POMONA COLLEGE	Environmental Analysis Teaching and Research Laboratory	Date: 02/07/2017	Number: X
	Standard Operating Procedure	Title: Trilogy Laboratory Fluorometer	
	Approved By: TBD	Revision Date: February 9, 2017	

1. Scope and Application

1.1 The scope of this SOP is train researchers in the use of the Trilogy Laboratory Fluorometer, a compact, multifunctional laboratory instrument that can be used for making fluoresence, absorbance, or turbidity measurements using the appropriate snap-in Optical Module.

1.2 The applications of this SOP are for...

2. Summary of Method

2.1 The Trilogy Laboratory Fluorometer is a compact, multifunctional laboratory insturment that can be used for making fluoresence, absorbance, and turbidity measurements using the appropriate snap-in Optical Module. A color touch screen with simple menus makes for an intuitive user interface.

Contents

3. Acknowledgements

4. Modules

4.1 There are several different modules available to the Trilogy Laboratory Fluorometer:

- 1. The Absorbance Module accepts interchangeable filter paddles so measurements can be made at different wavelenghts in order to identify or place a samplein a particular class of compounds. The standard filter paddle wavelengths/bandwidths are: 560/10; 600/10 and 750/10 nm.
- The Turbidity Module uses an Infrared (IR) LED with a wavelength of 850 nm as required for reference method: ISO 7027/DIN EN 27027, "Water Quality- Determination of Turbidity". Using Infrared allows Turbidity to be measured at wavelengths that are not normally absorbed by organic matter thereby reducing susceptibility to interference by sample color.

4.2 When properly calibrated, the Trilogy Fluorometer will read out the actual concentration of the solution. Optical Modules contain the necessary light source and filters for the relevant application.

5. Fluorometer Operation

Measuring Samples

5.1 Biases and interferences can come from...

6. Health and Safety

6.1 Describe the risk...

Safety and Personnnel Protective Equipment

7. Personnel & Training Responsibilities

7.1 Researchers training is required before this the procedures in this method can be used...

7.2 Researchers using this SOP should be trained for the following SOPs:

- SOP01 Laboratory Safety
- SOP02 Field Safety

8. Required Materials and Apparati

8.1 Item 1 w/catalog number!

8.2 Item 2

9. Reagents and Standards

10. Estimated Time

10.1 This procedure requires XX minutes...

11. Sample Collection, Preservation, and Storage

12. Procedure

12.1 Prepare ...

12.2

13. Data Analysis and Calculations

14. QC/QA Criteria

15. Trouble Shooting

16. References

16.1 APHA, AWWA. WEF. (2012) Standard Methods for examination of water and wastewater. 22nd American Public Health Association (Eds.). Washington. 1360 pp. (2014).