BAB V
KESIMPULAN

V.1. Kesimpulan

Partikel CuO-ZnO dapat digunakan sebagai katalis dalam pembuatan biodiesel dari minyak yang memiliki tingkat FFA tinggi maupun tingkat FFA rendah, menghasilkan %*yield* biodiesel yang tinggi, proses pemisahan yang lebih mudah serta dapat digunakan pada minyak baru ataupun minyak bekas. CuO dibuat dengan mencampurkan *copper acetate* 0,25M dan NaOH 0,5M, ZnO dibuat dengan mencampurkan *zinc nitrate* 0,25M dan NaOH 0,5M. Biodiesel dapat digunakan sebagai alternatif pengganti bahan bakar fosil yang lebih ramah lingkungan, karena kadar emisi CO_2 yang dihasilkan lebih rendah. Biodiesel dibuat dengan mencampurkan minyak kelapa sawit, metanol dan katalis CuO-ZnO dalam Reakor, kemudian katalis dipisahkan dalam Separator, FAME dan gliserol dipisahkan dalam Dekanter, metanol sisa reaksi diuapkan dalam Kolom distilasi, kemudian kandungan air dalam FAME dihilangkan dalam Dryer, FAME dapat digunakan sebagai biodiesel.

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