BAB V
PENUTUP

V.1 Kesimpulan

Berdasarkan hasil penelitian, komposit MIL-88B(Fe)@WO_3 dapat meningkatkan kemampuan adsorpsi dan degradasi fotokatalitik limbah zat warna RhB dengan rasio massa Fe:WO_3 yaitu 1:1. Hasil kinetika adsorpsi komposit tersebut sesuai dengan model kinetika *pseudo-fisrt order*. Hasil isotherm adsorpsinya sesuai dengan model Langmuir. Sedangkan, hasil degradasi fotokatalitik dengan penambahan H_2O_2 mengikuti persamaan BMG.

V.2 Saran

Penulis memberi saran untuk penelitian MOF-Tungsten selanjutnya berupa penggunaan material WO_3 tipe *nanoplate* atau *nanorod*. Walaupun dengan penggunaan WO_3 tipe *nanoplate* atau *nanorod* memiliki band gap yang lebih tinggi dari *nanosphere* yaitu 2,71-3,13 eV, akan tetapi memiliki aktivitas adsorpsi dan fotokatalitik lebih baik, sehingga penambahan H_2O_2 tidak lagi dibutuhkan. Selain itu, penulis juga memberikan saran untuk melakukan karakterisasi tambahan berupa *Fourier-transform infrared spectroscopy* (FTIR), *transmission electron miscoscope* (TEM), dan *X-ray Photoelectron Spectroscopy* (XPS).

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