

CURRICULUM VITAE: M DE WET

Personal:

Full name: Marius de Wet
Identity number.: 5301045021083
Date of birth: 4 January 1953
Place of birth: Potchefstroom
Marital status: Married

Academic qualifications:

B.Sc. Eng. University of Pretoria (1974)

B.Sc. Eng. (Hons.) University of Pretoria (1975)

M.Eng. University of Pretoria (1981)

M.Eng.-thesis: *The Application of Computer Graphics in the Teaching of Structural Engineering.*

Ph.D. (Ing.) University of Stellenbosch (1995)

Ph.D.-thesis: *The Electro-Mechanical Stabilization of Unsaturated Dispersive Clay and Electro-Osmotic Control of Infiltration.*

Professional registration:

ECSA Registered as Professional Engineer, ECSA (1989)

Membership of professional intitutes:

SAISI Registered as Member, SAICE (1990)

Practical experience:

1975: Temporary, part-time, junior lecturer at the University of Pretoria
1976 - 1978: Design engineer (bridge structures), Van Wyk and Louw Inc. (presently Aurecon), consulting engineers, Pretoria
1979 - present: Senior lecturer in geotechnical engineering at the University of Stellenbosch,

Publications:

Conference proceedings

De Wet M (1995). *Electro-chemical stabilization of dispersive clay*. Proceedings of the Eleventh African Regional Conference on Soil Mechanics and Foundation Engineering, ISSMFE. Cairo, Egypt, Vol. 2, pp. 248-294. (SAICE Geotechnical Division: JE Jennings prize for the best South African geotechnical publication, 1995)

De Wet M (1995). *Electro-kinetics, infiltration and unsaturated flow*. Proceedings of the First International Conference on Unsaturated Soils. Paris, France, pp. 361-366.

Dithinde M, Phoon KK, De Wet M, Retief JV (2006). *Analysis of uncertainties in analytical pile design methods in South Africa. New Generation Design Codes for Geotechnical Engineering Practice*. National Taiwan University of Science and Technology, Taipei, Taiwan, World Scientific.

Journals

De Wet M (1998). 'n Eenvoudige teoretiese model vir die versnelling van infiltrasie deur onversadigde klei met behulp van elektro-osmose. Journal, SAICE, Vol. 40, No. 3, pp. 17-20.

De Wet M and Hugo F (1988). *Evaluating the design of an earth dam by finite element analysis*. International Journal for Numerical and Analytical Methods in Geomechanics, Vol. 12, pp. 573-578.

M. Dithinde, K. K. Phoon, M. De Wet, and J. V. Retief (2011). *Characterization of Model Uncertainty in the Static Pile Design Formula*. Journal, ASCE, Journal for Geotechnical and Geoenvironmental Engineering, Vol. 137, No. 1, pp.70-85.

Dithinde. M, De Wet. M (2012). *Adhesion factors for pile foundations in residual soils of Southern Africa*. Asian Journal of Current Engineering and Maths1: No. 5, pp. 227 - 231.

Moderation:

Moderation of papers for national and international journals.

Internal and external examination of Masters theses and PhD dissertations for various SA universities.

External examination for undergraduate examinations for University of Cape Town.

Study Guidance to graduate students:

Van Zyl JP (1987). The application of statistical methods in the description of discontinuities in rock masses. M.Eng.-thesis, University of Stellenbosch.

Stevens ACA (1987). Problem soils and soil improvement techniques – a literature survey. M.Eng.-thesis, University of Stellenbosch.

Truter L (1988). Investigation into bearing capacity of foundations on steep slopes. M.Eng.-thesis, University of Stellenbosch.

Du Toit L (1991). Dispersive clay; factors that influence its behaviour and its use in earth-fill dams. M.Eng.-thesis, University of Stellenbosch.

Glatz T (2004). Forced infiltration of foundations of pavements by means of electro-osmosis. M.Eng.-thesis, University of Stellenbosch.

Dithinde M (2007). Characterisation of model uncertainty for reliability-based design of pile foundations. Ph.D.-dissertation, University of Stellenbosch.

Laubscher E (2009). The use of dynamic cone penetrometer in characterizing the nature of sandy soil for shallow foundation design. M.Eng thesis, University of Stellenbosch.

Gildenhuis N (2010). The occurrence and extent of collapse settlement in residual granite in the Stellenbosch area. MSc thesis, University of Stellenbosch.

Hagen DJ (2013). Investigation techniques applied to the foundation leakage at Osplaas Dam. M.Eng thesis, University of Stellenbosch.

Muteb CK (2013). Geotechnical investigation of properties of collapsible soils. M.Eng thesis, University of Stellenbosch.

Projects:

Investigation into the safety of a proposed design of an earth-fill dam on the Lomati River, Barberton. For: Burger, Pretorius and Partners, consulting engineers, 1984-1986.

Monitoring of the long-term integrity of the foundations of the Koeberg nuclear power station. For: ESCOM, 1985 – 2008.

Investigation into the possibility of penetration of an HDPE membrane by coarse aggregate under heavy wheel load. For: Entech, consulting engineers, 1999.

Evaluation of the geotechnical aspects leading to the failure of a 50 km canal in Namibia. For: NAMWATER, 2000-2001.

Seismic investigation of the proposed pebble-bed modular reactor at Koeberg. For: PBMR, 2001.

Site investigation and foundation design for various buildings on the Stellenbosch University campus, 2003, 2005, 2012.