Available online at www.joac.info

ISSN: 2278-1862

Journal of Applicable Chemistry

2014, 3 (6): 2441-2447

(International Peer Reviewed Journal)

Selective Characterisation and Microbial Analysis of Industrial Hazardous Effluents in Rayalaseema Region (A.P - INDIA)

K. Hari Nagamaddaiah[1], J.Latha[2] and K.Sudhakar Babu[1]*

1. Department of Chemistry, S.K. University, Anantapuramu (A.P), **INDIA**
2. S.K.U. College of Engineering & Technology, S.K. University, Anantapuramu (A.P), **INDIA**

Email: drksbabu9@gmail.com, hariphdsku@gmail.com

Accepted on 15th October 2014

ABSTRACT

The present research investigation is mainly aimed at selective characterisation of industrial hazardous effluents specifically solid wastes in Kurnool district of Rayalaseema region, Andhra Pradesh. The effluents from specified industries of the region contaminate the water, soil and atmosphere in the vicinity of selected locations of industrial belt. The hazardous solid effluent samples were collected from industrial belt of Kurnool district by following standard procedures. The research study is focused on investigating Physico-Chemical parameters like pH, EC, TDS, TH, TA, SO_3^{2-}, HCO_3^{2-}, Cl^-, SO_4^{2-}, PO_4^{3-}, Na, K, Ca^{2+} and Mg^{2+}. The results indicate that quality parameters exceeding the permissible limits and posing challenge to environment protection. The collected solid effluent samples in contaminated soil were characterized for identification of bacteria.

Keywords: Total dissolved solids (TDS), Physico-Chemical parameters and Hazardous Effluents.