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SENSOR SYSTEM FOR DETERMINATION OF PHOSPHATE SPECIES



▶ MORE INFORMATION

MEGA-TREND

- Chemicals and Materials
- Environment and Water

TECHNOLOGY READINESS LEVEL (TRL)

- TRL 4 (Lab Prototype - Lab Testing)

PATENT/ GRANTED NUMBER

- PI 2014701881

▶ TECHNOLOGY OVERVIEW

The present invention discloses a phosphate sensor system for use in determining the phosphate species which is suitable for application of analysis of body fluids, precision agriculture, soil nutrient measurement, precision aquaculture and water quality monitoring. The phosphate sensor system according to the present invention comprising a phosphate sensor to detect monobasic phosphate; a pH sensor to measure pH value of sample solution and to use the pH value to deduce phosphate species; a temperature sensor to measure analyte temperature and to use the measured temperature to correct signal error; a reference electrode to provide reference signal for potentiometric readout circuit; an anti-fouling

buffer solution to avoid fouling sensor surface; buffered phosphate solutions to measure sensor signal in standard phosphate solution and to define stable phosphate sensor surface; a measurement circuit to convert chemical activity to voltage signal; and an analyte container.

CONTACT US!

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