



IN THIS ISSUE

FROM THE PRESIDENT

NZSEE MANAGEMENT
COMMITTEE 25-26

NZSEE 2025 CONFERENCE

NZSEE 2026 CONFERENCE

NZSEE 2025 AWARDS

NZSEE WEBINARS/ SEMINARS

REVISED SEISMIC
ASSESSMENT GUIDELINES
RELEASED

NZ INDUSTRY NLRHA
GUIDELINES RELEASED

EQ ASSESS WEBSITE

ENGINEERING NEW ZEALAND
QUESTIONS

NZSEE BULLETIN VOL.58 NO.2

LFE CORNER

19WCSI CONFERENCE

ASSISI 2025 GLOBAL DESIGN
AND INNOVATION AWARDS

From the President . . .

Welcome to the June 2025 issue of our regular newsletter to keep you up to date on recent developments.

March - May 2025 has been a busy time for us, preparing for and holding the Annual General Meeting of the Society and our Annual Conference, and providing input to the government's review of managing the earthquake risk to existing buildings.



ASSISI 2025 Global Design and Innovation Awards

The ASSISI Global Design and Innovation Awards recognise excellence in design and research for seismic isolation and energy dissipation technologies worldwide. Entries close on 25th July, as you can see from the note at the end of this newsletter.

Managing Earthquake Risk to Existing Buildings

This is an important issue for the resilience of New Zealand, and NZSEE have played a key role in advocating for enhancing the seismic safety and resilience of existing buildings. We have continued to provide significant input to the government review of managing the risk to existing buildings led by the Ministry of Business Innovation and Employment (MBIE), through our representatives on the JC-SAR group, our representatives Andrew Thompson and Hugh Cowan on the Steering Committee, our input through the Technical Focus Group, and interactions with key members, Ken Elwood, Dave Brunson and Engineering New Zealand and sister technical societies SESOC and NZ Geotechnical Society.

It is understood that MBIE have submitted their report to the Minister and their recommendations are being considered by the government. We will bring you updates when information is made available as to the government's position.

Learning from Earthquakes

The Society is continuing with its Learning from Earthquakes initiatives as you see further down in this newsletter.

NZSEE is supporting the QuakeCore initiative to send a team to Thailand following the Myanmar Earthquake, M7.7, on 3rd April 2025, which included damage to buildings far away in Bangkok, Thailand. Our committee member Catalina Miranda is a co-leader for the team that returned recently.





UPCOMING EVENTS

[SESOC Conference 2025 Navigating Change with Integrity and Future Focus](#)

Tākina, Wellington

25 – 27 June 2025

<https://www.confer.co.nz/2025/sesoc-2025/>

[19 WCSI Conference](#)

Berkeley, California, USA

15 - 19 September 2025

<https://19wcsi.org>

[NZGS Symposium 2025 - Geotechnical Horizons: Innovations & Challenges](#)

15 – 18 October 2025

Aotea Centre, Auckland

<https://confer.eventsair.com/nzgs2025/>

[National Lifeline \(Utilities\) Forum 2025](#)

Te Papa, Wellington

16 - 17 October 2025

[NLUF 2025: Infrastructure Resilience in a Shifting Landscape](#)

Bulletin

The Society's Bulletin continues to be published quarterly, and the recent special edition presents papers relating to considerations in the development of TS 1170 and can be accessed online.

The Bulletin continues to need members with a passion for dissemination of technical knowledge from research and practice. If you are interested in being involved in supporting our Chief Editor Rajesh Dhakal editing and publishing the journal, please contact [me](#) or [Rajesh](#).

Annual General Meeting

The Annual General Meeting was held on 8th April 2025 in Auckland, in conjunction with our Annual Conference. Those who were unable to attend the AGM, can see the draft minutes [here](#), and the President's report on our activities over the past year, which can be accessed [here](#). The highlight of the AGM was the announcement of the new management committee, see the next section in this newsletter. I welcome the elected members of the Management Committee, including the new member of the committee, Didier Pettinga. At the Management Committee meeting after the AGM, I was re-elected as President for another year, and I am pleased to be able to continue to serve the members and take forward the objectives of the Society. We also co-opted Nikoo Hazaveh as a new member of the Management Committee to bring balance and you will see that she will also be a co-convenor for our conference next year.

I also thank the outgoing management committee members, Geoff Rodgers, Andrew Thompson and Alice Chang-Richards, who have provided valuable service to the Society, in particular Geoff as President and Andrew as our key representative on the Joint Committee on Seismic Assessment and Retrofit. As you will see below, they were also recognised through special awards of the Society at the Conference Dinner and Awards Night on 9th April 2025.

Annual Conference, Auckland, 8-10 April 2025

Our Annual Conference with a Focus on Harnessing Uncertainty to drive positive change for a sustainable and resilient future was held in Auckland from 8-10 April 2025, and you will see a report from our Conference Convenor, Sabina Piras. The conference was successfully concluded, and I would like to thank all the delegates who came and took part in discussions and deliberations, and the enormous positive feedback we received. I would like to thank the Natural Hazards Commission and the other sponsors and exhibitors who made the conference viable under this difficult economic climate.

Awards and Conference Dinner 2025

The Awards and Conference Dinner was held on 9th April 2025, and I would like to congratulate all the award recipients (see section below). Your contributions are what has kept the Society moving forward over the years towards our objectives. This year we consolidated all the NZSEE awards (except the conference paper awards) into one event at the dinner.

Annual Conference 2026, Wellington

We look forward to seeing you at the 2026 conference which we are planning to hold in Wellington, see note below.





UPCOMING EVENTS

[SESOC Conference 2025 Navigating Change with Integrity and Future Focus](#)

Tākina, Wellington

25 – 27 June 2025

<https://www.confer.co.nz/2025/sesoc-2025/>

[19 WCSI Conference](#)

Berkeley, California, USA

15 - 19 September 2025

<https://19wcsi.org>

[NZGS Symposium 2025 - Geotechnical Horizons: Innovations & Challenges](#)

15 – 18 October 2025

Aotea Centre, Auckland

<https://confer.eventsair.com/nzgs2025/>

[National Lifeline \(Utilities\) Forum 2025](#)

Te Papa, Wellington

16 - 17 October 2025

[NLUF 2025: Infrastructure
Resilience in a Shifting
Landscape](#)

Strategy Day

The new management committee met on 28th May in Wellington, to brainstorm our strategy for the next year and beyond. We are developing our strategy based on the deliberations, and we will share more in the next newsletter.

~ P Brabhakaran ~



NZSEE Management Committee 2025 – 2026

We are delighted to welcome the new Management Committee members and recognise the departing members (Geoff Rodgers, Andrew Thompson and Alice Chang-Richards) for their outstanding contributions to the Society.

Find out more and view the committees' profiles on the [website](#). The new Management Committee is made up of:



Pathmanathan Brabhakaran
(President)



Annie Scott



Catalina Miranda



Didier Pettinga



Dion Marriott



Gregory MacRae



Julian Benito



Umair Siddiqui



Sanjay Bora



Rajesh Dhakal
(Bulletin Editor)



Amy Samuelu
(Executive Officer)



Nikoo Hazaveh
(Co-opted)



NZSEE 2025 Conference



Thank you to everyone who joined us at the 2025 NZSEE Annual Technical Conference, held at the Cordis Hotel in Auckland. It was a pleasure to host such a vibrant and engaged community of professionals dedicated to advancing seismic resilience.

This year's conference brought together over 350 attendees, reflecting the growing interest and commitment within our field. Auckland Mayor Wayne Browne opened the event with a thought-provoking address, setting the tone for three days of meaningful discussion and collaboration.

We were privileged to welcome keynote speakers Dr. Marwan Nader (T.Y. Lin International, San Francisco), Dr. Laurie Johnson (Laurie Johnson Consulting, San Francisco), Professor Ruben Boroschek (University of Chile), and Professor Santiago Pujol (University of Canterbury). Their insights and experiences generated rich conversations and challenged us to think critically about the future of earthquake engineering.

The programme tackled timely topics including the National Seismic Hazard Model, sustainable seismic design, and the ongoing digital transformation in our industry. The NZSEE Learning from Earthquakes Workshop was another highlight, offering an in-depth look into research and lessons from recent seismic events.

We continue to be inspired by the calibre of papers, posters, and presentations. A special congratulations goes to Team Aurecon, winners of the He Tohu Pūpū Seismic Design Competition, which showcased remarkable creativity and technical skill from the teams that entered.

We thank all who contributed to making the 2025 conference a success and look forward to continuing these vital conversations as we work together to strengthen Aotearoa New Zealand's seismic resilience.

Sabina Piras
NZSEE 2025 Conference Convenor

NZSEE 2026 Conference

NZSEE is pleased to announce planning for the NZSEE 2026 Conference is underway. The 2026 conference is planned to be held in Wellington with dates to be confirmed shortly.

Conference Co-Convenors Nikoo Hazaveh, and Julia Becker have been confirmed.



Nikoo is a Member of the NZSEE Management Committee and Structural Engineer at Mott MacDonald, Julia Becker is an Associate Professor at the Joint Centre for Disaster Research in the School of Psychology at Massey University.

If you are interested in supporting the conference planning, please reach out to our Executive Officer, Amy Samuelu, at exec@nzsee.org.nz



NZSEE 2025 Awards

Distinguished Members



Helen Ferner
Life Member
[Citation](#)



Roger Shelton
Life Member
[Citation](#)



Alistair Cattnach
Fellow
[Citation](#)



Bo-Yao Lee
Fellow
[Citation](#)





Dean Saunders

Fellow

[Citation](#)



Geoffrey Banks

Fellow

[Citation](#)

NZSEE/QuakeCoRE Emerging Women Leaders in Earthquake Engineering Award 2025

Catalina Miranda

Dr Catalina Miranda is an outstanding young engineer, advancing earthquake engineering in New Zealand by working at the intersection of engineering and social science. Her journey in earthquake engineering started during her undergraduate studies in Chile, when the 2010 Maule Earthquake struck her hometown and she assisted the public in identifying potential structural issues in their homes.

After completing her degree, she worked for four years as a project engineer responsible for team leadership and delivery, undertaking numerous structural strengthening and design projects, particularly in mining, desalination, and dam projects. She was also responsible for assessing semi-collapsed timber structures and providing expert testimony in court cases in Chile. Her experiences during this time reinforced her passion for earthquake engineering and motivated her move to Aotearoa New Zealand to undertake a PhD in Civil Engineering at the University of Auckland.



Pathmanathan Brabhakaran, left, Catalina Miranda, Santiago Pujol, QuakeCoRE Director



During this PhD, she conducted pioneering interdisciplinary research that compared the predicted seismic performance of wooden-framed houses with homeowner expectations of damage following major earthquakes. By integrating earthquake engineering principles with social science methodologies, she broke new ground in understanding risk perception and communication in earthquake resilience.

In her current position as a Lecturer at the Joint Centre for Disaster Research, she continues to bridge social science and engineering to improve earthquake resilience. She has contributed to key national initiatives, including the MBIE Seismic Risk Resource for Commercial Building Tenants and the BRANZ Guidance for Professionals Communicating Seismic Risk Information with Tenants. She is also currently part of the Resilient Organisations/JCDR team supporting MBIE in its review of the earthquake-prone building system and contributing to multiple projects under Te Hiranga Rū QuakeCoRE, the MBIE Endeavour fund, and a BRANZ-funded project on the multi-hazard strengthening of timber-framed houses, which will inform future guidance on earthquake and flood preparedness.

She has demonstrated outstanding leadership in promoting gender diversity in earthquake engineering, organising outreach events connecting high school students with civil engineering undergraduates, inspiring more young women to enter the field. She has also given public talks to promote earthquake strengthening of houses, served as a volunteer with Wellington Response Team RT8, as a committee member of the Wellington Young Engineers Branch of Engineering New Zealand, and an ambassador for the Wonder Project.

For her unique combination of technical expertise, pioneering research, leadership in interdisciplinary collaboration, and dedication to diversity and outreach Catalina is recognised with the 2025 NZSEE/QuakeCoRE Emerging Women Leaders in Earthquake Engineering Award.

Natural Hazards Commission Toka Tū Ake / NZSEE Ivan Skinner Award 2025

Maxim Millen

Maxim Millen is an outstanding contributor to earthquake resilience in Aotearoa, with a rare combination of deep technical expertise across geotechnical and structural engineering, advanced numerical modelling, and digital innovation. Currently a Technical Director at Tonkin + Taylor, Maxim applies his unique background in both earthquake engineering and software development to lead impactful projects such as the National Liquefaction Model for the Natural Hazards Commission.

Across academia and practice, Maxim has contributed to the development of national guidelines and standards, co-authoring key chapters in the NZ Seismic Assessment of Existing Buildings guidance, the upcoming Whole-of-Building Retrofit Guidelines, and the new shallow foundation section of TS1170.5. His research on rocking foundations has resulted in simplified methods that reduce seismic damage, construction costs, and carbon emissions.



Pathmanathan Brabhakaran, NZSEE President, Maxim Millen, Caleb Dunne, NHC



Maxim's multidisciplinary expertise has not only shaped technical standards but has created accessible, scalable tools that embed resilience into design practice. Maxim exemplifies the spirit of the Ivan Skinner Award through his unwavering commitment to evidence-based engineering, national collaboration, and innovations that meaningfully protect New Zealand communities from seismic risk.

Maxim was encouraged by his colleagues to apply for this award because of his, and I quote, "outstanding technical expertise, leadership and commitment to advancing earthquake resilience in New Zealand and beyond." Maxim has been described as having the perfect balance of broad experience across many aspects of geotechnical, structural and seismic engineering, while also having specialist technical skills in data science, software engineering and ability to develop complex models. He is a sought after mentor and always willing to help teach the next generation of engineers.

For his efforts to significantly advance the nation's ability to model and predict liquefaction-induced ground damage at scale, as well as his ability to bridge the gap between academic insight and real-world engineering needs, Maxim is awarded the 2025 NHC Toka Tū Ake/NZSEE Ivan Skinner Award.

John Hollings Seismic Resilience in Practice Award 2025

Clendon Burns & Park (Engineer) for

Te Whare o Rehua Sarjeant Gallery – Seismic Strengthening

In conjunction with:

- Warren & Mahoney Architects (Architect)
- Whanganui District Council (Owner)
- McMillan Lockwood (Contractor)

The strengthening of Te Whare o Rehua Sarjeant Gallery focused on delivering an innovative and unobtrusive seismic upgrade that preserves the architectural and historical integrity of this iconic heritage building. Central to the structural solution was the use of over 300 stainless steel prestressing bars up to 12 m long installed vertically through the masonry walls, anchored in new reinforced concrete capping beams and foundations, to increase both the in-plane and out-of-plane wall capacity.

A new diaphragm was created by replacing the original timber floor system with reinforced concrete over steel decking. This diaphragm was then overlaid with salvaged timber to maintain the original appearance. At roof level, steel bracing and capping beams tied the structure together, while carbon fibre and coupling beams reinforced the central dome. The result is a seismic strengthening scheme that meets current codes while being carefully concealed, allowing the gallery to safely house its significant art collection and continue its legacy as a cultural landmark.

It is a pleasure to be able to provide Clendon Burns and Park the John Hollings Award.



Pathmanathan Brabhakaran, NZSEE President, presenting the Clendon Burns & Park team with the John Hollings Seismic Resilience in Practice Award



President's Award
Andrew Thompson



Pathmanathan Brabhaharan, right, presenting Andrew Thompson with the President's Award

NZSEE Special Appreciation Award
Geoffrey Rodgers



Pathmanathan Brabhaharan presenting Geoffrey Rodgers with the Special Appreciation Award

Otto Glogau Award

John Wood



for the paper "[*Earthquake design loads for retaining walls*](#)" in NZSEE Bulletin Vol. 56 No. 4 (2023)

He Tohu Pūpū Seismic Design Competition

The **Aurecon** team won the 2025 He Tohu Pūpū Seismic Design Competition, sponsored by NHC Toka Tū Ake. The team members representing Aurecon were Olivia Fox, Jesse Robertson, Tina Chen and Vincent Chui



Members of the winning Aurecon team; Vincent Chui, Olivia Fox and Tina Chen



Best Research Paper
Quincy Ma

for the paper titled:

Preliminary Observations from the Chile-NZ Research Collaboration on the Seismic Design of Hospitals



Sabina Piras, conference convenor, presenting the Best Research Paper 2025

Best Student Paper
Setu Argawal

for the paper titled:

Experimental Investigation of a Two-Storey Full-Scale CLT Structure with Resilient Rocking Walls



Sabina Piras, conference convenor, presenting Setu Argawal Best Student Paper 2025

Best Practice Paper
Kiran Makan & Peter Huber

for the paper titled:

Optimised and Adaptive Supplementary Damped Isolation Systems



Sabina Piras, conference convenor, presenting Kiran Makan Best Practice Paper 2025



NZSEE Seminars

One Whitmore Street

On 27 February 2025 NZSEE hosted a webinar exploring the One Whitmore Street building project – awarded the 2024 John Hollings Seismic Resilience in Practice Award. The project is a case study in Architectural/Structural integration from the curved form of the façade and diagrid through to the fineness of the canopy fins overlaying the clean rattle-space gap detailing and integrated drainage. Rising from a difficult site, the project is considered an exemplar of A+-Grade offices in Wellington.

A huge thank you to Chris Speed from Dunning Thornton for presenting this webinar.

Want to find out more? You can watch the webinar online [here](#).

Earthquake Rupture Simulations

NZSEE was pleased to host a seminar at the Holmes NZ offices in Christchurch, on 14 May 2025 with a fantastic turnout both in person and online.

Dr. Camilla Penney and Dr. Duo Li delivered insightful presentations on Earthquake Rupture Simulations, sparking great questions and discussion from attendees.

A huge thank you to Holmes Aus & NZ for hosting, and to our speakers for sharing their valuable research.

Missed it? You can watch the seminar online [here](#).

Have a topic suggestion or want to host a future seminar? We'd love to hear from you - contact our Executive Officer, Amy Samuelu, exec@nzsee.org.nz

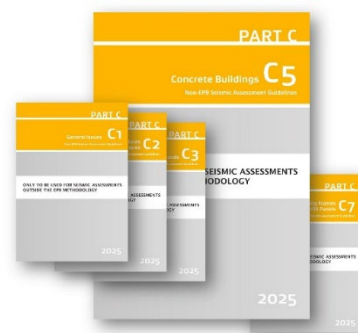
Revised Seismic Assessment Guidelines released for use

Revisions to Section C5 (and associated sections) of the non-EPB Seismic Assessment Guidelines have been released for use. They relate predominantly to the assessment of concrete buildings and components. The updated sections can be found on the [Design Resilience website](#). The update to Chapter C5 supersedes the 2018 Yellow Chapter. Engineers can now use the updated sections for seismic assessments of existing buildings outside of the earthquake-prone building system.

About the updated Section C5 (and associated sections)

These guideline updates are part of the work programme of the Joint Committee for Seismic Assessment. Engineering New Zealand facilitated a public consultation on the proposed updates in 2024. All comments were considered by the Joint Committee, and the proposed revisions were modified as necessary. Although this work mostly relates to reinforced concrete, associated revisions within Sections C1, C2, C3 and C7 apply to all building types. A summary of key changes is included in the front of each section, and all altered content is clearly marked.

The updates are expected to improve the clarity, consistency and accuracy of assessments, and better reflect our latest understanding of the performance of concrete buildings in earthquakes. Engineers should use these latest versions when carrying out assessments. The only time they should use the 2017 versions is when they are assessing specifically whether a building is earthquake-prone under the EPB system. In this situation, assessments will have been initiated by a letter from the territorial authority advising that the building



is potentially earthquake prone. The 2017 *Seismic Assessments of Existing Buildings – Technical Guidelines for Engineering Assessments* (Red Book) must continue to be used by engineers for *all* seismic assessments under the EPB system, as this is required by legislation.

Please note that the revisions to non-EPB Seismic Assessment Guidelines are not related to the review of the EPB system that MBIE is currently undertaking.

Final Non-EPB Seismic Assessment Guidelines expected in late 2025

The Joint Committee will be making further updates to the Non-EPB Seismic Assessment Guidelines sections over the course of 2025, including changes to geotechnical, URM, and reinforced masonry provisions. We expect to consult on these changes later in 2025 and publish all sections of the non-EPB Guidelines by the end of the year—completing the 2025 edition.

A new process for continual improvement

Once the complete 2025 edition is published, the Joint Committee will commence a five-yearly schedule for updating the Guidelines. A regular cycle of updates will provide the industry with greater certainty as to how and when new knowledge is reviewed and considered for incorporation into the Guidelines. To enable better alignment with research activities, the Joint Committee will also identify key research needs for future update cycles of the Guidelines.

[Learn more about the Joint Committee for Seismic Assessment and Retrofit](#)



NZ Industry NLRHA Guidelines Released

The nonlinear response history analysis (NLRHA) provisions contained within TS 1170.5:2025 were developed for NZS 1170.5:2004 more than 20 years ago. Significant developments have occurred since the standard was originally drafted which means that the NLRHA provisions contained within TS 1170.5 are out of date. To help address this issue, the collaborating technical societies of NZGS, NZSEE and SESOC have developed a guideline which can be used by NZ design professionals when using NLRHA to validate the seismic performance of structures.

A copy the guideline can be found on the [NZSEE Website](#).

The guideline draws upon knowledge that has been gained since NZS 1170.5 was published and sets out a contemporary approach for establishing earthquake design actions in structures when using NLRHA. It provides:

- Recommendations for the selection and scaling of ground motion records,
- Recommendations for modelling structural elements,
- Detailed criteria for evaluating seismic performance, and
- Guidance for determining horizontal design actions for parts of structures and non-structural components.



EQ Assess website update

For EPB Assessments, see the [MBIE Building Performance website](#).

For Assessments being undertaken in accordance with the Earthquake Prone Building (EPB) Methodology (when required by the Building Act), resources are now located on MBIE's website. This contains information about managing earthquake-prone buildings, links to core legislation and tools, and technical guidelines for engineering assessments.

1. [Information about Managing Earthquake-prone Buildings](#)
2. [Earthquake-prone building resources](#)

For Non-EPB Seismic Assessments, go to [Design.Resilience.NZ](#)

The current version of the non-EPB Seismic Assessment Guidelines better reflects our latest understanding of the performance of buildings in earthquakes. These are now located at Design.Resilience.NZ, alongside other best-practice resources.

1. [Non-EPB Seismic Assessment Guidelines and Resources](#)
2. [Learn about the Joint Committee for Seismic Assessment and Retrofit](#)

How would you describe Engineering New Zealand Te Ao Rangahau?

Organisations, like people, have personality. They can feel bold or cautious, warm or reserved, approachable or distant.

Engineering New Zealand would love to understand how they come across – and how you think it should feel in the future, to support their future brand evolution.

[Answer 6 quick questions](#)

NZSEE Bulletin Vol.58 No.2 is now available online!

Articles include:

Overview of TS 1170.5:2025 and changes from NZS 1170.5:2024

Kenneth Elwood, Matthew Gerstenberger, Nick Horspool, Anne Hulseley, Rob Jury, Rick Wentz, Misko Cubrinovski, John Hare, John Hooper, Anna Philott, Tim Sullivan

Recommendations for the shape of the design response spectrum in the New Zealand seismic loadings technical specification

Tom C Francis, Timothy J Sullivan, Anne M Hulseley, Kenneth J Elwood

PGA adjustment factors for nonlinear site-response effects on soft soil sites: Application to TS1170.5

Christopher DeLa Torre, Misko Cubrinovski, Brendon Bradley, Sanjay Bora

Consideration of near-fault effects in New Zealand seismic hazard analysis and design spectra

Brendon A Bradley, Graeme Weatherill



Assessing the life-safety risk for the proposed technical specification (TS) 1170.5
Anne Hulsey, Ken Elwood, Nick Horspool, Matt Gerstenberger, Timothy Sullivan

Simplified relationships between inelastic and elastic spectral acceleration demands for seismic design in New Zealand
Tom Francis, Timothy Sullivan

Access the articles online [here](#).

NZSEE Learning from Earthquakes (LFE) Corner

The revitalised NZSEE LFE programme has now been active for a full year!

Major Events

Beyond the seismic impacts of recent earthquakes, including:

- a) The 1 January 2024 Noto Peninsula earthquake;
- b) The 3 April 2024 Hualien earthquake in northeastern Taiwan; and
- c) The 17 December 2024 Port Vila earthquake, which affected much of Vanuatu,

the world also witnessed the devastating 3 April 2024 Myanmar earthquake. This event resulted in over 5,000 fatalities and widespread destruction, with damage extending hundreds of kilometres into neighbouring countries.

The LFE programme aims to extract critical lessons from such events to inform decision-making in New Zealand.

LFE Programme Organisation

To manage the growing workload, in April 2025 a subcommittee was formed under the NZSEE management committee. The team includes:

- *Chair:* Gregory MacRae
- *Deputy Chair:* Julian Benito
- *Travel/Insurance Coordinator:* Amy Samuelu (NZSEE Executive Officer)
- *Membership & Communications Coordinators:* Catalina Miranda/Julian Benito
- *Technology & Training Coordinators:* Julian Benito/Catalina Miranda
- *Protocols, Health & Safety, and NZSEE LFE Manual Coordinators:* Ke Jiang/Doug Mason
- *Financial Oversight:* NZSEE President Brabhakaran Pathmanathan, Gregory MacRae, and Julian Benito

Volunteers are needed! Those interested in digital/physical reconnaissance or supporting other LFE activities are encouraged to join the NZSEE LFE Contact Group (scan the QR code below). Diverse skills are welcome!



NZSEE 2025 Auckland Conference LFE Update

A session related to LFE described the use of new technology in earthquake engineering planning and response:

- *Julian Benito* shared insights on Taiwan's widely adopted systems.
- *Raj Prasanna* discussed life-saving early warning systems.
- *Maria Mingallon* described the use of AI.

Field reports from Taiwan's Hualien earthquake were presented by:

- *Bo-yao Lee (NZSEE LFE Hualien Mission Leader)*: Background on Taiwan's seismic history, collaborations, and organisational support.
- *Doug Mason*: Seismology and infrastructure impacts.
- *Lucas Hogan (RSNZ team)*: Retrofitted vs. unretrofitted building performance and policy implications, emphasising the effectiveness of simple retrofits.
- *Alice Chang-Richards*: Functional recovery lessons.
- *Bo-yao Lee*: Organisational collaboration and use of technology for better decision-making.

Laura Whitehurst and John Seward (USAR team) also provided a firsthand report from Vanuatu.

NZSEE LFE Event Status

a) Hualien Earthquake, Eastern Taiwan

- Post-mission presentations have been delivered to nine national groups, and a [report](#) was submitted to the NHC.
- Papers are underway and will be published on the NZSEE website after approval. These will also be collated into a special edition of the Bulletin with publication targeted at the end of 2025.
- While knowledge dissemination is critical, proactive measures are needed to ensure NZ benefits from, and continues to develop and lead, global best practice. One specific opportunity relates to interagency collaboration for optimal decision-making. NZSEE is exploring how to best support NZ(Inc) in the implementation of lessons learned.

b) Port Vila Earthquake

- No NZSEE team deployment is planned, but NZSEE is communicating with GNS and USAR regarding dissemination of findings.

c) Myanmar Earthquake

NZSEE has contacted earthquake related agencies in Myanmar, without whose work the damage would have been much worse. NZSEE is also in contact with colleagues in Thailand as the feasibility of sending a team is considered.

- Digital deployment/reconnaissance has been started.
- Myanmar: Travel restrictions due to civil war limit physical deployment. Some technical information is emerging.
- Thailand: Peak ground accelerations were small more than 500 km from the epicentre. Collapse occurred in very few buildings. However, some damage occurred to building non-skeletal elements (NSE) including brick partition walls. NZSEE is supporting the QuakeCore initiative to send a team to Thailand. Possible learnings from this event relevant to NZ relate to:



- Effects of distant earthquakes (relevant to NZ's risk profile).
- Tall building response (period/damping dynamics).
- Geotechnical impacts from remote events.
- Non-skeletal element (NSE) performance.
- Societal functional recovery.
- China: Reports of NSE damage in Ruili town in more than 800 structures is being gathered by Chinese colleagues.

Acknowledgements

The NZSEE LFE programme is grateful to the continued support of the following who make this work possible:

- Organisations such as the Natural Hazards Commission (NHC).
- Dedicated volunteers and their employers.
- Global collaborators.

LfE mission to Thailand

Following the 7.7 Myanmar – Thailand earthquake on 3 April 2025 NZSEE committee member, Catalina Miranda, is representing NZSEE on the Learning from Earthquakes reconnaissance mission to Thailand, led by QuakeCoRE, from 10 – 18 June 2025. We look forward to hearing the updates and learnings from the team when they become available.

The team members included:

- Andrew Stolte (UoA) co-leader
- Catalina Miranda (Massey University) co-leader
- Andrew Baird (Beca)
- Jitendra Bhatta (UC)
- Jitendra Bothara (Resipro International Engineering Ltd)
- Lucas Hogam (UoA)
- Chungwook Sim (Konkuk University in Korea)

Lucas and Chungwook join us as part of their role at the ACI 133 disaster reconnaissance committee.

19WCSI Conference

The 19WCSI Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control Structures will be held in Berkley on 15-19 September 2025.

NZSEE would be interested to connect with New Zealand members attending this event. Please contact Executive Officer, Amy Samuelu, exec@nzsee.org.nz if you are planning to attend.

Find out more and register [here](#).



ASSISi 2025 Global Design and Innovation Awards

ASSISi is excited to announce that the 2025 Global Design and Innovation Awards are open for submissions.

The ASSISi Global Design and Innovation Awards recognise excellence in design and research for seismic isolation and energy dissipation technologies worldwide. Submissions should highlight innovative and creative uses of seismic isolation and energy dissipation technologies, and particularly that respect and enhance regional and vernacular construction methods and materials. Submissions may be for new or retrofit construction, or for research, and may be for a building, non-building structure or component, or a bridge or research project.

For information about the program, including [detailed submission requirements](#), visit ASSISi's website, www.assisociety.org.

The submission deadline is 25 July 2025, and winners will be announced at [19WCSI](#).

