

WWW. NJASHRAE.COM

**APRIL 2007** 

REPLY@NJASHRAE.COM

CHAPTER OFFICERS

Pr**esident** Jori Fahrenfeld 609-520-1600

PRESIDENT - ELECT PETER FRANGISKOU P.E. 201-945-9999

VICE-PRESIDENT MARK RICHTER P.E. 212-354-5656

TREASURER OPEN

SECRETARY JANET SHIPTON 732-380-1100

**BD. OF GOVERNORS** 

Linda Carolan 908-663-2180

Ruth Giacobbe 732-968-4850

Yogesh Shah P.E. 201-447-6400

CHRIS PHELAN 973-777-6700

RUSS GRAHAM 908-663-2180

**COMMITTEES** 

**MEMBERSHIP** Chris Phelan 973-777-6700

RESEARCH PROMOTION YOGESH SHAH P.E. 201-447-6400

STUDENT ACTIVITIES PETER FRANGISKOU P.E. 201-945-9999

**REFRIGERATION** JIM CASEY

ROSTER/DIRECTORY OPEN



# MAY 3RD, 2007

**WOODBRIDGE SHERATON** ROUTE 1, GILL LANE, ISELIN, NJ



JOINT MEETING WITH NJ USGBC & NJ ASHRAE SCHOLARSHIP AWARD NIGHT

COST \$50.00 MEMBERS, \$55.00 GUESTS & \$5.00 STUDENT

RSVP TO: WWW.REPLY@NJASHRAE.COM NO LATER THAN MAY 2ND, 2007

4:30 BOARD OF GOVERNORS MEETING
5:30 REGISTRATION / COCKTAIL HOUR
6:30 CHAPTER ANNOUNCEMENTS
7:15 DINNER AND PRESENTATION

**DINNER PRESENTATION:** 

CASE STUDY "APPLYING LEED™ E.B. EXISTING BUILDING AT PRINCETON PLASMA PHYSICS LAB "

PRESENTED BY: MR. THOMAS MCGEACHEN, P.E. LEEDAP THE DOE PRINCETON PLASMA PHYSICS LAB

EXCITING CASE STUDY ON CONVERSION AND SUCCESSFUL APPLICATION OF SUSTAINABLE ELEMENTS TO THIS PRESTIGIOUS PHYSICS LABORATORY.

**INSIDE....** SEE PROPOSED CANDIDATES AS SUBMITTED BY CHAPTER NOMINATING COMMITTEE FOR 2007-2008 NEW JERSEY CHAPTER OF ASHRAE OFFICERS AND BOARD OF GOVERNORS.

**N.J. CHAPTER OF ASHRAE** 

THERMOGRAM

#### COMMITTEES (CONTINUED)

CTTC – TEGA Mark Richter P.E. 212-354-5656

#### NEWSLETTER ADS

Newsletter Editor Mark Richter P.E. 212-354-5656

#### Nominating

Russ Graham 908-663-2189

OPEN

#### PROGRAM

PETER FRANGISKOU P.E. 201-945-9999

#### SEMINARS

Mark Richter P.E. 212-354-5656

#### TECHNICAL SESSIONS PETER FRANGISKOU P.E.

201-945-9999

#### SCHOLARSHIP

Russ Graham 908-663-2189

SPECIAL EVENTS/GOLF OUTING CHRIS PHELAN 973-777-6700

AUDIT

Linda Carolan 908-663-2189

#### BUDGET

Mark Richter 212-354-5656

HISTORIAN

BOB DALY

ATTENDANCE/RECEPTION MARK MCLEOD 973-633-7730

Honors & Awards Jeffrey Grant 908-272-6755

WEB PAGE DESIGN LINDA CAROLAN 908-663-2189

CHAPTER BYLAWS LINDA CAROLAN 908-663-2180

WWW.NJASHRAE.COM WWW.REPLY@NJASHRAE.COM

> ASHRAE ATLANTA TOLL FREE NUMBER 1-(800)-527-4723



## NJ ASHRAE CHAPTER WE NEED VOLUNTEERS !!!

## **SPEAKERS BIOGRAPHY**

## MR. THOMAS J. MCGEACHEN

Thomas J. McGeachen is the Pollution Prevention Coordinator at The DOE Princeton Plasma Physics Laboratory [PPPL].

He is Professional Engineer in NJ, a Registered Environmental Manager, a Certified Energy Manager and a Leadership in Energy & Environmental Design Accredited Professional.

He has a BS Mechanical Engineering & MS Engineering Management from New Jersey Institute of Technology, Newark College of Engineering. He is also active in several local & national environmental organizations, the USGBCNJ Chapter and the Millstone Area Basin chapter of Habitat for Humanity. He is a Past President of the NJAEE.

He has been Employed at Princeton University-PPPL for 26 years, 16 years in Facilities Operations & 10 years in the Environmental Division.

Favorite thing to do at PPPL... "Save Energy, Save Money & Prevent Pollution with Reduce, Reuse, Recycle & Rethink what you do!"



NJ ASHRAE 2006 – 2007

DINNER MEETING

JUNE 7, 2007 Spouses Night

**N.J. CHAPTER OF ASHRAE** 

THERMOGRAM

## NJ ASHRAE 2007 – 2008 OFFICER & BOARD OF GOVERNORS NOMINEES SLATE

OFFICERS

PRESIDENT.....MR. PETER FRANGISKOU P.E. PRESIDENT-ELECT.....MR. MARK RICHTER P.E. VICE-PRESIDENT.....MS. JANET SHIPTON TREASURER.....MS. JANET SHIPTON SECRETARY.....MR. CHRIS PHELAN

**BOARD OF GOVERNORS** 

Ms. Linda Carolan Ms. Jori Fahrenfeld Mr. Robert Daly P.E. Mr. Hank Vitale Mr. Russ Graham

At the MAY 3RD board of governors meeting, additional nominations of members in good standing, who consent orally or in writing to be Candidates, maybe made from the floor for those interested in running. The board meeting will start at 4:30 pm

## 2006-2007 PRESIDENTIAL AWARD OF EXCELLENCE (PAOE) SUMMARY

Chapter #	Chapter Name	Chapter Members/ students	Member Promotion	Student Activities	Research Promotion	СТТС	History	Chapter Operations	Chapter PAOE Totals
007	N.J.	831	260	490	330	280	75	610	2045

Golf	2007
Outing	NJ AS
4	HRAE

Platinum Sponsor AERCO

Date: Wednesday, May 30, 2007

Place: Fox Hollow Golf Club Somerville, NJ (Exit 26 off Route 78)

Cost: \$200.00 per person includes: Room Use, Gratuities and Prizes Shotgun Start, Golf Carts, Locker Lunch, Reception and Dinner,

Reception and Dinner Only \$60.00 per person includes: Q

Attire: All golfers are required to wear gym or tennis shorts and sweat spikes, and a collared shirt. Jeans, (including designer jeans) traditional golf attire, which Bermuda shorts are permitted. includes golf shoes, rubber

suits are not permitted.

4-Man Scramble Format Shot Gun Start:

that will be awarded: The following are some of the prizes

First Raw Score

Second Raw Score

Third Raw Score

Closest to Pin

Closest to Line

Most Honest

Event Schedule:

Registration:	11:30 am
Lunch:	11:30 – 12:15 pm
Shotgun Start:	12:30 pm
Reception:	5:00 pm
Dinner	6:00 pm

Be a Tournament Sponsor

Platinum: \$3,000

Gold:

\$2,000

II G II G

Silver: Bronze: Hole:

\$ 60.00 per person x

11

Reception and Dinner Only

questions. Call Chris at 973-777-6700 with any

> May 21st. All participants must be paid in full by Note: Registration is limited

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		Golfer #3:
		Golfer #2:
		Golfer #1:
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		vame:

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Total: \$

### ASHRAE Region I 2006-07 Executive Committee & Society Contacts

DRC – Director & Regional Chair	Regional Chapter Programs Chair
Garry N. Myers	Peter Oppelt
Flack + Kurtz Inc.	R.F. Peck Co.
73 Bonnie Way	889 Atlantic Ave.
Allendale, NJ 07401	Rochester, NY 14609
212-951-2815 Fax	585-697-0836 x103
Garry.Myers@ny.fk.com	poppelt@rfpeck.com
lander og en	
ARC – Assistant Regional Chair & Treasurer	Regional Refrigeration Chair
Mike Circosta	wayne J Vanasse
County of Westchester	AKC Mechanical Contractors, Inc.
8 Bayberry Kd	PO Box 30/
Armonk N 1 10004-1000	902 222 0255
71+-77J-2J/J	102-222-52.5
inge stat westche stergov, com	wvanasie warchiech.com
Nominating Committee Member	Regional Historian
Gus Mastro	Knowlton Associates
University of Vermont	Phil Knowlton
24 Tanglewood Drive	191 Middle Haddam Road
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802-656-2186	860-642-3970
gmastro@uvm.edu	pbknowiton@comcast.net
Naminating Committee Alternate	Webmaster & Newsletter Judge
Cliff Konitz	Mike Colvell
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Wappingers Falls, NY 12590	Binghamton, NY 13903
845-297-5864	Tri Cities Temperature Control
c.konitz@verizon.net	607-724-8282
	mike.colwell@mail.ashrae.org
BVC Manhardia Promotion	Director of Manches Samina
Spanger Morangh	Carelan Kataring
Jarray Cantral Bouer Light	ASUPAE
Jeney Central Power Light	ASHIVE
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N.J. CHAPTER OF ASHRAE

Thermogram

## **HELP WANTED**

Company:	Clive Samuels and Associates	Location:	Princeton New Jersey
Company Profile:		Other Categories:	
Specialty Field:	Commercial	Training/Education:	BSME; PE License Required
Experience:	10+	Salary Range:	TBD

### Specific job responsibilities / qualifications required including certifications:

Would you like to be part of the MEP Design Engineer industry? Do you want to be challenged by opportunities that expose you to many facets of building design development?

As a Mechanical Lead Engineer for our Princeton NJ based MEP Consulting Engineering Firm (Division of Emerson Electric a Fortune 200 Corp), you will play a key role in performing complex engineering, design, analysis and other technical tasks utilizing current technology and available standards.

Perform a technical leadership role supervising, coordinating and directing others in the production of customer-focused design services that meet established project requirements.

Participate in business development activities including sales, proposal preparation and client presentations.

Requirements:

+ Senior-level engineering assignment to a project or organizational team, or as a Lead Engineer for a specific discipline or larger projects

+ Independently develops and/or supervises the creation of engineering documents that meet customer quality requirements; typical responsibilities may include detailed calculations and analyses, drawing review, technical reports, proposal evaluations, design and installation packages and development of specifications

+May supervise or mentor one or more subordinates and provide input regarding performance.

+ Responsible for selection, layout and sizing of applicable systems and equipment

+Identifies problems, establishes work scope, prepares budge and schedule, plans work, provides technical direction, and reports work status

+ Performs internal and external project management responsibilities as required

+Represents design team at project and client meetings

+Reviews, signs and seals drawings, specifications, calculations, reports and other documents.

CSA offers a competitive salary and excellent benefits, including medical, dental, life insurance, 401K with company match. We are an Equal Opportunity Employer and hire regardless of race, color, religion, general, natural origin, disability or veteran status.

### **Clive Samuels and Associates**

105 College Road East 105 College Road East 105 College Road E Princeton, NJ

## HELP WANTED

#### WANTED – TOP NOTCH ENGINEERS / TECHNICIANS!!

Specializing in hands-on field testing and evaluation of HVAC systems and site utilities, the Dome-Tech Group provides engineering services, energy consulting and project development and implementation to optimize building performance, reduce energy expenses and improve indoor environmental quality. Dome-Tech is actively hiring for the following challenging career positions:

#### **Commissioning Field Technician / Engineer**

The ideal candidate must have 5+ years of field related experience with HVAC systems such as air/water balancing, system start-up and commissioning, service/maintenance, operations and troubleshooting. Experience conducting functional tests of chillers, boilers, AHUs, VAVs and other HVAC equipment required. An engineering or technology degree is desired.

#### Energy Engineer

Dome-Tech Energy Advisors is seeking qualified energy engineers to support demand for its energy consulting services. The ideal candidate will possess either a BSME or BSEE (PE, CEM desired) with experience in energy auditing, project screening and energy engineering.

#### Project Engineer

Dome-Tech Energy Solutions (DES) is seeking qualified project engineers to support the growing demand for our turnkey design/build services. The ideal candidate will possess a BSME (PE, CEM desired) and mechanical design experience with central plant utility systems (chilled water & steam). Candidate must have design experience in heating / cooling load calculations, pipe sizing and pressure drop calculations, combined heat and power analysis, and energy conservation measures, including life cycle cost analysis.

#### Sr. Project Engineer – Pump Systems

Dome-Tech Energy Solutions (DES) is seeking a qualified project engineer to support the growing demand for pump system projects for our municipal and utility customers. The ideal candidate will possess a BSME and have experience identifying and analyzing root causes of pump system degradation or failure. Candidate must be able to identify opportunities to improve pump system performance (repair, upgrade, replace) as part of energy conservation management program. Experience with numerous pumps / pumping system designs is essential – utility, HVAC and process pumps.

#### 

**Salary** / **Benefits:** Competitive salary commensurate with experience, medical/dental benefits, 401K, flexible spending account, paid vacation and holidays.

#### Please email resumes to recruiting@dome-tech.com or fax to 732-590-0129.

Joe Martino, Technical Staffing Phone: (732) 590-0122, ext. 133 Fax: (732) 590-0129

E-mail: recruiting@dome-tech.com

Website: www.dome-tech.com

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## **HELP WANTED**

HVAC Engineer wanted for Princeton, New Jersey consulting firm. Experience in design of HVAC systems for institutional and commercial buildings required. AutoCad proficiency is a must. Position is for a hands-on, production oriented individual.

Our firm provides full building systems design services for a variety of building types, including theaters, government, university and historical structures.

Work is interesting and challenging in an informal atmosphere with opportunity for advancement. Candidate should have worked at a consulting firm doing similar work for a minimum of two years. Four year college degree desirable, EIT a plus.

Send resumes to contact@pegllc.com.

Princeton Engineering Group, LLC 100A Forrestal Road Princeton, NJ 08540



## SHINE ENGINEERING, P.A.

Shine Engineering a multi-disciplined engineering firm seeks HVAC Design Engineer with a minimum of 3 years experience in designing commercial spaces. Must be proficient with AutoCAD. This represents an excellent opportunity to work for a small company and learn all phases of the business including project management, design, engineering and building surveys.

Qualifications:

- Excellent communication skills and have ability to articulate conceptual ideas with clients.
- BSME Required
- Autocad

**Responsibilities:** 

- 1. Mechanical design engineer on multiple projects from schematic through construction phases.
- 2. Complete design and specifications with supervision.
- 3. Coordinate project work between mechanical, electrical & plumbing engineering's.

Salary/Benefits: Competitive salary, 100% full medical, retirement plan

Submit resume via email with salary requirement to: john@shineengineering.com

**SHINE ENGINEERING, P.A. 6 Renshaw Drive Montville, New Jersey 07045** Tel (973) 402-2125 Fax (973) 402-2126

THERMOGRAM

## **HELP WANTED**

Arup is a leading international planning & design firm comprised of about 7,000 employees worldwide in 70+ offices. We are involved in the design of some of the most prestigious building & transportation projects locally & worldwide.

Due to the growth of our NY and NJ office locations Arup is currently accepting resumes for the following positions:

Sr. HVAC Design Engineer (NJ) Tunnel Ventilation Design Engineer (NY) Mid Level HVAC Design Engineer (NY) Mid – Senior Level Electrical Engineer (NY/NJ) Civil Engineer (w/ I Rail or In Roads exp.) (NY)

To apply & for a full listing of current job vacancies please visit our website at www.arup.com/americas .

### SOCIETY NEWS.....

#### ASHRAE, ACCA Publish Load Calculation Standard

ATLANTA – A new standard that establishes minimum requirements for performing load calculations has been published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers. The standard was developed in conjunction with the Air Conditioning Contractors of America (ACCA).

ANSI/ASHRAE/ACCA Standard 183-2007, Peak Cooling and Heating Load Calculations in Buildings Except Low-Rise Residential Buildings, is available for purchase at www.ashrae.org/bookstore.

Proper load calculations are the first step in any design process, says Chris Wilkins, chair of the committee that wrote the standard. "Efficiency and comfort are only possible if the equipment is selected to match the load."

The standard establishes minimum requirements for building loads that are inclusive of as many procedural methods as possible while identifying core elements that impact heat loss and gains. Requirements are non-prescriptive and are aimed at ensuring that developers of load calculation methodologies observe recognized good practices. The specifics in undertaking a load are left to the discretion of the industry professional by their selection and application of load methodologies that meet the standard.

The need for the standard was driven largely by the desire of the code enforcement community. Code references to the ASHRAE Handbook existed, making it the de facto standard.

"The industry recognized that we were the appropriate source for load calculation guidance, but the problem was that the ASHRAE Handbook was never intended to be a standard," says Wilkins. "Standard 183 now provides an appropriate compliance reference that reconciles each organization's needs."

"We are pleased that the standard meets the needs of our members," says Phil Forner, ACCA 2007 – 2008 chairman. "ACCA wants contractors to have access to the most accurate, efficient and effective design standards, and this will help contractors with commercial building load calculations."

The cost of Standard 183-2007 is \$24(ASHRAE members, \$19) and is available in print and download versions. To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide); fax 404-321-5478; by mail at 1791 Tullie Circle NE, Atlanta, GA 30329; or visit the Bookstore at www.ashrae.org.

#### ASHRAE Announces Healthcare Design Professional as First Certification

ATLANTA – A program to certify healthcare facility design professionals is being launched by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The first examination to earn the credential will be held on June 28 in Long Beach, Calif., immediately following ASHRAE's Annual Meeting there. Subsequent examinations will be Web-based at testing facilities nationwide.

ASHRAE's Healthcare Facility Design Professional (HFDP) certification will designate understanding of a body of knowledge identified by ASHRAE as being critical to successful facility design.

"An ASHRAE certification will let employers know that the certification earner has mastered a significant body of knowledge in a specific aspect of HVAC&R design, as determined by industry professionals in that field and has met specified eligibility requirements," says ASHRAE President Terry Townsend. "Firms who employ ASHRAEcertified engineers will be better able to promote their services. This is an invaluable benefit to ASHRAE members to help them stand out from the competition."

The technical content for the healthcare facility design certification exam was developed in conjunction with the American Society for Healthcare Engineering (ASHE) of the American Hospital Association (AHA). ASHRAE will work with other industry organizations to develop additional certification programs, including sustainability, commissioning, and building operations and management.

Persons interested in earning the certification must meet certain eligibility requirements and submit a completed application. Membership in ASHRAE is not required to participate.

The first offering on June 28 consists of a two-hour, multiple choice, 100-question written exam. Participants will receive their scores within six weeks. Each exam program will have its own recertification or renewal requirements, potentially including such professional development activities as attending meetings or taking courses sponsored by ASHRAE and other organizations.

Optional resources, such as online sample exam questions, are available to help candidates prepare for the exam. Other resources include the ASHRAE publication HVAC Design for Hospitals and Clinics and two short courses will be offered at the 2007 ASHRAE annual meeting: Healthcare Facilities Best Practice HVAC Design Considerations and Criteria and Healthcare Facilities Best Practice Applications of HVAC Systems.

The exam cost is \$275 for ASHRAE members and \$395 for non-members. For more information, visit www.ashrae.org/certification or e-mail certification@ashrae.org.

### SOCIETY NEWS.....

ASHRAE Grants: Student Studies Impact of Noise Levels on Design

ATLANTA – Research to determine if new standards should be implemented for background noise levels in design of spaces for hearing-impaired people is being funded by ASHRAE.

Nineteen students will receive a total of \$173,000 through ASHRAE's grants-in-aid program, which is designed to encourage students to continue their education in preparation for service in the HVAC&R industry. The grants are awarded to full-time graduate students of ASHRAE-related technologies.

Grant recipient Lauren Ronsse, University of Nebraska, Lincoln, currently is studying whether people with hearing impairments respond similarly as people with no impairments to seven mechanical system background noise conditions. The proposed research is a continuation of that study including more people and different types of noise signals.

Ronsse will investigate productivity and subjective perceptions of people exposed to mechanical system background noise. Results of the research may lead to development of different standards for noise criteria levels for spaces designed for the hearing-impaired.

Other recipients of ASHRAE grants-in-aid are:

Jasmin Raymond, Universite Laval, Sainte-Foy, Quebec, Canada, The Pennsylvania State University, University Park, Pa., Geothermal Energy Extraction From Mine Waste Dumps

Soolyeon Cho, Texas A&M University, College Station, Texas, Development of an Easy to Use Simulation Tool for Designing High Performance Office Buildings in Hot and Humid Climates

Scott Hackel, University of Wisconsin-Madison, Wis., Optimization of Hybrid Geothermal Heat Pump System Federico Noris, University of Texas at Austin, Investigation of Biological and Non-Biological Contaminants on the HVAC Filter Dust

Jeremy Dreiling, Kansas State University, Indoor Air Quality in Health Care Facilities Focusing on Air Cleaning Methods and Technology

Yang Bin, National University of Singapore, Ceiling Mounted Personalized Ventilation Air Terminal Devices

Mohamed Alshehhi, University of Maryland, Electrostatic Gas-Liquid Separation – Application to Advanced On-line/On-Demand Separation Techniques

Benjamin Welle, University of California, Berkeley, Mixed-Mode Ventilation: A Blueprint for Design

Paulo Cesar Tabares Velasco, The Pennsylvania State University, University Park, A New Energy Model to Meet the Sustainable Challenge by Enabling ASHRAE Engineers to Calculate Potential Energy Savings Due to Green Roofs

Donghyun Rim, University of Texas at Austin, Evaluation of Air-Change Effectiveness as an Indicator of Exposure to Indoor Particulate Matters

Bereket Asgedom Nigusse, Oklahoma State University, Fenestration Heat Gain Calculation for the Radiant Time Series Method

Prakash Rapolu, University of Cincinnati, Microchannel Flow Boiling of Carbon Dioxide Near Critical and Subcritical Pressures

Josephine Lau, The Pennsylvania State University, Performance Modeling and Evaluation of In-Duct Ultraviolet Germicidal Irradiation Systems with Variable Operating Conditions

Ian Bell, Purdue University, Liquid Flooded Ericsson Cooler with Optimized Compressor and Expander. Bell also receives the 2006-07 Grant-In-Aid Life Member Club grant given to the highest top rated applicant and supported by a financial contribution from the club.

Ebrahim Al-Hajri, University of Maryland, College Park, Performance Characterization of Selected Refrigerants in Flat Plate Micro-Scale Condenser: Applications to Expanded Use of Micro-Channel Condensers

Zhao Zhang, Purdue University, Modeling of Airflow and Contaminant Transport in Commercial Aircraft Cabin Donghyun Seo, University of Colorado at Boulder, Application of Solar Radiation/Illuminance Models to Advanced Daylighting and Solar Heat Gain Control Strategies

Robert Slowinski, University of Colorado at Boulder, Fundamentals of Breathing Walls and Their Potential to Reduce Building Energy Consumption and Improve Indoor Air Quality

## SOCIETY NEWS.....

#### ASHRAE Looks at Combining Air Filter Testing Standards

ATLANTA – A proposed addendum open for public comment is part of efforts to combine ASHRAE's two standards on air filter testing.

Combining Standards 52.1, Gravimetric and Dust Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter, and 52.2, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size, would have several benefits for users, according to Monroe Britt and James Hanley, chairs of the Standard 52.1 and 52.2 committees.

"One benefit would be having a single ASHRAE test standard for determining the filtration efficiency of HVAC filters," Hanley said. "This would reduce the number of tests needed on a filter. Currently, many filters are run twice, once for Standard 52.1 and once for Standard 52.2. It also would allow for one test rig to perform all the needed tests. Existing differences in the test rig requirements between the two standards make it difficult for one rig to serve both tests."

Currently, the primary differences between the standards are:

Standard 52.1 includes "dust spot efficiency," while Standard 52.2 replaces the dust spot efficiency with efficiency measurements as a function of particle size.

Standard 52.1 has an emphasis on average efficiency of the filter, while Standard 52.2 has an emphasis on the minimum efficiency.

Standard 52.1 includes weight arrestance that is currently not included in Standard 52.2. Weight arrestance is mainly applicable to relatively low efficiency HVAC filters.

Standard 52.1 allows flow rate and final pressure drop to be selected by the person requesting the test whereas Standard 52.2 has prescribed flow rate and final pressure drop criteria.

Standard 52.2 includes the Minimum Efficiency Reporting Value (MERV).

Standard 52.2 includes a "conditioning step" to better reflect changes in efficiency that filters can undergo in actual use.

Proposed addendum b would incorporate the Standard 52.1 sections on weight arrestance and dust-holding capacity into Standard 52.2 and deletes some references to Standard 52.1 that occur in Standard 52.2. The addendum is open for public review until April 30. Also open for review is proposed addendum a, which revises the first dust-loading step, also known as the conditioning step, in Standard 52.2.

On a parallel path, the 52.1 committee is working to revise the 52.1 standard to remove the dust spot efficiency test requirements.

"Whereas, this test method has served the air filter industry well for several decades, the particle size efficiency technology presented in 52.2 provides more direct and useful data than the dust spot efficiency data," Britt said.

This revised standard 52.1 will be submitted for public review in the fall of 2007. When the revised standard is approved, the 52.1 standard will become redundant and will no longer be needed. At that time, ASHRAE will take steps to undergo a public review process to withdraw Standard 52.1 so that Standard 52.2 will become the sole ASHRAE standard on filtration efficiency.

Proposed addenda to ASHRAE standards are available during public review periods. To read the addenda or to comment, visit www.ashrae.org/publicreviews.

#### Addenda to Standard 90.1 open for public review Proposed 90.1 Addendum Would Allow More Efficient Skylighting

ATLANTA – A proposed addendum to ASHRAE's energy standard will allow for increased energy savings by modifying envelope requirements to allow the use of more daylight-friendly skylight materials in certain climate zones and require photocontrols with certain skylights.

Proposed Addendum d to ANSI/ASHRAE/IESNA Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings, is open for public review. Five proposed addenda are open for review until April 15 for addenda a, b and c, and until April 30 for addenda d and e.

The current wording of the standard limits the use of high solar heat gain coefficient (SHGC) plastic skylights that transmit high levels of light in climate zones 1 through 3. This restricts one of the potentially most energy efficient ways to use skylighting, according to Eric Richman, chair of the 90.1 lighting subcommittee.

The proposed addendum would provide an exemption to the SHGC requirements when high-diffusion skylights are used in conjunction with a multi-level photocontrol system. Photocontrol systems regulate lighting and save energy by reducing the artificial lighting in buildings when natural lighting reaches a useful level.

#### N.J. CHAPTER OF ASHRAE

### SOCIETY NEWS.....

#### Addenda to Standard 90.1 open for public review Proposed 90.1 Addendum Would Allow More Efficient Skylighting—Cont'd

"One result of this change will be to allow for more flexibility in designing skylight systems for energy savings and facility enhancement," says Richman. "The requirement for lighting controls when daylight is available will create electricity energy savings while reducing inner cooling loads."

Proposed addenda to ASHRAE standards are available during public review periods. To read the addenda or to comment, visit www.ashrae.org/publicreviews.

Other proposed addenda to ANSI/ASHRAE/IESNA Standard 90.1-2007 include:

Addendum a, which will clarify that the current cooling tower requirements in the standard apply to open circuit cooling towers only, as the standard is now written.

Addendum b, which now references Standard 62.1-2004 for minimum ventilation requirements rather than a specific section of the standard. This addendum also provides an exception that allows a regulating body to require more stringent ventilation rates for specific types of facilities when the safety of the occupants is a major design factor that is more important than complying with the fan power limitation requirements.

Addendum c, which would add vivarium to the list of spaces that require specific humidity levels to satisfy process needs in section 6.5.2.3

Addenda e, which would modify energy recovery requirements by expanding them to cover the use of energy recovery by weather zone and for outside air percentages equal to or greater than 30 percent.

#### ASHRAE Names Nine New Distinguished Lecturers

ATLANTA – The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has named nine new Distinguished Lecturers who provide ASHRAE chapters with noted authorities who speak on relevant topics that impact the HVAC&R industry.

This marks the 11th year of the Distinguished Lecturer Program. The new lecturers and their areas of expertise are:

Robert Bean, registered engineering technologist, Calgary, Canada – The Human Factor in HVAC, Radiant Based HVAC Systems, and Snow and Ice Melting.

Barry Benator, P.E., BENATECH Inc., Atlanta, Ga. – Characteristics and Competencies of Outstanding Leaders – An Overview, Fundamentals of Project Management, Effective Communication Skills and Win-Win Negotiating Skills.

Ramin Faramarzi, P.E., Southern California Edison, Irwindale, Calif. – Cool Solutions: Refrigeration for Grocery Stores and Delis.

Ralph Kittler, P.E., Seresco USA Inc., Atlanta – Natatorium Design and Dehumidification.

Thomas Lawrence, Ph.D., P.E., the University of Georgia, Athens, Ga. – Green Buildings, LEED and Standard 189P, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, ASHRAE GreenGuide, Mechanical Design for Green Buildings, and Green Roofs and Cool Roof Technologies.

Bing Liu, P.E., Pacific Northwest National Laboratory, Richland, Wash. – Compliance with ASHRAE/IESNA 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, and LEED and Building Energy Efficiency Analysis and Sustainable Design.

Dennis Loveday, Ph.D., Loughborough University, United Kingdom – Energy, Sustainability and the Indoor Environment: Staying Comfortable in a Changing Climate.

Cyrus Nasseri, U.S. Department of Energy, Washington, D.C. – Equipment and Appliance Standards, Federal Building Energy Efficiency Standards, Making Better Federal Buildings, and ASHRAE and the International Standards Organization.

Karen Rollins, environmental scientist and environmental management consultant, Indoor Air Quality Management, Canmore, Alberta, Canada – Confessions of an Indoor Air Quality Consultant and Demonstrating Due Diligence with an Indoor Air Quality Management System.

The new lecturers will serve a two-year term beginning in July. There are 49 Distinguished Lecturers for 2007-08.

To arrange for a lecturer visit, contact Rosy Douglas, manager of chapter programs, at rdouglas@ashrae.org or 404-636-8400.

## SOCIETY NEWS.....

#### Numerous Standards, Addenda Open for Review ASHRAE Public Review Process Makes for Stronger Standards

ATLANTA – Nearly 40 addenda and 16 ASHRAE standards and guidelines are open for public review, which allows interested parties to comment on the technical guidance contained in the documents.

"Through the public review process, it is possible for anyone to provide input," said Hugh McMillan, chair of ASHRAE Technology Council, which oversees standard development. "By opening the process to all interested parties during the public review period, it is hoped that through consensus, a final standard is published that has been rigorously examined, questioned and defended. ASHRAE standards are strengthened by virtue of having been through this process."

Proposed ASHRAE standards, guidelines and addenda to standards are available only during public review periods. To comment, visit www.ashrae.org/publicreviews.

Addenda to the following standards are open for comment:

ASHRAE Guideline 13-2000, Specifying Direct Digital Control Systems

ANSI/ASHRAE Standard 15-2007, Safety Standard for Refrigeration Systems

ANSI/ASHRAE Standard 34-2007, Designation and Safety Classification of Refrigerants

ANSI/ASHRAE Standard 52.2-2007, Method of Test (MOT) General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

ANSI/ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality

ANSI/ASHRAE/IESNA Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings

ANSI/ASHRAE Standard 90.2-2007, Energy Efficient Design of Low-Rise Residential Buildings

ANSI/ASHRAE Standard 135-2004, BACnet – A Data Communication Protocol for Building Automation and Control Networks

ANSI/ASHRAE Standard 135.1-2003, MOT for Conformance to BACnet

Standards and guidelines that are open for review are:

ASHRAE Guideline 8-1994, Energy Cost Allocation for Multi-Occupancy Residential Buildings ASHRAE Standard 17-1998R, MOT Capacity of Thermostatic Refrigerant Expansion Valves ASHRAE Standard 22-2003R, MOT for Rating Water-Cooled Refrigerant Condensers ANSI/ASHRAE Standard 63.1-1995, MOT Liquid Line Refrigerant Driers ASHRAE 78-1985R, MOT Flow Capacity of Suction Line Filters and Filter-Driers ASHRAE Standard 87.1-1992, MOT Fan Vibration, Blade Vibration and Critical Speeds ANSI/ASHRAE 87.2-2002, In-Situ MOT Propeller Fans for Reliability ASHRAE Standard 97-1999R, Sealed Glass Tube MOT the Chemical Stability of Materials for Use Within **Refrigerant Systems** ANSI/ASHRAE Standard 117-2002, MOT Closed Refrigerators ASHRAE Standard 118.1-2003R, MOT for Rating Commercial Gas, Electric and Oil Service Water Heating Equipment ASHRAE Standard 127-2001R, MOT for Rating Computer and Data Processing Room Unitary Air Conditioners ASHRAE Standard 129-1997R, Measuring Air-Change Effectiveness ASHRAE Standard 130-1996R, MOT Air Terminal Units ASHRAE Standard 143-2000R, MOT for Rating Indirect Evaporative Coolers ASHRAE Standard 164P, MOT for Central System Humidifiers for Residential Applications ASHRAE/ACCA 180P. Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems

### SOCIETY NEWS.....

#### ASHRAE to Fund Research on Operating Room Air Distribution

ATLANTA – Some 700,000 cases of surgical site infections occur each year, leading to time away from work, degraded life style, suffering, and in some cases, death.

New research funded by ASHRAE is expected to decrease patient exposure to particles that cause these infections by enhancing design guidelines for hospital operating rooms.

ASHRAE recently released nine projects for bid, including 1397-TRP, Experimental Investigation of Hospital Operating Room (OR) Air Distribution.

The research is expected to verify earlier analysis that a protective thermal plume maintained above the surgical site will reduce the deposition of infectious particles, according to Robert Cox, a member of ASHRAE's technical committee, 9.6, on health care facilities, which is sponsoring the project.

"These results will have significant impact on practical operating room design guidelines, allowing designers to better place air distribution in the operating room to maximize the HVAC system's impact on preventing spread of infection and to perhaps reduce overall airflow rates in the operating room," Cox said.

Results also could be used to improve air distribution engineering elsewhere in health care, such as patient protection rooms and infection isolation rooms, and in similar applications, such as industrial clean rooms.

For more information on how to submit a project bid, visit www.ashrae.org/research. Other projects currently open for bid are:

1287-TRP, Particle Counter Specification for Use with Filter Performance Test Standard ANSI/ASHRAE 52.2, sponsored by technical committee (TC) 2.4, Particulate Air Contaminants and Particulate Containment Removal Equipment;

1361-TRP, Biological Control in Cooling Towers Using Non-Chemical Water Treatment Devices, TC 3.6, Water Treatment;

1376-TRP, Method of Test to Evaluate Field Performance of Commercial Kitchen Ventilation Systems, TC 5.10, Kitchen Ventilation;

1388-TRP, Reevaluation of High-Altitude Effects on Operation of Gas-Fired Boilers and Water Heaters, TC 6.10, Fuels and Combustion;

1394-TRP, Study of Carbon Dioxide Condensation in a Chevron Angle Plate Geometry Exchanger, 8.5, Liquid-to-Refrigerant Heat Exchangers;

1402-TRP, Comparison of Vertical Display Cases, TC 10.7, Commercial Food and Beverage Cooling Display and Storage;

1431-TRP, Analysis of Transient Characteristics, Effectiveness and Optimization of Cleanroom Airlocks, TC 9.11, Clean Spaces;

1457-RFP, By-product Production from Photocatalytic Oxidation Associated with Indoor Air Cleaning Devices, TC 2.3, Gaseous Air Contaminants and Gas Containment Removal Equipment.

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