



## Bahrain Taps Singapore's Experience in Raising Standards in Construction Industry



Professor George Ofori was among a panel of experts invited to address a forum for classifying the construction sector in Bahrain last December. This forum was organised by the Bahrain Chamber of Commerce and Industry (BCCI)'s Contractors' Committee. Bahrain is studying the Singapore and South African models for registration and classification of contractors. This initiative is aimed at raising the profile of Bahrain's construction industry in line with the rapidly growing quality standards in the industry worldwide. Among the participants were Bahrain's ministers and BCCI's chairman.

The forum was reported in two issues of *Bahrain Tribune*. Prof Ofori told *Bahrain Tribune* that Singapore had implemented standards for contractors about two decades ago as part of her efforts to enhance the construction industry's standards. Bahrain intends to set up the Construction Organising Body (COB) to implement the national classification code for contractors.

< One of the articles in *Bahrain Tribune*.

### Academic Matters

#### Academic Programmes Open for Registration

The part-time Bachelor of Science (Building), Master of Science (Project Management), Master of Science (Building), and Master of Science in Construction Law and Arbitration programmes are open for registration. For more information, please go to: [Part-time BSc \(Building\)](#), [MSc \(PM\)](#), [MSc \(Building\)](#), and [MSc \(Construction Law & Arbitration\)](#).

### Student Matters

#### Industry Exposure for Student

Ms Shallene Lim, a third-year B.Sc.(Building) student, was selected to spend one year at the NUS Overseas College in Shanghai. She was attached to the various units of CPG Corporation in Shanghai during her internship. CPG is the largest construction consultancy organisation in Singapore. It has a strong presence in China. Shallene will be involved in all aspects of its operations in Shanghai including marketing and business development, cost consultancy and project administration.

#### Student Offered ABF and NUS-China SEP Awards

Building student Lim Wee Kee has been awarded the Ministry of

### Research

#### Researchers Complete Study on Thermal Performance of Façade and Indoor Thermal Environments

The research into the "Thermal Performance of Façade Materials and Design, and the Impact on Indoor and Outdoor Environment" was jointly funded by NUS and the National Environment Agency (NEA). It aimed to study the thermal performance of external walls and roofs for non air-conditioned buildings. The studies covered the examination of the thermal performance of façade and indoor thermal environments in the existing naturally ventilated buildings through a series of field measurements. ([more>](#))

#### Studying the Urban Heat Island Phenomenon in Singapore

Related to the above project is a series of studies conducted to research into the Urban Heat Island (UHI) phenomenon in Singapore, in collaboration with CRISP and Building and Construction Authority. Amongst other findings, the historical analysis of long-term climatic data of Singapore indicated that the rise in temperature was associated with land use. It is believed that by greening Singapore and minimising the release of anthropogenic heat, the UHI effect at the macro level can be mitigated. The temperature mapping surveys showed that the temperatures of the developed areas were associated with the greenery coverage within the sites. The well planted areas had lower temperatures while locations with less greenery recorded higher temperatures. ([more>](#))

Trade and Industry's Asian Business Fellowship (ABF). This was over and above the NUS-China Student Exchange Programme (SEP) grant he was offered earlier. Wee Kee can only select one of the awards, and he has decided to accept the ABF award.

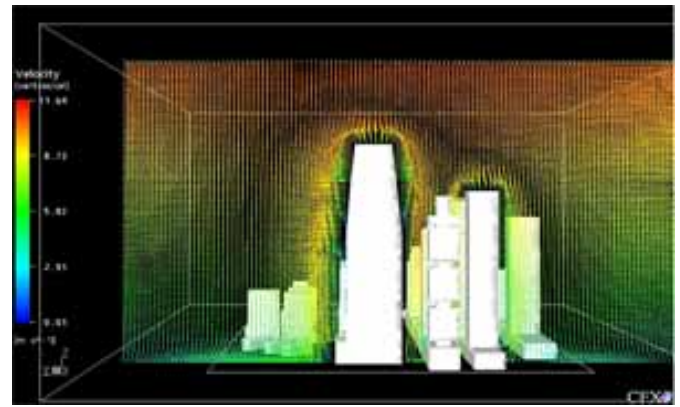


### Joint Executive Programme in Project Management

The Department conducted the third intensive two-week Joint Executive Programme in Project Management from 15 November to 26 November 2004 in Singapore, for a group of 15 senior executives representing various key organisations in Sri Lanka. The programme was conducted in collaboration with the University of Moratuwa (UOM).

As in the earlier two programmes conducted in February and May 2004, this was a combination of classroom lectures, case studies, and technical organisational/site visits, with the teaching faculty comprising academic staff from both NUS and UOM. Organisations represented by the group of 15 included Colombo Municipal Council, MTN Networks (Pvt) Ltd and Road Development Authority. The visits were to organisations such as the KPK Quantity Surveyors, Land Transport Authority, People's Association and StarHub Ltd.

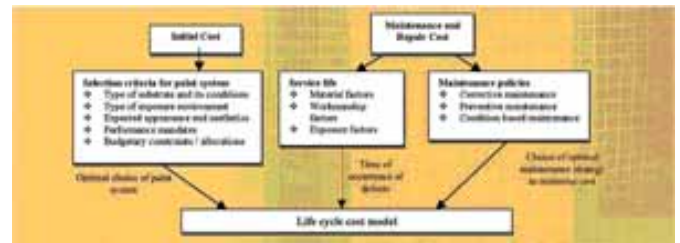
The Vice Chancellor of the University of Moratuwa, Professor Dayantha S. Wijeyesekera (right), delivered a special lecture on the programme and officiated at the certificate presentation ceremony.



Modelling of ventilation in the urban area.

### Life-cycle Costing Model Helps in Cost Evaluation and Management

The research project "Life-cycle Costing (LCC) for Façade Maintenance" aimed to develop a quantitative model for effective evaluation, monitoring and management of the costs incurred for efficient maintenance of facades on external wall surfaces and provide guidance on selection of types of plaster and paint for external wall surfaces. The research resulted in the successful development of the Defect Index Models and LCC Model. To facilitate the implementation of these models, the user-friendly electronic version of Defect Index Models and LCC Model software and good maintenance practices for plastered and painted facades manual have also been developed.



The LCC Model and its accompanying set of defect index models can be used to assist town councils to prepare the budgets for maintenance and repair work. It can also help the town councils to select a better value for money paintwork system for the façade of public housing blocks. ([more>](#))

### Maintainability of Buildings under Tropical Conditions

The research seeks to create an awareness of the current obstacles to good maintainability under tropical conditions. This would be achieved by a compilation of a defects library with information about types of defects and their causes, maintenance and diagnostic methods, good practices and guidelines which can be applied during the design and construction stages to control repetitive problems. Common defects in different elements in a building were captured and detailed explanations were compiled.

They were gathered under a "first section" in the database called "Defect Library" which comprises seven individual interphases.



The Sri Lankan executives during a site visit.

### Construction Law Public Seminar

A public seminar on Construction Law, jointly organised by King's College London (KCL) and NUS, was held on 8 January 2005. The seminar began with a preview of the Joint KCL-NUS MSc in Construction Law and Arbitration given by its Programme Director, Assoc Prof Philip Chan. The Keynote Speaker, Professor Phillip Capper, delivered a paper titled "A Progress Payment Claim is a single dispute capable of resolution by adjudication in 14 days – myth or reality? A UK perspective". The MSc programme is open for registration. For more information, please [click here](#).

#### Seminar on the Security of Payment (SOP) Act 2004

The Department organised a Seminar on "The Security of Payment (SOP) Act 2004: Cure or Aggravation of the Problems of the Construction Industry" on 19 and 20 January 2005. It was attended by over 100 participants. The speaker, Assoc Prof Philip Chan, gave a detailed assessment of the recent legislative intervention into the contractual payment and set-off arrangements of the construction industry in four sessions. For details of the seminar, please refer to the [brochure](#).



The Defect Library database.

For more information, go to [www.hpbc.bdg.nus.edu.sg](http://www.hpbc.bdg.nus.edu.sg).

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