

BAB V

KESIMPULAN

5.1 Kesimpulan

Kesimpulan yang dapat ditarik dari penelitian yang telah dilakukan adalah sebagai berikut:

1. Seluruh variasi sampel katalis PVA-SSA memiliki nilai kapasitas asam dan konversi yang lebih tinggi dari katalis DPT-3.
2. Peningkatan jumlah rasio berat asam sulfosuksinat (SSA) didalam sampel akan meningkatkan kapasitas asam PVA-SSA, juga waktu pengeringan oven vakum yang lebih lama akan memberikan ketahanan asam yang lebih baik pada katalis PVA-SSA.
3. Semakin rendah temperatur pemanasan di oven maka konversi dan kapasitas asam yang dihasilkan lebih tinggi
4. Katalis PVA-SSA yang telah diuji menggunakan XRD memiliki struktur yang lebih amorf dibandingkan dengan PVA murni.
5. Pengeringan oven vakum tidak memberikan ketahanan kimia yang baik karena masih adanya penurunan konversi dan kapasitas asam pada reaksi berulang

5.2 Saran

Saran yang dapat diberikan untuk peneliti-peneliti selanjutnya terkait topik ini adalah sebagai berikut:

1. Perlu dilakukan studi lebih lanjut untuk dapat memperoleh ketahanan mekanik yang lebih baik
2. Diperlukan penambahan *crosslinker* pada katalis PVA-SSA
3. Perlu dilakukan analisis *degree of cross-linking* secara kuantitatif sebagai acuan pasti terikatnya gugus sulfonat pada polimer-polimer poli(vinil alkohol) atau PVA
4. Penggunaan waktu oven vakum tidak perlu untuk dilakukan dalam waktu yang lama karena kenaikan konversi maupun kapasitas asam yang tidak terlalu signifikan

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