

DESIGN AND DEVELOPMENT OF PHVALUE DETECTION, BURNING AND TDS BASED ON ARDUINO UNO

*Name of Student : Susilawati
NIM : 3103171108
Advisor : Syaiful Amri, S.ST., M.T*

ABSTRACT

Water is a source of life, not only humans, other living things also need water. Water as an environmental component that will influence and be influenced by other components. Water that is of poor quality will also pollute the environment. Because of this problem, a design or tool that is able to detect some of these bad water problems is made, such as the pH value, the turbidity value and the TDS value in a liquid. When the appliance is supplied with a power supply, the system will be active. After the system is active, sensor one, namely the pH-4502C sensor, is immersed or put in water in order to know the sensor value, the read sensor value will be displayed on the 20x4 LCD display. In the second sensor, the turbidity sensor LGZD V1.1 is also inserted into the same liquid to find out the turbidity value of the liquid and in the last sensor, the conductivit/TDS/salt level sensor is inserted into the same liquid to find out the value of the sensor. From the test results, the highest value on the pH test is liquid soap of 11.7 mg/l in the turbidity test is coffee liquid of 3.86 NTU and in the TDS test is liquid salt 524.52 mg/l.

Keywords: *pH-4502C sensor, LGZD V1.1 Turbidity Sensor, Conductivity/TDS sensor and 20x4 LCD.*