



ASHRAE *ASHRAE SINGAPORE CHAPTER*
 American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. SINGAPORE CHAPTER



Mailing Address: Bukit Merah Central, P.O. Box 0626, Singapore 911535

ASHRAE Distinguished Lecturer Talk

Co-sponsored by

Department of Building, National University of Singapore

Presented by

Professor Jan Sundell

International Centre for Indoor Environment and Energy

Technical University of Denmark

- Topic** : **INDOOR ENVIRONMENTS AND HEALTH**
- Date** : 23 August 2005 (Tuesday)
- Time** : 7.00 pm to 10.00 pm
- Venue** : LR425, Level 4, SDE3
- Address** : School of Design and Environment, National University of Singapore,
 4 Architecture Drive, Singapore 117566, Tel: 6874 4836
**(Contact person : Ms Christabel Toh, email: bdgtohcl@nus.edu.sg,
 by 18 August 2005)**

Fees	Registered ASHRAE Singapore Chapter members	Free of charge
	Other Guests	\$15.00

- Programme** :
- Registration - 6.45 – 7.15 pm
(Venue : Registration area outside LR425)
 - Buffet dinner - 7.15 – 8.00 pm
 - Technical Talk - 8.00 – 10.00 pm
(Presentation : 1 hr 30 mins; Q&A : 30 mins)

Professional Engineers Board PDU points = 2



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ABSTRACT : An overview will be given regarding the history of human health and indoor environmental exposures. The problems today regarding such exposures and health will then be discussed with a focus on allergies and Sick Building Syndrome symptoms.

During the last 7 years Nordic and European multidisciplinary scientific State-of-the-Art reviews have been conducted regarding issues of large public health concern. Results will be presented on TVOC-Health, Pets-Allergies, Dampness-Health, Particles in indoor air – Health, Breastfeeding-Allergies, and Ventilation-Health.

As a result of the reviews a large epidemiological study on “Dampness in buildings and health”, DBH, was started. Step 1 was a cross-sectional questionnaire study on all children 1-6 years of age in a county in Sweden, with questions on the home environment and health. Step 2 is a case-control study on 200 symptomatic children (eczema, rhinitis, asthma), and 200 healthy children. Extensive exposure measurements and clinical investigations were performed. Results related to the role of indoor environmental exposures will be presented. Among the topics are the role of phthalates, building ventilation, and pet exposure for allergies among children.

Professor Jan Sundell is an environmental scientist, from Sweden, with a unique background in both engineering (M.Sc.Eng) and medicine (Dr.Med.Sc.). Before going into science he was responsible for building codes, and occupational health legislation in Sweden and the Nordic countries. He was the main author of a model building code for ventilation in homes for UN. He has conducted several large multi-disciplinary studies on associations between indoor environmental factors and health. His efforts have focused on ventilation, the causes of sick building syndrome, and for the increase in allergies/asthma. He has led numerous European multi-disciplinary reviews of the total scientific literature with regard to indoor climate and health. He has served on the Board of Directors of The International Society of Indoor Air Quality and Climate (ISIAQ), is Vice President of The International Academy of Indoor Air Sciences, and is the Editor-in-Chief of the most prestigious scientific journal within the field of "Indoor Air." Within ASHRAE he is a member of SSPC 62.1, the Environmental Health Committee, and is the chair of EHC Subcommittee for Research.



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REPLY FORM

As there are limited places, please register early for the seminar by completing the form below and fax it to Ms Christabel Toh at **6775 5502** / email to bdgtohci@nus.edu.sg by **18 August 2005**.

For further enquiries, please call **Christabel**, tel: **6874 4836**.

Yes, I will be attending this ASHRAE Distinguished Lecturer Talk on :
INDOOR ENVIRONMENTS AND HEALTH

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Address : School of Design and Environment, National University of Singapore,
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Fees

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Other Guests	\$15.00

Name: _____ Designation: _____

Company: _____

ASHRAE Singapore Chapter member : Yes/No (Membership No: _____)

ASHRAE Member : Yes/No (Membership No: _____)

Address: _____

Tel: _____ Fax: _____ E-mail: _____

I will be accompanied by the following guests:

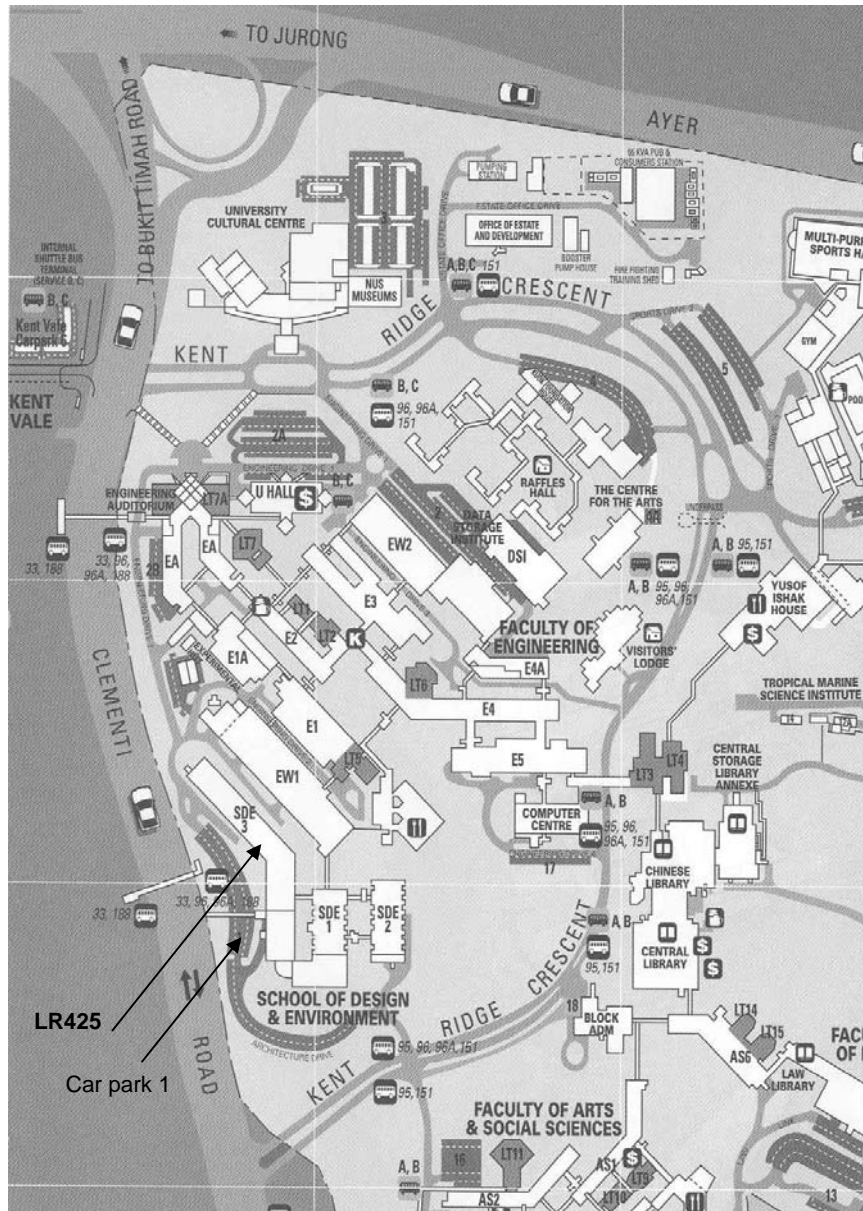
1. Name: _____ Designation: _____

Company/Institution: _____ Tel: _____ Member: Yes/No

2. Name: _____ Designation: _____

Company/Institution: _____ Tel: _____ Member: Yes/No

LOCATION MAP



Along Clementi Road: Bus nos. 33, 96*, 188

Along Kent Ridge Crescent: Bus nos. 95, 96*, 151

(*96 may be boarded at Clementi Interchange, next to Clementi MRT station)

Campus map: <http://www.nus.edu.sg/campusmap/>

Parking in NUS

Motorists can choose to park FREE-of-charge at 2 fringe car parks, i.e. **Kent Vale Car Park 6** and the **CRISP Car Park** (Car Park 10A) at Kent Ridge Road next to King Edward VII Hall. They can take the **Internal Shuttle Bus (ISB) Service** from there to various campus locations. Visitors and students may park their vehicles in WHITE-coloured lots at the pay car parks at the rate of 1.5 cents per minute. All RED-coloured parking lots are strictly reserved for staff holding the appropriate NUS season passes. A ticketless, licence plate recognition technology system is in operation at all pay car parks. Payment is by CashCard only.