
CURRICULUM VITAE

Jarg Didier Pettinga B.E. (Hons 1st Class), MSc., PhD, P.Eng

1. Tertiary Education:

University of Canterbury: 1999-2002 Bachelor of Engineering 1st Class Honors, 2002.

University of Pavia (European School for Advanced Studies in the Reduction of Seismic Risk – ROSE School): 2003-2006, Master of Science, 2004; Doctor of Philosophy, 2006.

2. Employment Record:

Period	Employer	Position
2012 - present	Holmes Consulting Group, Christchurch, New Zealand	Project Engineer
2007-2011	Glotman Simpson Consulting, Vancouver, Canada	Project Engineer
2007	Department of Civil Engineering, University of Canterbury, Christchurch, New Zealand	Post-Doctoral Research Assistant

3. Professional Consulting Experience:

Four and half years based in Vancouver, British Columbia, involved with a large number of projects ranging through low, medium and high-rise residential, office and institutional buildings. The particular focus for a lot of this work has been on Performance-Based Design of high-rise buildings (in the United States) as well as carrying out specialist Performance-Based Design of post-disaster facilities for both medical and law-enforcement sectors using advanced seismic systems (British Columbia).

4. Registration

- Registered Professional Engineer, British Columbia, Canada, 2010 - Present

5. Professional Affiliations:

- New Zealand Society of Earthquake Engineering 2008 - Present
- Structural Engineering Association of British Columbia, 2009 - Present

- Canadian Association of Earthquake Engineering 2009 – 2011
- Peer-reviewer for Journal of Earthquake Engineering, ASCE Journal of Structural Engineering, ACI Structural Journal.

6. Relevant Project Experience:

Georgia Hotel & Tower, 2007-2008

Downtown Vancouver – retrofit of the existing 90 year old 12 storey concrete-frame building and construction of adjacent 48 storey mixed-use tower

600 Wall Street, 2008

Seattle, Washington State – 28 storey residential high-rise utilising performance-based seismic design under peer-review for alternative design methods.

Insignia Towers, 2008

Seattle, Washington State – twin 42 storey residential high-rise towers utilising performance-based seismic design under peer-review for alternative design methods.

1133 Hope St, 2009

Los Angeles, California – 30 storey residential high-rise incorporating performance-based seismic design under peer-review for alternative design methods.

RCMP “E” Division Headquarters, 2010-2011

Surrey, British Columbia – multi-building project in construction (2011) that will provide the principal headquarters for the Royal Canadian Mounted Police in south-west British Columbia. Includes a high seismic performance post-disaster command centre utilizing alternative seismic systems and design methods

RCMP Richmond Detachment Upgrade, 2010-2011

Richmond, British Columbia – upgrade of a 25 year old two-storey steel frame building (10,000m²) situated on poor/liquefiable soils using performance-based design to incorporate a high-performance seismic system

7. Selected Research Publications:

Filiatraut, A., Tremblay, R., Christopoulos, C., Folz, B.R. and Pettinga, J.D. [2012] “Elements of Earthquake Engineering” – Chapter 8 “Elements of Seismic Design and Detailing for Reinforced Concrete Buildings”, Anticipated publication September 2012, Presses Internationales Polytechnique, Montreal, Canada.

Pettinga, J.D., Christopoulos, C., Pampanin, S. and Priestley, M.J.N. [2007] “Effectiveness of simple approaches in mitigating residual deformations in buildings”, Earthquake Engineering and Structural Dynamics, Vol.36, pp.1763-1783.

Pettinga, J.D., Pampanin, S., Christopoulos, C. and Priestley, M.J.N. [2007] Developments in the Prediction and Mitigation of Residual Deformations due to Seismic Demand, including Asymmetric Structural Response, Research Report No. ROSE 2007/01, European School for Advanced Studies in Reduction of Seismic Risk, Pavia.

Pettinga, J.D. and Priestley, M.J.N. [2007] Accounting for P-Delta Effects in Structures when using Direct Displacement-Based Design, Research Report No. ROSE 2007/02, European School for Advanced Studies in Reduction of Seismic Risk, Pavia.

Pettinga, J.D. and Priestley, M.J.N. [2005] “Seismic design of reinforced concrete frames using direct displacement-based design”, Journal of Earthquake Engineering, Vol. 9, Special Issue 2, pp. 309-330.