



Department of Biochemistry
T. K. M. College of Arts & Science
(Affiliated to University of Kerala)
Re-accredited by NAAC with "A++" Grade
Kollam-691005, Kerala.
www.tkmeas.ac.in

03/09/2024

CERTIFICATE

This is to certify that the dissertation entitled 'Green Synthesis of Silver Nanoparticles Using *Talinum fruticosum*: Characterization, Antioxidant And Antidiabetic Effects' submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. ABEERA B N (Candidate Code: 63822142001) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Latha B., Project guide, T.K.M. College of Arts and Science, Kollam.

It is also certified that no part of this work has been presented for the award of any other degree, diploma, or similar title at any other university.

Dr. LATHA B
Internal Guide

Dr. AJINZA. A

Head of the Department of Biochemistry

Examiners: 1. 21/9/24 DR. NISHA. V. R.
2. 21/9/24 Bijita V.R.



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CERTIFICATE

This is to certify that the dissertation entitled 'EXTRACTION AND CHARACTERIZATION OF COLLAGEN FROM CHICKEN FEET AND ITS APPLICATION AS COLLAGEN PEPTIDE IN COSMETIC EMULSION', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. AKHILA M R (Candidate Code: 63822142003) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Madhu K. Mani, Project guide, Merit Biolabs, Cochin. It is also certified that no part of this work has been presented for the award of any other degree, diploma, or similar title at any other university.

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CERTIFICATE

This is to certify that the dissertation entitled 'GREEN SYNTHESIS OF SILVER NANOPARTICLES FROM *ROTULA AQUATICA* : CHARACTERIZATION AND PHARMACOLOGICAL EVALUATION,' submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. AMEENA ANSAR (Candidate Code:63822142004) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Ansil P N.

It is also certified that no part of this work has been presented for the award of any other degree, diploma, or similar title at any other university.

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Dr. ANSIL P N

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This is to certify that the dissertation entitled "Antioxidant and Anti-inflammatory activities of silver nanoparticles synthesized from *Strobilanthes heyneanus* root", submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. Ameena S (Candidate Code: 63822142005) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Ansil P N. It is also certified that no part of this work has been presented for the award of any other degree, diploma, or similar title at any other university.

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This is to certify that the dissertation entitled 'ESTIMATION OF IN-VITRO STARCH DIGESTIBILITY AND RESISTANT STARCH LEVELS IN AROMATIC RICE VARIETIES OF KERALA TO PREDICT ESTIMATED GLYCEMIC INDEX', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. ANAGHA S. M (Candidate Code: 63822142006) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Nadiya F, PD Fellow, Inter University Center for Genomics and Gene Technology (IUCGGT)

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Dr. HARI SANKAR H. S
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This is to certify that the dissertation entitled 'PRODUCTION OF CHITO OLIGOSACCHARIDES AND THEIR POTENTIAL APPLICATIONS IN MEDICINE', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. ANJALI S (Candidate Code: 63822142007) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Madhu K. Mani. Project guide, Merit Biolabs, Cochin.

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This is to certify that the dissertation entitled '**SQUALENE EXTRACTED FROM HEMIGRAPHIS COLORATA DIFFERENTIALLY AFFECTING CELLULITIS AND FORMULATION OF ANTI-CELLULITIS GEL**', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by **Ms. FARSANA NAJEEM (Candidate Code: 63822142008)** of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of **Dr. Madhu K. Mani**, Project guide, Merit Biolabs, Cochin.

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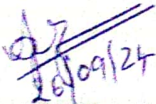
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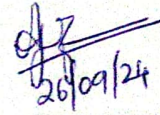
This is to certify that the dissertation entitled 'EVALUATING THE MEDICAL EFFICACY OF *HEMIGRAPHIS COLORATA* : A COMPREHENSIVE STUDY ON ITS THERAPEUTIC POTENTIAL', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by **Ms. FATHIMA N (Candidate Code: 63822142009)** of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Dr. Madhu K. Mani, Project guide, Merit Biolabs, Cochin.

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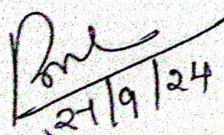
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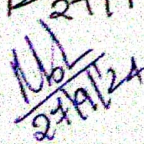
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This is to certify that the dissertation entitled '**Characterization, antioxidant and anticancer potential of silver nanoparticles from *Centratherum punctatum***' submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by **Ms. Haleema R (Candidate code: 63822142010)** of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of **Dr. Sumayya A.S**, Assistant professor, TKM College of Arts and Science, Kollam.

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This is to certify that the dissertation entitled 'ANALYSING THE EFFECT OF EXTRACELLULAR VESICLE INDUCED CISPLATIN DRUG RESISTANCE ON BREAST CANCER', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by Ms. HARITHA. H. B (Candidate Code: 63822142011) of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Mr. Sajith S.K, JRF, Inter University Center for Genomics and Gene Technology (IUCGGT).

It is also certified that no part of this work has been presented for the award of any other degree, diploma, or similar title at any other university.

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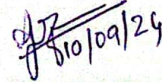
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Dr. SUMAYYA A S

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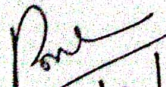

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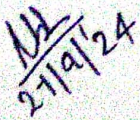
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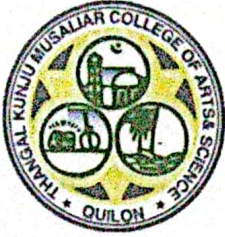

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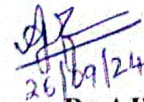
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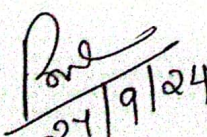
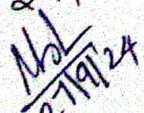
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Mrs. Soumya. S
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This is to certify that the dissertation entitled 'SENSITIZATION OF BREAST CANCER CELLS TO CISPLATIN BY THAPSIGARGIN INDUCTION', submitted to the University of Kerala in partial fulfillment of the requirements for the award of the degree of Master of Science in Biochemistry, is a record of original research work carried out by **Ms. SEREENA D (Candidate Code: 63822142015)** of the Department of Biochemistry, T.K.M. College of Arts and Science, Kollam, under the guidance and supervision of Prof. (Dr.) R. Rajalakshmi, Hon. Director, Inter University Centre for Genomics and Gene Technology (IUCGGT).

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Mrs. SOUMYA S
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Smt: **SOUMYA S**

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