

The Formula

Mid-Canada Regional Section

December 2008



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Mid-Canada AOAC Bowling Night

When: **Tuesday January 27th, 2009, 7:00-9:00pm**

Where: **Academy Uptown Bowling Lanes
394 Academy Road**

Registration Fee: **\$6.00 per person Early Bird (until Jan 21st),
\$8.00 Regular**

The Scoop: Registration includes shoes, pizza dinner and non-alcoholic pop.

Friends and family of membership are welcome. Company and individual teams welcome.

A total of 5 lanes are available. To book a lane for a company/friends team we ask for 5-6 people to be on that team (max 6 people per lane). Individual registrants will be added to open lanes and/or to groups of 4 or less as needed.

To register, please contact Wes Budakowski at wes.budakowski@kprime.net

Payments can be mailed to:

**Mid-Canada AOAC Bowling Night
C/O Wes Budakowski
99 Redonda St.
Winnipeg, MB.
R2C 0K7**

Please make cheques payable to "Mid-Canada AOAC".

D Grant Photos



Editor's Column

I have done other newsletters over the past 40 years. I hope you like the shape-change THE FORMULA has made. Please let me know what you think about it.

I hope you like this.

Enjoy the Holidays!

David Grant

I got this email from, Ryan M., a coworker.
I thought it might be amusing to others.

I cdnuolt blveiee taht I cluod aulacly uesdnatnrd waht I was rdanieg. The phaonmneal pweor of the hmuan mnid, aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it dseno't mtaetr in waht oerdr the ltteres in a wrod are, the olny iproamtnt tihng is taht the frsit and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it whotuit a pboerlm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Azanmig huh? yaeh and I awlyas tghuhot slpeling was ipmorantt!

David

Contributions are most welcome for next time!

Please let us know how you liked this at

dhgrant@hydro.mb.ca

David Grant, Editor

PRESIDENT'S REPORT

Seasons Greetings,

Perhaps you were wondering whether it was the "Economic Crisis", the "Stock Market Crash of 2008" or the "Green Shift" which caused your Mid-Canada AOAC newsletter to be sent out a little later than usual. Regardless, this year our Fall newsletter has now become a "Season's Greetings" or a "Holiday Message" to all of our members. In fact, it may turn out to be more timely as most of our activities tend to be during the winter and spring months leading up to our AOAC Day in June.

If you were not aware, this is my second opportunity to be President of Mid-Canada AOAC and I still find the role to be a privilege and very rewarding. It certainly is a pleasure for me to work with our capable and dedicated executive committee. I should mention that since our AGM there have been a few changes behind the scenes with our executive. To summarize, we were sorry to see both Morley Jacobs (a twice Past-President) and Jeff Easton (Secretary), leave our group. However we did welcome Cameron Lyttle to our executive committee. Even with these changes and some switching of duties, our executive didn't seem to slow down and is as hardworking as ever to provide our members relevant training opportunities, workshops and a newsletter.

This fall we had a very successful training course at the Manitoba Chemical Analysis Laboratory (MCAL) at the University of Manitoba. The workshop was sponsored by Varian Canada which included a hands-on training session for participants with the opportunity to learn more about LC/MS or ICP/OES. This recent workshop was collaboration with the Manitoba MS User group which was very well attended, right after our training session.

We are always trying to build positive relationships within the scientific community and I look forward to further collaborations with Manitoba MS User group and other groups that share our similar interests. In particular, this spring we will be providing our members an opportunity to attend a very informative LC/MS/MS Quantitation training course. This training session will be held right after the Western Canadian Trace Organic Workshop. Dr. Cecilia Basic, an ASMS training instructor will be facilitating this course, which will be held on May 7th, 2009. Please mark this date on your calendar and details on how to register for this course are included in this newsletter.

I would encourage all members to provide our executive with advice and suggestions on how to make our organization better. Please consider coming out to one of our meetings. We are always in the need of individuals willing to serve on our executive which helps provide a valuable service to our scientific community.

All the best in 2009,

Greg Sliva

Greg_sliva@hc-sc.gc.ca or 983-5490

Please mark your Calendar for the ...

20th Annual Mid-Canada AOAC Day



June 11, 2009

Victoria Inn,

Winnipeg, MB

AOAC Day has been very successful over the years with many scientific professionals in attendance (i.e. chemists, biologists, technologists and managers from laboratories in and around Winnipeg). The day usually consists of a poster session, seminars, training sessions, equipment/supplies exhibits, a luncheon and a featured luncheon speaker.

As always, consider this an opportunity to share with other scientific professionals in and around Winnipeg by giving a presentation or submitting a poster.



Need more information... ?

Have an idea or suggestion for an even better AOAC Day... ?

please contact Anja Richter
anja.richter@grainscanada.gc.ca
or any other member of your AOAC executive.

Photos courtesy of Leif Norman

Report on AOAC International September 22-24, 2008 By Greg Sliva



I had the privilege of attending the 122nd AOAC International Annual Meeting and Exposition at the Hyatt Regency Hotel in Dallas, Texas. I found it to be a great opportunity to learn about the latest in research and technological developments in the analytical sciences. There were twenty-three symposia (over 100 presentations) and sixteen different poster sessions (over 200 posters) on a wide variety of topics including food safety and security, biotechnology, allergens, mycotoxins, vitamins, authenticity, quality assurance and accreditation and laboratory safety.

I also represented the Mid-Canada AOAC at the AOACI Sections meeting. The other sections were quite impressed with the number of activities our section has throughout the year. Also, our section was very well represented in the "Section Exchange". The "Section Exchange" is a collection of resource materials prepared by AOACI on some of the best practices on running and operating a local section.

1. At the Opening Session the Keynote Address was given by Dr. Jorgen Schlundt, Director, Department of Food Safety, WHO. Dr. Schlundt's keynote address, "Food Safety in the 21st Century: Testing defined by Intelligence", focused on the issue of defining and reducing food based risk. His talk noted that contaminated food or water kills an estimated 1.8 million children annually. His opinion was that often laboratories identify and detect hazards in food that do not represent a human health risk. Thus, laboratory results are not always effective in finding the health problem(s). Dr. Schlundt advocated that new testing and typing systems are required to ensure that the money spent is effective in reducing the various health risks due to disease.

Each year, there seems to be a growing contingent of attendees from China, Taiwan and Thailand. A number of these attendees come from laboratories that are ISO 17025 certified and using quite complex scientific instrumentation. Certainly the issue of melamine did arise however there are quite a number of advances in this region of the world.

In addition to the many symposia and poster sessions there was plenty of opportunity to network with members from Canada and other countries. Also, attendees could spend time in the vendors Exhibit Hall to learn about the latest in laboratory products and services from 68 different exhibitors.

I would like to thank the Mid-Canada Section of AOAC for giving me this wonderful opportunity to attend this event. I found experience to be very inspiring and worthwhile.

Report on the Collaboration of Mid-Canada AOAC's Fall Workshop and the 3rd Manitoba MS User Group Meeting on November 19, 2008.

Mid-Canada AOAC recently had their fall workshop at the University of Manitoba Campus. The workshop was held at the Manitoba Chemical Analysis Laboratory and sponsored by Varian Canada. A special thanks goes to Tom Ward for allowing us to have our workshop at his facility. The course allowed attendees to learn more about either ICP-(OES,MS) or LC-MS/MS.

The course was very valuable in that allowed attendees to learn in both a classroom and a laboratory setting with a hands-on demonstration of the instrumentation. The small class size (limit of 7 students per technique) facilitated a more interactive experience for participants. The course covered the basic theory, principles of operation, and capabilities for each type of instrumentation. The instructors were Andrew Toms, ICP/MS Specialist and Marcus Kim, LC/MS Specialist both of Varian Canada. After the Mid-Canada AOAC course all participants were encouraged to attend the 3rd Manitoba MS User Group held later that day.

The MS User group meeting was well attended with just over 30 people present. The meeting included two very interesting seminar style presentations.

The first presentation was given by Dr. Cecilia Basic titled "Small Molecule Analysis by Mass Spectrometry: All Accurate Mass All the Time". Her talk reviewed the power of accurate mass measurements in the structure determination of small molecules and will summarize LC/MS instrument developments that have made accurate mass measurements not only routine, but vital to structure determination. We look forward to hearing Dr. Basic speak again at Mid-Canada AOAC's Spring Workshop.

The second presentation was by Marcus Kim, Varian LC/MS Specialist, who gave a very informative talk on both the history and theory of the ion trap. He discussed a few of the limitations of ion trap technology and some of the recent advances Varian has incorporated into its instruments to meet those challenges. One of these advances is Triple Resonance Mass Scanning is a new method to trap and eject ions.

We would like to everyone who attended the workshop and/or the meeting and we look forward to future collaborations with the Manitoba MS User Group.

Mid-Canada Section of AOAC, together with the Manitoba MS User Group, invite you to the
Mid-Canada AOAC Spring Workshop:

**Introduction to Quantitative Analysis - Using LC/MS/MS with Triple Quadrupoles
(Instructor - Dr. Cecilia Basic)**

The course – catered to analysts new to mass spectrometry - will provide an introduction to quantitative analysis using liquid chromatography/tandem mass spectrometry (LC/MS/MS), specifically the use of multiple reaction monitoring (MRM) on triple quadrupole tandem mass spectrometers (QqQ). The course will review the principal components of LC/MS instruments, describe the methods of electrospray ionization (ESI) and atmospheric pressure chemical ionization (APCI) and summarize the operating principles of QqQ's. The principals and advantages of tandem MS approaches will be presented, followed by the steps involved in first setting-up and then analyzing the data acquired using a MRM LC/MS/MS method.

Time: 9:00 a.m. – 4:00 p.m.

May 7, 2009

Inn at the Forks

Winnipeg, MB

Registration: \$185 (**space is limited**)

To pre-register and indicate your interest in attending this course please e-mail or phone Greg Sliva (greg_sliva@hc-sc.gc.ca; 204 983-5490)

To complete your registration please send a cheque for \$185.00 (payable to Mid-Canada AOAC) along with the attendee's name, e-mail and contact information to:

Greg Sliva
C/O Mid-Canada AOAC
510 Lagimodiere Blvd
Winnipeg, MB
R2J 3Y1

Executive Member Profile



**Chemical Engineer.
Active in CSA and ASTM.
Has presented at AOAC Day in
years past. Works in a lab.
Solve the Winter 2009 Newsletter
Prize Puzzle for YOUR Chance to
Win \$50! Who is this?**

Send your answer to:
Susan Kotello via e-mail at: skotello@mts.net

on or before February 20, 2009. If your answer is correct, you will be entered into a draw to win

\$50.00 cash!

Prize draw is open to those on the Mid-Canada AOAC section e-mail community list, excluding members of the Executive Committee.

The solution to the Spring 2008 Newsletter's scrambled joke, is:

Q: What is the name of 007's cousin from the north?

A: Polar bond.

Congratulations to Karen Feng who won the Spring 2008 Newsletter Prize Puzzle.

Karen works for the Quality Control Department, Method Transfer Group at Cangene Corp. Her work involves transferring compendia methods or clients' methods to the QC lab by validating those methods under Cangene's lab testing conditions. She is also involved in developing new methods for the needs of Production.

Karen moved to Winnipeg from Vancouver last year. Welcome to Winnipeg, Karen!

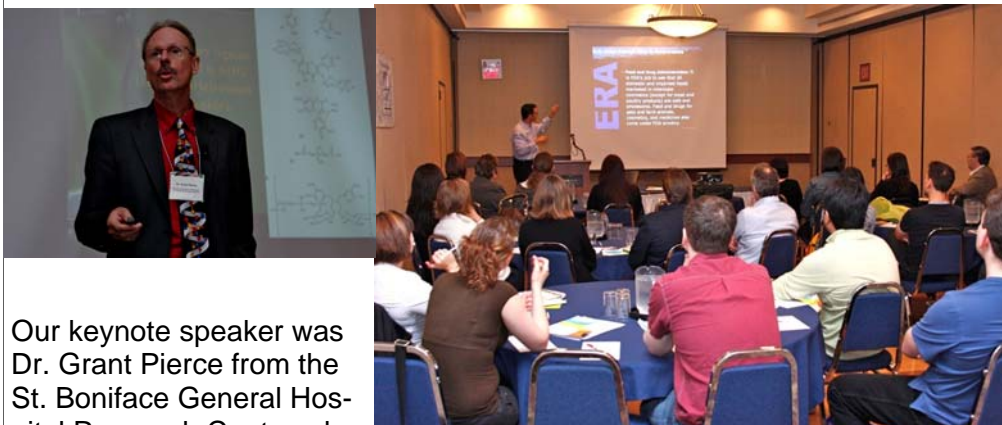
Karen's name was randomly selected during the October 29, 2008 Executive committee meeting from the 27 entries received.

Report on the 19th Annual Mid-Canada AOAC Day and AGM

In keeping with tradition, the 19th outing of our annual event was another success. The 3 sessions of presentations throughout the day were well attended, and for the first time (but hopefully not the last) the local MS users group joined in the day with the MS fo-



ocused presentations occurring as part of their meeting. Many thanks go to Tom Krakalovich for helping organize the joint effort. Additionally, a modest selection of posters made a return to AOAC day with both vendor and research based contributions. Speaking of the vendors, we had the participation of over twenty five companies and thank them for their attendance and door prize contributions.



Our keynote speaker was Dr. Grant Pierce from the St. Boniface General Hospital Research Center who gave a presentation entitled: *Bench to Beside to Better Living: The use of dietary flaxseed to improve cardiovascular health*. Dr. Pierce's presentation exposed the potential of flaxseed as a preventative dietary intervention in the fight against heart disease. The talk focused on the cardiovascular actions of flaxseed in basic science investigations and how it can be translated into clinical trials to test its efficacy as a therapeutic option for people with cardiovascular disease.

Photos courtesy of Leif Norman



Photos courtesy of Leif Norman

As part of the lunch presentation, the Mid-Canada Section scholarship program once again presented awards for outstanding academic achievement. The awards for \$600.00 each were given to:

Dung Hoang Nguyen from the University of Manitoba (Chemistry)

Maura Nelson from Red River College (Chemical Biosciences)

Ursula Hrysio from the University of Winnipeg (Microbiology)

The executive also awarded two plaques for outstanding contribution to the Section. Both Tricia McMillan and Greg Sliva received awards for their exemplary work as executive members for the past several years.

The program ended with our AGM meeting, in which Greg Sliva became President and David Grant took the mantle of President-elect. We also added a few new Members At Large: Ray Bacula (Agriculture Canada), Cameron Lyttle (RCMP), and Anja Richter (Agriculture Canada).

We thank everyone for their support of the past events and look forward to seeing you again on June 11th, 2009.

Best Regards,

Wes Budakowski



SAVING LAKE WINNIPEG ?

I was invited to take part in this 3 day event, but only attended the Evening (Public) Forum, which was billed thus:

Rescuing Lake Winnipeg's Watershed
The RED ZONE: Chemicals, Currents and Change Symposium
October 26 -28

“The public forum will feature a roundtable discussion with key scientists and policy makers including David Schindler, Robert Hecky, Hans Peterson, Peter Leavitt, Norman Yan, and UWinnipeg President and Vice-Chancellor Lloyd Axworthy.

Former Manitoba Premier, Gary Filmon, will moderate the discussions.”

The text in purple and the maps below are from the Red Zone home page on the University of Winnipeg website. These maps show the extent of the problem. It is not just Winnipeg. A lot of US and Saskatchewan farmland drains into the lake. It is not simply the fault of Manitobans.



FORUM REPORT

When we arrived, there was no sign of Lloyd, but the others were in place. Each spoke of his research, and of the lake's peril. Since all represent academia, and some have worked together, there was little disagreement as the opening remarks were made. Nutrient levels are increasing in the Lake. The algae that inevitably results has many negative effects. This took most of the 2 hours allotted for the Forum. The only future work suggested was further study of the water, and reductions of a few of those streams going into the lake. Mine was the first question. I explained my background in waste water treatment and chemical engineering. I suggested that one presenter's characterization of engineers (Engineers only want to use chemical treatment and add to the water stream) was incorrect, at least in my case! I asked why no one on the panel had mentioned the use of new wetland areas to remove target-list solutes from the water before it gets to the rivers and lake. Applause followed. A number of the panelists agreed with the wetland suggestion. Dr. Mehta, UofW event Host, agreed that wetlands were a very important part of the solution.

The last questioner pointed out that all the talk of research into what is in the Lake is fine, but that the Lake needs real action, and right away. If we spend more years talking, the lake will get worse. If we identify sure-fire, low cost action, we should get started. This brought a long wave of applause from the 'audience', and agreement by the panelists. There are immediate actions that need no further research. The last speaker said we should stop delaying, and take those actions. The panelists agreed.

Research is one of the cornerstones of an effort like this, and it pays for a lot of scientist's salaries, but it became clear that real action on this topic has been missing so far. Real action, like nutrient reduction in other jurisdictions west and south of Manitoba has not been considered. Wetland re-creation has been completely ignored in all previous 'Government Supported' discussions of the Lake's health, and was missing from this Forum, until speakers rose from the 'floor' at this panel forum.

AOAC CALL FOR SCIENTIFIC SESSIONS

An overwhelming amount of respondents to the 2008 Post-Annual Meeting survey stated that instead of traditional symposia, they would like to see roundtables or some form of an interactive workshop at future Annual Meetings.

Here is your chance to be part of the evolution of the AOAC Annual Meeting - think outside the box! Take this opportunity to organize and submit a proposal for a roundtable, workshop, or traditional symposium for the 123rd Annual Meeting & Exposition in Philadelphia, Pennsylvania, September 13-16, 2009.

We are open to all suggestions!

[Click here for the 2009 Call for Scientific Sessions](#). Please note that all timeslots for the 2009 Annual Meeting at the Philadelphia Marriott Downtown will be 90 minutes. The Call for Scientific Sessions deadline is **Wednesday, November 26, 2008**.

If you have any questions, please contact Lauren Chelf at 240-912-1449 or lchelf@aoac.org.

AOAC IS LOOKING TOWARDS THE FUTURE AS
WE
CELEBRATE OUR 125TH ANNIVERSARY...

JOIN US!