SCHEDULE OF ACTIVITIES

November 4, 2013 - Day 0 (Monday)

12:00	NN	Start of Registration
-------	----	-----------------------

6:00 PM Start of Welcome Cocktail Reception

November 5, 2013– Day 1 (Tuesday)

8:00 AM	Continuation	of Registration
---------	--------------	-----------------

9:00 AM Formal Opening of Plenary Session

(Strictly Formal Attire: Coat & Tie)

Power LUNCH 12:00 NN

1:00 PM Breakout Session

5:00 PM End of Day 1 Session

7:00 PM Energetic Banquet Dinner

November 6, 2013 - Day 2 (Wednesday)

8:00 AM Continuation of Breakout Session

12:00 NN Goodwill LUNCH

2:00 PM City Tour and HVAC/R Conference Visit

6:00 PM Back to Hotel and Send-Off

Technical Program

The conference program will include internationally acclaimed keynote speakers, original peer reviewed papers, plus workshops and panel discussions addressing indoor environmental quality in low energy buildings. Conference papers, keynote addresses, and conference topic summaries will be included in the post conference proceedings.

Venue

Metro Manila (UTC +8) is a megacity composed of 16 cities and 1 municipality populated by 12 million people. Makati City is the acknowledged financial and business district of the Philippines, hosting international financial institutions, major trading and marketing companies, the stock exchange, embassies and consulates. New World Hotel, located right in front of Greenbelt Mall at the corner of Makati Avenue and Esperanza Street is a prime location for hosting international conferences and will be the home for the 12th APCBE. High end shopping malls offering discounted prices, world-class restaurants, bistros, bars and eateries. museums, churches and even gardens can be found within a kilometer radius. Indeed, this is the venue you will not forget when you come to Metro Manila.

Important Dates and Deadlines of Submission for **Authors/Presenters**

Abstract proposals due:	(Extended up to)	May 30, 2013
Notification of acceptance:		May 31, 2013
Submission of full papers due:		July 15, 2013
Completion of peer review:		August 15, 2013
Final papers due:		September 15, 2013
Early registration due:		September 30, 2013

CONFERENCE FEES

	□ Full Early Registration	US\$	250.00	
	□ Full Late Registration	US\$	300.00	
	□ Day 1 Only	US\$	150.00	
	□ Day 2 Only	US\$	150.00	
	□ City Tour	US\$	50.00	
	□ Banquet Only	US\$	50.00	
(Full payment on or before Oct. 1, 2013)				

Abstracts are invited for the following topics:

 HVAC&R Technologies and Trends Air Conditioners Chillers

Thermal Energy Storage

Heat Exchangers

Compressors

Ventilation System

Green Building Technologies and Techniques

Thermal Comfort

Indoor Air Quality

Indoor Environment Quality

Intelligent Buildings

Zero Carbon Buildings

Environmental Issues

Replacement Refrigerants

Refrigerant Management

Ozone Laver Protection

Global Warming

Energy Savings

Special Topics, Trends and Cases in HVAC&R

Solar Photovoltaics

Refrigeration

Clean Room Environments

Hospital Indoor Air Quality

Large Space Ventilation

Modelling and Simulations, Tools and Measurements



For more information on the Conference, please contact:

ASHRAE Philippines Chapter

Unit 924, 9/F, Cityland Shaw Tower, Shaw Boulevard cor. St. Francis Street, Mandaluyong City, Philippines Telephone (02) 638-6539 Telefax (02) 910-2721 E-mail: ashraephilippines@gmail.com

MEN BEHIND THE 12TH APCBE

Conference Steering Committee

- Dr. Chee Sheng Ow, Chairman, Malaysia Chapter
- Dr. Chirdpun Vitooraporn, Member, Thailand Chapter
- Dr. Robert Yie-Zu Hu, Member, Taiwan Chapter
- Raymond Yau, Member, Hong Kong Chapter
- Albert Sin, Singapore Chapter
- Dr. Ari D. Pasek. Indonesia Chapter
- Dr. Manny C. Belino, Philippines Chapter

Advisory Committee

- Albert Lin, Hong Kong Chapter
- Ms. Ainee Cha, Malaysia Chapter
- Deddy El Rashid, Indonesia Chapter
- Emmanuel C. Punsalan, Philippines Chapter
- Gek S. Tan, Singapore Chapter
- Fu-Jen Wang, Taiwan Chapter
- Vorasen Leewattanakit, Thailand Chapter

Host Organizing Committee

- Joio G. Castro. Chairman
- Shernan B. Esmenda, Vice Chairman
- Bernie M. Terrobias. Secretary
- Dennis L. Alejandro, Treasurer
- Francis Roberto S. Guevara, Registration
- Prof. Efren G. Dela Cruz, Proceeding & Technical Committee
- Prof. Martin L. Kalaw, Technical Paper Committee
- Luis Angelo L. Sevilla, Publicity Committee
- Joselito B. David, Venue & Equipment Committee
- Tito B. Soledad, Hospitality Committee

TO KNOW MORE ABOUT THIS CONFERENCE, LOG ON AT OUR ASHRAE SOCIETY WEBPAGE:

https://www.ashrae.org/membership--conferences/conferences/ashrae-endorsedevents/2013/12th-asia-pacific-conference-on-the-built-environment

YOU CAN ALSO VIEW UPDATED INFORMATION ABOUT THIS EVENT AT OUR REGION XIII WEBSITE:

http://ashraeregionxiii.org/events/http://ashraeregionxiii.org/events/

^{*} Activities are subject to change by the Conference Committee

REGISTRATION FORM

Name				
Position_				
Company				
Address				
Tel	Mobile			
Fax	Email			
1. ASHRAE Member?	□ No □ Yes, CHAPTER	R		
2.ASHRAE ID No Member since				
□ Automat □ Contract □ Consulta □ Entrepre □ Facilities □ Governn	e Engineering ion ing ancy / Design eneur	□ Inventor □ Management □ Manufacturing □ Quality Control □ Plant Operations □ R & D □ Sales & Marketing □ Transportation		
4. Hotel Reservation □ Single Occupancy □ Twin Room Sharing □ I will book on my own For help in room reservations, email us at ashraephilippines@gmail.com				
□ Full Late □ Day 1 Oi □ Day 2 Oi □ City Tou □ Banquet	y Registration Registration nly nly r	U\$\$ 250.00 U\$\$ 300.00 U\$\$ 150.00 U\$\$ 150.00 U\$\$ 50.00 U\$\$ 50.00		
TOTAL APPLICABLE PAYMENT				
MODE OF PAYMENT: □ Cash / Check Payment / Telegraphic Transfer □ Deposit to ASHRAE Philippines Chapter US\$ Savings Account No.				
(THIS SERVES AS YO	UR OFFICIAL REGISTR	ATION WHEN SIGNED)		
DATE	(Signature over printed name)			

The official language of the conference shall be English. All papers to be submitted and presented must be written in English.

WHAT IS THE 12TH APCBE?

The Asia Pacific Conference on the Built Environment (APCBE) was formally organized by the Malaysia Chapter and Singapore Association of ASHRAE members as a biennial event in 1991. In response to the growing technology in HVAC&R, the scopes of the Conference have been expanded and the Conference is being held and hosted by the succeeding chapters within the region. This international conference will provide a forum for researchers and practitioners to share ideas, information, experiences, new developments and future prospects in the area of HVAC&R and the built environment. The 12th edition shifts to the sunny island of the Philippines thus, the appropriate theme Energy Efficiency in Hot and Humid Climates can best be discussed in an appropriate climate setting.

The conference topic will discuss among others, energy saving HVAC&R technology now being used not only in Asia but in North America as well, air conditioners, chillers, ice storage systems, heat exchangers, compressors and unique ventilation systems; the burning environment issues on alternative refrigerants, refrigerant management, ozone layer protection and global warming; Green Building technology and techniques for intelligent buildings that can address energy management and the indoor environment's IEQ and IAQ; and special topics, cases and trends on HVAC&R for solar photovoltaics, refrigeration, clean rooms, hospital IAQ, large space ventilation, energy modeling and simulation.

This conference will try to answer some lingering questions that thermal comfort can be achieved not by increasing energy consumption but can even be decreased while still ensuring a healthy and safe indoor environment at the same time, improving energy efficiency. This is quite a challenge especially in hot and humid climates.

The 12th APCBE will appraise the balance of HVAC&R trends and technologies arrayed against meeting increasing concerns for a healthy indoor environment while accepting the challenge for energy efficiency and inhibiting global warming and carbon emission that can result to further research, policy and education directions.

The conference program will include:

- Internationally acclaimed keynote speakers
- Original peer reviewed Conference papers
- Welcome Cocktails
- Half Day City Tour

Who should attend?

ASHRAE welcomes researchers, engineers, architects, health professionals, policy makers, building owners, building administrators, building restorers. designers, developers, manufacturers, and builders, and remediation experts.

Call for Abstracts

Submissions on energy saving HVAC&R technologies with proven project implementation, Green Building technologies and techniques that address IAQ, thermal comfort, and related environmental health concerns associated with low energy building design, construction, retrofit, and operation issues, and special topics, trends and cases for large ventilation spaces, clean rooms, hospitals and distinctive modelling and simulation solutions are the focus of this Call for Abstracts. All proposed submissions must be relevant to the conference themes to be accepted.

The abstract should contain the background and objectives of the study, the methodology used and key results. Interested authors are requested to submit the abstract in MS Word format, attention to Professor Efren G. Dela Cruz, Proceedings & Technical Committee Chairman at email address efren.delacruz@dlsu.edu.ph or alternate email address frenax2000@yahoo.com. Submission should include the following information:

> Title of the paper Authors' affiliation and contact details (email address, postal address and telephone number) A body of 300 - 500 words 3 – 5 keywords



PRESENTS THE

The 12th ASIA PACIFIC CONFERENCE ON THE BUILT ENVIRONMENT

A Biennial Event in Asia composed of Seven Chapter Countries















TO BE HELD ON

November 5-6, 2013

ΑT

NEW WORLD HOTEL

Esperanza Street corner Makati Avenue, Ayala Center, Makati City 1228, Philippines

WITH THE CONFERENCE THEME:

"ENERGY EFFICIENCY IN **HOT & HUMID CLIMATES"**



(This serves as your invitation)