BAB V
KESIMPULAN

5.1 Kesimpulan

1. Karakteristik karbon aktif pada Kondisi optimum (rasio massa kulit salak : massa $ZnCl_2$ sebesar 1:4, daya 540 watt, dan waktu 25 menit) memiliki luas permukaan sebesar 1796,788 m^2/g dengan rendemen sebesar 14,78%.
2. Semakin besar rasio impregnasi maka luas permukaan semakin besar dan %rendemen semakin kecil
3. Semakin besar daya yang digunakan maka luas permukaan semakin besar dan %rendemen semakin menurun namun luas permukaan mengalami penurunan apabila melebihi kondisi optimum
4. Semakin lama waktu radiasi maka luas permukaan akan semakin besar dan %rendemen semakin menurun
5. Model isotherm adsorpsi yang paling sesuai adalah model isotherm adsorpsi Langmuir dengan kapasitas adsorpsi (qm) sebesar 1262,62 mg Cu^{2+}/g karbon aktif.
6. Model kinetika adsorpsi yang paling sesuai adalah model kinetika pseudo orde 2.

5.2 Saran

1. Untuk mengetahui karakteristik karbon aktif secara lengkap sebaiknya dilakukan analisa BET yang lengkap, SEM untuk mengetahui struktur permukaan pori, dan EDS untuk mengetahui kandungan unsur dalam karbon aktif yang dihasilkan.
2. Untuk memperoleh data yang akurat sebaiknya proses sintesis karbon aktif dan proses adsorpsi dilakukan duplo.
3. Analisa pengukuran kandungan logam berat sebaiknya dilakukan dengan menggunakan AAS untuk memperoleh data yang lebih akurat.
4. Untuk aplikasi penyerapan ion logam berat Cu^{2+} sebaiknya dilakukan pada kondisi optimum.

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