



Healthy Buildings 2003

Energy-Efficient Healthy Buildings

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Editors

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Volume 3

The papers in this book comprise the proceedings of **Healthy Buildings 2003**. They reflect the authors' opinions and are published as presented without change, in the interests of timely dissemination. Their inclusion in this publication does not necessarily constitute endorsement by the editors, the sponsors or the organisers.

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Foreword

The Healthy Buildings conference is, for the first time, convened outside its traditional European-American circuit, and signifies the international recognition that healthy buildings and indoor environments are as much needed and desired in the developed and developing worlds, across all climatic regions. In the aftermath of the first emergence of Severe Acute Respiratory Syndrome (SARS), issues of environmental quality and control have become much more pertinent and important. In an unprecedented way, the linkage between health and environmental quality on the “consumer end” of the chain, and the policies, management and technologies on the “supply end” has been highlighted and articulated beyond the usual platforms of scientific publications to popular media. This presents HB2003, the 7th International Conference in tropical Singapore, as a unique opportunity for scientists, practitioners and policy makers to convene, discuss and share their latest findings and thinking on healthy buildings.

HB2003 continues the excellent work achieved by its predecessors in recognizing emergent issues and focusing on developing practical solutions based on rigorous scientific explorations and information. In recognising the importance, relevance and challenges of both IAQ and energy globally over the past four decades, the thrust of HB2003 is towards Energy-Efficient Healthy Buildings. Keynote addresses provide the state-of-the-art reviews and insights along the following five conference themes:

- Theme 1 : Science of Indoor Air Quality (IAQ) parameters
- Theme 2 : Materials, systems and technologies for healthy buildings
- Theme 3 : IAQ and human response
- Theme 4 : Practice and implementation issues in creating healthy buildings
- Theme 5 : Issues of healthy buildings and energy efficiency in the developing countries

Almost 400 papers from 45 countries documenting the research, thinking, innovative solutions and technologies for the achievement and sustenance of energy-efficient healthy buildings are published in three volumes of proceedings that are organised according to the five themes of the conference. Whilst 40% of the papers presented at HB2003 relate to the study of fundamental issues of indoor contaminants including thermal comfort aspects in THEME 1, 27% of the papers provide an insight into practical solutions across different climatic conditions in THEME 2. Environmental health related studies that impact upon occupant perception and work performance constitute 17% of the papers and are presented in THEME 3. Considerations from practitioners’ viewpoint are addressed in another 14% of the papers in THEME 4. The perspectives of the developing world are presented in a small number of papers in THEME 5.

All the technical papers published in HB2003 proceedings are presented as either ORAL or POSTER mode. To facilitate maximum interaction among authors and delegates, about half the total number of papers is presented as POSTERS, which are displayed throughout the duration of the conference. The poster papers are briefly introduced following oral presentations in a particular theme in each of the 55 parallel sessions that are spread across four days of the conference. Additionally, the technical sessions also incorporate six ISIAQ Task Force Workshops and a special SARS workshop.

A summary of the deliberations at the various Technical Sessions will be consolidated and made available to all delegates (by email) as a Post-Conference document and will also be uploaded on the conference website: www.hb2003.org

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Brief Contents for Volume 1

KEYNOTES

1A) CHEMICAL POLLUTANTS

1B) MICROBIALS

1C) THERMAL COMFORT (Continued to Volume 2)

Brief Contents for Volume 2

1C) THERMAL COMFORT (Continued from Volume 1)

1D) PARTICULATE MATTER

2A) CLIMATE SPECIFIC DESIGN

2B) BUILDING TYPES

2C) VENTILATION

2D) CONTROL STRATEGIES

2E) ENERGY EFFICIENCY

2F) INNOVATIVE TECHNOLOGIES & SOLUTIONS

Contents for Volume 3

	Page
Foreword	iii
Organising Committee	iv
International Scientific Committee	v
International Coordinators	vi
Acknowledgements	vii
Brief Contents for Volume 1 and Volume 3	viii
 3A) HEALTH EFFECT & SBS SYMPTOMS	
Sick Building Syndrome Symptoms Caused by Low Humidity	1
<i>L. Fang, D.P. Wyon, P.O. Fanger</i>	
Reliability of Cross-Seasonal Memory of Environmental Conditions and Symptoms	7
<i>Gary J. Raw, Sara K.D. Coward</i>	
Excess Cancer Risk and its Damage Cost due to Indoor Air Pollution in Seoul	11
<i>Yeshin Kim, Hoasung Park, Yongjin Lee, Youngsoo Kim, Dongchun Shin</i>	
A Framework for Performance Criteria of Healthy and Energy-efficient Buildings	17
<i>Philomena M. Bluyssen, Marcel G.L.C. Loomans</i>	
Health Performance Indicators of Housing	23
<i>E. Hasselaar</i>	
Coincidence of Microbial Findings, Complaints and Symptoms in a Building	30
<i>M. Reiman, P. Yli-Pirilä, L. Kujanpää, H. Kokotti, M. Seuri, R. Halonen, V. Asikainen, T. Raunemaa</i>	
2-Ethyl-1-Hexanol Emission From Floor Structure and Health Symptoms	36
<i>P. Metiäinen, Helena Mussalo-Rauhamaa, Markku Viinikka</i>	
Study of Ventilation Performance and Indoor Air Quality in Eight Sick Houses	42
<i>H. Yoshino, K. Ikeda, A. Nozaki, K. Amano, J. Wada, N. Iida, N. Suzuki, M. Matsumoto</i>	
Indoor Air Quality and Sick Building Syndrome at Office Buildings in Taiwan	48
<i>Pei-Chih Wu, Huey-Jen Su, Yen-Yi Li, Che-Ming Chiang</i>	
Field Survey of Indoor Chemical Pollution and Health Hazards in Sick Houses	54
<i>Kentaro Amano, Hiroshi Yoshino, Koichi Ikeda, Atsuo Nozaki, Nozomi Iida, Mari Matsumoto, Noritaka Suzuki, Kazuhiko Kakuta, Sachiko Hojo, Satoshi Ishikawa</i>	
Prevalence of Respiratory Symptoms of the Upper and Lower Airways in Office Block Workers, Rio De Janeiro, Brazil	60
<i>José Laerte Boechat, José Luiz Rios, Adriana Gioda, J.R. Lapa e Silva, F.R. Aquino Neto</i>	

Health Complaints After Moving Into a New Office Building: Results of Measurements and Investigations of Employees	65
<i>H. P. Hutter, Hanns Moshhammer, Peter Wallner, Bernhard Damberger, P. Tappler, M. Kundi</i>	
SBS and Chemical Sensitivity in Residents of Renovated Multi-Family Apartment Buildings	70
<i>Anita Gidlöf Gunnarsson, Birgitta Berglund</i>	
European Project HOPE (Health Optimisation Protocol For Energy-Efficient Buildings) ...	76
<i>Philomena M. Bluysen, Christian Cox, Marco Maroni, Nadia Boschi, Gary Raw, C.A. Roulet, Flavio Foradini</i>	
Rhinological Reactions in Persons with Self-Reported Chemical Sensitivity (SCS)	82
<i>G. A. Wiesmüller, Claus Bachert, Christoph van Thriel, Achim Steup, Meinolf Blaszkewicz, Ernst Kiesswetter, Andreas Seeber</i>	
A Principal Component Analysis of Perception and SBS Symptoms of Office Workers in the Tropics at Two Temperatures and Two Ventilation Rates	88
<i>K. W. Tham, H. C. Willem</i>	
The Influence of Psychological Factors on the Reporting of IEQ Complaints	95
<i>J. L. Leyten, A. C. Boerstra</i>	
Psychosocial Factors Associated with Sick Building Syndrome in a Biased and Unbiased Population of Office Employees Occupying Two Buildings in South Africa	101
<i>K. Heslop</i>	
Different HVAC Airside System Designs of the Surgical Operating Theatres—Their Impact on the Surgery Staff and Patient Health	108
<i>Ramiz Kameel, Essam Eldin Khalil</i>	
Proposed Modular Demountable Isolation Mini-En-Suites for Protecting Patients and Health Care Workers Against Infectious Diseases in Hospitals	114
<i>K. P. Cheung, S. H. L. Cheung, T. T. Chow, M. W. Lo, K. S. Fung</i>	
Indoor Air Related Health Disorders: Experiences of an Advisory Center for Environmental Medicine	120
<i>C. Hornberg, Souad Mourheg, Geraldine Sri Siao, Heribert Florian Neuhaan, U. Ranft, W. Dott, G. A. Wiesmüller</i>	
Gender-Specific Aspects of Exposure	126
<i>C. Hornberg, Doris Krings, Hiltrud Niggemann, Heribert Florian Neuhaan, U. Ranft, W. Dott, G. A. Wiesmüller</i>	
Meeting Workplace Healthy Building Information Needs	132
<i>B. P. Pathak, R. C. Cockerline, Wayne Maksylewich, H.J. Heins</i>	
Ranking Indoor Pollutants According to their Potential Health Effect, for Action Priorities and Costs Optimization in The French Permanent Survey on Indoor Air Quality	138
<i>Luc Mosqueron, Vincent Nedellec, Severine Kirchner, Stéphanie Gauvin, Frédéric Dor, Pierre-André Cabanes, Frank Golliot, Olivier Blanchard, Mickael Derbez, Frédéric De Blay, Florence Lieuter-Colas</i>	
Sick Building Transformed Into a Feelgoodbuilding	144
<i>Laura P. Hulsman, A. C. Boerstra, Arjen K. Raue, Ben Bronsema</i>	

3B) OTHER INDOOR AIR POLLUTANTS

Comparison of Exposure to Allergens in Homes in Uppsala, Sweden and Tartu, Estonia. ...	151
<i>L. Elfman, Rain Jögi, Argo Soon, E. Intermitte, Christer Janson, U. Spetz-Nyström, D. Norbäck</i>	
Initial Studies of Oxidation Processes on Filter Surfaces and Their Impact on Perceived Air Quality	156
<i>G. Bekö, O. Halás, G. Clausen, C. J. Weschler, J. Toftum</i>	

Objective and Subjective Responses to Low Relative Humidity in an Office Intervention Study	163
<i>L. Lagercrantz, D. P. Wyon, H. W. Meyer, J. U. Prause, L. Fang, G. Clausen, J. Sundell</i>	
Sensory Emission Rates From Personal Computers and Television Sets	169
<i>P. Wargocki, Zsolt Bakó-Biró, Sabina Baginska, T. Nakagawa, P. O. Fanger, C. Weschler, S. Tanabe</i>	
Examination of Influence of CO₂ Concentration by Scientific Methods in the Laboratory ..	176
<i>László Kajtár, Levente Herczeg, Eszter Láng</i>	
The SBS Symptoms and Environmental Perceptions of Office Workers in the Tropics at Two Air Temperatures and Two Ventilation Rates	182
<i>K. W. Tham, H. C. Willem, S. C. Sekhar, D. P. Wyon, P. Wargocki, P. O. Fanger</i>	
Occupational Exposure of Hairdressers to Air Pollutants in Hong Kong	188
<i>Eugena Li, Shun Cheng Lee</i>	
Indoor Climate and Perceived Comfort in Offices	195
<i>Jacques Ribéron, Patrick O'Kelly, Gaëlle Orset</i>	
Odour Intensity Assessment From Solid Flooring Materials—Comparison of Continuous and Discrete Scales	201
<i>Olivier Ramalho, Marjorie Jacquelin, F. Maupetit</i>	
The Effect of Perceived Indoor Air Quality on Productivity	207
<i>Risto Kosonen, Freddie Tan</i>	
Call-Centre Operator Performance with New and Used Filters at Two Outdoor Air Supply Rates	213
<i>P. Wargocki, David P. Wyon, P. O. Fanger</i>	
Individual Control of Air Velocity for Increasing Productivity	219
<i>Naoe Nishihara, Shin-ichi Tanabe</i>	
A New Method for Evaluating Productivity and Fatigue With Human Voice Under 800 lx and 3 lx Lighting Conditions	225
<i>Masaya Nishikawa, Naoe Nishihara, Shozo Hirose, Shin-ichi Tanabe</i>	
Effects of Building Characteristics on Self-reported Productivity of Office Workers: The Base Study	231
<i>A.C. Rohr, H. Brightman</i>	
Effects of Indoor Air Quality on Office Workers' Work Performance—A Preliminary Analysis	237
<i>H.J. Chao, Joel Schwartz, D. Milton, M.L. Mulenberg, H.A. Burge</i>	
Colour and Environmental Quality: Second-Level Parameters	244
<i>F. Gugliemetti, F. Bisegna, P. Gori</i>	
Prevalence of SBS-Symptoms as an Indicator of Health and Productivity in Office Buildings	251
<i>Raimo Niemelä, Olli Seppänen, Kari Reijula</i>	
Sensory Pollution Load From a Used Ventilation Filter at Different Airflow Rates	257
<i>Peter Strøm-Tejsen, Geo Clausen, Jørn Toftum</i>	
Environmental Quality and the Productive Workplace	262
<i>Derek J. Clements-Croome</i>	
The Influence of Typical Ways of Operating an Air-Handling Unit on the Sensory Pollution Load from Used Bag Filters	267
<i>M. Mysen, G. Clausen, Gabriel Beko, O. Halas</i>	
Effects of Humidity and Indoor Air Chemical Pollutants on Human Comfort and Productivity	273
<i>Hitomi Tsutsumi, Yuhua Chen, Takashi Akimoto, Shin-ichi Tanabe, Takayoshi Suzuki</i>	

Temperature and Ventilation Effects on the Work Performance of Office Workers (Study of a Call Center in the Tropics)	280
<i>K. W. Tham, H. C. Willem, S. C. Sekhar, D. P. Wyon, P. Wargocki, P. O. Fanger</i>	
The Influence of Sick Building Syndrome on Self-Reported Productivity and Work Disruption amongst Office Employees in Two Buildings in South Africa	287
<i>K Heslop</i>	
Subjective Experiments on the Effects of Relative Humidity and Humidity Ratio During Summer Season	293
<i>Y. Chen, H. Tsutsumi, T. Akimoto, S. Tanabe, T. Takagi</i>	
Effect of Cleaning on Symptoms and Percieved IAQ in an Office Building	299
<i>H. Kokotti, R. Halonen, L. Kujanpää, J. Tarhanen, E. Korhonen, P. Lavonen, M. Linnainmaa, J. Honkanen, M. Reiman</i>	
A Review of Occupant Responses to Localised Air Distribution Systems	305
<i>K. E. Charles</i>	
Effect of Temperature on Perceived Work Environment, Symptoms and Self-Estimated Productivity in Office Work	311
<i>Pirjo A. Korhonen, Kari Salmi, Marianna Tuomainen, Jari Palonen, Erkki Nykyri, Raimo Niemelä, Olli Seppänen, Kari Reijula</i>	
Comparison of Productivity and Absenteeism Effects of Indoor Environmental Quality in Offices	318
<i>J. L. Leyten, A. C. Boerstra</i>	
Documentation of Mould Odour Remediation in Flats	324
<i>H. N. Knudsen</i>	
An Interaction Model for Odour Intensity	330
<i>Olaf Böttcher</i>	
The Occupant Perception and Investigation of Indoor Air Quality at Home in Seoul	336
<i>Jong-Ryeul Sohn, Young-Hwan Kim, Sang-Hoon Byeon, Dal-Woong Choi</i>	
Odor Assessment as a Necessary Complement to Chemical Evaluation of Building Products	342
<i>Olivier Ramalho, François Maupetit</i>	
 3C) COST EFFECTS AND BENEFITS OF GOOD IAQ	
Air and Well-Being—A Way To More Profitability	348
<i>Diotima von Kempster</i>	
Indoor Air Quality in Residential Buildings: Costs, Effects and Benefits of Mechanical Ventilation Systems	355
<i>Sante Mazzacane, Valentina Raisa, Simona Rossi</i>	
Economizer System Cost Effectiveness: Accounting for the Influence of Ventilation Rate on Sick Leave	361
<i>William J. Fisk, Olli Seppänen, David Faulkner, Joe Huang</i>	
A Conceptual Model to Estimate Cost Effectiveness of the Indoor Environment Improvements	368
<i>Olli Seppänen, William J. Fisk</i>	
The Effect of Structures on IAQ and Thermal Comfort	375
<i>Jarek Kurnitski, Argo Suursoho, Jari Palonen</i>	
Estimate of an Economic Benefit from Investment in Improved Indoor Air Quality in an Office Building	382
<i>P. Wargocki, Rade Djukanovic</i>	

Potential Benefits of Reduced Summer Time Room Temperatures in an Office Building	388
<i>Juha Smolander, Jari Palonen, Marianna Tuomainen, Pirjo Korhonen, Olli Seppänen</i>	
Cost Benefit Analysis of the Night-Time Ventilative Cooling in Office Building	394
<i>Olli Seppänen, William J. Fisk, David Faulkner</i>	
 4A) SPECIFICATION, DESIGN, CONSTRUCTION, COMMISSIONING, OPERATION AND MAINTENANCE	
Creating Healthy Buildings: Early Design Stage and Handing Over are Crucial	400
<i>Christian Cox</i>	
Pilot Study on VOCS during Indoor Renovation	406
<i>Miki Jona, Kazukiyo Kumagai, Naohide Shinohara, Minoru Fujii, Akihiko Iio, Yukio Yanagisawa</i>	
Hazardous Wastes in the Process of Managing Construction—Whose Interest is it Finally? .	412
<i>Juha-Pekka Maijala</i>	
Ageing Gracefully: How Can a Whole Life Support Services Framework Enhance the Life of the Building Services Systems?	417
<i>G. A. John, H. M. Loy, D. J. Clements-Croome, V. Fairey, K. Neale</i>	
Implementation of a Web-Based Global Optimal Management System in District Cooling . .	423
<i>Likui Yu, Guoqiang Zhang, Youming Chen</i>	
Effective Sampling Protocol for Managing Indoor Air Quality in Air-Conditioned Buildings	428
<i>Chun-Sing Wong, Daniel W. T. Chan, John Burnett</i>	
From Healthy Buildings to Healing Buildings	434
<i>Ruzica Bozovic-Stamenovic, Ong Boon Lay, Ismail Said</i>	
Measured Outdoor Performance of Radiant Barriers in Tropical Climate	440
<i>T. Soubdhan, Jean Louis Bernard, P. H. Nguyen, Michel Dupont</i>	
Performance-Based Building: A State-of-the-Art with respect to Healthy Buildings	446
<i>Marcel G. L. C. Loomans, Philomena M. Bluyssen</i>	
A Cleaning Concept for HVAC System	453
<i>R. Holopainen, V. Asikainen, P. Pasanen, A. Majanen, A. Seppälä, T. Jalonen, O. Seppänen</i>	
Reducing the Risk of Future Moisture Problems in Buildings	460
<i>A. Nielsen</i>	
Integrating Health and Sustainability in Life Cycle Assessment	467
<i>E. Hasselaar, G. Klunder, L. Morawska</i>	
Constructional Materialism from the Healthy-Building Viewpoint	474
<i>I. C. Chen, P. C. Chou</i>	
Linoleum Floors—Properties, Maintenance and Effects on Indoor Air Quality— Recommended Methods for Cleaning and Maintenance	478
<i>Inger E. Dahl, Steinar K. Nilsen, Peter Blom</i>	
Linoleum Floors—Properties, Maintenance and Effects on Indoor Air Quality— Maintenance with Floor Polish—Powdering Problems and VOC Emissions	484
<i>Steinar K. Nilsen, Peter Blom, Inger E. Dahl</i>	
Sustainable Management Strategies Improve Building Performance: The Case of Italian Large Building Owners	490
<i>Nadia Boschi</i>	
Environmental and Durability Performance of Building Elements—Assessment Through a LCA Tool Application	495
<i>Ezilde Constanzo, Livio De Santoli</i>	

Indoor Air Quality as an Impact Category in Life Cycle Assessment of Building Materials—The Case Study of Indoor Paints	501
<i>Livio de Santoli, Adriana Sferra</i>	
Fault Introduction and Detection in Building HVAC Systems	508
<i>B. Yu, W. de Jong, A.H.C. van Paassen</i>	
Implementation of a Ventilation System with Clean Installation Method	514
<i>Riina Alén, Sirpa Kolari</i>	
Exploring the Use of Non-Conventional Materials for Self-Sufficient Housing as Healthy Buildings	520
<i>Debashis Sanyal</i>	
 4B) IAQ STANDARDS & GUIDELINES	
Analysis on the Grey Classification to Indoor Air Quality	527
<i>Zhang Furen, Jing Guoxon, Song Jianzun, Li Zhaojun</i>	
Updates on Legislation and Insurance Activity in the United States for “Mould, Asbestos and Lead”	533
<i>Walter H. Carter, Dewayne R. Miller</i>	
Principles, Experiences and New Developments of the Emission Classification of Building Materials in Finland	539
<i>Esko Kukkonen</i>	
Emissions from Construction Materials. Results from the National “Healthy Building” Programme	545
<i>Kristina Saarela</i>	
German Guide for the Prevention, Investigation, Evaluation and Remediation of Indoor Mould Growth (“Mould Guide”)	550
<i>Regine Szewzyk, Heinz-Jörn Moriske, Hans-Guido Muecke, Bernd Seifert</i>	
Air Distribution Design based on EN ISO 7730 with the Help of a Computer Program	556
<i>Egon Venko, Boris Gantar</i>	
Performance Criteria for Healthy Buildings: Target Values for some Indoor Air Quality Parameters	562
<i>M. Maroni, Paolo Carrer, Domenico Cavallo, Massimiliano della Torre, N. Boschi</i>	
Harmonisation of Indoor Material Labelling Systems in the EU—a Critical Review of Existing Labelling Systems	567
<i>S. Kephelopoulos, R. Augustin, C. Cochet, B. Seifert, M. Maroni, K. Saarela, D. Crump, P. Wolkoff, P. Leva, D. Kotzias</i>	
Multicriteria Analysis of Health, IEQ and Energy Use for Sustainable Buildings	574
<i>C. A. Roulet, N. Johner, F. Flourentzou, G. Greuter</i>	
Striving for Excellent Indoor Air Quality—The Hong Kong Experience	580
<i>Alain K.L. Lam, Joe W.Y. Fong</i>	
Recommendations for Establishing Target Values and Guidance Values for Volatile Organic Compounds (VOC) in Indoor Air	586
<i>Hans Schleibinger, Uwe Hott, Peter Braun, Dieter Marchl, Henning Rueden</i>	
Setting Indoor Air Guidelines in Austria	593
<i>H. P. Hutter, P. Tappler, H. Moshhammer</i>	
Criteria for Design of Indoor Environment in Sustainable Buildings	597
<i>P. C. Chou, Che-Ming Chiang, K. F. Chang, Yen-Yi Li, Nien-Tsu Chen</i>	
Quality Assessment in Building Investigations	603
<i>Ole Erik Carlson, J. Mattsson</i>	

4C) POLICY & LEGAL ISSUES

Indoor Climate 2002 Education and Information Campaign	609
<i>Jorma Säteri</i>	
Concept of Radon Protection Measures for New Buildings in Germany	615
<i>R. Lehmann, J. Kemski, R. Klingel, R. Stegemann</i>	

4D) SURVEYS & CASE STUDIES

Indoor Air Quality in Two Different Commercial Buildings: Part 1: Ventilation, Temperature, Humidity of Air and Gas Concentrations	620
<i>B. Ribot, A. Ginestet, M. Henninot, D. Pugnet</i>	
IAQ Evaluation of Educational Buildings	626
<i>Adriana Baglioni, I. Oberti, Silvia Piardi, Francesca Plantamura, Andrea Ratti</i>	
Benchmark of Data Centre Energy Performance	631
<i>Han Song Sun, Siew Eang Lee</i>	
IAQ at Two Vocational Institutes in Hong Kong	637
<i>K.S. Fung, Alan S.T. Tang, W.C. Lee, S.K. Ng, Y.K. Szeto</i>	
Study of Air Infection Risk in Operating Theatre	643
<i>T.T. Chow, Z. Lin, X.Y. Yang</i>	
Moisture Damage in Residential Buildings as a Function of Engineer and Occupant Observations	649
<i>Ulla Haverinen-Shaughnessy, Anne Hyvärinen, Juha Pekkanen, Aino Nevalainen, Juho Halla-aho, Jari Koivisto, Demetrios Moschandreas</i>	
IAQ in Office Buildings Located in the North and in the South of Italy	654
<i>Sara Bonetta, Silvia Bonetta, Simonetta Sampò, Sabrina Mosso, Silvia Romussi, Fernando Genova, Elisabetta Carraro</i>	
Quality of Indoor Air and Functionality of Ventilation in Day Care Centres	660
<i>Johanna Jalas</i>	
Long Term Monitoring of the Performances of an Innovative HVAC System for Cinemas ..	665
<i>A. Gastaldello, A. Gerrard-Smith, L. Schibuola, S. Venco</i>	
A Case Study on the Application of Underfloor Air Conditioning and Ventilation System in a School Assembly Hall	671
<i>Anthony Law, M. P. Wan, Christopher Chao, J. S. Hu</i>	
Magnitude of the Mould and Moisture Problem in Danish Homes	677
<i>Lars Gunnarsen, Lis Keiding</i>	
Measured IAQ in Two New Blocks of Flats	683
<i>Tuomainen Marja, Juhani Pirinen</i>	
Design Strategy for Sustainable Hospital Planning—A Case Study	688
<i>P. Meena Kumari</i>	
A Case Study on the Application of Nano-Confined Catalytic Oxidation (NCCO) Air Purification Technology in Ammonia Gas Removal in an Office Building	694
<i>Anthony Law, George Y.W. Chan, Tony H.M. Yip, Teresa S.C. Law</i>	
A Life-Cycle Costs Study of an Office Building in Scandinavian Conditions: A Case-Study Approach	701
<i>Risto Kosonen, Kim Hagström, Tuomas Laine, Veikko Martiskainen</i>	
Ventilation Management for Patient Care Protection During Construction in a Bone Marrow Transplant Unit	707
<i>Andrew Streifel, Maurice Mazzarella, JoAnne Groot, Anita Guelcher, Christine Hendrickson, Jim Eilrich</i>	

The French National Survey on Indoor Air Quality: Sample Survey Design	712
<i>F. Golliot, I. Annesi-Maesano, M.C. Delmas, F. Dor, Y. Le Moullec, L. Mosqueron, V. Nedellec, J. Ribéron, G. Salines, S. Kirchner</i>	

5A) STATUS-QUO ASSESSMENT

Indoor Air Quality and Health	718
<i>Lov Kumar Nagrani</i>	
Sick Building Syndrome in Mauritius: A Need for Concern	723
<i>A.H. Subratty, R. Bholah, V. Jowaheer, M.F. Lan Cheong Wah</i>	
Sick Building Syndrome Among Office Workers in Mauritius	728
<i>R. Bholah, H. Subratty, P. Gorroochand</i>	
Assessment of Building Environmental Impacts for Sustainable Development	734
<i>Guoqiang Zhang, Likui Yu, Youming Chen</i>	

5B) SOLUTIONS FOR HEALTHY BUILDINGS

Natural Ventilation in Dense Residential Areas: Studying Alternatives	740
<i>Zebun Nasreen Ahmed</i>	
Ventilation in a Mosque—An Additional Purpose the Minarets May Serve	746
<i>S. M. Najmul Imam</i>	
Investigation of Indoor Air Quality and Emission of Indoor Used Materials in Hungary	752
<i>László Kajtár, Tamás Hrustinszky</i>	
Development of a Life Cycle Cost Optimization Tool for Buildings	758
<i>Vishal Garg, Jyotirmay Mathur, N. K. Bansal</i>	
Optimization of the Glazed Surface of a Building with Reference to its Consumption for Thermal and Lighting Purposes	764
<i>A. Idone, Concettiona Marino, Antonino Nucara, Matilde Pietrafesa</i>	