List of tables:

Table 1.1  Classification of clay minerals

Table 1.2.  Cation Exchange Capacity of clay minerals, in milli-equivalent (meq) per 100gm

Table 1.3:  Anion exchange capacities (in milli-equivalent per 100 gm)

Table 1.4:  Surface area and CEC values of some common clay minerals

Table 2.1  Oxide compositions of Mont (Swy-2), Mont (GMB) and Mont K-10 (Ald.)

Table 3.1:  The percentage conversion of diphenylmethane in benzylation of benzene using anhydrous metal salts (1.5 mmol) activated at 120°C

Table 3.2:  The percentage conversion of diphenylmethane in benzylation of benzene using anhydrous metal²⁺-Mont (1.5 mmol) activated at 120°C

Table 3.3:  The percentage conversion of diphenylmethane in benzylation of benzene using anhydrous Metal chloride-Metal²⁺-Mont (1.5 mmol) activated at 120°C

Table 3.4.  Reaction conditions, yield and selectivity of products of alkylation of phenol with 4-hydroxybutan-2-one (γ-KB) in presence Fe³⁺ exchanged Mont.

Table 3.5.  Reaction conditions, yield and selectivity of products of alkylation of phenol with 4-hydroxybutan-2-one(γ-KB) in presence acid activated and supported Mont.
Table 3.6. Surface area data of selected catalysts, yields and selectivities of the \textit{para} product (raspberry ketone)

Table 3.7. Adsorption of different metal complexes on Na-Mont under normal stirring and ultrasonic conditions

Table 3.8. Surface area data for different clays and clay – dye composites

Table 3.9. Adsorption of \textit{dl} and \textit{l}-[Ni(Phen)$_3$](ClO$_4$)$_2$.3H$_2$O complex on Na-Mont clay under different conditions