

ABSTRAK

Interkalasi kation TMA^+ ke dalam ruang antar lapis montmorilonit dilakukan dengan cara mendispersikan montmorilonit ke dalam larutan TMACl 1 %, dengan pengadukan selama 12 - 60 jam dengan selang waktu 12 jam. Karakterisasi hasil dilakukan dengan X-ray difraktometer, spektrofotometer infra merah, dan analisis dengan DTA dan TGA.

Disimpulkan bahwa kation TMA^+ dapat terinterkalasi dalam montmorilonit, dengan perubahan jarak antar lapis $2,4585 \text{ \AA}$ pada waktu reaksi 48 jam, jumlah kation TMA^+ yang terinterkalasi $57,1 \text{ meq}/100 \text{ g}$, rendemen hasil $55,5 \%$.

Kata kunci: montmorilonit, kation tetra metil ammonium, interkalasi, jarak antar lapis.



ABSTRACT

Intercalation of TMA^+ cation into interlayer space of montmorillonit was done through dispersing montmorillonit in 1 % of TMACl solution. The mixture was stirred for 12 - 60 hours by 12 hours interval, the residue was washed by aquades. The product was characterized by X-ray diffractometer, infra red spectrofotometer and DTA and TGA analyser.

It is concluded that TMA^+ cation could be intercalated in montmorillonit, the change of distance interlayer 2.4585 Å at time reaction of 48 hours, amount of TMA^+ which intercalated 57.1 meq/100 g, rendement of product is 55.5 %.

Key words: montmorillonit, tetra metil ammonium cation, intercalation, interlayer space.

