



Solving energy and environment
problems through collaboration

The First International Conference on Building Energy and Environment (COBEE)

First Announcement and Call for Papers

Organized by
Tianjin University
Dalian University of Technology
Co-Organized by
Purdue University
University of Colorado at Boulder



Dalian, China
July 14-16, 2008

INVITATION

Energy and environment concerns have been ranked among the top problems facing society for the next 50 years, of which buildings are a major factor. This is because buildings use a significant portion of electricity and thermal energy, and the conversion of primary energy to electricity and thermal energy accounts for a large portion of greenhouse gas emissions. Energy is used to maintain comfortable and healthy environments in buildings, although such environments are difficult to achieve. Indeed, reports of building related symptoms and health complaints have been increasing.

This conference is organized to provide a platform for discussing energy and environmental issues and for initiating collaboration among building engineers, environmental scientists, architects, facility managers, and policy makers. The objective for the conference is to provide a forum for discussion that addresses the challenges and opportunities we are facing, while enabling collaboration that encourages the participants from both developed and developing countries to work together to solve the most critical problems.

This first International Conference on Building Energy and Environment (COBEE) will be held in Dalian, which is a scenic, coastal city in Northeast China. The conference will be held prior to the 2008 Olympics Games in Beijing so



it will be convenient for attendees to continue their stay for the games. Alternatively, if they prefer to leave China soon after the conference, there

should be plenty of empty airline seats available.

Welcome to charming and beautiful Dalian!

A handwritten signature in blue ink, appearing to read 'Neng Zhu'.

Neng Zhu, Ph.D.
Tianjin University
Co-President

A handwritten signature in blue ink, appearing to read 'Jili Zhang'.

Jili Zhang, Ph.D.
Dalian University of Technology
Co-President

ORGANIZING COMMITTEE

Presidents of 2008 COBEE

Jili Zhang (Dalian University of Technology)
Neng Zhu (Tianjin University)

Co-Chairs of Organizing Committee

Qingyan Chen (Purdue University)
Lin Duanmu (Dalian University of Technology)
Junjie Liu (Tianjin University)
John Zhai (University of Colorado at Boulder)

Secretary of 2008 COBEE

Tengfei "Tim" Zhang (Dalian University of Technology)

Michael Brandemuehl (University of Colorado at Boulder)

James Braun (Purdue University)
Guanyi Chen (Tianjin University)
Xudong Yang (Tsinghua University)
Xiaosong Zhang (Southeast University)
Jianing Zhao (Harbin Institute of Technology)

INTERNATIONAL ADVISORY COMMITTEE

Qingyan Chen, Purdue University, USA
Hal Levin, Building Ecology Research Group, USA
Yuguo Li, Hongkong University, China
Olli Seppänen, Helsinki University of Technology, Finland
Jan Sundell, Technical University of Denmark, Denmark
Shin-ichi Tanabe, Waseda University, Japan
Branislav B. Todorovic, University of Belgrade, Serbia

INTERNATIONAL SCIENTIFIC COMMITTEE

Francis Allard, Université de La Rochelle, France
Edward Arens, University of California at Berkeley, USA
Hazim Awbi, University of Reading, UK
Costas Balaras, National Observatory of Athens, Greece
Bas Baskaran, National Research Council Canada, Canada
Ian Beausoleil-Morrison, Carleton University, Canada
Souvik Bhattacharyya, Indian Institute of Technology at Kharagpur, India
Marianna Brodatch, ABOK, Russia
Wan-Ki Chow, Hong Kong Polytechnic University, China
David Claridge, Texas A&M University, USA
Derek Clements-Croome, University of Reading, UK
Richard Corsi, University of Texas at Austin, USA
Drury Crawley, Department of Energy, USA
Richard de Dear, Macquarie University, Australia
Gao Ding, Architecture Design & Research Group, China
David Etheridge, Gas Research Centre, UK
William Fisk, Lawrence Berkeley National Laboratory, USA
John Girman, Environmental Protection Agency, USA
Leon Glicksman, Massachusetts Institute of Technology, USA
Fariborz Haghighat, Concordia University, Canada
Robert Hastings, Energie & Umwelt GmbH, Switzerland
Per Heiselberg, Aalborg University, Denmark
Hugo Hens, Katholieke Universiteit, Belgium
Jan Hensen, Eindhoven University, Netherlands
Joe Huang, White Box Technologies, USA
Yi Jiang, Tsinghua University, China
Petr Kabele, Czech Technical University in Prague, Czech
Shinsuke Kato, University of Tokyo, Japan
Kwang-Woo Kim, Seoul National University, Korea
Yoon-Shin Kim, Hanyang University, Korea
Moncef Krarti, University of Colorado at Boulder, USA
Joseph Lam, City University of Hong Kong, China
Mark Levine, Lawrence Berkeley National Laboratory, USA
Angui Li, Xi'an University of Architectural Technology, China
Baizhan Li, Chongqing University, China
Zhiwei Lian, Shanghai Jiaotong University, China
Haiyan Lin, Chinese Academy of Building Science, China
John Little, Virginia Tech, USA
Mingsheng Liu, University of Nebraska at Lincoln, USA
Vivian Loftness, Carnegie Mellon University, USA
Ardeshir Mahdavi, Vienna University of Technology, Austria
John Mardaljevic, De Montfort University, UK
Allan Meier, Lawrence Berkeley National Laboratory, USA
Lidia Morawska, Queensland University of Technology, Australia
Shuzo Murakami, Keio University, Japan
William Nazaroff, University of California at Berkeley, USA

Peter Nielsen, Aalborg University, Denmark
Jianlei Niu, Hong Kong Polytechnic University,
China
Peter Novak, University of Ljubljana, Slovenia
Myung-Do Oh, University of Seoul, Korea
Bjarne Olesen, Technical University of
Denmark, Denmark
Andrew Persily, National Institute of Standards
and Technology, USA
Susan Roaf, Heriot Watt University,
Edinburgh, UK
Claude-Alain Roulet, Swiss Federal Institute of
Technology, Switzerland
Mats Sandberg, KTH Research School, Sweden
Mat Santamouris, University of Athens, Greece
Chandra Sekhar, National University of
Singapore, Singapore
Kirk Smith, University of California at
Berkeley, USA
Jang-Yeul Sohn, Hanyang University, Korea
John Spengler, Harvard University, USA
Jelena Srebric, Pennsylvania State University,
USA

John Swaffield, Heriot-Watt University, UK
Kwok Wai Tham, National University of
Singapore, Singapore
Marija Todorovic, University of Belgrade, Serbia
Shengwei Wang, Hong Kong Polytechnic
University, China
Charlie Weschler, UMDNJ, USA
Peter Wouters, Belgian Building Research
Institute, Belgium
Jonathan Wright, Loughborough University, UK
Tim Xu, Lawrence Berkeley National Laboratory,
USA
Wenfa Xu, China Urban Construction Design and
Research Institute, China
Henry Xue, California State Polytechnic
University, USA
Hiroshi Yoshino, Tohoku University, Japan
Guoqiang Zhang, Hunan University, China
Jianshun Zhang, Syracuse University, USA
Xu Zhang, Tongji University, China
Yuanhui Zhang, University of Illinois at Urbana-
Champaign, USA
Yingxin Zhu, Tsinghua University, China

SPONSORING ORGANIZATIONS(Tentative list)



American Society of Heating, Refrigerating and Air-conditioning Engineers



Architectural Institute of Japan



Architectural Thermal Energy & Power of Architectural Society of China



China HVAC&R Association



Department of Energy, USA



Environmental Protection Agency, USA



Federation of European Heating and Air-Conditioning Associations



International Society of Indoor Air Quality and Climate

中国建设部

Ministry of Construction, China

中国科学技术部

Ministry of Science and Technology, China



The Society of Heating, Air-Conditioning and Sanitary Engineers of Japan

COBEE 2008 continues to seek sponsorship from organizations with stake in building energy and environment. Please contact conference secretariat for more information.

PAPER TOPICS

1. Building energy demand and energy performance of buildings, systems, and components
2. Passive heating, passive cooling, and renewable energy for buildings
3. Indoor and outdoor air quality, thermal comfort and health impact related to built environments
4. Indoor and outdoor acoustic comfort and noise control
5. Indoor and outdoor lighting, lighting control, and visual comfort
6. Ventilation, infiltration, and air distributions
7. Sustainable and advanced built environments
8. Advanced or innovative HVAC&R systems and system components
9. Advanced or innovative building envelopes and materials for energy conservation and indoor environment improvement
10. Intelligent buildings and advanced control techniques
11. Computer tools and experimental techniques for assessment of building energy and built environments
12. Integration of technologies and tools for building design and operation
13. Public policies related to building energy and environment
14. Retrofit and optimal operation of the building energy system

LANGUAGE

The official language of the conference is English.

CALL FOR PAPERS

ABSTRACT SUBMISSIONS

You are invited to submit one-page abstracts. Each abstract should be submitted separately and should contain the following information:

1. Topic number
2. Title of the paper
3. Full name of the author(s)
4. Affiliation of the author(s)
5. Mailing address and e-mail address of the corresponding author
6. An abstract of 300 to 500 words

All abstracts must be submitted electronically by email to cobee2008@gmail.com.

FORUM SUBMISSIONS

In order to facilitate possible collaboration among conference attendees, you are invited to submit proposals for forums. The forums are to discuss challenges and opportunities in building energy and environment. Each forum will be scheduled for 90 minutes with 3-5 presentations (without papers) and ample time for discussion. Each proposal should contain the following information:

1. Topic number
2. Title of the forum
3. Full name of the forum chair
4. Affiliation of the forum chair
5. Mailing address and e-mail address of the forum chair
6. A list of proposed presenters and their affiliations
7. An abstract of 300 to 500 words

All forum proposals must be submitted electronically by email to cobee2008@gmail.com.

WORKSHOP SUBMISSIONS

In order to initiate or to strengthen collaboration among the conference attendees, you are invited to submit proposals for workshops. The workshops are to initiate research collaborations or to report the progress of collaborative research. Each workshop can be scheduled for 60, 90, 120, or 180 minutes. The workshop will have presentations (with or without papers) that summarize state-of-the-art research or current research progress. There will be ample time to discuss the results and plan for future collaboration or subsequent research. Each proposal should contain the following information:

1. Topic number
2. Title of the workshop
3. Full name of the workshop chair
4. Affiliation of the workshop chair
5. Mailing address and e-mail address of the workshop chair
6. A list of proposed presenters and their affiliations
7. An abstract of 100-200 words summarizing the workshop prepared by the workshop chair
8. Abstracts of 300 to 500 words from each presenter (Please see abstract submission for details, but note that presenters should not email directly their abstract(s) to the conference. Instead, the workshop

EXHIBITION SUBMISSIONS

chair should email the entire package to the conference.)

All workshop proposals must be submitted electronically by email to cobee2008@gmail.com.

Exhibition spaces in the conference venue will be available at reasonable price for display of industrial products and other information. Exhibitors are encouraged to submit requests for more information to cobee2008@gmail.com.

PUBLICATIONS

All accepted abstracts will be published in a printed version of the abstract book to be distributed at the conference. All accepted papers will be published in a CD of the conference proceedings. Selected papers from the conference will be expanded and published in special issues of the following journals:

Atmospheric Environment (decision pending)
Building and Environment (agreed)
Building Simulation (agreed)
Energy and Buildings (agreed)

SCHEDULES

| | |
|---|--------------------------|
| <u>Abstract/proposal due:</u> | <u>November 15, 2007</u> |
| <u>Notification of abstract acceptance:</u> | <u>November 30, 2007</u> |
| <u>Full paper submission:</u> | <u>January 31, 2008</u> |
| <u>Notification of paper acceptance:</u> | <u>March 31, 2008</u> |
| <u>Papers in final format:</u> | <u>April 30, 2008</u> |
| <u>Deadline of early bird registration:</u> | <u>April 30, 2008</u> |
| <u>Conference:</u> | <u>July 14-16, 2008</u> |

INFORMATION ON DALIAN



Dalian is a charming city with a blue sea, plenty of sunshine, beautiful landscaping, gourmet seafood, and friendly people. The city is known to many as "Home

of Track and Field" and "City of Fashion". Dalian has many beautiful parks and contains attractive buildings demonstrating various unique and interesting architectural styles. For those that enjoy the ocean, the city's beaches are an ideal place to escape the summer heat. Other local attractions in Dalian include: Xinhai Park, Tiger Beach Park, Golden Pebble Beach Scenic Area, Fujia Village Tourist Center, the Museum of Natural Science, and many others. Dalian is also famous for its shell carving pictures and glassware. Exploring scenic spots and places of historic interest will help you to recharge following a busy day at the conference. At night, you can enjoy the city while observing the unique, urban lighting, strolling along the seaside to assess thermal comfort, and experiencing the air quality of the fresh sea breezes. A diverse selection of local restaurants offers delicious food and wine from various regions of China. Studying the impact of the local cuisine on your health is perfect practice for evaluating energy and environment.

Dalian, located in a peninsular, is a flourishing coastal, beautiful port city with convenient land, water and air transportation. For example, Dalian has many direct flights



from/to many Asian countries and regions, such as Tokyo, Osaka, Seoul, and Hong Kong. Dalian has over 20 daily flights to Beijing, 14 daily flights to Shanghai, 5 daily flights to Guangzhou, and hundreds of flights to over 40 other domestic destinations.

The weather in Dalian is very pleasant, with summers that are not extremely hot and winters that are not too cold. The average temperature in Dalian is about 10 °C (50 °F). The temperature in early August ranges from 19 °C (66 °F) to 30 °C (86 °F) with relative humidity from 62% to 66%. The fair weather ensures that Dalian receives a high ranking for outdoor thermal comfort. Due to the moderate summer temperatures, late May to middle September is the peak travel season in Dalian.



CONFERENCE SECRETARIAT

Tengfei "Tim" Zhang, Ph.D.
School of Civil & Hydraulic Engineering
Dalian University of Technology
2 Linggong Road, Dalian 116023, China
Cell Phone: +86-139 4288 5761
Email: cobee2008@gmail.com
URL: <http://ceae.colorado.edu/cobee/>