BAB V
KESIMPULAN DAN SARAN

V.1. Kesimpulan

Kesimpulan yang didapat dari penelitian ini adalah:

1. Penambahan selulosa pada hidrogel cenderung meningkatkan tingkat kekerasan hidrogel.
2. Penambahan selulosa mampu meningkatkan *swelling ratio*, dimana uji *swelling ratio* untuk hidrogel GO/PVA/Selulosa yang tertinggi diperoleh dengan komposisi 1:1:0.4 dengan nilai 217% dari massa setelah pengeringan.
3. Penambahan selulosa dari ampas tebu mengurangi laju penyerapan hidrogel. Dimana laju penyerapan hidrogel tertinggi diperoleh dengan komposisi 1:1:0 (tanpa selulosa). Nilai Qt pada waktu penyerapan 6 jam sebesar 84.28 mg/g pada suhu ruang.
4. Jenis adsorpsi untuk sistem ini adalah adsorpsi kimia karena nilai R^2 yang terbaik diperoleh dengan menggunakan persamaan *pseudo-second order*.

V.2. Saran

Saran untuk penelitian berikutnya:

1. Diperlukan uji karakteristik fisik hidrogel secara kualitatif, seperti uji *tensile strenght*, *compressive strenght*.
2. Diperlukan studi lebih lanjut mengenai porositas hidrogel melalui uji SEM.
3. Diperlukan studi lebih lanjut mengenai pengaruh *graphene oxide* terhadap kapasitas adsorpsi *methylene blue* pada kondisi lainnya.

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