# M.J.N.Priestley PhD(Cantaur), DSc.((Hon) ETH,Zurich), DSc.((Hon) National University of Cujo,Argentina), Hon FRSNZ, FACI, FNZSEE, FIPENZ

### Academic and Professional Experience:

- **1967** : Received PhD from University of Canterbury, New Zealand.
- 1967-1975: Head, Structures Laboratory, MWD Central Laboratories, Lower Hutt
- **1976-1986:** Senior Lecturer then Reader, University of Canterbury
- 1987-2000: Professor of Structural Engineering, University of California, San Diego
- **1991-1999:** US Coordinator of joint US/Japan research program on seismic design of precast structures (the PRESSS program)
- 2001- : Emeritus Professor of Structural Engineering, UCSD
- 2002-2008: Co-director, European School for Advanced Studies in Reduction of Seismic Risk (Rose school), Pavia, Italy
- 2009- Emeritus co-director, "Rose school" Pavia
- **1987-** : Consulting Structural Engineer (Seqad, then Priestley Structural Engineering), specializing in Seismic Design.

#### **Research Publications:**

More than 450 technical papers and books/book chapters, and more than 250 technical reports, mainly related to seismic design of concrete and masonry structures. Two books: Seismic Design of Reinforced Concrete and Masonry Buildings – (Wiley, 1992, co-authored with T.Paulay), and Seismic Design and Retrofit of Bridges (Wiley, 1996, co-authored with F.Seible and M.Calvi) are widely recognized as definitive texts for seismic design of buildings and bridges. A third book (Displacement-based Seismic Design of Structures – IUSS Press, co-authored with G.M.Calvi and M.J.Kowalsky) has been recently published (May 2007), and provides recommendations for major changes in the way seismic design is carried out.

Participant, and co-author of reports for many post-earthquake reconnaissance teams, including Chile 1985, Whittier, Costa Rica, Northridge, Kobe.

#### **Consulting Experience:**

Extensive consulting experience on design, analysis or checking of seismic performance of new and existing structures, including major bridges, buildings, and wharves. A selection follows:

- 1969-1986 Structural testing consultant to New Zealand Pottery and Ceramics Research Association
- 1975-1986 Consulting proof engineer for major bridges and structures, including Air New Zealand Hangar, Christchurch; South Rangitikei Rail Viaduct; North Rangitikei Rail Bridge; Kawhatau Rail Bridge; Todd Motors Industrial Assembly Plant; Air New Zealand Hangar, Auckland. All of

the above structures have received awards for technical excellence. The three rail bridges also received environment awards.

- 1975-1980 Consulting engineer to Christchurch City Council on bridge design.
- 1975-1989 Consulting and testing on bridging and structural seismic design to various private and public bodies.
- 1989-1990 Consultant to Caltrans on bridge damage in the Loma Prieta earthquake.
- 1989-1990 Chairman, Caltrans blue ribbon commission to assess the seismic design of the I-110 elevated freeway, Los Angeles, CA.
- 1990-1999 Principal, SEQAD Consulting Engineers, Inc.
- 1990-1991 Chairman, Caltrans Seismic Review Committee to Evaluate Retrofit of the I-10/I-215 Freeway Separator.
- 1990-1991 Technical Advisor to Caltrans Peer Review Committee for developing and assessing retrofit schemes for the San Francisco double decker viaduct.
- 1991-1993 Chairman, Caltrans Seismic Review Committee to develop retrofit guidelines for the Santa Monica Viaduct.
- 1992-1999 Member of various Caltrans Ad Hoc Seismic Review Committees
- 1991-1999 Member, Caltrans Seismic Research Advisory Committee
- 1994-1995 Member, Caltrans Committee to Review Redesigns of Northridge earthquake collapsed bridges
- 1994-2000 Expert Witness for plaintiff on collapse of the Royal Palm Resort Hotel, Guam
- 1995 Seismic Assessment of Guam Sheraton Hotel
- 1997 Independent Seismic reviewer of Auckland Harbour Bridge.
- 1999-2001 Redesign of Bolu Viaduct#1 after Damage in the 1999 Duzce earthquake, Turkey
- 1998-2003 Seismic Design Checking of the Rion-Antirion Cable-Stayed Bridge, Greece
- 1998-2008Structural Design Advisor to Port of Los Angeles
- 2008 Consultant to Caltrans for Seismic Retrofit of Antioch and Dumbarton Toll Bridges Main Spans
- 2009-2010 Consultant on Seismic Design of Wharves at Port of Lyttleton
  2010 Consultant to Caltrans for Seismic Retrofit of Dumbarton Toll Bridge approach spans.

## Awards and Honours:

- Honorary Fellow of the Royal Society of New Zealand (FRSNZ)
- DSc. (Hon. Causa) Swiss Federal Institute of Technology (ETH), Zurich
- DSc. (Hon. Causa) National University of Cujo, Argentina
- Fellow, American Concrete Institute
- Fellow (and past-president), New Zealand Society for Earthquake Engineering

- Fellow, Institution of Professional Engineers, New Zealand
- More than 30 national and international awards for research and technical papers, including:
- Fulton Gold Medal (Premier Award of the Institution of Professional Engineers, New Zealand [IPENZ]), 1973
- Raymond C. Reese Award of the American Concrete Institute, 1984 (premiere structural research award). Again in 1989.
- Charles S. Whitney Award (Charles Lee Powell Structural Research Laboratories, U.C.S.D.), received at the ACI Spring Convention in Denver, CO,1996
- Award of Excellence, Engineering News Record Magazine, special recognition as one of 25 Newsmakers in the construction industry in 1995 (McGraw-Hill, Inc.). Again in 1998.
- ACI Wason Award for best paper,1998
- ACI Anderson Award for Innovation in seismic design philosophy,1999
- Freyssinet Award of the Institution of Professional Engineers, New Zealand for best technical paper on structural issues in past 3 years (6 times: 1976, 1978, 1984, 1986, 1995, 2001.
- The inaugural "Rose Prize" issued by EUCentre, Italy, 2008
- The FIB Freyssinet Medal (premier international structural concrete award, 2010

