

## **ABSTRACT**

Guppy Fish is one freshwater ornamental fish which is small and have various kind of colour and type that look very beautiful. In cultivation guppy fish is not easy. Because need many indicator in cultivation guppy fish. For example is Ph level and Salinity which is contained in the water used guppy fish. If pH water on guppy fish not regular then guppy fish will have a bad colour. And salinity on guppy fish water also must be considered, if salinity water on guppy fish not regular then guppy fish will be easy disease and can cause death. Of the two factors, then made a system can make easy cultivation of guppy fish. This system based on Arduino Microcontroler, and in this system has two sensors that is pH sensor and salinity sensor which where if the value of salinity sensor exceeds 210 then will be output is alert in website, LCD, and the buzzer will sound. Both sensor function as detector of pH level dan salinity. This system also connected to internet so can make it easy to do monitoring.

Keywords: Guppy Fish, pH Sensor, Salinity Sensor, Arduino, Raspberry Pi