Dear ASHRAE Members,

Our March Meeting was hugely successful, thank you to everyone that attended this meeting. A special thank you to Jim McKillip, with Desert Aire, who gave a wonderful presentation on “Understanding HVAC & Plant Dynamics in Grow Room Applications”. This was our second Student Night of the year, and we had over 20 students attend. We are extremely excited to see engaged students and hope they get involved in ASHRAE.

On March 28th, we held our Annual ASHRAE Bocce Ball event. As always this was a fantastic event with great attendance. I would like to personally thank our Sponsors, without you this event would not be possible.

Please join us on April 10th, for our April Technical Meeting and Government Affairs Committee Night. James Poole, a Past President of the San Jose Chapter, will be presenting on an article he published in the ASHRAE Journal “A Balanced System Approach to the Water – Energy Nexus”.

Please support Women in Construction on April 27th, by attending a SheBuilds event in East Palo Alto. The details for this event can be found on our website https://sanjoseashrae.wildapricot.org/.

See you all April 10th,

Bill Schoening
APRIL TECHNICAL MEETING
AND GOVERNMENT AFFAIRS
COMMITTEE NIGHT

A BALANCED SYSTEM APPROACH TO THE
WATER – ENERGY NEXUS

SPEAKER: JAMES POOLE, TRANE

We welcome you to join us for our technical meeting at the Hotel Biltmore in Santa Clara for an evening of sharing knowledge, fun, and networking.

Date: April 10th, 2019
Location: Hotel Biltmore
2151 Laurelwood Rd, Santa Clara, CA 95054

Time:
Check-in and Social: 5:30PM
Dinner: 6:30PM - 8:15PM
YEA Mixer: 8:30PM – Last Call

Cost:
Early bird Registration fee: $ 50/- (by Midnight Apr 3rd)
Late Reg/Walk-ins/Non-Members: $ 60

RSVP: https://sjashrae.org
Speakers:

JAMES POOLE
TRANE

James Poole has a BSME degree and CA PE with over 35 years working for Trane. He has assisted customers in designing and installing very high efficiency systems with controls to automate and optimize operations. As an active member of the Silicon Valley ASHRAE Chapter, he has served on many committees, Board of Governor terms, and a past chapter President.

Presentation Summary

Over the years the drive for improved system efficiency has led the industry to exceptional electrical efficiencies by using high quality potable water supplies in evaporative heat rejection systems. On a parallel path, many areas in the USA and the globe are experiencing diminished access to fresh water supplies. The cost of water and associated sewage costs have been increasing exponentially for most medium to large cities.

These two issues motivated James to research water usage at both the site and source of energy production and discover a surprising relationship in water usage terms and their meanings. This presentation will describe the relationship and show the simple derivation of a useful factor and calculation process to compare total environmental water consumption between air cooled and water cooled technologies. Ultimately, our industry should begin to evaluate the total electrical and water consumption together of projects and make an informed and best decision possible of system choices for buildings.

Finally, the presentation will end with one alternative that designers can choose today that conserves quality freshwater, offer owners the low utility costs of a premium w.c. system, generate low T-24 source kBtu/sqft., and not sacrifice total LEED points.
THANK YOU TO EVERYONE THAT CAME OUT TO BOCCE BALL 2019! IT WAS A HUGE SUCCESS!
THANK YOU TO OUR BOCCE BALL SPONSORS!
THANK YOU TO OUR BOCCE BALL RAFFLE SPONSORS!
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.

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.

San Jose would like to welcome the following members:

Student
- Michaela Bostic

“We look forward to seeing you at the next meeting!”
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.
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
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

Public Comment Opportunities:

- April Public Review Opportunities

GAC Announcements:

- San Jose – Energy and Water Building Performance Ordinance
- ASHRAE Publishes 2018 Version of Standard 90.2
Public Reviews, April 2019

Constructive comments are invited for the following public review drafts, which can be accessed on ASHRAE’s website.

- **Standard 205P**  
  **Deadline – April 09, 2019**  
  Representation of Performance Simulation Data for HVAC&R and Other Facility Equipment (1stPRD)

- **Standard 41.8-2016 RA**  
  **Deadline – April 15, 2019**  
  Methods for Liquid Flow Measurement

- **Guideline 29-2009R**  
  **Deadline – April 23, 2019**  
  Risk Management of Public Health and Safety in Buildings (1stPRD)

- **Addendum o, p, z & aa ANSI/ASHRAE/ICC/USGBC/IES 189.1-2017**  
  **Deadline – April 22, 2019**  
  Design of High Performance Green Buildings Except Low-Rise Residential Buildings (1stPRD)

- **Guideline 27P**  
  **Deadline – April 22, 2019**  
  Measurement Procedures for Gaseous Contaminants in Commercial Buildings (5th ISC PRD)

- **Addendum f, g & h to Energy Standard 90.4-2016**  
  **Deadline – April 07, 2019**  
  Data Centers (1st PRD)

- **Addendum q, r, s, t, u, v, w, x & y to ANSI/ASHRAE/ICC/USGBC/IES 189.1-2017**  
  **Deadline – April 07, 2019**  
  Design of High Performance Green Buildings Except Low-Rise Residential Buildings (1st PRD)

- **Addendum x & y Standard 34-2016**  
  **Deadline – April 14, 2019**  
  Designation and Safety Classification of Refrigerants (1st PR)
City of San Jose – Energy and Water Building Performance Ordinance

READ MORE

The Energy and Water Building Performance Ordinance builds on existing state law (CA Assembly Bill 802). It requires commercial and multi-family buildings over 20,000 square feet to track their yearly whole building energy and water usage data with the EPA platform ENERGYSTAR Portfolio Manager® and share this data with the City. The City will publish a subset of summary data to support market transparency and recognize high-performing buildings across San José.

ASHRAE Publishes 2018 Version of Standard 90.2

2018 – STANDARD 90.2

ASHRAE has published the revised ANSI/ASHRAE/IES Standard 90.2-2018, Energy-Efficient Design of Low Rise Residential Buildings. The 2018 revision of Standard 90.2 outlines cost-effective residential building energy performance measures that are at least 50% more efficient than those defined by the 2006 International Energy Construction Code (IECC). said Theresa Weston, Ph.D., chair of the Standard 90.2 committee. "This update to the standard offers better alignment between this standard’s requirements and marketplace product availability as well as some revisions to improve the document’s clarity and internal consistency."


Risk management of extraordinary incidents is a critical step in the process of establishing project goals and programs in the design and operation of new facilities or the renovation of existing facilities. This process will assist in determining what facility protection measures are appropriate to mitigate potential threats to meet the decision maker’s operational needs at an acceptable cost.

1. PURPOSE
The purpose of this guideline is to provide guidance for the practical evaluation, design, and implementation of measures to reduce multiple risks in new and existing buildings.

2. SCOPE
This guideline contains qualitative and quantitative methods for management of the risk of extraordinary incidents in buildings. Specific subject areas of concern include air, food, and water.
The extraordinary events addressed in this guideline include fire, seismic events, chemical and biological releases, blast, and other extraordinary hazards.
The guideline will address extraordinary incidents from a multi-hazard perspective and will cover both intentional and accidental occurrences. The guideline addresses aspects of building performance that affect occupant health and safety, including egress; chemical, biological, and radiological (CBR) protection; fire protection; smoke removal or purging; filtration; air quality; entrance paths for contaminants; and building envelopes.
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.
San Jose ASHRAE Scholarships
Various Awards Available to Qualified Applicants
For Academic Year 2019 – 2020

Deadline for Receipt of Application: May 30, 2019
Interviews: To Be Determined
Announcement of Selection: June, 2019

Description of the Award:
The purpose of the scholarship is to promote student interest in the Heating, Ventilating, Air Conditioning and Refrigeration industry.

Eligibility Requirements:
1. The applicant must be a full time student (12 Units or more) and enrolled in an accredited Mechanical Engineering, HVAC &R or other major related to the goals of ASHRAE during the 2019-2020 Academic Year.
2. The applicant can be an undergraduate or graduate student at a junior college or university
3. The applicant must be a Student Member of ASHRAE. The student membership application may be submitted along with the scholarship application.

Application Requirements:
1. Application form
2. Essay – The essay should be one to two pages outlining the applicants educational & career goals, and reasons for interest in the HVAC&R industry. Also describe any relevant student projects, work related projects, or coursework that have sparked an interest in HVAC&R. Any previous involvement with ASHRAE should be described. The applicant should also include any additional information he/she would like the selection committee to know about them.
3. Current Resume
4. Current Transcript. Transcripts must have description/name of class not just class numbers.

Please visit our chapter at www.sanjoseashrae.org or the link from Society’s home page
Selection Process:

All applications will be reviewed by the scholarship committee & presented to the San Jose ASHRAE Board of Governors. The following criteria will be evaluated:

1. Relevance of the student’s background to the HVAC&R industry based on the essay & coursework.
2. Subject matter and grades in courses relating to ASHRAE interests and goals will be strongly considered.
3. Financial need for the scholarship will be considered.
4. The committee recognizes that many students have not formulated career objectives or geographical preferences due to lack of employment commitments and experience. However, additional consideration will be given to those applicants whose career interests coincide with that of the Chapter and ASHRAE.
5. The committee may request to interview the applicant via phone or in person.

Email your application or any questions to:

Sargon Ishaya
Pragmatic Professional Engineers, Inc.
Phone: 408-982-6246
Email: Sargon@PragmaticPE.com

Please visit our chapter at www.sanjoseashrae.org or the link from Society’s home page
## ASHRAE San Jose Chapter 101 Scholarship Application

Academic Year 2019 - 2020

**Name**
- Last
- First
- Middle

**Name of College/University**

**Student ID #**

**Class Level: 2019-20 school year**

**Major**

**Emphasis**

**ASHRAE Member Number:**

**Present Address:**
- Street
- City
- State
- Zip

**Permanent Address:**
- Street
- City
- State
- Zip

**Phone Number:**

**Email:**

**Birth Date:**

<table>
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<td>College/ University</td>
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Please visit our chapter at [www.sanjoseashrae.org](http://www.sanjoseashrae.org) or the link from Society’s home page
Subjects of Special Study or Research work:

Activities (Exclude organizations that the name or character of which indicates race, creed or national origin of its members):

Date: __________________________ Signature: __________________________

San Jose ASHRAE Chapter Use Only:

- [ ] Application
- [ ] Essay
- [ ] Resume
- [ ] Transcript

Please visit our chapter at www.sanjoseashrae.org or the link from Society’s home page
PACIFIC COAST TRANE TRAINING SCHEDULE
At-a-Glance January through June 2019

Your One-Stop Training Center for Trane Equipment, CITY MULTI® VRF, Trane A/C Clinic, HVAC Fundamentals, Controls and EPA Section 608 Certification

- Schematics and Wiring Diagrams - Part 1 (Owners-Operators and Service Contractors) 01/24/19 (Day)
- Section 608 Clean Air Act Pizza Night (Owners-Operators and Service Contractors) 01/25/19 (Evening)
- Automation and Controls (Owners-Operators and Service Contractors) 01/26/19 (Saturday)
- Trane CenTraVac Chiller Boot Camp (Owners-Operators) 02/13/19 — 02/14/19 (Day)
- Schematics and Wiring Diagrams - Part 2 (Owners-Operators and Service Contractors) 02/22/19 (Day)
- Section 608 Clean Air Act Breakfast (Owners-Operators and Service Contractors) 02/23/19 (Saturday)
- Pneumatics Controls and Maintenance (Owners-Operators and Service Contractors) 03/01/19 (Day)
- Trane Voyager/Precedent Overview (Owners-Operators and Service Contractors) 03/02/19 (Saturday)
- Trane/Mitsubishi CITY MULTI® VRF in Benicia (Installing Contractors) 03/12/19 — 03/14/19 (Day)
- Boiler Operation (Owners-Operators and Service Contractors) 04/19/19 (Day)
- Accelerated A/C Clinic (Owners-Operators and Service Contractors) 04/20/19 (Saturday)
- Trane IntelliPak Unit Boot Camp (Owners-Operators) 04/24/19 — 04/25/19 (Day)
- Trane IntelliPak Unit Workshop (Service Contractors) 04/26/19 (Day)
- Trane/Mitsubishi CITY MULTI® VRF in Benicia (Installing Contractors) 05/07/19 — 05/09/19 (Day)
- Trane Air-Cooled Rotary Chiller Boot Camp (Owners-Operators) 05/15/19 — 05/16/19 (Day)
- Trane Air-Cooled Rotary Chiller (Service Contractors) 05/17/19 (Day)
- HVAC Systems and Service (Owners-Operators and Service Contractors) 05/24/19 (Day)
- Heat Pump Operation (Owners-Operators and Service Contractors) 05/25/19 (Saturday)
- Cooling Towers Ops and Maintenance (Owners-Operators and Service Contractors) 06/28/19 (Day)
- Indoor Air Quality (Owners-Operators and Service Contractors) 06/29/19 (Saturday)
- Section 608 Clean Air Act Breakfast (Owners-Operators and Service Contractors) 06/30/19 (Sunday)

For registration info contact Fawn Davis, Training Director at 408-481-3655
Register online at www.PacificCoastTrane.com/training

Pacific Coast Trane Training Center • 310 Soquel Way • Sunnyvale, CA 94085
Looking for an Internship or Full-Time Position?

- Post your resumes on [https://jobs.ashrae.org/](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/](https://jobs.ashrae.org/)
- Find qualified individuals looking to hire!
Join our SMACNA and Local 104 women for a day of work, fun and giving back to a deserving family in need at the SheBuilds event together with

WHEN: Saturday, April 27th from approximately 8:00 am to 4:00 pm

RAIN OR SHINE!

WHERE: Meet at East Palo Alto (more details to follow after initial registration)

WHO: any SMACNA contractors, their friends or relatives (men or women) who are ready and willing to help! (Must be 18 years of age or older)

WHAT: whether you can paint, hammer nails, pull weeds, or a skilled craftsperson, we can use your help

HOW: Please e-mail Donja Robinson at dробinson@bayareasmacna.org with your firm commitment. We are seeking 40 volunteers for the event to work with our construction captains.

LUNCH AND T-SHIRTS PROVIDED

Many thanks to our SMACNA and partner sponsors!
ANNUAL GOLF TOURNAMENT

JUNE 7, 2019
1:00 PM SHOTGUN START
SPRING VALLEY GOLF COURSE

BOX LUNCH, NY STEAK DINNER, AND DRINKS ON COURSE INCLUDED

FOR MORE INFORMATION
SJASHRAE.ORG or SANJOSEASHRAE@GMAIL.COM
springvalleygolfcourse.com
PLATINUM SPONSOR - $4,000
Includes (2) Foursomes, (4) Tee Signs, Box Lunch, NY Steak Dinner, Highest Level Recognition at Registration, Dinner, Newsletter and Website

GOLD SPONSOR - $3,000
Includes (2) Foursomes, (3) Tee Signs, Box Lunch, NY Steak Dinner, Second Level Recognition at Registration, Dinner, Newsletter and Website

SILVER SPONSOR - $2,000
Includes (1) Foursome, (2) Tee Signs, Box Lunch, NY Steak Dinner, Recognition at Registration, Dinner, Newsletter and Website

FOURSOME - $1,000
Includes Green Fees, (2) Golf Carts, Box Lunches, and NY Steak Dinner

SINGLE PLAYER - $275
Includes Green Fees, Box Lunch and NY Steak Dinner.
GOLF SHIRT SPONSOR - $2,500
Provides golf polo with your logo and SJ ASHRAE logo to each player. Includes (2) Tee Signs

DINNER SPONSOR - $1,500
Provides NY steak dinner to each player. Includes recognition at dinner and (1) Tee Sign

LUNCH SPONSOR - $1,000
Provides box lunch to each player. Includes recognition on each box lunch and (1) Tee Sign

TROPHY SPONSOR - $1,000
Provides trophies for tournament long drive, and closest to the pin winners. Includes (1) Tee Sign

ONE TEE SIGN SPONSOR - $250
Includes (1) Tee Sign

TWO TEE SIGN SPONSOR - $500
Includes (2) Tee Signs
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**Monthly Meetings**

- September Social: $9,500, $9,500
- October - MF Night: $1,500, $1,500
- November Technical - Student Night: $3,000, $3,000
- December - Joint Meeting: $5,600, $5,600
- January - RP Night: $1,500, $1,500
- February - MF Night: $1,500, $1,500
- March Technical: $1,500, $1,500
- April Technical: $1,500, $1,500
- May Refrigeration Tour: $2,500, $2,500
- Past President's Night: $4,500, $4,500

**Technology**

- Website Monthly Fees: $1,978
- Job Postings: $-

**Society**

- Annual Dues: $3,000, $0
- Region X Dues: $3,000, $0
- Chapter Opportunity Fund: $-

**Training**

- YEA Leadership Weekend: $1,000
- YLW 2.0: $-
- RP Centralized Training: $-
- Student Activities Training: $-
- MP Centralized Training: $-
- President Elect Training: $200
- Leadership Academy: $-

**Conferences**

- Winner Conference: $4,000
- Annual Conference: $-
- CRC: $4,100

**Scholarship and Endowments**

- College Scholarships: $2,500
- RP Donation: $2,500

**Comitee Budgets**

- Membership Promotion: $250
- Research Promotion: $200
- Student Activities: $500
- YEA: $-
- CITC: $250
- GCAC: $100
- Historian: $100
- Board of Governors: $500

**Events**

- Golf Tournament: $17,000
- Boice Ball: $17,750

**Misc**

- CA State Tax: $10
- Stamps: $-
- Stationary: $-
- Overdraft: $-
- Name Tags: $-
- Square Reader: $-
- Misc: $100
San Jose ASHRAE February BOG Meeting Agenda

Wednesday, March 13, 2019

4:30 PM

Subject: San Jose Chapter BOG Meeting

Date: March 13, 2019

Time: 4:30pm - 5:30pm

• Roll Call
  • David Hodson
  • Cherie Nixon
  • Richard Lam
  • Vanessa O’Conner
  • Bill Schoening
  • Elise Kiland
  • Cinthya Carrillo

2. President (Bill Schoening)
   o Product Show
     i. No Movement
   o Golf Tournament
     i. No Movement
   o Non-profit Status
     i. No Movement
   o Bocce Ball
     i. TV transportation (David to transport)
     ii. Vanessa & Cinthya: To help w/ check in (before 4:45)
     iii. Raffle ideas
       1. (Vanessa to send Groupon ideas)
       2. Wine tasting at Napa
       3. Groupon
       4. Nice alcohol
   o April Meeting
     i. James Pool (tentatively for April or May?)
   o Refrigeration Tour
     i. In progress
Past President’s Night
   i. John is in progress
   ii. Venue is tentative

PAOE Review (Chapter Operations, if time)
   o BS review tack
   o Vanessa & Gabe to review company ASHRAE lunch and learns
   o Min 6 ASHRAE press releases about ASHRAE – tentative next year

3. President Elect (Richard Lam)
   Past president Night in progress

5. Treasurer (Elise Kiland)
   Refer to budget
   Leadership Weekend
   CRC Information – EK to reach out

4. Secretary (Cinthya Carrillo): No Update

5. Bocce Ball (Cherie Nixon) See Above

8. Research (Rob Potter): No Update

9. GGAC (Vanessa O’Connor) No Update

10. Membership (Gabe/Vanessa):
    o YTD Membership Add and Cancellation
    o Add: 23 members
    o Cancelation: 24 members

11. Student Activities (Sargon Ishaya and Cinthya Carrillo):
    Chapter opportunity Fund – BS to check on status

12. CTTC (David Hodson) See Above

13. YEA (Cherie Nixon) No Update

14. Website (Austin Hochstetler) – No Update

15. Historian (Joe Singer) – No Update