



**Technology Council**

**OCTOBER 2011**  
VOLUME 11 ISSUE 3

## **MEMBERS FIRST! NEWSLETTER**

**G**ood day and welcome to ASHRAE's Members First! Newsletter (MFN). The Members First! Newsletter is issued after each Technology Council Meeting to provide highlights of ASHRAE technical activities and results, in order to keep all members informed. Our goal is to make the work of the technical side of ASHRAE open to all ASHRAE members. Previous issues are available [on-line](#).

*If you have technical questions for ASHRAE, please contact Steve Hammerling, Assistant Manager of Research and Technical Services, at 678 539-1158 or via email at [shammerling@ashrae.org](mailto:shammerling@ashrae.org).*

*Your feedback is welcome and encouraged! Please write to Costas Balaras, Vice Chair, Technology Council at [costas@noa.gr](mailto:costas@noa.gr).*

**H**ighlights as of [July 2011](#)

- [Editorial](#)
  - ✓ Tech Weekend eMeeting, October 3, 2011
  - ✓ Two Special Projects and several Position Documents are near completion
- [Environmental Health Committee \(EHC\)](#)
  - ✓ Three new articles on IAQ Applications published
  - ✓ EHC engaged in reviewing RTARs
- [Refrigeration Committee \(REF\)](#)
  - ✓ Updates to the REF web page
  - ✓ ASHRAE/NIST Refrigerants Conference planned for October 2012
- [Research Administration Committee \(RAC\)](#)
  - ✓ 18 pre-proposals in response to Innovative Research Grants (IRGs)
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  - ✓ "I have a great idea that I think would make a great standard (or guideline)"
- [Technical Activities Committee \(TAC\)](#)
  - ✓ Multidisciplinary Task Groups (MTGs)
  - ✓ Initiating enhanced communication to the grass-root ASHRAE members

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## Editorial

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**W**ith the start of the new Society year, Technology Council under the leadership of its Chair, Ross Montgomery, has been working on a number of challenging and exciting topics that you will read about in the following pages.

The Tech Weekend eMeeting was held on Monday, October 3, 2011. This is part of the ongoing efforts to encourage electronic meetings, with possible conference calls and web meetings for subcommittee and standing committees that report to the Council, starting June 2012. In addition, some Technical Committees (TCs) are exploring the possibility to hold subcommittee meetings by conference call/web meeting/webinar. This may be a more efficient way to conduct subcommittee business and it also allows TC members that can't travel to meetings on a regular basis to still get involved and contribute to the TCs.

The Council's *Ad Hoc Refrigerant Management Plan Committee* has completed the draft report "*Refrigerant Management Action Plan*" and will soon be presented to Technology Council for approval. The report develops a concept for a national refrigerant management program and specifies actions which ASHRAE can take to support the development and implementation of the plan.

The *90.2 Standard Advisory Panel (SAP)* under the Chair of Sheila Hayter, is continuing its elaborations and will soon submit its report and recommendations to the Council. The 90.2 SAP was appointed by the Council Chair in response to the Board of Directors directive from the 2011 Annual Meeting, when the Board unanimously adopted a motion "that the Board of Directors direct Technology Council to provide guidance to Standards Committee at SSPC 90.2 to position Standard 90.2 as a leadership standard. The Council will consider increased energy efficiency, sustainability, and health and safety."

Technology Council will also be working closely with the *Building Energy Quotient Committee (BeQ)*, a new standing committee that is responsible for business planning, training and marketing of the programs of the BeQ enterprise as well as the overall responsibility to determine technical developments that are required to support these activities, as determined by the Board, regarding the ASHRAE Building Labeling program.

In addition, the Council's standing subcommittees have been hard at work on various issues, including long-range plans for the Council, budget planning and priorities (*Planning SubCom*), support Council committees and handle procedural changes (*Operations SubCom*), provide administrative and financial oversight of all special projects (*Special Project SubCom*), and monitor the development of Position Documents (*Document Review SubCom*).

Two *Special Projects* are near completion:

- SP125 Advanced Energy Guide(s) – Existing Buildings: Technical Guide, and
- SP134 50% Advanced Energy Design Guide – K-12 School Buildings (the [50%](#))

[AEDGs](#) are a series of guides for specific building types with an energy savings of 50% over 90.1-2004).

Ongoing *Special Projects* and overview of relevant activities are available [on-line](#).

Several new *Position Documents* are being developed and may be approved by the Winter Meeting in Chicago, including:

- Unvented Combustion Appliances and Indoor Air Quality
- Professional Aspects of Building Commissioning
- Refrigerants and their Responsible Use
- Limiting Indoor Mold Growth and Managing Moisture in Building Systems
- Building Safety and Security

All approved *Position Documents* are available [on-line](#).

Technology Council and all its committees will be meeting during the [ASHRAE Winter Conference](#), January 21-25, 2012 and [AHR Exposition](#), January 23-25, 2012 in Chicago, IL. Join us to discuss and examine the latest topics in the building industry, such as high performing buildings and integrated design. Don't miss the chance to participate in ASHRAE's historically best-attended Conference.

Vice-President, Costas A. Balaras, Ph.D.,  
2011-2012 Vice Chair of Technology Council

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## Environmental Health Committee (EHC)

The Environmental Health Committee (EHC) continues to provide ASHRAE members and the public with information on how to improve indoor environmental quality as we design, construct and operate more energy-efficient buildings.

1. During the 3<sup>rd</sup> quarter, three articles on IAQ Applications have been published in the ASHRAE Journal, including:
  - October 2011: *Theory Meets Practice: Indoor Air 2011*, Lawrence J. Schoen, P.E.
  - September 2011: *Hospital Surge Capacity---Are we ready for the next outbreak?* Shobha S. Subhash and Lewis J. Radonovich, M.D.
  - August 2011: *DOAS Misconceptions*, Stanley A. Mumma, Ph.D., P.E.
2. A program committee has been formed for our next major international conference, ASHRAE IAQ 2013-- Indoor Environmental Quality in Low Energy Buildings, Vancouver, BC, Canada. The conference will be chaired by Steve Emmerich (NIST) and Hal Levin (Building Ecology Group).
3. In an effort to promote coordinated multidisciplinary research, EHC has engaged in reviewing research topic acceptance requests (RTARs) relevant to environmental health to assist the Research Administration Committee (RAC) in its review process.
4. A committee for developing a position document on air filtration and cleaning has

been formed. The committee will be chaired by Pawel Wargocki, Danish Technical University.

5. The *Indoor Air Quality Guide – Best Practices for Design, Construction, and Commissioning* has been widely considered as the most comprehensive IAQ Guide for commercial and institutional buildings ([www.ashrae.org/publications/page/IAQGuide](http://www.ashrae.org/publications/page/IAQGuide)). EHC has formed a working group to develop a proposal for ASHRAE to develop a companion IAQ Guide for residential buildings.

As always, we welcome comments and suggestions from all members regarding IEQ issues that are most important to you and feedbacks on how EHC can serve you better. Please email Steve Hammerling at <mailto:shammerling@ashrae.org> or myself <mailto:jszhang@syr.edu> for your questions, comments and suggestions.

Jensen Zhang, Ph.D.  
EHC Chair

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## Refrigeration Committee (REF)

In July Refrigeration Committee performed a survey of Chapter members to determine interests in refrigeration and identify new refrigeration-related products and services that would be beneficial to ASHRAE members. Over 500 responses were received, with many extensive and thoughtful comments. This information is being reviewed and analyzed to determine how society refrigeration activities can be more valuable and relevant to members.

At the Montreal meeting REF asked for additional speakers on “natural refrigerants and the safe use of refrigerants” to support Chapters and address the PAOE category on these topics. The Refrigeration Speakers List can be found on the REF web page: <http://www.ashrae.org/members/page/797>. Be sure to use the REF website as a resource. The website includes information on refrigeration-related ASHRAE research and other activities as well as information on the Milt Garland Award, Comfort Cooling Award and the latest article to win the George C. Briley ASHRAE Journal Article Award. The REF Manual of Procedures and Reference Manual have both been updated and are located on the website.

An ASHRAE/NIST Refrigerants Conference is being planned for October 2012. The schedule and program are being completed by the planning committee, and will likely include presentations on the future of HFC refrigerants, new HFOs and low-GWP alternatives, and natural refrigerants.

The “Guide for Sustainable Refrigerated Facilities and Refrigeration Systems” Work Statement proposed by REF was conditionally approved by RAC in Montreal, subject to obtaining co-funding. The Guide will include section covering: Refrigerated Facility

Design and Cooling Loads, Refrigeration System Components and System Design, Controls and Control Strategies, Energy Modeling and Performance Analysis, and Commissioning, Operations and Benchmarking. Information in the Guide will be used for design of new facilities, expansions and remodels, as well as providing guidance on improvements and operating methods that may also be applied to existing facilities. An essential element of the Guide is to incorporate an international perspective; both in utilizing information and methodologies from all resources globally, and in creating a document that is usable in countries and climates outside the US. Co-funding is being sought from the multi-lateral fund (MLF) of UNEP.

A Special Project Submittal for a Refrigeration Commissioning Guideline is being completed for submission in Chicago. Since refrigeration systems commonly run year-round in facilities with high energy use intensity, commissioning can be very valuable. However, commissioning of refrigeration systems requires consideration of refrigeration system characteristics and how refrigeration projects are commonly designed and constructed.

REF presented a report to CTTC in Montreal to convey information on refrigeration topics and ask for both input and additional involvement by members on refrigeration-related activities. This year REF is working to identify nationally located companies who would provide a "prepackaged" facility tour for local chapters, such as a supermarket chain or a refrigerated distribution company, to make it easier for a Chapter to plan a refrigeration event.

Douglas Scott,  
REF Chair

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## Research Administration Committee (RAC)

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**R**AC recently received 18 pre-proposals in response to the first solicitation for Innovative Research Grants (IRGs). IRGs are meant to encourage out-of-the-box research to complement the research proposed and guided by technical committees. RAC is currently evaluating these proposed ideas and will meet shortly to determine if we will ask for full proposals on one or more these ideas.

This year RAC had a significant turn over in membership, with 7 new members coming on in July. We had a new member training session in mid-August to quickly bring the new members up-to- speed. The enthusiasm and commitment of these new members has been extraordinary, which has allowed us to efficiently and effectively complete all our business this Fall. RAC members come from a broad range of backgrounds that are representative of overall ASHRAE membership: we have members from academia (3), research institutions (3), consulting firms (2) equipment manufacturers and suppliers (4), and service and control companies (2).

This Fall there are 14 Tentative Research Projects (TRPs) that are ready for bid. In our upcoming October Meeting, RAC plans to prioritize the projects and select the one that

can go out for bid in late Fall. We expect to have funding for more than half of these TRPs.

We continue to refine our processes to make sure your research contributions are used effectively and efficiently. Our goal to be good stewards of ASHRAE research dollars while valuing the volunteer efforts of technical committee members and others who conceive, develop and oversee ASHRAE's highly-respected research program. As always, RAC welcomes feedback, suggestions, and criticisms, particularly if it will help us to do our job better.

Hugh I Henderson, Jr,  
RAC Chair

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## Standards Committee (StdC)

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**S**tandards Committee has had a good start to the society year. So far this year,

- 197 PC roster changes have been processed
- 62 public review drafts have gone out
- 106 public review comments have been received, and
- The online comment database is done!

In addition to that work, Standards Committee has also been working on developing more training material. On Tuesday, August 9, Standards Committee held the first PC Chairs training webinar titled, "Getting Started - an Overview of the Standards Writing Process". The session was well attended with over 60 tuning in to the event and many more downloading the document and recording. The next one is scheduled for October 12 and will cover the Public Review Process. These sessions are written with PC Chairs in mind but are open to everyone wishing to learn about the Standards writing process, from the rules to best practices. Contact Susan LeBlanc ([sleblanc@ashrae.org](mailto:sleblanc@ashrae.org)) to learn more about this session, future sessions, and where to download the previously recorded sessions.

Last year Standards Committee developed a new process called an advisory public review (APR) with the goal of introducing new or potentially controversial changes to documents for feedback prior to a full publication public review (PPR). Since July an additional four APR's have gone out with numerous comments being received by the committees. Most committees taking advantage of this new procedure find it very beneficial for getting the feedback, so please continue to comment on them and provide that feedback to the committees. This helps ASHRAE create better documents.

Finally, to answer one of the questions that I get asked most frequently, "I have an idea that I think would make a great standard (or guideline), how can we get that developed?" Anyone can submit a request (title, purpose and scope) to Standards to

develop a document. I highly recommend that you first present your idea to a TC. There are a number of reasons for doing that, gaining additional support for the project, proving the idea with subject matter experts and looking for willing SPC members. All proposed new standards or guidelines are reviewed for relevance to ASHRAE, TC support, availability of willing SPC members and overlap with other documents. Then Standards and the BOD may approve the formation of the PC and the title, purpose and scope go out for public review. While this is a simplified summary of the process, it provides you with a glimpse of the process so please follow up if you do have an idea for a new Standard or Guideline.

Speaking of which, we are always looking for additional feedback on Standards committee, so please let us know how we are doing, and what we could do better. I can be reached at [StdChair@ashrae.net](mailto:StdChair@ashrae.net).

Carol Marriott,  
Standards Committee Chair

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## Technical Activities Committee (TAC)

**T**AC assists TCs so that TCs can do what they do best – develop technology, standards, programs and publications. TAC is composed of Section Heads, which have the key responsibility to communicating with TCs and representing TC interests. Each of our Section Heads handles one section and the Special Activities Coordinator handles the new Multidisciplinary Task Group (MTG) section. TAC also has Training, Liaison, Roster and Special Activities Coordinators.

Multidisciplinary Task Groups (MTGs) have recently been inaugurated and 4 are up and running. These are 1) Building Integrated Modeling (BIM), 2) Building Performance Metrics (BPM), Energy Efficiency Classification of General Ventilation Air-Cleaning Devices (EEC), and 4) Energy Targets (ET). MTGs were developed to allow ASHRAE to address issues that span multiple TC Sections.

We are initiating enhanced communication to the grass-root ASHRAE members and are currently developing plans for e-Meetings to connect all ASHRAE members to the national meetings. TAC has volunteered to be the first of these. We are planning to have a survey done for what members want in e-Meetings in the next 2 to 4 months. In addition, we will have an executive summary of TAC meetings for the ASHRAE web site that should be available within 1 week of the meeting.

TAC MBOs define our objectives for the 2011-2012 year. We have six categories of objectives as listed below:

1. Help assure TC websites are functioning, up-to-date with current information and work with CEC on using TC web sites for communication on programs.

2. Maintain the TC MOP and TAC Reference Manual. We recently modified this manual to accommodate the new MTGs.
3. Review roster updates and helps TCs with keeping their rosters up to date. We have the objective of getting all rosters completed and delivered to the TCs by May 15 on every year.
4. Maintain a monthly calendar for TAC monthly required activities.
5. Work with Young Engineers in ASHRAE (YEA) to enhance their impact and involvement in TCs. A mixer is planned for the January meeting in Chicago.
6. Communicate with CEC, Research and CTTC to improve coordination among TCs.

Charles Culp, Ph.D., P.E.  
TAC Chair

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To sign up for the Members First! Newsletter Listserv, please use the following link:  
[www.ashrae.org/publications/detail/16150](http://www.ashrae.org/publications/detail/16150)

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