

ASHRAE.ORG

A S H R A E J O U R N A L

THE MAGAZINE OF HVAC&R TECHNOLOGY AND APPLICATIONS AUGUST 2012



Broadening ASHRAE's Horizons

Thomas Watson, P.E.
ASHRAE President, 2012 – 13

CONTENTS

Vol. 54, No. 8 | August 2012



Features

- 16** 2012-13 PRESIDENTIAL ADDRESS
Broadening ASHRAE's Horizons
By Thomas E. Watson, P.E.
- 28** Improving Energy Performance of NYC's Existing Office Buildings
By Charles C. Copeland, P.E.
- 40** How 90.1-2010 Will Affect Health-Care Facilities
By Jeff Boldt, P.E.

2012 ASHRAE TECHNOLOGY AWARDS

- 52** Ventilation for Museum
By Tim Gasper, P.E.
- 56** Sustainability at the Y
By Chantale Bourdages, Eng.; Olivier Brodeur, Eng.

Departments

- | | | | | | |
|---|---------------|----|--------------------|----|------------------------|
| 4 | Commentary | 14 | Meetings and Shows | 90 | Special Products |
| 6 | Industry News | 68 | InfoCenter | 95 | Classified Advertising |
| 8 | Letters | 80 | Products | 96 | Advertisers Index |

Standing Columns

- 62** Building Sciences
Don't Do Ugly Things
By Joseph W. Lstiburek, Ph.D., P.Eng.
- 76** Emerging Technologies
'Smart' Irrigation Systems
By Mildred Hastbacka; John Dieckmann; James Brodrick, Ph.D.
- 82** Refrigeration Applications
Reducing Load
By Andy Pearson, Ph.D., C.Eng.
- 84** IAQ Applications
DCV for Multizone VAV
By Josephine Lau, Ph.D.; Dennis Stanke
- 88** Washington Report
Grassroots Opportunities
By Mark Ames and Mark Wills

Packaged With This Issue
AMCA International
inmotion Magazine

ASHRAE® Journal (ISSN 0001-2491) **MISSION STATEMENT** | ASHRAE Journal reviews current HVAC&R technology of broad interest through publication of application-oriented articles. ASHRAE Journal's editorial content ranges from back-to-basics features to reviews of emerging technologies, covering the entire spectrum of professional interest from design and construction practices to commissioning and the service life of HVAC&R environmental systems. **PUBLISHED MONTHLY** | Copyright 2012 by ASHRAE, 1791 Tullie Circle N.E., Atlanta, GA 30329. Periodicals postage paid at Atlanta, Georgia, and additional mailing offices. **LETTERS/MANUSCRIPTS** | Letters to the editor and manuscripts for publication should be sent to: Fred Turner, Editor, ASHRAE Journal, fturner@ashrae.org. **SUBSCRIPTIONS** | \$8 per single copy (includes postage and handling on mail orders). Subscriptions for members \$6 per year, included with annual dues, not deductible. Nonmember \$79 (includes postage in USA); \$79 (includes postage for Canadian); \$149 international (includes air mail). Expiration dates vary for both member and nonmember subscriptions. Payment (U.S. funds) required with all orders. **CHANGE OF ADDRESS** | Requests must be received at subscription office eight weeks before effective date. Send both old and new addresses for the change. ASHRAE members may submit address changes at www.ashrae.org/address. **POSTMASTER** | Send form 3579 to: ASHRAE Journal, 1791 Tullie Circle N.E., Atlanta, GA 30329. Canadian Agreement Number 40037127.

ONLINE at ASHRAE.org | Feature articles are available online. Members can access articles at no cost. Nonmembers may purchase articles at www.ashrae.org/bookstore. | **MICROFILM** | This publication is microfilmed by National Archive Publishing Company. For information on cost and issues available, contact NAPC at 800-420-NAPC or www.napubco.com. **PUBLICATION DISCLAIMER** | ASHRAE has compiled this publication with care, but ASHRAE has not investigated and ASHRAE expressly disclaims any duty to investigate any product, service, process, procedure, design or the like which may be described herein. The appearance of any technical data, editorial material or advertisement in this publication does not constitute endorsement, warranty or guarantee by ASHRAE of any product, service, process, procedure, design or the like. ASHRAE does not warrant that the information in this publication is free of errors and ASHRAE does not necessarily agree with any statement or opinion in this publication. The entire risk of the use of any information in this publication and its supplement is assumed by the user.