



## San Jose Chapter

San Jose ASHRAE Members and Friends,

The weather has finally cooled and it's dark by the time I'm done working for the day – it must be November. As we head into the holiday season, I'm focused on how much I have to be thankful for. My family is safe, healthy, and close by and our chapter has adapted well to a virtual year.

We're still in the middle of a global pandemic with a second wave of cases spiking around our country. I'm sure many technologies will emerge due to our current climate and I'm looking forward to learning about Using Needlepoint Bipolar Ionization to Create Healthy Indoor Environments from Distinguished Lecturer David Schurk at our November Technical Webinar and Student Night. Current students can email [sanjoseashrae@gmail.com](mailto:sanjoseashrae@gmail.com) for free registration.

Looking forward to December, we'll be having a joint virtual meeting with the Golden Gate chapter and Redwood Empire section. 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 designing around airborne pathogens to hear from another Distinguished Lecturer. Pam Duffy will be visiting our chapter again 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.

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.

I'm sad to announce that this year's Winter Conference will officially be held virtually February 9-11<sup>th</sup>. While I was looking forward to seeing our ASHRAE global family in Chicago, I'm excited that the technical topics and meetings will be more accessible to our membership. The AHR Expo has been postponed to 2022 in Las Vegas – hopefully I'll see you all there!

Stay healthy and safe,

Elise Kiland  
2020-21 San Jose Chapter President



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# Thank You



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## NOVEMBER TECHNICAL WEBINAR

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### USING NEEDLEPOINT BIPOLAR IONIZATION TO CREATE HEALTHY INDOOR ENVIRONMENTS

**SPEAKER: DAVID SCHURK, DES, CEM, LEED AP, CDSM, CWEP, SFP,  
CIAQM, HCCC, ASHRAE DL**

We welcome you to join us for the November technical webinar. Check in with our chapter and learn about how needlepoint bipolar ionization can create healthy indoor environments and safeguard the wellbeing of building occupants.

**Date:** November 11, 2020

**Time:**

Chapter Announcements	6:00 PM
Presentation	6:15 PM

**Location:** Virtual

Log in information will be provided prior to the meeting

**Cost:** \$10

**RSVP:** <https://sjashrae.org>

## Speaker:

### DAVID SCHURK

DES, CEM, LEED AP, CDSM, CWEP, SFP, CIAQM, HCCC, ASHRAE DL  
**DIRECTOR OF BUSINESS DEVELOPMENT, GLOBAL PLASMA SOLUTIONS**



David Schurk DES., CEM., LEED-AP., CDSM., CWEP., SFP., CIAQM., HCCC., ASHRAE Distinguished Lecturer, Director of Business Development for Global Plasma Solutions in Charlotte, NC. He is a Licensed Designer of Engineering Systems and has over 35-years of experience in the design and analysis of heating, ventilating, and air-conditioning systems for a variety of market sectors, with a special focus on healthcare facilities. David has authored various technical articles for a number of industry trade journals and magazines and is a featured presenter at regional and national industry events. He can be reached at David.schurk@globalplasmasolutions.com or 920-530-7677

## Presentation Summary

The recent worldwide healthcare pandemic has pushed the airborne transmission of the SARS-CoV-2 virus (COVID-19 disease) into the spotlight. Buildings and structures of all types have remained virtually empty while the public quarantines at home or maintains safe social distancing. As the country attempts to reengage economically many have anxiety about repopulating buildings and being exposed to others indoors. This has left HVAC professionals wondering how they can quickly adapt to ensure society that everything possible has been done to reduce the spread of infection and safeguard the health and wellbeing of building occupants after they walk through the front door.

This presentation will provide the most recent information on Needlepoint Bipolar Air Ionization (NPBI), which has recently undertaken 3rd party independent laboratory testing with results confirming it can inactivate 99.4% of SARS-CoV-2 viral particles within 30-minutes. This is a “game-changer” for those who have been so diligently working to create safer and healthier indoor environments considering the current pandemic.

Topics addressed will include:

- The latest ASHRAE guidelines and recommendations.
- How NPBI technology can help make traditional mechanical filtration and ventilation more effective.
- How NPBI can help the HVAC system contribute to “indoor social distancing”
- Ozone generation considerations, concerns, and regulations.
- How tested-and-proven NPBI technology works to inactivate viruses, kill pathogens, agglomerate particulate and save energy, all resulting in superior indoor air quality, contributing to the health and safety of occupants within building of all types.



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## ***DECEMBER JOINT TECHNICAL WEBINAR***

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### **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 of 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.



Vanessa Lasseson

## Membership Promotion Co Chairs



Benito Ferreyra

San Jose would like to welcome the following members:

### Associate:

David E Schwartz, PhD  
Sam Noble  
Khush Kapadia  
Scott Adam Ficken

"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](http://www.ASHRAE.org).  
Select "My ASHRAE"  
Select "Review/Update  
Profile"

### 3 - Notify / email ASHRAE.

Email [membership@ashrae.org](mailto: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!

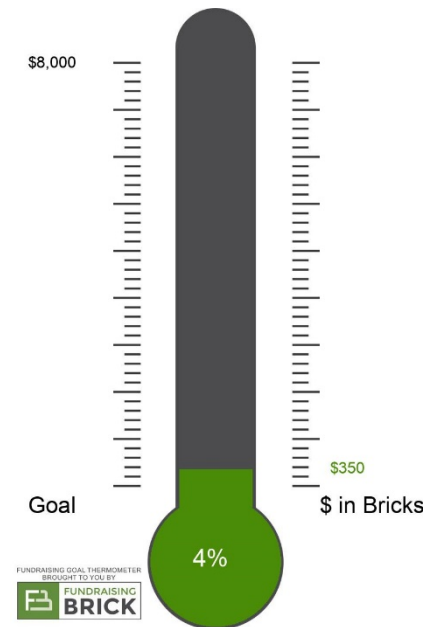
Update your member bio online today [www.ashrae.org](http://www.ashrae.org)





Rob Potter

Research  
Promotion  
Chair



### 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>



Vanessa Lassenon

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



### **California Assembly Bill Including ASHRAE Guidance to be Signed 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](#).

### **California Department of Public Health Website Includes ASHRAE Guidance**

#### *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.



Sargon Ishaya

Student  
Activities Co  
Chairs



Chalini Ekanayake

## Announcements



Interested in Outreach? ASHRAE can provide tools to help!

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





Cherie Nixon

## YEA Chair

### 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!





## 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!

