



BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil-hasil penelitian yang disajikan dalam BAB IV, dapat ditarik beberapa kesimpulan berikut ini :

1. Rasio mol pusat aktif Ni:Mo sebesar 0,25 serta rasio mol promotor K:P 0,45 merupakan katalis yang paling aktif dengan konversi sebesar 98,59% serta memberikan selektivitas terbaik dengan menghasilkan rantai C14-C18 sebesar 21,43% luas area.
2. Interaksi antara rasio mol Ni:Mo 0,25 dengan rasio mol K:P 0,55; serta interaksi rasio mol Ni:Mo 0,35 dengan rasio mol K:P 0,35 mendukung terjadinya reaksi pirolisis sehingga terbentuk produk biohidrokarbon berwarna hitam.
3. Rasio promotor K:P sebesar 0,4 hingga 0,5 dapat meminimalisir adanya deposisi karbon pada permukaan katalis.

5.2 Saran

Berdasarkan proses penelitian yang telah dilaksanakan, ada beberapa saran yang dapat diberikan untuk penelitian selanjutnya, yaitu sebagai berikut :

1. Perlu dilakukan penelitian lebih lanjut mengenai pengaruh formula katalis pada pembentukan gugus *terminal alkene*.
2. Perlu dilakukan uji bilangan *cetane* untuk mengetahui lebih detail kualitas produk.
3. Perlu dilakukan uji penentuan nilai asam pada setiap variasi komposisi katalis, sehingga hanya biohidrokarbon yang diinginkan yang akan diuji GC-MS.



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