

Somma Chokrung 2009: The Development of Pulse Biased Polarographic Dissolved Oxygen Meter. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering , Department of Electrical Engineering. Thesis Advisor: Mr. Dusit Thanapatay, Ph.D. 63 pages.

Agricultural water resource used for aquaculture such as prawn pond needs to be measured the level of dissolved oxygen in water regularly for controlling the water quality suitable for aquaculture all time. The water dissolved oxygen meter is then necessary. However, when the probe is dipped in the water continuously for long time, the electrodes of the probe will be dirty which causes inaccuracy of the measurement. Consequently, it needs to clean the probe so often. To extend the period of the continuous measurement, we have developed the pulse biased polarographic dissolved oxygen meter. The developed meter can measure the water dissolved oxygen correctly even though it has been operated continuously 45 days with small difference less than 0.5 ppm from the measurement value of the standard meter.

Key word: pulse biasing, water dissolved oxygen meter

Student's signature

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