

## AND THE WINNERS ARE



Faced with the tricky task of selecting winners from an exceptional calibre of entries for this year's coveted Concrete Prize, the Society has instead elected to recognise four outstanding entries.

They are Annie Tong (University of Auckland's School of Architecture), Hayoto Jay Auman (University of Canterbury), Opabola Eytayo Ademola (University of Auckland) and Liam McCosh (Victoria University's School of Architecture).

The Concrete Prize is awarded each year to students at New Zealand universities – typically to someone doing post-graduate research. Each receives \$4,000, free attendance at next year's Concrete Industry Conference (including registration, travel expenses of up to NZ\$300 and accommodation), and one year's complimentary membership of the NZ Concrete Society.

### The four projects are:

**Annie Tong** – a design for an underground “museum of silence” in central Auckland, in which concrete-lined spaces are ‘excavated’ out of the ground. Working with textured concrete, Annie formed an intriguing series of spaces of different sizes and proportions, skilfully animated by daylight introduced in a variety of ways to create a rich spatial experiences. The dense material presence of concrete and the deft control of light and sequence invest the museum with gravitas and a contemplative spirit.

**Hayoto Jay Auman** – the development of glass fibre-reinforced polymer bars in reinforced concrete structures. These bars possess durability properties far superior to conventional steel reinforcement, thanks to their non-corrodibility, low chemical reactivity and electromagnetic transparency. This makes them ideal reinforcement in concrete bridges, wharves, ports, foundations in aggressive/contaminated soils, and even in applications where electromagnetic sensitivity is an issue, such as MRI laboratories.

**Opabola Eytayo Ademola** – a study carried out to identify the current NZ guideline in the assessment of existing RC buildings. It compared experimental results at the component level to deformation limits provided by the NZ guideline. Results identified the need for modification to certain provisions of the guideline. New deformation limits have been proposed, as well as a new assessment procedure for such components.

**Liam McCosh** – a proposal for an Earthquake Museum in Wellington explores the structural and architectural opportunities of concrete in creative and ambitious ways. The memorial is a three-storey concrete ‘bowl’, with its shafts of natural light that change position and intensity with time and season. This feature becomes the highlight of a visitor's architectural experience. Visitors circle the building's curvilinear form from the outside at various levels prior to entering its hollow core.

Congratulations to the winners – inspiring stuff!

## SEISMIC ASSESSMENT SEMINARS

**Recent seismic activity has triggered legislation changes to New Zealand's building code, and it is now more important than ever that engineers are skilled in the seismic assessment of existing structures.**

To that end the Society has scheduled a series of three, full-day seminars in March to outline the implications of these changes. The seminars – *Displacement-based Seismic Assessment of Reinforced Concrete Frames* – are presented by Tim Sullivan, an Associate Professor at the University of Canterbury, and Didier Pettinga, a Senior Project Engineer at Holmes Consulting in Christchurch.

Tim is a faculty member of the post-graduate ROSE School in Pavia and was previously head of the Design Methods section at the European Centre for Training and Research in Earthquake Engineering at the University of Pavia, Italy.

Prior to starting with Holmes, Didier worked at Glotman Simpson Consulting Engineers in Canada where a significant portion of his work applied Displacement-Based Design principles to high-rise reinforced concrete buildings and post-disaster facilities.

The seminars review features of older structures that can affect their force-displacement response and the types of failure mechanisms that may develop. They also offer an introduction to the displacement-based assessment approach of Priestley et al. (2007), and outline the identification of potentially critical performance limits.

Delegates work through an assessment during the afternoon to become confidence with the displacement-based procedure and leave the seminar with a solution they've developed themselves, and which can referred to later in practice.

### Who should attend

Designers, local authorities, consulting engineers, project managers and graduate engineers.

### Venues

<b>Christchurch</b>	Monday 5 March 2018
<b>Wellington</b>	Friday 9 March 2018
<b>Auckland</b>	Monday 12 March 2018

The seminar registration brochure will be available early in the new year.

## WELCOME STEPHEN

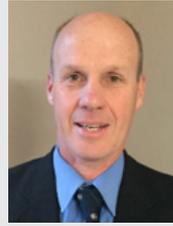


The Council's newest member – Stephen Broomfield – is the Business Development Manager for Ancon Australia and New Zealand. He is based in Auckland. Ancon is part of the multi-national CRH group supporting the seismic reinforced concrete market.

Over the past 20 years he has supplied technical support and products to the Precast, Tilt Up, Prestressed and Civil precast markets in both countries.

Stephen is also a registered prestress assessor for Proskills UK, and conducts prestress training down under. He is a sitting council member of the Crane Association of New Zealand and part of the working group writing the new Precast Concrete Good Practice Guidelines that will replace the ACoP for the Precast Concrete.

## A BUSY YEAR DRAWS TO A CLOSE



2017 has been a busy year for our Society, says new president James Mackechnie, marked by a range of significant milestones.

A major one was changing our name to the Concrete New Zealand Learned Society – reflecting the consolidation process of several concrete associations and societies into a single body.

I'm delighted to report that all parties involved with this initiative are extremely positive about it. We've also had a successful year helping to run what was the biggest-ever Concrete Industry Conference in Wellington, and organised several highly relevant and successful national seminars relating to changes to structural concrete standards.

Next year's already shaping up to be another busy one for the Society, with several seminar series planned. Keynote speakers for the annual conference are still being determined, but given the size of the Claudelands Event Centre we are confident of attracting a record number of delegates and exhibitors.

I'd like to wish all members and their families a well-deserved holiday, and I look forward to what is surely going to be a fascinating new year.

## PAPERS PLEASE



Next year's Concrete Industry Conference returns to the Claudelands Event Centre in Hamilton (11 – 13 October), and organisers have issued a Call for Papers.

The call for papers is open until 3 April 2018. Authors should submit a one-page synopsis

of their proposed paper, as well as a short paragraph detailing career history and a written commitment to personally attend and present the paper at the conference, if the paper is accepted.

Accepted papers (six to ten pages long) will be published in the Conference proceedings.

### Provisional Technical Programme

All aspects of the concrete construction and associated technologies will be covered. Papers are sought on research, design trends, marketing opportunities, recent developments, construction, materials, methodologies and new issues for cement and concrete.

All accepted papers will be eligible for the Society's Sandy Cormack Award – the author wins \$1,000 and receives a certificate.

### Deadlines

- Receipt of synopsis 3 April 2018
- Preliminary acceptance of papers 18 April 2018
- Receipt of papers 6 August 2018

Claudelands is always a popular venue for the Conference because it offers trade exhibitors generous space, including areas for live, outdoor demonstrations.

"This venue's capacity is a significant benefit in view of the growth trend evident from the past few Conferences," says society secretary Allan Bluett. "It continues to grow each year – both in terms of the number of people attending and the quality of the papers and presentations. The Conference is arguably the most effective place for suppliers to get their products and services in front of the industry decision makers."

The Conference is jointly organised by the Concrete NZ, Concrete NZ – Masonry, Concrete NZ – Learned Society, Concrete NZ – Readymix and Concrete NZ – Precast.

For more information call 09 536 5410 or email: [learnedsociety@concretenz.org.nz](mailto:learnedsociety@concretenz.org.nz)

## OUTSTANDING STRUCTURES AWARDS

A reminder that entries for fib's Awards for Outstanding Structures are being accepted until 31 December 2017.

The awards will be presented at the 6th fib Congress in October next year, in Melbourne, Australia.

To be eligible structures must have been completed between 1 February 2013 and 30 June 2017.

The jury may accept an older structure, completed one or two years prior to February 2013, provided it was not already submitted for the previous edition of the award (Mumbai 2014).

For more information, please visit [www.fib-international.org](http://www.fib-international.org)

## FESTIVE SEASON BREAK

The CNZ-LS office will be closed from Friday 15th December, re-opening on Monday 15th January.

