

## **Stability study of tetracycline drug in acidic and alkaline solutions by colorimetric method**

### **Abstract**

The stability of tetracycline drug taken from capsule was studied in acidic solution with four conditions light, dark, in the presence of metal ( $\text{Cu}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O}$ ) and in the presence of surfactant (tween80) using colorimetric method at 440 nm. The stability of drug in light acidic solution was compared with the stability in light alkaline solution by measuring the absorbance at 380 nm for the last. The results showed that the stability was markedly affected by changing the conditions, the light decreases the stability whereas the presence of metal and surfactant increase the stability.