Thesis Title	A Study of Ammonia Detection by Passive Dosimeter
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ABSTRACT

The objectives of this research were to evaluate the appropriate media and concentration of coating chemical for ammonia passive dosimeter and correlate the results of ammonia measurement between passive dosimeter method and standard method of National Institute for Occupational Safety and Health (NIOSH).

Results indicate that cellulose filter paper soaked with 0.0015 mole of diluted sulfuric acid and bromophenol blue was the most sensitive passive dosimeter to ammonia. This passive dosimeter when react with ammonia would turn the color from yellow to blue. The accuracy of the ammonia measurement in testing chamber at concentration of 5, 12.5, 25 and 50 ppm averaged $\pm$ 15.09 percent and the correlation coefficient of the two methods equaled to 0.9673.

In conclusion passive dosimeter is the screening method suitable for ammonia measurement in working area. This method is easily made, low cost, and easy to operate or use.