



## **Spectrophotometric Determination of Cobalt in Water and Agricultural Samples**

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Received on 27th October and finalized on 30<sup>th</sup> October 2012

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### **ABSTRACT**

*A simple, specific and rapid Spectrophotometric method is developed for the determination of Cobalt as Co-(M.D.T.C) complex in the presence of sodium acetate-acetic acid medium at pH = 7.0 and 0.2M MgSO<sub>4</sub> as salting out agent. This complex shows absorption in visible region at 640nm. The method is sensitive up to 0.59ppm and it is free from interference of many metal ions like Cd<sup>+2</sup>, Cu<sup>+2</sup>, Zn<sup>+2</sup>, Ni<sup>+2</sup>, Fe<sup>+2</sup>. The developed method is applied for the determination of Co (II) in various water and agricultural samples.*

**Keywords:** Spectrophotometry, cobalt (II), water and agricultural samples.

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