



nzsee
NEW ZEALAND SOCIETY FOR
EARTHQUAKE ENGINEERING

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From the President

It has certainly been a busy time for our profession in recent months. While our response to the recent release of the new National Seismic Hazard Model has certainly dominated our efforts in recent times, there are also a lot of other activities going on within NZSEE and the wider profession.



I am deeply saddened to begin this message with the news that two former Administrative Secretaries of NZSEE have passed away in recent months. Together, Michel Brice and Graham Quirke were in charge of managing key administrative activities for NZSEE for 13 years from 1989 through to 2002, including the period in which NZSEE hosted the World Conference on Earthquake Engineering in Auckland in 2000. This role has now evolved to become the Executive Officer role and represents a significant contribution to the ongoing running of the Society, often in the background and in ways unseen by the broader membership. There are obituaries included within this newsletter, recognising the significant contributions that both Michael and Graham have made to NZSEE. My deepest condolences go out to their families.

In this newsletter, we are also acknowledging NZSEE members who were recently conferred Fellowships and Distinguished Fellowships of Engineering New Zealand. It is great to see this recognition of those who have contributed so much to the engineering profession.

In recent weeks, NZSEE has collaborated with SESOC and NZGS to publish a [draft advisory on Designing for Uncertainty](#), provided [interim design guidance](#) after the release of the NSHM, and then delivered a series of seminars on [Earthquake Design for Uncertainty: Earthquake Engineering in the context of the 2022 National Seismic Hazard Model \(NSHM\) Revision](#). We had over 100 people at each of the three in-person seminars in Auckland, Wellington, and Christchurch, along with nearly 600 people online for the live-stream of the Christchurch event. I would like to thank our presenters Ken Elwood, Andy Thompson, Sjoerd van Ballegooy, and Mark Willard for their contributions to these seminars. The presenter slides and the recording of the live-stream are now available [here](#). I would also like to extend my gratitude to Michelle Grant (SESOC President) and Eleni Gkeli (NZGS Chair) for their efforts, and those more widely from SESOC and

UPCOMING EVENTS



Fifth International Workshop on Seismic Performance of Non-Structural Elements (SPONSE)

Stanford University, USA
5th-7th December 2022

2023 NZSEE Annual Conference

University of Auckland,
New Zealand, 19th-21st
April 2023

SESOC Annual Technical Conference

Christchurch, New Zealand,
21st-23rd June 2023

Pacific Conference

Vancouver, Canada 2023

our Kindred Technical Societies to respond rapidly and provide this interim design guidance.

On Friday last week, the Advancing Women in Engineering and Construction (AWEC) Symposium was held in Auckland. It sounds like it was a great event and was highly appreciated by those who attended. I would like to extend my sincere gratitude to the organising committee of Charlotte Toma, Annie Scott, Elly Rishworth, and Patrick Cummiskey for the work done in organising this important event as we seek to foster a more supportive and welcoming working environment and to support the diversification of the engineering workforce.

Our 2022 NZSEE Webinar series is ongoing with two events still to go this year. There is a section within this newsletter that provides links to recordings of events that have already occurred, as well as the details of the remaining events. The key remaining events are “New Zealand National Seismic Hazard Model 2022 – Under the hood” presented by Matt Gerstenberger on Monday November 14th, and a hybrid event held in-person in Auckland and live-streamed online on the evening of November 23rd entitled “Seismic design of tunnels & shafts”. This final event for 2022 is jointly hosted by NZSEE, NZGS, and the New Zealand Tunnelling Society and will be presented by Andy Dodds from Arup, who is the lead geotechnical designer for the Central Interceptor shafts, and Wataru Okada from WSP, a lead designer for the City Rail Link project.

Registration is now open for the [2023 NZSEE conference](#), which will be held in Auckland from April 19-21, 2023. We have had a strong number of abstracts submitted and we look forward to returning to an in-person event again in 2023. Please keep an eye on the conference website as we provide updates on programme development and announce keynote and invited speakers.

Thanks for being part of our society,

Geoff Rodgers

Obituary for Michael Brice, Life Member of NZSEE, Administrative Secretary 1989-1998

It is with great sadness that we inform members of the passing of Michael Brice. Past Presidents and Management Committee members will be well aware of the instrumental role of those charged with administering the Society's affairs. NZSEE has been blessed to have an unbroken string of excellent people in the role of Administrative Secretary and now in the role of Executive Officer.

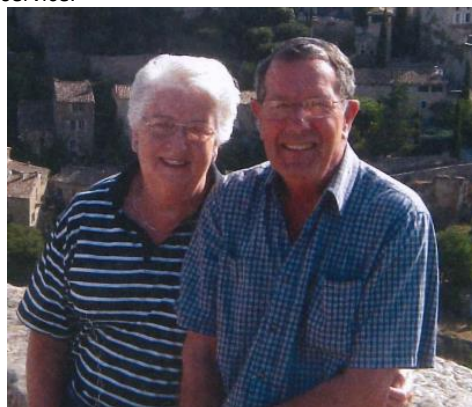


Michael worked for the New Zealand Portland Cement Association and became the New Zealand Prestressed Concrete Institute's secretary/manager when it was incorporated in 1964. He served in this role until his retirement in 1992. Michael also served as the



Administrative Secretary for NZSEE from 1989 until 1998. He was also conferred with Life Membership of NZSEE for the significant contributions that he made to NZSEE and the wider profession over his lifetime of service.

Michael Brice was exceptional, doing his duty with great efficiency, professionalism, and with utmost integrity. He had a delightful, understated dry humour that reflected his understanding of the shortcomings of the technical minds when it comes to the details of secretarial, financial matters and conference organisation. There was always a strong vein of mutual respect in his dealing with office holders of NZSEE - Michael enjoying his involvement with the country's leading earthquake engineers while knowing that his efforts were greatly appreciated by them. He was one of those people who was truly unflappable even in the most trying of circumstances – notably the challenges of NZSEE Conferences. Michael also enjoyed the challenge and satisfaction that he found in taking groups of architects, engineers and builders on a number of overseas trips to view the use of the materials in other countries



Michael will be remembered with great respect, affection and appreciation of his contribution to NZSEE, which went well beyond the core duties. Our deepest sympathy goes to his wife Jennifer and all his family who can all be extremely proud of the positive effect Michael had on the management of NZSEE, and on the lives of those who were privileged to work with him.

Obituary for Graham Quirk Administrative Secretary to the Society 1998-2002

It is also with sadness that we note the passing of Graham Quirk who served as Administrative Secretary to the Society between 1998 and 2002. Graham followed on from Michael Brice with responsibility for the ongoing general activities of the Society and Michael focused his efforts on the World Conference on Earthquake Engineering which the Society hosted in Auckland in 2000. Hosting this major international conference is certainly one of the milestone events within the Society's history and we can all appreciate the administrative challenge that this would have been. Graham was a professional company secretary and brought those generalised skills to the administration of the Society in both accounting and general secretarial and administrative activities. He was very much a behind-the-scenes administrator who set about modernising the Society's accounting and administrative practices to bring them into line with modern practice. One important role undertaken was the necessity to amend the Society rules so as to maintain our charitable status in accordance with subtle but significant changes in the Charitable Trust regulations.

Although used to working with accountants, Graham was often bemused by the different thought processes of both the engineering and science professionals who were somewhat more intuitive and less precise than his former accounting colleagues. Graham observed these skills with interest and a good sense of humour but was not inclined to emulate them. Our deepest sympathy goes to Graham's family as we recognise the lasting impact that Graham's contributions have had on the Society.

NZSEE Annual Technical Conference 19-21 April 2023

On behalf of the New Zealand Society for Earthquake Engineering (NZSEE) we warmly invite you to join us at the NZSEE Annual Technical Conference to be held on campus at the University of Auckland in the Sir Owen G Glenn Building (across the road from the Faculty of Engineering) from 19 - 21 April 2023. Following the on-line conference format of 2022 we are particularly enthusiastic about the prospect of returning to our traditional in-person conference format in 2023. This year we have chosen the conference theme of 'Facing the Seismic Challenge'. Currently there is much work being undertaken linked with a revision of the national seismic hazard model, and continued improvements in our understanding of earthquake and associated tsunami hazards across Aotearoa. New seismic risk guidance has recently been released and collectively we are continuing in our pursuit of facing the seismic challenge.

We are very pleased to announce that our conference Convenor this year is Jason Ingham from the University of Auckland. Abstracts for the conference have now closed and we will be contacting applicants soon.



Registrations for the conference are now open. For more information and to register for the conference please visit the website [here](#).



AWEC Symposium

The inaugural Advancing Women in Engineering & Construction (AWEC) Symposium appeared to be quite a success.

Tickets sold out several weeks in advance with waitlisted demand continuing up to the day before the event. Industry support for the event was well-received, with a range of companies sending members of their teams along to participate, and several contributing funds to help cover costs and keep the charge for participation at an accessible level.

On the day we were joined by around 170 women from across the country from engineering, construction and related technical disciplines, with a high level of engagement in the workshops that were the focus of proceedings, as well as the keynote presentations and closing panel session that helped frame our discussions.



Our next phase of effort will be to analyse the notes made across the workshops and from these develop a white paper that will hopefully help us to suggest action points that the likes of the technical societies, companies, and other industry groups can pick up and act on to improve the retention and support the advancement of women throughout our sector.



QuakeCoRE Emerging Researchers Chapter Christchurch Event, November 9th

The QuakeCoRE Emerging Researchers Christchurch Chapter will be holding an event “**Earthquake Engineering: A dialogue across generations**”. The event will be held in E5 Lecture Theatre in the Engineering Core at **the University of Canterbury on Wednesday 9th November**. The presenters will be Rob Jury (Chief Engineer, Beca), David Elms (Emeritus Professor, University of Canterbury), Craig Stevenson (Director, Aurecon), and Athol Carr (Emeritus Professor, University of Canterbury).

The event will also be live-streamed. Registrations information can be found at: <https://www.eventbrite.com/e/earthquake-engineering-a-dialogue-across-generations-tickets-429481820687>

Hopkins Lecture 2022

NZSEE Life Member and Holmes Group CEO John Hare will deliver **the 2022 Hopkins Lecture** at the University of Canterbury on Wednesday 16th November. **John’s talk is titled “Did Engineering save the Town Hall? (and other important questions)”**

Registration information can be found at: <https://www.engineeringnz.org/courses-events/event/hopkins-public-lecture-2022/>

The lecture will also be live-streamed on the University of Canterbury Facebook page



Engineering New Zealand Fellows dinner



Left to Right: Quincy Ma, Geoff Rodgers, Helen Ferner, Charles Clifton, Mike Stannard, and Brendon Bradley.

We are delighted to celebrate the success of four of our members who were recognised at the 2022 Engineering New Zealand Fellows Dinner in August.

Charles Clifton and Mike Stannard were both made Distinguished Fellows of Engineering New Zealand for their significant contributions to the engineering profession over



Left to Right: Helen Ferner (Immediate-Past President of NZSEE), Michelle Grant (President of SESOC), and Eleni Gkeli (Chair of NZGS).

their careers. Charles and Mike are also both Life Members of NZSEE.

Former NZSEE President Quincy Ma and Brendon Bradley were both made Fellows of Engineering New Zealand for their significant contributions to earthquake engineering and the broader engineering profession. Quincy and Brendon are also Fellows of NZSEE.

NZSEE 2022 Webinar series

NZSEE is proud to present the NZSEE Webinar series for 2022/2023. We have already had three webinars. Links to the first three webinars are below. For more information on future webinars and how to register please watch out for communication from NZSEE.

Past webinars

Resilience, Innovation and Implementation – Presented by Prof, Juan Carlos de la Llera – link to the webinar [here](#)

Non- Structural Elements - Presented by Jan Stanway and Dr Jitendra Bhatta – Link to the webinar [here](#)

An Introduction to Seismic Hazard Analysis - Presented by Professor Brendon Bradley – Link to the webinar [here](#)

Upcoming webinars

We have two more webinars planned for the rest of the year. Registrations for both events will be sent out via email very soon.

14th November 2022 NZ NSHM 2022 - Under the hood by Matt Gertsenberger

23 November 2022 - Seismic design of underground structures presented by Andy Dodds and Wataru Okada. This will be an in person live streamed event at BECA in Auckland.

Guidance for design Professionals on the 2022 NSHM

GNS Science has recently released the revised National Seismic Hazard Model (NSHM.) The Structural Engineering Society of New Zealand (SESOC), the New Zealand Society for Earthquake Engineering (NZSEE) and the New Zealand Geotechnical Society (NZGS) have collaborated to publish an advisory document giving interim guidance to design professionals and their clients until such time as any future updates are made to the New Zealand Building Code.

SESOC, NZSEE and NZGS understand that the NSHM is the latest science that will be used to inform design requirements within the Building Code. It will take time for the new science to be evaluated and for the Ministry of Business, Innovation and Employment (MBIE) to consider how to incorporate the model into the Building Code. In the meantime, we want to provide our members advice on how to proceed in the time between the model being released and any future Building Code update. The National Seismic Hazard Model will inform design Standards and design actions, however it is not a design document and should not be treated as such.

The [Interim Advice on the 2022 National Seismic Hazard Model](#) Release advisory document we have published will assist building designers in their discussions around hazard information with their clients and help them to engage in conversations regarding structural options which may buffer against hazard uncertainty.

Earlier this year, the technical societies published the [Earthquake Design for Uncertainty guidance](#) providing good design principles that should be referred to alongside the new advice.



SESOC, NZSEE and NZGS are currently planning a seminar for members on both the Earthquake Design for Uncertainty and the Interim Advice for National Seismic Hazard Model. The seminar will be held in late October in Auckland, Wellington, and Christchurch, with an online option available. Invitations will be sent by email to our members in the near future.

You can read the [Interim Advice on the 2022 National Seismic Hazard Model](#) document here.

[2022 NSHM Website \(National Seismic Hazard Model – GNS Science | Te Pū Ao\)](#)

For a link to the live recording from the seminar in Christchurch please click [here](#)

For links to the presenters slides please click [here](#)

Designing for Uncertainty

Managing uncertainty in earthquake engineering has always been a key challenge for New Zealand engineers and the theme of the recent NZSEE conference. The uncertainty of earthquake demands has recently been given increased prominence due to the anticipated release of the new National Seismic Hazard Model (NSHM) for New Zealand, later in 2022.

To assist engineers designing new buildings during this time of change, the collaborating technical societies of NZSEE, SESOC and NZGS have developed advice for engineers on recommended approaches an engineer can take to help ensure reliable performance from a building – regardless of the minimum design actions adopted.

[Read the advisory here](#)

Helen Ferner to present on behalf of the NZSEE at SPONSE

The Fifth International Workshop on Seismic Performance of Non-Structural Elements (SPONSE) will take place on the campus of Stanford University in Palo Alto, California (USA) on December 5 to 7, 2022. The Workshop is organised jointly by the Applied Technology Council (ATC), the European Center for Training and Research in Earthquake Engineering (EUCENTRE) and the International Association for the Seismic Performance Of Non-structural Elements (SPONSE). The workshop is hosted by the John A. Blume Earthquake Engineering Center at Stanford University. Please visit the following link for more information:
<https://5sponseworkshop.sponse.eu/>

NZSEE is pleased to inform that Helen Ferner will be representing NZSEE at the conference and will be presenting on the Resilient Buildings Project. To read the latest releases from the project please click [here](#).

