Abstract

NO$_x$ adsorption has been studied on NaA zeolite from rice husk and (3, 6, 9 and 12% wt) Cu-NaA as adsorbent. NaA and Cu-NaA were characterized using XRD and FTIR. While, specific surface area were determined by methylene blue method. The specific surface area of NaA, 3% Cu-NaA, 6% Cu-NaA, 9% Cu-NaA and 12% Cu-NaA are 18.22; 17.66; 17.75; 17.81 dan 17.84 m$^2$/g respectively. The NO$_x$ concentration on adsorbent was determined by spectrophotometric method. Based on test results adsorption, adsorption ability of adsorbent from high to low is 6% Cu-NaA > 9% Cu-NaA > NaA > 3% Cu-NaA > 12% Cu-NaA. The experiment results showed that adsorptivity was influenced by loading Cu on NaA zeolite.

Keywords : NaA zeolite synthesis, rice husk, NO$_x$ adsorption