

## KENYATTA UNIVERSITY WEBSITE SECRETARIAT STAFF PROFILE FORM

**Name:**

Dr. Eng. Muthumbi Waweru, (Acting Dean, School of Engineering & Technology)



**Title/Qualifications:**

Ph.D (Environmental Engineering),  
Msc. Environmental Sanitation,  
Bsc. Mechanical Engineering

**Department/Unit/Section:** Water & Environmental Engineering

**Position:** Lecturer

**Area of Specialization:**

Environmental Engineering,  
Sanitary Microbiology,  
Engineering Design

**Research Interests:**

Integrated Solid waste treatment  
Waste water treatment & Re-use  
Drinking Water & Waste Water Quality  
Climate Change, Energy Demand & Food Security in Developing Countries

**Professional affiliation:**

Registered Environmental Impact Assessment Lead Expert  
Registered Graduate Engineer

**Grants and Consultancies:**

Kshs. 3,500,000/= : Consultancy work in Karachuonyo for Nyaoga Water project (Completed in 2007)

**Publications (Please include the ISBN/ISSN Reference No.):**

- ◆ **Muthumbi** W., Herrygers V., Van Langenhove H. and W. Verstraete W. (2000). Process engineering of biological waste gas purification: In (eds) Rehm H., Reed G., Puhler A. and Stadler P. Environmental processes III (Vol IIc of the series "Biotechnology, 2<sup>nd</sup> edition). WILEY – VCH. Verlag GmbH Weiheim"
- ◆ **Muthumbi** W., Boon N., Boterdaele R., De Vreese I., Top E.M., and Verstraete W.(2001). Microbial sulfate reduction with acetate: process performance and composition of the bacterial communities in the reactor at different salinity levels. **Applied and Microbial Biotechnology**, **55: 787-793**.
- **Muthumbi**, W., De Boever, P., D'haese, I., D'hooge, W. Top, E.M., Pieters, J.G., Comhaire, F. and Verstraete, W. (2002). Assessment of the estrogenic activity of flue gases from burning processes by means of the yeast based human estrogen receptor (hER) bioassay. **Environmental Technology**, **23: 287-291**

- **Muthumbi W.**, De Boever P., Pieters J.G., Siciliano S., D'Hooge W., Verstraete W. (2003). Polycyclic aromatic hydrocarbons (PAHs) and estrogenic compounds in experimental flue gas streams. **Journal of Environmental Quality**, (32: 417-422)
- W. Verstraete, F. Morgan-Sagastume, S. Aiyuk, **M. Waweru**, K. Rabay and G. Lissens. (2004). Anaerobic Digestion as a core technology in sustainable management of organic matter. **Anaerobic Digestion 2004. 10<sup>th</sup> World Congress – Montreal, Canada. Proceedings, Volume 1**

**Recognitions:**

**Conference/Workshop Presentations:**

- Attended an IDRC/CCAA Capacity Building Workshop On Gender Mainstreaming in Climate Change & Adaptation, Kampala Uganda (January, 2009)
- Attended a Carbon Finance training Workshop in Dar-Es-Salaam, Tanzania in March 26<sup>th</sup> - 27<sup>th</sup>, 2008. Focus was on Clean Development Mechanism and demonstration of additionality with carbon finance.
- Participated in a field trip to India on wealth creation from plastic waste in Bangalore and community centered solid waste management practices in Chennai (April 3<sup>rd</sup> to April 18<sup>th</sup> 2004)
- Muthumbi W., De Boever P., Pieters J.G., Van Langenhove H., Comhaire F. and Verstraete W., (2001). Screening for the presence of estrogenic compounds and polycyclic aromatic hydrocarbons in experimental flue gas matrices. 7<sup>th</sup> Ph.D Symposium of the Faculty of agriculture and applied biological sciences, Ghent University, Belgium. 10<sup>th</sup> October 2001.
- Muthumbi W., Boon N., Boterdaele R., De Vreese I., Top EM., and Versraete W. Microbial sulfate reduction with acetate: process performance and composition of the dominant bacterial communities in the reactor at different salinity levels. 9<sup>th</sup> World Congress on Anaerobic Digestion, Antwerpen - Belgium. September 2-6, 2001
- Muthumbi W. and Verstraete W., (1999). Biological desulfurization of flue gas. Workshop entitled "VOC analysis and degradation"- Ghent University, 15<sup>th</sup> -16<sup>th</sup> December 1999.

**NB: Please Submit this Information in Soft Copy**