

The Dewpoint

ENGINEERING FOR A SUSTAINABLE WORLD

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May 2011
Volume 14, Issue 9

*A monthly publication of the
Central Florida Chapter
of the American Society of Heating, Refrigeration,
and Air Conditioning Engineers, Inc.*

www.ashrae-cfl.org

ASHRAE Society Website: www.ashrae.org



In the spirit of the events of this month, I hope you enjoy our special patriotic themed edition of the Dewpoint.

This month we are going to stress two important R's in ASHRAE – *Refrigeration* and *Research*.

We at ASHRAE CFL take refrigeration real seriously. We generally have a refrigeration article in every newsletter and this one is no different. We recap our recent refrigeration tour to Bari Beef International. It was a very educational tour and we had some great technical guides. Also, special thanks to those who took part in our two online refrigeration quizzes. The main goal was to create awareness about refrigeration and have fun along the way. Taner Tekin from EXP won on both occasions. His prizes were free dinners at the April and May technical meetings.

We had a great Spring Golf tournament this year. See Megan Tosh's recap in this newsletter. All proceeds of the tournament went to ASHRAE Research. On the topic of ASHRAE Research your chapter has been making great strides under the leadership of our RP Chair, Ian Lahiff. Ian is a new ASHRAE VOLUNTEER, but is really up to the RP challenge. His goal for the year is \$ 32 500, which is the highest goal among all chapters in Region XII. Ian's article in this Dewpoint will give you an RP update. Please remember June 30, 2011 is our RP deadline and every dollar will count! You will be hearing a lot more from Ian and the chapter regarding RP from now till that date.

As with every newsletter, I would like to spotlight some of our chapter VOLUNTEERS. Joseph deArmas, Kyle Davis and Hugh Wilson have given a lot of their time and talent to the chapter. Over the last year, the purpose of these VOLUNTEER spotlights is to show you that ASHRAE VOLUNTEERS come in all ages, backgrounds and levels of experience. We truly derive strength from this level of diversity. If you're looking to lead and shine among your peers, we will be happy to find you an opportunity in the 2011-2012 ASHRAE year. Please contact President Elect, John Miller at jmiller@peifla.com.

Look forward to seeing you at our final technical meeting of the year on May 12. ASHRAE President Lynn Bellenger will be speaking to the chapter. Please come out and give her a big ASHRAE Central Florida welcome.

Central Florida ASHRAE Volunteer Spotlight



Kyle Davis
Vice President & Branch Manager
– Harper Limbach, LLC
Member Since: 2006
Volunteer Since: 2008
Notable Volunteer Service: Nominating Committee Chair, UCF Initiative Chair, Shrimp Boil Volunteer

We thank you for your work with the UCF Initiative and Nominating Committee.

- Jason Alphonso, Chapter President



Joseph de Armas
Mechanical Engineering Designer
– Jacobs, Inc.
Member Since: 2006
Volunteer Since: 2008
Notable Volunteer Service: Refrigeration Chair, Dewpoint Editor, Chapter Secretary

Thanks for publishing our Dewpoint on time and giving it a fresh look every month.

- Jason Alphonso, Chapter President



Hugh Wilson
President / Sales
– Thermal Tech, Inc.
Member Since: 1963
Volunteer Since: 1970's
Notable Volunteer Service: Chapter President, President Elect, Board of Governors, Audit Committee Chair

We are fortunate to still have you contribute to our chapter after all these years of service. We appreciate your dedication to auditing our financial year.

-Jason Alphonso, Chapter President

History

Chair :
Donia Bessa, PE



Historical Company Event - TLC Marks 100 LEED®-Certified Projects

TLC Engineering for Architecture ended Earth Month in style with three LEED-certified projects in three days, bringing our total of LEED-certified projects to 100.

This notable achievement was recognized by Rick Fedrizzi, President, CEO and Founding Chair of the U.S. Green Building Council, governing body for LEED certification. An excerpt from his congratulatory note said “TLC should be applauded for their commitment to bringing greener, healthier buildings to the southern United States.....I extend my sincerest congratulations to TLC for reaching this milestone, and anticipate many more successful and innovative projects from their team.”



No. 100 is the Police Headquarters in Franklin, TN, which achieved LEED Gold certification. TLC worked closely with Kennon Architects of Nashville to provide LEED design administration and sustainable consulting. Located in downtown historic Franklin, the \$14 million, 95,000-sq. ft. building has three vehicle bays, evidence processing area, large conference and community room and a forensic laboratory.

TLC's LEED-certified projects include two Platinum, 41 Gold, 37 Silver and 20 Certified, exceeding 12 million square feet of certified sustainable space. A pioneer in sustainable design, the TLC team includes 92 LEED-accredited professionals, 30 ACG-certified commissioning authorities, and three ASHRAE Certified Building Energy Modeling Professionals.

Research Promotion

Chair :
Ian LaHiff



Members and Friends of the Central Florida Chapter of ASHRAE, We need your help!

We are reaching the end of this year's Research Promotion campaign and still have 50% of our goal left to go!

Going on now until June 30th Headquarters will match every dollar you donate to every dollar you donate to fund ASHRAE Research is matched dollar for dollar at the society level!

Yes you read that right! For every \$100 dollars you donate to ASHRAE Research, Society will match your contribution to fund industry research! You can be assured that every one of your dollars will be spent on research to provide the tools, publications and standards we use every day!

Through ASHRAE's research, we have developed more efficient ways to condition, ventilate, and commission our buildings that are quickly becoming standard practice throughout the United States and the rest of the world. Without your help and contributions, ASHRAE will not be able to remain the technical experts and leaders of the industry! By choosing to donate, you are helping fund the projects necessary to develop standards to design the most efficient and functional indoor environments.

Please make your donation TODAY online at <http://www.ashrae.org/contribute> (Please reference the **Central Florida Chapter** in the form), or contact Ian LaHiff (Ian.LaHiff@EXP.com) with cash or check donations. Any individual donation greater than \$100 or a corporate donation of \$150 is an honor roll level donation where you will be recognized by society with a bronze medallion, and your name in an upcoming edition of the ASHRAE Journal recognizing all of our Honor Roll Level donors!

All donations are due at society no later than June 30th, please deliver all check and cash donations prior to June 20th to allow for shipping.

I would also like to extend a very special thank you to John Miller, Firouz Keikavousi, Diane Powers, Megan Tosh along with Jason Alphonso and the rest of the Central Florida Board members for their time and effort in putting together this spring's golf tournament. I would also like to recognize Bill Dillard and Firouz Keikavousi for lending their time and years of experience to help with Research Promotion. These two are truly Champions for the cause, THANK YOU!

UCF Initiative

Chair :
Kyle Davis



As many of you may now, the Central Florida Chapter has been working with the University of Central Florida via the UCF Initiative. Recently we participated in helping UCF in receiving a government grant for a competition called MegaWatt Ventures. MegaWatt Ventures is a renewable energy technology and business competition that gives 10 teams of university students and young entrepreneurs \$10,000 and a mentor network to compete for \$100,000 as well as other prizes to start their clean tech company in Florida. In addition to helping the University "win" the money for this competition, we also participated in the judging to select the winners of the \$10,000 prize.

It is now time to continue our support. We have the opportunity to be a part of the mentor network. The competition provides a mentor network of seasoned technologists and executives from across the state to assist teams in product development, as the teams are comprised predominantly of students, and need product development experience. MegaWatt Ventures' facilitators are seeking either product developers (10+ years of experience) or technical executives in sales/operations/manufacturing to assist the following teams:

Verdicorp - <http://verdicorp.com/> (Tech: http://contractingbusiness.com/business_bits/danfoss-inventor-conry-verdicorp-0110/)

I-Red – vertical wind turbine design with a unique generator concept

OrgSolar – solar integration/Building-Integrated PV sales/distribution/installation/operations executive background

These concepts are VERY early stage, and the program is asking teams to check in with technical mentors once a month or with the executive mentor every other month, until the final event, Sept 8 -9, 2011. Technical mentors are sought to assist with the team's product development progress. No exchange of IP, especially on any design aspects, should originate from these conversations – it should be more on the for-seen issues with scaling processes or manufacturing, and some industry background on what would be appealing to potential customers. Executive mentors would look over business plans and presentation slides the students must submit for the final competition, as well as answer questions about the clean tech market.

If you are interested in being a mentor or would like more information, please contact Andrea Wesser at awesser@megawattventures.com or call 407-882-0594.

Spring Golf Recap

Co-Chair :
Megan Tosh, PE



Our Spring Golf Tournament was Friday, April 1st at Sanctuary Ridge. The weather was beautiful and everyone in attendance had a great time!

All proceeds from the golf tournament go towards ASHRAE Research Promotion and this tournament helped us inch closer to our goal! Overall, we raised more than \$6,700 towards Research Promotion for our chapter. Thank you Central Florida for your support!



Upcoming Events

ASHRAE Presidential Theme -
Modeling a Sustainable World

May 12, 2011

Lynn Bellenger, P.E., ASHRAE Society President

Nominations

Central Florida ASHRAE friends and members, It is with great pleasure that the Nominations Committee would like to present the board for the 2011-2012 ASHRAE Central Florida calendar year.

Your Officers and Governors for the 2011-2012 year are:

Chapter President – John Miller
President-Elect – Megan Tosh
Vice-President – Anik Patel
Treasurer – Malia Powers
Secretary – Nate Boyd
Governor – William “Bill” Dillard
Governor – Firouz Keikavousi
Governor – Wade Conlan
Governor – Richard King
Governor – Jason Alphonso

After the polls were posted and the votes cast the Nominations Committee’s recommendations have been upheld, and all individuals mentioned above are eager and willing to serve in their volunteer post for the upcoming year.

Thank you for all of the input received by our members during the nominations process, and we look forward to serving you again in the coming year.

Sincerely,

The Nominations Committee.

Programs

*President Elect & Programs Chair :
John Miller, PE*



Central Florida ASHRAE, It has been an honor having the opportunity to serve as your President-Elect and Programs chair for the 2010-2011 ASHRAE year, and it is with great pleasure I would like to present to you the final program of the year. This month we welcome the current ASHRAE Society President, Lynn Bellenger, P.E. to central Florida where she will take the time to present us her presidential message “Modeling a Sustainable World”. Lynn has traveled around the world over the past year promoting her theme and ASHRAE’s mission to eager listeners, and now it is time for Central Florida to have the opportunity to hear it directly from ASHRAE’s first woman president. Please join us as we celebrate the end of another successful year in Central Florida with one of our most influential speakers!

Thank you for allowing me to serve you by developing the past year’s programs schedule, and I look forward to seeing everyone again this September as our new President-Elect and Programs Chair, Megan Tosh, develops another series of programs for all of us to enjoy in the coming year!

Refrigeration

*Chair :
Jason Alphonso, PE*



Thank you one and all who attended the ASHRAE Refrigeration Tour 2011. A group of about 15 ASHRAE members toured Bari Beef International (BBI) on May 6, 2011. BBI has been providing quality meat products in the Central Florida market since 1985. Their new USDA processing center, a 74,000 square foot facility is comprised of state of the art technology along with some time honored traditional methods.

Colin Mclean (CEO, BBI) gave us a tour of his facility. This facility holds about \$ 5 million inventory at one given time. Our technical tour guides, Jim Grady and Dean Ellerbrock answered some of the technical questions. Jim and Dean combined have over 75 years experience in the refrigeration industry.

Key elements of a refrigerated warehouse design were discussed. The group had good questions about operating costs, especially the cost of energy. Colin pointed out the different processes involved in the aging of meat, especially the special “dry aging” process. This type of aging involves tight temperature and humidity control which imparts a very palatable and unique taste to the meat.

We thank Colin and BBI for opening their doors to our ASHRAE group. Also, a special thanks to Paul Halyard, P.E and the staff at University Club for their assistance in setting up this tour.



James A. Oberlin	1962-63
James A. Driver	1963-64
Warren L. Chase	1964-65
Kenneth E. Hayes	1965-66
Lloyd H. Boissoneault	1966-67
William C. Denson, PE	1967-68
Maynard D. Reese	1968-69
William R. Penn	1969-70
Theodore H. Brooks	1970-71
J. Wesley Floreth	1971-72
Wiley M. Cauthen	1972-73
Edwin C. Pratt	1973-74
Lyle M. Houser, Jr, PE	1974-75
Hal A. Head, PE	1975-76
Garth E. Tristram	1976-77
Raymond E. Davis	1977-78
W. Hugh Wilson, Jr	1978-79
William M. Dillard	1979-80
John D. Simmonds, PE	1980-81
Joseph K. McCarthy	1981-82
Dwayne Lorenze	1982-83
David Wassman, PE	1983-84
David Krause	1984-85
Bill Watford	1985-86
John J. Asendorf, PE	1986-87
Melvin Borczynski	1987-88
Jack Zelsman	1988-89
Kenneth L. Eiermann, PE	1989-90
Kevin K. McKenzie, PE	1990-91
Todd S. Morgan, PE	1991-92
Firouz Keikavousi	1992-93
John Elsea	1993-94
Bernard Horne	1994-95
Mark Lanier	1995-96
Larry Snyder	1996-97
Bill Leaton	1997-98
Hossein Dayi, PE	1998-99
Gary Carver, PE	1999-00
Michael Sheerin, PE	2000-01
Traci Just	2001-02
Chris Bradford	2002-03
Dan Cross, PE	2003-04
Damon Lynn, PE	2004-05
Todd Moore, PE	2005-06
Tim Citek	2006-07
Mike Dillard	2007-08
Wade Conlan, PE	2008-09
Rich King, PE	2009-10
Jason Alphonso, PE	2010-

ASHRAE Comments on DOE Quadrennial Technology Review

The U.S. Department of Energy (DOE) is conducting a review of its technology programs via a Quadrennial Technology Review, as part of a federal government-wide Quadrennial Energy Review. These reviews will help guide the future direction of federal energy priorities.

DOE solicited public comment on their Technology Review Framing Document, which was created to help facilitate stakeholder input. Responding to the call, ASHRAE submitted comments to DOE, which addressed the following issues, among others:

- The principles DOE should follow in allocating resources among technologies of disparate maturity and potential time to impact;
- Research and development of energy flows in buildings;
- The role DOE should play in addressing non-technical barriers to the deployment of energy technologies (the Department grouped codes and standards under this area);
- Modernizing the electrical grid

To view ASHRAE's comments in full, visit <http://www.ashrae.org/advocacy/page/1348>. To view DOE's Quadrennial Technology Review Framing Document, including an introductory video by DOE Under Secretary for Science, Steven Koonin, visit <http://www.energy.gov/qtr/>.

In other news... the e-industry news published as a side note that "Microsoft has announced that they plan to cut their average Power Usage Effectiveness (PUE) from 2.00 to 1.25 over the next 24 months."

What does this mean?

"PUE measures the power used for non-IT purposes in a data center, so a PUE of 1.10 says that for every watt used by IT hardware, 0.10 watts are used in cooling, lighting and other supporting infrastructure. Microsoft's goal equates to a 75 percent boost in the efficiency of its facilities."

Facebook also recently announced their plan for reducing data center PUE with their Open Compute Project, <http://opencompute.org/>. They say that drawings are available but I have not been able to access them.

In summary, the Open Compute Project uses evaporative cooling for the data center to reduce the PUE. In addition, they have increased the acceptable cold isle temperatures to range between 65°F and 85°F. The data center is located in Pineville, Oregon which has much lower wet bulb temperatures than the southeast. While these practices aren't practical for the southeast, it shows how a creative mind can reduce energy costs for high energy-use facilities such as data centers. See the attached PDF for more criteria for the Open Compute Project.

Chapter Leadership



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