retired

Summers, Peter
McMaster University

Surovtsev, Elena
Source Technical
Group Inc.

Swanson, Gord
Halton District School
Board

Taggart, Peter
Retired/Brigadier-
Gen Air
Force/College Admin

Teoh, Jo-Anne
Kevin H. T. Teoh
Medicine Prof.
Corporation

Theobald, Kim
Self Employed

Thompson, Matthew
Spectrum
Educational Supplies
Ltd.

Tod, Jeff
Rockwell Automation
Canada

Tropea, Bob
Retired

Tuttle, Anne Mulligan
McMaster University

Van Dam, Ashley
Hamilton EMS

van Leeuwen,
Jennifer

Walsh, Steven
City of Hamilton &
Ministry of Health

Webber, Brandon
McMaster – student

Wehrle, Paul

Wood, Jane
ArcelorMittal Dofasco

Wu, Christopher
Epson Canada

Zander, Otto
Sheridan



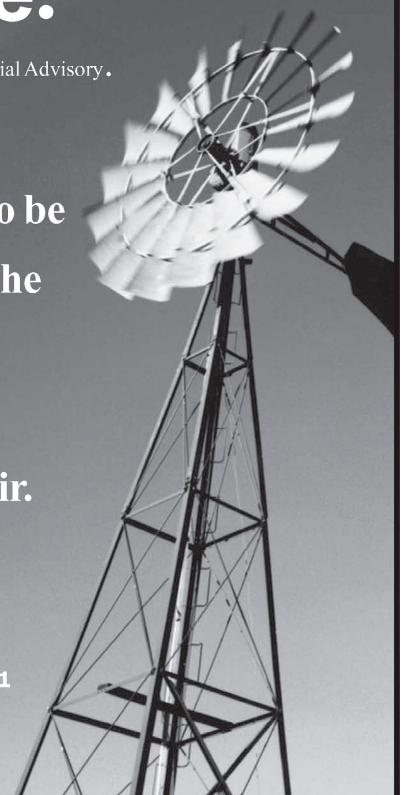
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SPECIAL AWARD JUDGES

Sarah Anderson
Michael Arthur
Hassaan Basit
Don Barclay
Nigel Birch
Derek Bishop
Chris Blackwood
Bill Brimley
Adriaan Buijs
Andrew Camus
James Casey
Peter Child
Dr. Stephen Chin
Shannon Clark
Cathy Collins
Ashlea Colton
Tom Crawford
Zoran Dabic
Tim Dietrich
Jessica Durante
James Ford
Nicholas Gagliardo
Edward Gerges
Laura Gilbank

Michael Gulas
Cathy Hamilton
Bert Halliday
John Hawker
Raj Jain
Michael Jefferson
Klaus Kaiser
Joe Kurpe
Kathy Lerette
Bernard LeBlanc
Pippa Lock
Blair MacCuish
Madeline Martin
Tom Matthews
John Mayhew
Ursula McGinness
Leslie McKenzie
Nancy Meehan
Brian Minaji
Mike Moore
Susan Olynyk
Greg Pipe
Kristin Pouw
Ludvik Prevec

Marianne Querques
Sarodha Rajkumar
Steve Remilli
Dan Rodriques
David Salari
Joydeep Sengupta
Kat Simmons
Nicola Simmons
Ishwar Singh
Herb Sinnock
Barry Smallbone
Brian Stefanchuk
Cindy Storr
Helena Struen
Tom Sutton
Robert Tedesco
Wuchow Than
David Thurlow
Ben Van Berkel
Sandy Walker
David Wardlaw
Marek Zigin

**Congratulations and best wishes
for continued success
to all BASEF participants!**



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Students & learning
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W W W . M O H A W K C O L L E G E . C A

EXHIBITOR INDEX

Abdumatlub, Abdi	B20	Clairmont, Brooke	A18	Graham, Sarah	F16	Hucik, Valentina	G18
Acocella, Catrina	K06	Coburn, Ashley	C14	Gruner, Keaton	G16	Hughes, Nicole	F12
Ahmed, Mariam	A05	Codispodi, Marissa	H02	Grupstra, Kenedie	D15	Humphrey, William	C12
Ahmed, Nada	A08	Coe, Melissa	G17	Gunn, Madison	D07	Hussain, Tajseem	I10
Alan, Stagg	N03	Colina, Nathan	G19	Habicht, Samuel	L04	Ippolito, Sarah	B17
Alex, Tu	B19	Colonné-Robertson, Allana	C18	Hakim, Aaron	L05	Islami, Tayler	I01
Almonte, Joseph	M07	Conciatori, Kristin	D16	Hamed, Dina	K03	Iv, Ling	D19
Alnajar, Seema	K03	Corey, Foster	M08	Hanta, Jessica	G13	Ivanco, John	E06
Altobelli, Francesca	I03	Cornale, Rebecca	F19	Harkness, Claire	F15	Jakji, Julie	B13
Amina, Benmessaoud	A11	Cosgrove, Pierce	E11	Harper, Alison	G01	Janosevic, Andjela	F01
Andrew, Reis	M08	Coulter-English, Sophia	M01	Harris, Emma	I20	Janssen, Erin	I12
Arnold, Jenny	L10	Dakota, Humphrey	K02	Harris, Simon	A20	Japalak, Aleksa	F04
Asif, Bismah	A06	D'Andrea, Carling	F20	Harvey, Kadisha	B08	Jarvis, Kayla	I12
Atkinson, Emma	B13	Darwish, Lina	E15	Hassan, Sara	F06	Jimenez, Ivan	H07
Audet, Courtney	G04	Davis, Kendra	D11	Hayes, Crystal	A17	Jones, Erica	D10
Bajwa, Fatima	C15	Davulcu, Nurefsan	L15	Hegazi, Dhoha	F02	Joseph, D'Angelo	H11
Baptist, Derrick	K04	D'Costa, Kaitlyn	H17	Heney, Kendra	K12	Kellner, Paige	G08
Barberstock, Jermy	G03	Deakin, Emma	I08	Hill, Edward	N02	Kettle, Brandon	E09
Barnard, Rebecca	H08	Deketete, Luke	H14	Hill, Nicholas	B15	Khan, Samia	C11
Barnett, Alina	C02	Dervisholli, Mirjeta	C13	Hinton, Stephanie	E02	Kolesar, Emma	A15
Bayr, Alexandra	D07	Desai, Arundhathi	I17	Hogg, Stephen	A14	Kolic, Chelsea	H13
Beaudoin, Camille	M04	Despond, Evan	I15	Holmes, James	F11	Kostyshyn, Tyler	H15
Beckley, Catie	H01	Di Gallo, Una	H16	Horvath, Nicole	B10	Kourtney, Yurgan	B06
Bell, David	K13	Diaz, Xaviera	C17	Hryc, Christina	H03	Krawchenko, Dominique	D13
Benjamin, Marisa	I18	Dingwall, Raeanne	C09				
Benmessaoud, Saad	A09	Dobrovolskis, Madison	C20				
Bhambra, Shaan	K10	Dolson, Jamie	G09				
Bialachowski, Kirsten	H20	Dost, Erum	A01				
Bigham, Liam	E12	Doyle, Emily	I06				
Bishop, Esai	B11	Droppo, Tim	I15				
Bowen, Natasha	G03	Duerksen, Abigail	D15				
Bozzo, Alisa	F17	Dyer, Eric	L09				
Bradshaw, Joshua	F11	EL-Rabbany, Abdul Rahman	L12				
Bradshaw-Cauchie, Hailey	B18	Emin, Lavan	I11				
Brandolino, Michael	E07	Esposto, Nicholas	G20				
Brennan, Devan	E19	Esteves, Alisha	G17				
Brucoleri, Nicholas	I01	Falco, Julia	D01				
Bryant, Trey	F04	Fan, Jason	C06				
Bursey, Mark	K09	Farquharson, Emily	I19				
Butani, Alisha	E18	Farr, Brittany	F09				
Calero, Vanessa	B09	Fedus, Kelsey	D14				
Cameron, Scott	N03	Filice, Sarah	G12				
Campos, Ingrid	B06	Filice, Tesla	L01				
Cardona, Hugo	G16	Fleming-St.John, Paige	G11				
Caterini, Gabriela	G06	Fortino, Gabriella	B16				
Chang, Jennie	E08	Fougere, Desiree	C12				
Cheeseman, Lucas	L03	Francella, Cassandra	D16				
Chen, Ashley	K12	Friedl, Lauren	D04				
Chidiac, Cassandra	F18	Fu, Annie	C02				
Chong, Katie	F16	Gallego, Vanessa	F08				
Chong, Matthew	A13	Gardner, Cole	G19				
Chong, Nicholas	B14	Gelinas, Jaymi	C14				
Chowdhury, Raiyan	A10	Gobran, Caroline	M03				
Chug, Nicholas	D06	Goel, Nisha	D01				
Cialini, Nicole	I02	Golbeck, Melanie	M04				
Cicchi, Anthony	H12	Goncalves, Callum	H04				

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EXHIBITOR INDEX continued...

Kresina, Dominique	K06	Nasir, Wardah	F03	Philp, Meaghan	D02	Rubletz, Christopher	N02
Lalla, Brock	K04	Nessek, Hamid	L07	Phinn, Kahmellah	D11	Ruggiero, Chelsea	I06
Lamanes, Lukas	H19	Nguyen, Joanna	B19	Phonthaphanh, Michelle	F05	Sack, Heidi	F13
Lamy, Charles-Philippe	D03	Nguyen, Vivian	B09	Piccioni, Victoria	H02	Sadikovic, Matea	L18
Lang, Alexander	E16	Niemczyk, Gabriela	F19	Picyk, Abigail	N01	Saleh, Israa	I10
Lauks, Dominik	K05	O'Donnell, Erin	H03	Piva, Brett	L02	Samardzic, Justin	B04
Lazzarato, Nicholas	M02	O'Donnell, Meagan	E02	Pongetti, Rebecca	I04	Sandill, Reha	A16
Lee, Monica	F10	Olejarz, Daniel	M02	Qasim, Sofia	A03	Saunders, Olivia	B05
Leeson, Madison	C08	Pace, Maddie	G15	Ramadan, Sherif	D03	Schaible, Tori	G11
Liu, Joy	F05	Palme, Leah	F10	Rasi, Natasha	G18	Schmidt, Alyssa	G10
Lok, Yixiong	K08	Pang, Vivian	D19	Razaq, Salsabela	F08	Scione, Alexandra	F17
Loughrey, Elizabeth	E20	Panna, Michal	B12	Re, Lucas	H19	Scott, David	L06
Lutz, Monica	G05	Parabem, Nicholas	I04	Reid, Michelle	D18	Sebaldt, Gabrielle	D04
Luu, Amy	B07	Patel, Nikesh	E01	Reilly, Megan	C10	Sennah, Shehab	A04
Luu, Vivian	B07	Patel, Sagar	L08	Restivo, Desiree	I05	Seymour, Luke	D06
Macasling, Jazriel	D10	Pellizzari, David	G14	Rich, Sarah	B02	Shakrollah, Gulan	I11
MacDonald, Maggie	N01	Pereira, Olivia	C15	Rocca, Alexandra	C18	Shen, Julia	A15
MacNeil, Hunter	K02	Petta, Lucas	H14	Rollins, Meaghen	D20	Sinke, Ian	K07
Madsen, Virginia	D09	Philip, Russell	I16	Ross, Carly	L18	Slye, Tasha	H18
Maida, Melissa	I05	Phillips, Hayden	F15	Rossi, Simona	I03	Small, Alexa	D18
Malek, Navid	L06						
Mallory, Koomen	B10						
Maly, Alex	E14						
Mandarino, Melissa	L10						
Mann, Emily	D17						
Marcoux, Curtis	L02						
Margetts, Emily	C03						
Marshall, Kyle	I09						
Marshall, Samantha	M06						
Marway, Bhaag	B20						
Mayes, Autumn	B18						
Mayne, Louisa	G10						
McArthur, William	F14						
McCaskell, Devin	A13						
McDonald, Carly	D20						
Mckay, Ghislain	L07						
McKennan, Austin	H05						
McKeown, Amy	E13						
McNally, Marissa	C13						
McNamara, Sara	E03						
Medakovic, Tatjana	F03						
Medeiros, Evan	K05						
Medeiros, Sarah	L11						
Meleskie, Michelle	I18						
Merkel, Colin	K13						
Michalski, Camilla	H10						
Mikhael, Kolic	H11						
Milisavljevic, Kristina	F01						
Minhas, Eden	F07						
Mitro, Alison	F12						
Mobasher, Mariam	D12						
Mohammadi, Sina	A02						
Morrison, Austin	C07						
Morrison, Evan	H04						
Morris-Patterson, Hannah	C20						
Muser, Carlo	B01						
Mustedanagic, Edina	F07						
Najda, David	L17						

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EXHIBITOR INDEX continued...

Smith, Sabrina	H20	Thiel, Rebecca	H17	Weeratunga, Dishan	L08	Yancan, Brancon	H06
Smrekar, Tyler	H05	Thompson, Sean	L03	Wendel, Elizabeth	C05	Yang, Nicole	D17
Smrke, Brittany	E10	Thomsen, Madeleine	F20	Wheaton, Jake	E09	Yune, Jake	B03
Son, Daniel	B11	Tinebra, alexandra	I07	Whiffing, Robin	F13	Zaidi, Sara	A07
Soolum, Tyler	L17	Tolic, Alexander	E17	Williams, Tobias	K01	Zaidi, Sheza	A12
Sorbara, Natalie	I07	Tran, Stephanie	G04	Wong, Lauren	M09	Zhong, Michelle	B08
Spicer, Tessa	D02	Tremblay, Meaghan	C19	Wright, Jessica	B17	Zylik, Lauren	E04
Stacey, Julia	C04	Trink, Jackie	H01				
Stemmler, Angela	G02	Trout, Kinzi	M06				
Stender, Julia	L15	Truman, Hayden	G07				
Stevens, Laura	I13	Tudball, Matthew	I14				
Sulewski, Michelle	K11	Turco, Claudia	B16				
Sulewski, Nicole	C05	van Leeuwen, Jenna	C16				
Sullivan, Emily	G09	Verasamy, Jordy	E11				
Sun, Rui	C01	Vivani, Mackenzie	E05				
Sur, Romita	M05	Vohra, Anam	F06				
Szymkiewicz, Erica	H09	Wain-Lowe, Samuel	D05				
Tabone, Lauren	L14	Walczak, Gillian	M01				
Tan, Samantha	C11	Walden, Julie	G15				
Tarique, Zunaira	F02	Walker, David	A19				
Tatti, Leah	D08	Wang, Tian Duo	L16				
Taylor, Melissa	E08	Wease, Alyxa	F09				
Tedeschi, Alana	I02	Weaver, Jacob	M10				
Terbrack, Nathan	K14	Weaver, Nick	L13				



Congratulations to all BASEF 2008 participants!

Bruce W. Riddiough, C.A.

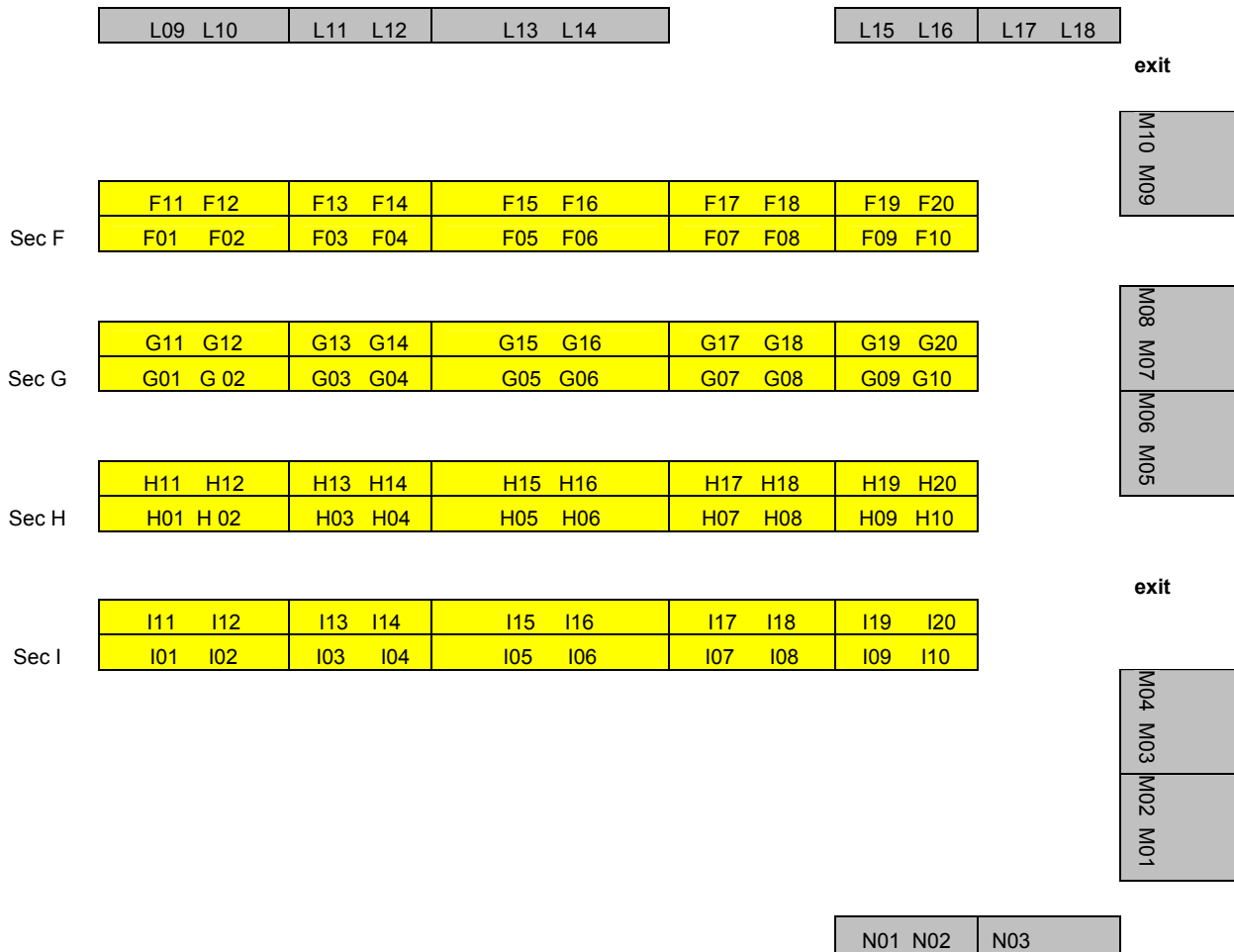
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BASEF 2008

	L01 L02	L03 L04	exit	L05 L06	L07 L08
K01 K02					
K03 K04					
K05 K06					
K07 K08					
K09 K10					
K11 K12					
K13 K14					
Sec E	E11 E12	E13 E14	E15 E16	E17 E18	E19 E20
	E01 E02	E03 E04	E05 E06	E07 E08	E09 E10
Sec D	D11 D12	D13 D14	D15 D16	D17 D18	D19 D20
	D01 D02	D03 D04	D05 D06	D07 D08	D09 D10
Sec C	C11 C12	C13 C14	C15 C16	C17 C18	C19 C20
	C01 C02	C03 C04	C05 C06	C07 C08	C09 C10
Sec B	B11 B12	B13 B14	B15 B16	B17 B18	B19 B20
	B01 B02	B03 B04	B05 B06	B07 B08	B09 B10
Sec A	A11 A12	A13 A14	A15 A16	A17 A18	A19 A20
	A01 A02	A03 A04	A05 A06	A07 A08	A09 A10

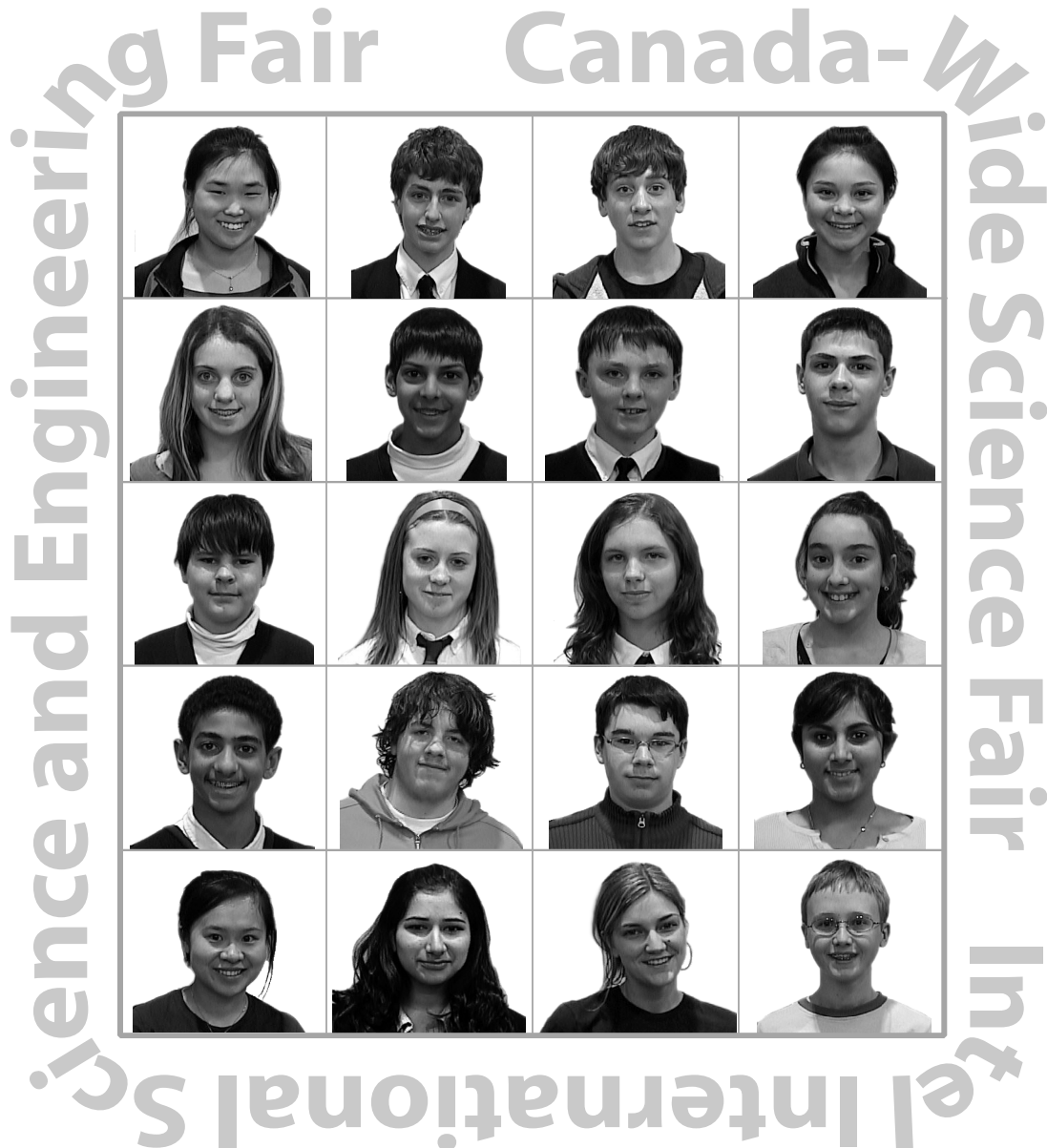
SHERIDAN



Main Entrance

BASEF 2007 Trip Award Winners

**Thanks to our sponsors
we're going places!**



**The BASEF Students and Volunteers gratefully
acknowledge the support of all of our sponsors**

EXHIBITOR LISTING

A01, Hypocalcemia and Congestive Heart Failure: the effects of hypocalcemia and its subsequent results on the depolarization

Erum Dost,
I 9-10, Health Sciences
Abbey Park High School, HDSB

A02, What is the strongest geometrical shape?

Sina Mohammadi,
J 7-8, Physical Sciences & Math
Al-Falah Islamic School, Independent

A03, ELECTROSTATIC WATER GENERATOR

Sofia Qasim,
J 7-8, Physical Sciences & Math
Al-Falah Islamic School, Independent

A04, The affect of video games on heart rate.

Shehab Sennah,
J 7-8, Health Sciences
Al-Falah Islamic School, Independent

A05, Does sound help you concentrate?

Mariam Ahmed,
J 7-8, Health Sciences
Al-Falah Islamic School, Independent

A06, Why do we need soap everytime we wash our hands?

Bismah Asif,
J 7-8, Health Sciences
Al-Falah Islamic School, Independent

A07, How does temperature effect the speed of dissolving in water.

Sara Zaidi,
J 7-8, Life Sciences
Al-Falah Islamic School, Independent

A08, Stairway to the Brain

Nada Ahmed,
J 7-8, Health Sciences
Al-Falah Islamic School, Independent

A09, What is the difference between AC and DC currents?

Saad Benmessaoud,
J 7-8, Physical Sciences & Math
Al-Falah Islamic School, Independent

A10, The affects of vinegar on plants.

Raiyan Chowdhury,
J 7-8, Life Sciences
Al-Falah Islamic School, Independent

A11, How to determine the PH level of liquids & solutions using purple cabbage water.

Benmessaoud Amina,
J 7-8, Physical Sciences & Math
Al-Falah Islamic School, Independent

A12, Microclimate

Sheza Zaidi,
J 7-8, Earth and Environmental
Al-Falah Islamic School, Independent

A13, Brain's Attorney

Matthew Chong, Devin McCaskell
J 7-8, Health Sciences
Ancaster Meadow, HWDSB

A14, Rocket Science: What a Drag

Stephen Hogg,
J 7-8, Engineering and Computing
Ancaster Senior, HWDSB



Al Bailey
Chair of the Board

Lou Piovesan
Director of Education

*Serving the Catholic Communities
of Burlington, Halton Hills,
Milton and Oakville*

CONGRATULATIONS
to all BASEF 2008 participants and
BEST WISHES
for continued success in all
of your endeavours!

**From the Halton Catholic District School Board
– committed to developing inquiring minds,
which will create solutions to tomorrow's challenges.**

EXHIBITOR LISTING continued...

A15, Do Boys Play Differently Than Girls?: A Look at Rock-Paper-Scissors

Emma Kolesar, Julia Shen
J 7-8, Health Sciences
Ancaster Senior, HWDSB

A16, The Loudness Limit

Reha Sandill,
J 7-8, Health Sciences
Ancaster Senior, HWDSB

A17, Is saltwater the answer to the worlds energy demand?

Crystal Hayes,
J 7-8, Earth and Environmental
Ancaster Senior, HWDSB

A18, Brooke's Biodegradeble Battery

Brooke Clairmont,
J 7-8, Earth and Environmental
Ancaster Senior, HWDSB

A19, Does Zinc Help You Think?

David Walker,
J 7-8, Health Sciences
Appleby College, Independent

A20, Electric Sewage

Simon Harris,
J 7-8, Earth and Environmental
Appleby College, Independent

B01, Watch What You Drink

Carlo Muser,
J 7-8, Health Sciences
Appleby College, Independent

B02, Can Your Backpack Make You Smarter?

Sarah Rich,
J 7-8, Health Sciences
Appleby College, Independent

B03, Can You Remember This or This?

Jake Yune,
J 7-8, Health Sciences
Appleby College, Independent

B04, H2Ology- The InTENSE Study of Water

Justin Samardzic,
J 7-8, Physical Sciences & Math
Appleby College, Independent

B05, Go Fetch!

Olivia Saunders,
J 7-8, Life Sciences
Appleby College, Independent

B06, Smooth Moves

Ingrid Campos, Yurgan Kourtney
J 7-8, Earth and Environmental
Bennetto, HWDSB

B07, The Pressure of Video Games

Vivian Luu, Amy Luu
J 7-8, Health Sciences
Bennetto, HWDSB

B08, Water Vs. Gravity: Which does a Plant Root Prefer?

Kadisha Harvey, Michelle Zhong
J 7-8, Earth and Environmental
Bennetto, HWDSB

B09, Colour Mania!

Vanessa Calero, Vivian Nguyen
J 7-8, Earth and Environmental
Bennetto, HWDSB

B10, Dissolving Drugs: How Quick Can You Get It In You?

Nicole Horvath, Koomen Mallory
J 7-8, Health Sciences
Bennetto, HWDSB

B11, Acid Attack

Esai Bishop, Daniel Son
J 7-8, Earth and Environmental
Bennetto, HWDSB

B12, Candy Chromatography

Michal Panna,
J 7-8, Physical Sciences & Math
Bennetto, HWDSB

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Accountability

Students

Achieving their Full Potential

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Innovation... We will:

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Accountability... We will:

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Measure and report our accomplishments to the community.
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EXHIBITOR LISTING continued...**B13, Gut Feeling II**

Emma Atkinson, Julie Jakji
J 7-8, Health Sciences
Blessed Kateri Tekakwitha, HWCDSB

B14, The Slingshot

Nicholas Chong,
J 7-8, Physical Sciences & Math
Canadian Martyrs', HWCDSB

B15, Which Ball Rules Them All?

Nicholas Hill,
J 7-8, Physical Sciences & Math
Canadian Martyrs', HWCDSB

B16, Fantastic 4

Gabriella Fortino, Claudia Turco
J 7-8, Health Sciences
Canadian Martyrs', HWCDSB

B17, Carton? Please! Give It A Squeeze!

Sarah Ippolito, Jessica Wright
J 7-8, Physical Sciences & Math
Canadian Martyrs', HWCDSB

B18, Resonating Pendulums

Autumn Mayes, Hailey Bradshaw-
Caughie
J 7-8, Physical Sciences & Math
Cathy Wever, HWDSB

B19, Are Vitamin C Levels the same in the same Fruit?

Tu Alex, Joanna Nguyen
J 7-8, Physical Sciences & Math
Cathy Wever, HWDSB

B20, CO2 Absorption properties of Duckweed

Bhaag Marway, Abdi Abdumatlub
J 7-8, Earth and Environmental
Cathy Wever, HWDSB

C01, Viscosity

Rui Sun,
J 7-8, Physical Sciences & Math
Dalewood, HWDSB

C02, Memorosity

Alina Barnett, Annie Fu
J 7-8, Health Sciences
Dalewood, HWDSB

C03, A Sweet Surprise: Antibacterial Properties of Honey

Emily Margetts,
J 7-8, Health Sciences
Dalewood, HWDSB

C04, Memorable Music

Julia Stacey,
J 7-8, Health Sciences
Dalewood, HWDSB

C05, The Cost of a Cup of Coffee

Nicole Sulewski, Elizabeth Wendel
J 7-8, Earth and Environmental
Dalewood, HWDSB

C06, Dude, You're Stressing Me Out!

Jason Fan,
J 7-8, Health Sciences
Dalewood, HWDSB

C07, Battery charger

Austin Morrison,
J 7-8, Engineering and Computing
Eastview Public School, HDSB

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EXHIBITOR LISTING continued...**C08, Colours On A Human Mood**

Madison Leeson,
J 7-8, Health Sciences
Eastview Public School, HDSB

C09, Rise Up, Rise Up

Raeanne Dingwall,
I 9-10, Physical Sciences & Math
Georgetown District High School, HDSB

C10, A Comparative Investigation of Aquatic Plants

Megan Reilly,
I 9-10, Life Sciences
Georgetown District High School, HDSB

C11, Wash away those harsh chemicals

Samia Khan, Samantha Tan
J 7-8, Earth and Environmental
Helen Detwiler, HWDSB

C12, Toxicity

William Humphrey, Desiree Fougere
J 7-8, Earth and Environmental
Hillcrest, HWDSB

C13, Pollution Around Us

Marissa McNally, Mirjeta Dervisholli
J 7-8, Earth and Environmental
Hillcrest, HWDSB

C14, Fish Frenzy

Jaymi Gelinas, Ashley Coburn
J 7-8, Life Sciences
Hillcrest, HWDSB

C15, Concentrating on Oxygen

Fatima Bajwa, Olivia Pereira
J 7-8, Earth and Environmental
Hillcrest, HWDSB

C16, Honey I Shrunk the (Starch) ^-7!

Jenna van Leeuwen,
I 9-10, Biotechnology
Hillfield Strathallan College, Independent

C17, Bacteria Battle

Xaviera Diaz,
J 7-8, Life Sciences
Hillfield Strathallan College, Independent

C18, Music to my Ears?

Allana Colonné- Robertson, Alexandra Rocca
J 7-8, Health Sciences
Hillfield Strathallan College, Independent

C19, Up, Up and Away

Meaghan Tremblay,
J 7-8, Physical Sciences & Math
Hillfield Strathallan College, Independent

C20, Not Clean, Not Green

Madison Dobrovolskis, Hannah Morris-Patterson
J 7-8, Earth and Environmental
Hillfield Strathallan College, Independent

D01, Don't Bug Me!

Nisha Goel, Julia Falco
I 9-10, Health Sciences
Hillfield Strathallan College, Independent

D02, How Have You Bin?

Meaghan Philp, Tessa Spicer
I 9-10, Earth and Environmental
Hillfield Strathallan College, Independent

D03, Are We Wasting Our Time?

Charles-Philippe Lamy, Sherif Ramadan
I 9-10, Health Sciences
Hillfield Strathallan College, Independent

D04, Can Horses Learn To Link Food With Colour?

Lauren Friedl, Gabrielle Sebaldt
I 9-10, Life Sciences
Hillfield Strathallan College, Independent

D05, NATURALLY BETTER ?

Samuel Wain-Lowe,
I 9-10, Earth and Environmental
Hillfield Strathallan College, Independent

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Tel: 905-522-5220 Fax: 905-572-9166 Email: info@hhca.ca

EXHIBITOR LISTING continued...**D06, Does Red Bull Give You Wings?**

Nicholas Chug, Luke Seymour
J 7-8, Health Sciences
Hillfield Strathallan College, Independent

D07, Highlighting: Does is it really help your memory?

Madison Gunn, Alexandra Bayr
I 9-10, Health Sciences
Hillfield Strathallan College, Independent

D08, To Grow Or Not To Grow?

Leah Tatti,
J 7-8, Life Sciences
Holy Name of Jesus, HWCDSB

D09, Shocking Truth

Virginia Madsen,
J 7-8, Physical Sciences & Math
Holy Name of Jesus, HWCDSB

D10, Candle Scandal

Erica Jones, Jazriel Macasling
J 7-8, Physical Sciences & Math
Holy Name of Jesus, HWCDSB

D11, sinkers and floaters

Kendra Davis, Kahmellah Phinn
J 7-8, Physical Sciences & Math
Holy Name of Jesus, HWCDSB

D12, Health Behaviour Among Adolescents in Hamilton, Ontario

Mariam Mobasher,
I 9-10, Health Sciences
Westdale High School, HWDSB

D13, DOWN ON YOUR LUX?

Dominique Krawchenko,
J 7-8, Health Sciences
Holy Spirit, HWCDSB

D14, Return of the Carbon Dioxide Invasion

Kelsey Fedus,
J 7-8, Earth and Environmental
Lisgar, HWDSB

D15, One at a Time

Abigail Duerksen, Kenedie Grupstra
J 7-8, Health Sciences
Lisgar, HWDSB

D16, Can You Feel The Squeeze

Cassandra Francella, Kristin Conciatori
J 7-8, Health Sciences
Mother Teresa, HWCDSB

D17, The Sweetest Thing

Nicole Yang, Emily Mann
S 11-12, Earth and Environmental
North Park Collegiate and Vocational
School, GEDSB

D18, Petroleum Snackers: A Biological Solution to Oil Spills

Michelle Reid, Alexa Small
S 11-12, Earth and Environmental
North Park Collegiate and Vocational
School, GEDSB

D19, An Unsolved Mystery: The Origin of Life

Vivian Pang, Ling Iv
S 11-12, Life Sciences
North Park Collegiate and Vocational
School, GEDSB

D20, The Unearthing of Flavonoids

Meaghen Rollins, Carly McDonald
S 11-12, Earth and Environmental
North Park Collegiate and Vocational
School, GEDSB

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EXHIBITOR LISTING continued...**E01, A Pillbug's Life**

Nikesh Patel,
S 11-12, Life Sciences
North Park Collegiate and Vocational
School, GEDSB

E02, Making Bacteria Glow with a Firefly Gene

Meagan O'Donnell, Stephanie Hinton
S 11-12, Biotechnology
North Park Collegiate and Vocational
School, GEDSB

E03, "Fight The Light" The Effects of Ozone Depletion on Plant Life

Sara McNamara,
J 7-8, Earth and Environmental
Oakville Christian School, Independent

E04, The Resistance Suit

Lauren Zyluk,
J 7-8, Biotechnology
Oakville Christian School, Independent

E05, Heart Races

Mackenzie Vivani,
J 7-8, Health Sciences
Oakville Christian School, Independent

E06, Wind Power In Ontario

John Ivanco,
J 7-8, Engineering and Computing
Oakville Christian School, Independent

E07, People Power

Michael Brandolino,
J 7-8, Engineering and Computing
Oakville Christian School, Independent

E08, Does Your Heart Rate Vary on What you drink?

Melissa Taylor, Jennie Chang
J 7-8, Health Sciences
Oakville Christian School, Independent

E09, Power Out of Thin Air

Jake Wheaton, Brandon Kettle
J 7-8, Engineering and Computing
Oakville Christian School, Independent

E10, Tomorrow's Water ... Today

Brittany Smrke,
J 7-8, Earth and Environmental
Oakville Christian School, Independent

E11, Coca-Cola: Liquid Candy or Liquid Poison???

Pierce Cosgrove, Jordy Verasamy
J 7-8, Health Sciences
Oakville Christian School, Independent

E12, Artificial Intelligence

Liam Bigham,
J 7-8, Engineering and Computing
Rotherglen School (Oakville),
Independent

E13, Light Efficiency

Amy McKeown,
J 7-8, Physical Sciences & Math
Rotherglen School (Oakville),
Independent

E14, Anaerobic Threshold

Alex Maly,
J 7-8, Health Sciences
Rotherglen School (Oakville),
Independent

E15, Hydrogen fuel cell cars

Lina Darwish,
J 7-8, Earth and Environmental
Rotherglen School (Oakville),
Independent

E16, Hydroponics: Growing Plants without Soil

Alexander Lang,
J 7-8, Life Sciences
Rotherglen School (Oakville),
Independent



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EXHIBITOR LISTING continued...**E17, The Athlete's Drink**

Alexander Tolic,
J 7-8, Physical Sciences & Math
Rotherglen School (Oakville),
Independent

E18, Do Taller People Have A Larger Lung Capacity Than Shorter People?

Alisha Butani,
J 7-8, Health Sciences
Rotherglen School (Oakville),
Independent

E19, Does Music Effect Memory?

Devan Brennan,
J 7-8, Health Sciences
Rotherglen School (Oakville),
Independent

E20, Variables Affecting Memory Recall

Elizabeth Loughrey,
J 7-8, Health Sciences
Rotherglen School (Oakville),
Independent

F01, Which Cleaner is Meaner?

Kristina Milisavljevic, Andjela Janosevic
J 7-8, Earth and Environmental
Sir Wilfrid Laurier, HWDSB

F02, Squeeze Me & You'll C!

Dhoha Hegazi, Zunaira Tarique
J 7-8, Physical Sciences & Math
Sir Wilfrid Laurier, HWDSB

F03, Quit Buggin'

Wardah Nasir, Tatjana Medakovic
J 7-8, Biotechnology
Sir Wilfrid Laurier, HWDSB

F04, Clean Up In Aisle Three

Trey Bryant, Aleksa Japalak
J 7-8, Earth and Environmental
Sir Wilfrid Laurier, HWDSB

F05, Planet or Plastic?

Joy Liu, Michelle Phonthaphanh
J 7-8, Biotechnology
Sir Wilfrid Laurier, HWDSB

F06, 2 + 2 = 5 ?

Anam Vohra, Sara Hassan
J 7-8, Earth and Environmental
Sir Wilfrid Laurier, HWDSB

F07, Bac Attack!

Eden Minhas, Edina Mustedanagic
J 7-8, Life Sciences
Sir Wilfrid Laurier, HWDSB

F08, Battle of the Toothpastes

Salsabela Razaq, Vanessa Gallego
J 7-8, Physical Sciences & Math
Sir Wilfrid Laurier, HWDSB

F09, Cloud Formation

Alyxa Wease, Brittany Farr
J 7-8, Earth and Environmental
Sir William Osler, HWDSB

F10, Peer Pressure, the Real Issue

Leah Palme, Monica Lee
J 7-8, Health Sciences
Sir William Osler, HWDSB

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EXHIBITOR LISTING continued...

F11, Gear Ratios VS. Rotations Per Minute (RPM)

Joshua Bradshaw, James Holmes
J 7-8, Engineering and Computing
Sir William Osler, HWDSB

F12, 12 Kids. 3 Tests. One Major Distraction.

Nicole Hughes, Alison Mitro
J 7-8, Health Sciences
Sir William Osler, HWDSB

F13, The Need For Aspirin?

Robin Whiffing, Heidi Sack
J 7-8, Life Sciences
Sir William Osler, HWDSB

F14, Where does the mold grow the slowest

William McArthur,
I 9-10, Life Sciences
Sir William Osler, HWDSB

F15, Introvert Or Extravert

Claire Harkness, Hayden Phillips
J 7-8, Health Sciences
Sir William Osler, HWDSB

F16, The Potentials of Plants

Sarah Graham, Katie Chong
J 7-8, Earth and Environmental
St. Ann (Ancaster), HWCDSB

F17, Water and Gatorade

Alisa Bozzo, Alexandra Scione
J 7-8, Health Sciences
St. Ann (Ancaster), HWCDSB

F18, Perception of Beauty

Cassandra Chidiac,
J 7-8, Health Sciences
St. Ann (Ancaster), HWCDSB

F19, In one sense, out another

Gabriela Niemczyk, Rebecca Cornale
J 7-8, Health Sciences
St. Ann (Ancaster), HWCDSB

F20, Reaction Time

Carling D'Andrea, Madeleine Thomsen
J 7-8, Health Sciences
St. Ann (Ancaster), HWCDSB

G01, The Browning of Apples

Alison Harper,
J 7-8, Physical Sciences & Math
St. Ann (Ancaster), HWCDSB

G02, Heat Transfer

Angela Stemmler,
J 7-8, Physical Sciences & Math
St. Ann (Ancaster), HWCDSB

G03, Citrus Power

Natasha Bowen, Jerney Barberstock
J 7-8, Earth and Environmental
St. Ann (Hamilton), HWCDSB

G04, Reconnect

Courtney Audet, Stephanie Tran
J 7-8, Health Sciences
St. Ann (Hamilton), HWCDSB

G05, To Grow or Not to Grow

Monica Lutz,
J 7-8, Earth and Environmental
St. Augustine, HWCDSB

G06, Scrub A Little Scrub A Lot?

Gabriela Caterini,
J 7-8, Physical Sciences & Math
St. Augustine, HWCDSB

G07, Making a photovoltaic cell in your kitchen

Hayden Truman,
J 7-8, Earth and Environmental
St. Augustine, HWCDSB

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- air, land and water -
through joint and
individual activities,
and by partnering
with the community
to enhance future
understanding of
environmental issues
and help establish
priorities for action."*

**Who we are....**

The Hamilton Industrial Environmental Association (HIEA), is a non-profit association of local private-sector industries. HIEA provides an open forum for community representatives and local associations to discuss environmental concerns. HIEA has a strong history of connecting with local neighbourhood associations and working with the community to fulfill its mandate:

"to improve the local environment - air; land and water - through joint and individual activities, and by partnering with the community to enhance future understanding of environmental issues and help establish priorities for action."

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Phone: 905-561-HIEA (4432)
Website: www.hiea.org
Email: info@hiea.org

EXHIBITOR LISTING continued...**G08, DOGS BARK FOR BARF**

Paige Kellner,
J 7-8, Life Sciences
St. Augustine, HWCDSB

G09, Colour Deficiency: Boys vs. Girls

Emily Sullivan, Jamie Dolson
J 7-8, Health Sciences
St. Augustine, HWCDSB

G10, Wide Asleep

Alyssa Schmidt, Louisa Mayne
J 7-8, Health Sciences
St. Augustine, HWCDSB

G11, Moldy Bread

Paige Fleming- St. John, Tori Schaible
J 7-8, Life Sciences
St. Augustine, HWCDSB

G12, Can Eye See Or Ear Better?

Sarah Filice,
J 7-8, Health Sciences
St. Augustine, HWCDSB

G13, What's Up Doc?

Jessica Hanta,
J 7-8, Health Sciences
St. Catherine of Siena, HWCDSB

G14, Compression vs. Tension

David Pellizzari,
J 7-8, Physical Sciences & Math
St. Clare of Assisi, HWCDSB

G15, Hydraulic Arm Project- Super Arm

Julie Walden, Maddie Pace
J 7-8, Engineering and Computing
St. Dominic, HCDSB

G16, Hydraulic arm project - The Power House

Keaton Gruner, Hugo Cardona
J 7-8, Engineering and Computing
St. Dominic, HCDSB

G17, Hydraulic Arm Project - mongo

Melissa Coe, Alisha Esteves
J 7-8, Engineering and Computing
St. Dominic, HCDSB

G18, Hydraulic Arm Project: OzzieOsten The Ostrich

Natasha Rasi, Valentina Hucik
J 7-8, Engineering and Computing
St. Dominic, HCDSB

G19, Hydraulic Arm- Roller Pig in a blanket T.T.V

Cole Gardner, Nathan Colina
J 7-8, Engineering and Computing
St. Dominic, HCDSB

G20, Bacterial Growth

Nicholas Esposto,
J 7-8, Life Sciences
St. Joachim, HWCDSB

H01, Music vs Emotions

Catie Beckley, Jackie Trink
J 7-8, Health Sciences
St. Joachim, HWCDSB

H02, If Germs Weren't Invisible . . .

Victoria Piccioni, Marissa Codispodi
J 7-8, Health Sciences
St. Joachim, HWCDSB

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EXHIBITOR LISTING continued...**H03, Little Miss Sunshine**

Christina Hryc, Erin O'Donnell
J 7-8, Health Sciences
St. John the Baptist, HWCDSB

H04, Practice Pitch

Callum Goncalves, Evan Morrison
J 7-8, Engineering and Computing
St. Luke, HCDSB

H05, Wall Mounted Can Crusher

Austin McKennan, Tyler Smrekar
J 7-8, Engineering and Computing
St. Luke, HCDSB

H06, A Remote Control Puppet

Brancon Yancan,
J 7-8, Engineering and Computing
St. Luke, HCDSB

H07, Can Crusher

Ivan Jimenez,
J 7-8, Engineering and Computing
St. Luke, HCDSB

H08, Toxic Salt Syndrome

Rebecca Barnard,
J 7-8, Biotechnology
St. Marguerite d'Youville, HWCDSB

H09, Electrifying Temperatures

Erica Szymkiewicz,
J 7-8, Physical Sciences & Math
St. Mark, HWCDSB

H10, Ozone Here, Ozone There, Ozone Everywhere!

Camilla Michalski,
J 7-8, Earth and Environmental
St. Mark, HWCDSB

H11, Plop, Plop, Fizz, Fizz

Kolic Mikhael, D'Angelo Joseph
J 7-8, Health Sciences
St. Mark, HWCDSB

H12, Methan Mayhem

Anthony Cicchi,
J 7-8, Earth and Environmental
St. Mark, HWCDSB

H13, What's Eating You?

Chelsea Kolic,
J 7-8, Health Sciences
St. Mark, HWCDSB

H14, Whistle While You Work

Luke Deketele, Lucas Petta
J 7-8, Health Sciences
St. Paul, HWCDSB

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EXHIBITOR LISTING continued...**H15, Fatigue Effect**

Tyler Kostyshyn,
J 7-8, Health Sciences
St. Paul, HWCDSB

H16, Mind The Music

Una Di Gallo,
J 7-8, Health Sciences
St. Paul, HWCDSB

H17, Paper vs. Light

Rebecca Thiel, Kaitlyn D'Costa
J 7-8, Physical Sciences & Math
St. Paul, HWCDSB

H18, An Idle Threat

Tasha Slye,
J 7-8, Earth and Environmental
St. Paul, HWCDSB

H19, Is The Toughest Stain Really A Problem

Lucas Re, Lukas Lamanes
J 7-8, Physical Sciences & Math
St. Paul, HWCDSB

H20, Going Geen?

Kirsten Bialachowski, Sabrina Smith
J 7-8, Life Sciences
St. Paul, HWCDSB

I01, How Fast Can You Throw ?

Nicholas Bruccoleri, Tayler Islami
J 7-8, Health Sciences
St. Paul, HWCDSB

I02, HANG UP AND DRIVE

Nicole Cialini, Alana Tedeschi
J 7-8, Health Sciences
St. Therese of Lisieux, HWCDSB

I03, Sweet Relief

Francesca Altobelli, Simona Rossi
J 7-8, Health Sciences
St. Therese of Lisieux, HWCDSB

I04, ICE ICE BABY

Nicholas Parabem, Rebecca Pongetti
J 7-8, Health Sciences
St. Therese of Lisieux, HWCDSB



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EXHIBITOR LISTING continued...**I05, CHEW YOUR WAY TO SUCCESS**

Melissa Maida, Desiree Restivo
J 7-8, Engineering and Computing
St. Therese of Lisieux, HWCDSB

I06, solid+liquid = ?

Emily Doyle, Chelsea Ruggiero
J 7-8, Physical Sciences & Math
St. Therese of Lisieux, HWCDSB

I07, Dare to Smoke ?

Natalie Sorbara, alexandra Tinebra
J 7-8, Health Sciences
St. Therese of Lisieux, HWCDSB

I08, Lost your marbles ?

Emma Deakin,
J 7-8, Physical Sciences & Math
St. Therese of Lisieux, HWCDSB

I09, THE PHYSICS OF MARTIAL ARTS

Kyle Marshall,
J 7-8, Health Sciences
St. Therese of Lisieux, HWCDSB

I10, The Truth Lies At Your Fingertips

Tajseem Hussain, Israa Saleh
J 7-8, Health Sciences
Templemead, HWCDSB

I11, I'm In Pain! What Do I Take?

Lavan Emin, Gulan Shakrollah
J 7-8, Health Sciences
Templemead, HWCDSB

I12, Flush...Splish, Splash...Gone?

Kayla Jarvis, Erin Janssen
J 7-8, Physical Sciences & Math
Templemead, HWCDSB

I13, The Effect of Distractors on Target Detection

Laura Stevens,
S 11-12, Health Sciences
Thomas A. Blakelock High School, HDSB

I14, Seeing Double

Matthew Tudball,
I 9-10, Biotechnology
Thomas A. Blakelock High School, HDSB

I15, Locked Out: Can We Design a Hydraulic Lock?

Tim Droppo, Evan Despond
J 7-8, Engineering and Computing
W. H. Morden Public School, HDSB

I16, Capillary Action and Water Filtration

Russell Philip,
J 7-8, Earth and Environmental
W. H. Morden Public School, HDSB

I17, You Crack Me Up

Arundhathi Desai,
J 7-8, Health Sciences
W. H. Morden Public School, HDSB

I18, Sound Waves Under Water

Marisa Benjamin, Michelle Meleskie
J 7-8, Physical Sciences & Math
W. H. Morden Public School, HDSB

I19, Which is the Better Buffer?

Emily Farquharson,
J 7-8, Earth and Environmental
W. H. Morden Public School, HDSB

I20, You're Growing On Me

Emma Harris,
J 7-8, Life Sciences
W. H. Morden Public School, HDSB

K01, Computer ANTimation

Tobias Williams,
I 9-10, Engineering and Computing
Highland Secondary, HWCDSB



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EXHIBITOR LISTING continued...**K02, Something Fishy**

Hunter MacNeil, Humphrey Dakota
J 7-8, Life Sciences
Hillcrest, HWDSB

K03, A Phantom Culture

Dina Hamed, Seema Alnajar
J 7-8, Earth and Environmental
Ancaster Meadow, HWDSB

K04, The Ancient Siege Weapon

Brock Lalla, Derrick Baptist
J 7-8, Physical Sciences & Math
Lisgar, HWDSB

K05, Styrofoam Stereo

Evan Medeiros, Dominik Lauks
J 7-8, Engineering and Computing
St. Mark, HWCDSB

K06, Anti Gravity

Catrina Acocella, Dominique Kresina
J 7-8, Engineering and Computing
Regina Mundi, HWCDSB

K07, Testing the Visibility Within a House of Mirrors Question with a Computer Simulation

Ian Sinke,
I 9-10, Engineering and Computing
Home Schooling, Independent

K08, High and Low Pass Frequency Filters

Yixiong Lok,
J 7-8, Engineering and Computing
Rotherglen School (Oakville),
Independent

K09, SKY SAILS The Sail to Save the Environment

Mark Bursey,
J 7-8, Earth and Environmental
Hillfield Strathallan College, Independent

K10, Wind Turbine vs. Solar Panel vs. Municipal Electricity

Shaan Bhambra,
J 7-8, Engineering and Computing
Eastview Public School, HDSB

K11, A Bright Idea

Michelle Sulewski,
J 7-8, Earth and Environmental
Dalewood, HWDSB

K12, Ultra Simple Electric Generator

Ashley Chen, Kendra Heney
J 7-8, Physical Sciences & Math
St. Luke, HCDSB

K13, Wireless Morse Code Communicator

Colin Merkel, David Bell
S 11-12, Engineering and Computing
Abbey Park High School, HDSB

K14, LRNS: The Chicken Robot

Nathan Terbrack,
I 9-10, Engineering and Computing
Bishop Ryan High School, HWCDSB

L01, Robots, Robots Everywhere

Tesla Filice,
J 7-8, Engineering and Computing
Lisgar, HWDSB



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EXHIBITOR LISTING continued...**L02, iSee 3-D**

Brett Piva, Curtis Marcoux
S 11-12, Engineering and Computing
Christ the King High School, HCDSB

L03, Earth, Wind and Water vs. Foundations

Lucas Cheeseman, Sean Thompson
J 7-8, Engineering and Computing
Oakville Christian School, Independent

L04, How safe is well water?

Samuel Habicht,
I 9-10, Earth and Environmental
Home Schooling, Independent

L05, Microarray Profiling of Gene Expression in the Normal Aging Brain of Drosophila

Aaron Hakim,
S 11-12, Life Sciences
Appleby College, Independent

L06, Listen To Your Brain

David Scott, Navid Malek
J 7-8, Health Sciences
Lisgar, HWDSB

L07, Optimissing Optical Illusions

Ghislain Mckay, Hamid Nessek
I 9-10, Engineering and Computing
Georges-P. Vanier, CSDCSO

L08, "Antifreeze My Genes!"- The Effect of Antifreeze Proteins on Plant Survival

Dishan Weeratunga, Sagar Patel
S 11-12, Biotechnology
North Park Collegiate and Vocational School, GEDSB

L09, Trip the Light Fantastic

Eric Dyer,
J 7-8, Earth and Environmental
Home Schooling, Independent

L10, Windmill Operated Waterwell

Jenny Arnold, Melissa Mandarino
J 7-8, Engineering and Computing
St. Luke, HCDSB

L11, Smart Batteries

Sarah Medeiros,
J 7-8, Physical Sciences & Math
Oakville Christian School, Independent

L12, What is the best type of cars?

Abdul Rahman EL-Rabbany,
J 7-8, Engineering and Computing
Al-Falah Islamic School, Independent

L13, Speak Up for Mobility

Nick Weaver,
S 11-12, Engineering and Computing
Highland Secondary, HWDSB

L14, Hit Me With Your Best Shot!

Lauren Tabone,
J 7-8, Physical Sciences & Math
Holy Name of Mary, HWCDSD

L15, Solar Powered Street Lights

Nurefsan Davulcu, Julia Stender
J 7-8, Earth and Environmental
Sir William Osler, HWDSB

L16, There's A PLC in My House!

Tian Duo Wang,
J 7-8, Engineering and Computing
Dalewood, HWDSB

L17, Magneto Energy

David Najda, Tyler Soolum
J 7-8, Engineering and Computing
Blessed Kateri Tekakwitha, HWCDSD

L18, Super Suction

Carly Ross, Matea Sadikovic
J 7-8, Physical Sciences & Math
Bennetto, HWDSB

M01, Perfect Plastic

Sophia Coulter-English, Gillian Walczak
I 9-10, Earth and Environmental
Notre Dame High School, HCDSB

M02, Sound waves and Music

Daniel Olejarz, Nicholas Lazzarato
J 7-8, Physical Sciences & Math
St. Ann (Ancaster), HWCDSD

M03, The Toughest Enemy

Caroline Gobran,
J 7-8, Health Sciences
Oakville Christian School, Independent

M04, Chlorophyll Conundrum

Camille Beaudoin, Melanie Golbeck
J 7-8, Earth and Environmental
Oakville Christian School, Independent

M05, I have seen the light 2! A model for calculation of treatment time for Photodynamic Therapy

Romita Sur,
I 9-10, Health Sciences
Hillfield Strathallan College, Independent

M06, Desalted

Kinzi Trout, Samantha Marshall
J 7-8, Earth and Environmental
Lisgar, HWDSB

M07, Military Armed Reconnaissance Combat Robot

Joseph Almonte,
S 11-12, Engineering and Computing
Bishop Ryan High School, HWCDSD

M08, How Do Video Games Effect Your Blood Pressure

Reis Andrew, Foster Corey
J 7-8, Health Sciences
St. Mark, HWCDSD

M09, Gassy, Grassy, Greener Plants

Lauren Wong,
J 7-8, Earth and Environmental
Appleby College, Independent

M10, Reaching Higher - The Aerodynamics of Rockets (Part Two)

Jacob Weaver,
J 7-8, Engineering and Computing
Dr. John Seaton, HWDSB

N01, EcOven

Maggie MacDonald, Abigail Picyk
J 7-8, Earth and Environmental
Ancaster Senior, HWDSB

N02, Quake Proof!

Christopher Rubletz, Edward Hill
J 7-8, Engineering and Computing
Lisgar, HWDSB

N03, Pykrete and Ice

Scott Cameron, Stagg Alan
J 7-8, Physical Sciences & Math
W. H. Morden Public School, HDSB

SPECIAL AWARDS

Special Awards are donated by organizations and groups to recognize deserving projects that deal with topics of interest to the donor.

Halton Regional Chairman's Award for Student Excellence

Prize: \$300 and certificates to each of three projects.

Criteria: Deserving projects by Halton students, any category, any level.

City of Hamilton Mayor's Award

Prize: 1st: \$500, 2nd: \$300, 3rd: \$200

Criteria: Deserving projects by Hamilton students in the Biotechnology division.

Acquired Brain Injury Awards

Prize: 1st: \$75, 2nd: \$25

Criteria: Two projects relating to the brain, especially acquired brain injuries, their causes, or therapies.

Ambitious City Toastmasters Leadership and Communications Awards

Prize: \$50 to each of two projects

Criteria: Leadership Award: Project demonstrating outstanding leadership skills in the area of innovative research.

Communications Award: Outstanding clarity in written format and communication during the interview.

Building tomorrow's workforce through today's youth

Halton Region is committed to supporting and encouraging youth interest in science and technology. We are fostering a well-educated, well-trained and motivated labour force in this community to make sure employers continue to view Halton as an attractive place to live, work and do business.



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How Halton Region supports the next generation of innovators:

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- **Summer Company Program –** Students can receive up to \$3,000 to start and run their own summer business
- **Business Registration Service**
- **Statistical & Demographic Information**
- **Exporting Assistance Programs**
- **Small Business Seminars and Advice**
- **Advocacy**
- **On-line Business**

SPECIAL AWARDS continued...**Artistically Inspired Display Award**

Prize: Two awards of \$50 each

Criteria: To the most artistically inspired display

Bell Computer and Communications Awards

Prize: 1st: \$150; 2nd: \$100.

Criteria: For projects regarding communication between people, between machines, or between people and machines.

Canadian Institute of Mining & Metallurgy Hamilton Branch Awards

Prize: Two cash prizes of \$100 each.

Criteria: For projects relating to mining and metallurgy.

Canadian Nuclear Society (Sheridan Park Branch) Awards

Prize: Two awards at the intermediate or senior levels for \$125 each & two at the junior level for \$75 each.

Criteria: For projects relating to nuclear science and engineering, energy research or climate sciences

Cancer Assistance Program Awards

Prize: Three awards: \$50, \$35, \$25.

Criteria: For outstanding projects on topics related to cancer prevention.

Chemical Institute of Canada, Hamilton Section Award

Prize: Three cash prizes of \$100 each.

Criteria: Projects related to chemistry, chemical engineering, or chemical technology.

Conservation Halton Environmental Sciences Award

Prize: \$100 each to two projects

Criteria: Best and second best Environmental Projects done by Halton Student(s)

Congratulations to all BASEF 2008 participants!



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SPECIAL AWARDS continued...

The DaVinci Awards

Sponsored by the Hamilton Association for the Advancement of Literature, Science & the Arts

Prize: \$300, honorary membership in the Association and an invitation to attend meetings

Criteria: The best candidate combination of personal initiative with the use of the scientific method.

D.E.N.M. Mining & Mineral Processing Awards

Prize: Three cash awards of 1st prize \$100, 2nd prize \$75, and 3rd prize \$50

Criteria: Outstanding engineering, physical sciences or environmental sciences projects (any level) with a preference to projects relating to Mining and Mineral processing

ArcelorMittal Dofasco Chemical Testing Award

Prize: \$100

Criteria: Project that best displays the use of chemical testing and/or chemical principles to solve a technical problem.

ArcelorMittal Dofasco Commercial Award

Prize: \$100

Criteria: Project which best displays, the use of commercial and business planning tools in developing a potentially new or improved commercial product

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SPECIAL AWARDS *continued...*

ArcelorMittal Dofasco Engineering & Maintenance Technology Award

Prize: \$100

Criteria: Deserving project that best displays the use of Engineering & Maintenance Technology principles and design to solve a technical problem.

ArcelorMittal Dofasco Environmental & Energy Award

Prize: \$100

Criteria: Project that best displays the use of physics, chemistry or engineering to explore or solve a technical problem associated with environmental issues.

ArcelorMittal Dofasco Hot Mill Award

Prize: \$100

Criteria: Project that best displays the use of creative principles and design to solve a manufacturing or process problem.

ArcelorMittal Dofasco Human Resources Training and Development Award

Prize: \$100

Criteria: Project that best displays the use of teaching and training techniques in explaining or exploring a technical program.

ArcelorMittal Dofasco Information Systems Award

Prize: \$100

Criteria: Deserving project that uses Information Systems and design to solve a technical problem.

ArcelorMittal Dofasco Market Development and Product Applications Award

Prize: \$100

Criteria: Project that best displays the innovative application of materials, products, processes or design principles.

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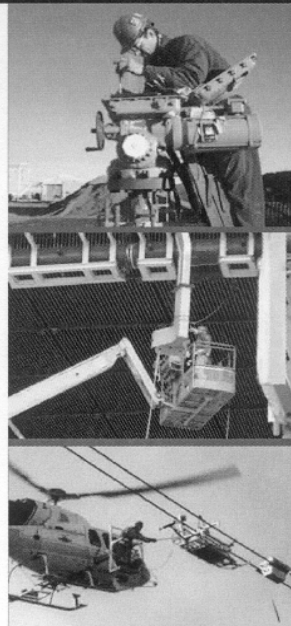
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SPECIAL AWARDS continued...

ArcelorMittal Dofasco Medical Department Award

Prize: \$100

Criteria: Project that best displays the use of scientific principles in exploring or solving a problem related to human health issues.

ArcelorMittal Dofasco Process Automation Award

Prize: \$100

Criteria: Project that best displays the use of Process Automation principles and design to solve a technical problem.

ArcelorMittal Dofasco Product Development Business Process Award

Prize: \$100

Criteria: Project that best displays the use of Product Development principles and design in developing a new consumer product with commercial potential.

ArcelorMittal Dofasco Quality Systems Award

Prize: \$100

Criteria: Project that best displays the use of Quality Systems principles and design to solve a technical problem with a Health and Safety Focus.

ArcelorMittal Dofasco Research and Development Award

Prize: \$100

Criteria: Project that displays the best use of investigative research and scientific principles to explore or solve a technical problem.

ArcelorMittal Dofasco Steelmaking Award

Prize: \$100

Criteria: Project that best displays the use of Engineering and Materials Science principles to solve a technical problem.

Dr. Colin J.L. Lock Memorial Chemistry Award

Prize: \$100

Criteria: Project demonstrating the best application of chemistry.

Dr. Leonard Harris Award in Health Sciences or Environment

Prize: \$100 to each of two projects

Criteria: Awarded to the most interesting projects which involve an experiment relating to human biology, health or disease.

Dr. Odette Tunks Awards

Prize: Two awards of \$100 each

Criteria: Two awards for the most creative or innovative project, any level.

Electrical Construction Association of Hamilton Award

Prize: \$250

Criteria: A project displaying the best, safest use of electricity in a creative manner.

EnviroExpo Special Award sponsored by Via Rail Canada

Prize: One award of \$100

Criteria: An outstanding project that applies the combined skill and science to address a pressing environmental issue. In addition to traditional science content, the project must incorporate an artistic discipline and fall into one of the seven areas of environmental focus: Renewable Energy, Sustainable Development, Resource Management, Environmental Influences on Health, Culture Society and the Environment, the Greening of Products and Services or Biodiversity. The EnviroExpo Special Award is open to all students, grades 7-12

SPECIAL AWARDS continued...**Gowlings Innovation Award**

Prize: \$250

Criteria: The award will be given in any category for a project that exploits multiple areas of intellectual property protection, namely trademarks, patents, industrial design and copyright. The prize includes a complimentary consultation with a patent or trademark agent at the Gowlings Hamilton office.

Hamilton Wentworth Occasional Teacher Local**Environment and Education Award**

Prize: \$50 and certificate

Criteria: Junior project which most effectively educates others about an environmental issue

Healthy Lifestyles Award

Prize: \$ 50 and certificate

Criteria: Junior project which most effectively educates others regarding the role of nutrition and/or exercise in maintaining a healthy lifestyle.

Presentation and Aesthetics Award

Prize: \$50 and certificate

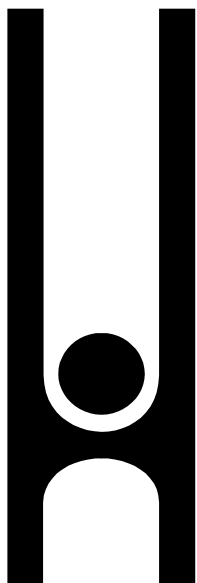
Criteria: Junior project which demonstrates a high level of visual appeal, creativity and overall quality of Presentation.

Helen Crawford Memorial Award

Prize: \$100

Criteria: A deserving project in Health Sciences, with preference given to projects related to the causes or treatment of cancer

Halton District School Board



*The Halton District School Board
would like to congratulate
all participating students in the 2008
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Best wishes for continued success!*

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SPECIAL AWARDS continued...

Hillfield Strathallan College Awards of Excellence

Design and Engineering

Prize: One cash award of \$100

Criteria: Senior project that best displays innovation in identifying an ergonomic design problem

Environmental Sciences

Prize: One cash award of \$100

Criteria: Junior or Intermediate project that best displays innovation in identifying an environmental problem

Health Sciences

Prize: One cash award of \$100

Criteria: Intermediate project that best displays excellence in sampling design in a health science project

Horizon Utilities Corporation Award

Prize: Three awards of \$100 each

Criteria: Project that best demonstrate the production of electrical energy from "green sources", or new, viable approaches to using electrical energy more efficiently

Hydro One Energy Ambassador Award

Prize: One award of \$100, to be sent after the fair.

Criteria: For a project at any level, with outstanding scientific quality and whose primary focus is the distribution, supply management, use or conservation of electrical energy (or alternatively, other forms of energy if suitable projects relating to electrical energy are not available)

IEEE Hamilton Section Awards

Prize: Two prizes of \$100 each

Criteria: Two projects which shows the best use of Electronics in a science or engineering project, any level.

Intel Excellence Award for regional science fairs affiliated with the Intel International Science & Engineering Fair

Prize: One prize of \$200 (U.S.) each (to be forwarded after the fair.)

Criteria: The top winner of Computer Science category in Intermediate or Senior potential of the fair.

International Science & Engineering Affiliated Fair Awards for regional science fairs affiliated with the Intel International Science & Engineering Fair

Prize: certificates

Criteria: deserving intermediate and senior projects related to topics of interest to the following organizations

American Meteorological Society - A certificate awarded to the High School project which exhibits Outstanding Ability and Creativity in an Atmospheric Science Exhibit

ASM Materials Education Foundation - A certificate awarded to the High School project which is the Most Outstanding Exhibit in Materials Science

Association for Women Geoscientists - A certificate to a female student (at any level) whose project exemplifies High Standards of Innovativeness and Scientific Excellence in the Geosciences

Herbert Hoover Presidential Library Association - A certificate and medallion to the Outstanding Engineering Project (any level) at the fair.

Intel Excellence in Computer Science - \$200 prize to the High School project which is the top ranked project in the Computer Science category at the fair.

SPECIAL AWARDS *continued...*

Mu Alpha Theta - A certificate to the High School project Demonstrating the Most Challenging, Original, Thorough and Creative Investigation of a Problem involving Mathematics. It does not have to be entered in the Mathematics category.

Ricoh - A certificate to the project (any level) whose "Principles and Technical Innovations offer the Greatest Potential for Increasing our Ability to Grow Environmentally Friendly and Socially Responsible Businesses".

Society for In Vitro Biology - A certificate awarded to the most Outstanding Grade 11 student exhibiting in the areas of Plant or Animal In Vitro Biology or Tissue Culture.

Yale Science and Engineering Association - A certificate given to the Most Outstanding Grade 11 student exhibiting in the areas of Computer Science, Engineering, Physics or Chemistry.

Investigative Science Awards

Prize: Two awards of \$250 each

Criteria: Two projects showing the best application of creative problem solving, any project, any level.

The James A. Winger Award sponsored by Hamilton Amateur Astronomers

Prize: \$50 award plus an Astronomy book

Criteria: Best project in demonstrating and understanding of a topic related to astronomy or physics

John. W. Howard Materials Research Award

Prize: \$100

Criteria: A project demonstrating innovation in engineering materials, especially concrete.

Clean City Liaison Committee/ City of Hamilton Public Works Award

Prize: \$100

Criteria: The entry that best addresses the effect on the environment of littering, dumping, and defacing property and/or processes and systems to effectively manage the collection and disposal of litter.

McMaster University Department of Chemistry Award

Prize: \$100 plus certificate

Criteria: An outstanding senior or intermediate project connected to chemistry

McMaster Engineering Society Award

Prize: \$250

Criteria: Best junior engineering project.

McMaster University Faculties of Science & Engineering Tuition Awards

Prize: Five \$500 tuition awards, to be redeemed upon acceptance of successful admission to either of the Faculties of Science or Engineering.

Criteria: Excellent science or engineering projects.

The Venture Science and Engineering Innovation Award, McMaster University

Prize: Free registration to Venture Engineering Science camp on June 30-July 4th, 2008 or August 5th – August 8th, 2008 and a plaque to the winning project

Criteria: Is presented to one Junior project that demonstrates creativity and originality.

Mechanical Contractors Association of Hamilton Award

Prize: \$250

Criteria: Best intermediate or senior engineering project.

SPECIAL AWARDS continued...

Mohawk College School of Engineering Technology Awards

Building & Construction Sciences Awards

Prize: \$50

Criteria: deserving project related to any branch of civil engineering, any category, any level.

Prize: \$50

Criteria: deserving project related to planning, design, operation of any transportation mode or facility, any category, any level.

Prize: \$50

Criteria: deserving project related to building sciences, building materials, energy conservation in structures, any category, any level.

Chemical and Environmental Engineering Technology Awards

Prize: \$100

Criteria: One deserving intermediate or senior project related to applied chemistry.

Prize: \$50

Criteria: One deserving junior project in environmental studies.

Computer Science & Information Technology - Computer Excellence Award

Prize: \$50

Criteria: Project which demonstrates thorough understanding of computer applications and design in today's world.

Electrotechnology Engineering Award

Prize: Two cash awards of \$50 each

Criteria: One award for \$50 to a deserving junior project in engineering studies. Second award for \$50 to a deserving project in engineering studies



Congratulations to all of this year's participants!

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SPECIAL AWARDS continued...

Mechanical & Industrial Engineering Technology Awards

Prize: \$100

Criteria: Outstanding project related to industrial engineering or manufacturing, any level

Mathematics Awards

Prize: \$75 to each of two projects

Criteria: Deserving projects in the mathematics division, or any project from any division demonstrating a thorough understanding of statistics, any level.

National Science & Engineering Research Council (NSERC) Awards

Prize: \$250 to each of two projects.

Criteria: Deserving projects demonstrating innovative and creative research by the student.

Nelson Steel Awards

Prize: \$50 to each of three projects.

Criteria: Outstanding projects related to each of the following fields: Steel, Environmental and Chemistry

Nicola Simmons Award in Cognition Studies

Prize: \$100

Criteria: An exemplary project in cognition studies.

Nipissing University Regional Science Fair Award

Prize: One scholarship award of \$1000

Criteria: To a senior project, any category to be paid out upon registration at Nipissing University

Ontario Association of Medical Laboratories

Prize: One award of \$100, to be sent after the fair

Criteria: Outstanding project at any level in disciplines such as biochemistry, chemistry, microbiology, toxicology, and forensic science, and incorporating analytical laboratory techniques or physical methods of analysis, for example a spectrometer or chromatograph.

Ontario Ministry of the Environment Award

Prize: One cash prize of \$100, to be sent after the fair and one award must go to a junior project.

Criteria: To an outstanding project in any category which demonstrates a creative approach to an environmental problem that could lead to cleaner air, land or water

Primary Fluid Systems Awards

Junior or Intermediate Engineering Awards

Two prizes each of : \$250, \$150, \$100

Criteria: Deserving projects in junior or intermediate engineering.

Junior or Intermediate Physical Sciences Awards

Two prizes each of : \$125, \$75, \$50

Criteria: Deserving projects in junior or intermediate physical sciences.

Junior or Intermediate Earth & Environmental Awards

Two prizes each of: \$125, \$75, \$50

Criteria: Deserving projects in junior or intermediate earth & environment.

SPECIAL AWARDS continued...

Professional Engineers Ontario (Hamilton Chapter) Awards

Prize: 1st: \$150, 2nd: \$125, 3rd: \$75

Criteria: To the top three outstanding Engineering Project Exhibitors at any level.

Professional Engineers Ontario (Oakville Chapter) Engineering Awards

Prize: Two awards of \$100 each

Criteria: To two deserving engineering projects.

Royal Botanical Gardens Award

Prize: \$100 gift certificate from RBG shop plus one year RBG family membership

Criteria: Best project in botanical or environmental sciences

Safety Management Systems Software Award

Prize: \$100 and a plaque

Criteria: A project that incorporates the most innovative integration of programming code to analyze data or to operate a piece of equipment.

University of Ontario Institute of Technology Innovation Award

Prize: Two Awards of \$100 each, to be sent after the fair and one award must go to a junior project.

Criteria: Outstanding projects demonstrating the most innovative development, adaptation, or use of technology in any subject area.

University of Ottawa Admission Scholarship

Prize: \$1000 admission scholarship (or two \$500 scholarship for a pair project) toward tuition fees upon being accepted into and registration in an undergraduate program in the faculties of Engineering, Science or Health Sciences at the University of Ottawa.

Criteria: The most deserving Senior project.

Zonta Club of Hamilton Awards

Prize: \$300 will be shared by a limited number of projects.

Criteria: Outstanding projects by females, any category, any level.



MERIT AWARDS



Sponsored by Primary Fluid Systems

Merit Awards recognize the tremendous amount of thought and effort that has gone into the projects entered into the BASEF Regional Science Fair. They are the result of an extensive judging process undertaken by up to 150 independent judging volunteers who have come forward from educational institutions, local government organizations, business and industry in our regions. All participants in the Bay Area Science and Engineering Fair are eligible to win Merit Awards.

The Awards are issued to projects that meet the following criteria:

Scoring:

over 90% and ranking in top 7.5% of category:
earns **Gold medal** & cash award

over 80% and next 10% of category:
earns **Silver medal** & cash award

over 75% and next 12.5% of category:
earns **Bronze medal** & cash award

over 75% and not in the top 30% of category:
earns **Honourable Mention** certificate & cash award

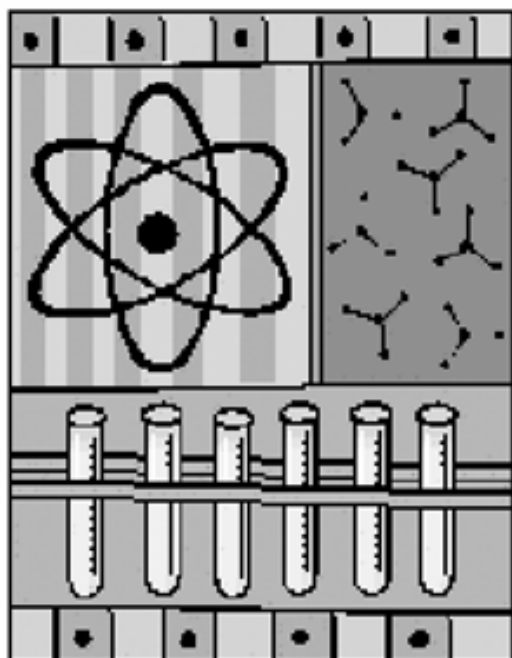
For Junior, Intermediate, Senior levels in:

- Health Sciences (Human)
- Life Sciences (Non-human)
- Physical and Mathematical Sciences
- Biotechnology
- Engineering and Computing Sciences
- Earth & Environmental Sciences

The Mohawk College & Sheridan Institute Tuition Scholarships

Mohawk College of Applied Arts and Technology & Sheridan Institute of Technology and Advanced Learning will provide \$500 scholarships to ALL BASEF 2008 Merit Award Medal (Gold, Silver, Bronze) winners. The scholarship may be used toward first year tuition upon the recipients' acceptance and registration in any full-time program at either Mohawk or Sheridan. If multiple scholarships are accumulated over more than one year, only one of these scholarships may be used.

Proud sponsors of BASEF and the 2008 Merit Awards



"Opportunity is missed
by most people
because it is dressed
in overalls and
looks like work"

Thomas A. Edison



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GRAND PRIZE AWARDS

WINNERS OF GRAND AWARDS HAVE DESIGNED, RESEARCHED AND PRESENTED EXCELLENT PROJECTS.

ARCELORMITTAL DOFASCO PINNACLE AWARDS

BASEF's Pinnacle Awards are presented to each of the top three projects in the fair. These awards are based on the project's Merit Award score. Each winner receives an engraved plaque; trophies are awarded to the winners' schools.

ROY MIDDLETON AWARD

For the best Junior level project at the fair, a plaque to the winner's school.

SUSAN JOYCE MEMORIAL AWARDS

For the top project in each of the six categories at the Junior level, a keeper trophy for each student

HERB GILDEA MEMORIAL TROPHY

A trophy is awarded to the secondary school accumulating the most points. Points are earned from the number of projects entered from intermediate and senior levels of each school and those projects earning Gold, Silver, Bronze and Honourable Mention Merit Awards.

BASEF COMMITTEE TROPHY

A trophy is awarded to the elementary school accumulating the most points. Points are earned from the number of projects entered from the junior level of each school and those projects earning Gold, Silver, Bronze and Honourable Mention Merit Awards.

The Pinnacle Award Trophies



Best in Fair Trophy

**Topped by a polar bear,
Ursa maritimus.**

**Represents and celebrates
our living world.**



2nd Best in Fair Trophy

**Topped by an Armillary Celestial
Sphere, a scientific instrument used by
the early astronomers, who often were
also the earliest mathematicians.**

**Celebrates innovation, creativity and
discovery.**



3rd Best in Fair Trophy

**Topped by an Amethyst,
Ontario's official mineral.**

**Celebrates the Inanimate
World and the Greater
Universe.**

GRAND PRIZE TRIP AWARDS

INTEL INTERNATIONAL SCIENCE & ENGINEERING FAIR TRIP AWARDS

All expense-paid trips to the 2008 Intel International Science & Engineering Fair, to be held in Atlanta, Georgia, USA from May 11 to 16, 2008. Chosen from excellent secondary school (Intermediate & Senior level) projects, up to 4 trips, two singles and a pair project (dependant on funding levels), will be awarded. Winners must be able to travel into the USA (Canadian citizenship or landed immigrant status) and possess or be able to obtain a valid passport.

Sponsors are

- McMaster University
- Mohawk College of Applied Arts and Technology
- Sheridan Institute of Technology and Advanced Learning



CANADA WIDE SCIENCE FAIR TRIP AWARDS

All expense-paid trips to the 2008 Canada Wide Science Fair, to be held in Ottawa, Ontario from May 12 to May 20, 2008. Up to 16 trips (dependant on funding levels) will be awarded for excellent projects. All projects entered in BASEF 2008 are eligible.

Sponsors are

- Boehringer Ingelheim
- City of Hamilton, Economic Development
- Comstock Canada Ltd.
- D.E.N.M. Ltd Engineering
- Edward Oldham, P.Eng, Patent and Trademark Agent
- Halton Catholic District School Board
- Halton District School Board
- Halton Region, Business Development Department
- Hamilton Halton Construction Association
- Hamilton Industrial Environmental Association
- Hamilton Wentworth Catholic District School Board
- Hamilton Wentworth District School Board
- Rotary Club of Hamilton
- Sci-Tech Ontario
- Triple Crown Enterprises
- Union Gas



TEAM SCI-TECH ONTARIO

Along with all other Ontario CWSF trip winners, BASEF students awarded CWSF trips will be named to "Team Sci-Tech Ontario". Each Ontario CWSF trip winner will receive a Team Sci-Tech Ontario lapel pin.





Do I have to be a genius to create a science project?

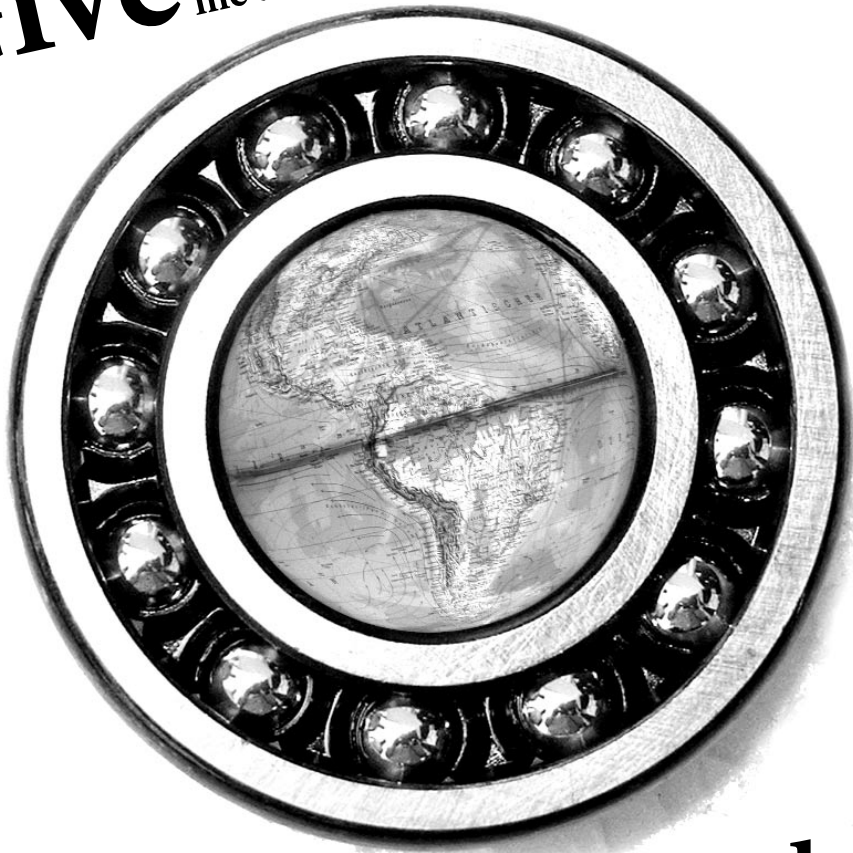
At Bell, we believe that strokes of genius are important to develop innovative products and services that will improve the world we live in.

As partners in your community, we are committed to supporting the programs that allow our kids to meet their full potential.

Good luck to all the participants of the 2008 Bay Area Science and Engineering Fair!



“Give me a lever long enough and a fulcrum on which to place it,



...and I shall **move the world.”**

—Archimedes

Congratulations to all BASEF participants.

Be innovative. Be creative. Make things move.

You are the future and we salute you.



BASEF

BASEF 2009

Mohawk College

March 25 to March 28, 2009

**Big ideas.
Infinite possibilities.**

Bay Area Science and Engineering Fair
c/o McMaster University
1280 Main Street West, DTC-125
Hamilton, ON, Canada L8S 4L8

email: basef@basef.ca

web site: basef.ca

Registered Charity: BN 11895 1565 RR0001

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