

The Grapevine

March 2019

Redwood Empire Section Newsletter



REASHRAE Meeting March 14th 2019

Join us for our spring meeting at Four Points Sheraton in San Rafael on Thursday March 14th. We will be discussing designs for indoor horticulture facilities with a group of knowledgeable guests, including mechanical designers and a plant physiologist.

Congratulate the 2019 awardees of our REASHRAE scholarships at our next meeting! www.reashrae.org

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NEW REASHRAE MAILING ADDRESS:
P.O. Box 5665 Santa Rosa, CA. 95402

Expert discussion: Indoor horticulture design

The state of indoor horticulture designs have gone through two major epochs and the understanding of growing indoors continues to evolve. The integration of plant science into mechanical design decisions will drive the third epoch, with multinational technology corporations devoting significant resources to develop efficient systems that will change the landscape of horticulture worldwide.

Join us as we bring together experienced mechanical designers and plant scientists to better understand the challenges involved and the current state of the art in overcoming them.

March 14th, 2019

Spring REASHRAE Meeting
Four Points Sheraton
1010 Northgate Drive
San Rafael, CA 94558

Meeting Schedule:

5:30 PM Registration and Social Hour
6:30 PM Dinner and Introductions
7:30 PM Main Program

Cost:

- **\$60 Chapter Member Price**
[\$65 after 5:00 PM on March 11]
- **\$70 Non-Member Price [\$75 after**
5:00 PM on March 11]
No Host Bar

For tickets please go to: [Golden Gate ASHRAE meeting registration page](#)

Rob Battiston graduated from the agriculturally-focused University of Guelph School of Engineering in 2003. He has spent 13 years in the HVAC industry, with the past 5 years focused on investigating solutions for the horticulture industry. As Co-Founder of the InSpire brand, he shares the vision for sustainable horticulture in all parts of the world through novel environmental controls and indoor growing systems.



James Falconer is a licensed Professional Engineer, Chartered Engineer (UK) and the Mechanical Department lead at Affiliated Engineers in San Francisco. James has worked on a diverse range of projects in many different geographic locations. More recently James has applied his technical expertise and innovative design approach to indoor growing applications, from greenhouses for plant research in higher education facilities to a start-up company generating a business model around growing food sources indoors.



Michael Jenkins is the founder and CEO of Rubisco Research and Consulting. He is a gas-exchange physiological ecologist, plant evolutionary biologist, and environmental scientist who earned his PhD at the University of California, Santa Cruz from research he conducted at Los Alamos National Laboratory.

Redwood Empire ASHRAE President's Message



Redwood Section President 2018-19
Adrian Giovenco

Greetings friends!

The winter has been a wet one and new life will soon be springing up everywhere. ASHRAE is a huge supporter of education and we are lucky to have members who support our local community. The 20th Annual Golf Tournament held at Bennett Valley back in October raised over \$7,500 which has allowed us to offer 5 total scholarships to graduating high school seniors who are headed to 2- or 4-year college to study engineering-related programs. Take a look at the recap prepared by our Scholarship Chair, Harrison Nichols. The scholarships our section offers to future engineers each year is one of the most gratifying reasons why I personally serve ASHRAE. Without the younger generation joining the movement, our profession would have no way to serve as a leader in the active transformation of the built environment. We appreciate your support, which keeps this tradition growing.

We had a great December Meeting (see meeting recap on page...) with two speakers! Our March joint meeting with the Golden Gate Chapter at the Four Points Sheraton in San Rafael presents the opportunity to take advantage of the very fact that our local community has a lot to say on topics that are current and groundbreaking. Two of the three speakers are involved in the local Bay Area ASHRAE chapters and the third completed some of his doctorate coursework and research in the Bay Area.

Horticulture and indoor farming is one of the fastest growing industry sectors. To tackle this complex engineering challenge, we have enlisted two mechanical engineers and a Ph.D. plant physiologist. James Falconer from AEI and Rob Battiston from InSpire will both speak about indoor farming from the psychrometric perspective and how best to design dehumidification and air delivery systems that drive plant performance. But first, Dr. Mike Jenkins from Rubisco Consulting and Research will root the discussion in the basics of plant physiology, what the plants actually need to flourish and why HVAC professionals are involved in the first place. Too often we take industry norms and rules of thumb to design around without really investigating why we do what we do. We hope that this discussion will help to change that approach. Between the three speakers there is a wealth of knowledge on this subject. Don't miss this event if you are interested in this burgeoning market segment. At this meeting, we will host the top three scholarship winners and families and present them with their awards.

Based on the exceptional fundraising efforts that our section contributed to this year, we have approved the board to donate \$500 to ASHRAE Research in the name of Redwood Empire ASHRAE. Let's keep up the great work!

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President's Message Cont.

As mentioned in a previous Grapevine last year, our section will begin to receive a portion of the dues that are paid to the local chapter when you renew your ASHRAE Society membership each time and that will allow us to expand our offerings. As such, be sure to select **Golden Gate** as your local ASHRAE chapter when you sign up or renew your membership so that we can benefit from your contribution! We will continue to ask for the \$25 per year donation as a means of support, since the more donations we can bring in, the more scholarships we can offer each spring. But the most important thing we ask is to be sure to pay the dues correctly to the Golden Gate Chapter when you renew your society membership so that we can benefit from the dues that our members pay.

The board would like to thank all the members for their contributions over the years and welcome all the new faces to the group. Now is a great time to get in touch with your colleagues and business associates who are not actively involved in ASHRAE and bring them to a meeting. There are so many positive resources available from the society and a growing membership complete with the next generation of industry professionals is the true gift that keeps on giving.

The board has completed the nominations for the 2019-20 Board of Directors – see more details in this Grapevine edition. Although the time commitment is not too crazy, it does take time from our busy schedules to serve the community. Those of us on the board appreciate the support and encouragement from our colleagues. If you are interested in getting involved next year, even in a supporting role, please reach out to us.

As always please let me know if you have any suggestions, comments, ideas, technical topics, speakers, tour locations, nominations for board members, etc. as we are always looking to grow

and expand on what we do. Redwood Empire ASHRAE is here to serve our membership so let your voice be heard and help us thrive.

Please mark Friday June 14 on the calendar for our annual end-of-the-year spouse's night event. The location is nearly confirmed and will be publicized as soon as possible. This is always a fun event that is routinely coupled with a technical tour at a local winery or brewery. We hope to see you there!

From all of us on the board we wish you a happy and healthy 2019. Let's have a great year!

Sincerely,

Adrian Giovenco
Redwood Empire ASHRAE President 2018-2019

Board Nominations 2019-2020

The REASHRAE Section is looking for enthusiastic and committed board members for the 2019-2020 year. Please consider nominating yourself, or suggesting a colleague.

Board Nominees:

President	William H. Martin III
Treasurer	Maya Salabasheva
Secretary	Harrison Nichols
Past President	Adrian Giovenco
Director Emeritus	Tony Costa
Board of Governors:	Geoff DuBois
	Martin Quevedo
	Nikola Kravik
	Gary Harbison

Please suggest nominees: _____

Address questions and concerns to Adrian Giovenco at: adrian@inspire.ag

ASHRAE

NOT A NATIONAL ASHRAE MEMBER? JOIN US!

By Mike Scofield, Membership Chair for Redwood Empire ASHRAE Section

Your membership in ASHRAE puts you in touch with over 53,000 members in over 170 Chapters worldwide. This group includes Consulting Engineers, Mechanical Contractors, Building Owners, Manufacturing Companies, Educational Institutions, Research Organizations, Architects, Government officials, and all concerned with HVAC&R for the Built Environment.



Join online at <http://www.ashrae.org/join>

LEVELS OF MEMBERSHIP ARE AS FOLLOWS:

- **ASHRAE Member (\$206)** is available for anyone with 12 years or more ASHRAE approved experience in the HVAC&R Industry.
- **Associate Member (\$206)** is available for anyone with less than 12 years of experience in the HVAC&R Industry.
- **Affiliate Member* (\$52 first year, \$78 second year and \$103 third year)** is available for first time members under the age of 30 years. This is an excellent way for the young Design Professional to become involved with ASHRAE at a lower cost. *This membership does not include the ASHRAE Handbook.

Questions: Contact membership@ashrae.org

Don't forget to select your local **Golden Gate Chapter** when you join National Society! (\$60)

Your ASHRAE membership includes:

- ASHRAE Handbook the year you join and each year you remain a member.
- Monthly *ASHRAE Journal* magazine.
- Discounts on attending ASHRAE annual EXPO and Technical Meetings.
- Discounts on over 300 of the HVAC&R Industry Technical Publications.
- Discounts for Continuing Education Courses through the ASHRAE Learning Institute.

Join the Redwood Empire ASHRAE Section

I'll Join RE-ASHRAE for 2018-2019

Send your check of \$25 to P.O. Box 5665, Santa Rosa, CA. 95402 or bring your check to the next REASHRAE meeting. Make checks payable to Redwood Empire ASHRAE. Thanks!

Name: _____
 Company: _____
 Company Address: _____
 City, State, Zip: _____
 Email: _____
 Work Phone: _____ Work Fax: _____
 Home Phone: _____

Please use the following address for ASHRAE correspondence (if different than above):

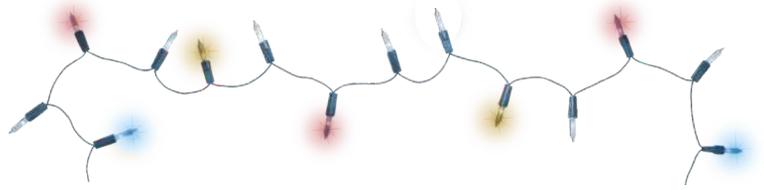
Address: _____
 City, Zip: _____

Currently I am a member of:

- ASHRAE National Society Member
- ASHRAE Golden Gate Chapter
- ASHRAE _____ Chapter

Meeting Re-Cap

REASHRAE December 6th



'Twas the Sixth of December and all through the Bay
Traffic was a stirring, To Napa! We all made our way
Our speaker was stuck, car trouble had stopped him
On 880 of course, his electronics had bopped him

In Napa, not Reindeer, but Elks was the site
Much merriment was made, it was such a night
With the tree lit, and joy in the air
Membership mingled, without a care
The tables were laden, there would be no famine
With tasty prime rib, the fresh fish was Salmon

All was ready, the Christmas lights twinkled,
We were anxious to learn,
There was just one little wrinkle,
No speaker to be found,
Silence was the only sound
With No triple A, and no Cal Trans in sight
He'll never make it, he'll be stuck there all Night!

The attendees all rustled, then something quite magic...
In stepped a man who knew of duct made from Fabric

No way, shouted members from the sheet metal shops
They won't last that long, they can't be that strong
Our duct is tops!

He assured them, they are light
And they can last very long
He taught us for a few minutes
And then we all moved along

Our time was now ebbing, some may call it tidal
When out of nowhere, in crashed Mr. Reinhard Seidl!
With not a minute to spare
He taught controls with attention and care

Eight-hour class training is what not to do
It's hands-on site training because it won't bore you
And so we learned on, I won't give too many spoilers
But if you have issues with heating
We can all blame the boilers ☺!

At the Raffle, Max a Million won the night
Looks like he picked his tickets just right
Eggnog and wine, he won everything but Fanta...
He won so much, he was almost like Santa
This money was helpful for future young scholars
Thank you so much, we need every last dollar!

Stay tuned for March and many things more
Come learn about grow rooms, horticulture Galore!

Where are the pictures you might say?
The explanation is hard
Billy's camera clicked away
With no memory card!

Who needs the photos, we'll remember it all
A fun evening was had, a good night one and all

Cheers,

Billy Martin (photographer)



Contribute to our college scholarship fund!

The REASHRAE community supports annual scholarships for college-bound high school students planning to pursue engineering during college.

Please contact Harrison Nichols for scholarship details.
Harrison.Nichols@trane.com

Meet our 2019 Scholars!



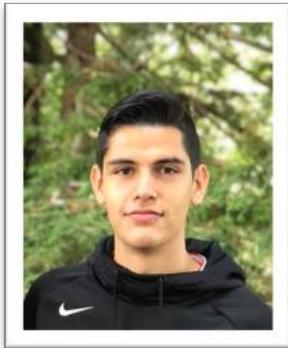
By Harrison Nichols, Redwood Empire ASHRAE Section

The Redwood Empire ASHRAE Board is happy to announce that we were able to give \$6,000 in scholarship prizes to 5 applicants! We received many qualified applications from senior students at High Schools in Marin and Sonoma County. Applicants were reviewed based on their academics, SAT and ACT scores, letter of recommendations, extracurricular activities, and their choice to pursue a major in a field relating to the mission of ASHRAE. We would like to wish all of our applicants the best of luck in their future endeavors.



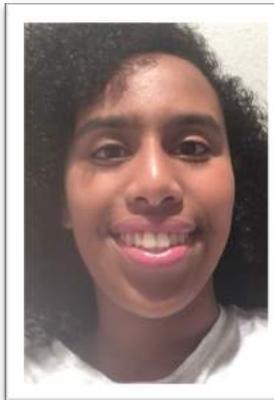
Marcus Vidaurri

Marcus is currently a senior at Cardinal Newman High School in Santa Rosa and is looking to pursue a degree in Mechanical Engineering in college.



Daniel Lopez

Daniel is currently a senior at Healdsburg High School and is looking to pursue a degree in General Engineering in college.



Samra Tekle

Samra is currently a senior at Cardinal Newman High School in Santa Rosa and is looking to pursue a degree Aerospace Engineering in college.

Todd Williams
Memorial Scholar



Sam Lin

Sam is currently a senior at Healdsburg High School and is looking to pursue a degree in Computer Science in college.



Kevin Cadle

Kevin is currently a senior at Casa Grande High School and is looking to pursue a degree in Mechanical Engineering in college.

The Grapevine

Is published quarterly by the Redwood Empire Section of the Golden Gate Chapter of ASHRAE. We encourage submissions from members and non-members alike that might be of interest to our readers. Items for publication should be submitted directly to the Editor and President via email.

If you have questions or comments about the Grapevine, please contact the following:

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The Grapevine

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*The mention of any business, product or service in this newsletter does not imply endorsement by ASHRAE.



Events Calendar

Mar. 14, 2019 – REASHRAE Meeting
San Rafael, CA

Mar. 21, 2019 – CSI Technology Expo
Santa Rosa, CA

April 4, 2019 – PEC Evening Lecture
San Francisco, CA

April 18, 2019 – Golden Gate ASHRAE Meeting
San Francisco, CA

May 23, 2019 – ASHRAE Product Show and Expo
San Francisco, CA

June 14th, 2019 – REASHRAE Meeting
TBD

June 22-26 2019 – ASHRAE National Conference
Kansas City, MO

Sept. 5, 2019 – Joint CSI REASHRAE Meeting
Winsor, CA

Send us your ASHRAE-related events!

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