ABSTRACT

DETERMINATION OF WATER TREATMENT PARAMETERS BASED ON ABSORBANCE AND FLUORESCENCE

A computer-implemented method for determining a water treatment parameter includes receiving, by a computer, measurements of a fluorescence emission spectrum of a water sample including a first peak emission wavelength and at least a second peak emission wavelength, emitted in response to an excitation wavelength, receiving, by the computer, an absorbance measurement obtained at the excitation wavelength of the water sample, determining, using the computer, a ratio of the measurements at either the second peak emission wavelength, or a sum of measurements at a plurality of peak emission wavelengths including at least the first peak emission wavelength and the second peak emission wavelength, to the first peak emission wavelength, and calculating, using the computer, a value for the water treatment parameter based on a combination of at least the ratio and the absorbance measurement.

[Figure 9]