conferenceseries LLC Ltd

Speakers Session

ANALYTICAL CHEMISTRY
BIOCHEMISTRY
BIOMEDICINE

2021

2021
July 26-27
Webinar

23rd World Congress on
Analytical and Bioanalytical

Analysis of some heavy metals of soil samples in the bahir dar textile industry, northern amhara, ethiopia

Alemu Talema

Ambo University, Ethiopia

The research investigated the concentration of some heavy metals in a soil sample from the Bahir Dar textile industry by using Flame Atomic Absorption Spectroscopy (FAAS). The results obtained from the present study showed that the overall concentration of seven heavy metals (Cr, Cd, Zn, Fe, Pb, Mn, and Cu) in the range of 65.60- 132.3, 10.783-18.967, 174.467-220.267, 3119.366-3147.933, 105.466-234.50, 656.40-709.667 and 55.6-80.6 (mg/ Kg) in the soil samples respectively. In general, the levels of metals in soil samples collected from all the sampling sites were found to decrease in the order: Fe>Mn>Zn>Pb>Cr>Cu>Cd. Some of the concentrations of heavy metals (Zn, Mn, Fe, Cu) in studied soil samples found below the maximum limit that proposed for agricultural soil by FAO/ WHO and some of the heavy metals (Cr, Cd, Pb) that the concentrations were found above the maximum limit. Results of heavy metal concentrations in the soil samples under-investigated indicate that industrial activities most important sources for some heavy metals in the soil samples of the Bair Dar textile industry.

Biography:

Alemu Talema has completed his MSc. at the age of 29 years from Ambo University. I am lecturer of Injibara University. I have published more than 4 papers in reputed journals.

2021
July 26-27
Webinar

23rd World Congress on
Analytical and Bioanalytical

Low-frequency mechanical action on the kinetics and mechanism of a liquid-phase reaction with temporary instability upon reagent association

Kulagina T.P.

Institute of Problems of Chemical Physics RAS, Russia

The work carried out mathematical modeling of the effect of external low-frequency mechanical action on the kinetics of chemical reactions upon the association of reagents. Modeling of the kinetics of chemical reactions with temporary instability is considered for two types of reactions: a multistage bimolecular reaction and well known reaction Lotka-Volterra. It was shown that the choice of the amplitude and frequency of the action makes it possible to change the shape, frequency, and amplitude of oscillations of the concentrations of intermediates and thereby regulate the rate and yield of reaction products.