TOPIC:
An Introduction to Ammonia Refrigeration Systems

GBCI Approved | 1 CE Hour | 0920014344
AIA Approved|1LU/HSW|REINDL01

Presenter:
Douglas T. Reindl, Ph.D., P.E.
Professor University of Wisconsin-Madison

Thur April 29th, 2021

4:30-6:30 PM – Hosted virtually on ‘GoToMeeting’
Cost = $30.00*

Registration link: https://forms.gle/qnW2Ezkt7qaF7Htf6
*One-time fee for full year of meetings – if you have registered for a previous meeting no action required!

Hosted by ASHRAE London in joint online meeting with ASHRAE Windsor
April Topic
An Introduction to Ammonia Refrigeration Systems

Industrial refrigeration systems have used anhydrous ammonia for more than a sesquicentennial. Although ammonia has a long history of use in the industrial sector, the interest in ammonia as a potential refrigerant for non-industrial applications has grown recently. This presentation will provide an overview of the ammonia refrigeration systems that have been the mainstay in the industrial sector and emphasize unique characteristics that differentiate ammonia systems from traditional halocarbon refrigeration systems.

April Presenter
Douglas T. Reindl, Ph.D., P.E.

Douglas Reindl is a professor and chair with appointments in the Department of Engineering Professional Development and Mechanical Engineering at the University of Wisconsin-Madison. In addition, he is the founding director of the Industrial Refrigeration Consortium (IRC) at UW-Madison. He received his B.S. in Mechanical Engineering Technology from the Milwaukee School of Engineering and his M.S. and Ph.D. degrees from the University of Wisconsin-Madison. He is a registered professional engineer in the State of Wisconsin and actively involved in ASHRAE, IIAR, and IIR.

As faculty member at the University of Wisconsin since 1996, Professor Reindl has taught at all levels: undergraduate, graduate, and continuing professional development. Professor Reindl has developed an internationally-recognized series of professional development courses focused on industrial refrigeration systems with an emphasis on the safe use of ammonia as a refrigerant. Through the IRC, Professor Reindl collaborates with the world’s leading food companies to improve the safety, efficiency, reliability and productivity of industrial refrigeration systems and technologies.

Professor Reindl is an ASHRAE Fellow and a past recipient of ASHRAE’s Distinguished Service Award. HE was the first recipient of ASHRAE’s George C. Briley Award for the best refrigeration article in the ASHRAE Journal. He is a past chair and currently serves as a member of ASHRAE’s Standard 15 committee – Safety Standard for Refrigeration Systems. Professor Reindl has published 7 books and over 100 technical papers on topics including: industrial refrigeration, building mechanical systems, energy systems, and solar energy.
Chapter President’s Message

To ASHRAE London Chapter Members
I am Andrew Crowley, your ASHRAE London Chapter President for 2020/2021. I am an industrial refrigeration engineer, Engineering Manager for Drennan Refrigeration Inc. in London ON.

It has been an interesting year for all of us, challenging for most, and I hope this email finds you and your family in good health and spirits.

As you are aware, our usual way of conducting ASHRAE business is different this year, and I want to update everyone on some important changes:

- Chapter meetings, until at least January but more than likely all year, will take place virtually on Go to Meeting.
- Most meetings will begin at 4:30pm. The first hour will be ASHRAE business and technical presentation. The second hour will be Q & A and a “virtual” social.
- London and Windsor Chapters will alternate hosting meetings, combining members from both chapters. There are currently 8 meeting dates scheduled
- There will be a one-time fee of $30 to attend any or all the virtual meetings this year. Any proceeds raised from this will be donated to Research Promotion and other charity. A sign up form will be sent out shortly.
- We will be taking advantage of the virtual year and booking many DL speakers!

If you have any questions in the meantime please reach out to the BOG. You can also contact me directly at

Andrew Crowley
Drennan Refrigeration Inc.
acrowley@drennan.on.ca

We are looking forward to a successful year!
From your ASHRAE London Chapter BOG

A Word About Meeting Costs...
As there are no chapter meals that help contribute to the chapter operation and offset some meeting expenses, the chapter still needs some funds due to ongoing expenses such as bank charges, ASHRAE Region 2 dues on behalf of chapter members, and to contribute to ASHRAE Research. The low-cost fee of $30 will help the ASHRAE London Chapter and board members continue to provide services to the chapter members.

If there are any comments/concerns please reach out to any of the board members, we are happy to receive all feedback.
Professional Development
Need hours for your professional development requirements? Be sure to attend a chapter meeting. Professional Engineers Ontario requires members to have yearly professional development training recorded through the Practice Evaluation and Knowledge (PEAK) program. Other groups may also require continuing education.

Chapter Upcoming Meetings

Thursday April 29th – Chapter Meeting
• Hosted by ASHRAE London

Tuesday May 18th – Chapter Meeting
• Hosted by ASHRAE Windsor

*** be sure to check web site for latest information ***
http://LondonCanada.AshraeChapters.org

ASHRAE LONDON CANADA
The Chapter always welcomes new members who would like to get involved and assist the chapter in any way you are able. If this is of interest, please forward your name to any one of the board of governors.

Coronavirus COVID-19 Response Resources
ASHRAE has compiled a list of industry reviewed and recommended resources on COVID-19 guidelines and FAQ’s. Please follow the below link to access to these resources:

www.ashrae.org/covid19
ASHRAE Epidemic Task Force Releases Updated Airborne Transmission Guidance


ASHRAE has released the following statement:

“Airborne transmission of SARS-CoV-2 is significant and should be controlled. Changes to building operations, including the operation of heating, ventilating, and air-conditioning systems, can reduce airborne exposures.”

It replaces the April 2020 statement that said airborne transmission was “sufficiently likely” that airborne precautions should be taken. At that time both, the World Health Organization (WHO) and the Centers for Diseases Control (CDC), contended that transmission of SARS-CoV2 was by droplet and fomite modes, not airborne. Subsequently, both have acknowledged the risk of airborne transmission indoors.

“This may seem like a small step, but we feel it is important to leave no doubt about our position, given the muted support for ventilation and filtration as important tools in the effort to stop the pandemic, from some organizations that should be leading more strongly,” said William P. Bahnfleth, Ph.D., P.E., ASHRAE Epidemic Task Force chair.

The ASHRAE Epidemic Task Force has been developing and disseminating guidance for the control of airborne transmission of SARS-CoV-2 since its formation in March 2020.

“ASHRAE volunteers have played a huge role in evaluating evidence and developing detailed guidance to improve indoor environmental quality,” said Bahnfleth. “The public, globally, is benefitting from the volunteer efforts of some of the most knowledgeable scientists and engineers in our field and this updated guidance is proof of it.”

To view the complete airborne transmission statement and other COVID-19 resources, visit ashrae.org/COVID-19. Questions specific to Epidemic Task Force guidance can be emailed to covid-19@ashrae.org.

Save the Date – London ASHRAE Golf Tournament – Monday September 27th

With optimism and hope, the 2021 golf tournament has been reserved for Monday September 27th. We have really missed hosting the golf tournament in last year and we are hoping that by the end of the summer it will be within the regulations to catch up with one another for a day of ASHRAE celebration. We have taken feedback from previous years and have partnered with FireRock to host this year’s tournament. So, get your groups organized and keep your fingers crossed for the 2021 golf tournament! Stay tuned for more updates.
ASHRAE RESEARCH

Hello ASHRAE London Members,

My name is Kate Mayberry and I am your Chapter Research Promotion Chair for this year. Our Research Promotion goal for this year is $12,550 and look forward to reaching this goal through your continued support.

This year we will be recognizing donors at a RP Donor Recognition meeting by displaying individual and company donors prior to one of the technical presentations. Donors will also be recognized in the monthly newsletter and on the London Chapter website. To donate online please visit:  http://www.ashrae.com/donate

Current Honour Roll Individual Donors:
Tom Pollard, Jeff Armstrong, Kate Mayberry, Ibrahim Semhat, Rajarajan Deenadayalan, Kate Mayberry, Derek Vakaras

Current Honour Roll Corporate Donors:

Current Corporate Major Donor Silver:

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If any questions, please contact:
Kate Mayberry
519-471-6667 x202
kmayberry@sbmltd.ca

ASHRAE’s Building EQ Portal provides a quick energy analysis that benchmarks a building’s energy performance. Building EQ assists in the preparation of an ASHRAE Level 1 Energy Audit to identify means to improve a building’s energy performance including low-cost, no-cost energy efficiency measures and an Indoor Environmental Quality survey with recorded measurements to provide additional information to assess a building’s performance.

Two different evaluations can be used independently to compare a candidate building to other similar buildings in the same climate zone or together for an assessment of a building’s design potential compared to actual operation:

- **In Operation** compares actual building energy use based on metered energy information.
- **As Designed** compares potential energy use based on the building’s physical characteristics and systems with standardized energy use simulation.

Learn more on how to access the portal, initiate a project, and begin a submission:
https://www.ashrae.org/technical-resources/building-eq/building-eq-portal