
Design of smartphone-based analytical tools for detection and analysis of chemicals, heavy metals and biological contaminants in water

*A thesis submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy*

by

DIGANTA HATIBORUAH

Registration no.: TZ132583 of 2013



DEPARTMENT OF PHYSICS
SCHOOL OF SCIENCES
TEZPUR UNIVERSITY, ASSAM
INDIA-784028

July 2022