

The Formula

Mid-Canada Regional Section
January 2014



CELEBRATING 27 YEARS IN AOAC



JUNE 12, 2014
PLANNING FOR THE BIGGEST DAY OF THE YEAR
FOR MSSS MEMBERS AND THE COMPANIES
WHICH SUPPORT THEM, Page 4

AOAC HELPS AT THE 2014 MSSS, Page 13
PRIZE PUZZLE, Page 6

Cover photo: **The sun rises over the University of Manitoba on a very cold January morning. For those whose workday begins early, sunrises like this can be particularly inspiring.**

I hope you enjoy this issue. I hope you will consider helping at the Provincial Science Fair in a couple of months.

Please put June 12 on your day-planner, whether it is a paper book like mine, or an app. on your phone.

My apologies to all for not getting an issue of the FORMULA into your hands months ago. As always, the more content that is submitted, the more frequently everyone gets to read a new issue. ;-)

If you would like to spend a few hours this year, helping Mid Canada AOAC succeed into the future, please consider letting someone know. We would like to see a few fresh faces on the Executive for 2014-2015.

If you can think of anything that would be of interest to your fellow members, please let any member of the AOAC Executive know.

Contributions are most welcome for next time!

Why not tell us what is new at your lab?

Please let us know how you liked this at

dhgrant@hydro.mb.ca

TABLE OF CONTENTS

- 4 AOAC Day 2013 information**
- 6 PRIZE PUZZLE**
- 9 News from AOAC-International**
- 14 AOAC helping at the 2013 & 2014 MSSS**

President's Message

Happy New Year! It is with great pleasure that we celebrate the 25th anniversary of our annual AOAC Day in Winnipeg! From our humble beginnings at the Ward Provincial Laboratory on Logan, this organization has grown and our annual conference continues to be a draw for scientists both near and far. Your vendors for instruments and consumables continue to support this event and without their support, we would have difficulty pulling it off. We are indeed fortunate to have such a dedicated executive to help manage the Mid-Canada AOAC. A special thanks to Anja Richter for coordinating last year's AOAC Day. We are continuing to plan for this year's Mid-Canada AOAC Day on June 12. We will also be launching a new website in the next months to help keep all our members connected.

As we reflect on the last year and plan for the new one, I can't help but see the major changes in employment opportunities for many of our members. From federal government scientists that have been declared surplus to our private industry scientists that have fallen victim to layoffs. Needless to say, the face of the Mid-Canada AOAC section is changing.

Your executive will be having discussions about who we are? Where have we been? Where do we want to go? One of those discussions is our future affiliation with the AOAC International (AOACI). Does it still make sense? Should we re-brand AOAC DAY to attract scientists in other areas such as the medical and biological sciences? Some may still think that AOAC stands for the "Association of Official Analytical Chemists". Please let your executive know of your feelings on these and other important issues.

2013 was a year of change and I suspect 2014 will continue this trend.

J. David Graham
President,
Mid-Canada AOAC



MARK YOUR CALENDARS!
THE 25th ANNUAL MID-CANADA AOAC DAY
is on
Thursday, June 12th
Registration fee: \$25

AOAC Day Features:

Manitoba's largest annual scientific vendor exhibit

Oral presentations

Free workshops/training sessions. **Past topics** have included:

Good pipetting technique

Good weighing practices

How to Get the Most out of Your ICP-OES and ICP-MS,

Fit-for-Intended Use Through the Quality by Design (QbD) Approach to
Analytical Methods

Buffet lunch with keynote address

Prize draws

**MAKE AOAC DAY BETTER! Tell us what would make AOAC
Day right for YOU!**

Become a presenter! We are currently accepting oral presentations!

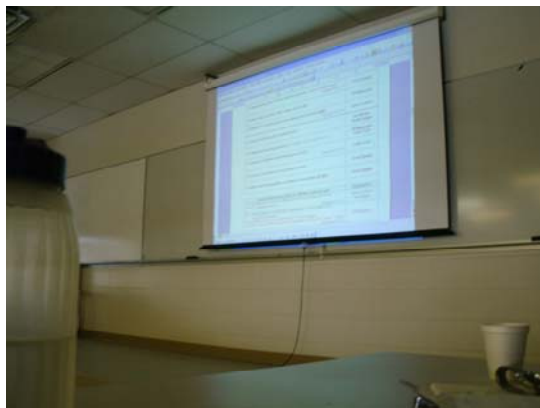
Presentations are 20 minutes long and can be on any aspect of analytical
science including (for example):

Research at the undergraduate, graduate or post-graduate level.

Industry perspective on a relevant topic with a focus on the
chemistry, biochemistry or microbiology involved.

Description of the scientific process and science behind the solu-
tion of a significant problem.

Email Ray Bacala, ray.bacala@grainscanada.gc.ca
with your topic to reserve your spot!



Suggest a training course or workshop!

Can be in conjunction with AOAC Day or stand-alone.

We are a non-profit organization with no salaried staff – If we cannot source it for free, we will only charge on a cost-recovery basis!

What training is required in your workplace? Is it financially out of reach?

Cost reductions are realized by:

Flying one trainer to Winnipeg rather than multiple attendees elsewhere

Increasing attendance by including other workplaces.

Email suggestions to Brian Asher, brian.asher@gov.mb.ca

Suggest a keynote speaker!

We are always looking for prominent and engaging local scientists to tell us how they are putting us on the global map and making the world a better place.

Email suggestions to Doug Goltz, dgoltz@uwinnipeg.ca

CONFIRMED VENDORS:

CALEDON

CEM CORPORATION

CHROMATOGRAPHIC SPECIALTIES

ESBE SCIENTIFIC

METROHM

METTLER-TOLEDO

NEO-GEN

PERKIN ELMER

SARTORIUS

SCP SCIENCE

SPEX CERTIPREP

WATERS LIMITED

**Please stay tuned –
More content to come as it is finalized!**



Solve the February 2014 Newsletter Prize Puzzle for YOUR Chance to Win \$50!

They say that all great relationships involve great chemistry. Well, a wise chemist once told me that, "If you are not part of the solution, you are... "

Send your best guess at completing this sentence to:
DAVID GRANT
MID CANADA AOAC NEWSLETTER EDITOR
in care of raceofficials@gmail.com

on or before March 31, 2014.

If you enter any answer before this deadline, you will be entered into a draw to win.

\$50.00 cash!

Prize draw is open to Mid-Canada AOAC Community List Members, excluding those serving on the Executive Committee.

[The solution to the May 2013 joke is:](#)

Q: What do you get when you take Barium then add Carbon, give it a little Oxygen, finally, put Nitrogen with it? (hint: a food many people like to eat)

A: BaCON or bacon (Ba, C, O, N)

Congratulations to Cameron Lyttle. Cameron won the May 2013 Newsletter Prize Puzzle. His name was drawn randomly on January 24, 2014 from the 16 entries received.

About our 2013 Prize Puzzle Winner:

Cameron works for the RCMP and has recently been relocated from the RCMP Forensics Lab Winnipeg and now works in the RCMP Toxicology Lab in Ottawa. When informed of his Prize Puzzle win, Cam summarized his current life on Ontario: "I am originally from Southern Ontario, so most of my family is still in the Hamilton and Brantford area. My wife's family is in the Ottawa area. It took some time to finally sell my house in Manitoba but by last June we settled into our new home in the Kemptville area. The commute is rather long, around 1 hour (or almost 2 due to bad roads, snowing and really slow drivers) but to me it's worth it to live outside the city.

The last few years have not been kind to those of us in the field of science. With the numerous closures etc., many of us have had to relocate to remain employed. I am probably one of the few who didn't mind being relocated as it brought my wife and I closer to our families, including two of our daughters who are at various universities here in Ontario.

The RCMP has scheduled the Winnipeg Forensic Lab for closure this spring and as I am one of the first (and so far only) to be relocated to the Ottawa Lab. I find myself tasked with trying to set up (or actually re-establish) the Toxicology Lab here in Ottawa. The previous reorganization saw the closure of the Toxicology Lab back in or around 2003. You can imagine what happens to the lab space when one discipline vacates. The area is soon taken over by the other disciplines. So I now find myself having to squeeze back into some of those spaces. Included in my duties, I find myself planning the location of the instrumentation that has been shipped or will be shipped from some of the other lab sites. Part of the planning consists of reviewing the existing bench, gas and electrical infrastructure and requesting any changes that may be needed. And finally, a lot of ordering and some scrounging of lab supplies and consumables.

Please give my regards to all at the lab there and to all at Mid Canada AOAC. While I have looked forward to the relocation to Ottawa, almost every day I find myself missing Manitoba, Winnipeg and the scores of colleagues and connections I made there."

FOOD SCIENCE NEWS

Once again, Food Science students from the Faculty of Agricultural and Foods Sciences at the University of Manitoba made their department proud. Maple Leaf Foods, Leadership Track Program accepted Devapriya Kundu, M.Sc. Food Sc., into their Operations Trainee Program. She will join her peers that preceded her from the same faculty. Of 100 resumes submitted to Maple leaf Foods, Devapriya was one of only 6 students accepted to this program

Maple Leaf continues to recruit from this faculty because it delivers high-quality grads trained for highly demanding jobs. To inquire about recruiting candidates from this faculty, contact laura_lazo@umanitoba.ca

In the 2013 Food fight at the Forks, Food Science Department students showed their work. The winning team included Elisabeth Harms, Kathy Diep (Food Sc.), Jolene Le (Food Sc.) and Meng Guo Guo (Food Sc.). Below is the SEA BUCKTHORN PLUSTERZ, a pretzel snack made with sea buckthorn.



The Official Methods of Analysis, 19th Edition NOW AVAILABLE!!!

The Official Methods of AnalysisSM, 19th Edition (print), is now available for purchase. The print edition is a 2-volume set (hard cover bound books; not a subscription). Following are highlights in the new edition:

- 31 Methods adopted as First Action
- 16 SMPRs developed and approved by AOAC stakeholder panels
- 7 Methods with major modifications
- 10 Methods with minor editorial revisions
- 7 New appendices on guidelines for SMPRs, voluntary consensus standards, probability of detection, validation of microbiological methods for foods and environmental surfaces, validation of dietary supplements and botanicals, single-laboratory validation of infant formula and adult nutritionals, and validation of food allergens
- A new subchapter on General Screening Methods (Chapter 17, subchapter 15) that includes screening methods for bacteria
- Updated information on program components of the Official MethodsSM process (found in the front matter)

AOAC also offers the Official Methods of AnalysisSM (OMA) online, which is an annual subscription and is a "continuous edition." New and revised methods are posted as soon as approved and ready which gives you the most up-to-date methods. AOAC offers several levels of online licenses to fit your needs as an individual or an organization, of any size.

For further information [click here](#) to visit AOAC's bookstore or to request a quotation contact AOAC Customer Service at CustomerService@aoac.org.

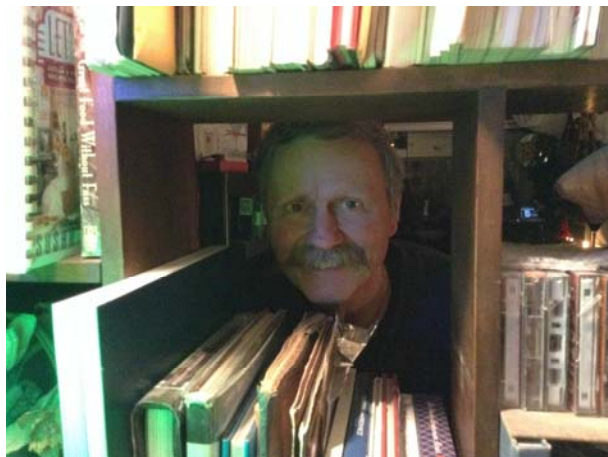
Date: November 2, 2012

Revision: March 19, 2013

The most used new word of 2013 was the 'selfie'. It is typically a hand-held photo of the person holding camera. Since most folks in the civilized world have cameras in their hands most of the time, there are a lot of self-portraits on the internet.

Here is a photo, taken with my wife's I-pad Mini, framed by a wooden bookshelf.

I call it a SHELFIE.



AOAC's Stakeholder Panel on Strategic Food Analytical Methods (SPSFAM) is a panel developed from the investment of AOAC INTERNATIONAL in the AOAC Organizational Affiliate multi-national food companies to identify issues within food safety and to develop solutions to global problems via the voluntary consensus standards program. The SPSFAM Meeting will be held on March 20, 2014 at the Gaithersburg Hilton in Gaithersburg, MD. This meeting will mark the start of an exciting new direction for the panel.

Who Should Attend?

AOAC encourages any individual/company to attend that has a stake in food safety. This may include:

- Product Manufacturers
- Analyte/Method Subject Matter Experts
- Technology Providers
- Method Developers
- Government and Regulatory Agencies
- Contract Research Organizations
- Reference Materials Developers
- Ingredient Manufacturers
- Method End Users
- Academia
- Non-Governmental Organizations
- Other.... as identified

AOAC's standard setting process requires a balanced perspective across all areas of the food industry. AOAC encourages you to attend!

[Learn more](#) about SPSFAM or [Register](#) for the March 20, 2014 session.

Dear Colleague:

NOMINATE A COLLEAGUE TODAY!

AOAC INTERNATIONAL is seeking nominations for the **Harvey W. Wiley Award** and for **Fellow of AOAC INTERNATIONAL**. The AOAC Awards Program recognizes significant contributions to the analytical science community and to AOAC itself. This is an opportunity for you to nominate outstanding scientists who deserve recognition.

Foremost among AOAC Awards is the **Harvey W. Wiley Award**. This most prestigious award is presented to a scientist (or group of scientists) who has made an outstanding contribution to analytical method development in an area of interest to AOAC INTERNATIONAL. The Harvey W. Wiley Award is selected from nominations received from members of the analytical science community, with nominations accepted year-round. **All nominating materials for the 2015 Harvey W. Wiley Award awards must be received no later than January 31, 2014.**

The Fellow of AOAC INTERNATIONAL Award recognizes meritorious service to the Association. This award is given to Members of AOAC whose volunteer efforts have significantly contributed to the success and prestige of the Association. **All nominating materials for 2014 Fellows of AOAC must be received no later than February 15, 2014.**

I encourage you to take a few moments to reflect on the contributions made by your colleagues to AOAC INTERNATIONAL and to submit a nomination today!

To obtain a **Harvey W. Wiley** Nomination Form [click here](#).

To obtain a **Fellow of AOAC** Nomination Form [click here](#).

To obtain a **2014 Awards Flyer** [click here](#).

For eligibility and nomination guidelines, visit the AOAC Web site [click here](#) or contact May Rose Jones, Program Manager, at +1-301-924-7077 ext. 114 or email at mjones@aoac.org.

Thank you in advance for your assistance and support of the AOAC Awards Program.

Cordially yours,



James Harnly
President, AOAC INTERNATIONAL

STAKEHOLDER PANEL ON INFANT FORMULA & ADULT NUTRITIONALS (SPIFAN) NEWS

AOAC INTERNATIONAL (AOAC) ANNOUNCES DETAILS OF THE 2014 MID-YEAR MEETING

Meeting to be held March 18-21, 2014 at the Hilton Washington DC North/Gaithersburg, MD. [Click here](#) to view the AOAC 2014 Mid-Year Meeting Webpage!

REGISTRATION FOR AOAC 2014 MID-YEAR MEETING IS NOW OPEN!!

Please visit AOAC's 2014 Mid-Year Meeting page for registration, hotel & travel information and more...[Click here](#) to register!

AOAC SPIFAN MEETING AGENDAS AVAILABLE

Meeting agendas for AOAC SPIFAN activities to be held during the AOAC 2014 Mid-Year Meeting are now available...[Click here](#) for details.

AOAC SPIFAN FIRST ACTION *OFFICIAL METHODS*SM FEEDBACK REQUEST!

AOAC INTERNATIONAL is requesting feedback on SPIFAN First Action *Official Methods*SM adopted to date. The request is for First Action methods not currently in multi-laboratory testing. The AOAC SPIFAN Nutrients Expert Review Panel will review these methods during the March 19, 2014 meeting. [Click here](#) to view the SPIFAN Status Chart.

[Click here](#) to submit information on SPIFAN First Action *Official Methods*SM. Deadline for submission is Friday, February 14, 2014.

AOAC SPIFAN CALL FOR EXPERTS!

AOAC INTERNATIONAL is urgently seeking scientific experts in the area of Amino Acids, Carotenoids, Chloride & Fluoride in infant formula and dairy products to establish standard methods performance requirements (SMPRs). [Click here](#) to view Call for Experts.

CALL FOR LABORATORIES

Study directors are continuing to seek interested labs for Multi-Laboratory Testing (MLT) on four (4) AOAC First Action *Official Methods*SM...[Click here](#) for details.

For general information about SPIFAN MLT, please contact [Robert Rankin](#), International Formula Council (IFC).

We want you back!

Do you believe that your membership in AOAC INTERNATIONAL, the Scientific Association Dedicated to Analytical Excellence®, expired? Whether this is due to an administrative error on our part or an oversight on yours, I want to extend this opportunity for you to consider renewing your membership.

By renewing your AOAC membership today, you will be able to continue taking advantage of the many opportunities and benefits provided by AOAC INTERNATIONAL, including: Access to critical information, professional development and recognition, valuable networking opportunities, preferred member pricing on AOAC products and services, Inside Laboratory Management, the Association's premiere magazine, and complimentary access to the Official Methods of Analysis (OMA) online.

I would also like to encourage you to become engaged and participate on the various Stakeholder Panels, Expert Review Panels and Working Groups. [Click here](#) for more information on these Stakeholder activities and other [volunteer opportunities](#).

Considering all of these valuable member benefits, services and publications, I hope you'll agree that at only \$120.00 a year, AOAC membership is an outstanding value. To renew your membership, please [click on the link](#) and pay online or print and fax or mail your application. If you have any questions, please email me at griegler@aoac.org or via email at members@aoac.org.

I thank you in advance for your support, and look forward to your continued membership in AOAC INTERNATIONAL!

Sincerely,



G.J. (Gar) Riegler,
Sr. Director, Membership and Administration

And this from the Past President of AOAC-I, a former Winnipeg Chemist:

Hello Ray,

The Mid-Canada section has been great section since its inception. Following the Chicago meeting, I pointed out to Gar the efforts of the Mid-Canada section to engage students. It is great to see the support of faculty from the colleges and universities in Winnipeg. Dave and the others should take great pride in helping shape the next generation of your scientific community. Please ensure that you pass along the acknowledgement of the AOAC Board to your committee....past and present....for a great job in keeping the section active, relevant and growing.

Stan

Stan Bacler

Senior Science Advisor

Health Canada, Bureau of Chemical Safety

Frederick G. Banting Building

251 Sir Frederick Banting Driveway

Tunney's Pasture

Ottawa, ON K1A 0K9

stanley.bacler@hc-sc.gc.ca

phone: 613-957-0870 fax: 613-954-4674

Government of Canada

WANT TO SUPPORT THE SCIENTISTS OF TOMORROW?

WANT TO JOIN IN A COUPLE OF DAYS OF FUN?

Want to join your AOAC friends and help the community?

Maybe what you really want is to be part of this Manitoba tradition, the MANITOBA SCHOOLS SCIENCE SYMPOSIUM!

This event is open and free for public viewing, so you can take your own students to see it. As a judge for the AOAC special prizes, you get to help identify the projects that meet our criteria, and then rank them.

As a part of the main scientific judging team, you will join a team to handle projects most closely matching your own specialty. Like senior level endocrine analysis? One team will look at such projects. Prefer home-made electric motors? There will be a few of those, and you could help pick the most deserving of recognition.

There is also a need for judges for the science fair organized for Aboriginal students. My wife and I have been helping at that one for a few years now, too. It is not as big and high pressure as the MSSS, but still is fun. Helping with this one also gives you a chance to meet students and teachers from the north. They are very polite and willing to learn.

Look up MSSS Manitoba with your search engine,
or reply to us at AOAC this month.

You will be glad you took either
(or both) of these opportunities.

MID-CANADA AOAC HELPS OUT AT MSSS 2013

Again in 2013, the MSSS was held at the U of M Fort Garry Campus. This venture has been a Manitoba institution since 1971. I have been judging at this event for over 25 years. It is still evolving. This year, registration of judges was by web sign-in. The reminders and invites have been by email for quite a few years. The Friday banquet has allowed for time to get familiar with the projects before meeting the student scientists on Saturday.

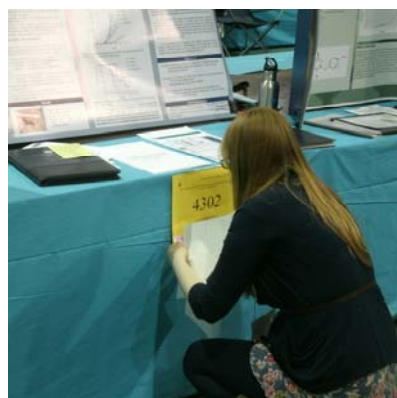
For 2013, our judge teams were seated at the same table. We had our forms for each project, so we could begin filling them in. This went very well. There were dozens of tables for the main (gold medal) judge teams, and about 6 tables for special award judges. Manitoba Engineers and doctors each had an award, as did the Mining group, AOAC, science teachers, etc.



Above is the start of our Judge's slideshow. Above right judges sort through their paperwork, before enjoying a varied buffet of tasty healthy-choice food.

Other specialty award judge teams were done by the lunch break. The AOAC team met at lunch to discuss the most promising projects. Because they took the time to list so many projects that involved analytical work, there were a lot of students to listen to. I was leading the senior Chemistry and Environment teams, and only helped the AOAC team when I could.

At right, a volunteer applies the STAY and YOU CAN GO HOME stickers to each project.



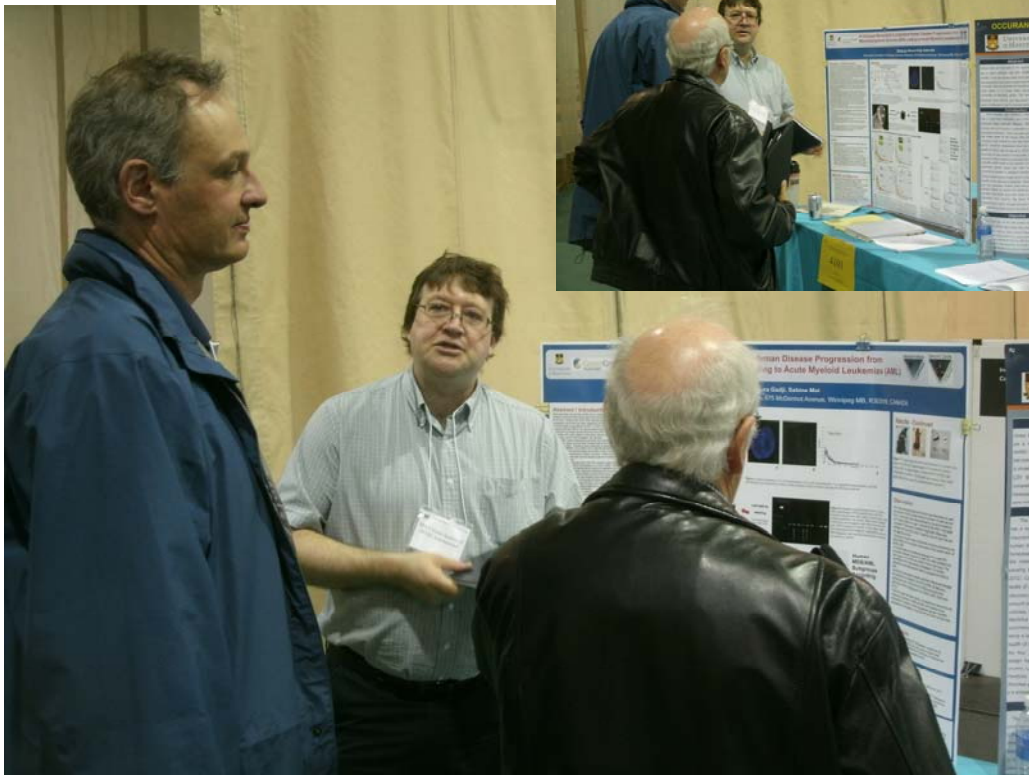
There were many judges willing to stay until all the comparisons were done. In the morning we decided who would get gold, silver etc medals. We also knew who had the best Senior Chemistry. After lunch, we had to compare 'best Senior Enviro' with 'Best Chem'. After all the run-offs, we had to talk about which students would be invited to travel to the Canada Wide Science Fair, in Lethbridge, Alberta in May 2013.



In one judge-team's deliberations was an unexpected quandary: pick 1. a student who built an anima-tronic dinosaur from plastic syringes, bits of wire and plywood and a small water pump, or 2. a student who had worked with a University-based mentor on an exotic medical topic. Not only were these two polar opposites in their approaches, and their topics, but they were at opposite corners of the same table! I found this ironic and noteworthy!

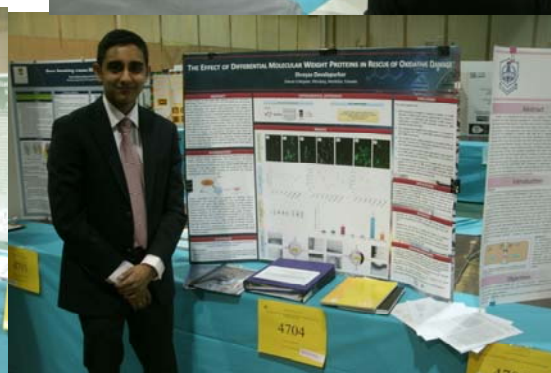
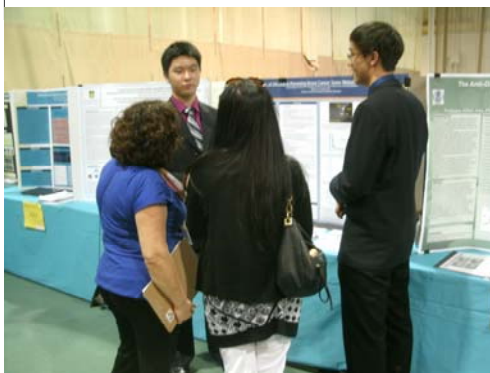
Below, 4 of your AOAC special award judges in their final deliberations, long after the students have "left the building".







Above is another pair of opposite projects in direct competition. Both students spent the day as good friends, even though this is serious competition. Not what you might expect on a sports field, but typical of MSSS competition. On the left, a project based on intensive lab work to extract and analyze a nutrient from the herb, rosemary. Very well done, with real benefits for Canadians. On the right, an innovative approach to sampling and studying a retention pond in this student's 'backyard'. She made her own tools for sampling, and measuring the cloudiness of the pond water. Below and at right are more students being interviewed by judging teams.







Initial judging sessions are one-on-one with the student. In later rounds, teams of judges visit to listen to the student's story, and ask even more pointed questions. This is good preparation for the Canada-Wide Science Fair and graduate work!

