BAB V
KESIMPULAN DAN SARAN

5.1 Kesimpulan

1. Perolehan karbon hasil karbonisasi akan berkurang dengan adanya peningkatan temperatur karbonisasi.
2. Terjadi perubahan morfologi pada kulit salak setelah dikonversi menjadi karbon atau *hydrochar.*
3. Produk dari karbonisasi hidrotermal menghasilkan banyak OFG (*oxygenated functional group*) yang berupa gugus karbonil, hidroksil, dan karboksil.
4. Semakin tinggi temperatur karbonisasi hidrotermal, maka gugus OFG juga cenderung meningkat.
5. Pada temperatur 250°C OFG mulai terdekomposisi sehingga menyebabkan penurunan OFG.
6. Pengaruh keberadaan katalis asam sitrat tidak terlalu signifikan dalam menambah OFG pada analisa FTIR.

5.2 Saran

1. Perlu dilakukan adanya pengecekan secara berkala pada reaktor subkritik agar tidak terjadi penyumbatan saat pengambilan sampel.
2. Pembungkusan sel elektroda (*sealing*) pada saat akan dilakukan pengujian *cyclic voltammetry* harus sempurna dan dalam keadaan vakum sehingga tidak mengganggu proses ion transfer.
3. Impregnasi *hydrochar* dengan KOH sebaiknya dilakukan dengan pengadukan agar pencampuran dengan KOH menjadi lebih merata.

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