9th World Convention on

## RECYCLING AND WASTE MANAGEMENT October 22-23, 2018 Osaka, Japan

Estimation of production and rate of consumerism for electronic wastes of Arak City for prospecting purposes and policies for these wastes

Amir Hedayati Agmashhadi and Azade Kazemi Arak University, Iran

**Statement of the Problem:** One of the most important issues that have been raised in the past two decades is relative to the development of the electronic industry and the wastes generated. The metropolitan region of Arak is the industrial hub of Iran and has been involved in varied environmental issues, such as waste management and engineering for the past years. In this study, efforts are made to compute the amount of production and the rate of consumerism for electronic wastes in Arak, together with policies and future measures.

**Methodology & Theoretical Orientation:** Due to the absence of a valid data-base in Iran for this purpose and production of this kind of waste, questionnaires are utilized and statistical methods for the years 2018-2028 computed. Likewise, this article unfolds the consumerism rate or the exclusion of e-wastes for better prospects in the future.

**Findings:** Calculations and research indicates that the per capita production of e-wastes in Arak in 2018 was estimated to be approximately 3.45 kilograms per capita; this shall rise to 5.36 kilograms in lieu of each person in 2028. Based on the results of this research, the consumerism rate for e-wastes in Arak in 2018 has been estimated to equate to 50.4%.

**Conclusion & Significance:** In order to gain from economic benefits and the management of environmental impacts and e-wastes, provisions for an integrated electronic waste management system is essential. This shall be achieved by an accurate estimation of an infrastructure in this sphere for the current and future. To be successful, such a system should consider the socio-economic and environmental issues of wastes of such criterion under a single system.

ahedayati@alumni.ut.ac.ir