**CURRICULUM VITAE**



**Regina E. Edziyie**

Department of Fisheries and Watershed Management,

Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Telephone: +233 572921090 E-mail address: [edziyie@yahoo.co.uk](mailto:steveamisah1@yahoo.co.uk)

**EDUCATION**

Ph.D. 2011 Environmental Sciences, University of North Texas (UNT), Denton, TX

M.S. 2004 Aquaculture/Fisheries, Univ. of Arkansas (UAPB), Pine Bluff, AR.

M.S. 2009 Applied Geography (Water Resources), UNT, Denton, TX.

BSc (Hons). 2000 Natural Res. Mgt. (Fisheries option). Kwame Nkrumah Univ. of Sc. & Tech. (KNUST), Ghana.

**RESEARCH:**

* **Team lead**; Establishment of demonstration aquaculture and agriculture at Legon - Safe and Improved use of Wastewater Utilisation. Greater Accra Sustainable Sanitation and Livelihoods Improvement Project (GASSLIP/S/032).
* **Institutional lead**; Consortium on “Capacity Building in Aquatic and Environmental Health in West Africa” sponsored by Norwegian Agency for Development Cooperation.
* **Co-PI**, DANIDA sponsored project on “Increasing the Productivity of Aquaculture in Ghanaian Aquaculture” (No.18-16-GHA).
* **CO-PI,** USAID/ AquaFish Innovation Lab Project **“**Optimizing the Use of Commercial Feeds in Semi-Intensive Pond Production of Tilapia in Ghana; From Nursery to Grow-out”.
* **Principal Investigator,** Direct Aid Programme (AussieAid) - “Cage Aquaculture in Northern Ghana: Enhancing food security and livelihoods”.
* **Home Country PI**, USAID/ AquaFish Innovation Lab Project – **“**Enhancing the nutritional value of tilapia for human health, in collaboration with University of Arkansas at Pine Bluff, USA”.
* **Principal Investigator,** BSUII KNUST **“**Improving the quality of farm-made feeds in Tilapia pond culture, Ashanti Region, Ghana”.
* **Investigator and member of management committee**, DANIDA sponsored project on Sustainable fish feed development in Ghana (DFC file No. 13-P01-GHA).
* **Investigator**, BSU EC-GEP Outreach Project (DANIDA), - “Capacity Building within Research Communication, Dissemination and Networking”.
* **Investigator**, KNUST KREF Award. “Preliminary studies on the breeding, hatchability and larval growth of the African River Prawn, *Macrobrachium vollenhovenii*”.

**RESEARCH INTERESTS**

improving water quality for aqualcuture, Wastewater treatment and safety, , increasing aquaculture productivity by improving feeds and feeding strategies; promoting the culture of native species in Ghana, aquatic ecology and toxicology in natural systems and environmental science education.

**PROFESSIONAL EMPLOYMENT**

2017- Present: ***Senior Lecturer***, Dept. of Fisheries and Watershed Mgt., FRNR, KNUST, Ghana

Aug. 2015- Jul 2020: **Graduate Coordinator**, Dept. of Fisheries & Watershed Mgt., KNUST.

2012 - 2017: ***Lecturer***, Dept. of Fisheries and Watershed Mgt., FRNR, KNUST, Ghana

2011 - 2012: ***Post-Doctoral Fellow*** at UNT (Science Education Research): writing grants, research in

Environmental Education and implementation of programs/projects

2011- 2012: ***Adjunct Faculty;*** Earth Science, Columbia Southern Univ., Alabama (Online) and Environmental Science, Kaplan College, Texas (Adult class)

2004 -2011: ***Instructor***, Environmental Science, & Contemporary Biology lab classes, UNT, Texas.

2008: **Environmental Monitoring assistant**, Denton Waste Water Treatment Plant (WWTP).

2006: ***Consultant***: Chlorophyll *a* analysis and identification of phytoplankton for the United States Department of Agriculture ARS/UAPB Aquashade project.

**CLASSES TAUGHT**

**Undergraduate**: Water Quality, Environmental Science, Basic Statistics, Introduction to Experimental Design & Statistics, Fisheries Management, Fisheries Ecology, Introduction to Fisheries & Aquaculture, and Earth Sciences. **Graduate**: Waste Water Management, Aquatic Toxicology, Water quality, Statistics in research, Special topics (scientific writing). Additionally, I have supervised over 30 undergraduate theses and 30 graduate student theses.

**SELECTED PUBLICATIONS**

1. Obirikorang, K.A., Gyamfi, S., Goode, M.E., Amisah, S., **Edziyie, R.E.,** Quagrainie, K., Egna, H., Frimpong, E.A. [2020] Effect of soybean meal diets on the growth performance, ammonia excretion rates, gut histology and feed cost of Nile tilapia (*Oreochromis niloticus*) fry. Aquaculture Nutrition.
2. Obirikorang, P. A., Campion, B. B., **Edziyie, R. E.,** Prah Duodu, C., and D. Adjei-Boateng (2020). Effects of oilseed meals on pellet characteristics, faecal matter production, postprandial ammonia and phosphorus excretion rates in Nile tilapia, *Oreochromis niloticus*, Journal of Applied Animal Research, 48:1, 525-533,
3. Mensah ET-D, Dankwa HR, Lauridsen TL, Asmah R, Campion BB, and **Edziyie R**.(2019). Seasonal changes in fish catch and environmental variables in a large Tropical Lake, Volta, Ghana. *African Journal of Ecology*. ;57:66-75. <https://doi.org/10.1111/aje.12537>
4. Mensah, E. T., Dankwa, H. R., Torben, L. L., Asmah, R., Campion, B. B., & **Edziyie, R**. (2018). Effects of seasonal and environmental changes on aquaculture production in tropical Lake Volta, Ghana. *Aquaculture International*, 1-14.
5. Attim, D. A., Obirikorang, K. A., Campion B. B. **Edziyie, R.E** and P. V. Skov (2018). Dietary supplementation of yeast (*Saccharomyces cerevisiae*) improves growth, stress tolerance, and disease resistance in juvenile Nile tilapia (*Oreochromis niloticus*). Aquaculture International *26*(3): 843-855.
6. Duodu, C.P, **Edziyie R.,** Agbo, N.W., Adjei-Boateng, D., Skov PV (2018). Groundnut and Cottonseed Meals in Tilapia Juvenile Diets: Effects on Apparent Nutrient Digestibility, Short-Term Growth Performance, Feed Utilization and Carcass Composition. Fish Aqua J 9: 259. doi:10.4172/2150-3508.1000259.
7. **Edziyie R,** and Perschbacher P (2017). Studies on the Effect of Propanil on the Water Quality and Plankton Communities Part 2: Channel Catfish (*Ictalurus punctatus*) Pond Systems With and Without a Floating Algal Scum. J Fisheries Livest Prod 5: 230 doi: 10.4172/2332-2608.1000230.
8. Perschbacher, P. and **Edziyie, R.** (2017). Mesocosm Studies on the Effect of Propanil on the Water Quality and Plankton Communities of Four Aquaculture Pond Systems. J Fisheries Livest Prod 6 (1) 223 DOI: 10.4172/2332-2608.1000223.
9. Nallani, G. C., **Edziyie, R. E.,** Paulos, P. M., Venables, B. J., Constantine, L. A., & Huggett, D. B. (2016). Bioconcentration of two basic pharmaceuticals, verapamil and clozapine, in fish. Environmental Toxicology and Chemistry, 35 (3): 593-603
10. Nallani, G.C., Paulos, P. M., Venables, B. J., **Edziyie, R. E**., Constantine, L. A., and Huggett, D. B. (2011). Tissue-specific uptake and bioconcentration of the oral contraceptive norethindrone in two freshwater fishes. Arch Environ Contam Toxicol 62(2):306-313.
11. Ludwig, G.M., Perschbacher, P. W., and **Edziyie, R. (**2010). The effect of the dye Aquashade on water quality, phytoplankton, zooplankton, and sunshine bass fingerling production in fertilized culture ponds. *Journal of World Aquaculture Society*,41(S1):40-48.

**Societies**

* Member, World Aquaculture Society (WAS) & US Aquaculture Society, 2002.
* Member, Sigma Xi Research Society, 2004.
* Member, Society of Environmental Toxicology and Chemistry, 2005.