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Short Communication

Novel Method for Extraction and Determination of Fe²⁺ Ions From River Patalganga

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ABSTRACT

Iron ranks next to aluminum in abundance of metals in the earth's crust. Natural waters contain only minor amounts of Iron. Iron in natural waters usually occurs in ferrous forms; however it is readily oxidized to ferric form and ferric salts are precipitated as rust colored deposits. The presence of more than traces of iron in river water is an indication of pollution by iron pickling effluents or mine water. This paper presents a novel method for extraction and determination of Fe (II) ions by forming a Prussian blue complex of Ferric ferrocyanide. The ferric ferrocyanide complex is a very stable complex. The results obtained after complexing the standards are highly within the limits of acceptance value of US EPA.

Keywords: Iron, Ferric ferrocyanide Complex, 1-10 phenanthroline method, 2-2Bipyridyl method, Prussian blue complex.