



**Solving energy and environment
problems through collaboration**

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

Second Announcement and Call for Papers

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



**July 13–16, 2008
Dalian, China**

<http://bechtelrh.colorado.edu/ceae/cobee/>

WELCOME TO COBEE 2008

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.

Welcome to charming and beautiful Dalian!

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Tianjin University
Co-President

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

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International Society of Indoor Air Quality and Climate

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Ministry of Science and Technology, China



Society of Air-Conditioning and Refrigeration Engineers of Korea

TECHNICAL PROGRAM

Invited Lectures

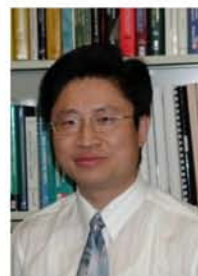
Several internationally renowned scholars have been invited as the plenary session speakers of COBEE 2008.

The presentation topics are:



Understanding Human Exposure to Air Pollutants in the Built Environment

Prof. William Nazaroff
University of California at Berkeley
USA



Energy and Environment in Chinese Rural Housing: Road to Sustainability

Prof. Xudong Yang
Tsinghua University
China



Sustainable Building Design

Prof. Koen Steemers
Cambridge University
UK



Ventilation and health in
built environment

Prof. Yuguo Li
University of Hong Kong
China

Papers

COBEE 2008 has received more than 600 abstracts from 33 countries and regions. The abstracts have been reviewed by the International Scientific Committee and invited experts. Decisions on the abstracts have been mailed to the authors. The contributing papers will be presented either by oral or by poster presentations.

Workshops and Forums

Several workshops and forums are being organized to discuss ad hoc topics that fall within the general scope of COBEE. The workshops are to initiate research collaborations or to report the progress of collaborated research. The workshops 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 next phase research. The forums are to discuss challenges and opportunities in building energy and environment. Each forum has several presentations (with or without papers) and ample time for discussion

The topics of the workshops and forums proposed are:

1. Sustainable and Advance Built Environment—A Singapore Experience

Chair: Tan Eng Khiam
National University of Singapore
Singapore

2. Multifunctional facades and building structures-performance prediction and validation.

Chair: Marija Todorovic
University of Belgrade, Serbia

3. Inverse tracking of indoor pollutant

Chair: Qingyan Chen
Purdue University, USA

4. HVAC design for high-rise residential buildings

Chair: Jianlei Niu
Hong Kong Polytechnic University,
China

5. Balance between Energy Use and Indoor Environmental Quality

Co-chair: Yuanhui Zhang

University of Illinois at Urbana-Champaign,
USA

Co-chair: Jamie Bennett

National Institute for Occupational Safety
and Health, USA

6. IAQ Problems in China: Current Status and Future Perspective

Co-chair: Qingyan Chen

Purdue University, USA

Co-chair: Guoqiang Zhang

Hunan University, China

Co-chair: Qihong Deng

Central South University, China

7. Recent progress in IAQ and Health Research in China

Co-chair: Yuguo Li

Hongkong University, China

Co-chair: Xu Yang

Huazhong Normal University, China

Co-chair: Jinliang Zhang

Peking University, China

Exhibition

An exhibition will be held concurrently at the same venue with the COBEE 2008 conference. The exhibition is to show products, software, and information related to building energy and environment to the conference participants. Exhibition spaces in the conference venue will be available at reasonable price. Exhibitors are encouraged to submit requests for more information to cobee2008@gmail.com.

Language and Publications

The official language of the conference is English.

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 as special issues by the following journals:

- 1 Atmospheric Environment
- 2 Building and Environment
- 3 Building Simulation
- 4 Energy and Buildings

Topics of Sessions

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

TENTATIVE PROGRAM SCHEDULE

	July 13, Sun	July 14, Mon	July 15, Tue	July 16, Wed
8:00-9:00		Parallel sessions	Parallel sessions	Plenary session
9:00-10:00				Parallel sessions
10:00-10:30	Registration	Coffee/Tea	Coffee/Tea	Coffee/Tea
10:30-12:30		Parallel sessions	Parallel sessions	Parallel sessions
12:30-13:30		Lunch break	Lunch break	Lunch break
13:30-15:30		Parallel sessions	Parallel sessions	Posters
15:30-16:00		Coffee/Tea	Coffee/Tea	Coffee/Tea
16:00-17:00	Opening Ceremony	Posters	Social tour	Closing ceremony
17:00-18:00	Plenary Session			
18:00	Reception		Party and performance	

IMPORTANT DATES

The deadline for submitting abstracts has passed. However, COBEE may be able to consider late submissions if the following deadlines can be satisfied. Please contact the conference secretariat for more information.

Full paper submission	January 31, 2008
Notification of paper acceptance	March 31, 2008
Deadline of early bird registration	April 30, 2008
Papers in final format	April 30, 2008
Conference	July 13-16, 2008

CONFERENCE REGISTRATION

It is expected that all the papers/workshops/forums will be presented. If an author does not register by April 30, 2008, his/her paper will then not be included in conference program, abstract book, and conference proceedings. One registered author can have a maximum of two presentations. If an author fails to present his/her paper, the paper will not be considered for possible publication in the special issues of the four journals. The conference registration form will be mailed out to the authors and will be downloadable from the conference website before March 31, 2008.

	Before April 30	After April 30
Participants	US \$400	US \$450
Student Participants	US \$250	US \$300

* Participants from china will enjoy a special discount rate to be announced later

** Note: US\$1 = RMB 7.5

CONFERENCE VENUE

COBEE 2008 is to be held in Furama Hotel Dalian, a five-star hotel located in 60 Renmin Road, downtown of Dalian. The conference venue is 14 km from the airport, 1 km from the railway station, and 5 km from the scenic Tiger Beach.



ACCOMMODATION

The following hotels at or near to the conference venue have been booked for COBEE 2008. Hotel reservation can be made together with the meeting registration. The room rate includes service charge and breakfast.

Hotel	Room Type	Single	Twin
Furama Hotel (★★★★★)	Standard	RMB 880	RMB 880
Shangri-La (★★★★★)	Standard	RMB 1200	RMB 1300
	Deluxe	RMB 1300	RMB 1400
Delight Hotel (★★★★)	Standard	RMB 410	RMB 410
Lee Wan Business (★★★★)	Standard	RMB 398	RMB 398
Friendship (★★★)	Standard	RMB 380	RMB 380

* The rate is subject to change in 2008. The above information is only for reference. Updated information will be available in the registration form.

** Note: US\$1 = RMB 7.5



Map of Conference Venue and Accommodation

TOURS

Technical Tour

Seawater Source Heat Pump Project

The seawater source heat pump project was initiated in 2005 in Dalian for building heating and cooling in Xinghai bay area and then was selected as one of the demonstration projects for building utilization of renewable energy by the Chinese Ministry of Construction. The seawater heat pump project is designed to heat up or cool down buildings with a total area of 1.3 million square meters in the business region near Xinghai Square of Dalian. The project is still under constructing and is planned to be completed by 2008.

Social Tour

Bin Hai Road

Bin Hai Road stretches along Dalian's famous coastline and is a sightseeing must for visitors to the area. The 35-kilometer-long



road borders Xing Hai Square in the west and Dong Hai Park in the east. One side of the road features mountainous areas covered with forests while the opposite side reveals the panoramic coastline and sea. Due to the clear, fresh air



and the sea, locals have nicknamed the road the "natural oxygen bar."

Tours for Accompanying Persons

Golden Pebble Beach



The Golden Pebble Beach is a national tourist resort located in 50 km away from downtown Dalian. It is surrounded

by sea at three sides and people can enjoy pleasant weather of warm winter and cool summer at around. Sinian rocks from 600 million years ago have formed into magnificent landscape of grotesque stones in these areas. The Golden Pebble Beach is known as "The Solidified Animal World", "The Natural Geological Museum" and "The Magic Sculpture Park".

Scenic spots include the Golden Pebble Waxworks Hall, Stone Collection Hall, Golden Pebble Park, Ten-Thousand Fortune Pot, Chinese Martial Arts Hall, Golden Pebble Discovery Kingdom Theme Park, etc.



Tiger Beach Park

The Tiger Beach is one massive vortex of fun. Built in 1990, this amusement area caters to both kids and adults by offering a diverse scope of options including shopping and swimming. But it's the animal



exhibits that really elevate it into "Must See" status. China's largest birdcage (18,000 square meters) and largest tiger sculpture reside



here. It also harbors an aquarium that features an entertaining dolphin show.

Ice Valley Scenic Area (Xianrendong National Natural Reserve)

Located near the Qian Shan Mountains, this massive reserve sits almost 600 meters above sea level and encompasses three

sections: Dragon Hill, Small River Valley and Yingna River Valley. Despite its height, it enjoys a temperate climate, allowing plant and animal life to flourish. The reserve harbors 810 plant species and 196 different forms of wildlife, many of which are



endangered. It also features Xianren Cave and its famous karsts rock formations dating back to the Pre-Sinian Period.

INFORMATION ON DALIAN



Dalian is a charming city with a blue sea, a lot 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: Xinghai Park, Tiger Beach Park, Golden Pebble Beach Scenic Area, Fujia Village Tourist Center, and 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 interests will help you to recharge following a busy day at the conference. At night, you can soak in the city while observing the unique, urban lighting, strolling along the seaside to assess thermal comfort, and taking in the air quality from the 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 and beautiful coastal, port city with convenient



land, water and air transportation. For example, Dalian has many direct flights

from/to a dozen of 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 mid July ranges from 19 °C (66 °F) to 30 °C (86 °F) with relative humidity from 62% to 66%. The fair weather ensures that Dalian can receive a high rank for outdoor thermal comfort. Due to the moderate summer temperatures, late May to middle September is the peak travel season in Dalian.

CONFERENCE SECRETARIAT

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