ASHRAE **

THE GUIDE POST DECEMBER 2020 | ISSUE 4

San Jose

San Jose ASHRAE Members and Friends,

We've almost made it through 2020! What an accomplishment. As we close out the year, I hope you all are able to spend time, either virtually or in person, with your family to celebrate the holiday season. Although the weather is frightful, this season always fills me with a joy I'd like to carry into the new year.

As you've probably guessed, our annual joint technical meeting with the Golden Gate chapter will be held virtually this year. Dr. Kishor Khankari, Ph.D., will be presenting on the Analysis of Airflow Patterns and Flow Path of Airborne Contaminants. In January, we'll be switching gears away from COVID related design and technology to hear from another Distinguished Lecturer. Pam Duffy will be revisiting our chapter to talk about being productive from anywhere and provide practical tips to get stuff done. This will be very helpful for those of us who will be working at least partly from home for the foreseeable future! You can find info on all upcoming meetings on our chapter website.

Region X will be hosting an Ugly Sweater Bingo party on December 15th with all proceeds being donated to our RP campaign. Bingo cards are available for purchase and will be sent out a in advance of the event. There are also sponsorship opportunities available. It should be a fun event and a good way to both network with others in our region and donate to ASHRAE! The RP campaign helps to provide many programs from scholarships to funding COVID research. Check out the event on our website, or at RegionX.org.

Our YEA committee is hosting a virtual Salsa and Margarita making event with Tacolicious on January 28th. The event will only cost \$15 per person thanks to a generous donation from Trane. As always, anyone is welcome to attend and it will be a fun way to spend a Thursday evening!

If you have ideas or requests for future meetings, both technical or social, please let us know what you'd like to see! This will be an unprecedented year and we are always looking for feedback as to how we can best serve our members. We are also always looking for sponsors and would love to work with you to create an event you'd like to be a part of.

Stay healthy and safe,

Oly

Elise Kiland 2020-21 San Jose Chapter President





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Thank You







DECEMBER JOINT TECHNICAL WEBINAR

ANALYSIS OF AIRFLOW PATTERNS AND FLOW PATH OF AIRBORNE CONTAMINANTS

SPEAKER: DR. KISHOR KHANKARI, PH.D.

We welcome you to join us for the December joint technical webinar with the Golden Gate chapter and Redwood Empire section. Network with members in our region and learn how we can use CFD to analyze airflow and how contaminants spread throughout a building.

Date: December 17, 2020

Time: 12:00 PM Location: Virtual

Log in information will be provided prior to the meeting

Cost: \$20 Member/\$25 Non-Member

To be donated to ASHRAE RP

RSVP: https://ggashrae.org/



Speaker: DR. KISHOR KHANKARI, PH.D. PRESIDENT, ANSIGHT, LLC

Dr. Kishor Khankari, Ph.D. provides engineering solutions and insights through Physics based simulations and CFD analysis. Kishor has several years of experience in providing optimized HVAC solutions to a wide variety of applications involving external wind engineering, plume dispersion, smoke exhaust, displacement ventilation, natural ventilation, radiant heating and cooling, and indoor air quality and thermal comfort optimization for office spaces, patient rooms, operating rooms, cleanrooms, justice facilities,



data centers, and warehouses. Dr. Khankari has developed a patented technology of a wind band design of exhaust fan assembly systems. He has developed several easy-to-use analytical software tools which are regularly used by design engineers in a variety companies including those in HVAC industry, critical facilities, and automotive industries.

A noted expert in his field, he has a Ph.D. from the University of Minnesota and has been regularly published in several technical journals and trade magazines. Dr. Khankari has delivered close to 100 DL presentations worldwide on topics related to design and optimization of HVAC systems and made several presentations at various technical conferences and professional meetings.

Dr. Kishor Khankari is a Fellow member of ASHRAE. He is a recipient of ASHRAE Exceptional and Distinguished Service Awards. He is the past President of Detroit ASHRAE Chapter, past Chair of ASHRAE Technical Committee TC9.11 Clean Spaces, and past Chair of Research Administration Committee (RAC). He is the member of ASHRAE Environmental Health Committee and currently leading a new Multi Task Group (MTG) on Air Change Rates.

Presentation Summary

Recent COVID-10 pandemic necessitates an increased need for understanding the room airflow patterns and its role in containing and spreading of airborne contaminants. With air being the primary carrier of heat, moisture, and airborne contaminants, the flow path of supply air plays an important role in determining the flow path of airborne contaminants in indoor facilities. This course covers the basics of airflow and particle dynamics and demonstrates how the supply air flow paths, induced air flow paths, and exhaust grille placement can work collaboratively to establish protective and effective contaminant control in a typical patient room. Several studies indicate that the design of a ventilation system and the resulting airflow patterns play a more important role in controlling the flow path of airborne contaminants than just the supply airflow rate or air changes per hour (ACH) alone. This case study evaluates the impact of supply and return locations on the airflow patterns and temperature distribution along with the resulting thermal comfort of occupants. Probable flow path of airborne particulates in a typical patient room using Computational Fluid Dynamics (CFD) simulations are demonstrated. Insightful airflow animations will show the movement of airborne particles for various applications displaying the importance of HVAC design including the locations of supply and exhaust grilles. The course provides valuable insights to HVAC design engineers, facility managers, infection prevention personnel, and building owners regarding the role of airflow patterns and resulting flow path of airborne contaminants.







JANUARY TECHNICAL WEBINAR

PRODUCTIVE FROM ANYWHERE: PRACTICAL TIPS TO GET STUFF DONE

SPEAKER: PAM DUFFY, PE

We welcome you to join us for the San Jose ASHRAE Chapter's January technical webinar. Check in with our chapter and learn about how you can get stuff done, wherever you are working, from an ASHRAE Distinguished Lecturer!

Date: January 13, 2021 Location: Online Only

Log in information will be provided prior to the meeting

Time:

Chapter Announcements 6:00 PM Presentation 6:15 PM

Cost:

Registration \$ 10

RSVP: https://sjashrae.org



Speaker:

PAM DUFFY, PE

OWNER, SPARK ONE SOLUTIONS, LLC

Pam Duffy, P.E. is the owner of Spark One Solutions based in Dallas, TX. She has a mechanical engineering degree from the University of Central Florida. Pam has over 10 years of experience in the HVAC industry with roles in mechanical design, application support, technical training, product development, and product



marketing. In 2017, Pam was named a Distinguished Lecturer for ASHRAE and travels the globe for speaking events. She is a Life Member of the Society of Women Engineers (SWE) and in was selected as one of Consulting-Specifying Engineer's 40 under 40. Outside of work Pam enjoys working with her Australian Shepherd, Dixie, on training, tricks, and dog sports.

Presentation Summary

In the Spring of 2020, the world came to a screeching halt when the rapid spread of an infectious disease forced millions of people to shelter in place. Adapting to a new way of work – without the amenities of an office, in-person interactions, or business travel – proved to be a challenge for nearly everyone. In this presentation, attendees will learn about easy-to-implement tips and tricks to boost productivity. Plus, learn best practices for staying focused in any kind of workplace: in the office, working from home, or on the road.

ASHRAE YEA & Trane Presents



VIRTUAL SALSA & MARGARITA MAKING EVENT!

WHEN: THURSDAY, JAN. 28 AT 5:30PM WITH TACOLICIOUS ON ZOOM!
\$15 PER PERSON



Tacolicous is a local restaurant located in Palo Alto & San Francisco.

They will lead us through how to make a few different salsas and margaritas that they serve at their restaurant.

You will be provided with a grocery list a few weeks before the event so you can have all the ingredients on hand.

THANK YOU TRANE FOR SPONSORING!





Membership Promotion Co Chairs

San Jose would like to welcome the following members:

Associate:



"We look forward to seeing you at the next meeting!"

Please consider membership advancement! Why should a member advance from Associate to Full Member status?

- **Local Chapter Recognition**
- Service Society, Chapter, or Regional Committees
- Qualify for ASHRAE Fellow & other Society awards

To become a Full Member, complete the three steps below.

Have all (3) qualifications below? Apply for advancement!

Engineering Degree (4+ years) PE License Work Experience (3+ years)

1 - Check if you qualify.

See the next page on **Attaining Full** Membership

2 - Update your online ASHRAE Profile.

Go to www.ASHRAE.org. Select "My ASHRAE" Select "Review/Update Profile"

3 - Notify / email ASHRAE.

Email membership@ashrae.org Let them know you have an updated bio and wish to be considered for a grade advancement.

ATTAINING FULL MEMBERSHIP

Twelve years may not be as long as you think!

How many years have you been working in this industry? _____(A)

How many years did you attend a technical school, college, or university? ______ (B)

Is (B) at least 2 years? Then enter that number here: _____(C)

Did you graduate from an accredited college or university? If yes, multiply (C) by 0.5 and enter here: (D)

Have you attained professional registration?

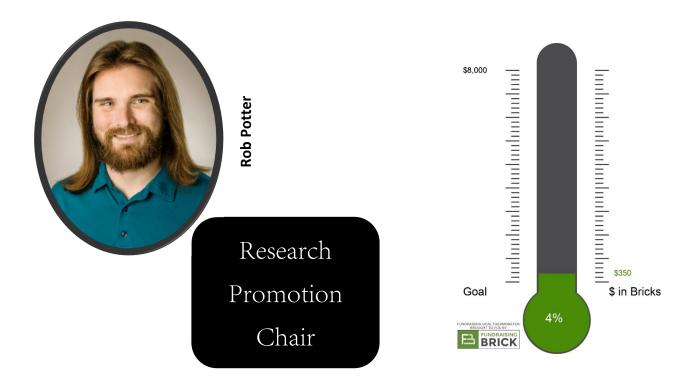
If yes, enter 3 here:

_____(E)

Now...add (A) + (C) + (D) + (E) = _____(F)

Is (F) at least 12? Then you qualify for full membership!

Update your member bio online today www.ashrae.org



What is Research Promotion?

The RP Campaign is an annual fundraising campaign benefiting the funding of numerous ASHRAE Programs. These programs include:

ASHRAE Research ASHRAE Scholarships for undergraduate students ASHRAE Learning Institute (ALI) development of new courses & materials Graduate Research Projects (Grants-in-Aid) Young Engineers in ASHRAE (YEA) Leadership Training Permanently endowed support to all of the above programs

The RP Campaign is overseen by the RP Committee, a standing ASHRAE Committee. The Committee is made up of 14 Regional Vice Chairs (RVC), 1 Consultant (past RVC), 3 Vice Chairs (past Consultant), and Chair (past Vice Chair). Staff support includes a 3-member team based at ASHRAE Headquarters.

The RP Campaign raises over \$2.2 million a year from over 6,000 donors. These donors are made up of ASHRAE Members, industry associations, and industry organizations.



Rushang Shah

Chapter Technology
Transfer Committee
(CTTC) Chair

What is CTTC?

The Chapter Technology Transfer
Committee (CTTC) provides efficient and effective transfer of current and relevant information throughout the HVAC&R industry to and from the Chapters. CTTC develops and maintains high quality and readily available tools to enable Chapters to offer information and attractive industry-related information and programs to all segments within the HVAC&R industry

Upcoming Events



Advance your career and open new doors by earning an ASHRAE Certification

https://www.ashrae.org/professional-development/ashrae-certification





GAC Chair

What is GAC?

The Government Affairs Committee (GAC) is responsible for organizing ASHRAE members to educate local, state, provincial, and national government bodies and officials in areas of interest to ASHRAE members, and to promote effective cooperation between ASHRAE members and government.

ASHRAE Government Affairs

Stay informed on the latest news. Subscribe to ASHRAE's Government Affairs Update!

This bi-weekly publication features information on government affairs-related activities of interest to ASHRAE members and others interested in the built environment.

Subscribe through the link below:

https://www.ashrae.org/government-affairs/government-affairs-updates

Announcements



ASHRAE Announcements:

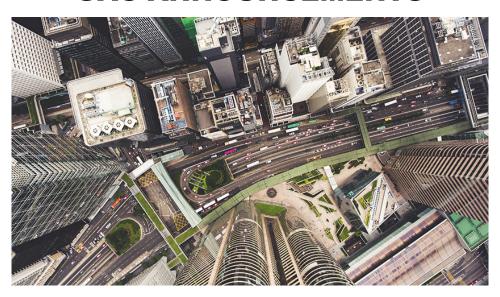
- California Assembly Bill Including ASHRAE Guidance to be Signed Into Law
- California Department of Public Health Website Includes ASHRAE Guidance



GAC Announcements:

- House Passes Broad Energy Package
- Push for Legislation to Decarbonize the Power Sector

GAC ANNOUNCEMENTS



<u>California Assembly Bill Including ASHRAE Guidance to be Signed</u> Into Law

ASHRAE Government Affairs Update

California Assembly Bill 841, which has passed both the House and Senate, has been presented to the Governor for signature. The bill, known as the School and State Building Energy Efficiency Stimulus Program, includes requirements for previously unoccupied school buildings to make them safer for reopening. The legislation includes ASHRAE's Building Readiness Guidance and Guidance for Reopening Schools and Universities. In July, ASHRAE President Chuck Gulledge had written to bill sponsor Assembly Member Ting in support of the inclusion of ASHRAE's guidance in the legislation. The full text of the enrolled bill can be found here.

<u>California Department of Public Health Website Includes ASHRAE</u> <u>Guidance</u>

ASHRAE Government Affairs Update

The California Department of Public Health, Indoor Air Quality Program has added new information on Airborne Disease to its website, including a paper titled "The Role of Building Ventilation and Filtration in Reducing Risk of Airborne Viral Transmission in Schools, Illustrated with SARS-CoV-2." The paper has 18 total references to ASHRAE, including the Guidance for Reopening Schools and Universities and ASHRAE Standard 52.2. The full paper can be found here.

House Passes Broad Energy Package

ASHRAE Government Affairs Update

On September 24, the House of Representatives passed a \$135 billion legislative package that covers a wide range of energy policy from energy efficiency, renewable energy, electric grid and cybersecurity, transportation, and environmental justice. The bill also includes a section that would require a phase-down of hydrofluorocarbon. The bill passed by a 220 to 185 vote, with seven Republicans voting for it and 18 Democrats voting against the measure. The White House announced that it would veto the measure if it reached President Trump's desk. A section-by-section of the bill can be found here.

Push for Legislation to Decarbonize the Power Sector

ASHRAE Government Affairs Update

Congressmen David McKinley (R-WV) and Kurt Schrader (D-OR) have drafted bipartisan legislation to decarbonize the power sector. A discussion draft has been circulated that aims to create a clean energy standard for the electric power sector that would reduce carbon emissions by 80% by 2050, support carbon capture and storage, and provide tax credits for advancing renewables. A "Section-by-Section" of the discussion draft legislation can be found here. The two Congressmen are members of the House Energy and Commerce Committee.



Announcements



Interested in Outreach? ASHRAE can provided tools to help!

- ASHRAE and HVAC & R related presentations. Ideal for colleges, universities, & high schools
- Hands-on STEM activities. Ideal for K-8 classes.



YEA Chair

Cherie Nixon

What is YEA?

The Young Engineers in ASHRAE (YEA) committee is responsible for welcoming young engineers into ASHRAE and create a community for these members to thrive in. Our goal is to attract young members into ASHRAE and develop young leaders.



Join the ASHRAE YEA group on Facebook



Join the ASHRAE YEA group on LinkedIn

Virtual YEA Events Coming Soon!

If there is anything you want to see, let us know!

ANNOUNCEMENTS

Are you interested in any old code books? Contact Saul Villanueva at saul@macsj.com

Complete sets of CBC, CFC, CEnergyC, CGreenC, CMC and CPC:

- 2001
- 2007
- 2010
- 2013
- Plus copies from the 70's, 80's, and 90's





Looking for an Internship or Full-Time Position?

- Post your resumes on https://jobs.ashrae.org/
- Look for the latest job listings!
- Available for Students and Professionals!

Looking to hire?

- Post your job openings on https://jobs.ashrae.org/
- Find qualified individuals looking to hire!