

BAB V

KESIMPULAN DAN SARAN

V.1 Kesimpulan

Dari percobaan yang telah dilakukan didapat beberapa kesimpulan sebagai berikut:

1. Al-MOF BDC dapat berhasil terbentuk dengan menggunakan pelarut etanol-air dengan kondisi operasi pengadukan 24 jam dan pemanasan pada suhu 180°C selama 48 jam.
2. Al-MOF BDC memiliki kristalinitas sebesar 78,9% dan untuk luas area serta volume total pori-pori masing-masing sebesar 46.221 m²g⁻¹ dan 0.2508 cm³g⁻¹
3. Al-MOF BDC yang berhasil terbentuk dapat menyerap air dengan kapasitas adsorpsi sebesar 0,11 gr air/gr MOF pada suhu 50°C selama 5 jam.

V.2 Saran

Dari percobaan yang telah dilakukan saran yang dapat diberikan sebagai berikut:

1. Pada saat pelarutan ligan dan logam perlu dilakukan pada tempat terpisah sehingga dapat lebih mudah larut.
2. Pelarut ligan dapat menggunakan NaOH yang dilarutkan menggunakan etanol sehingga ligan akan dapat lebih mudah terdeprotonasi yang akan memberikan efek pada struktur kristal yang lebih kecil dan dapat mempunyai luas permukaan yang lebih besar.

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