



## CHRISTMAS MESSAGE FROM THE PRESIDENT

**The arrival of December on the wall calendar brings with it the realisation that another year has raced by.**

The year nearing completion was, for the construction industry, a particularly challenging one. The drop-off in demand has forced many organisations to relook at business models. However, it is pleasing to note that the value the industry places on sharing knowledge has not diminished. Evidence of this can be found in the recently-completed Concrete Combined Industry Conference. Numbers attending the conference were excellent, and the feedback from all was very positive. Thank you to those who presented and the volunteers and sponsors/trade exhibitors who make this event happen each year.

Already planned for the year ahead are some exciting seminars covering the design of low-rise structures, and the design of structures incorporating unbonded tendons. Both seminars will be the culmination of many hours of work preparing excellent notes in the form of design guides. These are planned for the first quarter of the New Year.

I trust you all enjoy some rest and relaxation over the Christmas break - you have earned it.

Merry Christmas,  
Dene

**Dene Cook, President, NZ Concrete Society**

## 2009 CONCRETE PRIZE WINNERS

**This year's Concrete Prize winners are three outstanding students who have demonstrated excellence in their studies and innovation in relation to concrete.**

The winners are Sumit Anand, Nazia Kachwala and Craig Muir.



**SUMIT ANAND** designed, built, tested and managed an art project which replicated on a 1:1 scale a beam and column joint for the purpose of a solo art exhibition. He worked with fellow student, Jed Martin on the project which was titled "Push Over: An artistic vision of concrete construction". It attempted

to capture an artist's perspective on post earthquake disaster effects in structures. It investigated the relationship between

modern seismic design in concrete, contemporary art and the concern for social, economic and environmental sustainability within global politics. "Push Over" included the work of artist Simon Glaister and was exhibited at the St Paul Street Gallery. Sumit and Jed won this year's Sandy Cormack Award for the best paper presented at Concrete Conference 2009.

Sumit, who has just completed his fourth year of a Bachelor of Civil/Structural Engineering at the University of Auckland, is the recipient of an ASB Bursary Scholarship.



**NAZIA KACHWALLA'S** project explored redesigning the Museum of City and Sea in Wellington by inserting a contemporary intervention into this historic building. The project, a virtual treatise on the nature and advantages of concrete, integrated traditional with light-weight concrete technologies. It

retained the building's historic features and its original position and used sustainable practices theoretically and physically to strengthen the Museum's presence. It then explored ephemeral architecture through light, reflection, movement and transparency, and contrasted it with solid/static forms. While the intervention was disengaged from the existing context, it acknowledged it, to make "The Museum of Ephemera".

Nazia, who is studying towards a Masters of Architecture at Victoria University, also won the top Interior Design/Architecture award at the Australasian Student Design Awards 09 as well as achieving Overall Excellence across all categories. During the final year of her degree, she was awarded the Gold Award at the Best Awards 08 for the Student Spatial Category, the NZIOB Student Achievement Award 08 and the Benson-Cooper Design for Sustainability Award of Excellence 09.



**CRAIG MUIR'S** project investigated the strain-hardening behaviour of reinforced concrete slotted beam systems with emphasis placed on their comparison with traditional monolithic systems. The slotted beam is a connection detail designed to reduce beam elongation during seismic events and the corresponding

damage to the floor diaphragm. The study analytically investigated the effect that increased plasticity in the bottom reinforcing steel has on overstrength development. Non-linear

time history analyses were performed on a 16-storey prototype building subject to a suite of earthquake histories recommended for the Wellington region to determine both the hysteretic and overall structural response.

Craig has just completed his Bachelor of Engineering with Honours (Civil) at the University of Canterbury and is continuing his research at post-graduate level.

Concrete Society Secretary Allan Bluett says the Concrete Prizes were relaunched last year with a more generous package for each of up to four winners - \$4000 and up to \$1000 towards the cost of attending the Concrete Conference to present a paper - in order to attract top students to the concrete industry.

"Most prizes in that area are about \$2000, so at a value of about \$5000, they are well worth winning. The high standard of this year's Concrete Prize winners indicates the awards are achieving their objectives for the concrete industry."

## CALL FOR PAPERS FOR CONFERENCE 2010

The call for papers for next year's NZ Concrete Industry Conference is open.

Concrete Conference 2010, to be held at the Wellington Convention Centre from 7 October, will cover all aspects of concrete construction and associated technologies. Papers are sought on research, design trends, marketing opportunities, recent developments, construction, materials, methodologies and new issues for cement and concrete.

Authors are required to send a 300-word synopsis of their proposed conference papers to the [Conference Secretary](#), along with a brief career history and a written commitment to attend and present the paper at the conference, if the paper is accepted.

The call for papers is open until 31 March 2010. Papers will be preliminarily accepted by 12 April, with final acceptance on 2 July. Authors whose proposal is accepted will be required to submit a six to ten-page paper which will be published in the conference proceedings.

All accepted papers are eligible for the NZ Concrete Society's 'Sandy Cormack Award'. The author judged to have presented the best paper at the conference will receive \$1,000 and an award certificate.

## PRESSS DESIGN HANDBOOK SEMINARS

A series of Precast Seismic Structural Systems (PRESSS) design seminars is to be held in Auckland, Wellington and Christchurch in March 2010.

The seminars, originally scheduled for late this year, have been delayed as the documentation is still being peer reviewed. They will be led by Dr Stefano Pampanin, a Senior Lecturer at the University of Canterbury.

PRESSS Technology allows structures to resume their original position after earthquakes and enables buildings to be constructed cheaply and quickly.

The seminars will be held in the week commencing Monday, 22 March 2010.

## RED BOOK - SECTION C SEMINARS - EARLY 2010

Preparations are underway to hold a new seminar series on Chapter C of the RED Book.

The plan is to run the seminars early in the New Year in the main centres. The Cement & Concrete Association of NZ and the NZ Concrete Society created the RED Book: *Examples of Concrete Structural Design to New Zealand Standard Code of Practice for the Design of Concrete Structures* to assist the process of design and design review and increase design efficiency. Section C covers a low-rise two-storey industrial building. The design example has been selected to illustrate many of the design decisions required for structures incorporating low-rise concrete frames and slender concrete walls.

## OFFICE CLOSED FOR THE HOLIDAY PERIOD

The NZ Concrete Society office will close on **Tuesday, 22 December** and re-open on **Monday, 18 January 2010**.

Best wishes for the Season and 2010

