

BAB 5

KESIMPULAN DAN SARAN

5.1. Kesimpulan

Beberapa kesimpulan yang dapat ditarik dari penelitian ini adalah:

1. Konversi meningkat seiring meningkatnya temperatur dan waktu reaksi.
2. Penggunaan promotor menurunkan konversi reaksi, tetapi juga menghambat terbentuknya deposit karbon pada katalis.
3. Konversi tertinggi diperoleh pada *run* 12 (370°C, 3 jam, tanpa promotor).

5.2. Saran

Dengan harapan dihasilkannya minyak diesel nabati yang lebih baik, maka beberapa saran yang dapat diberikan untuk penelitian selanjutnya, yaitu:

1. Proses *leaching* pada analisis nikel terimpregnasi dilakukan pada temperatur yang lebih tinggi, yaitu sekitar 80-90°C.
2. Dilakukan pengecekan parameter lain pada minyak yang dihasilkan, seperti *cetane number* menggunakan metode *aniline point test* dan angka asam.
3. Dilakukan percobaan menggunakan promotor katalis lainnya, seperti Mn dan Mg.
4. Dilakukan beberapa kali percobaan awal dengan formula katalis yang sama untuk mengetahui konsistensi katalis.
5. Dilakukan *tuning* pada pengatur temperatur reaktor sehingga temperatur reaksi lebih stabil.
6. *Seal* reaktor perlu diganti dengan bahan yang lebih tahan pada temperatur tinggi seperti perfluoroelastomer (FFKM).

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