Established in 1981

#### Sree Narayana College Chengannur, Kerala - 689508

Managed by the Sree Narayana Trusts, Kollam Affilliated to the University of Kerala Accredited by NAAC with B Grade Tel: 0479 2962728

Tel: 0479 2962728 e-mail:sncchengannur@gmail.com Website:www.sncollegechengannur.org



Dr. Shereen.K
Principal in charge
Mob: +91 9447075311
e-mail:sherinsank@gmail.com

#### **DVV Clarification Criteria 1**

- 1.3.2. Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)
- 1.3.2.1. Number of students undertaking project work/field work / internships

#### **Supporting Document**

• Internship completion certificate / project work completion certificate from the organization where internship / project was completed.

This is to certify that this dissertation entitled 'SOCIO ECONOMIC CONDITION OF FISHERMEN IN KERALA WITH SPECIAL REFERENCE OF

CHELLANAM VILLAGE IN ERNAKULAM DISRICT' is an authentic record of the work carried out by Miss. Lakshmi R (Candidate Code: 15020128010), Miss. Nandana J (Candidate Code: 15020128051), Miss Gopika Prasad (Candidate Code: 15020128039), Mr. Navaneeth S Das (Candidate Code: 15020128052) of 6<sup>th</sup> semester BA Economics, Department of Economics, Sree Narayana College Chengannur under my supervision and guidance in partial fulfillment of the requirements for the award of the degree of Bachelor of Arts in Economics under CBCSS of University of Kerala and that no part thereof has been precented for any other degree.

SREEDEVI GOPALAKRISHNAN

(Project Guide)

Countersigned by

222222222222

SREEDEVI GOPALAKRISHNAN

(Head of Dept. of Economics)

Chengannur

Date: 15 | 5 | 2023

This is certify that the work entitled "SOCIO- ECONOMIC IMPACT OF WATER POLLUTION – A CASE STUDY OF AMBALAPPUZHA NORTH GRAMA PANCHAYAT" submitted to the University of Kerala in partial fulfillment of the requirement for the award of BA Degree, Final Semester Degree Programme in Economics under CBCSS is a bonafide research carried out by MEGHA MURALI "MUHSINA SIDHIQ, NABIN NAZAR, SANDRA S NAIR, SURYA LEKSHMI .S, Sree Narayana College, Chengannur under our supervision and guidance.

Prahaladhan K.K

Dahalaha

Guest lecturer

Department of Economics

SN College Chengannur

Sreedevi Gopalakrishnan

Sueda

HoD & Assistant professor

Department of Economics

SN College Chengannur

#### JYOTHISH S

Guest Lecturer

Department of Economics

S N College, Chengannur

#### CERTIFICATE

This is to certify that the dissertation entitled "Economic burden of diabetes in Kerala: with special reference to Ala Panchayat, Alappuzha District" submitted for the partial fulfillment of the requirement for the award of the Degree of the Bachelor of Arts in Economics by ADITHYA SHANKAR, AMESH MOHAN, AMJAD NAVAS, ANANDU S is based on the original work undertaken by them in the Department of Economics, SN College Chengannur, and that this entitled work has not previously formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or any other similar title.

Place: Chengannur

REFERENCE PROPERTY STATE FOR THE TOTAL TOT

Date: 15th May, 2023

JYOTHISH S

(Supervisor)

SREEDEVI GOPALAKRISHNAN

(Assistant Professor & HoD, Department of Economics)

This is to certify that project entitled "IMPACT OF HOUSEBOAT TOURISM -A STUDY ON ALPPUZHA REGION, KERALA" submitted to the university of kerala in partial fulfilment of requirements for the award of BA Degree , First Degree program in Economics under the CBCSS is a bonafide research carried out by, Ajaya kumar . M, Anjali. m, Anujith.T, Aromal, k.s., Arun.R VI semester BA Economics, Sree Narayana college chengannur, under my supervision and guidance.

Mrs. Sreedevi Gopalakrishnan Department of Economics
Head & Assistant profes Head &Assistant professor

Department of Economic Chengannul

Department of Economics,

SN college chengannur

Smt. Rajani.

Supervisory Teacher

This is to certify that project entitled "THE STUDY ONF THE TEMPORARY WORKERS IN ECOTOURISM DESTINATIONS OF PATHANAMTHITTA"

submitted to the university of kerala in partial fulfilment of requirements for the award of BA Degree , First Degree program in Economics under the CBCSS is a bonafide research carried out by, Davison sam, Ganga lekshmi.G, Jincy.s ,Lekshmi.r ,and Malu.s, VI semester BA Economics, Sree Narayana college chengannur, under my supervision and guidance.

Mrs. Sreedevi Gopalakrishnan,

Head &Assistant professor

Department of Economics,

SN college chengannur

SREEDEVI GOPALAKRISHINAN Head. Department of Economics SN College, Chengannur

Smt. Rajani. N

Supervisory Teacher

This is to certify that this work entitled "A study on online food delivery system with special reference to the Alappuzha district" submitted to the University of Kerala in partial fulfilment of the requirement for the award of B. A Degree, First Degree program in Economics under CBCSS is bonafide research carried out by GANGA S LAL, LAJIN A, NITHUL RAJ, RAJU. G, and SWATHY GIREESH, Semester B.A Economics, Sree Narayana College, Chengannur under my supervision and guidance.

Sueda Mrs Sreedevi Gopalakrishnan

Head of the Department

2222222222

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)

Department of Economics

S N College Chengannur

SREEDEVI GOPALAKRISHNAN Head, Department of Economics Dr Mahima S

Assistant Professor

Department of Economics

S N College Chengannur

#### DECLARATION

We, do hereby declare that the project report entitled A CAUSE STUDY OF PATHANAMTHITTA DISTRICT KHADI INDUSTRY ELANTHOOR is a record of an original work carried out by us under the supervision and guidance of Assistant professor Ms Deepti Acharya Department of economics Sree Narayana College Chegannur we declare this has not previously formed the basis for the award of any degree , diploma , fellowship,or other similar title of recognition.

Place: Chenganni

Date: 15/5/2023

ATHIRAR. AHITOR

ATHUL KRISHNAN

AVANI SUSEELAN.

DEVIKA REGHU

Sree Narayana College Chengannur 689508

May 2023

#### **DEPARTMENT OF ECONOMICS**

#### CERTIFICATE

This is to certify that this project intitled "SOCIO-ECONOMIC CASE STUDY OF CASHEW WORKERS ERUVA" is an authentic record of the work carried out by the following candidates in partial fullfillment of the requirement for the award of the Degree of Bachelor of Arts in Economics of the university of Kerala under my supervisions

Slno	Name of candidates
T.	Indrajith Krisnan
2.	Teema Yohannan
3.	Varsha. V
4.	Vishnu. S
5.	Vishnu Jayakumar
(Martin)	Vishnu Jayakumar  Vishnu Jayakumar  SREEDEN GOPALAKRISHINNI  SREEDEN GOPALAKRISHINNI  Head, Department of SN CC
C	TO THE CORAL A VIDIGUNAN

Ms. DEEPTI ACHARYA

3

Smt.SREEDEVIGOPALAKRISHNAN

(Supervising Teacher)

(Head of the Department)

Sree Narayana College chengan

## SREE NARAYANA COLLEGE, CHENGANNUR



#### CERTIFICATE

This is to certify that the project report entitled"DAIRY FARMING AND CONTRIBUTION OF APCOS- A CASE STUDY OF THAMARAKULAM KUSC PANCHAYAT" submitted to the University of Kerala in partial fulfillment of the requirement for the award of BA Degree. Final Semester Degree Programme in Economics under CBCSS is a bonafide research carried out by NIDHIN .S. MADHU, NIKHIL KUMAR .A, SAKEER HUSSAIN .S, VISHNU .C , Sree Narayana College , Chengannur under our supervision and guidance .

Prahaladhan K.K

Guest lecturer

Department of Economics

Bahaladhn

SN College, Chengannur

SREEDEN GOPAL

Sreedevi Gopalakrishnan

HoD & Assistant professor

Department of Economics

SN College Chengannur

This is certify that the work entitled "STUDY ON EFFECTS SHOPPING MALL WITH SPECIAL REFERENCE TO LULU MALL TRIVANDRUM" submitted to the university of Kerala in partial fulfillment of requirements for the award of BA Degree, First Degree program in Economics under the CBCSS is a bonafide research carried out by VIDHUMOL R, ABIN A, ADHITHYAN K S, AKHILAB, AMALKRISHNAN K VI semester BA Economics, Sree Narayana college Chengannur under my supervision and guidance

Succession GOPALAKRISHNAN Head, Department of Economics

Mrs. Sreedevi Gopalakrishnan,

Head & Assistant professor

Department of Economics,

SN college Chengannur

Dr Mahima S

Assistant Professor

Department of Economics

SN College Chengannur

### SREE NARAYANA COLLEGE CHENGANNUR, KERALA DEPARTMENT OF COMMERCE

#### **CERTIFICATE**

This is to certify that a report on "A STUDY ON TRANSPORTATION FACILITIES IN CHENGANNUR " carried out by SANJAY SAJAYAN, SARANYA.S ,SIYANA SUDHEER, SREELEKSHMI.S, VINOY VARGHESE, in partial fulfillment of the requirement of Bachelor of commerce, University of Kerala. This is Bonafide report of the work done by them under our supervision and guidance. Also certified that this report has been submitted to any other institute or university for the award of any degree, diploma or fellowship.

> THUSHARA. U.S Asst. Professor & HOD Department of Commerce

Sree Narayana College Chengannur

Smt. PHUSHARA U.S

(Head of Commerce Department)

DK NISHAD A (Assistant professor)

NARAYANA COLLEGE

Sree Narayana College

Chengannur

Signature of Examiner

# DEPARTMENT OF COMMERCE SREE NARAYANA COLLEGE, CHENGANNUR, KERALA

#### ,CERITIFICATE

This is to certify that a report on "A STUDY ON THE EFFECTIVENESS OF EMPLOYEES GRIEVANCE REDRESSAL SYSTEM WITH SPECIAL REFERENCE TO MILMA IN KOLLAM" is a record of studies carried out by NAVANEETH A.R, NILA S ANAND, NISHANTH SUDHAN, PUNYA S, RITHU T in partial fulfilment of the requirement of Bachelor of commerce, University of Kerala. This is the bonafide report of the work done by them under our supervision and guidance and that no part of this project has been submitted to any other institute or university for the award of any degree, diploma or fellowship.

Smt.THUSHARA US

Head, Department of Commerc

Sree Narayana College, Chengannur

THUSHARA. U.S
Asst. Professor & HOD
Department of Commerce
Since Mar. And College

Smt.SOUMYA SURENDRAN

Assistant professor

Sree Narayana College,

Chengannur

Dr. SHEREEN K

Principal in charge

Sree Narayana College, Chengannur

CHENGAN UR

Signature of Examiner

#### SREE NARAYANA COLLEGE, CHENGANNUR

#### DEPARTMENT OF COMMERCE

#### CERTIFICATE

This is to certify that a report on "A STUDY ON SOLID WASTE MANAGEMENT BY HARITHA KARMA SENA IN CHERIYANNAD LOCALITY" carried out by DHANYA P S, MIDHUN MOHAN, MUHAMMAD BILALS, NAVAMYZ and SONA AJI in partial fulfilment of the requirement of bachelor of commerce, Kerala University. This is a bonfire report of the work done by them under our supervision and guidance. Also certified that this report has not been submitter to any other institution or university for the award of any degree, diploma or fellowship.

Dr. Mishad. A

(Asst. professor)

(Asst. professor)

Head of the department of commerce

DR SHEREEN K

Principal,

Signature of the Examiner

THUSHARA, U.S Asst Professor & HOD Department / Commerce Sree Narayana College Chengannur

SN College, Chengannur



#### **DEPARTMENT OF COMMERCE**

### SREE NARAYANA COLLEGE, CHENGANNUR, KERALA

#### **CERTIFICATE**

This is to certify that this project entitled A STUDY ON THE WORK LIFE BALANCE AMONG WOMEN TEACHERS IN HIGHER SECONDARY SCHOOLS A STUDY WITH SPECIAL REFERENCE TO CHENGANNUR TALUK is a record of studies carried out by Abhaya U.S, Aparna Raj, Dhanya Babu, Bipin.B and Muhammed Asif in partial fulfilment of the requirements for the Degree of Bachelor of Commerce, University of Kerala. This is bonafide report of the work done by them under our supervision and guidance and that no part of this project has been presented earlier for the award of any degree, diploma, title or recognition.

THUSHARA U S

THUSHARA. U.S Asst. Professor & HOD Department of Commerce Sree Narayana College Chengannur

Head, Department of Commerce

Sree Narayana College, Chengannur

Dr.SHEREEN K

Principal in charge

Sree Narayana College, Chengannur

CHE NARAYA A COLLOGO

Signature of Examiner

### DEPARTMENT OF COMMERCE SREE NARAYANA COLLEGE CHENGANNUR, KERALA

#### **CERTIFICATE**

This is to certify that a report on "A study on consumer awareness towards consumer protection Act,1986 with special reference to Chengannur Taluk" carried out by ABIN BINU, VARSHA RAJESH, SAYUJYA JAYARAJ, SHERY SHIBU, SHILPA SURESH in partial report of the requirement of Bachelor of commerce, University of Kerala. This is Bonafide report of the work done by them under our supervision and guidance. Also certified that this report has been submitted to any other institute or university for the award of any degree, diploma or fellowship.

Smt. THUSHARA U.S

(Head of Commerce Department)

Ms. SNEHA SURESH

(Assistant professor on contract)

Dr. SHEREEN. K

Signature of examiner

Principal

Sree Narayana college

Chengannur

PRINCIPAL SREE NARAYANA COLLEGE CHENGANNUR

#### DEPARTMENT OF COMMERCE

### SREE NARAYANA COLLEGE, CHENGANNUR, KERALA

#### CERTIFICATE

This is to certify that a report on "A STUDY ON PROBLEMS AND PROSPECTS OF WOMEN ENTREPRENEURSHIP IN MAVELIKARA" carried out by ARSHA R, ASHWIN BINU, ASWANY S LALU, ASWIN V K, ATHULYA P in partial fulfilment of the requirement of Bachelor of commerce, University of Kerala. This is Bonafide report of the work done by them under our supervision and guidance. Also certified that this report has been submitted to any other institute or university for the award of any degree, diploma or fellowship.

Smt. THUSHARA U S

THUSHARA. U.S Asst. Professor & HOD Department of Commerce Sree Narayana College Chengannur

HOD, Department of commerce

Sree Narayana College,

Chengannur

Assistant professor

Sree Narayana College,

Chengannur

Dr. SHEREEN. K

Principal.

Sree Narayana College,

Chengannur



Signature of Examiner

# WIRELESS POWER **TRANSMISSION**

### MINI PROJECT REPORT

Submitted to

#### UNIVERSITY OF KERALA

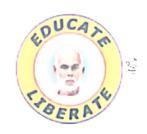
In Partial fulfillment of the requirements for the award of the degree of Bachelor of Science in Physics





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SUBMITTED BY, DAYAL UDAYAN

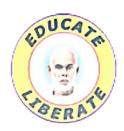


DEPARTMENT OF PHYSICS SREE NARAYANA COLLEGE **CHENGANNUR** 

#### SREE NARAYANA COLLEGE **CHENGANNUR**

### **DEPARTMENT OF PHYSICS**

**CORE COURSE -PHYSICS** 



#### PROJECT REPORT

Register No	:	23020128004
Admission No	:	10188
Serial No	š	

Year of study from : 2020-2023

: DAYAL UDAYAN

Group members name :

3

3

2

2

2

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1. ANJU B

Name

2. ANSEENA A

3. DAYAL UDAYAN

4. SANJEEV SATHYAN5. SHIJI JOHNSAN

Examiner (1) Da. Ame A	Certificate Bonafide:
Examiner (2) Dr. As-colmit	Head of the Dept

### PIEZOELECTRIC GENERATOR

#### MINI PROJECT REPORT

Submitted to

#### UNIVERSITY OF KERALA

In Partial fulfillment of the requirements for the award of the degree of Bachelor of Science in Physics



**SUBMITTED BY** 

**GROUP II** 



DEPARTMENT OF PHYSICS

SREE NARAYANA COLLEGE CHENGANNUR

### SREE NARAYANA COLLEGE **CHENGANNUR**

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### DEPARTMENT OF PHYSICS CORE COURSE -PHYSICS



#### PROJECT REPORT

Name

THOMAS KURIAKOSE

TINI CHANDRAN

	AMRUTHA S ANJU UTHAMAN SWATHY SANTHOSH
RegisterNo	: 23020128007,2302012800 8,23020128009,23020128 010,23020128011
AdmissionNo	: 10417,10309,10319,10312
Serial No	:
Year ofstudy	: 2020-2023
Examiner(1)	CertificateBonafide:
Examiner(2)	Head of theDept

### STRUCTURAL AND OPTICAL PROPERTIES OF COPPER DOPED TITANIUM OXIDE NANOPARTICLES

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Project report submitted to the University of Kerala for the partial fulfilment of the Requirement for the award of degree of

MASTER OF SCIENCE

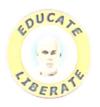
IN

**PHYSICS** 

By

**LAKSHMIS** 

Reg. no: 63021128008



SREE NARAYANA COLLEGE, CHENGANNUR

Under the supervision of

Dr. K. SREELATHA

ASSOCIATE PROFESSOR AND HEAD

SREE NARAYANA COLLEGE, CHENGANNUR

# Hydrothermal route to graphene quantum dots (GQDs): Effects of temperature

A Project report submitted to the

University of Kerala

For the partial fulfilment of the requirements for the Degree of

#### MASTER OF SCIENCE IN

**PHYSICS** 

Ву

LEKSHMI B

Reg no: 63021128009



Sree Narayana College,

Chengannur

Under the supervision of

Dr VINOY THOMAS

ASSOCIATE PROFESSOR

HEAD OF THE DEPARTMENT

CHRISTIAN COLLEGE

**CHENGANNUR** 

33444444444444444

**AUGUST 2023** 

# SYNTHESIS AND CHARACTERISATION OF LITHIUM FERRITE

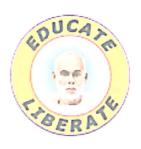
A Project Report submitted to the University of Kerala for the partial fulfillment of the requirements for the Degree of

MASTER OF SCIENCE IN
PHYSICS

Ву

PARVATHY.S.KUMAR

Reg no: 63021128010



SREE NARAYANA COLLEGE, CHENGANNUR

Under the supervision of

DR. LAKSHMI VIJAYAN

ASSISTANT PROFESSER

ST.ALOYSIUS COLLEGE, EDATHUA

**AUGUST 2023** 

# Structural and optical bandgap analysis of a novel heterogeneous nanocomposite

### Project report submitted to the University of Kerala

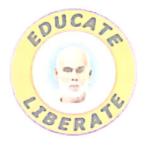
In partial fulfilment of the requirements for the award of the Degree of

# MASTER OF SCIENCE IN PHYSICS

By

SANDEEP KUMAR.S

Reg.no: 63021128011



Sree Narayana College, Chengannur

Under the supervision of

Dr. INDULAL C.R

ASSISTANT PROFESSOR ST. GREGORIOS COLLEGE KOTTARAKKARA AUGUST 2023

### Structural, optical and viscous studies of Barium Oxide nanofluid

Project report submitted to the
University of Kerala

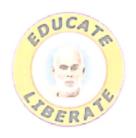
In partial fulfilment of the requirements for the award of the Degree of

MASTER OF SCIENCE
IN PHYSICS

By

**ANJALI.S** 

Reg.no: 63021128001



Sree Narayana College, Chengannur

Under the supervision of
Dr. INDULAL C.R
ASSISTANT PROFESSOR
ST. GREGORIOS COLLEGE
KOTTARAKKARA
AUGUST 2023

### Investigation of the structural properties of reduced graphene oxide (RGO)

### via green hydrothermal method at different temperatures

A project report submitted to the University of Kerala for the partial fulfilment of the

Requirement for the degree of

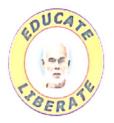
MASTER OF SCIENCE

IN PHYSICS

Ву

ARDRA SAJEEV

Reg. no: 63021128002



Sree Narayana College,

Chengannur

Under the supervision of

Dr. VINOY THOMAS

ASSOCIATE PROFESSOR AND

HEAD OF THE DEPARTMENT

**CHRISTIAN COLLEGE** 

**CHENGANNUR** 

**AUGUST 2023** 

# STRUCTURAL AND OPTICAL PROPERTIES CNT INTERCALATED In<sub>2</sub>S<sub>3</sub> THIN FILM

Project report submitted to the University of Kerala for the partial fulfilment of the Requirement for the degree of

MASTER OF SCIENCE IN PHYSICS

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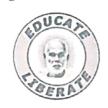
3

3

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A

By
ASWATHI ASHOK
Reg. no: 63021128003



SREE NARAYANA COLLEGE, CHENGANNUR

Under the supervision of

Dr. JINCEMON CYRIAC

ASSISTANT PROFESSOR

MARIAN COLLEGE (AUTONOMOUS), KUTTIKANAM

**AUGUST 2023** 

g to

### SYNTHESIS AND CHARACTERIZATION OF TITANIUM OXIDE NANOPARTICLES

Project report submitted to the University of Kerala for the partial fulfilment of the Requirement for the award of degree of

MASTER OF SCIENCE

IN

**PHYSICS** 

By

**GOPIKA PS** 

Reg. no: 63021128005



SREE NARAYANA COLLEGE, **CHENGANNUR** 

Under the supervision of

Dr. K. SREELATHA ASSOCIATE PROFESSOR AND HEAD SREE NARAYANA COLLEGE, CHENGANNUR

# **Experimental investigation on thermal conductivity** of Strontium Oxide Nano fluid

Project report submitted to the

University of Kerala

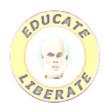
In partial fulfillment of the requirements for the award of the Degree of

# MASTER OF SCIENCE IN PHYSICS

By

**GREESHMA BABU** 

Reg. no: 63021128006



#### **Department of Physics**

SREE NARAYANA COLLEGE

**CHENGANNUR** 

2021-2023

### PHOTOCATALYSIS STUDY OF GRAPHENE: In<sub>2</sub>S<sub>3</sub> NANOCOMPOSITE THIN FILMS

A project report submitted to the University of Kerala for the partial fulfilment Of the Requirement for the Degree of

MASTER OF SCIENCE IN PHYSICS

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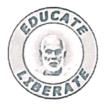
-1

-2

By

KAVITHA K M

Reg. no: 63021128007



SREE NARAYANA COLLEGE, CHENGANNUR

Under the supervision of

Dr. JINCEMON CYRIAC
ASSISTANT PROFESSOR
MARIAN COLLEGE (AUTONOMOUS), KUTTIKANAM

**AUGUST 2023** 

### ESTIMATION OF CHLOROPHYLL CONTENT OF SOME MEDICINAL PLANTS AVAILABLE IN KERALA

Dissertation submitted to the University of Kerala in partial fulfillment for the award of Degree of Bachelor of Science in Chemistry

#### Submitted by:

Name

**Candidate Code** 

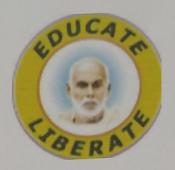
1. GOPIKA S. SHAJI : 23520128005

2. SAVANTH S.

: 23520128006

Subject Code: 235 Exam Code: 23520601

Under the guidance of Dr. Jisha Sreedharan Assistant Professor



**DEPARTMENT OF CHEMISTRY** SREE NARAYANA COLLEGE CHENGANNUR, ALAPPUZHA **MARCH 2023** 

This is to certify that the dissertation entitled "Estimation Of Chlorophyll Content Of Some Medicinal Plants Available In Kerala" is an authentic record of work carried out under my supervision and guidance in partial fulfillment of requirement for the award of the Bachelor Degree in Chemistry. I further certified that no part of this project has been submitted earlier for the award of any other degree, diploma of other similar titles of any University.

Dr. Venu S.

Head and Assistant Professor

Department of Chemistry

Sree Narayana College

Chengannur

DEAPARTMENT OF CHEMISTRY M

**External Examiners:** 

2. Thing

Assistant Professor

Department of Chemistry

Sree Narayana College

Chengannur

# DETERMINATION OF VITAMIN C CONCENTRATION IN DIFFERENT FRUIT SAMPLE BY REDOX TITRATION



Dissertation submitted to the university of Kerala in partial fulfillment for the Award of

Degree of bachelor of science in chemistry

#### SUBMITTED BY,

ARJUN A

REG NO. 23520128007

ARSHA A KUMAR

REG NO. 23520128008

TS ADITHYARAJ

REG NO. 23520128012

**EXAMINATION CODE: 23520601** 

**SUBJECT CODE: 235** 

### UNDER THE GUIDANCE OF DR. AMBILY CHANDRAN ASSISTANT PROFESSOR



DEPARTMENT OF CHEMISTRY

SREE NARAYANA COLLEGE

NEDUVARAMCODE P O, CHENGANNUR, KERALA

MARCH 2023

This is to certify that the dissertation entitled
"DETERMINATION OF VITAMIN C
CONCENTRATION IN DIFFERENT FRUIT
SAMPLE BY REDOX TITRATION" is an
authentic record of work carried out under my
supervision and
guidance in partial fulfillment of requirement for the
award of the Bachelor Degree in Chemistry. I
further certified that no part of this project has been
submitted earlier for the award of any other degree,
diploma of other similar titles of any University.

Dr. Venu S.

Head and Assistant Professor

Department of Chemistry Sree Narayana College Dr. Ambily chandran

**Assistant Professor** 

Department of Chemistry Sree Narayana College

Chengannur

Chengannur

DEAPARTMENT OF CHEMISTRY M

EXTERNAL EXAMINERS:

1. 1400 1915/2

2. Alarman 2 1 | 5 | 2

### EXTRACTION OF CAFFEINE FROM VARIOUS BRANDS OF COMMERCIALLY AVAILABLE TEA LEAVES

Dissertation submitted to the University of Kerala in partial fulfillment for the award of Degree of Bachelor of Science in Chemistry

#### Submitted by:

Name

Candidate Code

1. AJAY R

23520128002

2. NEETHUS

23520128009

3. RISHIKESH P S

23520128010

**Subject Code** 

: 235

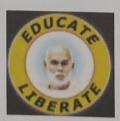
**Exam Code** 

: 23520601

Under the guidance of

Dr. Smitha Sasidharan

Assistant Professor Department of Chemistry



DEPARTMENT OF CHEMISTRY
SREENARAYANA COLLEGE
CHENGANNUR, ALAPPUZHA
MAY 2023

#### **CERTIFICATE**

This is to certify that the project entitled

# 'EXTRACTION OF CAFFINE FROM VARIOUS BRANDS OF COMMERCIALLY AVAILABLE TEA

LEAVES' is an authentic record of the dissertation work carried out under my supervision and guidance in partial fulfillment of requirement for the award of the Bachelor Degree in Chemistry. I further certified that no part of this project has been submitted earlier for the award of any other degree, diploma of other similar titles of any University.

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Head and Assistant Professor

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**EXTERNAL EXAMINERS: 1.** 

2.

## ESTIMATION OF FERROUS IRON CONTENT PRESENT IN DIFFERENT IRON TABLETS

Dissertation submitted to the University of Kerala in partial fulfillment for the award of Degree of Bachelor of Science in Chemistry

#### Submitted by

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Under the Guidance of

Dr.Anju K S Assistant Professor



#### DEPARTMENT OF CHEMISTRY

SREE NARAYANA COLLEGE, CHENGANNUR ALAPPUZHA, MAY 2023

#### **CERTIFICATE**

This is to certify that the dissertation entitled "ESTIMATION OF FERROUS IRON CONTENT PRESENT IN DIFFERENT IRON TABLETS" is an authentic record of work carried out under my supervision and guidance in partial fulfillment of requirement for the award of the Bachelor Degree in Chemistry. I further certified that no part of this project has been submitted earlier for the award of any other degree, diploma of other similar titles of any University.

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(1) 10

(2) Affrica 17/5/23



Dr. Smitha Chandran.S Associate Professor Department of Chemistry

#### CERTIFICATE

This is to certify that the thesis report entitled "Phyto mediated biogenic synthesis of silver nanoparticles using leaf extract of Justicia adhatoda and its applications" has been carried out by AJIL S B (63521128001) under my guidance and supervision at the Department of Chemistry, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amritapuri, Kollam – 690525, as part of the final semester project work for his Master's Degree in Chemistry, is an authentic record of the work carried out by him, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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#### **CERTIFICATE**

This is to certify that the project entitled "Graphitic Carbon Nitride/Graphene Oxide Nanohybrid for the Adsorptive Removal of Methyl Orange from Wastewater" submitted to Kerala University in partial fulfilment of the requirements for the award of the Degree of Master of Science is a record of original work done by ANJANA T.V (Reg No: 63521128002) from School of Chemical Sciences, Payyanur Campus, Kannur University under my supervision and guidance. The work presented in this dissertation has not been submitted for any other degree/diploma of this or any other university.

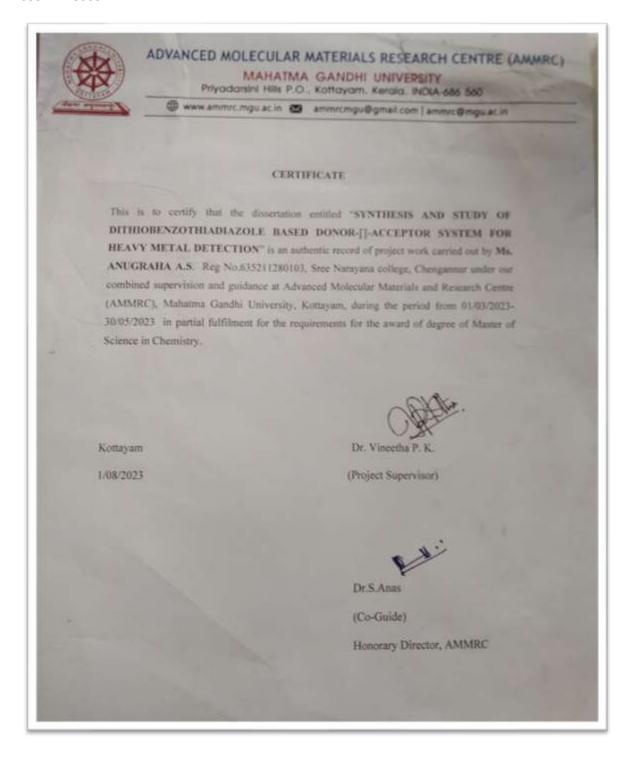
Place: Payyanur

Date: 22 -08 2013

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Dr. SHIMA P.E

Dr. SHIMA. P.D Assistant Professor Department of Chemistry (Swami Anandatheeths Campus-Payyenur) Kannur University, Kerala - 670 327





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#### CERTIFICATE

This is to certify that the thesis report entitled "SYNTHESIS OF ALPHA CHITIN & BETA CHITIN NANOFIBERS AS A BIOBASED REINFORCEMENT FOR PVA/Fe(III) NANOCOMPOSITE FILMS - FABRICATION -MECHANICAL & ABSORPTION STUDIES" has been carried out by ARABHI A R (63521128004) under my guidance and supervision at the Department of Chemistry, Amrita School of Arts & Sciences, Amrita Vishwa Vidyapeetham, Amritapuri, Kollam - 690525, as part of the final term project work for her Master's Degree in Chemistry, is an authentic record of the work carried out by her, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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#### CERTIFICATE

This is to certify that the thesis report entitled "ELECTROCHEMICAL QUANTIFICATION OF TRYPTAMINE USING ORTHO-PHENYLENEDIAMINE MODIFIED PENSIL GRAPHITE ELECTRODE" has been carried out by CHIPPY HARISH (63521128005) under my guidance and supervision at the Department of Chemistry, Amrita School of Arts & Sciences, Amrita Vishwa Vidyapeetham, Amritapuri Kollam – 690525, as part of the final term project work for her Master's Degree in Chemistry, is an authentic record of the work carried out by her, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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Dr. Beena S



Dr.Shylesh Chandran M S Assistant Professor Department of Chemistry

#### CERTIFICATE

This is to certify that the thesis report entitled "Assessment of Microplastic Concentration Sediments in Azheekkal Beach, Kollam District, Kerala" has been carried out by GOWRI PRASAD (63521128006) under my guidance and supervision at the Department of Chemistry, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amritapuri, Kollam – 690525, as part of the final semester project work for her Master's Degree in Chemistry, is an authentic record of the work carried out by her, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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#### CERTIFICATE

This is to certify that the project report entitled "FABRICATION OF MULTI-LAYERED AQUATIC WEED DERIVED NATURAL FIBER FOR THE ENHANCED REMOVAL OF TEXTILE DYE" is a bona fide record of the work done by Ms. Krishna. S.V(Candidate code 63521128007), M.Sc. Chemistry, Sree Narayana college Chengannur, Alappuzha, under my guidance in the Advanced Centre of Environmental Studies and Sustainable Development (ACESSD), Mahatma Gandhi University, Kottayam, from March to May 2023.

Dr. Shanthi Prabha V (Research guide) Research Scientist ACESSD Mahatma Gandhi University

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Dr. A P Thomas

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#### CERTIFICATE

This is to certify that the project entitled "Doped g-C<sub>3</sub>N<sub>4</sub>-BiVO<sub>4</sub> composite for photocatalytic degradation of dye and antibiotics in water" submitted to Kerala University in partial fulfillment of the requirements for the award of the Degree of Master of Science in Chemistry is a record of original work done by Meenakshy A (63521128008) at School of Chemical Sciences, Payyanur Campus, Kannur University under my supervision and guidance. The work presented in this dissertation has not been submitted for any other degree/diploma of this or any other University.

Piace: Payyanur

Date: 03.05:2073

Bair

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This is to certify that the project entitled "Adsorptive Removal of Organic Pollutant Methylene Blue from Aqueous Solution Using Graphene Oxide/Graphitic Carbon Nitride Nanohybrid" submitted to Kerala University in partial fulfillment of the requirements for the award of the Degree of Master of Science in Chemistry is a record of original work done by MEENU REMESH (Reg.No: 63521128009) from School of Chemical Sciences, Payyanur Campus, Kannur University under my supervision and guidance. The work presented in this dissertation has not been submitted for any other degree/diploma of this or any other university.

Place: Payyanur

Date: 22-8-2023

Dr. SHIMAP. D.

Dr. SHIMA. P.D.
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श्री चित्रा तिरुनाल आयुर्विशान और प्रौद्योगिकी संस्थान, तिरुवनन्तपुरम- 11, केरल Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram- 11, Kerala (भारत सरकार के अधीन राष्ट्रीय महत्व का संस्था)

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15th August 2023

#### CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterisation of Zein based Radiopaque Microbeads for Transarterial Chemoembolization" is an authentic record of the work carried out by Ms. Reshma R S, under my supervision in partial fulfilment for the degree of Master of Science in Chemistry and no part of this dissertation has been presented before for any other degree.

Thiruvananthapuram

Dr. Manju.S

Guide



Dr. Shylesh Chandran M S Assistant Professor Department of Chemistry

#### CERTIFICATE

This is to certify that the thesis report entitled "Microplastics In Mangrove Sediments, Near Azheekal Beach, Kollam District" has been carried out by ROHINI S PILLAI (63521128011) under my guidance and supervision at the Department of Chemistry, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amritapuri, Kollam-690525, as part of the final semester project work for her Master's Degree in Chemistry, is an authentic record of the work carried out by her, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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#### CERTIFICATE

This is to certify that the project entitled "Fabrication of Flexible Titania nanotube and its Composites for Supercapacitor Applications" submitted to Kerala University in partial fulfillment of the requirements for the award of the Degree of Master of Science in Chemistry is a record of original work done by Shamla. P. S (Reg. No: 63521128012) at School of Chemical Sciences, Payyanur Campus, Kannur University under my supervision and guidance. The work presented in this dissertation has not been submitted for any other degree/diploma of this or any other University.

Place: Payyanur

Date: 02.08.2023

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Dr. BAUU, K. V., M.Sc. Ph.D.

January Department of Chemistry

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Land R. Q., Kannur-670 327



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#### CERTIFICATE

This is to certify that the project report entitled "NANAOCELLULOSE-BASED BIOCHAR MEMBRANE FOR SELECTED TEXTILE DYE REMOVAL FROM AQUEOUS MEDIUM" is a bona fide record of the work done by Ms. Sradha R(Candidate code 63521128013), M.Sc. Chemistry, Sree Narayana College Chengannur, Alappuzha, ander my garidance in the Advanced Centre of Environmental Studies and Sustainable Development (ACESSD), Mahatma Gandhi University, Kottayam, from March to May 2023.

Dr. Shanthi Prabha V (Research guide) Research Scientist ACESSD Mahatma Gandhi University

Kottayam

Dr. A P Thomas

Director

Mahatma Gandhi University

Kottayam





#### CERTIFICATE

This is to certify that the thesis report entitled "EXTRACTION, IDENTICATION AND DETERMINATION OF ANTIOXIDANT ACTIVITY FROM METHANOL EXTRACT OF LEAVES OF CATHARANTHUS ROSEUS. PERIWINKLE" has been carried out by SREELEKSHMI M S (63521128014) under my guidance and supervision at the Department of Chemistry, Amrita School of Arts & Sciences, Amrita Vishwa Vidyapeetham, Amritapuri, Kollam -690525, as part of the final term project work for her Master's Degree in Chemistry, is an authentic record of the work carried out by her, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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Assistant Professor Department of Chemistry Department of Chemistry

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#### CERTIFICATE

This is to certify that the dissertation entitled "SYNTHESIS AND PHOTOPHYSICAL STUDIES OF LOW BAND GAP CONJUGATED POLYMERS" is an authentic record of , project work carried out by Ms. SRUTHY S. Reg No.63521128015, Sree Narayana college, Chengannur under our combined supervision and guidance at Advanced Molecular Materials and Research Centre (AMMRC), Mahatma Gandhi University, Kottayam, during the period from 01/03/2023- 30/05/2023 in partial fulfilment for the requirements for the award of degree of Master of Science in Chemistry.

Kottayam

1/08/2023

Dr. Vincetha P. K

(Project Supervisor)

Dr.S.Anas

(Co-Guide)

Honorary Director, AMMRC



Dr. Saritha A
Associate Professor
Department of Chemistry

#### CERTIFICATE

This is to certify that the thesis report entitled "FACILE EXTRACTION AND COMPARISON OF LIGNIN FROM COCONUT SHELL WITH MULTIPLE APPLICATIONS" has been carried out by VISMAYA VV (63521128016) under my guidance and supervision at the Department of Chemistry, Amrita School of Arts & Sciences, Amrita Vishwa Vidyapeetham, Amritapuri, Kollam - 690525, as part of the final term project work for her Master's Degree in Chemistry, is an authentic record of the work carried out by her, under my supervision during the period from March 2023 to April 2023 and no part of this report has formed the basis for the award of any degree, diploma or other similar titles of any University.

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Dr. Saritha A