Greetings SWFL Chapter. We are already into the first quarter of the ASHRAE year. Our first meeting of the year was a HUGE success. The meeting was well attended and guest speaker was Spectacular.

Our Chapter’s Golf Tournament is right around the corner on Saturday, October 22nd. The Golf Event will be at the River Hall Golf Club as it has been for the past few years. We are still looking for sponsors, so please contact Isaac Lima, (ilima@bandicontractors.com), ASAP to RSVP and/or sponsor this great event. There is still time to put a team together. Remember, the funds generated go to ASHRAE Research, so this event helps raise the funds necessary to reach our RP goals (Research Promotion Goals).

The Guest Speaker this month is Bruce D. Hunn, Ph.D., (Distinguished Lecturer!) Bruce D. Hunn, is a consultant in building energy analysis and recently retired after nearly 15 years as Director of Technology/Director of Strategic Technical Programs at ASHRAE. He received B.S., M.S., and Ph.D. degrees in Mechanical Engineering from Stanford University in 1964, 1965, and 1972, as well as a B.A. in Engineering from the University of Redlands. He is Chair of ASHRAE TC 7.6 (Building Energy Performance) and is a member of SPC 211 (Standard for Commercial Building Energy Audits). He is a past chair of TC 4.7 (Energy Calculations) and past vice-chair of the Research and Technical Committee. Bruce has forgotten more than most of us know. We are extremely fortunate to have him as a speaker.

We are very excited about some upcoming STEM events. The Robotics programs are starting up and we are looking for volunteers, refs, and judges for the FIRST Lego League and the FIRST Tech Challenge League. More information will follow. If you would like more information immediately, please see Jason Hardman or Richard Brooks.

A reminder that next year’s CRC, (Chapters Regional Conference), is in Argentina. This conference will take place around the first week in August. Please start planning now to attend. Additionally, the ASHRAE Winter Meeting is in Las Vegas this January. Both events shall be great fun for all.

One last thing – Our Chapter is only as strong as its Members. I would encourage all of our Members to come to at least one meeting and bring someone who is not a Member. If you are not currently a Member, consider joining. For those potential new members under 30 years of age, ASHRAE makes it very easy to get started. Ask one of the officers to tell you about the Quick Start Program.

Thank you all for your support!

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**Guest Speaker:** Bruce D. Hunn, Ph.D., (Distinguished Lecturer!)

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This presentation describes the ASHRAE Research Program, how the process works, and how it benefits ASHRAE members and chapters. Emphasis is placed on building confidence in ASHRAE’s Research Promotion campaign by explaining the rigor, integrity, and value of the research program. A detailed explanation is given by which research projects are initiated in the TCs, how work statements are vetted, how contractors are selected, and how projects are monitored to produce quality research results. The role and responsibilities of the Research Administration Committee in overseeing and coordinating the Research Program is presented. Development of ASHRAE’s 5-year research strategic plan by RAC is also described. This presentation provides valuable insights into ASHRAE research, which is little known to most chapter members who are asked to financially support this program. Grassroots members need to know how their research contributions are being spent.

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**Research Promotion – Isaac Lima**

Our 2016-2017 year is off to a great start! September was a busy month and October is looking to be even busier with our Donor Recognition Night during the second chapter meeting and the Golf Tournament at River Hall on October 22. Are you participating in our Golftoberfest Tournament? Time is running out, so don’t miss your chance to participate as a sponsor and/or player. It is guaranteed to be a great time!
What if accessing fresh water on the go was as easy as turning a dispenser in the front of your car? That was the vision Ford engineer Doug Martin unveiled on Monday, a system called “On-The-Go H2O.” Using a simple kitchen pan (helpfully provided by his wife), Martin collected drinking water from the air in this week’s Further With Ford trend conference in Detroit, Michigan. Inspired by a water-dispensing billboard that he had seen, Martin decided to explore the feasibility of making fresh water accessible wherever it would normally be scarce. This isn’t Martin’s first invention at Ford. The engineer has been with the company for 22 years, and in that time he’s managed to amass 70 auto-related patents. In his new invention, Martin hopes that this technology could be repurposed to help provide access to clean drinking water.

Super-powered kitchen wrap

To develop their cooling textile, the Stanford researchers blended nanotechnology, photonics and chemistry to give polyethylene – the clear, clingy plastic we use as kitchen wrap – a number of characteristics desirable in clothing material: It allows thermal radiation, air and water vapor to pass right through, and it is opaque to visible light. The easiest attribute was allowing infrared radiation to pass through the material, because this is a characteristic of ordinary polyethylene food wrap. Of course, kitchen plastic is impervious to water and is see-through as well, rendering it useless as clothing. The Stanford researchers tackled these deficiencies one at a time. First, they found a variant of polyethylene commonly used in battery making that has a specific nanostructure that is opaque to visible light yet is transparent to infrared radiation, which could let body heat escape. This provided a base material that was opaque to visible light for the sake of modesty but thermally transparent for purposes of energy efficiency. Then they modified the industrial polyethylene by treating it with benign chemicals to enable water vapor molecules to evaporate through nanopores in the plastic, said postdoctoral scholar and team member Po-Chun Hsu, allowing the plastic to breathe like a natural fiber.

Making clothes

That success gave the researchers a single-sheet material that met their three basic criteria for a cooling fabric. To make this thin material more fabric-like, they created a three-ply version: two sheets of treated polyethylene separated by a cotton mesh for strength and thickness. To test the cooling potential of their three-ply construct versus a cotton fabric of comparable thickness, they placed a small swath of each material on a surface that was as warm as bare skin and measured how much heat each material trapped. “Wearing anything traps some heat and makes the skin warmer,” Fan said. “If dissipating thermal radiation were our only concern, then it would be best to wear nothing.” The comparison showed that the cotton fabric made the skin surface 3.6 F warmer than their cooling textile. The researchers said this difference means that a person dressed in their new material might feel less inclined to turn on a fan or air conditioner. The researchers are continuing their work on several fronts, including adding more colors, textures and cloth-like characteristics to their material. Adapting a material already made for production in the battery industry could make it easier to create products. “If you want to make a textile, you have to be able to make huge volumes inexpensively,” Cui said. Fan believes that this research opens up new avenues of inquiry to cool or heat things, passively, without the use of outside energy, by tuning materials to dissipate or trap infrared radiation. “In hindsight, some of what we’ve done looks very simple, but it is because few have really been looking at engineering the radiation characteristics of textiles,” said Fan.

Credit: article by eindustry@shnvoe.org The HVAC&R Industry, Weekly News – September 22, 2016 Vol. 15 No. 38

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Massachusetts Governor Issues Executive Order on Climate Change

Massachusetts Governor Charlie Baker (R) signed Executive Order 569 on September 16, which lays out a comprehensive approach to further reduce greenhouse gas emissions, safeguard residents, municipalities and businesses from the impacts of climate change, and build a more resilient Commonwealth. The Order, Establishing an Integrated Climate Change Strategy for the Commonwealth, represents the collaboration between the Office of the Governor, the Executive Office of Energy and Environmental Affairs, the Executive Office of Public Safety and Security, and key State, local and environmental stakeholders. The Order, which will be reviewed again in 2019 and every five years thereafter, builds upon earlier efforts already underway to mitigate and adapt to climate change. Initiatives and programs underway across State government include vulnerability assessments and resiliency plans within the Division of Capital Asset Management and Maintenance, Department of Transportation, Massachusetts Water Resources Authority, Division of Fisheries & Wildlife, and MassPort. This effort follows legislation passed by the legislature in August (H 4568) to seek out long-term contracts from offshore wind farm developers to bring at least 1,600 megawatts of wind energy to Massachusetts in the next 10 years. It also encourages the delivery of larger supplies of Canadian hydropower and other renewables, and provides incentives for utilities to develop energy storage technology. To view the Executive Order please click here.

Credit: article by eindustry@shnvoe.org The HVAC&R Industry, Weekly News – September 22, 2016 Vol. 15 No. 38

Future With Ford

Ford Invention Turns AC Condensation Into Portable Water

What if accessing fresh water on the go was as easy as turning a dispenser in the front of your car? That was the vision Ford engineer Doug Martin laid out in this week’s Further With Ford trend conference in Detroit, Michigan. Inspired by a water-dispensing billboard that he had seen, Martin decided to explore the feasibility of making fresh water accessible wherever it would normally be scarce. This isn’t Martin’s first invention at Ford. The engineer has been with the company for 22 years, and in that time he’s managed to amass 70 auto-related patents. In his new invention, Martin hopes that this technology could be repurposed to help provide access to clean drinking water.

The HVAC&R Industry, Weekly News – September 22, 2016 Vol. 15 No. 38

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The U.S. Environmental Protection Agency (EPA) enacts (2) rules to further reduce use and emissions of commonly used hydrofluorocarbon refrigerants (HFCs). High global warming potential (GWP) refrigerants including R-407A, R-407C will be unacceptable for new food retail installations after January 1, 2021. Cold storage warehouses and chiller uses will become unacceptable in following years. Additionally propane (R-290) has been identified as acceptable alternative at the point of sale. To ensure customers are aware of these changes the HVAC&R Industry is appealing for suppliers to inform equipment owners and for self-contained ice machines and water coolers. For the complete ruling: https://www.epa.gov/sites/production/files/2016-

Credit: article by eindustry@shnvoe.org The HVAC&R Industry, Weekly News – September 22, 2016 Vol. 15 No. 38

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US Conference of Mayors Adopts Energy Efficiency Resolution

The US Conference of Mayors recently adopted a resolution in support of maintaining building energy codes the ICC 2015 level. The resolution, entitled “Moving America’s Model Building Energy Code on a Path of Steady Efficiency Improvements Toward Net Zero” opposes the adoption of proposals that roll back the 2015 ICC’s level of efficiency; and supports the adoption of the Energy Efficiency Codes Coalition’s Builder Flex Points proposal and its recommended 5% boost in efficiency for the 2018 ICC. Additionally the resolution encourages municipal support for all eligible code official codes to attend these hearings and to vote in favor of continued and future efficiency gains for America’s model energy code, the ICC.

Credit: article by eindustry@shnvoe.org The HVAC&R Industry, Weekly News – September 22, 2016 Vol. 15 No. 38

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California Governor Signs Legislation on Super Pollutants

California Governor Jerry Brown (D) recently signed Senate Bill 1383 which establishes some of the nation’s toughest restrictions on super pollutants (also known as short-lived climate pollutants) including black carbon, fluorinated gases and methane. SB 1383 concurrently promotes renewable energy by requiring a 50% reduction in black carbon and 40% reduction in methane and hydrofluorocarbon from 2013 levels by 2030. Sources of these super pollutants include petroleum-based transportation fuels, agriculture, waste disposal and synthetic gases used in refrigeration, air conditioning and aerosol products. To view a statement on this bill, please click here.
RP Raffle
Win a New Driver!

TaylorMade M2 Driver
– RH w/ Medium Flex Shaft, 10.5-degree loft (Gift Receipt Included)

1 ticket for $10
OR
3 tickets for $20

Raffle Drawing to take place during the Golftoberfest 2016 Tournament.

Raffle Winner does not need to be present to win!

Portion of Proceeds to benefit ASHRAE Research and the SWFL ASHRAE Chapter Endowment Fund.

SWFL ASHRAE is a 501(C)(3) not for profit organization
ASHRAE

GOLFTOBERFEST 2016

RIVER HALL COUNTRY CLUB
SATURDAY, OCTOBER 22, 2016
8:00AM SHOT GUN START

Portion of Proceeds to Benefit ASHRAE Research and the SWFL ASHRAE Chapter Endowment Fund

SWFL ASHRAE is a 501(C)(3) not for profit organization
ASHRAE GOLFTOBERFEST 2016

INDIVIDUAL PARTICIPATION & A LA CARTE

**Individual Player Fee: $100**
Includes: Driving Range Warm-up, Cart & Green Fees, Awards Lunch, Gift Bag

**A La Carte:**
Dizzy Fore Challenge – $10 per person
Mulligans – 1 for $10 / 3 for $20
Raffle Tickets – 1 for $10 / 3 for $20
Yard Sticks – $40 per team (measured to front of hole) – Limit of (1) per team
Awards Lunch Only – $50 per person
SPONSORSHIP OPPORTUNITIES

GOLD SPONSOR: $1,500

Eight (8) Player Entries
Sponsorship Recognition on Event Postings
Eight (8) Dizzy Fore Challenge Entries
One (1) Hole Tee Sponsorship
Eight (8) Mulligans

SILVER SPONSOR: $750

Four (4) Player Entries
Sponsorship Recognition on Event Postings
One (1) Hole Tee Sponsorship
Four (4) Dizzy Fore Challenge Entries

À LA CARTE:

Tee Sponsors - $500
Awards Lunch Sponsors - $750 (2 available)
Beverage Cart Sponsor - $1,500 (1 available)
Putting Contest Sponsor - $750
Closest to the Pin Sponsor - $750

HOLE IN ONE SPONSORS (HIO):

$10,000 Cash (#16) - $1000
Golf Vacation for 2 - $750
3 Day Bahamas Cruise for 2 - $750
Premium Golf Clubs & Bag - $500

GOLFTOBERFEST 2016
YES! I WILL SPONSOR:

Gold Sponsor ($1500)

Beverage Cart ($1500) – 1 available

$10k Cash HIO ($1000) – 1 available

Silver Sponsor ($750)

Awards Lunch ($750) – 2 available

Closest to the Pin ($750) – 1 available

Putting Contest ($750) – 1 available

Golf Vacation HIO ($750) – 1 available

Cruise for 2 HIO ($750) – 1 available

Golf Clubs HIO ($500) – 1 available

Tee Sponsor ($500)

Other Donations:

Total Sponsor Amount: $________________

Sponsor Registration

Deadline is:

September 30, 2016

Please make checks payable to:
ASHRAE Southwest FL Chapter

Mail Checks to:
Isaac Lima
2701 Prince Street
Fort Myers, FL 33916

Or

Pay Online:
www.swflashrae.org
# Participant Information

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<tr>
<td>Phone:</td>
<td>$10 Dizzy Fore</td>
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<tr>
<td>Email:</td>
<td>1/$10 or 3/$20 Mulligans</td>
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<td>Total Participant Amount:</td>
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## Directions

From I-75 Take Exit 141 (FL-80) Toward Labelle (6.0 Miles).
Right onto River Hall Parkway and proceed to Clubhouse.
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Thank you for your continued support!