BAB V
KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitan ini, ada beberapa kesimpulan yang dapat diambil yaitu:

1. Proses karbonisasi hidrotermal dan pirolisis menggunakan katalis *ferrocene* dan nikel nitrat dari *Chlorella sp.* menghasilkan material karbon nano.
2. Penambahan konsentrasi katalis sebelum proses karbonisasi hidrotermal atau pada proses impregnasi meningkatkan komposisi unsur C.
3. Proses karbonisasi hidrotermal pada karbon prekursor dapat meningkatkan kristalinitas hasil karbon nano.
4. Rata-rata *yield* karbon nano dari *hydrochar* adalah sebesar 30,5 %.
5. Rata-rata kristalinitas karbon nano yang terbentuk adalah sebesar 21,9 %.

5.2 Saran

Adapun beberapa saran yang dapat dipertimbangkan guna menyempurnakan penelitian selanjutnya antara lain:

1. *Support catalyst* yang digunakan pada proses pirolisis dapat digunakan senyawa Al_2O_3 atau senyawa silika.
2. Penambahan karbon prekursor perlu ditambahkan.
3. Analisis bahan baku mikroalga perlu ditambahkan untuk membandingkan hasil analisis.

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