SUMMARY REPORT
NZCS Travel Bursary 2016

Award recipient: Ericson Encina, University of Auckland.

Conference: 16th World Conference on Earthquake Engineering (16WCEE)

The WCEE is one of the most important conferences in the Earthquake Engineering field. It is celebrated every 4 years and the most recent meeting was held in Santiago, Chile, between the 9th and the 13th of January 2017, being the 16th conference since it started in 1956. The conference was organised by the International Association for Earthquake Engineering (IAEE) and the Chilean Association on Seismology and Earthquake Engineering (ACHISINA). The WCEE gathered worldwide experts in a broad range of earthquake-related topics, such as: building seismic resilience, seismic risk reduction, seismology, geotechnical engineering, seismic isolation, performance-based engineering, social and economic seismic-related issues, and lessons learnt from previous earthquakes, to name a few. The total number of attendees was approximately 3000.

The conference was composed by plenary sessions, normal and special sessions, invited lectures, posters and a new feature within the history of the WCEE: debates. The plenary session presentations included "Resilience by Design: A Structural Engineering Perspective" by Professor Stephen Mahin, "The quest for resilience in seismic design of RC buildings: The Chilean practice" by engineer René Lagos, "Effects of Long-Duration Motions on Soil Liquefaction Hazards" by Professor Steven Kramer, "Earthquakes in subduction zones and the scaling of their seismic spectra" by Professor Raúl Madariaga, and "Advances on Monitoring and Damage Detection in Earthquake Engineering" by Professor Carlos Ventura. In addition, invited lectures were presented by Professor Antonio Godoy, Professor Jianzhong Li, Professor Paolo Clemente and Professor Taro Arikawa. There were 2 debates: "Performance-Based Design: Promises and Pitfalls?" debated by Dr. Farzad Naeim and Professor Polat Gülkan, and "Prescription of Seismic Demands: Probabilistic vs. Deterministic" debated by Professor Hiroshi Kawase and Dr. Nicolas Luco. The normal and special sessions were run in 15 parallel sessions with a duration of 2 hours each; there were 2 or 3 blocks of parallel sessions each day.

I had the privilege of presenting my work titled "Modelling wall-to-floor interaction on RC buildings: Modelling case study" to colleagues from around the world as part of the oral presentations in the session Reinforced Concrete Structures I on the first day of the conference. My presentation was 15 minutes long and had 2 questions from the attendees regarding the numerical formulation I used to represent the reinforced concrete walls. I also had the opportunity to be one of the two chairs of the session. During the conference, I had the pleasure to meet researchers and engineers, which made this conference a great place to network with colleagues from all around the world.

I really appreciate the Travel Bursary from the New Zealand Concrete Society which supported my attendance at this conference.