

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Polybenzoxazine blended with poly(ethylene oxide) was successfully fabricated in nanoscale by using electrospinning technique. The weight composition of polybenzoxazine solution to poly(ethylene oxide) solution was 60:40, which was the best composition to use for fabricating the polybenzoxazine/poly(ethylene oxide) blended fibers with the applied voltage at 4 kV, the distance between the tip and the target as 20 cm and the needle diameter of 0.5 mm. The polybenzoxazine/poly(ethylene oxide) blended fibers has diameter of fiber in the range 600-1000 nm.

Polybenzoxazine blended with poly(ethylene oxide) nanofibers can use in many applications such as metal removal, catalyst support, electrical conductor, filtration and separation application, and conductive fibers. Thus, these applications should be further study.