

BAB V

KESIMPULAN DAN SARAN

Dari percobaan adsorpsi dari nano komposit SH-MMS terhadap logam timbal diperoleh kesimpulan sebagai berikut:

1. Nanokomposit SH-MMS sudah dikarakterisasi dengan menggunakan FTIR yang hasilnya telah menunjukkan adanya gugus Si-OH, Si-O, Si-O-Si, Fe-O, Fe-O-Si, -OH dan -SH.
2. Kapasitas penyerapan logam timbal oleh nanokomposit SH-MMS meningkat seiring dengan kenaikan nilai pH larutan timbal.
3. Adsorpsi logam timbal nanokomposit SH-MMS sesuai dengan model kinetika adsorpsi *pseudo-second order* dengan nilai q_e sebesar 300,3745 mgr/gr, nilai k_2 sebesar 0,0304 gr/(mgr.menit) dan sesuai dengan model isoterm adsorpsi Langmuir dengan nilai q_{max} sebesar 273,1922 mgr/gr dan nilai k_L sebesar 0,4624 L/mgr.

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