The Role of Sulfur Nanostructures in the Mercury Ion Pre-condensation in the Real Sample

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ABSTRACT: This study explains the application of the Nanoparticles of placed mercury on the Alumina particles as appropriate assimilator, for the solid –phase recovery method. The atomic attraction spectrograph set has been used to identify amount of little of mercury ions exited in the marine sample. In this paper, synthesis of nanoparticles has been used of a dilution including a thio sulfatesodium, Alumina powder, Hydro Chloride acid. Also to separate nanoparticles of mercury on covered alumina, sorfectant (SDBS) was added. This element HAS been adsorbed to the mercury because of its long chine group and creates a structure as mycelium. Presence of these nanoparticles was identified by used of XDR and LLS technique. Affective Items in the analyses condensation, as PH of the dilution sample, velocity of dilution flow through the column, dilution volume and its type were studied. The results showed that by using velocity of flow 20 ml/min for passing dilution and PH=7.5 for dilution in the volume 250 ml litter in the presence of Nitride acid , the dilution in the methanol of mercury ions can be adsorbed to nanoparticles of mercury. Margin specification of this method for mercury ion is about 0.673 µg/L (n=10). Obtained results for marine samples had appropriate compromise with the standard sample of fish that emphasized.

Keywords: surfactant, solid phase recovery, spectrometer, flaming atomic absorption, mycelium.

Reference: