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ASHRAE Houston Chapter's

THE HOT AIR RECORDER

78th Volume No. VI

February

Sun	Mo	Tue	We	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

24

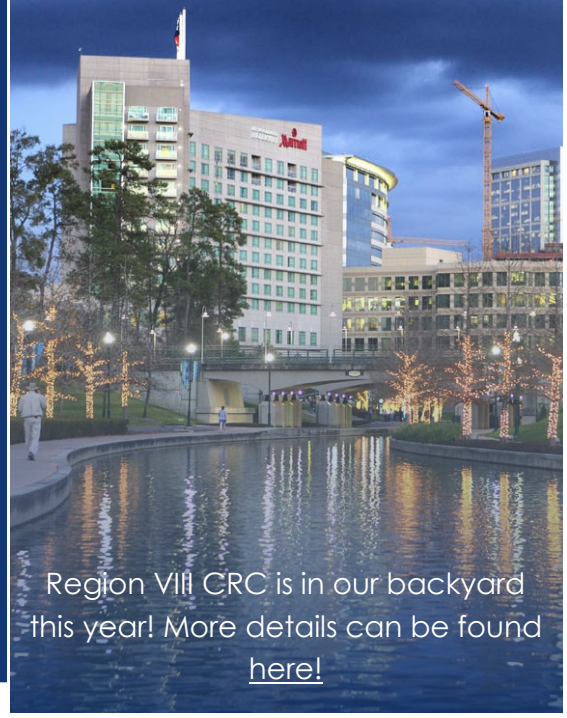
February Chapter Meeting

Please join us at Roessler Equipment Company from 4:30-6:00 PM to learn about Air Cleaning (Particulate Filtration, Portable and In-Duct Air Cleaners, Coil Cleaning) and Air-borne Infectious Diseases. Register here.

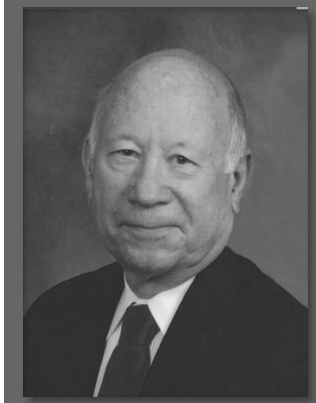
REGION VIII CRC

The Woodlands, TX

April 27-30, 2022



Region VIII CRC is in our backyard this year! More details can be found here!



Sidney Carl "Tony" McFarland, Jr.

10.1.1936 - 1.24-2022

Click here to view Tony's obituary

FACE TO FACE HVAC DESIGN TRAINING IS BACK!



Click here to see in person and virtual training dates.

HOUSTON ASHRAE ANNUAL SPRING GOLF TOURNAMENT



4.12.2021

Be on the lookout for more info!

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ANNUAL SPONSORS

PLATINUM

VICON EQUIPMENT

Nailor® Industries Inc.

TEXAS AIRSYSTEMS

Johnson Controls

GOLD

Carrier

CONVERGENTZ™

MEMBERSHIP

CALEFFI Hydronic Solutions

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MEMBERSHIP

Endless Technical Resources

Members enjoy access to the world's largest knowledge base of HVACR related technical information.

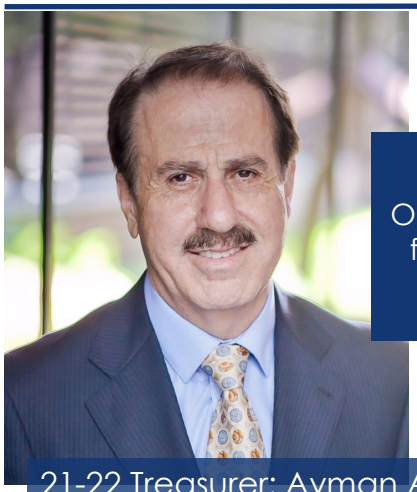


- Monthly ASHRAE Journal and quarterly HPB Magazine
- New Member and Associates receive complimentary one-year subscription to Handbook Online which provides access to all four of the most recent Handbooks
- Member access to the ASHRAE Technology Portal
- Member access to Science and Technology for the Built Environment research publication
- 25% Member discount in the Bookstore
- Discounted access to complete online library from the Institute of Refrigeration (IOR).

Please welcome our new member: Filza H Walters, Randy Brannen, Adam Goldberg, Ehsan Borazjani, Jesus Gilberto Pena, David Kehrli, Andrew Scott Robenalt, PE, Lisa L Rosenow, and Briana Cardenas

Join or renew through www.ashrae.org/home. If you have any questions, contact membership@ashraehouston.org

TREASURER



21-22 Treasurer: Ayman Ashkar

November Treasurer Report

Our annual taxes for the year ending June 30, 2021 have been filed. We are in good financial standing. We are hoping for better revenue this year from the upcoming Fall Golf Tournament and other events.

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RESEARCH PROMOTION





Research Promotion Chair Catherine Tinkler is hard at work planning a fourth fundraising event for May!

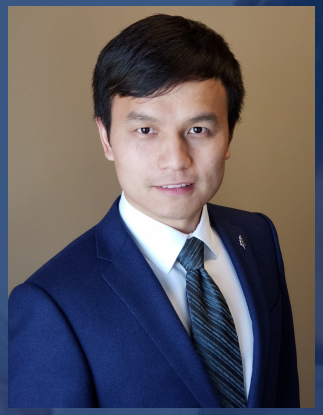
Be on the lookout for details!

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STUDENT ACTIVITIES

STUDENT ACTIVITIES CO-CHAIRS



JIAJUN "FRANCIS" LIAO



ELMER WHITEHEAD

Student Activities Updates

- The 2022 ASHRAE Houston Chapter scholarship application is open (due on 3/18/2021). The application form is available on our chapter website.
  - https://ashraehouston.starchapter.com/Student_Activities
- Graduating seniors are encouraged to sign up for SmartStart, a 3-year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly.

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Government Advocacy

2021-2022 GRASSROOTS GOVERNMENT ADVOCACY CO-CHAIRS

KENNETH SHIFFLETT



KEITH REIHL



HAVE YOU HEARD?

All of the building codes are about to be updated. 2015 is the new vintage that will be adopted as of April 1, 2022. Houston codes updated from the 2012 to 2015 editions include:

- International Building Code
- International Residential Code
- International Fire Code
- Uniform Mechanical Code
- Uniform Plumbing Code

The National Electrical Code will be updated from 2014 to the 2020 edition. The 2015 International Existing Building Code and 2018 International Swimming Pool & Spa Code will be included. The Energy Code will remain under the 2015 International Energy Conservation Code. I do anticipate the 2021 Energy Code being adopted in the first quarter of 2023. The link below has much more information on all of this.



Houston Construction Code FAQs | Houston Permitting Center

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REFRIGERATION

PRINCIPLES OF ICE & ICE MAKING

Submitted by: Manuchehr Mehdizadeh, Refrigeration Chair

Ice chills 144 times more than an equal weight of chilled water at 0°C (32°F), hence best suited where energy conservation is called for and where the latent heat of fusion for ice is 144 Btu/lb. (80 kcal/kg). This value is based on conversion of 32°F water to 32°F ice. The specific heat (Cp) of water is 4.18 kj/kg°K, while the specific heat of ice thru latent heat of fusion (hf) is 334 kj/kg°K, hence 334 ÷ 4.18 = 80 kcal/kg.

Assume an initial temp of 80°F and a brine temp of 16°F, theoretical amount of heat to be removed per pound of water can be determined as follows:

To reduce water from 80°F to 32°F = 48 X 1	= 48 Btu
To convert 32°F water to 32°F ice	= 144 Btu
To reduce 32°F ice to 16°F ice = 16 X 0.5	= 8 Btu
Total heat to be removed from 1 lb. of 80°F water	= 200 Btu

An automatic DX version industrial ammonia refrigeration system producing one ton of ice per day with a terminal suction pressure of 270 kPa would require 6.5 kW(1.85TR) of refrigeration capacity. This procedure requires treated infeed city water temperature at max. 25°F, be cooled to the freezing point overcoming various other

Manuchehr Mehdizadeh, BSME
Project Advisor – All Aspect of Cold Chain Industries - USA
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BOG MINUTES

ASHRAE Houston Chapter

November 18, 2021 BOG Meeting
3:30 pm
TEAMS / In-Person meeting

Attendees: BoG and Chairs
Board of Governors Date: November 18, 2021
Call to order at: 3:46 PM

I. Meeting Attendees: Greg Tinkler, Catherine Tinkler, Ken Shifflett, Terry Connor, Nick Janssen, Ayman Ashkar
II. President – Josh Vanlandingham
III. Approve the October 28th Meeting minutes
   a. Please contact your RVC no later than the 15th every month. Copy to Josh and Nick.

Position	Officer	MBOs	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
President	Josh Vlandingham			X	X	X						
CTTC	Garrett Neubauer											
Research Promotion	Catherine Tinkler				X							
Membership	Shannon Yancey		X	X	X							
Treasurer	Ayman Ashkar			X	X							
Student Activities	Francis Liao											
YEA	Sydney Foreman											
GAC	Keith Reihl/Ken Shifflett		X	X	X							
Historian	Bruce Flaniken											
Refrigeration	Manuchehr Mehdizadeh											
Electronic Communication	Rachel Haines											

I. PAOE – Terry Connor
   a. Update PAOE status – on pace to meet goals and meet the "par" values for the year
II. President-Elect and CTTC Chair – Garrett Neubauer
   a. Upcoming meetings and events:
      i. 11/18 November Mtg (Today) – Paige's Office @ 4:30 pm.
      ii. 1/20 January Mtg.: Past Presidents Night, St. Arnolds
         1. MMJ and DA are sponsoring at ½ the cost
         2. Wine or other Drink Options? Still considering
         3. Entertainment: Still ongoing
         4. Garrett needs to delegate a person to contact all past presidents and give personal invites.
      iii. 2/24 February Mtg.: In-Person @ Roessler Offices - Speaker (Tentatively Marwa Zaatari regarding Air Cleaning (Particulate Filtration, Portable and In-Duct Air Cleaners, Coil Cleaning) and Airborne Infectious Diseases)
      iv. 3/24 March Mtg.: Refrig and Student night (scholarships) – possibly at 919 Milam.
         1. Touring ice storage facility
      v. 4/28 April Mtg.: Airport Projects Topic
      vi. 5/26 May Mtg.: ASHRAE DL Advance Energy for Healthcare facilities

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b. Garrett has two (2) DLs planned for this year.
   i. Were DL forms sent to Kenneth? Garrett will follow up with society for the chapter DL situation for the remainder of the year.
   ii. Nick has sent Garrett email about Aaon covering the DL fees for a visit.
c. Discussion on meetings and poor turnout. Ken mentioned possibly doing lunch meetings. Nick made the point about Dallas Chapter's meeting attendance much larger than ours.
   i. Garrett put Nick in charge of setting up a Survey Monkey to see what time, and what type of meeting venues membership is looking for. Are members currently working form their offices? This may help figure out location.
   ii. Nick to check with The Petroleum Club to check on availability/cost to host monthly meetings.

III. Vice President and RP Chair – Catherine Tinkler
a. Annual Sponsors/Sponsorship update
   i. Current List of Annual Sponsors/Sponsorships: 3 platinum, 2 gold, 2 silver, 4 bronze = $63,000
b. Events:
   i. Clay Shoot – Financials…TBD
   ii. RP Goal Progress?
      1. Current RP Funds Raised
      2. RP funds paid to Society
   iii. Golf Tournament – 11/9/2021, Golf Trails of the Woodlands, noon shotgun
      1. Summary – 25 teams = 100 players
      2. $ raised - $31,425 took in, $17,814 in expenses
   iv. Other Events, info forthcoming:
      1. Spring Golf tournament – High Meadow Ranch, date TBD
      2. Possible axe throwing, go cart racing
c. Full Circle Status – Due Nov. 15th ($150 donation from board members)
   i. Status update – all BOG in
   ii. $ raised - $1,700

IV. Treasurer – Ayman Ashkar
a. Account balances (standing)
b. CRC Funds Update
c. Audit – Complete
d. Taxes – CPA has all info, sent in form for our review today (10/28)
   i. Submitted
e. Budget for 2021-2022 approved on 10/2/2022 (email vote)

V. Secretary – Nick Janssen – Josh and Garrett to check on updating bylaws by 12/6. Associated paperwork has been uploaded to Basecamp.

VI. Membership – Shannon Yancey (update numbers below)
a. Membership Update
b. Feb event for membership team at meeting?
c. Connect with Keith R on Socient goals for increasing membership?

VII. Student Activities, K-12 – Francis Liao, Elmer Whitehead
a. No update to report from Francis
b. Rice U – Elmer
c. Scholarships

VIII. YEA (Sydney not in attendance)
a. Join YEA happy hour tomorrow, 11/19. Post Oak Ice House 2-5pm. Roessler sponsoring.

IX. Diversity in ASHRAE (not in attendance)

X. Refrigeration – Manuchehr Mehdizadeh (not in attendance)

XI. Sustainability / Energy Modeling – Steve Stelzer

XII. Newsletter – Julie Thomet
a. Update- Newsletters- due date for articles
b. Oct. HAR was on BASECAMP and Website only.
c. Photos for the HAR

XIII. Webmaster and Social Media and Electronic Communications Chair – Rachael Haines

XIV. Honors and Awards – Alan, Bruce

XV. Directory Chair – Greg Tinkler

XVI. Grass Roots Government Advocacy – Keith Reihl, Kenneth Shifflett

XVII. Commissioning Chair – David MacLean

XVIII. Other business:

XIX. Meeting called to close at 4:33 PM

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ROSTER

Position	Full Name	Phone	Email
Chapter President	Mr Josh Vanlandingham, PE	(713) 515-3726	jjvanham@gmail.com
Chapter President Elect	Mr John G Neubauer, PE	(713) 871-8484	gneubauer@pagethink.com
Chapter Vice President	Catherine A Tinkler	(713)203-9267	ctinkler@foscd.com
Chapter Treasurer	Mr. Ayman Ashkar	(713) 914-0888	aashkar@dbrinc.com
Chapter Secretary	Mr. Nick Janssen	(832) 342-9276	Nick.Janssen@texasairsystems.com
Chapter Board of Governors	Greg Tinkler	(713)658-2206	gtinkler@yahoo.com
Chapter Board of Governors	Mr Bruce L Flaniken, PE	(832)473-1989	BLFlaniken@houstonmethodist.org
Chapter Board of Governors	Mr Kenneth Shifflett	(713)828-2329	kshifflett@distribaire.com
Chapter Board of Governors	Mr Michael Langton, PE	(832)867-7149	mlangton@langtonenergy.com
Chapter Board of Governors	Mr Keith H Reihl, PE	(713)459-1044	reihl@swbell.net
Chapter Delegate	Mr John G Neubauer, PE	(713) 871-8484	gneubauer@pagethink.com
Chapter Alternate	Catherine A Tinkler	(713)203-9267	ctinkler@foscd.com
Chapter Technology Transfer Chair	Mr John G Neubauer, PE	(713) 871-8484	gneubauer@pagethink.com
Chapter Commissioning Chair	Mr David A MacLean	(713)857-6499	david.maclean@mcmaccx.net
Chapter Grassroots Government Advocacy Co-Chair	Mr Keith H Reihl, PE	(713)459-1044	reihl@swbell.net
Chapter Grassroots Government Advocacy Co-Chair	Mr Kenneth Shifflett	(713)828-2329	kshifflett@distribaire.com
Chapter Historian	Mr Bruce L Flaniken, PE	(832)473-1989	BLFlaniken@houstonmethodist.org
Chapter Honors and Awards	Mr Robert (Alan) Neely	(281)432-9864	alan.neely@owenscorning.com
Chapter Membership Promotion Co-Chair	Mr Jeffrey B Hunter	(713)939-6098	jeff.hunter@carrier.com
Chapter Membership Promotion Chair	Mrs Shannon Tawney Yancey	(832)523-6619	Shannon.yancey@caleffi.com
Chapter Refrigeration	Mr Manuchehr Mehdizadeh	(832) 660-5450	mmz@roxara.com
Chapter Research Promotion Chair	Catherine A Tinkler	(713)203-9267	ctinkler@foscd.com
Chapter Student Activities Chair	Mr Jiajun "Francis" Liao, PhD, EIT	(346) 339-7173	liaojiajun142857@hotmail.com
Chapter Student Activities Co-Chair	Mr Elmer Whitehead	(713) 348-6369	ew16@rice.edu
Chapter Sustainability Chair	Mr Steven Stelzer	(832)-394-9050	steve.stelzer@houstontx.gov
Chapter Women in ASHRAE Chair	Miss Lauren Ramos	(713)783-7707	lramos4321@hotmail.com
Chapter Women in ASHRAE Co-Chair	Mrs Krista Villanueva	(832) 317-1512	KVillanueva@gulfcoastboiler.com
Chapter YEA Chair	Tim Navarro	(281) 253-5028	Tim.Navarro@Carrier.com
Chapter Newsletter Editor	Ms Julie A Thomet	(936)523-0556	Juliet@mjec.com
Chapter Webmaster	Mr Jack W. Kolar	(832) 759-4227	jackoolair@outlook.com