**THE ENVIRONMENTAL AND HEALTH EFFECTS OF ELECTRONIC WASTE GENERATION AND MANAGEMENT IN LAGOS, NIGERIA**

Seun Popoola1, Khadijah Ismekhai2

1 Department of Chemical Science, Yaba College of Technology, Yaba, Lagos, Nigeria, [seunliz27@yahoo.com](mailto:seunliz27@yahoo.com)

2 School of Science and Technology, Middlesex University,The Burrough, London NW4 4BT UK, [K.Isimekhai@mdx.ac.uk](mailto:K.Isimekhai@mdx.ac.uk)

Electronic waste is a global challenge, especially in developing countries like Nigeria where there is massive importation of second-hand electronics from developed countries. This is due to increasing obsolescence as well as importation of substandard electronic products. The generation and recycling of e-waste through primitive means for extraction of metals is a real concern in Nigeria as e-waste contains hazardous substances. The present recycling cost of e-waste through proper technologies in developed countries is one major reason for the huge volume of e-waste is being exported to the poorer nations in Africa and Asia. Nigeria, with her large population of over 140 million and less stringent laws is thus a ready market for used electronics. However, of all the electronics traded, only 25% can be recycled or reused. The remaining 75% scrap becomes a mountain of technological devices and legacy of environmental toxicity. This is coupled with substandard “new” electronics that berths at the ports in huge containers daily. The effect is generation of e-waste at an alarming rate. The disposal of the mountains of e-waste poses a serious challenge in the country. Informal recycling centers scattered across Lagos state have found that they could extract valuable compounds during the process of recycling, thereby creating income for thousands of people. Even though the intention of salvaging reusable parts from these waste products is admirable, the processes and techniques used during the recycling activities are often crude and lack pollution control measures especially in Nigeria, where environmental enforcement are not sufficiently stringent, excessive levels of trace metals and other contaminants can thus be emitted. This practice needs to be discouraged because unscientific and unhygienic methods are employed to recycle the wastes that are harmful to the workers and the environment. In conclusion, effective electronic waste management which embraces both the formal and informal recyclers is proposed as a short term solution while also adopting a long term proactive material management strategy and education that can minimize e-waste production and make their components more desirable for recycling and reuse.