



Airways

Hamilton Chapter No. 037

<http://www.vaxxine.com/ashrae/>

American Society of Heating, Refrigeration and Air Conditioning Engineers

Volume 49, No. 3

Our 49th Year

November 2007

President

David Hills, A.Sc.T.
Phone (905) 687-9778 x22
dhills@tmpniagara.com

Treasurer & Research Chair

William McCartney
Phone (905) 822-2430
w.mccartney
@isothermengineering.com

Secretary

Brian White, B.A.Sc.
Phone (905) 572-1111
hamilton@engineeredair.com

**Membership Chair &
Student Activities Chair**

Adam Werthmiller, C.E.T.
Phone (905) 687-9778 x25
awerthmiller
@tmpniagara.com

Historian

George Menzies, P.Eng.
Phone (905) 388-1313
gmenzies@allstream.net

Social Chair

David Rasmussen, C.E.T.
Phone (905) 575-5542
drasmussen
@delhi-industries.com

C.T.T.C. / T.E.G.A. Chair

Mike Krewski
Phone (519) 885-7460
mkrewski@uniongas.com

Programs

Terry Fowler, P.Eng.
Phone (905) 520-8823
terry.j.fowler@jci.com

Programs Co-Chair

John Loncar, P.Eng., MBA
Phone (519) 885-7450
jloncar@uniongas.com

Webmaster & Airways Editor

Allan Antcliffe, P.Eng.
Phone (519) 756-5760
allan@madok.com

DRC

Wilfred Laman, P.Eng.
Phone (905) 304-1788
wflaman@vaxxine.com

Tuesday, November 13, 2007

Updating ASHRAE Climatic Data for Design & Standards

ASHRAE Research Project 1453-RP was awarded to **Numerical Logics Inc.** in Waterloo, ON. Dr. Didier Thevanard, Ph.D., P.Eng., president of Numerical Logistics, will talk about the calculation of climatic design conditions for the 2009 ASHRAE Handbook of Fundamentals and ASHRAE Standard 169.

Feature Speaker

Didier Thevanard, Ph.D., P.Eng.
Numerical Logics Inc.

Dr. Didier Thevenard is a graduate of the École Polytechnique in Paris, France. He is the president of Numerical Logics Inc., a scientific consulting company specializing in renewable energy systems, scientific and engineering computing and simulation. Dr. Thevenard has contributed to the development of various software tools for the solar energy industry, provided expertise in the field of climate data analysis and solar radiation estimation and participated in various projects related to solar energy, including the development of standards for the photovoltaic industry and the design of zero-energy houses. He is a member of ASHRAE Technical Committee 4.2 (Climate Information) and has been principal or co-investigator in three ASHRAE Research Projects: 1015-RP (Development of Typical Weather Years for International Locations), 1273-RP (Updating the climatic design conditions for the 2005 Handbook of Fundamentals), and 1453-RP (Updating the ASHRAE climatic data for design and standards).

Royal Hamilton Yacht Club

North End of McNab, On Hamilton Harbour

5:00 pm – Social Hour (& Technical Session, if applicable)

6:00 pm – Dinner & Business Meeting

7:00 pm – Feature Speaker

Technical Session/Dinner/Feature Speaker

Chapter Members - \$40.00 • Guests - \$45.00 • Students - \$15.00 • Meal Plan - \$140.00

Technical Session and/or Feature Speaker (without Dinner)

\$15.00

President's Report

October's meeting focused on Demand Kitchen Ventilation and George McGrath provided an insight of how much energy North America actually uses to operate commercial kitchens every day of the year. The ratio of the electrical energy used to operate the exhaust fans versus the actual time the appliances are used can be alarming, depending of course on the facility and its schedule. Therefore substantial energy savings and operate costs can be achieved through the use of a variable speed exhaust fans which operate at lower speeds during unused periods.

The monthly Airways includes several message from Society that may be of interest to you—including comments from the President and a list of new design guides and standards.

This month, we have Numerical Logics Inc. making a presentation on an ASHRAE Research Project that they were successful in obtaining recently from Society. Weather Climate Data is one that affects all of us and we look forward to putting the results of this project to work in our area of the HVAC business.

Our next monthly Chapter meeting will be a special Christmas event and will take place on Tuesday December 4th, at 5:00pm at the Hamilton Yacht Club. Our special guest will be George Roter, P. Eng. from "Engineers Without Borders" and, as always for the December event, we encourage everyone to bring their spouses and families. Please RSVP to Wilf Laman at wflaman@vaxxine.com to confirm your attendance so that we may make the necessary arrangements for the meal and service staff.

The Christmas meetings have the "Past Presidents Night" theme to them as well. So, if you're a Chapter past president, we'd love to have you come out so we can catch up with you.

Warmest Regards,

David Hills, A.Sc.T., President 06/07

Technical Session

ASHRAE Research Promotion - Region II Update

Prior to dinner, **David Rasmussen**, Region II RVC Research, will make a short Powerpoint presentation, updating Chapter members on research promotion in Region II.

Upcoming Chapter Meetings

Tuesday, Dec. 4/07 (not the 2nd Tuesday)

Theme: History/Past Presidents

Feature Speaker - George Roter, P.Eng. – co-founder and co-CEO of Engineers Without Borders (EWB) - will make a presentation on the activities of EWB.

Note that this is the Chapter's annual family Christmas Event – spouses/family are also invited so mark your calendar now.

Tuesday, Jan. 15/08 (not the 2nd Tuesday)

Theme: T.E.G.A.

Technical Session - Speaker t.b.d. - Enermodal Engineering - will update Chapter members on the energy savings realized at the Region of Waterloo EMS facility [a follow-up to our tour of the facility in January 2006].

Feature Speaker - **Brian Monk** - Carrier Corporation and ASHRAE Distinguished Lecturer - will make a presentation on Gas Phase Air Filtration.

Note that the January 15th meeting will be held at the University Club at the University of Waterloo.

Upcoming Events of Interest

PM Expo

November 28 – 30, 2007
Metro Toronto Convention Centre
Toronto, ON
www.pmexpo.com

ASHRAE Winter Meeting **(including AHR Expo)**

January 19 – 23, 2008
New York, NY
www.ashrae.org
(Click on Meetings & Events)
or www.ahrexpo.com

CMX/CIPHEX 2008

March 27 – 29, 2008
Metro Toronto Convention Centre
Toronto, ON
www.cmxshow.com

New Faces Nominations Now Being Accepted

For Terry Schroeder, a lifelong love of math and science led her to major in engineering and to her career as a Design Engineer at a firm in Baltimore, MD. Her role in many green projects at work, her mentoring to younger engineers and her love of her job earned her ASHRAE's New Faces of Engineering Award for 2007.

"I was speechless. I was incredibly honored. To know they had picked me was quite an honor," Terry said, "The recognition was nice for all of the hard work."

ASHRAE is currently seeking nominations for New Faces of Engineering for 2008. The recognition program, started by ASHRAE in 2003, is part of National Engineers Week which is sponsored by the National Engineers Week Foundation, a coalition of engineering societies, major corporations and government agencies. Member societies nominate colleagues 30 years old and younger who have shown outstanding abilities and leadership. Engineers Week promotes New Faces to provide incentive to those in college and inspire even younger students to consider engineering careers.

The top New Face from each society will be featured in a full page ad in USA Today during Engineers Week, Feb. 17-23, 2008. Each photo will be captioned with the engineer's name, name of engineering society providing the nominee, employer and a brief statement of that individual's accomplishments as they relate to the public welfare.

Engineers 30 years of age or younger as of December 1, 2007 are the focus of the recognition program.

Nominees must have a degree in engineering from a recognized U.S. college or university, or from an equivalent international educational institution. Degrees in engineering technology, science, computer science and similar disciplines do not qualify; a degree in computer engineering is acceptable.

Complete nominations must be submitted to ASHRAE by Friday, November 9, 2007 and should include a photo. The nominations should try to tie at least one achievement to something the non-engineering community can appreciate.

For more information, contact Tony Giometti at giometti@ashrae.org.

Eco Efficiency in Commercial Buildings – a Vision of Canada's Future Investment Opportunities

Sustainable Development Technology Canada (SDTC) will be launching its latest SD Business Case™, a report developed with comprehensive stakeholder input to provide strategic insights into Eco Efficiency in Commercial Buildings. A copy of the document will be provided and our findings will be reviewed and discussed in a series of presentations to be delivered across Canada. To find out more about SDTC, please consult their website at www.sdte.ca, where you can also find previously published SD Business Cases™ in the Knowledge Centre section.

Presentation Schedule: Toronto - Nov. 23; Winnipeg - Nov. 28; Calgary - Nov. 29; Vancouver - Nov. 30/07; Halifax - Jan. 8; Montreal - Jan. 9; Ottawa - Jan. 10/08.

Agenda: 8:30–9:30 Continental Breakfast
9:30–12:30 Presentation

Venues: Posted in the Events section of SDTC's website (www.SDTC.ca/en/news/events/index.htm)

Registrations: SDTC is now accepting registrations. To reserve your seat, simply provide the following information by e-mail to sdbusinesscase@sdte.ca: In the e-mail Subject Field: Indicate the city for which you are registering - eg., Toronto. In the e-mail, send: Your name; company name & e-mail address. SDTC will reply to confirm your registration and to provide you with details about the venue.

HVACR Heritage Centre Canada

Preserving and promoting the HVACR Industry's – and your – heritage and legacy is what the HVACR Heritage Centre Canada is all about. It is the only group in North America striving to preserve not only the significant technological achievements of the early 20th Century but also the pioneers, innovators and leaders who made all that you benefit from today.

Check out their website at www.hhc-canada.net and view their educational presentation – 'Chilling Out' – on the evolution of refrigeration and its impact on lifestyles, culture, society and the economy during the 20th century. This is just one example of what this new group is striving to achieve.

ASHRAE New York Research Promotion

DO YOU HAVE A BOOTH AT THE ASHRAE SHOW IN NEW YORK (JAN. 22-24/08)?

A letter has been sent to every exhibitor outlining the Expo-RP recognition program. They are sent a faxback pledge form and notified of the minimum contribution required.

The Expo Recognition includes:

- ★ Listing on an 8' x 15' display at Expo entrance
- ★ Listing in Expo's Show Daily – full page ad for 2 days
- ★ RP booth decal

Minimum contribution is \$1,000.

ASHRAE requires the faxback pledge form returned – or a written pledge on the company's letterhead – by mid-December 2007.

For those of you who have a booth at the ASHRAE Show in New York, I strongly recommend that you consider a \$1,000 investment into ASHRAE Research. As you will note, the recognition at the Show is staggering. Not only will your company be listed at the show entrance – you also get an ad for 2 days in the Show Daily plus a decal to display at your booth. Either Bill McCartney (as Hamilton Chapter Research Chair) or I (as Region II RVC Research) will make a personal follow up phone call to answer any questions you may still have.

See you in New York!

*Submitted by David Rasmussen,
Region 2 RVC Research*

This space could be yours!

**Business Card Ad
\$75.00 for One Year**

If you are interested, contact Allan Antcliffe
allan@madok.com

RESEARCH REPORT

At the November Chapter meeting, certificates of appreciation from ASHRAE Research will be presented to the following:

Air Audit Inc.	Superior Boiler Works
Applied Comfort Products	TMP Consulting Engineers
Arvin Air Systems	Union Gas Limited
Delhi Industries	Maximilian Andronowski
Dynamic Flow Balancing	David Hills
Emerson Climate Technologies	Ronald MacDonald
Fibrecast	William McCartney
HECO Limited	Terrance McLorg
HVAC Commissioners Inc.	George Menzies
Madok Manufacturing Limited	Chris McClelland
Neelands Refrigeration	Richard Reitzel
O'Dell Associates	George Robb
Philip Doyle Manufacturing	Neil Smith
RCR Design Air	William Stevens

These companies and individuals have already received their commemorative coin and plaques directly from ASHRAE Headquarters.

The ASHRAE Hamilton Chapter is offering a new incentive for the 2007-2008 Research Promotion Campaign. If you bring your donation to the November meeting, we will not bother you for the rest of the year.

*Submitted by William McCartney,
Treasurer & Research Chair 07/08*

ASHRAE News Releases

ASHRAE's Role in Providing Guidance for Contractors Explored in Forum

ATLANTA – To ensure design and construction of the most efficient and comfortable buildings possible, ASHRAE is working to provide its technical guidance to all members of the building team.

ASHRAE Receives NCEES Accreditation for Educational Programs

ATLANTA – ASHRAE has received accreditation for its education program from the National Council of Examiners for Engineering and Surveying (NCEES).

ASHRAE Expands Certification to Testing Centers Worldwide

ATLANTA – ASHRAE's first certification program is now available in testing centers in 22 countries. The certification, Healthcare Facility Design Professional (HFDP), is a computer-based examination that tests an applicant's mastery of a body of knowledge.

Lessons Learned in Sustainable Design Highlighted in ASHRAE Roundtable

ATLANTA – New York City is home to some of the world's best known green buildings and leading design firms that test new boundaries in high-performance, sustainable design.

In a special roundtable session at ASHRAE's 2008 Winter Meeting, two of New York's best-known owner/developer firms, along with the engineering designers who bring their projects to reality, discuss the challenges, opportunities and successes in delivering new green high-rise towers that add to New York City's skyline and grace the covers of engineering trade magazines.

Guidance for Net-Zero Energy Design Highlighted in Technical Program

ATLANTA – How low can you go when it comes to energy reduction in buildings?

Try net zero.

Water-Cooled Chiller Proposal Represents Energy Savings for 90.1

ATLANTA – An estimated annual energy savings of 13 percent relative to ASHRAE/IESNA Standard 90.1-2004 should result from a proposed addendum regarding air- and water-cooled chillers.

Demand Controlled Ventilation Requirements Proposed for ASHRAE 62.1

ATLANTA – Requirements for systems that use optional demand-controlled ventilation strategies are being proposed for ASHRAE's ventilation standard.

Click here for complete news releases.



Phone (905) 631-5815 / Fax (905) 637-8655
www.aquatech.ws



Your Source for High Quality Engineered Products





**BUILDING AUTOMATION
& CONTROLS**

Ian Simpson, C.E.T.
Tel.: 905-385-3092 ext. 22
 Fax: 905-385-3093
 83 Bigwin Road, Unit 11
 Hamilton, ON L8W 3R3
www.cullodenautomation.com
ian.simpson@cullodenautomation.com

Click on ad to go to web site.



Wm. J. McCartney

ISOTHERM ENGINEERING LTD.
 Founded in 1975
 2133 Royal Windsor Drive, Unit # 37
 Mississauga, Ontario L5J 1K5
 Phone: 905-822-2430 • Fax: 905-822-5182 • Toll Free: 1-800-394-2954
 Email: w.mccartney@isothermengineering.com

Click on ad to go to web site.



Frank E. Olds
 Systems Branch Manager,
 SW Ontario
 Johnson Controls L.P.
 Controls Group
 3070 Mainway Drive, Unit 10 & 11
 Mainway Business Centre
 Burlington, Ontario L7M 3X1
 Direct: (905) 335-3551 Ext. 231
 Tel: 1-800-263-6226
 Fax: (905) 335-9960
frank.e.olds@jci.com

Member Club d'Excellence

Click on ad to go to web site.



Terry J. Fowler, P.Eng.
 Account Representative
 Johnson Controls L.P.
 Controls Group
 3070 Mainway Drive, Unit 10 & 11
 Burlington, Ontario L7M 3X1
 Tel: (905) 335-3325
 Direct: (905) 335-3551 Ext. 241
 1-800-263-6226
 Fax: (905) 335-9960
 Cell: (905) 730-9674
terry.j.fowler@jci.com

Member Club d'Excellence

Click on ad to go to web site.

J. Allan Antcliffe P. Eng
 President



50 Morrell Street,
 Brantford, ON N3T 4J5
 (519) 756-5760
 (519) 756-5768 FAX
allan@madok.com
www.madok.com



Heating/Cooling Coils & Corrosion Protection

Click on ad to go to web site.



Jack Fitzmaurice, P. Eng.
jack@odellassoc.com

Tel (905) 681-3901
 Fax (905) 681-0688
 Cell (905) 546-6600

1038 Cooke Blvd., Unit #3
 Burlington, ON L7T 4A8
www.odellassoc.com

Click on ad to go to web site.



**Consulting
Engineers**

The Mitchell Partnership Inc.

26 Hiscott St., Suite 104
 St. Catharines, Ontario
 Canada L2R 1C6
 Tel (905) 687-9778 x22
 Fax (905) 687-8147
 Cell (289) 213-1642

David Hills, A.Sc.T.
 Senior Designer
 E-mail: dhills@tmpniagara.com
www.tmpniagara.com

Click on ad to go to web site.



uniongas

John Loncar P.Eng, MBA, CEM
 Account Manager
 Commercial/Industrial Markets

Union Gas Limited
 P.O. Box 340
 603 Kumpf Drive
 Waterloo, ON
 N2J 4A4

office 519 885 7450
 fax 519 885 7540
 cell 519 635 6199
 toll free 888 436 7204 ext 450
jloncar@uniongas.com

A Spectra Energy Company

Click on ad to go to web site.

2007 – 2008 Meeting Schedule

This year's meeting schedule is summarized below. Except for some special events, all meetings will be held at the Royal Hamilton Yacht Club, at the north end of McNab St., on the Hamilton Harbour (If you need a map, visit our web site). New products and/or services may be presented informally via a "technical session" or a "table top demonstration" prior to dinner. After dinner, the main topic of the evening is presented by the "feature speaker". If you are interested in presenting a technical session, booking table top space to promote your product and/or service or, if you have a suggestion for a feature subject and/or speaker, please contact Terry Fowler (Programs Chair). There is a charge of \$75.00 for "table top demonstration" space and this includes a business card ad for two months.

ASHRAE Hamilton Chapter Program Activity			
Date	Theme	Technical Session/ Table Top Demonstration	Feature Speaker
November 13, 2007	Research Promotion	David Rasmussen ASHRAE Research Promotion	Didier Thevanard <u>Numerical Logics Inc.</u> ASHRAE Research Project 1453-RP "Updating ASHRAE Climatic Data for Design & Standards"
December 4, 2007 (not 2nd Tuesday)	History/ Past Presidents	Christmas Event — Dinner & Speaker <u>Engineers Without Borders</u> George Roter, P. Eng. – Co-Founder & Co-CEO	
January 15, 2008 (not 2nd Tuesday)	T.E.G.A.	Speaker t.b.d. <u>Enermodal Engineering</u> Region of Waterloo EMS Energy Savings <i>[At the University of Waterloo]</i>	Brian Monk <u>Carrier Corporation (RCAN)</u> <u>ASHRAE Distinguished Lecturer</u> Gas-Phase Air Filtration <i>[At the University of Waterloo]</i>
February 12, 2008	Membership	open	Shehwar Haque <u>ECOS Aire (Division of Dectron)</u> Computer Room Glycol Cooling
March 11, 2008	Students/ Y.E.A.	Noel Neelands <u>Neelands Refrigeration</u> Tour of New Style Supermarket Refrigeration Technologies	
April 8, 2008 (not 2nd Tuesday)	T.E.G.A./ IAQ	<u>ASHRAE Satellite Broadcast</u> Indoor Air Quality	
May 13, 2008	Refrigeration	open	Hugh Crowther (tentative) <u>McQuay International</u> Variable Cooling / Refrigerant Flow
June 4, 2008 (not 2nd Tuesday)	Social/ Research	Legends on the Niagara — <u>Battlefield Course</u> Annual Golf Tournament	

Webmaster & Airways Editor:

Allan Antcliffe, P. Eng.
Madok Manufacturing Limited
50 Morrell Street, Brantford, ON N3T 4J5
Phone: (519) 756-5760
Fax: (519) 756-5768
E-mail: allan@madok.com

Hamilton Chapter Mailing Address:

ASHRAE Hamilton Chapter
59 Abbey Close
Ancaster, ON L9G 4K8

ASHRAE Hamilton Chapter
<http://www.vaxxine.com/ashrae/>