CURRICULUM VITAE

Eng. Alphonce Ayado Owayo P.O BOX 36858-00200 Nairobi +254725562108/+886901039816 owayoachiando@gmail.com

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Professional Engineer, Engineers Board of Kenya (EBK), A3234 Corporate member, Institute of Engineers, (IEK), M4418

EDUCATION

Ongoing- Pursuing Doctor of Philosophy (PhD.) in civil & construction Engineering (Geotechnical Engineering option), National Taiwan University of Science and Technology (NTUST) Taipei, Taiwan.

PhD research area: Hybrid FEM-DEM (FDEM) Framework to study Excavation Induced Micro- cracking behavior in rock mass.

2012-2014 Master of Science (**MSc**.) in Construction Engineering (Geotechnical and Structural Engineering option), National Taiwan University of Science and Technology (NTUST) Taipei, Taiwan

M.Sc. Thesis Title: Investigation of soil deformation characteristics of in situ soil using tube samples.

2006-2011 Bachelor of Science (**B.Sc. Hons)** in civil engineering, University of Nairobi, Kenya.

B.Sc. Project Title: Determination of the strength of Red Coffee Soil using Dynamic Cone Penetrometer.

EMPLOYMENT RECORDS

July 2017-Todate: Practicing professional engineer.

May 2018-Todate: Lecturer Department of Civil & Construction Engineering at the Technical University of Kenya. Part time Lecturer Machakos University

Sept 2015-April 2018: Tutorial Fellow Department of Civil & Construction Engineering at the Technical University of Kenya. Part time Lecturer Machakos University.

Jan 2015-Sept 2015: Project manager/officer at Labor Link Limited Mombasa. A project by the United Nations working in the Federal republic of Somali.

2012- July 2007: Offering civil engineering services as a graduate civil engineer.

2011-2012: Site engineer, Motalent Construction Limited in Mombasa (Working in structural rehabilitation inside Bamburi cement Plant)

PROFESSIONAL EXPERIENCE

2018-Todate: Research Assistant at Underground Excavation Laboratory, at The Department of Construction engineering, NTUST Taiwan.

Jan 2018: Consulted for the development of 3D model of Mara Bridge across Mara River in the Tanzania- A project by the government of the Republic of Tanzania.

Aug 2017-Todate: Practicing professional engineer.

2015: Project officer/Site engineer/Project manager at Labour Link Limited Mombasa (A Project by the United Nation in Somali, Mogadishu)

2014: 2 Months as a supervisor in standard gauge railway, SGR based in Emali

2013-2014: Research Assistant at Deep Excavations Laboratory at The Department of Construction engineering, NTUST Taiwan.

2012-2017: Offering civil engineering services as a graduate civil engineer.

2012: Site engineer, Motalent Construction Limited in Mombasa

2010: Comprehensive Study of Construction techniques in Thika Super highway.

2011: Kenmas Contractors and Suppliers in the Rehabilitation and Expansion of the Kimilili Water Supply System Lot '2a'

2009: Attachment on 'Construction of Siaya Bondo Rang'ala Road'project undertaken by GoK (Government of Kenya).

2008Attachment on 'Construction of Owimbi Luanda Kotieno Road' project undertaken by GoK (Government of Kenya).

LECTURER(S)

Delivered a public lecture on the use of Prefabricated Drain Technology in Soft Soil improvement at the University of San Jose Recoletos in Cebu, City in the Republic of the Phillipines on 18/1/2019.

ATTENDED WORKSHOPS/SEMINARS/CONFERENCES/LECTURES

Nov 2019 (18th)- Attended, a lecture on 3D concrete Printing: Future of emerging industry trends, challenges, economic potentials, and opportunities by Dr. Mohammed Sonebi from Queens University, Belfast, UK, at Taiwan Tech.

Nov 2019 (5th-7th)- Attended, the Big 5 Construct Kenya 2019 held at KICC.

Oct 2019- Attended Asian Regional Conference 16th ARC in Taipei

February- April 2019- Attended webinar on design of steel structures according to Design Eurocode 3 facilitated by the Doshi group.

Nov 2018 (19th -22nd)- Attended and presented a paper on the Engineering Solutions Partnerships Conventions. Engineering Solutions Summit of the Big Four Agenda, in Naivasha Nakuru County. The event organized by Engineers Board of Kenya (EBK) **Nov 2018 (18th)-** Attended a lecture on; Advanced Experiments on Clay's Anisotropy at Taiwan Tech by Prof.

Nishimura from University of Hokkaido Japan.

March- April 2018- Attended webinar on design of steel structures according to BS 5950 facilitated by the Doshi group.

Nov 2017 (22nd)-Attended Engineers Board of Kenya Training on Continuous Professional Development (CPD).

Sept 2016 (20th-23rd) -Attended training for Midas Software usage at Hilton Hotel Nairobi.

2013- Attended Rankine's Lecture at Taiwan Tech (NTUST).

LEADERSHIP POSITIONS

Sept 2019-Todate- President of the International Student's Association of Civil engineering (ISSACE), NTUST

Digital learning collaborator, NTUST 2019

PUBLICATIONS

- [1] A.A. Owayo & C.Y. Ou (2014). Determination of True Residual Stress Within In-situ Sampled Clay. International Journal of Scientific and Engineering Research IJSER, Volume 5 Issue 5 Pages 1036-1039.
- [2] A.A. Owayo & C.Y. Ou (2014). Estimation of Residual Stress in Clay sampled from the Field. Journal of Civil & Environmental Engineering, Volume 4 Issue 4 doi:10.4172/2165-784x.1000149.
- [3] A.A. Owayo & V. O. Ogwenya.(2018). Viability of Waste Foundry Sand Usage as a Replacement of Conventional Sand in Concrete Production. Proceedings of Engineering Solutions Partnerships Conventions. Engineering Solutions Summit of the Big Four Agenda, in Naivasha Nakuru County- Kenya. 22nd Nov. 2018.

OTHER WRITINGS

- [1] A.A. Owayo, (2019). Prediction of the Soil's yield surface coefficients (Manuscript under review).
- [2] A.A. Owayo, D. Kinyua (2015). Geotechnical site investigation report for a proposed seven **7** storey residential apartment in South B Nairobi- Report for a private client.

[2] A.A. Owayo (2017) Structural Design Report for a Four Bedroomed Mansionette in Kiambu County- Report for a private client.

[3] A.A. Owayo, (2018). Geotechnical site investigation report for a proposed 400MW/132kV Konza Power Substation within the Proposed Konza Techno city in Machakos County- A report on behalf of Varde Engineering Company.

VOLUNTARY ACTIVITIES

2007: Missionary Work in Locicar (Turkana), 2008 in Bamba (Kilifi), 2009 Kapsaraman (Baringo), 2010 Kilgoris(Kisii). All in Kenya

2019 Jan- 3 days Volunteer Painting Work at Boljoon National High school at Boljoon Town in the Republic of the Phillipines.

CERTIFICATION

I, Eng. Alphonce Ayado Owayo, the undersigned, certify that to the best of my knowledge and belief, this information correctly describes my qualifications, my experience and me.

Signature Date 25/10/2019

REFEREES

 Dr. George D.O Okwadha Senior Lecturer Department of Civil Engineering, Technical University of Kenya P .O. Box 52428-00200 Nairobi; TEL. +254727450418

CELL: +254727450418 Email: george.okwadha@tukenya.ac.ke

- Prof. Fu-Chen Teng, Assistant Professor, Department of Civil and Construction Engineering, National Taiwan University of Science and Technology, Section 43 Keelung Road 106 Taipei Taiwan, Republic of China TEL: + 886-2-2737-6578 Email: fteng@mail.ntust.edu.tw
- 3. Prof. S. K. Mwea Senior Professor, Department of Civil and Construction Engineering, University of Nairobi, P.O. Box 30197-00100 Nairobi; +254722720435 Email: smwea@uonbi.ac.ke