

Capitalaire

The National Capital Chapter of ASHRAE

Monthly Newsletter



Making Connections



President's Corner

I hope you all had a wonderful Thanksgiving holiday! Last month's 16th annual MCAMW/ASHRAE joint trade show was a huge success. It was a great opportunity for ASHRAE members to meet and mingle with contractors, sales representatives, and to see innovative equipment.

For our December meeting which will be held on the 16th at the Hilton Arlington, we are excited to welcome PES speaker Rick Lawlor who will educate us on wastewater heat recovery and Jonathan Garrick will speak about the benefits of rain water retention and reuse, specifically for cooling tower makeup, during dinner. This is our annual joint meeting with the Washington DC Chapter of the American Society of Plumbing Engineers. We would also like to thank and encourage everyone, including season ticket holders, to continue to make reservations by the deadline, noon on the Friday, December 11th.

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 2014 – 2015 campaign successful, and keep the momentum going for a successful 2015 – 2016 campaign.

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. Your financial support is the driving force behind every research project conducted worldwide, and the 2015-2016 NCC Research Promotion Campaign is going strong with a total of \$4,280 secured from generous donors like you. Thanks to your support, NCC has also been able to reach its scholarship goal of \$500, which will be put towards scholarships awarded to deserving students across the country.

A quick reminder, NCC dues are being raised to \$50 on January 1st, but 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.

As always, thank you for your support of our chapter activities. I wish you all a safe and happy holiday season!

Best Regards,



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

2015 - 2016 National Capital Chapter of ASHRAE

<u>Officers</u>			
President	Laura Petrillo-Groh	703-600-0335	President@nccashrae.org
President-Elect	Omar Hawit	202-296-4344	President-elect@nccashrae.org
Vice President	Jeffrey Colby	703-652-2337	Vice-President@nccashrae.org
Treasurer	Morgan Stevens	703-655-5084	Treasurer@nccashrae.org
Secretary	Alec Petrillo-Groh	202-974-0869	Secretary@nccashrae.org
<u>Board of Governors</u>			
Sr. Governor	Andrew Rhodes	571-233-6346	Senior_Governor@nccashrae.org
Governor #1	Stephen Niez	703-399-3959	Governor1@nccashrae.org
Governor #2	Amy Boyce	202-552-1367	Governor2@nccashrae.org
Governor #3	Ryan Westlund	703-777-5255	Governor3@nccashrae.org
Governor #4	Nick Barrett	443-561-1662	Governor4@nccashrae.org
<u>Committee/Sub-Committee Chairs</u>			
CTTC	Jeffrey Colby	703-652-2337	CTTC@nccashrae.org
Research Promotion	Bryan Oliva	571-527-1486	ResearchPromotion@nccashrae.org
Student Activities	David Yankovich	610-739-2981	
	Mikelann Scerbo	347-733-7553	StudentActivites@nccashrae.org
	Michael Spencer	703-635-6385	
Finance	Jeffrey Colby	703-652-2337	Finance@nccashrae.org
Membership	Ryan Westlund	703-777-5255	Membership@nccashrae.org
	Michael Morder	703-834-5570	Membership@nccashrae.org
Reception	Erin Miller	703-834-5570	Reception@nccashrae.org
	Lauren Zelinski	703-600-0389	Reception@nccashrae.org
Programs	Nick Barrett	443-561-1662	Programs@nccashrae.org
	Michael Hoffacker	703-682-6116	
Newsletter	Jonathan Rumbaugh	703-682-9094	Governor3@nccashrae.org
Website	Lauren Zelinski	703-600-0389	website@nccashrae.org
Directory	Alec Petrillo-Groh	703-682-4900	Directory@nccashrae.org
	Michael Hoffacker	703-682-6116	
Golf Outing	Andy Tech	703-834-2412	GolfOuting@nccashrae.org
Technology Awards	Patti Gunderson	202-974-4598	TEGA@nccashrae.org
Winter Party Chair	Erin Miller	703-834-5570	WinterParty@nccashrae.org
	Amy Boyce	202-552-1367	
Young Engineers in ASHRAE (YEA)	Jonathan Rumbaugh	703-682-9094	YEA@nccashrae.org
	Dan McGee	202-974-0882	YEA@nccashrae.org
Sustainability	Amy Boyce	202-552-1367	Sustainability@nccashrae.org
Historian	Dan McGee	202-974-0882	Historian@nccashrae.org
Honors & Awards	Andrew Rhodes	571-233-6346	HonorsandAwards@nccashrae.org
C.K. Memorial Scholarship	TBD	-	CK_MScholarship@nccashrae.org
Refrigeration	TBD	-	-
Government Activities	Kinga Porst	202-570-1198	GouvernementActivities@nccashrae.org
	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

*The National Capital Chapter of ASHRAE and
the Washington DC Chapter of ASPE
are pleased to announce...*

The December Chapter Meeting of the 2015-16 Society Year!

WEDNESDAY, December 16th, 2015

Hilton Arlington
950 Stafford Street
Arlington, VA 22203

For more information and registration, visit www.nccashrae.org



PES

Waste Water Heat Recovery

Rick Lawlor

Dinner

Rainwater Harvesting – Cooling Tower Makeup

Jonathan Garrick

MEETING SPONSOR



Schedule		Costs		
Time	Event		PES	Dinner
3:15 PM – 6:00 PM	PES	ASHRAE Student Members	\$20	\$20
5:45 PM – 6:30 PM	Social	Paid NCC Dues Members with Reservation**	\$40	\$30
6:30 PM – 7:15 PM	Dinner	Paid NCC Dues Members without Reservation	\$40	\$55
7:15 PM – 7:45 PM	Presentation	Guests with Reservation**	\$40	\$45
7:45 PM – 8:15 PM	Wrap-up	Guests & Non-ASHRAE Individuals without Reservation	\$40	\$55
8:15 PM	Adjourn	**NCC / ASPE members and guests who register before noon Friday, December 11th will receive a significant discount on the full price of dinner!!		

To make reservations, please visit www.nccashrae.org

Due to rising hotel costs, we have had to raise the price of our dinner and seminar tickets.

December PES Presentation

Waste Water Heat Recovery

Building and municipal sanitary wastewater has traditionally been ignored as a heat transfer medium, despite its attractive source temperature, typically between 72 F and 65 F. New technologies are available that facilitate the opportunity to exploit this medium as a heat-source and heat-sink, reliably and economically. When coupled with this technology, conventional commercial mechanical HVAC equipment & systems can (1) lower heating and cooling operational costs, (2) deliver competitive, or better, green HVAC system installed costs, (3) facilitate viable and scalable energy recovery opportunities, (4) reduce or eliminate carbon-based fuel consumption. Waste-water energy exchange is proving to be a viable and credible means to improve on the energy and environmental bottom-line. A wide array of building and mechanical system applications are in a position to take advantage of this development, to name a few;

- Dormitories, Apartments, Condominiums
- College & University Campuses
- District Energy Systems
- Hospitals
- Long-term Care Facilities
- Retirement Homes
- Sports and Recreation Centers
- Industrial Facilities
- GEOTHERMAL Systems
- Public & Institutional Buildings
- Commercial Buildings

Speaker Bio

Rick Lawlor



Rick Lawlor is a Mechanical Engineering graduate of UNB and is a 35 year HVAC Industry veteran. He started his career with the Trane Company, with field-Sales Engineer assignments in Saint John and Ottawa, before completing Trane's Graduate program in LaCrosse Wisconsin. Engineering Field-sales assignments followed, beginning in Toronto and later in Hamilton. Rick has held various Sales Leadership and Sales Management roles within the Trane Ontario organization, overseeing graduate engineers, sales teams, and sales administration, implementing corporate initiatives to meet financial and growth objectives.

In 2010 Rick became an Industry Consultant, providing engineering, management, and sales services to the HVAC Industry. In 2013 he joined International Wastewater Systems (IWS) of Vancouver BC to grow IWS presence and exposure in North America in the arena of emerging sustainable technologies.

Rick acquired LEED AP certification in 2009, is a registered P. Eng in Ontario, and is a member of ASHRAE. He currently resides in Hamilton Ontario.

December Dinner Presentation

Rainwater Harvesting – Cooling Tower Makeup

The presentation will focus on the importance and benefits of rain water retention and reuse, specifically for cooling tower makeup. It will also highlight the opportunity for optimization of water retention space by predictive storm water modeling and management. The specific design requirements will be addressed along general good engineering practices for water reuse systems. Sample designs and case studies will be presented demonstrate the implementation of these design methods and showcase the benefits of rain water reuse for cooling tower makeup.

Speaker Bio

Jonathan Garrick



Jonathan Garrick is a recent addition to the Aquanomix team. His role as project manager includes water reuse system design, fabrication coordination, and final implementation. For the decade prior to his work in rainwater harvesting and sustainability, Jonathan worked as a process engineer for an industrial filtration equipment company. Much of his focus there was on SO₂ and CO₂ capture for coal and natural gas fired power plants. Jonathan has a bachelor of science degree in Chemical Engineering from Clemson University.

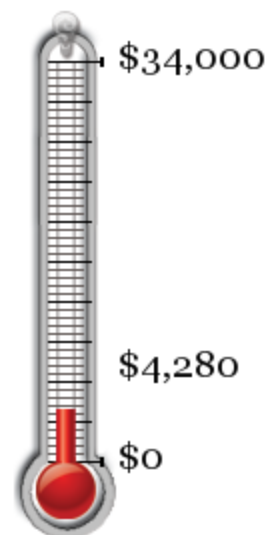
Research Promotion (RP)

As of November 29, 2015, NCC has secured \$4,280 in donations towards Research from generous donors and supporters like you!

Since the previous issue of Capitalaire, NCC has also been able to reach its ASHRAE Scholarship goal of \$500. ASHRAE Scholarships are scholarships sponsored, controlled, and managed by the ASHRAE Foundation and the ASHRAE Scholarship Trustees. Currently, more than \$80,000 a year is given to deserving students through

ASHRAE Scholarships. For more information on scholarships, see the ASHRAE Scholarships Q&A at the end of this article.

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 2014 – 2015 campaign successful, and keep the momentum going for a successful 2015 – 2016 campaign.



2014 – 2015 Donor Recognition

The RP Committee would like to extend a special thanks to the following supporters who donated more than \$500 towards the 2014 – 2015 Campaign. If you see your name (or company) listed below, we request that you or a designated representative attend the upcoming December 16 meeting so that the Chapter can thank you in person and provide a token of our appreciation.

2014 – 2015 Donors (More than \$500)

Boland Trane
 Mr. Raymond E Ruf
 D M R Associates Incorporated (Mr. David Ruf)
 Havtech Corporation (Mr. Norm Long)
 Southland Industries (Mr. Scott C Winkler)
 Victaulic
 Chesapeake Mission Critical

2015 – 2016 Donor Recognition

The RP Committee would like to thank the following donors for their support and generosity towards the 2015 – 2016 Campaign. Names listed below in **bold red** are new names added since the previous issue of Capitalaire.

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

Mr Kevin W Fallin
Xudong Wang, PhD

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

Mr Nicholas Barrett **
Ms. Amy Boyce **
Mr. Dennis E Clark
Mr Jeffrey D Colby *
Mr. Carl P Collat
Mr. Julian R de Bullet
Mr. James M Grant
Mr. Omar John Hawit, PE *
Mr. James P Hoffman
Mr. Scott C Houghton
Mr Roger K Jones
Mr Arthur L Kent
Mr Peter J Laiti

Mr. Paul H Levy
Mr Bradley E Lowe
Mr Dunstan Laurence Macauley, III
Ms Stephanie J Mages
Mr. Robert McDaniel
Mr. Stephen Niez **
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 following companies and individuals have made pledges towards the 2015 – 2016 Campaign. We look forward to seeing you among the list of recognized donors very soon!

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

WSP | Parsons Brinckerhoff

Membership Promotion

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

Mr. Travis Huffman
Mr. David Carroll
Mr. Steven Shapiro
Mr. Alan Calbi
Mr. Matt Giarratana
Mr. Richie Mohan
Mrs. Sherry Brown
Mr. Sean Welch

ASHRAE Scholarships Q&A

Q: What are ASHRAE Scholarships?

A: These are the 24 Scholarships sponsored, controlled, and managed by the ASHRAE Foundation and the ASHRAE Scholarship Trustees. They do not include the multiple Chapter Scholarships that are controlled and managed by various ASHRAE Chapters.

Q: How much in scholarship funds are distributed annually?

A: Currently, more than \$80,000 a year is given to deserving students. Individual funds' support range from \$3,000 up to \$10,000!

Q: Who can set up a Scholarship? Only individuals?

A: Scholarships may be set up by everyone - Companies, Chapters, Individuals, Regions, or a group of all types of donors working together! The minimum amount to create a new Scholarship is \$60,000. Those funds may be raised over a 3-yr time period and can be open to anyone to contribute into.

Q: Why create a Scholarship with ASHRAE instead of a Chapter one?

A: The two biggest advantages of ASHRAE Scholarships are reducing the workload on the Chapter and increased financial security. The Chapter (or donor) outlines the criteria they would like to use in the distribution of the Scholarship; ASHRAE markets it, gathers the information, and oversees the final selection – based on the donor's criteria. In addition, the Foundation has a set rate of 5% return – helping to guarantee that the funds will be available every year. This also eliminates the potential risk that Chapters may face by holding large sums of money.

YEA Fall Social 2015

NETWORK

EXCHANGE

CONNECT

SHARE

Thank you to Critical Systems for sponsoring another successful Young Engineers in ASHRAE (YEA) Social. Over 30 young professionals gathered at Spider Kelly's in Clarendon to network and enjoy a night out with their peers in the industry.

What is YEA? To ensure the future of the Society and the industry, ASHRAE is committed to advancing its programs and services for young members through helping them build their professional foundations. With this in mind, ASHRAE created a committee called Young Engineers in ASHRAE (YEA), for members age 35 and younger! For more information please reach out to Jonathan Rumbaugh at YEA@nccashrae.org.



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 so that we can track your donation and make sure you are given the credit you deserve!

Subject:

Student Activities

Catholic University of America's ASHRAE Student Chapter Wins Energy Audit Competition

We are excited to congratulate Catholic University of America's (CUA) Student Chapter yet again, this time for excelling in the Energy Audit Competition put forth by the Green Impact Campaign! CUA's student chapter has performed more than 20 energy assessments for Takoma Park, Maryland. Students Begoña Blasco-Puente and Emily Oldham were awarded the PowerUp Prize in November 2015 for completing the most energy assessments in a week! Begoña Blasco-Puente went on to win first prize for conducting a whopping 28 assessments to benefit energy savings in Takoma Park!

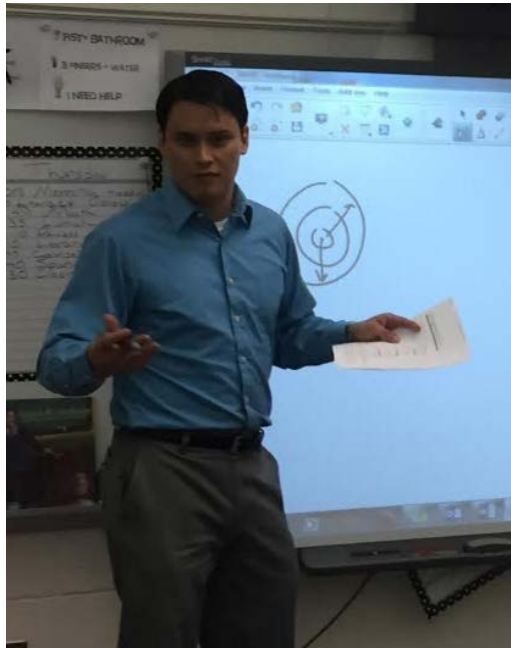
Learn more at <http://greenimpactcampaign.org/kilowattsmackdown/#Overview>.

Opportunities to Get Involved in Student Activities

We had a great volunteer event November 10, 2015 demonstrating the basics of acoustics and insulating sound at Glebe Elementary in Arlington, VA using shoe boxes, egg crates, cotton balls, and a handy decibel meter. ASHRAE member Mark Menzer, three ASHRAE student members Tao Cao, Daniel Bae, and Zhiwei Huang, as well as your Co-Chairs of Student Activities Michael Spencer and Mikellann Scerbo, all had an excellent time sharing their love of engineering at Glebe Elementary's after-school STEM club.



University of Maryland students (from left to right) Tao Cao, Daniel Bae, and Zhiwei Huang ready to demonstrate how to quiet sound in their boxes



Student Activities Co-Chair, Michael Spencer, demonstrating how sound travels

You still have a chance to share your love of engineering with students during this season of giving before the end of 2015! We will be doing the same acoustics activity at the following event at Tyler Elementary in December:

What: Acoustics activity with after-school club

Where: Tyler Elementary School, 1001 G St SE, Washington, District of Columbia 20003 (near the Eastern Market metro!)

When: Wednesday, December 9, 2015 from 5:00 p.m. to 6:00 p.m.

Here's a preview of the first volunteer opportunity for 2016:

What: Discussion on STEM careers and lego activity with Girl Scout Cadette Troop

Where: People's Congregational Church, 4704 13th St NW, Washington, DC 20011

When: Saturday, January 9, 2016 from 1:30 p.m. to 3:00 p.m.



Sponsorship Opportunities Available:

\$1800/ 10 tickets

\$2650/ 15 tickets

\$3400/ 20 tickets

For more information, contact

Erin Miller

ecmiller@southlandind.com

Presents...

The 2016 Annual Winter Party

January 16, 2016

National Press Club, 529 14th Street NW





2015-2016 Meeting Schedule

Dates	Theme	PES Program	Dinner Program	Location
Wednesday Sept. 9 th	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