



BASCEF 2013

Annual Report

**Bay Area Science and Engineering Fair
Sponsored by ArcelorMittal Dofasco**



ArcelorMittal

About BASEF

The Bay Area Science and Engineering Fair* (BASEF) is the regional fair for the City of Hamilton, Region of Halton, Six Nations, and the counties of Brant, Haldimand and Norfolk. BASEF is open to over 100,000 students from grades 7 to 12 attending public, separate, independent, private and home schools. BASEF is a registered charity run by a diverse group of committee volunteers from business, education, and industry.

Mission

To promote project based science and encourage youth to conduct research in areas of science, engineering, mathematics and technology, utilizing the scientific method or engineering design process.

We believe 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 components allow students to practice their “people” and communication skills and gain self-confidence and a sense of accomplishment for a job well done.

Goals

Our goal at BASEF is to make science fair participation a rewarding and enjoyable experience. Students may not win big in their first or even second science fair competition, however they gain the tremendous opportunity to meet other students interested in science and technology, and get a chance to meet and learn from some of our successful science fair veterans.

* BASEF is a registered charity 118951565RR0001

Major Activities

BASEF volunteers organized and staged the 53rd Annual Regional Fair, March 20-23, 2013, at Hillfield Strathallan College and Mohawk College in Hamilton.

The administration and staff of both schools gave excellent support, cooperation and assistance to BASEF and provided a warm welcome to our students, volunteers, and visitors.

BASEF’s **YES** (Youth Engaging in Science) Outreach Program provided guidance and mentors for 10 projects in two secondary schools.

BASEF continues to provide Activity Morning during the fair for both BASEF participants and classes of Grade 7-8 students. The Activity Morning show is completely sold out each year with many schools on a waiting list to attend.

Teacher's Activity Day workshop is now available as a full day of training by BASEF's very experienced former Chief Judge, Tom Crawford.

Science Success! Materials developed by BASEF continue to be used at the regional, national and international level.

BASEF committee members regularly volunteer their time to assist teachers through judging at school science fairs, mentoring students, and easing newcomers through the regulations, rules, and scientific review requirements.



Fair Highlights

Over **\$152,000** in cash, prizes, trips, scholarships and participation awards.

156 students received Merit Awards



sponsored by Primary Fluid Systems. Total value \$9,020. All Merit Award winners received merit scholarships provided by Mohawk College and Sheridan College. Total value \$78,000.



153 special awards were presented totaling \$15,200 in cash, \$3,500 in scholarships and one internship valued at \$2,200.



Three high school students advanced to compete in the Intel International Science & Engineering Fair in Phoenix, Arizona, May 12-17, 2013.

BASEF also provided one other high school student the opportunity to attend ISEF as an observer.

16 students advanced

to compete in the Canada Wide Science

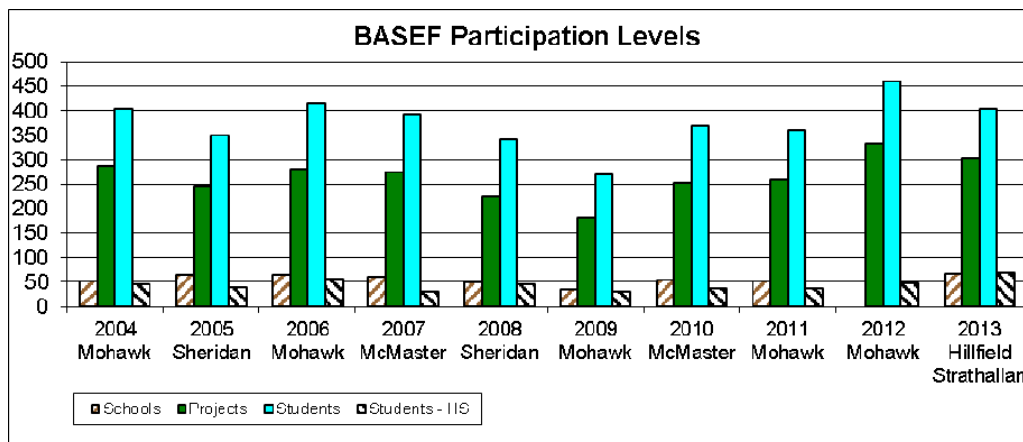
Fair in Lethbridge, Alberta, May 11-18, 2013



Activity Morning

sponsored by Bell Canada

BASEF Activity Morning is a major outreach event for both BASEF participants and local Grade 7- 8 students, designed to create interest in BASEF. Approximately **700 students** from eleven schools and nearly 400 BASEF students attended. The keynote address was given by Care Go Technology about Innovative Ways to Ship Steel Around the World. Presentations were given by McMaster's Venture/Leap Program, Southern Ontario Gliders Group, the Hamilton Amateur Astronomers, McMaster University Sustainability, and McMaster University Chemistry professors finished with an intensive chemistry show. Thank you, Bell Canada for your support.



Competition Results

Twenty of the top students won trips to either the Canada Wide Science Fair (CWSF) in Lethbridge, Alberta, or to the Intel International Science and Engineering Fair (IISEF) in Phoenix, Arizona.

National Competition Results - Canada Wide Science Fair

Catharine Bowman St. Mary Secondary School, Hamilton	Just the Right Light – An Investigation Using Bright/ Dark Illumination Principles Gold Medal winner Discovery Challenge Award
Ishan Aditya MacLachlan College, Oakville	Skeletal Muscle Inflammatory Cytokine Expression Predicts Metabolic Disease Risk Silver Medal winner
Jason Fan Westdale Secondary School, Hamilton	Saving the World – One Ligand at a Time: Novel Streptococcus pneumoniae Ligand Silver Medal winner
Alex Tomala Cardinal Newman Secondary School, Stoney Creek	MIPE: Microprocessor with Integrated Programmable Execution Units Silver Medals winner
Graham Bohm St. Augustine Catholic Elementary School, Dundas	Evading Erosion: Which Plants Are Effective at Controlling Shoreline Erosion? Bronze Medal winner
Katie Brent Notre Dame Secondary School, Burlington	MARTHA: Medication Automated Reminder Technological Health Assistant Bronze Medal winner
Blake Correia and Eduard Brenninkmeijer Oakville Christian School, Oakville	Is Your Water Pure? Bronze Medal winner
Mycah DeJong Trinity Christian School, Burlington	Intellectual Interference Bronze Medal winner
Caroline Mahut Rolling Meadows Public School, Burlington	Ground effect Aircraft: Is it a more energy efficient way to travel? Bronze Medal winner
Theo Willows John William Boich Public School, Burlington	Atlas: A Proper Controller Bronze Medal winner



International Competition Results-Intel International Science and Engineering Fair



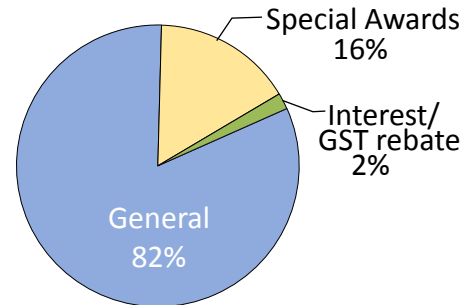
Three BASEF students competed as part of "Team Canada" at the Intel International Science and Engineering Fair, held in Phoenix, Arizona.

Junyi (Sarah) Wu's project "Colorimetric Detection of Plasmodium Falciparum via Aptasensor Technology" won a **Grand Award – Second Place Award in the Medicine and Health Sciences** category and a **First Place Award** from the Sheikh Zayed Institute at Children's National Medical Centre.

Financial Highlights – Statement of Operations

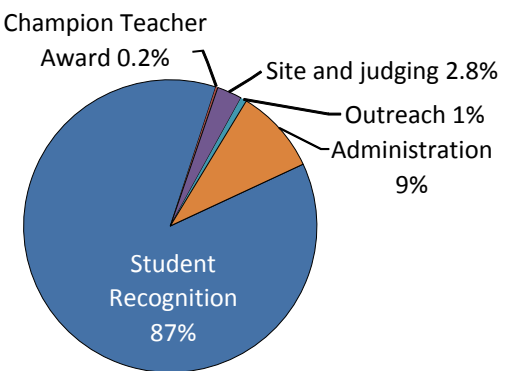
For the year ended August 31, 2013 (unaudited)

Revenue	2013	2012
General	\$ 72,226	\$ 67,792
Special awards	14,125	14,185
Interest/HST rebate	1,639	1,365
	<u>\$ 87,990</u>	<u>\$ 83,342</u>



Summary of Expenses

Students: Awards/recognition/Activities	\$ 72,651	\$ 75,703
Champion teacher award	199	338
Teacher workshop	-	333
Site and judging	2,305	8,043
Outreach	545	427
Administration	7,835	7,804
	<u>\$ 83,535</u>	<u>\$ 92,648</u>






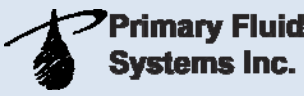



Excess (Deficiency) of Revenue Over Expenses	<u>\$ 4,455</u>	<u>\$(9,306)</u>
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Disbursements to Students		
Participation awards	2,330	3.2%
Trophies and medals	2,452	3.4%
Photography and audio visual	483	0.7%
Merit awards	8,173	11.2%
Special awards	14,510	20.0%
Susan Joyce Memorial Award	300	0.4%
Student activities	650	0.9%
Intel International Science and Engineering Fair	13,691	18.8%
Canada Wide Science Fair	30,062	41.4%
	<u>\$72,651</u>	<u>100.0%</u>

Administration Expenses		
Office expenses	1,846	23.6%
Marketing and publicity	1,269	16.2%
Registration	398	5.1%
Fundraising	1,499	19.1%
Bank charges and interest	664	8.5%
Volunteers	104	1.3%
Ceremony and sponsor recognition	2,055	26.2%
	<u>\$7,835</u>	<u>100.0%</u>

Sponsorship

Title Sponsor			
 ArcelorMittal DOFASCO HAMILTON			
Diamond (\$10,000+)		Platinum (\$5,000+)	Gold (\$2,500+)
 Hillfield Strathallan College Here Excellence is a Way of Life 		 THE HAMILTON SPECTATOR thespec.com	Bell Lifetouch TaylorLeibow Accountants Union Gas Limited
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		Friends	
		Hamilton Wentworth Occasional Teachers McMaster University Faculty of Science Optimist Club of Stoney Creek	
Benefactors			
Banting & Best Level (\$1000+)	Bondar Level (\$500+)	Polanyi Level (\$200+)	McGill Level (\$50+)
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Sponsors donating in-kind services continued to help us provide an exceptional experience for BASEF participants. Key donations included: printing, posters, newspaper advertising, trip winners' jackets, photo ID tags, accounting, and web hosting.

