



# DELTA DIGEST

April 2011

Editor: Stuart Feilden

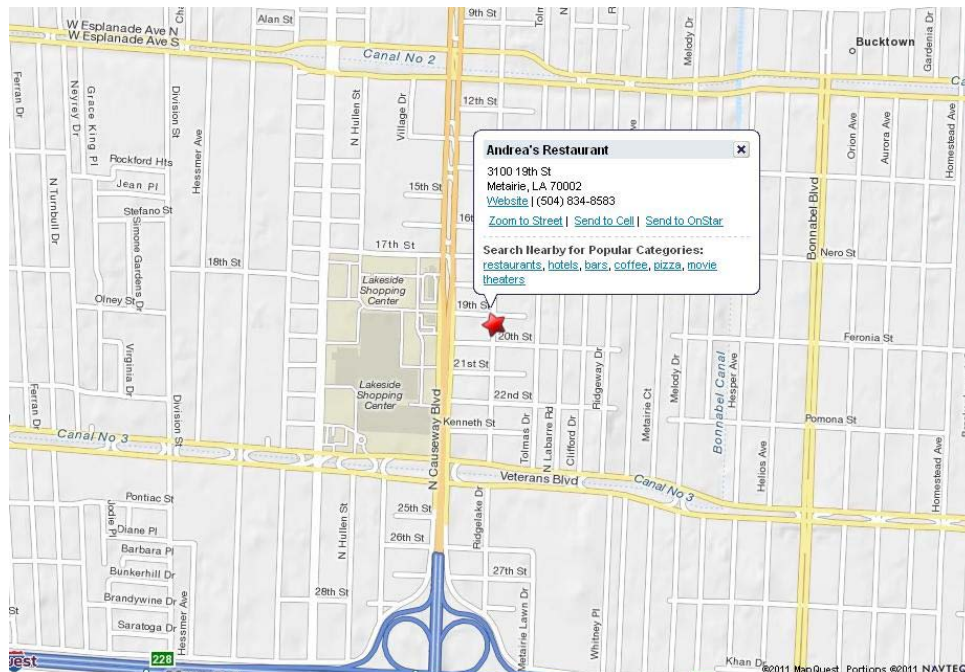
The [New Orleans Chapter of ASHRAE \(www.ashraeno.com\)](http://www.ashraeno.com) is once again pleased to distribute the latest Delta Digest, keeping you up-to-date with the latest happenings of your local ASHRAE chapter. As always, if you have any comments that can help us serve you better, please let us know.

## Meeting Information:

- Date and Time:** Tuesday, April 19, 2011
- Venue:** Andrea's Italian Restaurant  
3100 19th Street at Ridgelake, Metairie, LA 70002 (See Map Below)
- Time:** 5:30 pm (Social) & 6:00 pm (Dinner & Presentation Begin)
- Cost:** \$ 30.00 per person (Includes dinner)
- Speaker:** Dennis Stanke, Staff Applications Engineer, Trane, ASHRAE DL
- Topic:** ASHRAE Standard 189.1 "High Performance Green Buildings"

Please RSVP to [Stuart.Feilden@honeywell.com](mailto:Stuart.Feilden@honeywell.com) for this event.

This is a great opportunity to attend a highly informative presentation and earn 1.0 PDH. Please feel free to bring a colleague or associate to the meeting and pass this along to any ASHRAE members who may not be on this list.





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## *President's Message*

April 2011

Dear Fellow Members, Engineering Students, HVAC Colleagues and Guests,

Spring is finally here in New Orleans, though it never lasts long enough. I hope everyone enjoys the beautiful weather, great golf and numerous festivals that this season brings to our great city. Speaking of golf, our Annual Golf Tournament is now behind us. As usual, it was a success, and I would like to thank each and every person that had a part in making that happen. At risk of leaving someone out, I am not going to name names, but you know who you are!

At this point, we only have two meetings remaining for the ASHRAE year. Those two meetings come with two outstanding speakers in Dennis Stanke (TRANE) and Julien deBullecourt (MCQUAY). I am looking forward to increased attendance over the next couple of meetings. Just a reminder, the May meeting will be held on 'the Thursday before the third Tuesday' (5/12) in lieu of our traditional 'third Tuesday' of the month. I hope to see everyone in attendance.

If anyone needs anything, please do not hesitate to reach out to myself or one of my board members.

A handwritten signature in black ink, appearing to read 'K. Sharbonno'.

Kyle Sharbonno



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## 2010 – 2011 ASHARE New Orleans Events

### General Membership Meeting Schedule

\*\*\* Meetings are typically on the 3<sup>rd</sup> Tuesday of every month. \*\*\*

September Meeting	Tuesday, September 21, 2010
October Meeting	Tuesday, October 19, 2010
November Meeting:	Tuesday, November 16, 2010
Christmas Party:	Thursday, December 16, 2010
January Meeting:	Tuesday January 18, 2011
February Meeting:	Tuesday, February 15, 2011
March Meeting:	Tuesday, March 15, 2011
April Meeting:	Tuesday, April 19, 2011
May Meeting:	Tuesday, May 17, 2011



### Special Events Schedule

ASHRAE/ASPE Christmas Party	December 16, 2010
Past President's Night	December 16, 2010
Research Promotion Night	December 16, 2010
17th Annual Golf Tournament:	March 25th, Colonial Country Club
UNO Spring Event	TBD

### General Membership Meeting Presentation Topics

Sep 21	"Room Systems," David John, DL, Metal Industries
Oct 19	"Thermal Energy Storage," Mark Steven Johnson, Calmac Manufacturing
Nov 16	Brian Monk, DL, Carrier
Dec 16	No speaker — Christmas Party
Jan 18	Variable Refrigerant Flow Benefits for Variable Load Applications, Robert Hanna, LG Electronics
Feb 15	Hoy Bohanon, DL, Working Buildings, LLC
Mar 15	Chris Muller, DL, Purafil
Apr 19	Dennis Stanke, DL, Trane
May 17	J. deBullet, DL, McQuay

### Board Meeting Schedule

September	Friday, September 17, 2010
October	Friday, October 15, 2010
November	Friday, November 12, 2010
January	Friday, January 14, 2011
February	Friday, February 11, 2011
March	Friday, March 11, 2011
April	Friday, April 15, 2011
May	Friday, May 13, 2011





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## **ASHRAE Technology Awards Highlight Outstanding Building Projects**

LAS VEGAS – Designers of systems for a university building, a synagogue, a hospital and a commercial building are recognized by ASHRAE for incorporating elements of innovative building design.

Recipients of the ASHRAE Technology Awards were recognized at the Society's 2011 Winter Conference being held this week in Las Vegas. The recipients have applied ASHRAE standards for effective energy management and indoor air quality. This year's Society-level competition had 34 entries.

"ASHRAE Technology Awards are awarded for innovative HVAC&R designs that provide superior energy saving, cost effectiveness, enhanced indoor air/environmental quality and excellent performance through application of new design concepts, new technologies or by applying existing technologies with innovative approaches," Wei Sun, chair of the judging panel, said. "Panel judges looked far beyond a good design or a high profile project, they confirmed that all judging criteria were well addressed and looked for the application of new technologies and innovative concepts. Winners challenged themselves to work outside their comfort zones."

Following are summaries of the winning projects.

### **Jerry Yang and Akiko Yamazaki Environment and Energy Building (Y2E2), Stanford University**

Amit Khanna, Arup, San Francisco, Calif., receives first place in the new institutional buildings category for the design of the Jerry Yang and Akiko Yamazaki Environment and Energy Building, Stanford University, Palo Alto, Calif.

When Stanford Trustee Jerry Yang took Senator Barbara Boxer (D-Calif.) on a tour of the new building, known as Y2E2, Boxer told the Yahoo! Inc. co-founder, "This is spectacular. It gives me a lot of hope!"

Y2E2 exemplifies a new kind of thinking aimed at providing watershed solutions in the areas of environment, technology and energy. It is the first element in Stanford's new Science and Engineering Quad 2.

The energy performance emphasizes load reduction, passive operation and efficiency, energy recovery opportunities, including self-generation, and allows for successful carbon-neutral operation through offsets. Y2E2 has post-occupancy verified energy consumption 44 percent below Standard 90.1-2004. In addition, the building spaces are either naturally ventilated or served via 100 percent outside air-handling units, maintaining high indoor air quality at all times.

Other highlights include north and east facing offices with adequate façade opening and solar protection to maintain comfortable conditions with no mechanical cooling or forced ventilation, achieved through the Adaptive Comfort Criteria in Standard 55, *Thermal Environmental Conditions for Human Occupancy*, and computational analysis; use of active chilled beams, making Y2E2 the first of its kind in California and among the largest buildings in the country to use them; and a natural smoke ventilation system. Y2E2 achieved a level of energy performance for a +0.9-4.6 percent premium that will pay itself back in four to six years.

### **Pierre-Boucher Hospital**

Gilles Desmarais, DESSAU, Montreal, Quebec, Canada, receives first place in the existing healthcare facilities for the rehabilitation of Pierre-Boucher Hospital, Longueuil, Quebec, Canada. The building is government owned and managed by CSSS Pierre-Boucher.

Because of growth in ambulatory service needs, over 100,000 square feet, including a new hospital wing, operation block and laboratories, were added, as well as over 90,000 square feet of the existing hospital reorganized. By combining low-temperature water loops with a dual-compressor recovery chiller and a direct-contact condensing stack economizer, the design team was able to recover a significant amount of energy that would have normally been evacuated outside. Enthalpy wheels also were added in the fresh air units to reduce air heating, cooling and humidification loads.



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The design isn't set apart only by its high performance but also the original way in which it was designed. Quebec's extreme winter temperatures require energy management more complicated than most areas. Through the use of building energy simulation software, designers evaluated different solutions before choosing the most efficient and cost-effective one. This led to a million dollar self-financed innovative project.

The hospital's innovative and efficient design significantly reduced energy use: reducing yearly natural gas consumption by 64 percent for the expansion area and 15 percent in the existing area in spite of the increase of ventilation rate in the rehabilitated part, which also reduces greenhouse gas emissions by 1,152 tons a year.

## **Jewish Reconstructionist Congregation**

Yury Lui and Charles Eggert, HP Mission Critical Services, Chicago, Ill., receive first place in the new public assembly category for the Jewish Reconstructionist Congregation, Evanston, Ill. The building is owned by the Congregation.

The new synagogue replaces its original building, balancing the limitations of a small site with an ambitious program that promotes worship, education and community objectives. Its innovative measures include use of displacement air diffusers that were carefully designed to integrate with architectural elements. Wood slats screen supply and return ventilation making them essentially invisible to the users while still permitting supply air to stratify in the room. The building's showcase three-story staircase was positioned for south exposure, which allows the air to act as a thermal buffer zone to capture solar and exterior heat gain. The staircase is equipped with outside air intake openings at the first floor and an exhaust air hood on the roof for natural ventilation. This design cools the stairs at no cost when weather conditions permit and captures the heat inside during the winter.

The building is heated by an ultra-high 94 percent efficient gas-fired condensing boiler and cooled with a high efficiency air-cooled modular chiller with peak power consumption at 1.212 KW/Ton.

## **The David Brower Center**

Peter Rumsey, P.E., Fellow ASHRAE, Integral Group, Oakland, Calif., receives first place in the new commercial buildings category for The David Brower Center, Berkeley, Calif. The project was developed by Equity Community Builders.

The Center serves as a home for many environmental and social action organizations and combines offices and program facilities. Using the latest in energy-efficient technologies and design as well as 53 percent recycled building materials, the project makes the lowest possible impact on the environment, taking into account the true life-cycle cost of building construction, operation and maintenance.

The building uses some 60 percent less energy than the average U.S. building of similar use, before taking credit for the energy production of the onsite 25 KW PV system. Energy efficiency gains are provided by an innovative combination of HVAC and whole building design strategies and technologies, including an in-slab radiant heating and cooling system; a mechanical nighttime purge system that captures cooler summer night air, flushing the building and charging the high thermal mass; a high efficiency condensing boiler selected to operate at a lower supply water temperature; pumps with variable speed drives; ground floor spaces served by high efficiency water source heat pump systems; evaporative cooling; natural ventilation; and displacement ventilation.

The building's water saving features include waterless urinals (a landmark milestone: the first installation of these for the City of Berkeley); a rainwater catchment system that provides water for flushing toilets and irrigation; and low-flow fixtures.

The building features low energy and low carbon output mechanical systems and low water-use plumbing systems. It could achieve 70 to 80 percent lower carbon emissions per person than the current



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baseline due to well-designed MEP systems, efficient use of building space and a conscientious concrete specification.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

## Chapter Technology Transfer Corner

### Sustainable Design

#### **December 20, 2010** ASHRAE: Standard 189.1 Adopted as Part of Army Sustainability Policy

**ATLANTA** – ASHRAE leaders recently met with U.S. Army officials regarding a new sustainable design and development policy that incorporates requirements of the green building standard developed by the Society, USGBC and IES.

<http://www.ashrae.org/pressroom/detail/17685>



### Government Affairs

#### **December 15, 2010** ASHRAE Applauds Signing of Federal Buildings Personnel Training Law of 2010

**ATLANTA** – Federal legislation signed into law this week will provide training for federal building personnel in the areas of building operations and maintenance, energy management, safety and design functions.

<http://www.ashrae.org/pressroom/detail/17684>

### Technology

#### **December 7, 2010** ASHRAE Brings Hot Topics to AHR Expo Attendees

**ATLANTA** – Guidance on industry hot topics is being provided from ASHRAE through two free sessions at the AHR Expo® in Las Vegas, Nev.

<http://www.ashrae.org/pressroom/detail/17682>

#### **November 29, 2010** Newest Version of Thermal Comfort Standard Provides New Provisions on Elevated Air Speeds

**ATLANTA** – New requirements regarding air speeds, analysis and documentation are included in the newly published ASHRAE thermal comfort standard, ANSI/ASHRAE Standard 55-2010, *Thermal Environmental Conditions for Human Occupancy*.

<http://www.ashrae.org/pressroom/detail/17670>

## Technology Awards Program

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The purpose of the ASHRAE Technology Awards program is to:

1. Recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data;
2. Communicate innovative systems designs to other ASHRAE members;
3. Highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

For more information on this program, [Click Here](#).

## Young Engineers in ASHRAE

Please direct any questions you may have on the ASHRAE YEA Connection to: [youngengineers@ashrae.org](mailto:youngengineers@ashrae.org). Expect the next edition of the newsletter in February 2009. Please feel free to email submissions for future newsletter articles regarding events at your local chapter.

The primary objective for the YEA Committee of Members Council is to enhance our member benefits for young professional ASHRAE members by identifying activities and services focused on their needs.

## Membership Corner

We wish to encourage those who may have changed jobs, addresses, phone numbers, or e-mail addresses to please logon to the ASHRAE website to update your account information. Consolidation of this information will be utilized to develop the Chapter Directory, so don't delay! Don't let bad information get published!

[WWW.ASHRAE.ORG](http://WWW.ASHRAE.ORG)

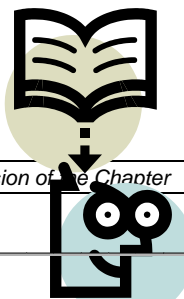
This year, news of our meetings will be transmitted in various forms, all in an effort to increase our Chapter's visibility and boost member attendance. Our Chapter has many members we haven't seen in quite a while. Please contact your associates in our profession (forward their information to [Stuart Feilden](#)), and encourage them to get involved in our Society on the local, regional, national, or international level. Also, look for meeting announcements in City Business and the weekend Money Section Calendar of the Times Picayune. Not receiving e-mail notifications? Changed jobs or e-mail addresses?

## ASHRAE Research

Thank you for your support of ASHRAE.

One of the missions of ASHRAE is to fund and administer research projects related to the HVAC/R sciences. Numerous advances in our industry have been made over the past several decades due to the work funded by ASHRAE Research. Last year we had excellent participation by our membership,

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and we were able to exceed our goal. Many thanks to our past RP Chairman Harold Baur for his hard work. Harold was recognized for his accomplishments at our recent CRC in Memphis, including receiving the Regional Award for outstanding performance as RP Chair. Congratulations Harold!

As we move head first into the new ASHRAE year, please know that I will be contacting you to discuss Research Promotion, and will request your financial support for this worthwhile cause. After last year's outstanding performance, expectations are high! Thank you in advance for your consideration of making your tax-free donation to Research Promotion this year.

Best regards,

Kelly Hasney Jr.  
ASHRAE NO Chapter RP Chair

Contributions to ASHRAE Research should be made payable to ASHRAE Research and mailed to Damien W. Serauskas, P.E., 15 Cypress Point Lane, New Orleans, LA 70131



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## ASHRAE Chapter Banner



The bottom of the banner says "Founded in 1904."

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[STUART FEILDEN](#) - EDITOR

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