Electronic Supplementary Material (ESI) for Analytical Methods. This journal is © The Royal Society of Chemistry 2023

Low-cost optofluidic platform for colorimetric assessment of bacterial activity in domestic wastewater

Prajal Chettri, a* Kalathur Mohan Ganesh, b Sahashransu Satyajeet Mahapatra, c A. S. Vishwanathan c and Shailesh Srivastava a

^a FEMTO FabULLAS, CRIF, Department of Physics, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Andhra Pradesh 515134, India

^b STAR Laboratory, CRIF, Department of Chemistry, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Andhra Pradesh 515134, India

 WATER Laboratory, Department of Biosciences, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Andhra Pradesh 515134, India

* Corresponding authors: prajalchettri@sssihl.edu.in (E-mail)

Supplementary information

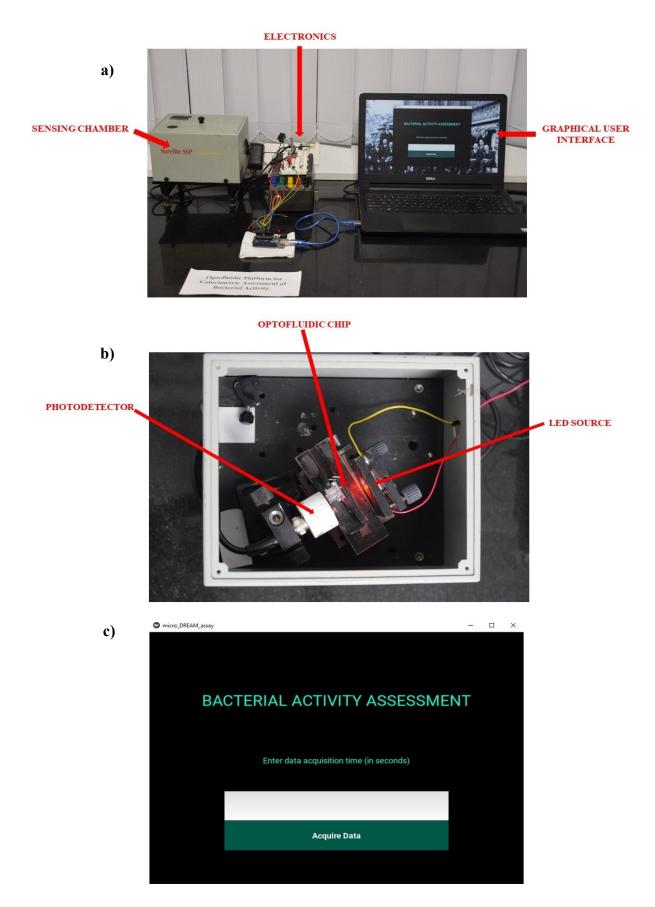


Figure S1. a) Experimental setup which includes the sensing chamber, electronics and a custom-built software. b) Image of the inside of sensing chamber. c) Custom-built GUI for real time monitoring using Arduino-Python interfacing.

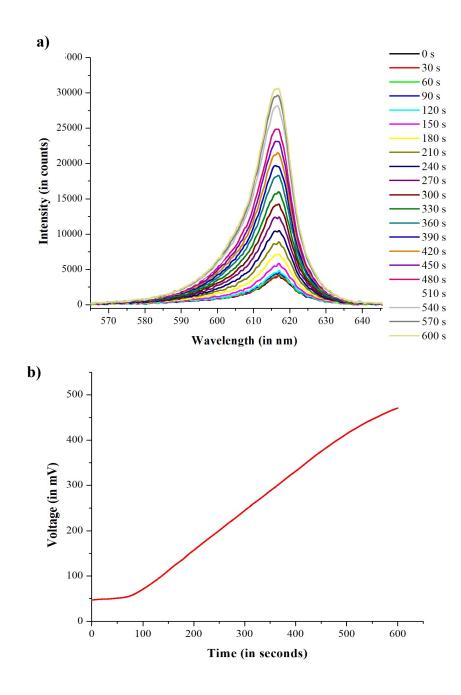


Figure S2. a) Decolorization as a function of increasing intensity as measured by Ocean Optics Spectrometer. (b) Decolorization as a function of increasing voltage as measured by PIN-10D photodiode