

**Effects of light emitting diode (LED) illumination on
viability of microorganisms**

Submitted in partial fulfilment of the requirements
of the degree of

Master of Science in Life Science (Applied Medical Sciences)

by

Reshmi Sagar

(UID No.: 188512)

Guided by:

Dr. Binoj C. Kutty



**Department of Life Science & Biochemistry
St. Xavier's College (Autonomous), Mumbai
June 2020**



DEPARTMENT OF LIFE SCIENCE & BIOCHEMISTRY
ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI
MUMBAI - 400 001



CERTIFICATE

Class: M.Sc. (Part II) – Life Science

UID NO.: 188512

This is to certify that the project entitled "Effects of light emitting diode (LED) illumination on viability of microorganisms" is a result of the original research work carried out by Ms. Reshmi Sagar.

This project is submitted to the Department of Life Science & Biochemistry, St. Xavier's College (Autonomous), Mumbai, in partial fulfilment for the degree of **Master of Science (M.Sc.) - Life Science (Applied Medical Sciences)** for the year 2019-20.

Dr. Binoj. C. Kutty
Research Advisor

Head of Department
Life Science and Biochemistry

Date: 27th June 2020

Place: Mumbai

**DEPARTMENT OF LIFE SCIENCE
AND BIOCHEMISTRY
ST. XAVIER'S COLLEGE AUTONOMOUS,
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DECLARATION

Class: **M.Sc. (Part II) – Life Science**

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I declare that this dissertation entitled "*Effects of light emitting diode (LED) illumination on viability of microorganisms*" has been written by me and no part of it has been plagiarized from any other source. The literature has been cited in-text and in the reference list. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my dissertation. I understand that any violation of the above will be the cause for disciplinary action by the College and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed. The entire work or any part of it thereof, will not be published without the permission and consent of my research guide.



Signature

Name of student: **Ms. Reshmi Sagar**

Date: **27th June, 2020**

Place: **Mumbai**