BAB V
KESIMPULAN DAN SARAN

5.1 Kesimpulan

Melalui penelitian ini, terdapat beberapa kesimpulan yang diperoleh:

1. Peningkatan rasio massa GA terhadap PVA/SSA pada katalis PVA/SSA dapat menurunkan *swelling degree.*
2. Peningkatan rasio massa GA terhadap PVA/SSA pada katalis PVA/SSA dapat menghambat penurunan konversi pada katalis PVA/SSA.
3. Peningkatan rasio massa GA terhadap PVA/SSA pada katalis PVA/SSA dapat menghambat penurunan kapasitas asam pada katalis PVA/SSA.
4. Peningkatan rasio massa GA terhadap PVA/SSA pada katalis PVA/SSA membuat nilai *degree of crosslinking* semakin turun.
5. Suhu *crosslink* PVA/SSA dengan GA yang semakin besar dapat meningkatkan kapasitas asam, sifat hidrofobisitas, dan konversi reaksi katalis, dengan catatan bahwa suhunya harus di bawah 50 °C.

5.2 Saran

1. Variasi suhu *crosslinking* katalis PVA/SSA/GA perlu dilakukan diantara suhu 35°C-45°C, tujuannya untuk melihat lebih jelas pengaruh suhu *crosslink* terhadap kecenderungan dari kestabilan dan konversi katalis.
2. Waktu pemanasan dan suhu *crosslinking* mungkin sangat mempengaruhi sifat katalis, contohnya dengan waktu pemanasan yang lebih singkat ketika suhu *crosslinking* nya tinggi.
3. Pembuatan katalis PVA/SSA/GA dengan metode penelitian ini terbilang memerlukan waktu yang lama dan membutuhkan sumber daya yang lebih, sehingga perlu dilakukan *research* untuk memperoleh metode yang lebih singkat dengan sumber daya yang lebih rendah.
4. Katalis PVA/SSA/GA yang dihasilkan dari penelitian ini berbentuk film yang mana bentuk kurang efektif untuk digunakan pada proses reaksi pabrik, sehingga metode ekstrusi mungkin menjadi pilihan yang lebih baik.

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