

**Project Title-“Microextraction Analysis of Toxicants in a Single Drop of Environmental and Biological Samples.” Under
CCOST, Raipur,**

The present method is successfully applied for determination of iron (III) in ground water samples collected from Dantewada district. The physicochemical parameters and concentration of iron (III) determined by nanodrop spectrophotometer (NDS) in single drop of water sample.

In proposed work using, non ionic surfactants, Tween-80 remarkably enhance the absorptivity of the complex of Fe(III)-disodium-1-nitroso-2-naphthol-3, 6-sulphonate, Present approach is simple, sensitive and low cost. Thus it has applied for the determination of Iron (III) concentration in ground water samples of Dantewada district with different physico-chemical parameters. The proposed method is found to be a low cost due to small amount of sample solution (1 μ L) and reagents were used for determination of iron (III). The proposed method is very useful in clinical application since only one micro volume of biological samples (blood, urine, and plasma) was required for analysis where the availability of sample is minute.