

# Capitalaire

*The National Capital Chapter of ASHRAE*

## Monthly Newsletter



## Making Connections



## President's Corner

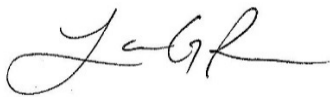
Happy Halloween! First, a huge thank you to our fantastic October meeting speakers. The Professional Engineering Seminar (PES) for Jesse Fisher's lecture on psychrometrics and Jen Leach's dinner presentation on ethics was interactive and informative. Both presentations are posted to [www.nccashrae.org](http://www.nccashrae.org) for NCC Members.

This month's meeting is the 16th annual MCAMW/ASHRAE joint trade show on Thursday, November 12th at 5:00 pm in Bethesda North Marriott & Conference Center. It is such a great opportunity to see the industry's most innovative products and to speak directly with suppliers. Please be reminded that this year's entry fee was included for Season Ticket holders – remember to register in advance through the NCC website.

Lastly, thank you to those members who voted to increase annual local chapter membership dues be raised to \$50, effective January 1st, 2016 at the October dinner meeting. This increase is in response to an increase in Regional Dues and to meet increasing operating expenses. As a reminder, if you renew your membership early and you pay your dues before January 1st, you would still pay the current rate of \$40. Only dues paid after January 1st would be subject to the increased rate.

Thank you for supporting the chapter activities! I look forward to seeing you in November.

Best Regards,



Laura Petrillo-Groh  
President – National Capital Chapter 2015 - 2016

## 2015 - 2016 National Capital Chapter of ASHRAE

<b>Officers</b>			
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Governor #3	Ryan Westlund	703-777-5255	<a href="mailto:Governor3@nccashrae.org">Governor3@nccashrae.org</a>
Governor #4	Nick Barrett	443-561-1662	<a href="mailto:Governor4@nccashrae.org">Governor4@nccashrae.org</a>
<b>Committee/Sub-Committee Chairs</b>			
CTTC	Jeffrey Colby	703-652-2337	<a href="mailto:CTTC@nccashrae.org">CTTC@nccashrae.org</a>
Research Promotion	Bryan Oliva	571-527-1486	<a href="mailto:ResearchPromotion@nccashrae.org">ResearchPromotion@nccashrae.org</a>
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	Mikelann Scerbo	347-733-7553	<a href="mailto:StudentActivites@nccashrae.org">StudentActivites@nccashrae.org</a>
	Michael Spencer	703-635-6385	
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	Lauren Zelinski	703-600-0389	<a href="mailto:Reception@nccashrae.org">Reception@nccashrae.org</a>
Programs	Nick Barrett	443-561-1662	<a href="mailto:Programs@nccashrae.org">Programs@nccashrae.org</a>
	Michael Hoffacker	703-682-6116	
Newsletter	Jonathan Rumbaugh	703-682-9094	<a href="mailto:Governor3@nccashrae.org">Governor3@nccashrae.org</a>
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Directory	Alec Petrillo-Groh	703-682-4900	<a href="mailto:Directory@nccashrae.org">Directory@nccashrae.org</a>
	Michael Hoffacker	703-682-6116	
Golf Outing	Andy Tech	703-834-2412	<a href="mailto:GolfOuting@nccashrae.org">GolfOuting@nccashrae.org</a>
Technology Awards	Patti Gunderson	202-974-4598	<a href="mailto:TEGA@nccashrae.org">TEGA@nccashrae.org</a>
Winter Party Chair	Erin Miller	703-834-5570	<a href="mailto:WinterParty@nccashrae.org">WinterParty@nccashrae.org</a>
	Amy Boyce	202-552-1367	
Young Engineers in ASHRAE (YEA)	Jonathan Rumbaugh	703-682-9094	<a href="mailto:YEA@nccashrae.org">YEA@nccashrae.org</a>
	Dan McGee	202-974-0882	<a href="mailto:YEA@nccashrae.org">YEA@nccashrae.org</a>
Sustainability	Amy Boyce	202-552-1367	<a href="mailto:Sustainablity@nccashrae.org">Sustainablity@nccashrae.org</a>
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Honors & Awards	Andrew Rhodes	571-233-6346	<a href="mailto:HonorsandAwards@nccashrae.org">HonorsandAwards@nccashrae.org</a>
C.K. Memorial Scholarship	TBD	-	<a href="mailto:CK_MScholarship@nccashrae.org">CK_MScholarship@nccashrae.org</a>
Refrigeration	TBD	-	-
Government Activities	Kinga Porst	202-570-1198	<a href="mailto:GouvernementActivities@nccashrae.org">GouvernementActivities@nccashrae.org</a>
	Roger Chang	202-296-4344	
Women in Engineering	Israa Ajam	202-573-3041	
Women in Engineering	Laura Morder	703-243-1200	

Capitalaire is the publication of the National Capital Chapter of ASHRAE. Capitalaire welcomes input and intellectual contributions from its readers. Please send all communications to Jonathan Rumbaugh.

Tel: 703.682.9094 Email: [Capitalaire@nccashrae.org](mailto:Capitalaire@nccashrae.org)



# 16TH ANNUAL MCAMW/ASHRAE JOINT TRADE SHOW

**Date:** Thursday, November 12, 2015  
**Time:** 5:00 to 9:00 pm  
**Location:** **Bethesda North Marriott & Conference Center,**  
**5701 Marinelli Road, Bethesda, MD 20852**  
**Place:** Grand Ballroom Salons E-H

ASHRAE will again join MCAMW in sponsoring an industry wide trade show – for the 16<sup>th</sup> year in a row! This year, the trade show will be held at the Bethesda North Marriott & Conference Center. At this time, industry suppliers will showcase their innovations, products and services. This is the perfect opportunity to have face-to-face interaction with your suppliers and get the latest information on their services.

Mark your calendars ***now*** to attend this popular event-filled evening which promises to be packed full of information. ***Come early!*** Cocktails and heavy hors d'oeuvres will be served throughout the evening. Complimentary parking is available for the event, or take Red Line Metro to White Flint Station (5500 Marinelli Road) and walk .2 miles (about 3 minutes) to the hotel.

## **Participating Trade Show Vendor/Suppliers**

Advanced Thermal Solutions, LLC	H & B Products, Inc.
Aireco Advanced Products Group	Havtech
Anvil International	Johnson Controls, Inc.
Boland	The Joyce Agency
Carrier Air Conditioning	Milwaukee Tool
Certified Building Services, Inc.	The Morin Co., LLC
Chesapeake Systems, LLC	S.J. Rafferty Co., Inc.
Complete Boiler Systems	Siemens Industry, Inc.
Critical Systems	SMACNA Mid-Atlantic Chapter
Cummins-Wagner Co., Inc.	Stromberg Architectural Division
Sam DeSanto Co., Inc.	Taze & Hewitt
Emerson Network Power/Liebert	United Energy Products
Ferguson Hydronics	Victaulic
The Filtres Corp.	NH Yates & Company

***To register, visit: [www.nccashrae.org](http://www.nccashrae.org)***

## Membership Promotion

ASHRAE Membership Promotion and the Board of Governors would like to welcome our newest NCC Members, including:

Mr. Robert	Gray
Mr. James	Richards
Mr. Jim	Marsh
Mr. George	Preston
Mr. Alex	Filauro

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## Why Join ASHRAE?

### Explore Technology

ASHRAE Handbooks (yearly): Handbooks are issued in June annually. For example, if you join ASHRAE in September, you will receive your Handbook the following June. If you join in May, you will receive your Handbook the next month. New Members and Associates will receive the 2016 ASHRAE Handbook—Systems and Equipment in June 2016.

You don't have to wait until June to have access to the ASHRAE Handbook. Within 24 hours of joining ASHRAE, new members receive a complimentary 12-month subscription to ASHRAE Handbook Online, which allows search of all four volumes in I-P and SI units. (Renew this subscription for only \$49 at the end of your first year of membership.)

### Receive Special Discounts

New ASHRAE members - entitled to a 20 % discount on ASHRAE Handbook publications\* any time during their first year of membership. Please contact the ASHRAE Member Contact Center at [membership@ashrae.org](mailto:membership@ashrae.org), or (800) 527-4723 (U.S. and Canada)/(404) 636-8400 (worldwide) to learn more or to place your order at a discount. \*offer excludes ASHRAE Handbook Online (only \$49 for ASHRAE Members)

Student Members - ASHRAE Handbook available at a discount.

Affiliate Members - One-time discount off Member price (15% off)

Member Discounts on [Publications](#), [Continuing Education](#) and [Standards & Guidelines](#).

### ASHRAE Members' Insurance Program

Various insurance products are available to ASHRAE members, through the Members' Insurance Program. This quality collection of insurance products offers valuable coverage with options that can be tailored to fit your needs and budget.

### Become an Industry Leader

Develop leadership skills, work with and lead ASHRAE committee members, and network with industry professionals at ASHRAE chapter, region, and society meetings. You can also keep up-to-date with the industry through ASHRAE's Society Connections newsletter (monthly) and the HVAC Industry e-Newsletter (weekly).

### Advance your Career

Look for employees & employment at [ashraejobs.com](http://ashraejobs.com) and network with other HVAC&R professionals at ASHRAE meetings, participate in job postings, maintain your professional education and designation with 40+ courses, earning CEUs/PDHs/AIA LUs, and explore technical topics at ASHRAE chapter, region and society meetings.

### Gain Industry Insight

You're on the "team" with thousands of members who volunteer on industry-driven committees. Your local chapter's committee chairs and governors are all filled by volunteers, members of ASHRAE like you, who strive to bring you the best benefits for your membership. Your membership in ASHRAE helps support our efforts in keeping you informed of activities through newsletters, seminars, and meetings. Your involvement can help you become a stronger contributor on the job and make you a more valuable employee. Your participation is also a great way to network with other industry professionals and maintain your professional education by earning Continuing Education Units (CEUs) or Professional Development Hours (PDHs).

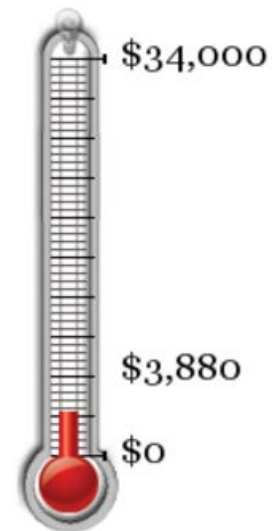
This year's Membership committee chairs are Ryan Westlund and Michael Morder. Both Ryan and Mike have been involved with ASHRAE NCC in the past and are excited to further contribute to the Society's Membership efforts during the 2015-16 Society year. If you have any questions or require any additional information about Membership please contact Ryan or Mike at [Membership@nccashrae.org](mailto:Membership@nccashrae.org).

## Research Promotion (RP)

ASHRAE Research has grown and expanded to address the ever changing questions and topics facing its members, the HVAC&R Industry, and the world as a whole. ASHRAE Standards are constantly evolving to address these new challenges, fueled by the knowledge and principals developed through ASHRAE Research.

The power behind ASHRAE Research comes directly from you! Your financial support is the driving force behind every research project conducted worldwide. As of October 23, 2015, we have secured \$3,880 in donations to Research and are well on our way to reach our Chapter goal of \$34,000.00.

The theme for our upcoming December 16 meeting is Research Promotion. The Chapter Officers and Chairs encourage all of you to attend so that we can recognize those who made the 2015 campaign successful, and keep the momentum going for a successful 2016 campaign.



## Donor Recognition

The RP Committee would like to thank the following donors for their support and generosity. A special thank you also goes out to our Chapter Officers and Board of Governors for leading by example to achieve Full Circle. A Chapter achieves Full Circle when every Chapter Officer has contributed a minimum of \$100 towards ASHRAE Research.

### Major Donors (\$250 - \$2,499)

Mr Kevin W Fallin  
Xudong Wang, PhD

### Honor Roll Donors (\$100 - \$249)

Mr Nicholas Barrett \*\*  
Mr Dennis E Clark  
Mr Jeffrey D Colby \*  
Mr Carl P Collat  
Mr Julian R de Bullet  
Mr Eric D Goodman  
Mr Omar John Hawit, PE \*  
Mr James P Hoffman  
Mr Roger K Jones  
Mr Arthur L Kent  
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Mr Paul H Levy

Mr Bradley E Lowe  
Mr Dunstan Laurence Macauley, III  
Ms Stephanie J Mages  
Dr Michael E McCabe  
Mr Robert McDaniel  
Mr Bryan Oliva \*\*\*  
Ms Laura G. Petrillo-Groh, PE \*  
Mr Alec R Petrillo-Groh, PE \*  
Mr Daniel E Pless  
Mr Harvey M Sachs, PhD  
Mr Robert Shannon  
Mr Morgan J Stevens \*  
Mr Ryan Westlund \*\*  
Mr David W Yankovich \*\*\*

#### Notes:

\* Denotes a Chapter Officer  
\*\* Denotes a Chapter Governor  
\*\*\* Denotes a Chapter Committee Chair

The RP Committee is very excited to announce that the following companies and individuals have made pledges towards the 2016 Campaign. We look forward to seeing you among the list of recognized donors very soon!

### Major Pledges (\$250 - \$2,499)

WSP | Parsons Brinckerhoff

## Research Projects in Your Neighborhood

1590-RP Alexandria, VA

Implementation of Total Cost of Ownership (TCO) Principles into Higher Education as an Integrated Decision Making Tool



The research effort will focus on the “Implementation of Total Cost of Ownership (TCO) Principles into Higher Education as an Integrated Decision Making Tool”. This study will focus on the principles of TCO and will be in alignment with both interoperability and sustainability practices. APPA will invite up to 25 institutions to participate in this study. The data collected from these institutions will provide the necessary data for analysis and establishment of a “standard of practice” for the industry and could result in a Standard for applying TCO and/or a guideline for utilizing TCO in Facilities Management. The study will also help to significantly expand the ASHRAE Service Life and Operating Cost Database with additional buildings and equipment.

1590-RP Alexandria, VA

## Implementation of Total Cost of Ownership (TCO) Principles into Higher Education as an Integrated Decision Making Tool

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## Donating to Research in 5 Minutes or Less

**Step 1:** Choose your favorite internet web browser and go to <https://xp20.ashrae.org/secure/researchpromotion/rp.html>.

**Step 2:** Allocate your donation to one or multiple funds shown below.

I would like to financially support ASHRAE’s mission, programs, and member services indicated below: (indicate the amount you wish to contribute in U.S. dollars to any or all resources below)

U.S.\$   ASHRAE Research  ASHRAE Research Canada

U.S.\$  ASHRAE Learning Institute and educational programs

U.S.\$  Endowed Research via ASHRAE Foundation.

\* By checking the box, I indicate that I understand that these are endowed funds and permanently restricted for the support of ASHRAE Research.

Existing Fund Name (If known):

[Click here to see existing endowments](#)

U.S.\$  ASHRAE Scholarships (endowed scholarship support)

U.S.\$  ASHRAE General Fund

U.S.\$  Young Engineers in ASHRAE (YEA) Support

**Step 3:** Input your payment information.

**Step 4:** Input all required Contributor Information and indicate “National Capital” as your Chapter.

Contributor Information Fields in red are required

Donor Name (Individual / Company to be Recognized):  \*

ID # (if known):

Chapter (if known):  \*

Address 1:  \*

Address 2:  \*

City:  \*

State or Province:  \*

Zip Code:

Country:  \*

Phone:

E-mail (to receive confirmation):  \*





**Step 5:** Click Submit and print a PDF confirmation for your records.

**Optional Step 6:** Forward your confirmation to [Research\\_Promotion@nccashrae.org](mailto:Research_Promotion@nccashrae.org) so that we can track your donation and make sure you are given the credit you deserve!

Send	To...	Research_Promotion@nccashrae.org
	Cc...	
	Subject:	

**YEA Fall Social 2015**  
**Thursday, November 19, 6:00 pm – 9:00 pm**  
**Location to be determined**



The Women in ASHRAE Committee hosted their first Networking Social of the 2015-16 ASHRAE season on Wednesday, October 21<sup>st</sup> at the Liberty Tavern in Arlington, VA. Over 40 industry professionals joined for drinks and appetizers sponsored by HAVTECH. Committee co-chairs Laura Morder and Israa Ajam announced their plans for upcoming events in January and April, including a “speed dating” mentoring session, continued networking opportunities and panel discussion on the retention of women in the building industry.



Pictured left to right: Laura Morder, Norm Long (HAVTECH) and Israa Ajam



Pictured: Attendees of the Fall WiA Networking Social

# ASHRAE Learning Institute

## Seminars & Courses at ASHRAE's Winter Conference in Orlando, FL

### 2 WAYS TO REGISTER

**Internet:** [www.ashrae.org/orlandocourses](http://www.ashrae.org/orlandocourses)

**Phone:** Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

### Full-Day Professional Development Seminars

**\$485/\$395** ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

**Commercial Building Energy Audits**

Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

**Energy Modeling Best Practices and Applications**

Tuesday, January 26, 2016 – 9:00 a.m. to 4:00 p.m.

**Commissioning Process in New & Existing Buildings**

Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

**Operations & Maintenance of High-Performance Buildings**

Tuesday, January 26, 2016 – 9:00 a.m. to 4:00 p.m.

**Designing HVAC Systems to Control Noise & Vibrations**

Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

### Half-Day Short Courses

**\$159/\$119** ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

**Laboratory Design: The Basics and Beyond**

Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

**Advoiding IAQ Problems**

Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

**Troubleshooting Humidity Control Problems**

Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

**Commissioning Process & ASHRAE Standard 202**

Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

**Understanding & Designing Dedicated Outdoor Air Systems**

Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

**Complying with Standard 90.1-2013: HVAC/Mechanical**

Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

**Variable Refrigerant Flow System Design & Applications **NEW!****

Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

**Evaluation and Control of Legionella in Building Water Systems **NEW!****

Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

**Air-to-Air Energy Recovery Applications: Best Practices**

Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

**Exceeding Standard 90.1-2013 to Meet LEED Requirements**

Monday, January 26, 2016 – 9:00 a.m. to 12:00 p.m.

**Applications of Standard 62.1-2013**

Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

**IT Equipment Design Evolution & Data Center Operation Optimization**

Monday, January 26, 2016 – 9:00 a.m. to 12:00 p.m.

**Building Demand Response & the Coming Smart Grid**

Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

**Designing High-Performance Healthcare HVAC**

Monday, January 26, 2016 – 1:00 p.m. to 4:00 p.m.

**Energy Management Best Practices**

Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

## ASHRAE HVAC Design Training

### 2 Courses, 5 Days of Intense Instruction

Atlanta • Halifax • Hong Kong • Houston

Kuala Lumpur • Miami • Minneapolis • Vancouver

### **HVAC Design: Level I – Essentials** - Registration is \$1,264 (\$1,009 ASHRAE Member)

Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

### **HVAC Design: Level II – Applications** - Registration is \$854 (\$699 ASHRAE Member)

*HVAC Design: Level II — Applications* provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit [www.ashrae.org/hvactraining](http://www.ashrae.org/hvactraining) to register.

## Opportunities to Get Involved in Student Activities

NCC's Student Activities Committee has arranged two upcoming opportunities for members to share their excitement for engineering with local students. Let Student Activities help get you in the mood for the season of giving at the very beginning of November and December!

At the following events you will have the chance to help students learn about acoustics. Students will design a small shoebox to insulate sound with the help of egg crates and cotton balls.

### November Opportunity:

Where: We are revisiting Glebe Elementary! 1770 N Glebe Rd, Arlington, VA 22207

When: Tuesday, November 10, 2015 at 3:45 to 4:45 p.m.

### December Opportunity:

Where: Tyler Elementary (partnered with Maury Elementary) 1001 G St SE, Washington, DC 20003

When: Wednesday, December 9, 2015

Looking forward to seeing you at our next event! Please email Michael Spencer and Mikelann Scerbo at [ashraencstudentactivities@gmail.com](mailto:ashraencstudentactivities@gmail.com) with any questions.



**2015-2016 Meeting Schedule**

Dates	Theme	PES Program	Dinner Program	Location
Wednesday Sept. 9 <sup>th</sup>	Awards	Ice Thermal Storage	Solar Thermal	Hilton Arlington
Wednesday Oct. 7	Membership/WiE	Basics of Engineering	Ethics	Hilton Arlington
Thursday Nov. 12		MCA Trade Show		Bethesda North Marriott
Wednesday Dec. 16	Research Promotion/ ASPE	Waste Water Heat Recovery	Rainwater harvesting – treatment for CT makeup	Hilton Arlington
January TBD	Holiday Party	Holiday Party		TBD
Wednesday Feb. 3	Past Presidents	Humidification – Focus on Museums / Psychrometrics	Humidification Case Study	Hilton Arlington
Wednesday Mar. 16	Research Promotion	DOAS	Advanced Energy Design Guide	Hilton Arlington
Wednesday April 13	Students/ Membership/ Sustainability	Cogen	Refrigerants	Hilton Arlington
May TBD	Tour	Building Tour		TBD