**METHODIST JUNIOR HIGH SCHOOL**

**OPP. GENERAL HOSPITAL**

**BADAGRY, LAGOS STATE**

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**STUDENT’S CLASS:** JSS 1E

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To invest is to design a new process or mechanism. To create something fictional for a particular purpose. To come upon; to find; or fangle.

**INTRODUCTION**

Water, the essence of life, is a fundamental human right. Yet, million of people worldwide lack access to clean water, leading to devastating consequences for their health, education, and economic development. If I could invent something new, I would fangle a portable, sustainable, and cost effective water purification system called Aquagen. This innovative technology would provide clean drinking water for millions of people worldwide, especially in underserved communities.

**THE NEED FOR CLEAN WATER**

Water is essential for human survival, but unfortunately, millions of people are forced to consume contaminated water, leading to water – borne illness like cholera, typhoid, and diarrhea. These disease are significant cause of morbidity and mortality worldwide, especially among children under the age of five. In fact, according to the World Health Organization (W.H.O) every months, a child dies from water-borne disease.

The lack of access to clean water also has far reaching consequences for education and economic development. Children who are forced to walk long distances to fetch water from distance source miss out on valuable education perpetuating the cycle of poverty. Moreover communities without access to clean water are unable to develop and thrive, leading to a perpetuation of poverty and inequality.

**THE SOULUTION: AQUAGEN**

Aquagen is a revolutionary water purification system that uses a combination of solar power advanced filtration, and UV treatment to remove contaminants and pollutant from water.

Aquagen is designed to be portable, sustainable, and cost- effective, making it ideal for use in various settings, including:

Natural disasters: providing clean water for survivors.

Rural areas: where access to clean water is limited.

Urban slums: where water contamination is prevalent.

Schools and hospitals: ensuring clean water for student and patients

**HOW AQUAGEN WORKS**

Aquagen uses a combination of technologies to purify water, including;

* **Solar Power:** Aquagen is powered by solar panels making it sustainable and environmentally friendly.
* **Advanced Filtration:** Aquagen uses advanced filtration systems to remove impurities and contaminant from water.
* **UV Treatment:** Aquagen uses UV treatment to kill bacteria and other micro – organism that can cause water – borne diseases.
* **Activated Carbon:** Aquagen uses activated carbon to remove chlorine, lead and other harmful chemical from the water.
* **Microbial Fuel Cell:**  to break down organic matter from the water.
* **Ion exchange resin:** to remove heavy mental from the water.
* Advanced oxidation process (AOP): To remove persistent organic pollutant from the water.
* Nano filtration membranes: to remove dissolves bacteria and virus from the water.

**IMPLEMENTATION AND DISTR IBUTION**

**Aquagen would be implemented and distributed through a variety of channel including:**

* + Partnership with non- governmental organization (NGO) and community groups.
  + Collaboration with governments and international organizations.
  + Establishment of a network of local distributions and technicians

**CONCLUSION**

Aquagen is a revolutionary water purification system that has the potential to transform lives and communities worldwides. I believe that innovation and technology can solve some of humanity’s most pressing challenges, and I hope to make a different through my invention, AQUAGEN.