**CITATION:  GEOFFREY EUSTACE BLIGHT**

Geoffrey Blight was born in the then Northern Transvaal in 1934. He obtained his BSc Degree in Civil Engineering from Wits in 1955 and worked for a short period in the civil engineering industry.  He completed a Masters degree at Wits in 1958, and went on to complete **five doctoral** degrees in an academic career that has spanned more than 40 years.

Notwithstanding the diversity of his research activities, his most significant contributions have been in the fields of soil mechanics and geotechnical engineering. His early work on unsaturated soils still stands as a benchmark for researchers undertaking laboratory testing of unsaturated soils, and the rigour of his early experiments provides data that is still being used by new generations of numerical modellers. Rather than confining himself to a narrow range of applications for the theory he had mastered, Blight sought out unusual, and sometimes surprising applications for implementing fundamental soil mechanics principles. These included the design of tailings storage facilities, the strength of underground backfill, the loading imposed on silos by stored material such as grain and canola, and the behaviour of municipal solid waste when placed and compacted in landfills. Furthermore, his work on the loads imposed on silos by granular fill materials stands as one of the most significant recent advances in our understanding of the design and behaviour of these structures. This work has made him the international adviser of choice in investigations of silo failures.

This research in no way diminishes his contribution to the other areas of his work, such as approaches to structural design and materials engineering. His early work in the properties of asphalt, and later, his work on the structural stability of concrete deteriorated by alkali silica reaction, represent unique contributions to these fields of study internationally.

Blight has published around 330 reviewed papers on geotechnical and materials engineering. He is the co-author and Editor of the book *Mechanics of Residual Soils* (1997), author of the book *Assessing Loads on Silos and other Bulk Storage Structures* (2005) and has recently completed another book: *Geotechnical Engineering for Mine Waste Management*” (to be published in 2009).  Not surprisingly, he was awarded an A rating by the then FRD and he maintained this rating until his retirement in 2002. He was one of the three lead authors who developed the *Minimum Requirements for Waste Disposal by Landfill* and he authored the Chamber of Mines Guidelines, *The Design Operation and Closure of Metalliferous and Coal Residue Deposits*. He is presently an Honorary Professorial Research Fellow in the School of Civil and Environmental Engineering at Wits and he continues to undertake research and supervision of postgraduate students.

Professor Blight has also excelled as a teacher and particularly as a supervisor and mentor to senior students and emerging academics. During his time as the Professor of Soil Mechanics and Construction Materials, he made enormous contributions to developing the undergraduate teaching laboratories in these areas and much of these facilities and techniques are still used in the undergraduate teaching today. Students remember him as a lucid and challenging teacher who was able to make complex subject material more accessible and with just the right dose of empathy for the needs of his students.

He has also supervised numerous research-based masters and doctoral students. In this area of his work, he has had a particular and long-standing focus in attracting and developing black and women postgraduate students. He is recognised as being generous in the intellectual and financial support that the gives to his students while being very demanding and uncompromising in the quality of the work that he expects from his them.

During his time as an academic at Wits, Blight has served as Dean, Deputy Dean and Assistant Dean (Postgraduate Affairs) in the Faculty of Engineering. He served two terms as the Head of Civil Engineering and was active on a number of university committees over the years. Within the Profession he has served on a number of national and international committees. Most notable of these are:

* Member, International Society for Soil Mechanics and Foundation Engineering’s Technical Committees on Tailings Dams, Unsaturated Soils, Residual Soils (former Chairman) and Erosion of Soils.
* Member of International Solid Waste Association (ISWA) Working Group on Sanitary Landfills. Co-author of the Working Group’s policy paper on Application of Graded Standards to Landfilling in Developing Countries. Lecturer on the Working Group’s annual courses on Landfilling in Developing Countries, 1990-2000.
* Member, International Commission on Large Dams’ Committee and on Tailings Dams, via SA National Committee, 1985-2000.

Among the numerous local and international awards and acknowledgements that Blight has received are: Award for Distinguished Research by the South African Institution of Civil Engineers (1989); Telford Premium Award by the British Institution of Civil Engineers for his paper on silo loading (1991); elected Fellow of the Royal Society of South Africa (1991); elected Honorary Fellow of the South African Institution of Civil Engineering (1997); Elected Life Member of American Society of Civil Engineers (2000); President’s Award for Exceptional Service to the Waste Management Profession by the Institute of Waste Management of Southern Africa (2002); commended by the Italian National Group for Prevention of Hydrogeologic Hazards for research on flow failures of tailings dams, with special reference to the Stava tailings dam failure in 1985 that killed 268 victims (2003).

Furthermore, Blight is the only South African to have received the following recognition: Awarded J James Croes Gold Medal for innovation in research by the American Society of Civil Engineers (1975); chosen as “Cross Canada Lecturer” by the Canadian Geotechnical Society (1996); chosen as “Rankine Lecturer” by the British Geotechnical Society (1997 ); awarded the South African Geotechnical Medal by the South African Institution of Civil Engineering (1997); chosen as “GRC Lecturer” by Nanyang University, Singapore (1997); chosen as “Lawrence Lecturer” by the Solid Waste Association of North America (1999).

In light of Geoffrey Blight’s enormous and continuing contribution to civil engineering at Wits and across the globe, it is apposite that the University of the Witwatersrand bestows upon him its highest honour, the Honorary Doctorate of Engineering degree.