**Abstract**

The present study revealed that all the modification procedures employed show prominent effect in the removal of Co (II). However, the uptake capacity of the adsorbent material was appreciable for TCS – CA, when compared to the other two modifications. The percentage removal of Co (II) was maximum at an optimum pH 7. Cr (VI) was found to have maximum inhibition towards the metal ion under study, whereas Ni (II) showed minimal effect.