

BAB 5

KESIMPULAN DAN SARAN

V.1 Kesimpulan

Berdasarkan hasil penelitian, dapat ditarik tiga garis besar kesimpulan, yaitu :

1. Semakin besar komposisi massa adsorben, maka jumlah zat yang teradsorpsi semakin banyak
2. Suhu berpengaruh terhadap proses adsorpsi senyawa *steryl glucosides* dalam biodiesel dengan adsorben *crystalline nanocellulose*, dengan suhu optimum 75°C
3. Isoterm yang dapat mewakili proses adsorpsi senyawa *steryl glucosides* dalam *biodiesel* dengan adsorben *crystalline nanocellulose* adalah isotherm Langmuir

Berdasarkan kemampuan adsorpsi yang dimiliki CNC, CNC mempunyai potensi untuk dimanfaatkan sebagai adsorben SG dalam biodiesel dalam skala industri.

V.2 Saran

Dengan melihat potensi CNC sebagai adsorben senyawa SG dalam biodiesel, dapat dikembangkan metode adsorpsi dengan menggunakan variabel bebas yang lain, sebagai contoh dengan variasi pH adsorpsi. Disamping menggunakan variabel bebas lainnya, dapat dilaksanakan penelitian lanjutan mengenai kemampuan regenerasi adsorben CNC, mengingat hal tersebut dapat berdampak dalam keekonomisan proses adsorpsi untuk

meminimalkan dampak negatif yang ditimbulkan dalam penggunaan biodiesel.

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