#### OPTIMIZATION AND PARTIAL PURIFICATION OF ANTI CANCER ENZYME L- GLUTAMINSE FROM BACILLUS SUBTILIS

Dissertation submitted to Calicut University
in partial fulfillment of requirements for the award of the degree of

#### MASTER OF SCIENCE IN MICROBIOLOGY

Submitted by
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## SUBMERGED FERMENTATION, OPTIMIZATION AND PARTIAL PURIFICATION OF L-ASPARAGINASE FROM SOIL ACTINOMYCETES

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## EXTRACELLULAR PRODUCTION AND PARTIAL PURIFICATION OF L-GLUTAMINASE AND ANTI CANCER ENZYME FROM ENTROBACTER AEROGENES

# DISSERTATION SUBMITTED TO CALICUT UNIVERSITY IN PARTIAL FULFILMENT OF REQUIREMENTS FOR THE AWARD OF THE DEGREE OF

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This is to certify that the dissertation entitled "Extracellular Production And Partial Purification Of I-Glutasmicaese And Anti Cancer Enzyme From Entrobacter aerogenes" is a bonafide record of the work done by Mr. ATHUL JOHN, Dept. of Microbiology, Pazhassi Raja College, Pulpally, during the academic year 2018-2020 for the award of Master of Science in microbiology of the University of Calicut



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#### CHARACTERIZATION OF ACTINOMYCETES FOR SOME INDUSTRIALLY IMPORTANT ENZYMES

Dissertation submitted to Calicut University
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# PRODUCTION, OPTIMIZATION AND PARTIAL PURIFICATION OF L-ASPARAGINASE OF ACTINOMYCETES FROM SOIL

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#### ISOLATION OF AZOTOBACTER SPECIES FROM WAYANAD SOIL AND THEIR EFFECT ON PLANT GROWTH

Dissertation submitted to Calicut University

In partial fulfilment of requirements for the award of the degree of

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### INVITRO FUNGAL DEGRADATION AND EVALUATION OF INDUSTRIAL COIR MATTRESS WASTE

Dissertation submitted to Calicut University

In partial fulfillment of requirements for the award of the degree of

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### INVITRO FUNGAL DEGRADATION AND EVALUATION OF INDUSTRIAL COIR MATTRESS WASTE

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Date: 10 06 2020

This is to certify that the report entitled "Invitro fungal degradation and evaluation of industrial coir mattress waste" submitted in partial fulfillment of the requirement for the degree of Master of science in Microbiology to the Calicut University, is a record of bonafide research work carried out by Ms. VRINDA SURESH P. P, from 25<sup>th</sup> April 2019 to 7<sup>th</sup> June 2019 under my guidance and supervision and no part of the report has been submitted for the award of any degree, diploma associateship, fellowship for other similer title

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This is to certify that VRINDA SURESH P.P of final year M.Sc. MICROBIOLOGY have undertaken the project entitled "Invitro fungal degradation and evaluation of industrial coir mattress waste" towards the partial fulfillment of the requirements of Master of science in Microbiology by Calicut University during the year 2018-2020. No part of the thesis has been presented for the award of any other degree.

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