



ASHRAE

Hawaii Chapter

HE EA MAKAMAE

A monthly publication by the American Society of Heating Refrigerating and Air Conditioning Engineers, Inc.

SY 2008-09, Issue #8 HONOLULU, OAHU, HAWAII March 2009

APRIL DINNER MEETING

STUDENTS /YEA NIGHT

Thursday, April 9, 2009

Technical Session: TAB DO & DON'T

Main Program: Back to the Basic - Psychrometrics & Its Applications

5:30-6:00 PM	Registration
6:00-6:30 PM	"DO & DON'T" Technical Session
6:30-7:30 PM	Attitude Adjustment (Open bar – 2 drink tickets)
7:00-7:30 PM	Dinner & Committee Reports
7:30-8:30 PM	Main Program

REGISTRATION: RSVP Kevin Saito kevin.saito@trane.com and remit payment to ASHRAE Hawaii Chapter, P.O. Box 3916, Honolulu HI 96812-3916 by April 6, 2009. Otherwise, for expedient registration, remit payment via "PayPal" by clicking <http://hawaii.ashraechapters.org>.

RSVP (Pre-registration): All pre-registrants (show or no show) will be billed accordingly.

ASHRAE Members: \$40 per person

Non-Member of the above organizations: \$45 per person

No RSVP (Registration on-site):

Regardless of Members or Non-Members: \$50 per person

MAIN PROGRAM:

*Back-to-the-Basic:
Psychrometrics & Its
Applications*

This month's main program will feature our Program Chairman **Kevin Saito, P.E.**

At the upcoming meeting, we are very fortunate to have Kevin, who volunteers to speak on the most fundamental topic that relates to our day-to-day livelihood.

Learn the basics of psychrometrics: the science of the properties of air.

In this presentation, you will explore why the properties of air is so important to air conditioning and common issues that arise from the misunderstanding of psychrometrics. Moreover, you'll learn the difference between dry bulb and wet bulb temperatures, why relative humidity plays such an important role in dehumidification, and what dew point has to do with mold growth. You'll also learn how to read and use a psychrometric chart and why a psychrometric chart without an "index point" is worthless to you. Come and join

DIRECTIONS TO THE WILLOWS

901 Hausten Street, Honolulu (Phone: 952-9200)

FROM DIAMOND HEAD (Westbound): Take H-1 and exit at Kapiolani Blvd cut-off. Go past University Avenue & turn RIGHT at Hausten Street.

FROM EWA (Eastbound): Take H-1 and exit at Isenberg Street cutoff. Turn LEFT on King Street and take the 2nd RIGHT into Hausten Street.

the technical world of psychometrics to explore in a slightly different way with the Trane's Comprehensive Solutions Account Manager, Kevin Saito.

Kevin was born and raised in Hawaii. He's a graduate of St. Louis High School in 1978.

Subsequently, he went to pursue his undergraduate studies and graduated from the School of Engineering, Bachelor of Science, Mechanical Engineering, University of Hawaii at Manoa in 1983. He was a co-recipient of the Student of the Year Award in 1983.



Like many local graduates, Kevin did his internship and spent his first 5 years with Cedric D.O. Chong & Associates after graduation from 1984. He then moved on to work for Ferris & Hamig Hawaii from 1989 thru 1994. As a private consultant for a decade, he found a cozier place at Public Work Center in Pearl Harbor facilities also known as NAVFAC. After learning the rope of dealing with large bureaucratic organization from 1994 to 2007, he decided to get into the fast lane and join The Trane Company.

In 2001, he was awarded the NAVFAC Engineer of the Year. While spending fruitfully his time at NAVFAC, he was able to graduate from the Navy War College in 2003. In 2006, he received the Industry Innovator Award.

Kevin is married to Carmen, his wife of 22 years. They have two sons, Kyle (21) a student at KCC and Ryan (18) a senior at Kamehameha School.

Currently, he is actively involved with the local chapter of ASHRAE, Rebuild Hawaii, and US Green Building Council Hawaii Chapter. With a busy schedule both at work and various non-profit organizations, he still finds time to volunteer with the Kamehameha School Swim Team, Sailing Team, Orchestra; Assistant Scout Master for Troop 123 (Kaimuki) and serve as advisor for Venture Crew 123 (Kaimuki). He is recently honored by the Boys Scouts of America with the Silver Beaver Award.

thus allowing him to lead the NEBB (National Environmental Balancing Bureau) organization. He is currently serving as President elect & Treasurer for NEBB Northern California / Hawaii Chapter. He is certified in the Building Systems Commissioning, the NEBB Certified Professional for Air / Hydronics testing & balancing, and, the TABB certified Professional for Air / Hydronics testing & balancing. He is also a SMWIA member.

Curtis will share with us his "TAB DO & DON'T", so that the consultants & contractors can be much more prepared when requesting TAB services for new construction prior to commissioning or for retro-commissioning work after building is occupied.

DO & DON'T TECHNICAL SESSION:

TAB (Testing Adjusting Balancing) DO & DON'T

Curtis Worley is the General Manager of TABCO (Total Air Balance Company Inc.), whose headquarters office is located in San Jose, California.

Curtis also oversees TABCO's Sacramento office as well as its Honolulu office as well as its independent TAB offices in Hawaii. Being a contractor with TABCO for the past 26 years has provided him a vast experience to deal with professionals from the government, large facilities owners including pharmaceutical & high tech center as well as the general contractors, mechanical contractors, controls contractors, electrical contractors, consulting architects & engineers. His ability to work with people from all walks of life has given him an edge over many contractors



headquarters office is located in San Jose, California. Curtis also oversees TABCO's Sacramento office as well as its Honolulu office as well as its independent TAB offices in Hawaii. Being a contractor with TABCO for the past 26 years has provided him a vast experience to deal with professionals from the government, large facilities owners including pharmaceutical & high tech center as well as the general contractors, mechanical contractors, controls contractors, electrical contractors, consulting architects & engineers. His ability to work with people from all walks of life has given him an edge over many contractors

"DO & DON'T Technical Session will be held monthly. To the other product manufacturers or service companies, who are interested to conduct this session, make your reservation with Kevin Saito. Cut \$250 check and make it payable to ASHRAE Hawaii Chapter. Send it to P.O. Box 3916, Honolulu HI 96812-3916. Otherwise, remit your payment via PayPal.

Go to our chapter website at www.hawaii.ashraechapters.org.

PRESIDENT'S MESSAGE – Joseph K. Ting, P.E.

Three quarters of the Society Year 2008-2009 have gone by so swiftly. We have had seven (7) straight months of



successful attendance with no financial losses. That said, we thank the die-hearted members who frequented our monthly meetings for continuously supporting the Chapter activities and for continuously learning from our Industry experts. We believe that these members brought home some great technical information to enhance their professional career. As



our Attendance Committee Chair Mofazzal Mir & his Vice Chair Roland Suzuki were busy signing-in Jackson Cheng, the Chapter Officers (clockwise: Treasurer Michael Chang, Vice President Dicson Aggabao & President-elect Albert Hahn) have learned to lighten-up themselves during the Happy Hour, while waiting for the speaker to set-up the presentation.

Our chapter PP Steven Nakagawa, P.E. thanked ISE Vice President Barry Jim, P.E. for a timely technical presentation on the subject matter pertaining to the "Compliance with ASHRAE Standard 90.1-2004 & LEED". The depth of Barry's technical presentation has allowed many of the consultants, contractors, suppliers and students to bring back to their respective workplaces at least three important pointers to share with their co-workers. He emphasized the importance of Standard 90.1-2004, which proposed to be the reference standard for the 2006 ICC (International Code Council) & IECC (International Energy Conservation Code). It is proposed to be the commercial building energy reference in NFPA's family of building codes. Standard 90.1-2004 is the professional "standard of care" set by ASHRAE consensus. It is the basis of LEE Energy Optimization Points as well as the basis of Energy Policy Act of 2005. As he concluded in his remarks when pairing the Model Hawaii Energy Code (MEC) with that of Standard 90.1-2004, in some instances, the MEC is more stringent. For examples, MEC regulates piping friction rates to 4' per 100' of piping while Standard 90.1-2004 does not regulate. MEC allows a maximum Roof Heat Gain Factor (RHGF) of 0.05 whereas Standard 90.1-2004 will allow a 0.063 RHGF or 25% less efficient. MEC requires heat recovery for systems larger than 10 tons of cooling and service water heating load of 75,000 BTUH (12 kW) or more. Standard 90.1-2004 requires heat recovery for systems 500 tons or more and service water heating loads of 1,000,000 BTUH. Bottom line is to ensure that MEC is integrated with the ASHRAE Standard 90.1 requirements for minimum code compliance.



Our chapter PP John Gesser thanked David Lord, our technical session's speaker from JM Sales, a manufacturer's representative of Chicago Faucets. He provided us an informative & educational presentation on the "DO & DON'T of Embracing New Plumbing Technologies". Dave basically shared with us the importance of water conservation and utilization of "GREEN" plumbing devices should assist us in implementing water conservation on a daily basis. Dave quoted UN Secretary-General Kofi Annan in his address to the United Nations that "What is needed along with fresh water is "fresh thinking". We need to learn how to value water." JM Sales' tabletop display of some "hi-tech" plumbing devices has gotten many attendees to take a serious look about specifying sensor faucets, waterless urinals and tankless water heaters.

STUDENT ACTIVITIES – Paul Fukunaga, P.E.

On March 10, 2009, the members of ASHRAE-HCC Student Branch visited the Standard Sheetmetal & Mechanical (SSM) shop, a local mechanical contractor. Twenty one students and their advisor, Professor Derek Oshiro, as well as two recent graduates from the ASHRAE-UHM Student Branch observed an actual duct fabricating demonstration followed by a demonstration of carbon steel pipe cutting. Mark Diego, one of the demonstrators, is a graduate of HCC Air-Conditioning & Refrigeration (AC&R) program and a former student of Professor Oshiro. The student members were able to ask questions and received valuable information about jobs in construction and service. An ASHRAE certificate of appreciation was presented to the SSM President, Mr. Stanley Salcedo, who had graciously allowed his employees to share their experiences and thoughts with the students as well as arranged the tour.

TOUR OF STANDARD SHEETMETAL & MECHANICAL



Left photograph depicts the pipe cutting demonstration performed by Mark Diego. Right photograph shows the presentation of the Certificate of Appreciation to Stanley Salcedo by Paul Fukunaga.

The 52nd Hawaii State Science and Engineering Fair will be held on April 6 through 8 at Neal Blaisdell Exhibition Hall. ASHRAE Hawaii Chapter is sponsoring awards for projects in mechanical engineering, particularly HVAC, in the Junior Division (Grades 6 through 8) and Senior Division (Grades 9 through 12).

MEMBERSHIP PROMOTION – Min Zhong, P.E.

We have further updated the 2009 Hawaii Chapter Roster to include two additional sponsoring companies' electronic line cards. The draft was reviewed and edited by the concerned parties. The updated Roster should be released after the April monthly meeting. This should provide ample time for those Society dues-paid members, who didn't pay their Hawaii Chapter dues to bring their chapter membership up-to-snuff.

To date, the Chapter received twelve (12) sponsoring companies as listed below.

ACS Supply Corporation

Acutron Co., Inc.

Admor HVAC Products, Inc.

Architectural & Engineering Systems, Inc.

Air Treatment Corporation

Carrier Hawaii

DMG Hawaii

Engineered System, Inc.

The Gellert Company

Trane Pacific

Waltz Engineering, Inc.

Norman S. Wright

These corporations continue to support the promotion of our membership. Their financial supports have made possible the publication of our electronic roster. Their line cards will be electronically published for your use and will be located at the back section of the Chapter Roster.

Only Society & Chapter dues-paid members will be notified via email on or about April 15th. For those ASHRAE members who have paid their \$20 Chapter dues, you will receive a new password to download the updated Roster once it will be posted. If you are currently a delinquent member or a non-member of Hawaii Chapter, we urge you to renew your chapter membership or to re-apply as a new member. Doing so will allow you to receive the benefits as a member of ASHRAE Hawaii Chapter. Should your name be inadvertently listed that your Chapter dues have not been paid, contact Min at 808-521-3773.

All dues-paid members should also promptly update your personal information, so that you will be properly contacted by your respective clients or customers. If you have any further questions and need assistance, please email Min at mzhong@insynergyeng.com.

<i>Adam Negele</i>	<i>Donald Kaitoku</i>	<i>Keith Nakanishi</i>	<i>Mofazzal Mir</i>	<i>Sheldon Fukamizu</i>
<i>Albert Hahn</i>	<i>Dyrk Teramae</i>	<i>Kevin Chock</i>	<i>Neil Asato</i>	<i>Stefan Beresiwsky</i>
<i>Andrew Petersen</i>	<i>Gary Gribbon</i>	<i>Kevin Chong</i>	<i>Nicholas Allday</i>	<i>Stephen Timpson</i>
<i>Brian Coday</i>	<i>Isaac Duncklee</i>	<i>Kyle Cheng</i>	<i>Pam Farnsworth</i>	<i>Steve Olsen</i>
<i>Brian Kang</i>	<i>Jake Gribbon</i>	<i>Lori Ann Arakawa</i>	<i>Patrick Sharkey</i>	<i>Thomas Chong</i>
<i>Clayton Oku</i>	<i>Jason Huffman</i>	<i>Mark Kalahale</i>	<i>Randy Iwamoto</i>	<i>Todd Beiler</i>
<i>Clayton Shobu</i>	<i>Joey Resurreccion</i>	<i>Matt Ortscheid</i>	<i>Rick Schnarr</i>	<i>Victor Russell</i>
<i>Dennis Kephart</i>	<i>Jonathan Muratsuka</i>	<i>Matthew Briley</i>	<i>Ronald Swenson</i>	<i>Wesley Tyau</i>
<i>Deron Jyo</i>	<i>Joseph Semeniuk</i>	<i>Michael Conway</i>	<i>Ross Sasamura</i>	<i>William Denham</i>
<i>Dominador Agluba</i>	<i>Justin Kauwale</i>	<i>Michael Lum</i>	<i>Sage Kiyonaga</i>	<i>William Tanruther</i>
<i>Donald Clothier</i>	<i>Kamuela Lacerdo</i>	<i>Michael Yatsushiro</i>	<i>Scott La Beau</i>	<i>Yoon Sung Hwang</i>

If you are currently an associate member and would want to upgrade to full member, simply go to www.ashrae.org. Use your personal email address and password to update your bio. Please go through each of the small blue tabs to enter demographics, contact information, education, professional registration, etc. Input as much information as possible, in order to ensure your request for advancement will be approved. When completed, click the "SAVE" button. Then, send an email to the membership@ashrae.org in order to notify that you have updated your bio and would like to advance your membership grade. Do not forget to carbon-copy me, so that I can help to track the process.

HISTORICAL – Harendra Panalal, P.E.

During the Society Year 2007-08, Sam Gillie, our immediate past president initiated the ‘Senior Moments’ to the chapter membership. Eight (8) of our long standing members made their presentations. The articles pertaining to the talks are currently recorded on disk known as “Hawaii Historical CD”. It should be made available to the membership upon request.

The Chapter historical records dating back from its inception in 1969 with the exception of 1978 thru 1987 were also recorded. Upon interviewing the past presidents from 1978 to 1987, who are still alive, we will incorporate them into the said CD. Reports by some of the current past presidents pertaining to their year of presidency were incorporated, too.

Disclaimer: ASHRAE Hawaii Chapter & the Society do not and will not endorse any of the products or services displayed in this newsletter. Statements made in this publication are not expressions of the Society or the Chapter and may not be reproduced without special permission of the chapter.

HAWAII CHAPTER OFFICERS BOG's & COMMITTEE CHAIRS

CHAPTER OFFICERS:

PRESIDENT

Joseph Ting, P.E.
tingj002@hawaii.rr.com

PRESIDENT-ELECT

Albert Hahn, P.E.
ahahn@douglasengineering.com

VICE PRESIDENT

Dicson Aggabao
daggabao@carrierhawaii.com

SECRETARY

Tyson Toyama, P.E.
ttoyama@okahara.com

TREASURER

Michael Chang
michael.j.chang@jci.com

BOARD OF GOVERNORS:

Barry Jim On, P.E.
bjimon@insynergeng.com

Eric Nakagawa, P.E.
rma-eric@hawaii.rr.com

Ken Richardson

ken@islandcontrols.com

Rick Schnarr
rischnarr@trane.com

Samuel Gillie, P.E.
sam.gillie@heco.com

COMMITTEE CHAIRS:

ATTENDANCE & RECEPTION

Mofazzal Mir
mmir@insynergeng.com

CHAPTER PROGRAMS

Kevin Saito, P.E.
Kevin.Saito@trane.com

CHAPTER TECH TRANSFER

Albert Hahn, P.E.
ahahn@douglasengineering.com

COMMUNICATION (PUBLICITY)

Gene Albano, P.E.
gene.albano@lincolnescott.com

GOLF TOURNAMENT

Sam Fujikawa, P.E.
FujikawaSam@contmech.com

HISTORICAL

Harendra Panalal, P.E.
henryP@leisinc.com

HONORS & AWARDS

Samuel Gillie, P.E.
sam.gillie@heco.com

LONG RANGE PLANNING

Robert Hann
rshann@trane.com

MEMBERSHIP PROMOTION

Min Zhong, P.E.
mzhong@insynergeng.com

NEWSLETTER EDITOR / WEBMASTER

Dicson Aggabao
daggabao@carrierhawaii.com

PRODUCT SHOW

Ken Richardson
ken@islandcontrols.com
Rick Schnarr
rischnarr@trane.com

REFRIGERATION

Eric Nakagawa, P.E.
rma-eric@hawaii.rr.com

RESEARCH PROMOTION

Marites Calad
mcasad@norman-wright.com

STUDENT ACTIVITIES

Paul Fukunaga, P.E.
fukunaga@thermaleng.com

TECHNICAL SEMINAR

Barry Jim On, P.E.
bjimon@insynergeng.com

YOUNG ENGINEERS OF ASHRAE

Alayna Shima
alayna@katayama-assoc.com