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OBITUARY

NIGEL PRIESTLEY (1943-2014)

Les Megget[1]

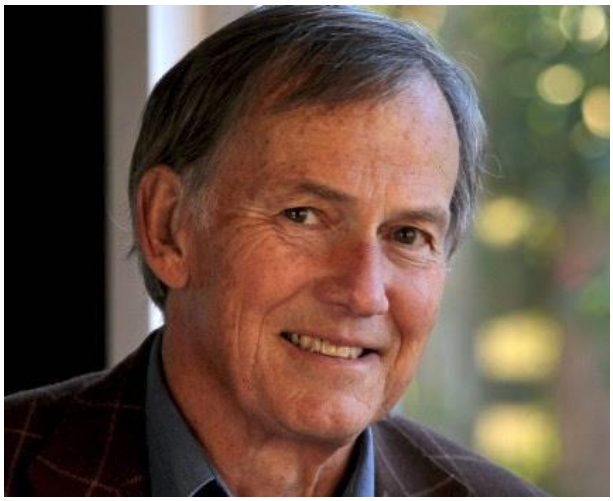
NZSEE Life Member Professor M. J. Nigel Priestley died in his home town of Christchurch, New Zealand on 23 December 2014 after a long battle with cancer.

Nigel was born in Wellington (21 July 1943) and attended the Wellington Technical College before completing his engineering intermediate at Victoria University of Wellington in 1960.

Nigel gained his first degree, a Bachelor of Engineering with first class honours from the University of Canterbury in 1963. He then completed a PhD at Canterbury partially supervised by Prof. Bob Park on the topic of Continuous Prestressed Beams, at the young age of 23. His first position was as head of the Ministry of Works Central Laboratories at Gracefield, Lower Hutt. It was there that the writer first met Nigel and we worked together on the design and testing of large reinforced concrete beam-column joints. One joint had longitudinal prestressing along the beam centreline and through the joint; the forerunner of the 1990s PRESSS (Precast Seismic Structural System) technology, invented by Nigel, which allows buildings to rock during earthquakes and, in larger events, ensure the building returns to its original position. Nigel remained at Central Labs for a decade.

Nigel then moved to the University of Canterbury in 1975 as a Senior Lecturer in Civil Engineering, being promoted to Reader (Associate Professor) in 1978. Much of his research was concrete and masonry related and he authored several papers in the Bulletin on concrete and masonry shear walls, reinforced concrete beam-column joints, columns, rocking foundations and the seismic design of tanks. Much of this work has been incorporated into current NZ Standards and international Codes of Practice. He was President of the Society in 1985/86 prior to leaving for California.

By the mid-1980s Nigel had gained an international reputation in seismic analysis and design and was lured in 1986 to a chair in Structural Engineering in the Department of Applied Mechanics and Engineering Sciences at the University of California, San Diego where he remained for 14 years. Over this period his research covered prestressed multi-storey buildings and prestressed bridges, culminating in the publication of two books "Seismic Design of Reinforced Concrete and Masonry Buildings" (with Prof. Tom Paulay) and "Seismic Design and Retrofit of Bridges" (with Frieder Seible and Michele Calvi). In 2007 his third book "Displacement Based Seismic Design of Structures" (with Calvi and Mervyn Kowalsky) was published. Nigel did extensive work over the last two decades developing the displacement-based design method which today is rapidly replacing the traditional force-based design method extensively used over the last 60 years or so. All three books are state-of-the-art tomes and are extensively used by both practitioners and in university courses around the world. His published technical papers total more than 450.



(Image: Christchurch Press)

In 2000 Nigel became a co-founder and Emeritus Director of the ROSE School in Pavia, Italy. He helped teaching, advising and setting up the course curriculum until 2007.

Nigel was closely involved with the Canterbury Earthquakes Royal Commission leading the investigations into the collapse of the CTV and Pyne Gould Corporation buildings which occurred during the February 22, 2011 earthquake.

Nigel has been honoured on many occasions both in NZ and internationally. He was made an Officer of the New Zealand Order of Merit (ONZM) for services to structural engineering in 2014. He became a Fellow of the NZ Royal Society, a Distinguished Fellow of IPENZ and a Life Member of NZSEE. He has been honoured with 3 honorary doctorates from ETH, Zurich and Cujo.

Nigel supervised 27 PhD students and numerous ME and MS students during his academic career at UoC and San Diego.

I will remember Nigel as a close friend and colleague, a person of brilliant intellect, full of innovative ideas and interested in all things structural. The world of seismic structural design has truly lost a remarkable man. He is survived by his wife Jan, daughters Rebecca, Rachel and Ana and son Sefton.

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