

## **CURRICULUM VITAE OF SAMPSON ODURO-KWARTENG (PhD, FULL PROFESSOR)**

**Specialisation** Water Supply and Environmental Sanitation Engineering,  
**EMAIL** [sokwarteng@yahoo.com](mailto:sokwarteng@yahoo.com)

### **EDUCATION**

2006-to-2011 PhD from IHE Water Education, Delft, The Netherlands,  
1999-2001 M.Sc. Water Supply and Environmental Sanitation,  
Kwame Nkrumah University of Science and Technology, Kumasi  
1991-1996 B.Sc. (Hons) Civil Engineering, Kwame Nkrumah University of Science and Techn  
Kumasi)

### **MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS/NETWORKS:**

- Member, Ghana Institution of Engineering (MGhIE), 2000 – present.
- Member, African Membrane Society, 2019 to present,
- Member, International Solid Waste Association (MISWA), 2007 – present.

### **ACADEMIC AND PROJECT MANAGEMENT EXPERIENCE**

2019 to date **Head**, Departmental of Civil Engineering, KNUST,  
2019 to date **Centre Director**, Regional Water and Environmental Sanitation Centre  
(RWESCK), under the African Centre of Excellence Project,  
2014 to 2019 **Deputy Centre Director**, Regional Water and Environmental Sanitation  
Centre (RWESCK), under the African Centre of Excellence Project,  
2016 to 2019 **Head**, Environmental Quality Engineering Unit, Departmental of Civil  
Engineering

### **EMPLOYMENT RECORD**

2002 to date: Kwame Nkrumah University of Science and Technology, Kumasi Department  
of Civil Engineering, KNUST, Ghana  
2004 to Date: Water and Sanitation Engineer on projects for FAS Consult Ltd, Consulting  
Engineers and Architects, Accra (Part-time)  
2011 to 2016 Water Consultant on projects for Nhance Development Partners,  
March 1998 - Site Engineer, Biwater International LTD  
1999 Involved in the construction of Obuasi Water Supply Scheme, , Accra,  
Ghana,  
1996- Feb 1998: Site Engineer, Construction of: (a) Ghana L.P.G. Cylinder Manufacturing  
Plant Project, and (b) Tema Oil Refinery Revamping Project. Worked with  
AFKO Engineering and Construction LTD., TEMA, Ghana;

### **WORK EXPERIENCE**

2002 – **Kwame Nkrumah University of Science and Technology**,  
date

- Teaching and research on water supply, water quality, onsite sanitation and waste management,
- Supervising students' research projects,
- Supervising field assessment of boreholes water supply and sanitation facilities, water quality assessment and solid waste management,

- 2015 to 2016 **TABCON Consulting firm**  
 Design and Construction Supervision of Community Water Supply Project in Brong Ahafo Region for CWSA,
- Feasibility of five water supply systems, Hydraulic design of distribution system and modeling using EPANET software,
  - Review engineering design of water supply systems,
- 2004 to 2017 **FAS Consult Ltd, Consulting Engineers and Architects, Accra**
- Prepare resettlement action plan for three markets construction,
  - Conduct environmental and social impact assessment three markets construction
  - Design sanitary landfill cells, drainage and embankments for municipal solid waste in Kumasi
  - Feasibility studies and Design of water supply systems and hydraulic design of irrigation schemes and small dams
  - Supervised the construction of the irrigation schemes
- 2002-2004 **KNUST-GWCL Water distribution modelling Project**  
 Water engineer for Hydraulic Modeling of Kumasi Water Distribution Network for Ghana Water Company. Limited,
- Hydraulic modelling of Kumasi distribution system,
  - Calibration of the distribution model, Water quality modelling
- 2015 **Water and Sanitation of urban poor (WSUP) Ghana**  
 Consultancy service for Monitoring and Evaluation of Public Latrines, As Water and Sanitation Consultant to execute the following:
- Develop evaluation and monitoring tools,
  - Conduct a training needs assessment and develop training materials,
  - Train Environmental Health Officers and public toilet operators
- Jan 2012 to Dec 2015 **CARE International Ghana, WSUP Ghana**  
 Consultant for participatory learning and action planning for water and sanitation management
- Provided training on Water, Sanitation, Hygiene (WASH) Behavioural Change and Management for community management
  - Conducted participatory learning and action planning in Water, Sanitation, Hygiene (WASH) and Training on community management,
  - Conduct a training needs assessment and develop training materials
  - Conduct pre and post training knowledge evaluation ,
- 1998-1999 **Biwater International LTD**  
 Water Engineer, Construction of 4 Million Gallon water treatment, transmission and system for Obuasi .
- Construction supervision of water treatment plant consisting of intake structure, aerator, settling tank, filtration tank, clear water well and highlift pumping station,

- Setting out of pipelines and water structures,
- Pipeline Route alignment survey for the design and construction of water distribution mains

## PUBLICATIONS

1. Asare, W., Oduro-Kwarteng, S., Donkor, E. A., & Rockson, M. A. (2020). Recovery of Municipal Solid Waste Recyclables under Different Incentive Schemes in Tamale, Ghana. *Sustainability*, 12(23), 9869.
2. Nuagah, M. B., Boakye, P., Oduro-Kwarteng, S., & Sokama-Neuyam, Y. A. (2020). Valorization of faecal and sewage sludge via pyrolysis for application as crop organic fertilizer. *Journal of Analytical and Applied Pyrolysis*, 151, 104903.
3. Kumatse, I. M., Essandoh, H. M. K., Asiedu, N. Y., & Oduro-Kwarteng, S. (2020). Evaluation of selected activated carbon filters and sand media for nutrient and pathogen removal from an anaerobic baffled reactor effluent system. *Scientific African*, 9, e00523.
4. Obeng, P.A., Oduro-Kwarteng, S., Keraita, B., Bregnhøj, H., Abaidoo, R.C., Awuah, E. and Konradsen, F., (2019). Optimising ventilation to control odour in the ventilated improved pit latrine. *Modelling Earth Systems and Environment*, 5(1): pp.133-142.
5. Obeng, P.A., Oduro-Kwarteng, S., Keraita, B., Bregnhøj, H., Abaidoo, R.C., Awuah, E. and Konradsen, F., (2019). Redesigning the ventilated improved pit latrine for use in built-up low-income settings. *Journal of Water, Sanitation and Hygiene for Development*, 9(2): pp.374-379.
6. Rachmadyanto, H., Dijk, M.P.V. and **Oduro-Kwarteng, S.**, (2016). Mapping pro-poor water supply services: what are the technical and institutional options for the utility and private provision in Accra? *International Journal of Water*, 10(2-3): 246-266. [Publisher: *Inderscience*]
7. Lutterodt, G., Van de Vossenberg, J., Hoiting, Y., Kamara, A.K., **Oduro-Kwarteng, S.** and Foppen, J.W.A., (2018). Microbial groundwater quality status of hand-dug wells and boreholes in the Dodowa area of Ghana. *International journal of environmental research and public health*, 15(4): pp.730-742 [Publisher: *MDPI*]
8. Silvestri, G., Wittmayer, J.M., Schipper, K., Kulabako, R., **Oduro-Kwarteng, S.**, Nyenje, P., Komakech, H. and Van Raak, R., (2018). Transition management for improving the sustainability of WASH services in informal settlements in Sub-Saharan Africa – An exploration. *Sustainability*, 10(11), pp.4052. doi:10.3390/su10114052 [Publisher: *MDPI*]
9. Agbefu, B.D., Chikogu-Ameso, V. and **Oduro-Kwarteng, S.**, (2016). Ground water quality in a low income community: case study of Kotei, Kumasi. In *Ensuring availability and sustainable management of water and sanitation for all: Proceedings of the 39th WEDC International Conference, Kumasi, Ghana, July 11-15*. cc WEDC, Loughborough University.
10. Obeng, P.A., Oduro-Kwarteng, S., Keraita, B., Bregnhøj, H., Abaidoo, R.C., Awuah, E. and Konradsen, F., (2016). Measurement of Odour in On-Site Sanitation Systems in Low-Income Settings. *Environmental Processes*, 3(1), 217-227.
11. **Oduro-Kwarteng, S.**, Anarfi, K.P. and Essandoh, H.M., (2016). Source separation and recycling potential of municipal solid waste in Ghana. *Management of Environmental Quality: An International Journal*, 27(2), 210-226.
12. **Oduro-Kwarteng, S.**, Monney, I. & Braimah, I. (2014). Human resource capacity in Ghana's water, sanitation and hygiene sector: analysis of capacity gaps and policy implications. *Water Policy*, 17 (1): 502-519,