



Abstract

Keratin is an insoluble protein that contains fibers and filaments and is used in numerous applications. The protein keratin is extracted from the waste of leather by treating the leather with sodium sulfide solution at 30 °C at pH range of 10-13. The presence of keratin is confirmed by performing biuret test which shows absorbance in UV-VIS spectrophotometer at 365 nm. The protein is precipitated by ammonium sulfate solution prepared in deionized water. Keratin is obtained in partially purified form by centrifugation of sample with deionized water and sodium hydroxide solution. After purification, the characterization of keratin is performed by running the solution of purified keratin in Fourier Transform Infrared Spectrometer which displays a graph showing the characteristics of keratin protein.