

In memory of the late Professor Nicholas Snowden Trahair

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On May 19, 2021 one of the world's foremost structural engineers passed away, our Master and Friend, Professor Nicholas Snowden Trahair. Nick, as he was known to his friends and colleagues, was born on April 29, 1934 in Brisbane, Australia. He graduated with a Bachelor of Science in 1954, a Bachelor of Engineering with First Class Honours in 1956, a Master of Engineering Science in 1959. His Doctor of Philosophy degree in 1968 and Doctor of Engineering degree in 1994 were obtained for his work on flexural-torsional buckling of steel structures. All of his honours and degrees were obtained from the University Sydney, New South Wales, Australia. Prior to joining the academic staff at the University of Sydney in 1960, he was a Cadet engineer at the Department of Works, Canberra, Australia, 1953-1955, and then engineer grades 1,2,3 Australia, 1958-1960. At the University of Sydney, he held successive faculty positions from Lecturer in Civil Engineering 1960-1965, Senior Lecturer 1966-1970, Associate Professor 1971-1977, Challis Professor 1978-1998 and Emeritus Professor since 1999. He acted as Head of Department of Civil Engineering, Director of the Postgraduate Civil Engineering Foundation and was the Founding Chairman of the Centre for Advanced Structural Engineering. Nick's activities outside the University included being a member of various committees such as the executive committee of the Australian Institute Steel Construction since 1989, standards committee and co-chairman of Standards Australia, 1964-1995.

Prof. N.S. Trahair was a Fellow of the Institute Engineers Australia (honorary, receiving the Warren Memorial prize in 1975 and the RW Chapman medal in 1977, 1981, 1984, 1987) and a Member of the American Society of Civil Engineers.

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Nick held visiting appointments at many universities worldwide, including Washington University, University of Sheffield, Japanese Society for the Promotion of Science, University of Alberta and Imperial College of Science and Technology, as well as delivering lectures in the USA, England, Germany, Belgium, Switzerland, France, New Zealand, Scotland, Canada, Japan, Thailand, Singapore, India, South Africa and Hong Kong. Professor Trahair's contributions to research, design and teaching in steel structures were enormous. He was a member of the Steel Structures Committee of Standards Australia which developed the steel design codes AS-CA1 1968, AS 1250 1972, 1975, 1981, and was a major contributor to and co-chairman of the committee which developed the Limit States Steel Structures Standard AS 4100 1990, being regarded internationally as one of the world's leading steel design standards. Achievements include world renown textbooks: *The Behavior and Design of Steel Structures*, 1977, review, 1988, 91, 98, 2001 (Building Science award 1978) and *Flexural-Torsional Buckling of Structures*, 1993 (award 1994). The former providing advice on the steel design codes of Australia, USA, UK, and Europe, as well as the LIMSTEEL computer software design package which is almost universally used throughout Australia and New Zealand for the routine design of steel structures. Nick's research into the lateral-torsional buckling of steel structures gained him international standing in structural stability, with his contributions in this area being considered by many as outstanding. His publications in the discipline, both in leading international journals and symposia, are in the hundreds. This work earned Nick numerous awards, including the international most prestigious ones of the American Society of Civil Engineers Shortridge Hardesty Award in 1998 and the Lynn S Beedle Award of the Structural Stability Research Council, established in honor of the late Lynn S. Beedle in 2011.

Since his 'retirement' in 1998, Nick has continued on with his research and written more than 50 papers, attesting to his passion for his ongoing quest to garner a better understanding of the behaviour of structural steel members and frames. This quest continued right up until a few days before his death.

Those who know Nick would all attest, besides his outstanding achievements in structural engineering, his humility, friendship and mentoring of doctoral and post-doctoral fellow students. Those with whom he worked, including undersigning of this notice, owe him much. Professor Nicholas Snowden Trahair will be remembered by future generations of civil engineers as one of the leading steelwork researchers and designers of structures requiring advanced stability analysis.

Rest, Dear Nick, in peace. We reserve a special place for You in our hearts.

References

<https://shellbuckling.com/cv/trahair.pdf> - Tribute by Profs. Mark A. Bradford and Gregory J. Hancock to Prof. Nick Trahair on his retirement in 1998.