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PRE-CONCENTRATION OF MOLYBDENUM IN WATER SAMPLES USING COCONUT HUSK

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Abstract

Molybdenum accompanies uranium in various types of deposits and plays an important role as a pathfinder element in the hydrogeochemical survey for uranium. In the present study, coconut husk was used for the pre-concentration of molybdenum in hydrogeochemical samples, prior to its analysis by ICP-OES. Quantitative sorption of molybdenum was observed at pH 2 and desorption was achieved by 8M HNO_3. Enrichment factor obtained by this procedure was 50. Molybdenum concentrations up to 1.0 ng/ml can be determined easily after pre-concentration using this method. This pre-concentration technique was applied for the determination of molybdenum in hydrogeochemical samples.

Keywords : Solid phase adsorbent, coconut husk, pre-concentration, molybdenum.