OBITUARIES

MICK PENDER

Professor Michael John Pender BE (Hons) PhD FENZ FNZGS FNZSEE MASCE

Professor of Geotechnical Engineering, University of Auckland 1977-2021

19 June 1943 – 15 December 2021

Professor Michael (Mick) Pender's life was dedicated to achieving strong foundations for structures – buildings and bridges. He taught soil mechanics at Auckland University for over 40 years. Generations of engineers remember him with respect, admiration and affection for his technical knowledge, teaching ability and human qualities. He passed on practical techniques for designing safe and economical foundations which, over the years, spread to every corner of the country. For those keen on soil mechanics Mick was inspirational. Even those inclined to be bored by the topic became interested. His teaching won student awards – and no wonder. He honed his notes every year to keep them up to date and had the gift to explain technical concepts in simple terms. He was generous with his time and was always ready to help and guide students and colleagues regardless of other pressures.

Perhaps his most significant contribution was as a leader in the introduction of limit state design in geotechnical engineering in New Zealand between 1998 and 2005. This represented a major and fundamental change in approach to design. Implementing the change required the highest levels of understanding of the influences of geotechnical engineering on the overall performance and safety of structures, particularly in response to earthquake demands. Through his teaching and interaction with consultants, government and industry, Professor Pender made a major contribution to the development of geotechnical engineering skills in New Zealand, skills that have been at the forefront of the engineering response to the Canterbury and Kaikoura Earthquakes.

The foundation of his life was set as a pupil at St Bede's College in Christchurch. An able student, nippy wing three-quarter and a distance runner, he became Head Day Boy. Mick absorbed the mantra of the school more than most. Be courageous. Everyone matters. Develop faith. Embrace opportunity. Strive to succeed. Boys were encouraged to reach their potential through faith and by their actions. From schooldays until his final days Mick Pender lived these values - providing an example for family, friends, colleagues and acquaintances.

A Bachelor of Engineering with Honours from the University of Canterbury was followed by a PhD there specialising in soil mechanics. He then worked at the Ministry of Works Central Laboratories in Lower Hutt as Head of the Geotechnical Laboratory, providing services for designers of the Wellington Urban Motorway, Terrace Tunnel and the Pukaki High Dam and interpreting the data obtained.

In 1972 Mick was awarded a University Grants Committee Scholarship to take up a post-doctoral fellowship to Cambridge University where a world-renowned geotechnical team welcomed him and his fresh and original ideas. He returned to Central Laboratories working alongside the late Professor Nigel Priestley, Head of the Structures Laboratory. Mick joined the University of Auckland in 1977, beginning a distinguished academic career and was named Professor of Geotechnical Engineering in 1985, following in the footsteps of the renowned Professor Peter W.Taylor.

Mick's reputation grew as a teacher, researcher and administrator. He was Head of the Civil Engineering Department from 1994 to 1998. With each year he became increasingly respected throughout New Zealand and around the world for his knowledge and understanding of soils and foundations, especially under earthquake actions. He was a sought-after keynote speaker and advisor and was author of many internationally authoritative papers on the topic, reflecting his practical approach targeted at practicing engineers.

Sabbaticals at the University of British Columbia, at the University of California at Berkeley on a Fulbright Travel Scholarship, and time spent in Japan kept him in tune with international trends – and provided an opportunity to teach a wider audience. On three separate occasions he taught a geotechnical engineering course at the European School for Advanced Studies in the Reduction of Seismic Risk (ROSE School), University of Pavia, Italy, set up as a post-graduate school for top students from around the world.

Many hours went into turning his research into a textbook, Design of Earthquake Resistant Foundations. Sadly, this was not completed due to his ill health, but colleagues at the University of Auckland will complete what will be a sought-after reference for students and practitioners.

Like many of his engineering colleagues Mick gave much back to the profession through voluntary contributions to professional organisations and Code committees. He was a Fellow of the Institution of Professional Engineers New Zealand (IPENZ), of the New Zealand Society for Earthquake Engineering (NZSEE) and the New Zealand Geotechnical Society (NZGS), being President of the last two organisations and one of a very few people who were made a Life Member of both.

Professor Pender's contributions and reputation were borne of many hours of work beyond the call of duty and of a passion for his subject. He wrote over 55 refereed papers for journals and an additional 87 refereed papers for conferences. He held two patents related to soil mechanics technology. Since 1977, as an independent expert consultant he conducted over 60 peer review assignments of project work by engineering consultants – testimony to the regard in which he was held across the industry.

Further testimony to his outstanding contributions can be seen in the awards he received from NZ and international organisations. Professor Pender was elected a Life Member of

NZSEE, NZGS and the American Society of Civil Engineers. He was a Distinguished Fellow of Engineering NZ and was elected an International Honorary Member of the Japanese Geotechnical Society. Other awards include the IPENZ Supreme Technical Award for Engineering Achievers, the IPENZ Fulton Downer Gold Medal (twice), the IPENZ Turner Award for Professional Commitment, several awards for best paper at technical conferences, and two awards for teaching excellence from the University of Auckland.

Outside of his professional work, Mick enjoyed family life, travel, music and art. He had a passion for furniture-making and acquired an impressive array of tools for this purpose in his basement workshop. Everything was done to the highest standards with meticulous care and the finished products were of the highest quality. He was a parish council member at St Michael's in Remuera for many years and had a lifelong interest in theological and faith issues – which he was always happy to discuss.

He leaves his wife Janne and children Kate, Jeremy and David.

Michael Pender provided a great example in a life of service to the engineering profession and the community. As someone whose company always lifted others' spirits he will be sadly missed in many circles.

LIST OF AWARDS IN DATE ORDER

1966 BE (Civil) (Hons), University of Canterbury

1971 PhD in Civil Engineering, University of Canterbury
Thesis: *The Stress-Deformation Behaviour of a Compacted Clay*

1978 NZIE Rabone Award for Best Paper

1985 IPENZ Fulton Downer Gold for Best Paper

1989 IPENZ Structural Award for Best Paper

1989 NZSEE Fellowship Award

1994 IPENZ Structural Award for Best Paper.jpg

1995 International Society for Rock Mechanics, Recognition of Vice President 1991-95

1995 IPENZ Fellowship Award

1996 NZGS Certificate commemorating the 9th NZ Geomechanics Lecture

1998 IPENZ Rabone Award for Best Paper

1999 NZGS Award of Life Membership

2000 12th World Conference on Earthquake Engineering Certificate of appreciation

2004 American Society of Civil Engineers Elected as Member

2005 University of Auckland Distinguished Teaching Award (Medal)

2005 IPENZ Supreme Technical Award for Engineering Achievers in Building Construction and Amenities

2006 IPENZ Turner Award for Professional Commitment

2008 NZGS Symposium Award for Best Technical Paper

2011 Fulton Downer Gold Medal – The President's Award for public service in response phase of the 2010 and 2011 Canterbury Earthquakes.

2012 Japanese Geotechnical Society Award of Honorary Membership

2013 American Society of Civil Engineers Award of Life Membership

2013 NZ Society for Earthquake Engineering Award of Life Membership

2015 NZ Society for Earthquake Engineering Award for Best Research Paper

2017 Engineering NZ (formerly IPENZ) Fellowship Award

2019 Engineering NZ (formerly IPENZ) Distinguished Fellow Award

BRUCE HENRY WILLIAMS

2 November 1940 – 22 March 2022

Bruce was born in Greymouth and the family moved to Christchurch before he started school.

From Linwood High School he went to Canterbury University and studied engineering. His first employment was with Christchurch City Council where he worked for around ten years. His major project while there was the Litchfield Street Carpark which remained after the Christchurch earthquakes.

Bruce studied transport engineering in Australia before moving to Palmerston North with his wife Inga and daughter Sally. Very shortly after this he relocated to Hastings to work for the City Council roading and engineering department.

Around 1984 he joined Len Hoogerbrug and Paris Magdalinos, who together had a successful architectural practice, to form Hoogerbrug Magdalinos and Williams, creating a multi discipline firm. When the partnership dissolved about 1989 Bruce became a sole practitioner with both of his former partners now as clients.

Bruce became a "go to" for many architects, designers, contractors and private clients as well as the transport fabricators and, if he had a failing, it was not being able to say "no" to people. He had the ability to look at a project and identify ways in which it could be enhanced and simplified. In later years he was assisted by Inga and visits to the office were always a bit of a social occasion as well as being about a project.

Bruce and Inga had a holiday home in Taupo for many years and he loved spending time there with his family and a good book. He read widely and this was a major form of relaxation for him. His other love was engineering and this was well demonstrated by him working for as long as his health would allow.

Bruce's calculations were well-known and the comment was made at the service for Bruce that, should you take them to a pharmacist, you would come away with medications.

We have lost a talented and dedicated engineer, but more so, a gentleman and friend to many.

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