

Issue 19 - September 2017

Welcome to the 19th edition of SESOC NEWS. For general information regarding the New Zealand Structural Engineering Society (SESOC) and for committee contact details refer www.sesoc.org.nz

IN THIS ISSUE

President's Message

SESOC Conference 2017

SEAOC and SESOC

IStructE and SESOC

Safety in Design – Health and Safety at Work Act 2015

The Seismic Assessment of Existing Buildings

Building Code Clause – B2 Durability

Software Report: Gencol, Shearwall Design, MEMDes and BeamAnal

Changes to the SESOC Committee

President's Message

Kia ora all and welcome to this issue of the SESOC newsletter as we prepare for the upcoming SESOC conference in Wellington in early November. SESOC membership numbers are steadily growing and we continue to forge closer working relationships with both our counterpart technical societies in New Zealand, and with comparable national structural engineering societies in California, the UK, and most recently Australia. The Management Committee are assisting with appointments of industry technical experts to national standards and guidance working groups, and are working closely with IPENZ (soon to be Engineering New Zealand) on issues related to becoming Chartered. After a long hibernation, we are also about to embark on a severely overdue revamp of our website and associated systems. We are also looking to freshen up the SESOC Constitution so that it accurately reflects the expanded number of SESOC regional groups and Management Committee portfolios. The Management Committee are aware of the wish to have more presenters visiting the regional groups and this issue will be addressed once the SESOC conference is behind us.

I wish to again remind you that Michelle Grant is leading our initiative to recognise and support our woman members, and I encourage all who are interested to make contact with Michelle. I also wish to introduce Hamish Mckenzie, who has been co-opted onto the Management Committee. Hamish's arrival is partly in response to the departure of Stuart Oliver, who has very ably served as SESOC Secretary but has recently departed offshore for a fresh work experience in the Netherlands. Members have expressed their views on the draft Body of Knowledge and Skills that was published in the last SESOC Journal, and Larry Bellamy is now leading the exercise to finalise these 'BOKS' so that they can become a resource for future initiatives. I look forward to seeing you all the SESOC conference.

SESOC Conference 2017



Registration is now open for the SESOC Conference to be held in Wellington on 2 & 3 November 2017. Details can be found here. Early bird registration closes and 8th October 2017. SESOC looks forward to welcoming you to Wellington in November, and your participation in what promises to be an outstanding event.

SEAOC and SESOC







SESOC continue to develop the burgeoning relationship with SEAOC (The Structural Engineering Association of California). John Snook and Paul Campbell have submitted a paper for presentation at the <u>SEAOC Convention</u> to be held in San Diego this month. During the convention, they will be attending a meeting with a SEAOC/SESOC relationship committee.

SEAOC's President Joyce Fuss will also be attending the upcoming 2017 SESOC Conference.

IStructE and SESOC

We are pleased to announce that IStructE President, Ian Firth, and Chief Executive, Martin Powell, will be attending the upcoming 2017SESOC Conference.

The shortlist for the IStructE <u>Structural Awards 2017</u> shortlist has recently been published. New Zealand continues to punch above its weights in terms of nominations and we are pleased to note that three New Zealand projects are amongst the nominees across a number of categories. The projects nominated are:

- Majestic Centre, Holmes Consulting (Structures in Extreme Conditions, Outstanding Value, Sustainability)
- Christchurch Arts Centre, Holmes Consulting (Structural Heritage)
- Makatote Rail Viaduct, Opus International Consultants (Vehicle Bridges, Structural Heritage, Outstanding Value, Sustainability)

IStructE Gold Medal 2017

Jo da Silva, an Arup Fellow and Director, International Development and Global Leader City Resilience, has been awarded the Institution's 2017 Gold Medal in recognition of her outstanding work as a structural and humanitarian engineer, and her distinguished and cross-sectoral work on urban resilience. She will be presented her medal at 18:00 BST on 11th October 2017 and there will be a livestream on the night: no need to register, just save this link

Hear from Jo as she discusses:

- Structural engineers' role creating safe, sustainable, inclusive and resilient cities
- · How less celebrated buildings contribute most to society
- How the simplest structures can save lives in post-disaster situations if appropriately designed
- Her remarkable 30-year career, including projects spanning Asia, Africa and Europe, deprived areas of the UK, and her post-disaster work, including the United Nations' response to the Indian Ocean Tsunami

Don't miss this opportunity to hear this unique talk by one of structural engineering's foremost professionals. The recording will be available to watch on the IStructE website after the event.

Safety in Design – Health and Safety at Work Act 2015

The Health and Safety at Work Act 2015 came into force on 4th April 2016. Members are reminded of the need to be aware of their responsibilities and those of their Clients and other design team members: not only is it important to implement Safety in Design practice but it should also be clearly documented and communicated to all affected parties. Guidance on the Act can be found on the IPENZ website, here. More information can also be found at Worksafe New Zealand - Health and Safety at Work Act

The Act borrows heavily from the earlier Australian Legislation and useful guidance can be found at Safe Work Australia including the Model Codes of Practice for Safe Design of Structures and Construction Work

The Seismic Assessment of Existing Buildings

MBIE have recently completed their roadshow on the new Technical Guidelines for Engineering Assessments which came into force in July 2017. Workshops for Territorial Authorities and Engineers have also been undertaken in a number of centres. Further evening tutorial sessions are planned over the coming months and will be organised with the assistance of the SESOC regional representatives. Further details to follow.

The Seismic Assessment of Existing Buildings – Technical Guidelines for Engineering Assessments are available free of charge from the Eq-assess website.

Building Code Clause – B2 Durability

Many of you will be aware of the recent discussions regarding the expectations of some councils in regards to the signing of Clause B2 - Durability on Producer Statements and the concerns raised amongst members. The issue is whether existing regulations allow engineers to show compliance for durability for all materials used, and whether Producer Statements are suitable for showing

compliance to B2.

IPENZ and ACENZ have been working with MBIE, Auckland Council and Christchurch City Council and an interim solution has been agreed. IPENZ recommend that compliance for durability be provided only on a material-by-material basis. This can be done by submitting a letter to the Building Consent Authority tailored to the materials that you have specified in the design. Further details, including a sample letter, can be found on the IPENZ website here.

IPENZ will continue to work with MBIE to find a permanent solution to this matter. In the meantime if you have any concerns in regards to B2 compliance matter please contact IPENZ.

Software Report



MemDes: SESOC branded MemDes has been available for download since June 2017. Functionality includes:

- Standard Windows-style distribution/installation
- SESOC registration/activation screens; SESOC branding, along with standard copyright and disclaimer notices
- Compatibility with Windows 10
- Updated user manual
- Minor enhancements to the user interface
- Indication of section availability, particularly for hollow sections

MemDes Plus: Plans are in place for a major enhancement to MemDes. This will include the provision of a module to provide single span beam analysis capacity and serviceability checks. This will use the existing MemDes capability to check each segment along the beam.

GenCol + Shearwall Design: Develop is progressing to provide an additional module to provide reinforced concrete shearwall design capability to GenCol. This capability will be to NZS 3101, with focus on the shear, confinement and transverse steel detailing provisions, for rectangular shearwalls. This enhancement will provide a NZ code based design tool for use across the industry.

Changes to the SESOC Committee

This quarter sees the departure of Stu Oliver from the SESOC committee. Stu Oliver has acted as the Committee Secretary for the last two but will be departing NZ to take up a position in Holmes Consulting's Netherlands office. We wish Stu and his family all the very best in their new endeavours and thank him for his service over the last two years.

We also welcome Hamish MacKenzie on to the committee. Hamish is currently the Business Unit Leader for Holmes Consulting Group's Wellington Office.