BAB V

KESIMPULAN

5.1 Kesimpulan

1. Dalam rentang pH 2,5-5, pH optimum diperoleh pada pH 5 dengan *%removal* 35,75% dengan kapasitas maksimum sebesar 2500 mg Cu (II)/mg adsorben.
2. Laju adsorpsi dan *%removal* dari adsorben komposit nano karbon yang dihasilkan lebih baik dibandingkan dengan karbon aktif.
3. Model isotermal adsorpsi yang paling sesuai adalah model isotermal Langmuir yang menghasilkan kapasitas adsorpsi (*qm*) 3,296 mg logam Cu (II)/g komposit nano karbon dan konstanta Langmuir 0,048 L/mg logam Cu (II).
4. Model kinetika adsorpsi yang paling sesuai mengikuti model kinetika adsorpsi pseudo orde dua.
5. Seiring meningkatnya suhu maka laju adsorpsi dan *%removal* semakin meningkat.

5.2 Saran

1. Morfologi komposit nano karbon yang terbentuk dari minyak kelapa sawit perlu dipelajari secara lebih lanjut.
2. Komposit nano karbon yang diperoleh dapat di *treatment* dengan kadar terlebih dahulu untuk menghilangkan kandungan Fe dan dapat dilakukan *thermal annealing* supaya bentuk CNT dapat lurus menyerupai hutan CNT.

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