

## JOHN ROBERT BOOKER, AO, B.Sc., Ph.D., D.Eng., FIEAust., FAA

John Robert Booker was widely regarded as one of the finest researchers of his generation working in the field of theoretical geomechanics. It was his supreme skill in devising rigorous theoretical solutions to many important but difficult practical problems that distinguished his work, and also for many years underpinned the research of the geotechnical group at the University of Sydney, Australia. His solutions to these problems were both elegant and accessible; they are used widely in engineering practice.

Throughout his career, John produced a large and important body of research published in over 250 technical papers. He authored and co-authored many seminal papers in the fields of soil mechanics, foundation engineering and environmental geomechanics. His major interests included development and application of analytical and computer solutions to bearing capacity problems, soil–structure interaction, consolidation, creep, thermomechanical behaviour of soil and rock, and contaminant transport in soil and fractured rock. He was a co-author of the influential book on “Clayey Barrier Systems for Waste Disposal Facilities”. He was awarded a higher doctorate (D.Eng.) in 1983 for his “Selected Papers on Analytic Geomechanics”.

The excellence of John’s work was recognized in a variety of important ways, both nationally and internationally. He received many prestigious awards and distinctions, including the Medal for Distinguished Contributions to Geomechanics, awarded by the International Association of Computer Methods and Advances in Geomechanics in 1994, and an invitation to present the E. H. Davis Memorial Lecture to the Australian Geomechanics Society in 1995. In recognition of his outstanding research in geomechanics, he was granted a most exclusive Australian Research Council Special Investigator Award in 1995. In the same year he was also elected as a Fellow of the Australian Academy of Science—another very rare achievement for an engineering academic. In 1997 John was appointed an Officer of the Order of Australia for his lifelong services to geomechanics and education, a particular distinction that was unexpected by this private man of genuine modesty. While regarded as one of the pre-eminent academic researchers in civil engineering, John’s advice on many practical engineering problems was often sought by the engineering profession.

John Booker was born in Sydney, but spent many of his formative years in Wollongong where he received the major part of his primary and secondary education. He arrived at the University of Sydney in 1960 armed with a cadetship from the N.S.W. Department of Main Roads to undertake studies in civil engineering, but instead completed an honours degree in science, majoring in mathematics. He subsequently undertook Ph.D. studies in civil engineering at the University of Sydney under the supervision of the late Professor Ted Davis.

After his Ph.D., John moved quickly through the academic ranks and was appointed as a Reader, and then to a personal chair in engineering mechanics at the University of Sydney in 1985. As well as appointments at Sydney, John was also a Senior Fulbright Scholar at the University of California at Berkeley, and held Visiting Research Fellowships at Kings College

London, Cambridge University and the University of Western Ontario. From 1989 to 1994 he served as Head of the School of Civil and Mining Engineering at the University of Sydney, and from 1990 he was Pro-Dean of the Faculty of Engineering.

All who came into close contact with him acknowledged John as a wonderful friend and colleague. He always supported and encouraged his students and colleagues not only in their professional careers but also in their personal lives. He provided the model for mentoring and for caring. John Booker's legacy to engineering and academia is vast, and extends well beyond his published works and scientific achievements. The large number of John's former students who are now in academia and high level positions, both in Australia and abroad, is testament to his legacy. His inspiration extended well beyond those with whom he collaborated directly.

John was a founding leader and Vice President of the International Association for Computer Methods and Advances in Geomechanics. His support and participation have been vital for the international status and success of this association. John supported and contributed consistently to the *International Journal for Numerical and Analytical Methods in Geomechanics* from its very inception, about two decades ago. He was a co-editor of the journal, and with his colleagues was a regular contributor of papers, all of outstanding quality. He co-edited a series of special issues of the journal on the important area of geoenvironmental engineering. The success and eminence of this journal owe much to John Booker's contributions, participation and unflinching support. This memorial issue, containing papers by a number of his former students and colleagues is a fitting tribute to the life, work and contributions of John Robert Booker.

John Booker was born in Sydney on the 24th of July, 1942 and he died peacefully in a Sydney hospital on the 13th of January, 1998, after a long and courageously fought battle against cancer. He was a warm, friendly, caring man who touched many lives and whose influence on them was almost always profound.

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