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## Contamination of surface and ground water due to anthropogenic activities in Ogwuama community of Ahiazu, Imo State, Nigeria

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Human activities have become a major source of environmental pollution especially on the issue of water pollution which includes surface and ground water. This research was aimed at studying the effect of human activities such as indiscriminate defecation, fermentation of cassava tubers etc on the water quality of Onuakpaka stream and selected ground water in Ogwuama community of Ahiazu, Imo State, Nigeria. Water samples were collected in triplicates each with sterile containers from upstream, downstream and ground water. All the samples were analyzed using standard method. The result showed that the pH of samples collected from the upstream and downstream were more acidic (5.70 and 5.90 respectively) than the ground water (6.06). Also, the upstream and downstream have high turbidity of 14.76 and 15.40 respectively. More also, dissolved oxygen in the stream samples were below the World Health Organization and Federal Ministry of Environment standards while the ground water samples were within the standard. Also there were presence of fecal counts and *Escherichia coli* in all the samples collected (8.00 in ground water, 13.00 in the upstream and 23.00 downstream) this may be due to indiscriminate defecation. Furthermore, the temperature, conductivity, total dissolved oxygen etc. were within the standard in all the samples collected. Conclusively, the presence of fecal contaminant and *Escherichia coli* signifies that the water is highly polluted and unfit for drinking and domestic work. This leads to great danger to human health in this community.

### Biography

Tochukwu Ezechi Ebe has completed her PhD from Federal University of Technology, P.M.B.1526 Owerri, Imo State, Nigeria. She is a Lecturer in the Department of Environmental Technology of the same institution. She has published 23 papers in related field in reputed journals.

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