

ACCREDITED BY NAAC WITH 'A' GRADE (AFFILIATED TO KANNUR UNIVERSITY)

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# PROJECT WORK-DEPARTMENT OF CHEMISTRY

## **CERTIFICATE**

This is to certify that the project work entitled "COPPER TUNGSTATE - HEXAGONAL BORON NITRIDE COMPOSITE PHOTOCATALYST FOR ENHANCED DEGRADATION OF METHYLENE BLUE UNDER VISIBLE LIGHT IRRADIATION" is a bonafide work of Anaswara. M (C2PSCH1304) MSc pure chemistry in the Department of Chemistry, Sreenarayana college Kannur under the supervision and guidance of Assistant prof. SREYA.P, in partial fulfilment for the requirements of the award of the degree of Master of science in pure chemistry during the academic year 2022-2024.

Kannur

May 2024

Assistant professor

Sree Narayana College, Kannur

Sieya. P

# **BONAFIDE CERTIFICATE**

to certify that This the project work entitled "SYNTHESIS, CHARACTERISATION AND SUPERCAPACITOR APPLICATION OF MoS<sub>2</sub> NANOPARTICLES" done by ANAGHA SASI Reg no.C2PSCH1303, PG Department of Chemistry, Sree Narayana College, Kannur submitted to Kannur University for the partial fulfillment for the award of the DEGREE OF MASTER OF SCIENCE IN CHEMISTRY during the academic year 2022-2024.

Signature of Guide: DR. TITHESH. K ASSISTANT PROFESSOR Signature of Head of the Departmen

Signature of External Examiner:

Dr Manjustia Malhew 201107124

D Md Spws Soph

### **DECLARATION**

I hereby declare that the Thesis entitled "SYNTHESIS AND CHARACTERISATION OF MIXED METAL OXIDE NANO COMPOSITE FOR ENVIRONMENTAL REMEDIATION" submitted to Kannur University in partial fulfillment of the requirements for the award of the Degree of Master of science in Chemistry is an authentic record of the work done by me under the guidance of Dr. CHARISHMA RAVINDRAN. Assistant Professor on contract, Department of Chemistry, S.N.College, Kannur and that, this has not previously formed the basis for the award of any Degree or Diploma of any other University or Institution.

Abhinraj P P

(REG.No: C2PSCH1301)

# SREE NARAYANA COLLEGE KANNUR



## **CERTIFICATE**

This is to certify that project work entitled "SYNTHESIS CHARACTERIZATION AND BIOLOGICAL APPLICATION OF NOVEL SCHIFF BASES" is a bonafied work of APARNA V (REG. NUMBER: C2PSCH1305) MSc Chemistry in Department of Chemistry Sree Narayana College ,Kannur under the supervision and guidance at Sree Narayana College ,Kannur , in partial fulfilment for the requirements of award of degree of Master of Science in Chemistry during academic year 2022-2024.

Kannur

**JUNE 2024** 

Mr Mahesh S

Assistant professor

Sree Narayana College, Kannur

# 

# BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "INVESTIGATION OF THE EFFECT OF COPPER AND NICKEL CO-DOPING ON ZINC OXIDE NANOPARTICLES FOR WATER TREATMENT; A GREEN APPROACH" submitted to the Kannur University, in partial fulfilment of the requirements for the degree of Master of Science in Chemistry is a record of the original research work done by FIDA FAISAL (Reg. No: C2PSCH1306) during the period of her study in the Department of Chemistry of Sree Narayana College, Kannur.

Dr. VINISHA VALSARAJ P.

Sree Narayana College Marinisha VALSARAJ P ASSISTANT PROFESSOR DEPT. OF CHEMISTRY

Signature:

S N COLLEGE, KANNUR PIN: 670 007

### **CERTIFICATE**

This is to certify that this project entitled "GREEN SYNTHESIS OF MNO2 NANOPARTICLE" is a bonafide record of the project work done by HRIDHYA TK. Reg no.C2PSCH1307 during the academic year 2022-2024 in partial fulfilment of the requirement for the degree of master of science in chemistry.

Project guide.

Aparna N

PG New Maria Coll. Sree New Maria Coll. Sree Manuar - 670 607

# **BONAFIDE CERTIFICATE**

This is to certify that the project report entitled 'Mixed metal oxide composite for environmental remediation' is a bonafide record of the work done by JINSIYA.C.H (Reg No: C2PSCH1308), Dept. of Chemistry, Sree Narayana College, Kannur under my guidance and supervision for the partial fulfillment of Master of Science in Chemistry.

Dr. SITHA KUNIHKRISHA.IA M Assistant Projessor Dept of Chemistry Sice Navayana College Zammer-670007

Dr. JITHA KUNHIKRISHNAN M

202222222222222222222

# SREE NARAYANA COLLEGE, THOTTADA, KANNUR (Affiliated to Kannur University)



### **CERTIFICATE**

This is to certify that the project work entitled "METAL OXIDE POLYMER NANOCOMPOSITE MEMBRANE FOR ENVIRONMENTAL REMEDIATION" is a bonafide work of KADEEJATHUL SHAHAMA (C2PSCH1309) under the guidance of Mrs. Geetha devi K T, Assistant Professor, Department of Chemistry, Sree Narayana College, Kannur, in partial fulfillment for the requirements of award of the Degree of Master of Science in Chemistry, during the period 2022-2024.

KANNUR

**JUNE 2024** 

Mrs. GEETHA DEVI K T

ASSISTANT PROFESSOR OF CHEMISTRY

29.6.24

SREE NARAYANA COLLEGE, THOTTADA KANNUR

# SYNTHESIS OF A C3 SYMMETRICAL AMIDE FUNCTIONALIZED CARBAZOLE DERIVATIVE



# PROJECT SUBMITTED TO THE KANNUR UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE POSTGRADUATE DEGREE IN CHEMISTRY

BY

### MANEESHA C

Reg No: C2PSCH1310

Under the supervision of

Dr. KRISHNAN KARTHA KALATHIL

**Examiners** 

1) Low MJ Emos 2) Dr Manjuska Malhew Rm 1/7/84

ead of the Department

Sreya P. Head, Past Graduate & Research Department of Chemistry Sree Narayana College, Kannur



# DEVELOPMENT OF AN AMPHIPHILIC BODIPY SYSTEM



PROJECT SUBMITTED TO THE KANNUR UNIVERSITY IN THE PARTIAL FULFILLEMENT OF THE REQUIREMENTS FOR THE POST GRADUATE DEGREE IN CHEMISTRY

BY

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# SYNTHESIS OF A STIMULI-RESPONSIVE MACROCYCLIC **SYSTEM**



PROJECT SUBMITTED TO THE KANNUR UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE POSTGRADUATE DEGREE IN CHEMISTRY

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**Head of the Department** 

**SREYA P** 

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2) Dr Wanjuska Malhew Rom
17404)

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# DESIGN AND SYNTHESIS OF NAPHTHALENE DIIMIDE BASED CONJUGATED POLYMERS FOR **OPTOELECTRONIC APPLICATIONS**



A DISSERTATION SUBMITTED TO THE UNIVERSITY OF KANNUR IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF

### MASTER OF SCIENCE IN **CHEMISTRY**

BY

SAMANYA P Reg No: C2PSCH1313 Exam Code: CHE4Pr, Project (R)

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## SYNTHESIS OF AN AMPHIPHILIC RESVERATROL



PROJECT SUBMITTED TO THE KANNUR UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE POST GRADUATE DEGREE IN CHEMISTRY.

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2. Dr Manjusha Malbert Har

# Design and Synthesis of Ebselen – Type Systems



PROJECT SUBMITTED TO THE KANNUR UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE POSTGRADUATE DEGREE IN CHEMISTRY

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**Examiners** 

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Head of the Department

Sreya P. Head, Post Graduate & Research Department of Chemistry Sree Narayana College, Kannur

**SREYAP** 

# ADSORPTION AND DRUG RELEASE PROPERTIES OF CIPROFLOXACINE LOADED VARIOUS MAGNETIC AND NON-MAGNETIC METAL OXIDE NANOPARTICLES



Project report submitted to Kannur university in partial fulfilment of the requirements for the award of the post graduate degree in chemistry



By
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**Head of Department** 

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**Examiners** 

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# **PROJECT REPORT**

Submitted to Kannur University

For BSc Degree (Chemistry)

By

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# GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES



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# ENVIRONMENTAL REMEDIATION APPLICATION OF ZINC OXIDE NANOPARTICLES IN SYNTHESIS, CHARACTERIZATION AND

# **А РРОЈЕСТ REPORT**

Submitted to Kammy University in partial fulfillment of

BACHELOR OF CHEMISTRY 10 элихэр јо равам эці 101 ш**жилийн э**д

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Under the guidance of

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# EXTRACTION OF NATURAL DYES FROM PLANT AND ITS APPLICATION IN COLOURING PROCESS IN CLOTH INDUSTRIES

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