

2.2.1.4. Differential Scanning Calorimetry (DSC)

DSC thermogram of all chitosan samples were recorded on differential scanning calorimeter (AT-50WS, Shimadzu Company, Japan). About 5–10 mg of each sample were placed in a pinholed aluminum sample pan with lid and heated in atmospheric air at a rate of 10 °C/min between 30 and 350 °C, under nitrogen purge of 20 ml/min. The instrument was periodically calibrated with a standard sample of indium (m.p. 156.66 °C) (Qinna et al., 2015).