

**PAM**

**CPD  
Seminar  
2011**

**PAM Sabah Chapter  
CPD Seminar & Event Committee 2011**

**Saturday, 17<sup>th</sup> September 2011**

**Thermal Comfort House by Solar Powered Ventilation**

**Speaker: Assoc. Prof. Dr. Christopher Chu Chi Ming  
C. Eng., C.Sci.  
(School of Engineering and Information  
Technology) Universiti Malaysia Sabah**

**Venue:**

PAM Mini Auditorium,  
PAM Sabah Chapter,  
Lot 5 & 6, 3<sup>rd</sup> Floor, Block A,  
Damai Plaza Phase IV,  
Luyang, 88300 Kota Kinabalu  
Tel: 088-261313, 088-232524  
Fax: 088-233773  
Email: pamsabah@gmail.com

**Registration fees:**

Admission is free

**Seminar programme:**

**08.30 am – 09.00 am**

**Registration**

**09.00 am – 10.30 am**

**Presentation start**

**10.30 am – 10.45 am**

**Tea Break**

**10.45 am – 11.30 am**

**Presentation continues**

**11.30 am – 12.00 noon**

**Q & A Session**

**12.00 noon**

**End**

**REGISTRATION FORM**

I am a PAM member

I am a non PAM Member

I am a Student

Membership No (PAM): \_\_\_\_\_ (LAM): \_\_\_\_\_

Fax No: \_\_\_\_\_ Office No: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Email address: \_\_\_\_\_

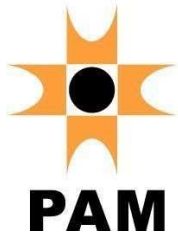
H/P No: \_\_\_\_\_

Capacity is limited to 60 participants only. Thus, registration is based on first come-first-served basis. Any cancellation of registration must be notified by 12<sup>th</sup> September 2011, 12.00 noon.

**PAM Sabah does not recommend walk-in registration.**

**One LAM CPD Point  
have been approved**

**NOTE:** At times, due to unforeseen circumstances, the scheduled events may have to be cancelled or rescheduled for which PAM Secretariat would normally inform the registered attendees/participants accordingly. In order to avoid causing any inconvenience to members due to any last-minute changes, we strongly recommend that members to call **PAM Sabah Chapter at 088-232 524 or 088-261 313** for confirmation of the scheduled events or visit PAM website at [www.pamsabah.com](http://www.pamsabah.com).



# CPD Seminar 2011

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#### **Synopsis of Presentation**

A research programme on natural draft air cooled heat exchanger was conducted in Universiti Malaysia Sabah under the financial support donated by the Ministry of Higher Education through fundamental grant (FRG0022) during 2007-2009 on parametric study of the performance of the model air cooled heat exchanger. The main objective of this research was to enhance natural draft air cooled heat exchanger performance by the parametric study of modified laboratory models. One of the applications of the above study is solar thermal comfort house.

#### **INNOVATION**

Electric coils were used to heat over 0.56m<sup>2</sup>, 1.00m<sup>2</sup> and 2.25m<sup>2</sup> area. Hence the air velocity due to convection flow for 1.00 kW to 2.5kW heat load was too low and a special air inlet duct was designed to increase air velocity into a measurable range. An anemometer was used to measure the air velocity at the inlet of the special duct (Figure 1). A modified solid chimney was installed for each model of different face area.

- Entrance draft recorded 50% to 90% more than when the solid chimney was unmodified.
- The velocity increased with solid chimney height and decreased with face area for the same heat load.

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#### **Speaker's biography**

Assoc. Prof. Dr. Christopher Chu received his B.Sc. (Hons.) and Ph.D. from Birmingham University in Chemical Engineering. He had worked for National Engineering Laboratory, which was owned by Siemens/TÜV in 1995-1998, as a Senior Project Engineer for several industrial scale heat exchanger studies. These projects were awarded under HTFS (Heat Transfer and Fluid Flow Services), which were monitored by industry panels derived from blue-chip multi-nationals around the world.

He is currently Head of Chemical Engineering Programme in the School of Engineering and Information Technology, Universiti Malaysia Sabah. One of the on-going research projects is on cold inflow prevention, and participates in research, innovation and consultancy on sustainable, renewable resources.



This seminar is made possible by  
a generous grant from Monier Sdn  
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