## Abstract

Water is the main requirement for human life, so there is no human life if there is no water on earth. Clean water is very necessary for humans, both for daily needs or industrial needs. Water pollution in general can be seen from several aspects that exist in water, especially in water quality. This study aims to create a tool to determine groundwater quality. Two sensors are designed to be installed, namely the pH sensor and the mercury sensor which are processed using the fuzzy logic method to obtain the proper or unfeasible status of the bathwater used by humans. The output obtained in this study is to find out groundwater quality information around the Kelurahan area of East Bekasi and North Bekasi Districts based on pH and mercury parameters. Based on the test results obtained from 5 test location points, the minimum pH value obtained is 7.37 and the maximum value is 7.74. For the mercury value obtained from the total water tested is 0.001.

Keywords: pH, Mercury, Fuzzy Logic