



DEPARTMENT OF MICROBIOLOGY & BIOCHEMISTRY

Certificate

This is to certify that the dissertation entitled "Determination of Heavy Metals by AAS in Edible Salts and its Quality Analysis." Is a bonafied record of project work carried out by **KEERTHANA G NAIR** (Reg. No. 22011286), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfilment for the award of the degree of Master of Science in Biochemistry during the period of 2020-2022.

Place: Changanassery
Date: 12/9/22


Dr. Jiji Jacob

Head of the Department

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Certificate

This is to certify that the dissertation entitled "BIO-FABRICATED GOLD NANOPARTICLE INCORPORATED WITH DOXORUBICIN FOR TARGETED MELANOMA THERAPY" is a bonafide record of project work carried out by Ms. Smrithi Ajay (Reg. No.22011294), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the Degree of Master of Science in Biochemistry during the academic year 2020 - 2022.

Place: Changanassery

Date: 12th Sep 2022


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Certificate

This is to certify the dissertation entitled "PHYTOCHEMICAL SCREENING, ANTIOXIDANT ACTIVITY AND ANTIMICROBIAL ANALYSIS OF *Zingiber officinale* (GINGER)" is a Bonafide record of project work carried out by ABHIDHA YOUSEF (RegisterNo:22011280), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 -2022.

Place: Changanassery.

Date: 12.9.2022.

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Certificate

This is to certify that the dissertation entitled "DNA BARCODING OF GREEN CARDAMOM CULTIVAR" is a bonafide record of project work carried out by SANDRA K AJITH (Register No: 22011290), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the period of 2020 - 2022.

Place: *Changanassery*

Date: *12/09/2022*


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Affiliated to Mahatma Gandhi University, Kottayam, Kerala
Changanassery, Kottayam, Kerala, India-686101

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This is to certify that the dissertation entitled "OXIDATIVE STRESS AND ITS CORRELATION WITH SERUM LEVELS OF IRON AND SPECIFIC ADIPOCYTOKINES (ADIPONECTIN AND LEPTIN) IN HYPOTHYROID AND HYPERTHYROID PATIENTS" is a bonafide record of project work carried out by JOSEPH THOMAS (Reg. No. 22011285), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the period of 2020 - 2022.

Place: Changanassery
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Certificate

This is to certify that the dissertation entitled **PHYTOCHEMICAL SCREENING ,
ANTIOXIDANT ACTIVITY AND ANTIMICRIOBIAL ANALYSIS OF
Phyllanthus emblica (Gooseberry)** is a bonafide record of project work carried out
by **CHANDANA A (Reg. No. 22011283)**, and is submitted to St. Berchmans College
(Autonomous), Changanassery in partial fulfilment for the award of the degree of Master of
Science in Biochemistry during the academic year 2020- 2022.

Place

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CERTIFICATE

This is to certify that the dissertation entitled "Heterologous expression, purification, and biochemical characterization of a novel outer membrane lipase (OML) of *Pseudomonas guariconensis*" is a bonafide record of project work carried out by AKSHAYA BENESH (Reg. No. 22011298), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfilment for the award of the degree of Master of Science in Microbiology during the period of 2020 - 2022.

Place: Changanacherry -

Date: 13.9.2022.


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
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CERTIFICATE

This is to certify that the dissertation entitled "**DEVELOPMENT OF FUNCTIONAL PVA-HYDROGEL IMMOBILIZED WITH NOVEL ENZYME PEKUI AS A WOUND DRESSING**" is a bonafide record of project work carried out by **VIJINA.K (Reg. No. 22011297)**, under the supervision of Dr. Sabu Abdulhameed, Professor, Department of Biotechnology and Microbiology, Dr. Janaki Ammal Campus, Kannur University, Palayad, and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2021 - 2022.

Place: *Changanacherry.*
Date: *13.9.2022.*


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CERTIFICATE

This is to certify that dissertation "ISOLATION AND CHARACTERIZATION OF AMYLASE PRODUCING BACTERIA AND ITS UTILIZATION FOR BIOTECHNOLOGICAL APPLICATIONS" is a bona fide record of original research work carried out by Ms. RESMI B (Reg. No. 22011287) and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment of the degree of **Master of Science in Biochemistry** during the period of 2020-2022. Contents of the thesis have not previously been used for the award of any degree, diploma or other similar title or recognition.

Place: Changanassery

Date: 13/09/22

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Certificate

This is to certify that the dissertation entitled 'STUDIES ON GROWTH AND BIOCHEMICAL CHANGES IN SMALL CARDAMOM (*Elettaria cardamomum* Maton) WITH THE APPLICATION OF SILICA' is a bonafide record of project work carried out by SREEKUTTY RAMESH (Reg. No. 22011295), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 - 2022.

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Date

12.09.2022.

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Certificate

This is to certify that the dissertation entitled "**Studies on Isolation of Ulvan from *Ulva lactuca* and Synthesis of Curcumin-Loaded Acetylated Ulvan and Characterization.**" is a bonafide record of project work carried out by **AMALRAJ R P (Reg. No. 22011281)**, and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 - 2022.

Place : *Changanacherry* .

Date : *12.9.2022* .


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Certificate

This is to certify that the dissertation entitled "Prognostic Significance of Cytogenetic Studies and PTEN Mutation Status in Pediatric Acute Lymphoblastic Leukemia" is a bonafide record of project work carried out by Ms. Shruthi Ajay (Reg. No.22011292), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 - 2022.

Place: Changanassery

Date: 12 sep 22


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CERTIFICATE

This is to certify that the dissertation entitled "STUDY OF ANTIOXIDANT AND ANTIMICROBIAL ACTIVITIES OF CRUDE POLYSACCHARIDES AND CRUDE PROTEINS FROM BLACK TURMERIC (*Curcuma caesia* ROXB.) AND MANGO GINGER (*Curcuma amada* ROXB.)" performed under my guidance and supervision is a bonafide record of Mr. Sujith S (Reg. No. 22011296) was carried out at ICAR-Indian Institute of Spices Research, Kozhikode in partial fulfillment of the requirement for the award of degree of Master of Science in Biochemistry of St. BERCHMEN'S COLLEGE, CHANGANASSERY during the period April 2022 to June 2022. Certified further to the best of my knowledge that this work does not form part of any other dissertation or project work on the basis of which a degree or diploma or a similar title has been awarded earlier to any candidate by any other university.



Ms. Sivaranjani. R

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This is to certify that the dissertation entitled " EFFECT OF *Saraca asoca* EXTRACT ON 4T1 INDUCED BREAST CANCER MODEL IN BALB/c MICE" is a bonafide record of project work carried out by **SILBY MARKOSE (Reg. No. 22011293)**, and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 - 2022.

Place:

Date:

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This is to certify that the dissertation entitled "ROLE OF APT2 IN COLORECTAL CANCER DRUG RESISTANCE" is a bonafide record of project work carried out by SAMEERA BASHEER (Reg. No. 22011289), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2019 - 2021.

Place: *Changanassery*

Date: *13.9.2022*


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This is to certify that the dissertation entitled "CPT1A Mediated Fatty Acid Oxidation Promotes Metastasis in Oral Squamous Cell Carcinoma" is a bonafide record of project work carried out by Ms. Amritha Naick S (Reg. No.22011282), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfillment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 - 2022.

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Date: 12/09/22

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Certificate

This is to certify that the dissertation entitled
**“ANTIMICROBIAL, ANTIOXIDANT ANALYSIS OF GUAVA
LEAF EXTRACT (*Psidium guajava*) AND PRODUCTION OF
HAND SANITIZER”** is a Bonafide record of project work
carried out by ROSE MARY K M (Reg. No.22011288), and
is submitted to St. Berchmans College (Autonomous),
Changanassery In partial fulfillment for the award of the
degree of Master of Science in Biochemistry During the
academic year 2020-2022


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Head of the department
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Place : Changanassery

Date : 13/9/2022

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Certificate

This is to certify that the dissertation entitled "ANALYSIS OF HEAVY METALS BY AAS AND NUTRITIONAL QUALITY OF BABY FOOD PRODUCTS" is a bonafide record of project work carried out by SEETHAL S LAL (Reg. No. 22011291), and is submitted to St. Berchmans College (Autonomous), Changanassery in partial fulfilment for the award of the degree of Master of Science in Biochemistry during the academic year 2020 -2022.

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