

**Degrees**

BSc, University for Development, UDS, Navrongo campus, Ghana
MSc, UNESCO-IHE, Delft, The Netherlands

Award

2012 – 2014: Netherlands Funding Programmes by Nuffic.

Research Interests

Water quality monitoring and assessment. Wastewater treatment technology. Environmental risk reduction.

Profile

Research Scientist, Environmental Chemistry &
Sanitation Engineering Division

Zita Naangmenyele Abuntori (Mrs) is a young lady Research Scientist at the Council for Scientific and Industrial Research- Water Research Institute (CSIR-WRI), Tamale office at the Environmental Chemistry and Sanitation Engineering Division. She is also the research scientist-in-charge of the water quality laboratory (physico-chemical analyses aspect) to ensure quality control and quality assurance of laboratory results.

She obtained her Bachelor of Science degree in Applied Chemistry at the University for Development Studies, (UDS) Navrongo campus in 2008 and Master's degree in Environmental Science with specialization in Environmental Science and Technology at the Institute for Water Education, UNESCO-IHE, Delft, The Netherlands.

Her masters' thesis was geared towards industrial wastewater treatment and residual management via anaerobic oxidation of methane in the presence of electron donors and electron acceptors. She has several years of experience in water quality analyses and assessment.

Zita has experience also in proposal writing and very interested in research areas such as: water quality, environmental engineering, and technological innovations. Currently innovated wastewater sanitation management system (branded "Shecosink") for Women Shea butter processing centers with support of Stichting Nederlandse Vrijwilligers, (SNV) a Netherlands Development Organization in Tamale, in-use by women shea butter processors.

Other projects include:

- Water quality monitoring studies; dams, dugouts/wells, boreholes in the Tamale Metropolis and its environs.
- Water quality studies of sachet water in the Tamale Metropolis and Northern Ghana as a whole.
- Water quality studies at boarding senior high schools in the Tamale Metropolis.
- Agricultural intensification for food security with the sustainability of water quality; looking into pesticides contamination in water resources of irrigation schemes.

Current Research

- Water quality research into packaged drinking water (“Sachet water”) sold in towns and cities like Tamale and its surroundings. Studying the trend of water quality issues especially the physicochemical quality and microbial quality in the laboratory within a period of time. The research involves a periodic comparison of the difference in water quality with the emergence of different water treatment technologies.
- Water quality monitoring studies; dams, dugouts/wells, boreholes in the Tamale Metropolis and its environs.
- Water quality studies of boarding senior high schools in the Tamale Metropolis.
- Agricultural intensification for food security with the sustainability of water quality; research into pesticides contamination in water resources of irrigation schemes and health risks hazards.

Our laboratory is composed of a very active team of technicians, technologist, research scientists with MSc and Ph.D, attachment students and visiting students. It is well equipped with standard equipment guided with standard protocols to ensure the quality of results.

List of Scientific Publications

Health risk assessment and heavy metal contamination levels in vegetables from Tamale Metropolis, Ghana Samuel Teye Ametepey, Samuel Jerry Cobbina, Felix Jerry Akpabey, Abudu Ballu Duwiejuah and Zita Naangmenyele Abuntori. International Journal of Food Contamination. (2018) <https://doi.org/10.1186/s40550-018-0067-0>.

Michael Lawer Asare, Samuel Jerry Cobbina, Felix Jerry Akpabey, Abudu Ballu Duwiejuah & Zita Naangmenyele Abuntori. Heavy Metal Concentration in Water, Sediment and Fish Species in the Bontanga Reservoir, Ghana. Toxicology and Environmental Health Sciences Vol. 10(1), 49-58, 2018.

Susma Bhattarai., Chiara Cassarini., Zita Naangmenyele., Eldon R. Rene., Graciela Gonzalez-Gil., Giovanni Esposito., Piet N. L. Lens (2017). Microbial sulfate-reducing activities in anoxic sediment from Marine Lake Grevelingen: screening of electron donors and acceptors. The Japanese Society of Limnology. ISSN 1439-8621 Limnology DOI 10.1007/s10201-017-0516-0.

Samuel Obiri., Samuel Jerry Cobbina., Fredrick Ato Armah., Zita Naangmenyele, (2011). Quantification and characterization of vehicle – based polycyclic aromatic hydrocarbons (PAHs)

in street dust from Tamale Metropolis, Ghana. Environmental Science Pollution Research, 18:1166-1173.