Thursday, November 14, 2019

Dr. Julia Keen, PE, PhD
ASHRAE Distinguished Lecturer

Educational Lunchtime Session
"Targeting Success - Improve Employee Satisfaction and Profit"
12:00 Noon to 2:00 PM
Click here to Register

LOCATION
Del Frisco’s
The Vault
1428-1432 Chestnut Street
Philadelphia, PA 19102

Happy Hour and Guided Discussion
“Distinctly Different - Skillsets for Women to Succeed in STEM”
5:00 PM - 7:00 PM
Click here to Register

LOCATION
Jacobs
2301 Chestnut St.
Philadelphia, PA 19103

This is an ASHRAE and WTS (Women in Transportation) joint event.

See page 3 and page 4 for more information.

Please Note: During Mobile Checkout - choose the option to "Pay with Debit or Credit Card" if you do not want to use a PayPal account and click "RETURN TO MERCHANT" after paying to complete registration.
Greetings Chapter Members,

Welcome to the beginning of the heating season! Many of us have already performed the maintenance and startup of our home heating system and I hope your house is toasty.

Our Chapter’s 2019-2020 HVAC course has started and has record attendance. There is a diverse group enrolled - facility managers, consulting engineers, construction managers, and other engineering disciplines. We thank Burns Engineering for donating their training room, which has allowed us to expand enrollment.

This past month was packed with events and sessions. In addition to the October session, our Chapter had two joint-society events including SCMA Engineers’ Night and the ASPE symposium and product show. On Engineers’ Night, our Chapter had a membership promotion table at the SMCA showcase. The SMACNA Leak Testing lecture and demonstration followed the show and was interactive and informative. We thank Bill Reardon and SMCA Philadelphia for hosting another successful event at the Crystal Tea Room. We also teamed with ASPE for the bi-annual event and we had a display setup at the product show. It was nice to see new faces and talk about our Chapter and Society. There were six presentations concurrent with the event. We thank Onvector, Watson McDaniel and LAARS for supplying our expert presenters for the ASHRAE content. There were many of our supporting manufacturers and their representatives present at the product show, which had a great turnout.

October’s session at World Café Live was packed. Thank you, Dr. Greenhouse and to all who attended. The presentation was well received and we had great feedback. We are pleased to announce that we are hosting the Philadelphia Chapter of Women in Transportation (WTS) at our November session. This will be our first event together and we are happy to team up.

November 14th is a lunch session and our speaker is Dr. Julia Keen - an ASHRAE Distinguished Lecturer, Society Past VP, professor at KSU and consulting engineer. Her presentation is very enlightening and will help us to be better mentees, colleagues, mentors and managers.

November is also our Research Promotion (RP) donor recognition event. We thank everyone who supports our Society and Chapter. There will be a special Diversity in ASHRAE (DIA) event on November 14th, in the evening, after the lunch session. Our DIA committee will be providing a Seminar and Happy Hour, hosted by Jacobs.

Last weekend, we had a display at the Future City Engineering Fair. The Chapter provided fun STEM activities during the event where they gather ideas for their competition this year. The students are working on a remote treatment plant along with their city design. They learned about pressure drop in pipes using plastic straws which can be assembled in various configurations. Unfortunately, due to the “Save the Turtles” movement, the plastic straws were controversial. Their competition is January 2020 and our Chapter will be sponsoring and presenting a special award.

We look forward to seeing you for lunch on November 14th at Del Frisco’s in the Vault.

Michael Calabrese, PE
Philadelphia Chapter President
c021@ashrae.net
Speaker Bio

Julia Keen, PE, PhD, is a Professor of Architectural Engineering and Construction Science at Kansas State University holding the Bob and Betty Tointon Engineering endowed chair. She also owns her own consulting company, Keen Designs, PA. Her specific areas of interest include HVAC design, energy codes, high performance design, HVAC education, and the advancement of women in the building design and construction industry.

Julia Keen received her Bachelor’s Degree in Architectural Engineering from Kansas State University. Upon graduation, she worked as a Mechanical/Electrical Project Engineer in Waterloo, Iowa. In this capacity she was responsible for the design of building systems from initial planning stages through final project inspection and completion. In July 2003, Julia accepted a faculty position with K-State in the Architectural Engineering and Construction Science Department. She completed her Master’s degree in Architectural Engineering (2005) and her Doctorate (2010) in Education both from K-State. She is a Licensed Mechanical Professional Engineer in Kansas and Iowa and holds two ASHRAE Certifications - High-Performance Building Design Professional (HBDP) and Building Energy Audit Professional (BEAP).

In addition to her 9-month faculty appointment at K-State, Julia has the opportunity to stay current with the HVAC industry in a consulting capacity. Her consulting endeavors include performing as HVAC professional education consultant, engineering design, plan check and quality review, and acting as an owner’s representative in facility planning and project implementation.

Julia became involved in ASHRAE as a student member of the Kansas State University student branch. She has acted as the faculty advisor to this branch since 2003 during which time the chapter has routinely attended the ASHRAE winter meetings and the competition team that she has coached has finished first in the ASHRAE Design Competition six times. Through the years, Julia has held several chapter positions including President of the Cedar Valley Chapter. She has also been involved in many Society level committees including: Finance, Publishing and Education Council, Planning, Publications, Conferences and Expositions, and Certification as well as chaired TC6.1-Hydronic and Steam Equipment and Systems. Julia served in the elected positions on the ASHRAE Society Board of Directors as Vice President (2017 – 2019) and Director-at-Large (2013 – 2016). As a DAL and VP she served as Ex Officio/Coordinating Officer to the Refrigeration, Society Rules, and Standards Committees and was a voting member of Tech Council. Her service to the organization was recognized in 2010 when she was given the Distinguished Service Award. Julia continues to promote her passion of HVAC education through the HVAC Essentials Course she co-developed and delivers for ASHRAE around the world. She was promoted to the grade of ASHRAE Fellow in 2016 and was presented with the 2018 ASHRAE E. K. Campbell Teaching Award.

CLICK HERE to read about Julia being named "20 to Watch: Women in HVAC" by Engineered Systems Magazine.
Thursday, November 14, 2019

Dr. Julia Keen, PE, PhD
ASHRAE Distinguished Lecturer

Educational Lunchtime Session
"Targeting Success - Improve Employee Satisfaction and Profit"

Registration 11:45 AM - 12:15 PM
Lunch 12:15 PM - 12:45 PM
A cash bar will be available.
Presentation 12:45 PM - 1:45 PM

As the building design and construction industry looks at the composition of the future workforce it is clear that the demographics of today will need to change to meet future demand for employees. It is projected that this change will include increasing the number of women employed in the building design and construction industry. We have seen an increase in young women enrolling in STEM disciplines at the university level and an improvement in the numbers attaining college degrees but we have not seen the same increase in the percent of women employed in the STEM workforce. This inconsistency can be attributed to poor retention of women once they enter the profession. This presentation will address why women leave the industry and what can be done to help increase retention. This is an important topic for our industry as a whole as well as for employers trying to minimize turn-over and maximize productivity and profit.

LOCATION
Del Frisco’s
The Vault
1428-1432 Chestnut Street, Philadelphia, PA 19102
https://delfriscos.com/steakhouse/philadelphia/
Click here for directions.

Happy Hour and Guided Discussion
A Diversity in ASHRAE Social Event

“Distinctly Different - Skillsets for Women to Succeed in STEM”

Registration: 5:00-5:30pm
Guided Discussion: 5:30-6:30pm
Closing: 6:30pm-7:00pm
Drinks and light fare will be provided.

LOCATION
Jacobs
2301 Chestnut Street, Philadelphia, PA 19103
Click here for directions.

The discussion will focus on providing women the non-technical tools need for success in their STEM careers. The primary outcome for the attendees is to better appreciate gender differences by gaining understanding and perspective. This knowledge results in more effective management and navigation of challenging workplace situations. Specific topics include: stereotypes, confidence, communication, leadership, and success. This is a very appropriate presentation for women but men that are in the position of working with, managing, and mentoring women will also find the discussion and insight helpful as they work to promote women in the workplace.
November’s Meeting is
Research Promotion Donor Appreciation

Thank you to our 2019-2020 Corporate Sponsors

- Blankin Equipment
- Bush Sales Associates, Inc.
- Chase & Associates
- Clapp Associates, Inc.
- CM3 Building Solutions, Inc.
- Combustion Service & Equipment Co.
- Coward Environmental Systems, Inc.
- Elite Air Systems, Inc.
- Engineered Air, Inc.
- Ernest D. Menold, Inc.
- EwingCole
- Falasca Mechanical
- Finnegan Associates
- Gallen Engineering
- General Aire Systems, Inc.
- GP Energy Products
- HX Coils / Maiocco & Associates
- J. Lorber Co.
- Jacobs Buildings & Infrastructure
- McHugh Engineering, Inc.
- Metropolitan Acoustics
- National Air Filter
- Peirce-Phelps, Inc.
- Penn Pump & Equipment Co. Inc.
- R.D. Bitzer Company, Inc.
- Rogers Mechanical Company
- Sass, Moore & Associates, Inc.
- Setty & Associates
- The Tri-M Group, LLC

ASHRAE RP Campaign

The RP Campaign supports research as well as ALI and educational programs, Endowed Research through ASHRAE Foundation, YEA programs, ASHRAE Scholarships, and the General/Unrestricted fund.

To donate online, go to: https://www.ashrae.org/about/support-ashrae

ASHRAE Philadelphia Corporate Sponsorships Are Still Available

The Philadelphia Chapter invites your company to join as a Corporate Sponsor for the 2019-2020 year. Your firm’s participation in this program would enable us to make a donation to ASHRAE Research Promotion which includes over $1.5 million in local research funding. Corporate Sponsors are listed on our web site, in our newsletter, and in our annual directory. They receive free copies of our directory and recognition at all of our events. With the ease of one payment, you may get all this, as well as free dinner tickets good for our monthly meetings, and make a valuable contribution to ASHRAE Research at the same time.

If you are interested, please email us at philachapter@mail.ashrae.org. The Board of Governors thanks you for your continued support of ASHRAE.
Save the Date!

Young Engineers in ASHRAE (YEA) Committee and Student Activities Committee (SA) Joint Social

Thursday, November 21, 2019
6:00 PM to 8:00 PM

Watch for the Email Announcement!

Government Activities Committee (GA) Updates

The 2019 New Jersey Day on the Hill will take place on December 16th. Anyone interested in participating, please contact me at ashraephilly@gmail.com. Regional Vice Chair Kinga Porst Hydras will be present at the upcoming November Philadelphia Chapter meeting at Del Frisco's to discuss government affairs and ASHRAE.

Anthony Scaccia
Chair, Government Activities Committee

The New 2019-2020 Directory is Available!

The latest edition of the Directory of Associations, Consulting Firms, and Manufacturers’ Representatives in the Philadelphia Area is now available. It sells for $23 each.

Send your check to ASHRAE, 994 Old Eagle School Road, Suite 1019, Wayne, PA 19087. If you prefer to pay by credit card, please call Hope at 610-971-2169 or email her at hope@mmco1.com.

The Chapter is seeking sponsors for our Student Activities Social(s). Please email the Chapter Chair, Noresh Manisagar (c021sac@ashrae.net) or the Chapter President (c021@ashrae.net) for more information.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Venue</th>
<th>Session / Topic</th>
<th>Theme</th>
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<tbody>
<tr>
<td>Thursday, November 14, 2019</td>
<td>11:45am - 12:15pm Registration</td>
<td>Del Frisco’s The Vault</td>
<td>&quot;Targeting Success – Improve Employee Satisfaction, and Profit&quot; - Julia Keen, an ASHRAE Distinguished Lecturer (DL) -</td>
<td>-Diversity in ASHRAE -Employers -Joint w/Women in Transportation -Research Promotion Donor Appreciation</td>
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<tr>
<td>Thursday, November 14, 2019</td>
<td>12:15pm - 12:40pm Lunch</td>
<td>Del Frisco’s The Vault</td>
<td>Distinctly Different - Skillsets for Women to Succeed in Stem - A Happy Hour with Julia Keen -</td>
<td>-Diversity in ASHRAE Event (Discussion-Social) -Joint w/Women in Transportation</td>
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<td>Thursday, November 21, 2019</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Combination Young Engineers in ASHRAE (YEA) and Student Activities Event (Social)</td>
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<td>Wednesday, December 11, 2019</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Employer Recognition</td>
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<tr>
<td>Thursday, January 09, 2020</td>
<td>11:45am - 12:15pm Registration</td>
<td>World Café Live</td>
<td>&quot;Integrating Renewable Energy Systems into Buildings&quot; - Sheila Hayter, Society Past President and Distinguished Lecturer (DL) -</td>
<td>-Diversity in ASHRAE -Chapter History</td>
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<td>Thursday, January 09, 2020</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Diversity in ASHRAE Event (Social)</td>
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<td>Thursday, February 13, 2020</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>FREE Seminar for Chapter Members</td>
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<td>Thursday, February 13, 2020</td>
<td>TBD</td>
<td>Yards Brewery</td>
<td>Brewery &amp; Refrigeration Plant Tour</td>
<td>Research Promotion Night -Member Promotion Night -Student Activities, Scholarship Awards -Young Engineers in ASHRAE (YEA) -SMCA</td>
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<td>Thursday, March 12, 2020</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>President Boyle Visit -Employer Recognition -Research Promotion Donor Appreciation</td>
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<td>March 2020</td>
<td>TBD</td>
<td>Burns Engineering</td>
<td>&quot;CTTC: Codes and Standards Seminar&quot; - Larry Spiehler and Associates -</td>
<td>FREE Seminar for Chapter Members</td>
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<td>Thursday, April 09, 2020</td>
<td>TBD</td>
<td>TBD</td>
<td>CHAOS (Cooling and Heating for Architecturally Optimized Systems) - Dr. Forrest Meggers, Princeton University</td>
<td>Government Activities (GA)</td>
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<td>Friday, April 10, 2020</td>
<td>TBD</td>
<td>Philly Wholesale Produce Market</td>
<td>Food Warehouse - Refrigeration Tour</td>
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<td>Tuesday, April 21, 2020</td>
<td>TBD</td>
<td>Philadelphia Center for Architecture</td>
<td>Getting from AEDG’s to Zero-Energy Buildings - Dr. Gaurav Isaac, ASHRAE Distinguished Lecturer (DL)</td>
<td>AIA Joint Meeting</td>
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<td>Thursday, May 14, 2020</td>
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<td>TBD</td>
<td>TBD</td>
<td>Government Activities (GA) -Past-Presidents Night</td>
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<td>Monday, June 01, 2020</td>
<td>TBD</td>
<td>DuPont CC (Nemours Course and Brantwyn Mansion)</td>
<td>Annual Golf Outing - Hosted by the National Capital Chapter -</td>
<td>Social Event</td>
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<td>TBD</td>
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<td>Citizens Bank Park</td>
<td>Baseball - Phillies vs. TBD</td>
<td>Membership Training</td>
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<td>Thursday, August 13 thru Saturday, August 15, 2020</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Region 3: Chapters Regional Conference (CRC) - Hosted by the National Capital Chapter - Membership Training</td>
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From the Refrigeration Committee and the Chapter Technology Transfer Committee (CTTC)

For any questions, contact: Brian N. Stehman  Hasanaat Prophete
CTTC Chair Refrigeration Committee Chair
c021cttc@ashrae.net c021ref@ashrae.net

System Provides Cooling with no Electricity
Passive device relies on a layer of material that blocks incoming sunlight but lets heat radiate away.
From MIT News, October 30, 2019

Imagine a device that can sit outside under blazing sunlight on a clear day, and without using any power cool things down by more than 23 degrees Fahrenheit (13 degrees Celsius). It almost sounds like magic, but a new system designed by researchers at MIT and in Chile can do exactly that.

The device, which has no moving parts, works by a process called radiative cooling. It blocks incoming sunlight to keep from heating it up, and at the same time efficiently radiates infrared light — which is essentially heat — that passes straight out into the sky and into space, cooling the device significantly below the ambient air temperature.

The key to the functioning of this simple, inexpensive system is a special kind of insulation, made of a polyethylene foam called an aerogel. This lightweight material, which looks and feels a bit like marshmallow, blocks and reflects the visible rays of sunlight so that they don’t penetrate through it. But it’s highly transparent to the infrared rays that carry heat, allowing them to pass freely outward.

The new system is described today in a paper in the journal Science Advances, by MIT graduate student Arny Leroy, professor of mechanical engineering and department head Evelyn Wang, and seven others at MIT and at the Pontifical Catholic University of Chile.

Such a system could be used, for example, as a way to keep vegetables and fruit from spoiling, potentially doubling the time the produce could remain fresh, in remote places where reliable power for refrigeration is not available, Leroy explains.

Read the full article here: http://news.mit.edu/2019/system-provides-cooling-no-electricity-1030

We need your attendance!

If we are below our guaranteed level for attendees at our meetings, our treasury could be negatively effected. Our programs are designed around the membership’s input and we all need to support these meetings to maintain a strong/informed association. We hope to see you at our next meeting. Please come out and support our Chapter!

The program calendar on page 7 is tentative and subject to change. Please refer to ASHRAE Philadelphia website for up to date information. Advance registration and pre-payment are required before the meetings.
October Event Photos

Future City Philadelphia Engineering Fair
www.futurecityphilly.org

ASHRAE Philadelphia Chapter
Basic HVAC Design Course

October Lunchtime Session
at World Café Live
LV ASHRAE SPORTING CLAY OUTING

Held at
Lehigh Valley Sporting Clays (LVSC)
Friday, Dec 6th, 2019

**FOURSOME PRICES - Lunch Included**

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<td>100 Targets</td>
<td>$560</td>
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This includes lunch, targets, firearm rental**, shells** and golf cart.

**INDIVIDUAL PRICES - Lunch Included**

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<tr>
<td>100 Targets w/ rental</td>
<td>$140</td>
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This includes lunch, targets, firearm rental**, shells** and golf cart.

**Sponsorships Available**

Lunch Sponsor - $125
Stand Sponsor - $125
PPE Sponsor***EXCLUSIVE! - $150

**Firearm rental (All rentals in one squad of 4 will share single firearm) and will include ammunition (Rented firearms must purchase and use ammunition from LVSC and is provided in cost)

Our guests may provide their own firearms and ammunition. “Bring your own firearm” is subject to LVSC policy.

Please call or reference the LVSC website with any questions about personal firearms.

Per LVSC policy, one experienced shooter must be in each squad. If you do not have this, you will be asked to book lessons with their instructor ahead of the event.

Eye and Hearing protection must be worn per LVSC policy. See LVSC website for details (www.lvsclays.com)

A complete listing of course rules can be found at www.lvsclays.com

Due to the nature of this special event, no refunds will be offered for cancellations or changes to reservation.

Please complete forms and send with payment to Frank Paretti O’Neal Inc. - Allentown 7540 Windsor Dr.
Allentown, PA 18195

**All Rented firearms will be 12ga shotgun with shells unless specifically requested**
New Philadelphia Chapter Members

Members
Patrick Cunningham
Chris Koger
Eric Taggart

Associate Members
Sean Banul
Aiden Drusedum
Todd Gordon
Imad Haq
Enerel Munkhzul
Joseph Rennie
Kevin Sousa
Paul Spencer

Student Members
Stefanie Beard
Alexander Carlson
Carlie Christy
Michael Thomas Croke
John Dierkes
Michael Fazio
Aaron Goldberg
Kason Leung
Katie Martin
William Messick

What are the benefits of paying Philadelphia Chapter dues?

- Session Discount, valued up to $25 off
- Free Tech Seminars
- Free Code Seminar
- Members Resume posted on our webpage
- And much more . . .

Note that Philadelphia Chapter Membership Dues are $35/year.
To receive discounts and FREE seminars, please remit you Chapter dues when renewing online or applying for a new membership. Feel free to contact Hope Silverman at hope@mmco1.com, who can accept payment and update the Society.

Membership Advancement

If you are currently an ASHRAE Associate Member, becoming a full Member is easier than you think! The following count toward the required 12 points to advance to full membership status. You must update your ASHRAE online biography and send an email to membership@ashrae.org to advance.

- Non-accredited degree = 4 points
- Accredited degree = 6 points
- PE = 4 points
- Industry experience = 1 point/year

Congratulations!
100 Years of Progress Through Partnership
The Sheet Metal Contractors Association of Philadelphia and Vicinity