

ABSTRACT

The Dissertation entitled "Kinetics and Mechanism of Oxidation of Amides by Potassium Permanganate" is described in six chapters.

First chapter consists of general theory.

The second chapter is a brief review of the properties of potassium permanganate and the object of the present work.

Third chapter deals with the experimental procedure, apparatus and method of kinetic measurements are described.

The fourth chapter includes the results of the kinetics of oxidation of nicotinamide and iso-nicotinamide by alkaline permanganate. The mechanistic study is carried out taking into consideration different variables such as concentration of KMnO_4 , alkali, amide, ionic strength, temperature on the reaction rate. The kinetic measurements were carried out to obtain thermodynamic parameters.

In the fifth chapter, the results of experiments are discussed.

The sixth chapter describes the probable reaction mechanism and the rate law.