NEWSLETTER

ASHRAE SINGAPORE CHAPTER

August 2001. VOLUME 5 NO: I MITA (P) NO: 266/07/2001

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EDITORIAL

This is the first newsletter published under the new term of the 2001-2002 Board of Governors.

It has been exciting and challenging as we muscled our resource and energy to kick start the new term after a handover by the previous council.

As leadership passed from the Immediate Past President Mr Leong Cheng Wee to Mr Steven Chan, the board was mobilised to ensure continuity. Vision, mission and goals were set. In the coming months, more activities and programmes should take us into the new millennium.

The publicity committee is committed to lift the image and profile of the Singapore Chapter. It is proposed that the newsletter should carry a new face and a new name. A contest is being organised for all members to contribute ideas for this name. Details of this contest are found in page 8.

Our web site www.ashrae.org.sg has been revamped and updated regularly to disseminate the latest news and upcoming activity. Over the coming months, this web will be designed to be more interactive with all its members for improved communication.

We welcome any new suggestions from members to make ASHRAE Singapore Chapter Newsletter more worthy.

Pleasant reading!!

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19th Annual installation Dinner and Dance

The Singapore Chapter celebrated its 19th Annual Dinner and Dance cum Installation on the 28th April 2001 at the Pan Pacific Ballroom. This is an event whereby the Chapter members and all involved in the field of air-conditioning, refrigeration and mechanical ventilation would gather to foster closer relationships and also to catch-up on the happenings in the local scenes.

The Guest-Of-Honour for this grand event was Mr. Lim Swee Say, the Acting Minister for the Environment and Minister of State for Communication and Information Technology.

The other distinguished guests that were present to grace the occasion were Mr. Wang Nan Chee, Commissioner of Public Health and Presidents from ACES, IES, REDAS and the Malaysia Chapter.

The Occasion also marked the installation of the incoming President, Mr Steven Chan and the new Board of Governors.

The programmes for the evening included the table draws, games and performances by some of our local artistes. The lucky draw drew much anxious moments from the participants as they silently awaited the lucky ticket numbers to be announced by the Master of Ceremony, Mr Simon Cheese.

Overall, everyone thoroughly enjoyed the evening and it was certainly a night for all to remember.

The Dinner and Dance Committee led by Mr Norman Ng deserved credits for their excellent organisation and execution of the programmes.

2001-2002 Board of Governors - ASHRAE Singapore Chapter
From left (Mr YP Chee & Mr GS Tan/Hon.Auditor, Mr George Sze/TEGA, Mr Bobby Han/Membership Promotion, Mr Steven Leong/PrograHime, Mr Davis Ong/Publicity & Publication, Mr Steven Chan/Presidenl Mr Arthur Chay/Promotion, Ms Lee Bee Bee/Student Activities, Mr Norman Ng/Hon. Treasurer, Mr Albert

Sin/Hon. Secretary and Mr Jeremy Chia/President-Elect

President Speech at 19th Annual installation Dinner and Dance

Amidst the gloom in the horizon, the diversity of issues and recognizing our limited resources and constraints, it is my plan to chart our priorities right. I therefore outline 4 broad millennium challenges in the next 12 months and beyond.

1. MONEY - To raise sufficient funds so as to meet the rising costs and operational needs for development and growth.
2. MEMBERSHIP - To increase membership whilst sustaining the current membership base.
3. MANAGEMENT - To streamline the operational and financial management so as to achieve an effective unit.
4. LEADERSHIP - To play an active role at national and regional stage in order to raise our profile, position and standing in the industry.

THE MILLENNIUM PROGRAMME

We will relentlessly pursue on our fund-raising campaign, continued education programme, educational seminar and conference.
A major event to raise fund is the **ASIA-PACIFIC CONFERENCE ON THE BUILT-ENVIRONMENT** with theme : **"PROGRESS ON ENERGY EFFICIENCY AND INDOOR AIR QUALITY"** to be held on November 15th through 17th 2001 at Novotel Apollo Hotel, Singapore. This event is organised jointly with the Malaysia Chapter as well as the Institute of Environment Epidemiology, Ministry of Environment, Singapore.

THE MEMBERSHIP CHALLENGES

To address the membership challenges, we will explore how we can stay relevant to the aspiring needs of our current and potential members. These needs will be responded with a strong technical and social programme to provide participation and interaction for our members.
A Resource Center will be explored to provide our members, including student members, a free access to ASHRAE handbooks, publications, CD-ROM, technical papers, magazines and seminar/conference proceedings. Our current website will be fine-tuned and enhanced to improve communication and interaction and provide any latest HVAC articles and news to our members.

THE MANAGEMENT FRONT

We shall initiate to develop a BOG User Guide and Information Manual for each governor and officer to facilitate a better understanding of their duties and responsibilities and financial management.

We certainly aspire to be more user-friendly to our officers-in-charge, our members as well as the public at large.

THE LEADERSHIP ROLE

On the last but not least challenge, our chapter will play an active and intensive role to engage with government and other authoritative bodies in their decision-making processes within our area of expertise to contribute to the outcome of legislative standards and practices, which shall be sensible and practical and can be reasonably adopted and abided by our industry.
At the local level, we will increase collaboration and networking with learning institutions and other industry associations.
At regional level, I would like to congratulate Assoc Prof Raymond Wong for his consent to stand election this coming June for the post of director and Region Chair, Region XIII which comprises 6 Asian Chapters from Hong Kong, Malaysia, Philippines, Taiwan, Thailand and Singapore. We wish him success.
In summary, we aim to strengthen values and relationship with our members and to increase our standing at national as well as international stage, which we believe will embrace progress and growth in our chapter in this millennium,
Lastly but not least of all, I would like to congratulate Mr Norman Ng and his organising committee for their outstanding efforts in organising this annual grand event and a very big thank you to our Guest-or-Honour, Mr Lim Swee Say for taking his ministerial time off to grace this occasion. Also, I thank you all for your unwavering support all these past years.
Have a pleasant, enjoyable and productive evening.

Steven Chan
President
ASHRAE Singapore Chapter
BOG 2001-02

Regional Planning Meeting (RPM) 2001

The RPM 2001 was organised and hosted by ASHRAE Taiwan Chapter on Saturday, June 9th 2001 at Howard Plaza Hotel.

Our Chapter was represented by President Steven Chan whilst the Regional Officers including A/P Raymond Wong (RVC-Tega), Dr Ng Eng Hong (Nominating Member), Mr Sunny Tan (RVC-Student Activities) and Mr Henry Lee (Regional Historian) from our Chapter attended the meeting.

The whole day meeting comprised of DRC report. Regional reports, Chapters' reports and action items on CRC planning, motion, award and nomination, new chapter formation, regional finance and Asia Pacific Conference on the Built Environment to be held in Singapore on November 15th to 17th 2001.

The day event was winded down with an enjoyable and sumptuous dinner hosted by Taiwan Chapter, epitomizing with an atmosphere of ASHRAE's fellowship and camaraderie spirit of togetherness.
Congratulations to Taiwan Chapter for a well organised meeting!

Temasek Polytechnic - Intelligent Building Technology Development & Anolication Center (IBTDAG)

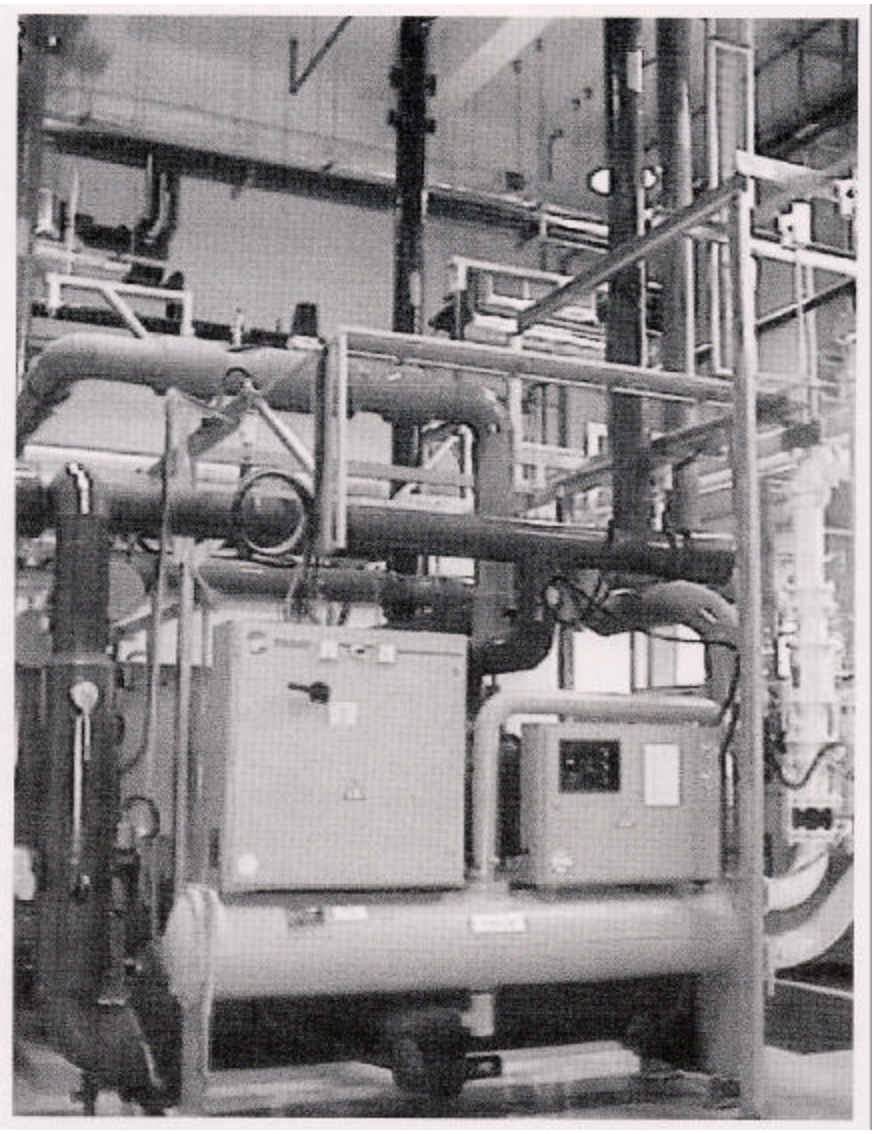
The recently completed Phase 3A of Temasek Polytechnic's Phase 3 Campus Development is home to the Intelligent Building Technology Development & Application Center (IBTDAC)

The IBTDAC is a facility dedicated to the training of students in the Diploma in Intelligent Building Technology (Dip. IBT). Possibly the first of its kind in a local educational institution, it is a double-volume structure spread over a floor area of approximately 900 m2 and houses training areas for various M & E services and a Building Management System (BMS), briefing rooms and a roof terrace.
The M & E services serving the Workshop proper are essentially stand-alone systems ie they are independent of the M & E systems serving the rest of the campus. The facility has an independent LT electrical supply, its own emergency generator, a non-operating HT switchboard, transformer and a LT switchboard. The air-conditioning needs of the workshop are met by its own primary-secondary chilled water distribution system, with the chilled water being generated by either an air-cooled chiller or a water-cooled chiller. Air distribution is accomplished through a Constant Air Volume (CAV) and a Variable Air Volume (VAV) system, as well as chilled water fen-coil units (FCUs). These major M & E systems are integrated via a structured cabling system and controllable from the BMS. The Workshop's BMS is independent of the BMS serving the rest of the campus.

Other systems used for student-training include a see-through lift and escalator lighting training system, a fire protection system comprising sprinkler and hosereel systems and an addressable fire alarm board.

All these industrial-grade facilities provide a realistic environment for the students' hands-on training in the design, operation, integration and management of typical building services. The IBTDAC also incorporates the LONWorks™ Center of Excellence, jointly established between the Polytechnic and Echelon Corporation for partnering with industry in the area of training and performing applied development work via LONWorks™ networking technology. Some projects which have been/are being undertaken under the aegis of the IBTDAC include:

- Comparative Study of Air-Cooled vs Water-Cooled Chillers
- Modeling Indoor Air Quality in a Pedestrian Subway via CFE
- Modeling Smoke Movement in Buildings via CFD
- Effectiveness of Electronic Air Cleaner on AHU Performance
- Effectiveness of Evaporative Cooling Systems
- Non-Chemical Methods of Cooling Tower Water Treatment
- LONWorks™ Plug-In for VAV
- LONWorks™ Plug-In for Chiller Optimization



Water Cooled Chiller in IBTDAC

Congratulations to Assoc Prof Raymond Wong

Congratulations to A Prof Raymond Wong Yew Wah for being elected by ASHRAE as the new Director & Regional Chair of Region XIII and a member of ASHRAE regions Council for the years 2001 to 2004.

He is also being elevated to the grade of Fellow ASHRAE.

Well done Raymond !!! We are very proud of you.

ASHRAE STUDENT DESICN COMPETITION 2000-2001 RESULT

Congratulations to the Students of Chulalongkorn University and the ASHRAE Thailand Chapter!!!

The Student Design Competition for HVAC Design prepared by the students of Chulalongkorn University and submitted by the Thailand Chapter has won the 2ND prize in the All ASHRAE International Competition. It is indeed a pride not only for Chulalongkorn University and Thailand Chapter but also for the Region XIII.

This is the first time that Region XIII had participated in the ASHRAE Student Design Competition. Three submissions were received from Temasek Polytechnic students in Singapore and two submissions from Thailand Chapter. A Regional judging panel comprising Dr Teh Soo Lee, Mr Chen Siew lk, Mr Leong Cheng Wee and Mr Sunny Tan had selected the submission from students of Chulalongkorn University of Thailand to represent Region XIII. The design was forwarded to the Society to compete with all Student Designs Worldwide. The Submissions were judged by the ASHRAE Student Design Project Subcommittee in the Annual Meeting in Cincinnati on 22"d June 2001. The first prize for the HVAC Design Category was won by Ferris State University USA. Chulalongkorn University Thailand came in second.

Although we are in the tropical countries and have limited experience in Heating System Design and very little available information in the heating equipment from the HVAC equipment supplier for our selection into the design, the students from Chulalongkorn University had done very well despite the disadvantages. The Judges in the Society realized the disadvantages we had but commented that we had done very well. This is really an encouragement to our Students in tropical countries of Region XIII.

KEEP IT UP, STUDENTS IN REGION XIII !!!

FUNDAMENTALS OF AIR SYSTEM DESIGN

Jointly organised by **Nanyang Technological University** School of Mechanical & Productior Engineering, **Centre for Continuing Education** and **ASHRAE Singapore Chapter**, this course is scheduled on the 17th to 9th November 2001.

This course on air distribution systems is designed for engineers in the If VAC industry and is part of a continuing series of courses conducted by the ASHRAE Singapore Chapter. The course content will cover theory on air flow, designs, comfort, codes & standards in depth.

Course lecturer, Dr Bong Tet Yin is a Professorial Fellow in the School of Mechanical and Production Engineering of Nanyang Technical University where he teaches Air Conditioning as a final year elective subject.

Dr Leong Kai Choong is an Associate Professor in the School of Mechanical and Production Engineering of Nanyang Technological University where he lectures on thermodynamics and heat transfer and was involved in the teaching of final year air conditioning design.

Both had served as President of ASHRAE Singapore Chapter in the past and are registered Professional Engineers in Singapore.

The course fee (include 3% GST) for ASHRAE Singapore Chapter Member is S$630.
For registration form, you can call 65-7904223/7904564 for Sim Sor Hui/Wana Rahim of NTU, Centre for Continuing Education. You can also download this form from web page : **http://www.ntn.edu.sg/cce/**

WEB PAGE HIGHLIGHTS

ASHRAE Singapore Chapter web http://www.ashrae.org.sg is being updated on a monthly basis. We encourage members to contribute ideas to make this web more interactive. Also it is envisaged in the near fature, ASHRAE news will be conveyed more timely and effectively through electronics means and at a lower cost.
You might wish to know that we have the following headings in the web content page:

- About ASHRAE Singapore Chapter
- 20*" Board of Governor
- Photos of the 19th and 20th Board
- Event Calender
- New Events - What is coming
- Joining ASHRAE Singapore Chapter
- Newsletter
- Hot Links
- Student Chapter
- Company Product Listing (under construction.....)

We like to draw your attention to our **Event Calender** for upcoming activities.

PROPOSAL FOR A NEW NAME FOR ASHRAE NEWSLETTER

To give our newsletter a new image and uplift, a new name will be adopted. We welcome all contributions and suggestions from our members. A contest is being organised to solicit this new name and the following rules and regulations will apply:

1. Name should reflect ASHRAE Singapore Chapter direction. This is being outlined in our President Dinner and Dance Speech.
2. Submission of name with a short reason should be sent to our secretary Mr Albert Sin at albert_sin@lta.gov.sg by the **3**1'" August 2001.
3. All Past Presidents and current BOG chairs are ineligible to participate in this contest.
4. The sole winner will be awarded a free one year membership with ASHRAE Singapore Chapter.
5. The decision of the panel of judges will be final.