



Preliminary Program **International Conference for Enhanced Building Operations** November 16-19, 2009



2009 Conference & Workshops Schedule

Monday, November 16

Registration: 7AM – 5 PM
Continuous Commissioning®
Workshop, 8 AM – 4 PM
Measurement & Verification
Workshop, 8 AM – NOON

Tuesday, November 17

Registration: 7AM – 5 PM
Conference Sessions:
8 AM – 4:30 PM
Luncheon: Noon
Reception: 5 PM – 7 PM

Wednesday, November 18

Registration: 7AM – 5 PM
Conference Sessions:
8 AM – 4 PM
Luncheon: 12:20 PM

Thursday, November 19

Workshop: 8 AM–NOON
LEED® Workshop

Keynote Speakers

Mr. Bill Harrison, Past President of ASHRAE
Mr. Karl Rábago, Vice President, Austin Energy

Conference Site Information

The 9th International Conference for Enhanced Building Operations will be held at the [AT&T Conference Center](#) in Austin, Texas. Joining the **Energy Systems Laboratory** at Texas A&M University as a host of ICEBO is **Austin Energy**. This team is bringing together a stellar international group of presenters and practitioners in the realm of improving existing building operations and comfort. See the line-up of speakers in the following pages, and make plans to attend. If your business is managing energy operations and client comfort in new and existing buildings, you need to be in Austin November 16-19!

Accommodations

A block of hotel rooms is reserved at the [AT&T Conference Center](#) at the conference rate of \$149 USD/day, single or double occupancy. **THIS RATE IS GOOD UNTIL 23 OCTOBER 2009.** The hotel website is <http://www.meetattexas.com/> and you can make reservations on-line with the group code "BUILD01109" (The field is case-sensitive, the first 6 digits are letters and capitalized, the last 4 digits are numbers). There is a parking garage underneath the AT&T Conference Center, at the corner of University and 20th Street.

Call the AT&T Conference Center for reservations 512.404.3600 or 800.744.8822. You can also visit the ICEBO website for hotel information.

Pre-Conference Workshops

Continuous Commissioning® Workshop Information – November 16, 2009, 8AM – 4PM

The one-day Continuous Commissioning® Workshop presents techniques practiced daily by the engineers at the Energy Systems Laboratory. These techniques are proven to save significant dollars from the Continuous Commissioning® existing buildings at Texas A&M University, airports, school districts, hospitals, and many commercial and government facilities. Now is your chance to learn state-of-the-art, hands-on knowledge from these experts.

Instructors are **Dr. David Claridge, Dr. Dan Turner, and Mr. Song Deng**, Director and Associate Directors respectively of the Energy Systems Laboratory. As leaders of the ESL they are responsible for leading the Lab's Continuous Commissioning® effort and have extensive experience in technology transfer and workshops.

The topics included for instruction are:

- *Introduction to the Continuous Commissioning® Process*

- *Fundamentals for Continuous Commissioning®*
- *Tools and Equipment*
- *Ensuring Optimum Building Performance*
- *Typical Continuous Commissioning® Measures*
- *Financing Options*
- *Measurement & Verification for Continuous Commissioning®*

MEASUREMENT & VERIFICATION WORKSHOP – Nov. 16, 2009

Dr. Jeff Haberl, P.E., FASHRAE, of the Energy Systems Laboratory will present the Lab's latest version of the Measurement & Verification Workshop. Dr. Haberl served as a technical committee member in the development of the NEMVP, and later the IPMVP. The Energy Systems Lab has been at the forefront of this issue for many years due to its work in the LoanSTAR program for the Texas State Energy Conservation Office.

Post-Conference Workshop - LEED® WORKSHOP – Nov. 19, 2009

This half-day workshop will focus on LEED_{NC} Version 3.0 for individuals considering accreditation or planning to have a building certified. The LEED accreditation process, the building certification process and the LEED Credits will be covered. A CD will be provided with reference material for specific credits, a simulation program (eQuest) for determining energy savings and a practice LEED-like exam. The instructor will be **Dr. Charles Culp**, P.E., LEED-AP, FASHRAE, ASHRAE-HBDP. Dr. Culp teaches a full semester LEED course at Texas A&M University.

Visit the ICEBO website at <http://icebo.tamu.edu> to register

Preliminary Program Schedule

Tuesday, November 17

8:00AM – 9:05 AM – Welcome and Plenary Session

9:15AM – 11:50 AM – Technical Sessions

Session 1: ENERGY MANAGEMENT STRATEGIES - I

“Austin Independent School District Efforts to Promote Energy Efficiency and Sustainability,” Farshad Shahsavary, John David Watkins, Whitney Allene Wood, Austin Independent School System

“Educational Buildings Stocks Refurbishment, a double Opportunity: Massive Energy Savings, Education of Youngsters About Sustainable Development,” Nicolas Couillaud, CSTB, France

“Energy Saving and CO2 Reduction Concept at Lufthansa Technik,” Jens-Peter Fahs, Lufthansa Technik AG

Session 2: ENERGY EFFICIENCY PROJECTS-CASE STUDIES

“CC[®] of US Army Medical Facilities,” Jim Butts, US Army MEDCOM, Song Deng, Energy Systems Laboratory, Texas A&M University

“Continuous Commissioning[®] LEED-Gold Austin City Hall,” J.J. Zhou, Carlos Yegua, Energy Systems Laboratory, Texas A&M University

“Cost Saving Through Energy Efficiency: A Case Study of Western Connecticut State University,” Tom Arnold, Enernoc

“Case Study and Energy Performance Optimization for Dell Children’s Medical Center of Central Texas,” Phillip Risner, Seton Network Facilities

“CC[®] of a Central Utility Plant with Thermal Storage,” Chen Xu, Song Deng, Energy Systems Laboratory, Texas A&M University

Session 3: SUSTAINABILITY

“Historical Survey of Daylighting Calculations Methods and Their Use in Energy Performance Simulations,” Sandeep Kota and Jeff Haberl, Texas A&M University

“Estimation of the Performance of a Solar Fiber Optic Lighting System after Repairing the Glass Fiber Cables in a South Korean Residential Building,” Kwang-Seok Cha and Tae-Koo Kim, Hyundai Engineering and Construction, Ltd.; Myung-Sig Park, Visiting Researcher, University of Texas at Austin

“AIM: A Home-Owner Usable Energy Calculator for Existing Residential Homes,” Kyle Marshall, Matt Moss, Mini Malhotra, Betty Liu, Charles Culp, and Jeff Haberl, Energy Systems Laboratory, Texas A&M University; Christine Herbert, Good Company, Austin, Texas

12 NOON – 1:30 PM – Lunch

1:45 PM – 4:30 PM – Technical Sessions

Session 4: ENERGY MANAGEMENT STRATEGIES - II

“Energy Management Strategies for Existing Buildings,” Laurie Gilmer, Facilities Engineering Associates

“Texas Facilities Commission Overall Energy Management Plan,” Jorge Ramirez, Texas Facilities Commission

“Implementation of Smart Operation Strategies for Air-Conditioning and Lighting Systems for Ministries Complex in the State of Kuwait,” A. Al-Mulla, G.P. Maheshwari, D. Al-Nakib, and H. Ishaali, Kuwait Institute for Scientific Research

“Chilled Water Thermal Storage System and Demand Response at the University of California at Merced,” Sila Kiliccote, Junqiao Han Dudley, Jessica Granderson and Mary Ann Piette, Lawrence Berkeley National Laboratory

Session 5: OPTIMIZATION AND CONTINUOUS COMMISSIONING[®]

“Ontology Development for Low-Energy Building Embedded Commissioning,” Kwang Jun Lee, Omer Akin, Burcu Akinci, and James Garrett, Jr., Carnegie Mellon University; Steven Bushby, National Institute of Standards and Technology

“A Study on the Effects of Unwanted Air infiltration on Thermal Comfort at DFW Terminal E,” Bill Lander, Guanghua Wei, Jorge Caeiro, Energy Systems Lab, Texas A&M University

“Commissioning of DFW Airport,” Jerry Dennis, Larry Kramer, DFW Airport

“CC[®] of a US Army Medical Facility – Case Study,” Dayu Dong, Vision BEE, Austin, Texas

“CC[®] of Campus Office Building,” Song Deng, Energy Systems Laboratory, Texas A&M University

Session 6: SUSTAINABILITY

“Higher Education Building Material Selection on Life Cycle Costing Sensitivity,” Noorsidi Aizuddin, Universiti Teknologi Malaysia

“Effect of Courtyard on Thermal Performance of Commercial Buildings in Hot-Dry Climate, Ihmedabad, India,” Rachit Kumar, CEPT University, Navrangpura

“Economic Life Cycle Assessment as element of Sustainability certification - a key success factor moving beyond Life Cycle Costing,” Wolfram Trinius, Ingenieurbuero, Trinius, Hamburg, Germany and University of Gavle, Sweden; Harry Hirsch, HH Consulting, Baden Baden Germany; Simone Lakenbrink, DU Diederichs Project Management, Munich, Germany

5:00-7:00 PM – Reception

Wednesday, November 18

8:00 AM – 9:15 AM – Plenary Session

9:30 AM- 12:00 Noon – Technical Sessions

Session 7: BENCHMARKING

“Real Time Monitoring: Achieving Energy Efficiency!” Scott Rouse, Energy @ Work

“Use of First Law Energy Balance as a Screening Tool for Building Energy Use Data: Experiences on the Inclusion of Outside Air Enthalpy Variable,” Jung Ji, Hiroko Masuda, Juan-Carlos Balthazar, David Claridge, Energy Systems Laboratory, Texas A&M University

“The SCORE and CitySmart Programs: Sustaining Investment in High Performance Buildings in Schools and Cities,” Jonathan Kleinman and Steve McMinn, CLEAResult Consulting

“Case Studies in Using IPMVP Option C with Interval Meter Data to Determine Annualized Savings,” Mark Effinger, Portland Energy Conservation, Inc.

Session 8: COMMISSIONING AND CONTINUOUS COMMISSIONING®

“Continuous Commissioning® of a LEED-EB Gold Certified Office Building,” Paul McCown, SSRcx, LLC

“Dynamic Thermal Modeling of a Radiant Panels System and Its Environment for Re-Commissioning: Application to Case,” Stéphane Bertagnolio and Néstor Fonesca Diaz, University of Liège Belgium, Thermodynamics Laboratory,

“Continuous Commissioning® of a Multipurpose Facility,” Guanghua Wei, Carlos Yagua, Gary Napper and Dan Turner Energy Systems Laboratory, Texas A&M University; Mark Effinger, Portland Energy Conservation, Inc.; Farshad Shahsavary, Austin Independent School System

Session 9: GREEN BUILDINGS

“Imagine an Energy Efficient Campus,” Laurie Gilmer, Facilities Engineering Associates

“Green Homebuilding by Design,” Peter Pfeiffer, Barclay & Pfeiffer Architects

“Evolution and Building Codes – Commissioning and Beyond,” Aliasha Khan, Alliance to Save Energy

Session 10: COMPONENTS IN HVAC

“Building Systems Vibrations & Noise Control/Acoustics,” Jack Evans, JE Acoustics, Jack Evans & Associates

“Analysis of Energy Recovery Ventilator Savings for Texas Buildings,” Kevin Christman, Jeff Haberl and David Claridge, Energy Systems Laboratory, Texas A&M University

“Joint-Frequency Bins versus Conventional Bin Weather Data in Analysis of HVAC System Operation,” Alaina Jones, Juan-Carlos Balthazar and David Claridge, Energy Systems Laboratory, Texas A&M University

“Development and Analysis of Model Based Economizer Strategies,” Amit Bhansali, Command Commissioning, LLC, Irving, Texas

12:15 PM – 1:50 PM - Lunch

2:00 PM – 3:30 PM – Technical Sessions

Session 11: ENERGY MANAGEMENT STRATEGIES - III

“Achieving Sustainability, Energy Savings, and Occupant Comfort,” David Fisher, P.E. and Gary Bristow, P.E., Estes, McClure & Associates, Inc.

“Master Plan and Energy Audits at a Large Medical Campus,” Kenneth Simpson, P.E.; Mike Hart, P.E., Morgan Stinson, P.E.; Scott Haag, P.E., EEA Consulting Engineers, Austin, Texas

“Management of Power Demand Through Operations of Building Systems,” A. I. ElSherbini, G. Maheshwair, D. Al-Naqib; A. Al-Mulla, Kuwait Institute for Scientific Research

Session 12: CODES & ENVIRONMENTAL ISSUES

“The role of carbon finance in enhancing building performance in developing countries,” Jun Li, Ecole des Mines des Paris

“Recommendations for 15% Above-Code Efficiency Measures on Implementing Houston Amendments to Residential Buildings in Houston, Texas,” Jaya Mukhopadhyay, Zi Liu; Mini Malhotra, Sheila Blake, Jeff Haberl, Charles Culp, Bahman Yazdani, Energy Systems Laboratory, Texas A&M University

“Recommendations for 15% Above-Code Efficiency Measures on Implementing Houston Amendments to Multifamily Residential Buildings in Houston, Texas,” Jaya Mukhopadhyay, Zi Liu; Mini Malhotra, Sheila Blake, Jeff Haberl, Charles Culp, Bahman Yazdani, Energy Systems Laboratory, Texas A&M University

“Development of the DOE-2 simulation Models for the Code-Compliant Commercial Construction Based on the ASRHAE 90.1,” Seongchang Kim, Western Illinois University; Jeff Haberl and Zi Liu, Energy Systems Laboratory, Texas A&M University

“Estimation of Annual Reductions for NOx Emissions in ERCOT for 2010 and 2015 Electricity Savings Goals,” Juan-Carlos Balthazar, Piljae Im and Jeff Haberl, Energy Systems Laboratory, Texas A&M University; Art Diem and Denise Mulholland, US EPA, State and Local Clean Energy-Environment Program; Jim Yarbrough, EPA, Region 6

Session 13: CPA/SECO PANEL ON LoanSTAR AND STIMULUS FUNDS

Dub Taylor, Director, Texas State Energy Conservation Office
Lisa Elledge, Stimulus Program Manager, Comptroller of Public Accounts

3:30 P.M. – 4:00 P.M. - Conference Wrap-up and Invitation to ICEBO 2010 –

Dr. Turner, ESL

Dr. Dhari Al-Ajmi, Kuwait Institute for Scientific Research

Dr. A. Al-Mulla, Kuwait Institute for Scientific Research

Register for the Conference and Workshops!

Use the Enclosed Registration Form or register online through the TAMU website at <http://icebo.tamu.edu>

REGISTRATION FORM
International Conference for Enhanced Building Operations & Workshops
AT&T Conference Center, Austin Texas
November 16-19, 2009

Name _____
Nickname for name badge _____
Title _____
Company _____
Company Address _____
City _____ State _____ Zip _____
Phone _____ Fax _____
Email Address _____
Special Needs or Dietary Request: Vegetarian Other _____

ICEBO Two Day Registration\$395 ____

ICEBO One Day Registration (indicate date below).....\$250 ____
____ Tuesday, Nov. 17 or ____ Wednesday, Nov. 18

GROUP RATE (4 or more employees registering together)
ICEBO Two Day Group Registration (per person).....\$295 ____

Monday Workshop, Nov. 16:
Continuous Commissioning® Workshop (full day).....\$750 ____
M&V Workshop (half day)\$250 ____

Thursday Workshops, Nov. 19:
LEED® Workshop (half day)\$250 ____

Conference registration includes coffee breaks, lunches and one copy of the ICEBO proceedings. Workshop registration includes continental breakfast, coffee breaks and workshop notebook.

Total.....\$ _____

Enclosed is my personal/company check made payable to: TEES/ICEBO

____ Enclosed is my company Purchase Order, please invoice me.

____ I wish to pay by Credit Card.

Credit Card Number _____

Name on Credit Card _____

____ Visa ____ MasterCard ____ American Express Expiration Date _____

Fees are due upon registration. No refunds will be given after November 1, 2009.



Visa, MasterCard and American Express Accepted.

Please mail checks and registration forms to:

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