HE EA MAKAME



May 03, 2017

P.O. Box 3916, Honolulu HI 96812-3916 Ashraehawaiichapter.info

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Presidents Message

By Dean S. Borges, P.E.

April had a variety of interesting meetings. At the Chapter Meeting the presentations of Mike Tibbitts and Leslie Taniyama on Power Quality: Effects of Harmonics and Solutions also Protecting Adjustable Speed Drives was on the point towards resolutions of future electrical problems. Something new to consider in the designs using non-linear 60 Hz electrical sine-wave and how they increase wire sizing, etc. Hope you were able to connect up with this informational opportunity. Leslie has offered to provide copies of the slides to those who attended. Also, the free webcast on April 20th regarding Use of Analytics to Drive Building Performance provided details of how to use big data analysis for predictive failures of equipment for O&M purposes for those mission critical facilities that cannot afford failures of HVAC&R systems.



Dean S. Borges InSynergy Engineering

The May Chapter Meeting has a Distinguished Lecturer presentation on "Releasing Individuals' Own Creativity." I read the review of several other Chapters and they really loved the topic. The lecture by Victor Goldschmidt, PhD is intended as a means for individuals to attempt to realize their own potential to be creative. This should impress the UH Manoa Students who are also scheduled to provide the first session of the meeting will be a review of the design project that was submitted by the 2016 Fall Semester students for their ME 417 Course requirements in Applied Thermal Engineering.

Our RP Committee has completed the planning of the 30th ASHRAE Golf Tournament on Friday 5-5-2017 (Cinco-de-Mayo) at Pearl Country Club which will have plenty of fun, food and prizes for over 136 players.

Last Chance to submit to Min Zhong, P.E. for the CTTC Energy Award applications and Tony Rasabout for the Refrigeration Comfort Cooling Award. We are doing well in PAOE at 5935 points - #1 in Region X - keep pushing BOG's team members to report your activities to me.

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May Chapter Meeting

Date: 11 May 2017

Where: The Plaza Club, 900 Fort St. Mall, 20th and 21st Floors,

www.theplazaclub.com

Registration: Starts at 5:30 pm. Contact Valerie Mencias at

vmencias@norman-wright.com for additional info.

Technical Session: 6:00 pm Dinner: Approx. 7:00 pm Main Program: 7:30 pm

Adjournment: Approx. 9:00 pm

Cost: \$45 per ASHRAE member; \$50 per guest; \$55 at the door. Payment via credit card: https://ashraehawaiichapter.info
Otherwise, make check payable to ASHRAE Hawaii Chapter.



Technical Session: UH at Manoa Student's Presentation on Their HVAC Design Project for ME 417 Course

The May 2017 technical program will feature the student's presentation from University of Hawaii at Manoa (UHM). The presentation will be a review of the design project that was submitted by the 2016 Fall Semester students for their ME 417 Course requirements in Applied Thermal Engineering. The students adapted and modified the design provided by 2017 ASHRAE Student Design Competition. The design team was formed to enhance the design project and to make the final presentation on May 11, 2017.

The purpose of the project was to design the HVAC&R systems for a newly constructed Meteorological Station on Islas Diego Ramirez, Chile. The Station will be a single story government, meteorological and housing building operating all year round. It will include the mezzanine office and repair building in the Diego Ramirez Islands. The design systems are intended to be dependable and economically viable for at least 20 year life span.

Presenter: Ryan Chun, Kent Harada, and Po"okela Stillman Reyes

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Main Presentation: Problem Solving and Creativity

There is a dramatic difference between the problem solving techniques presented to us in formal engineering courses, and the skills that are called for in actual practice. These differences will be outlined, leading towards a special focus on the need for cooperation between creativity and problem solving in engineering applications. The lecture will present the general steps in problem solving of definition, recasting, ideation, convergence, and validation/implementation. The lecture will end with a listing of "pet-peeves" which will include confusing cause and effect and violating the scientific method.



Victor W. Goldschmidt Professor Emeritus, Purdue University

Presenter: Victor W. Goldschmidt, Professor Emeritus, Purdue University School of Mechanical Engineering

Victor W. Goldschmidt, Emeritus Mechanical Engineering Professor, served at Purdue University from 1964 through 2000. He is currently serving as a Leelanau County Planning Commissioner as well as a facilitator and engineering consultant. During his 36 years at Purdue University, Mr. Goldschmidt was responsible for educating mechanical engineering students, including the direction of graduate research in the HVAC area. Most of his service with graduate students was with the Ray W. Herrick Laboratories with heavy support from the HVAC industries. During early stages of his career, he served as Director of the Engineering Purdue Fellows in Latin America; during later stages he served as department head for Freshman Engineering.

Prior to his academic involvement, he worked in Applications Engineering and Development Engineering with Honeywell. Mr. Goldschmidt has taught almost every course in thermal sciences offered at Purdue, as well as a special upper level technical course on the "Creative Process in Engineering." He is trained as a Synectics (special brainstorming) facilitator and is currently engaged in the development of strategic plans and problem solving sessions. A past ASHRAE Director-at-Large, he also has served as a member of Publishing and Technology Councils. He is an ASHRAE Distinguished Service Award recipient and Fellow, as well as Honorary Member of IIR, ACAIRE, ASURVA and AAF. He resides in North Michigan, above Traverse City.

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Chapter Officers

Chapter Officers for Society Year 2016-17

- President: Dean Borges, P.E
- President Elect: Kevin Luoma, P.E.
- Vice President: Mofazzal Mir, P.E.
- Secretary: Willie Diguc
- Treasurer: Samantha Niver, P.E.

Chapter Board of Governors

- Donna Kishi (Immediate Past President)
- Lori Arakawa, P.E.
- Matthew Tio
- RJ Ritter
- Ryan Chang, P.E.

Committee Chairs

- Attendance and Reception Chair: Valerie Mencias/Hazel Wong
- Energy Awards Chair: Min Zhong, P.E.
- Technology Portal: Kelsey Koshi
- Grassroots Government Activities Chair: Andrew Crossland, P.E.
- Historian Chair: Donna Kishi
- Membership Promotion Chair: Lori Arakawa, P.E.
- Newsletter Editor Chair: Mofazzal Mir, P.E.
- Chapter Programs Chairs: Les Taniyama, P.E. and RJ Ritter
- Refrigeration Chair: Tony Rasabout
- Research Promotion Chair: Dave Drapalik
- Student Activities Chair: Diamond Pedro
- Technical Seminar Chair: Matthew Tio
- Product Show Chair: Ryan Chang, P.E.
- Technology Transfer Chair: Kevin Luoma, P.E.
- Webmaster Chair: David Lebowitz/Jake Gribbon
- Young Engineers of ASHRAE Chair: Daniel Murakami
- Sustainable Activities Chair: Josh Jackson
- CRC Action Chair: Donna Kishi
- Nominating and Events: William P. Lee, P.E., Donna Kishi
- Long Range Planning: William P. Lee, P.E.



Kevin Luoma, P.E. WSP Hawaii



Mofazzal Mir, P.E. InSynergy Eng. Inc.



Willie Diguc Oahu AC



Samantha Niver, P.E. WSP Hawaii



Donna Kishi Norman S. Wright



Lori Arakawa, P.E.DOD



Matthew Tio DMG Hawaii



RJ Ritter Trane



Tony Rasabout Coffman Engineers

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Valerie Mencias Norman S. Wright



Diamond Pedro ACS Supply Corp.



Kelsey Koshi ACS Supply Corp.



David Lebowitz Oahu AC

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Chapter Technology Transfer Committee Chair Report

By Kevin Luoma, P.E., Chapter CTTC Chair

Aloha All,

The chapter year is coming to a close so this will be one of my last two write-ups for the newsletter. In this write-up I would like to share what many may have already seen from ASHRAE in a notification about the ICC partnership with ASHRAE, AIA, USGBC and IES and how it is advancing.

The collaboration is the International Green Construction Code (IgCC). As part of that collaboration they will be publishing 2018-IgCC in the summer of 2018. By collaborating on developing the 2018-IgCC, these organizations envision a new era of building design and construction that includes environmental health and safety as code minimums. The goal of the 2018-IgCC is to provide fundamental criteria for energy efficiency, resource conservation, water safety, land use, site development, indoor environmental quality and building performance that can be adopted broadly.

Per the ICC Board President M. Dwayne Garriss, "The 2018-IgCC will provide the design and construction industry with the single, most effective way to deliver sustainable, resilient, high-performance buildings..."

Now we will just need to get AHJ's to adopt the IgCC.

With regards to the Energy Code in Hawaii, here is what we have found from discussions with Howard Wiig and the counties. The 2015 IECC is the energy code for all state buildings. However, none of the counties have adopted it. Kauai and Honolulu may adopt it with amendments in the next few months and Maui and the County of Hawaii will most likely not adopt it until quarter 3 of 2018. All engineers should try to design the 2015 IECC standards if budget allows since the 2006 IECC is out of date.

Last but not least, here is a quick bio of an influential engineer:

Rudolf Diesel: Born in 1858 in Paris, France, Rudolf Christian Karl Diesel was a German inventor and mechanical engineer, famous for the invention of the diesel engine. Diesel understood thermodynamics and the theoretical and practical constraints on fuel efficiency. He knew that as much as 90% of the energy available in the fuel is wasted in a steam engine. His work in engine design was driven by the goal of much higher efficiency ratios. After experimenting with a Carnot Cycle engine, he developed his own approach. Eventually, he obtained a patent for his design for a compression-ignition engine. In his engine, fuel was injected at the end of compression and the fuel was ignited by the high temperature resulting from compression.

Mahalo Nui Loa!

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Pictures from April Monthly Meeting























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Message from the Newsletter Editor

By Mofazzal Mir, P.E.

Our April monthly meeting was very informative where Leslie M Taniyama and Michael Tibbitts educated us regarding the effect of power quality on equipment efficiencies. Leslie's presentation on VFD was also very impressive where we learned how to design them and their proper applications for energy savings.

April monthly meeting was also designated as a membership promotion night. Few new members joined ASHRAE on that night. Lori also did an excellent presentation on the benefits of joining ASHRAE. A lot of gifts were given away in raffle draws throughout the meeting.

In our upcoming May meeting, ASHRAE Hawaii chapter will provide an opportunity for the UH at Manoa students to present their HVAC design project for ME 417 Course. It's a great opportunity for the students to increase their presentation skills as well as to meet with the potential employers. We hope you will support our local students by attending our May meeting.

ASHRAE Hawaii chapter will also have an interesting presentation on 'Problem Solving and Creativity" by ASHRAE Distinguished Lecturer Victor W. Goldsmith, PH.D., Professor Emeritus, Purdue University School of Mechanical Engineering. Mr. Goldsmith is an eminent scholar and well known for his interesting presentations. You probably do not want to miss this opportunity to hear from him and interact with him.

Our annual golf tournament is also all set for this Friday. We have noticed huge enthusiasm among the members to attend the tournament. All of the slots are gone well before the due date. We are expecting a lot of fun and fellowship among the members during the tournament. Excess donations received from the tournament will be used to fund ASHRAE research. What an awesome way to have fun while promoting a great cause that will serve entire humanity!

Attached with this Newsletter you will find the lists of our local companies that sponsored our annual golf tournament. We greatly appreciate them for their generous support.

Last but not the least, attached are also our last BOG meeting minutes and chapter monthly meeting minutes in case you are interested to know what has been discussed.

Mahalo to everyone until we write again!

ASHRAE Hawaii Chapter

P.O. Box 3916

Honolulu, HI 96812-3916

Chapter Website:

www.ashraehawaiichapter.info

ASHRAE Main Website:

www.ashrae.org

E-mail:

admin@ashraehawaiichapter.info



MAHALO TO OUR PLATINUM SPONSORS...

WITHOUT YOUR GENEROUS SUPPORT, THE 2017 GOLF TOURNAMENT WOULD NOT BE POSSIBLE.

WE APPRECIATE YOUR SUPPORT!









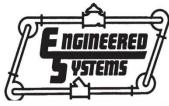


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BOG MEETING MINUTES

ISE Conference Room on 2nd Floor

828 Fort Street Mall, Suite 200 Honolulu, HI 96813 4/6/2017 (**Thursday**) – 5:00 pm to +/-6pm Attendees: See attached Sign In Sheet

Call to Order: 5:10pm HST by Dean Borges, President

- 1. Welcome and Self Introductions (5 min)
- 2. Housekeeping notes (2 min)
 - a. Dean Borges Appt'd as Reg X Historian Chgs to CRC D&A
 - Kevin L. Going to PET Saturday, Review Apptmts with us, Installation of Officers will be at Honolulu Country Club (will cancel Plaza Reserv'n)
 - c. Treasurer Report Status of receipts/bills
 - d. February Sustainability Luncheon Report of Finances Josh Okay
 - e. Tech Seminar Report of Finances Matt Hawaii Energy \$4k sponsorship
 - f. CTTC Webcast on Using Analytics to Drive Building Performance 4/20/17 7:00 am 11:00 am at ISE 2nd Floor Conference Room
 - g. Golf 2017 Report on status for this event Dave
 - Conference Meeting was held earlier today. 37 teams to-date, most paid. Val and Donna to do Registration. Need volunteers for other various support.

Committee Reports:

- 3. Nominating Donna's report for publishing Election of Officers.
- 4. Reviewed PAOE reported activities (5 min)
- 5. Chapter Programs Les & RJ May 11th DL Arrangements (15 min). UHM Students to present for 1st half of meeting.
- 6. YEA Daniel Meeting with Victor Goldschmidt
- 7. Student Activities Diamond Meeting with Victor Goldschmidt
- 8. Refrigeration Tony Rasabout Working on another tour.
- 9. Webmaster issues David TBD
- 10. Newsletter Mofazzal for May deadline 4/21/2017.
- 11. Technology Kelsey TBD
- 12. Energy Awards RJ said he will file for his Alaska Project, Mofazzal has one for the QMC.
- 13. CTTC. MAY DL actions
- 14. GGAC, issues at Legislature Andy to attend a meeting for updates.
- 15. Other Committee Reports
 - a. Long Beach Society Winter Meeting Report Everyone
 - b. Sustainability Suggesting a beach clean-up or something environmental
 - c. BOG nominees for SY17-18 Lori, Josh, & Val.

Adjourned: 6:14 pm

Next BOG Meeting: Thursday May 4, 2017 – ISE Conf. Room 2nd fl – 5pm

Respectfully Submitted,

W. Diguc

Willie Diguc, Secretary

Sign In Sheet

Event:	ASHRAE HAWAII CHAPT, BOARD OF GOVERNORS			
Date:	4/6/2017			
Location:	ZHE FLOOR CONF. RM, 15E			
Time:	5:00 pm - 6:15 pm			

		F.·.	
	Name (Printed)	Signature EMAIC	Organization Position
1.	Dean Borges	Days @ad. Com	
2.	Willie Digui	Willie & OSepplex.com	Seaperary
3.	Samawha Makamura	Samantha. nakamura@wspgroup.a	m. Treasurer
4.	Josh Jackson	Jackson @ airtrestmet a	
5.	Les Tariyama	psighi@ 201.com	Program
6.	TONY RASABOUT	on Pyons	REPRIGERATION
7.	KEVIN LUOMA	ON PHONE	PRES-ELECT
8.	DONNA KISHI	dkishi@norman-wright.com	Nominatus
9.	MOFAZZAL MIR	mmir@Insynergyeng.co	M VICE RESIDENT
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Chapter Meeting Minutes

Plaza Club Room on 20th Floor

900 Fort Street, Suite 2000 Honolulu, HI 96813 4/13/2017 (Thursday) – 5:00 pm to +/-9pm

- 1. Gavel to OPEN 6:05 pm Self Introductions (5 min. Name & Favorite Jokes by Alexa)
- 2. Activities/discussions planned (2 min. each)
 - A. Welcome Lori Arakawa, P.E. MEMBER Bring a Member Presentation.
 - B. (Door prize Give-Aways)
 - C. Golf Committee 5/5/2017 Report, Dave Drapalik (Katie Thul) Lots of prizes this year. Free shirt for registered players.
 - D. Nominating Committee –Donna and Bill as Members to present next year's officers roster for election
- 3. Intro Tech Presentation by Les:
 - Keith Block, Program Engineering Manager, Hawaii Energy
- 4. Dinner ~ 30 minutes
- 5. (Door prize Give-Aways)
- 6. After Dinner Intro Main Program Speaker Les Taniyama, VP of PSIG-HI
 - Energy Use Verification for Unique Applications
- 7. Other Committee Reports? If there is time:
 - a. Chapter Programs for May DL and Students RJ or Les (15 min)
 - b. Sustainability, Josh, Planned events? Volleyball in Kailua?
 - c. Student Activities Diamond Work with DL to visit
 - d. Webmaster David L
 - e. Newsletter Mofazzal Deadline for March: 4/24/2017
 - f. Technology Kelsey Issues?
 - g. Energy Awards Min None received yet.
 - h. CTTC Kevin WEBCAST 4/20/2017 7am to 11 am.
 - i. GGAC Andrew issues?
 - j. Dean Congratulations to Marites, DRC, Appointed me as Historian
 - k. Other items Long Beach Society Annual Meeting.
- 8. (Door prize Give-Aways)
- 9. Adjournment Gavel dropped 8:45 pm

Next Chapter Meeting: Thursday May 11, 2017 – Plaza Club 20th – 5pm

Respectfully Submitted,

W. Díguc

Willie Diguc, Secretary