BAB V
KESIMPULAN

Berdasarkan dari hasil dan pembahasan dapat ditarik kesimpulan bahwa faktor-faktor yang mempengaruhi besar kecil kapasitas adsorpsi berupa *pretreatment*, ukuran partikel, modifikasi, metode adsorpsi dan tingkat pH dalam air. Pretreatment pada umumnya dilakukan secara tiga proses yaitu pengecilan ukuran, pencucian dan pengeringan. Ukuran partikel paling tinggi kapasitas adsorpsinya berukuran 0,072 mm. Modifikasi yang paling baik menggunakan larutan NaCl. Metode yang paling besar kapasitas adsorpsinya menggunakan metode fixed bed. kondisi pH optimum untuk mendapat kapasitas adsorpsi yang optimum berada pada rentang pH 6 hingga 7.

Penggunaan zeolit dalam pengolahan limbah masih terbilang sedikit jika dilihat dari banyaknya manfaat yang didapatkan dalam penggunaan zeolit ini. Maka masih menjanjikan untuk dilakukan pengembangan teknologi baru untuk penggunaan zeolit alam ataupun yang dimodifikasi. Dimana zeolit ini sangat melimpah di Indonesia jika dilihat dari jumlah titik tambang zeolit yang menyentuh angka puluhan titik, mudah ditemukan oleh masyarakat, memiliki harga yang relatif murah berkisar Rp 25.000 – Rp 35.000 untuk pembelian 50 kg zeolit alam, serta ramah lingkungan. Tidak menutup kemungkinan masih ada tantangan terhadap penggunaan zeolit alam yang jauh lebih baik di masa depan.

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