STUDIES ON THE UHRIG DYNAMICAL DECOUPLING SCHEME TO COMBAT HIGHER ORDER POLARIZATION QUBIT DECOHERENCE

Project Report submitted to the

UNIVERSITY OF CALICUT

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

Master of Science

In

Physics

By

RHEBA SURESH

Reg. No.: SHAVMPH009

Under the guidance of

Dr. D SAJEEV

Assistant Professor

Department of Physics,

Govt. College Karyavattom

2021-2023

CERTIFIED AS BONAFIED RESEARCH WORK

EXTERNAL EXAMINERS:

1. Sauthy. N. S.
2. JISWIN VARGHESE

HEAD OF THE DEPARTMENT:

02/08/2023

Department of Physics, Sacred Heart College, Chalakudy

2022-2023

CERTIFICATE

This is to certify that this project report entitled **"STUDIES ON THE UHRIG DYNAMICAL DECOUPLING SCHEME TO COMBAT HIGER ORDER POLARIZATION QUBIT DECOHERENCE"** is an authentic record of the project work carried out by Ms. Rheba Suresh, student of Master of Science in Physics, Department of Physics, Sacred Heart College, Chalakudy, successfully completed under my supervision in the Department of Physics, Govt. College Karyavattom, Thiruvananthapuram. The contents of this project work have not been presented earlier for the award of any other degree in any other universities.

Date: 02/08/2023

Place: Karyavattom

Dr. D SAJEEV
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Department of Physics
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Dr. D Sajeev
Assistant Professor
Govt. College Karyavattom,
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Exploring Extragalactic Component in the Ultraviolet Sky: Insights from GALEX Observations

Project report submitted to the

UNIVERSITY OF CALICUT

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

In

MASTER OF SCIENCE IN PHYSICS

By
ARSHNA PULLIKKUDI
Reg.No:SHAVMPH 005
Department of Physics,Sacred Heart College

Chalakudy,Thrissur
Under the guidance of
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Assistant Professor
Dept. of Physics
St.Xavier's College for Women ,Aluva
2021-2023 Aluva

DEPARTMENT OF PHYSICS
SACRED HEART COLLEGE, CHALAKUDY, THRISSUR, PIN-680741

CERTIFICATE

This is to certify that this project report entitled **"Exploring Extragalactic Component in the Ultraviolet Sky: Insights from GALEX Observations" Is** an authentic record of the project work carried out by Arshna pullikkudi, student of Master of Science in Physics, Department of Physics, Sacred Heart College, Chalakudy, successfully completed under my supervision. The contents of this project work has not been presented earlier for the award of any other degree in any other universities.

Internal Guide

Ms. Fency K F
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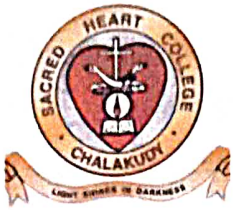
External Guide

DR.Sujatha N V
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Date: 2/8/2023

SACRED HEART COLLEGE PG DEPT OF PHYSICS CHALAKUDY



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CERTIFICATE

This is to verify that the dissertation entitled "**Exploring Extragalactic Component in the Ultraviolet Sky: Insights from GALEX Observations**" is a bonafide record done by ARSHNA PULLIKKUDI (SHAVMPH005) at Department of Physics, St.Xavier'sCollege for Women Aluva in partial fulfillment of the requirement for the MASTER OF SCIENCE in PHYSICS of Department of Physics, Sacred Heart College, Chalakudy, Calicut University during the period 2021-2023.

Dr. NIJO VARGHESE

HEAD OF THE DEPARTMENT

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EFFECT OF CERIUM DOPING ON THE PROPERTIES OF TiO_2 NANOPARTICLES

Dissertation submitted to the

UNIVERSITY OF CALICUT

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

Master of Science

IN

Physics

Submitted by

JISNA SHAJI

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M.E.S. Asmabi College, P.Vemballur

SACRED HEART COLLEGE PG DEPT OF PHYSICS CHALAKUDY

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2022-2023

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This is to certify that this project report entitled "**EFFECT OF CERIUM DOPING ON THE PROPERTIES OF TiO_2 NANOPARTICLES**" is an authentic record of the project work carried out by Ms.Jisna Shaji, student of Master of Science in Physics, Department of Physics, Sacred Heart College, Chalakudy, successfully completed under my supervision in the Department of Physics, M.E.S. Asmabi College, P. Vemballur, Thrissur. The contents of this project work has not been presented earlier for the award of any other degree in any other universities.

Date: 02/08/2023

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Dr. Sheena P A, MPhil, PhD
Associate Professor
Department of Physics
M E S Asmabi College
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DIFFUSE ULTRAVIOLET STUDIES OF CHANDRA DEEP FIELD

Project report submitted to the

UNIVERSITY OF CALICUT

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

In

MASTER OF SCIENCE IN PHYSICS

By

NIKHILA PAUL

Reg.No:SHAVMPH008

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Under the guidance of

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Assistant professor

Dept. Of physics

St. Xavier's college for women, Aluva

2021-2023

DEPARTMENT OF PHYSICS

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CERTIFICATE

This is to certify that this project report entitled "**DIFFUSE ULTRAVIOLET STUDIES OF CHANDRA DEEP FIELD**" is an authentic record of the project work carried out by Sr.Nikhila Paul, student of Master of Science in Physics, Department of Physics, Sacred Heart College, Chalakudy, successfully completed under my supervision. The contents of this project work has not been presented earlier for the award of any other degree in any other universities.

Internal Guide

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External Guide

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Assistant Professor
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St.Xavier's College for Women, Aluva

Place: Chalakudy

Date: 2/8/2023

GREEN SYNTHESIS OF SILVER NANOPARTICLES USING SCLEICHERA OLEOSA PLANT EXTRACT AND THEIR NONLINEAR OPTICAL STUDIES

MSc Project Report

Submitted to

SACRED HEART COLLEGE CHALAKUDY

Affiliated to the University of Calicut in partial fulfillment of the requirement for the award of the degree of

MASTER OF SCIENCE IN PHYSICS

March 2023

Submitted by

RITTY LONAPPAN

SHAVMPH010

Under the Guidance of

Dr. BENOY ANAND

Assistant professor

Department of physics

St. Joseph's College, Irinjalakuda

Department of physics

Sacred Heart College, Chalakudy

CERTIFICATE

This is to certify that the dissertation entitled **"GREEN SYNTHESIS OF SILVER NANOPARTICLES USING SCLECHERA OLEOSA PLANT EXTRACT AND THEIR NONLINEAR OPTICAL STUDIES"** is a bonafide record of work done by **RITTY LONAPPAN** (SHAVMPH010) at St. Joseph's college, Irinjalakuda under the guidance of **Dr. BENOY ANAND** in partial fulfillment of the requirement for the award of Master of Science in Physics from University of Calicut during the period of March 2022 to July 2023.

Head of department

Dr. Nijo Varghese

Associate professor

Sacred Heart College, Chalakudy

Certified that the candidate, Reg no: SHAVMPH010 was examined in the in the project viva held on ..Sacred...Heart...College....Chalakudy.

External examiners:

1) Sruthy. N.S.

2) JISWIN VARGHESE

Biogenic Synthesis of Iron Oxide Nanoparticles in Varied Conditions and Study of the Structural and Optical properties

Project Report
Submitted to the
University of Calicut
partial fulfilment of the requirements for the award of the degree

MASTER OF SCIENCE
IN
PHYSICS

Under the guidance of
Dr.Veena Gopalan E

Asst. Professor, Department of physics,

Vimala College (Autonomous), Thrissur

By
Sandra Roji
Reg. No: SHAVMPH011

Department of Physics
Sacred Heart College, Chalakkudy
Thrissur
Kerala
2022-2023

PG & Research Department of Physics
Vimala College (Autonomous)
Thrissur

CERTIFICATE

This is to certify that the project work entitled **"Biogenic Synthesis of Iron Oxide Nanoparticles in Varied Conditions and Study of the Structural and Optical properties"** is a bonafide work done by Ms. SANDRA ROJI (Reg No:SHAVMPH011) under the guidance of Dr. Veena Gopalan E, Assistant Professor, Department of Physics, Vimala College (Autonomous), Thrissur during the academic year of 2022-2023 and submitted for partial fulfilment of requirement of the award of Degree of MASTER OF SCIENCE in Physics.

Dr. Veena Gopalan E
(Project Guide)
Asst. Professor, Department of Physics
Vimala College (Autonomous), Thrissur

Examiner 1: Sruthy.N.S

Examiner 2: JISWIN VARGHESE

Investigation on the Structural and Dielectric Properties of Cobalt Substituted Lanthanum Sodium Manganite Synthesized by Sol-Gel Auto-Combustion Method

PROJECT REPORT

submitted to the
UNIVERSITY OF CALICUT
partial fulfilment of the requirements for the award of the degree

Master of Science
in
Physics

Under the guidance of
Dr. Veena Gopalan E

Assistant Professor, Post Graduate and Research Department of physics,
Vimala College (Autonomous), Thrissur

by
AIBEL JOHN

SHAVMPH001

Department of Physics
Sacred Heart College, Chalakudy
Thrissur
Kerala
2022-2023

SACRED HEART COLLEGE PG DEPT OF PHYSICS CHALAKUDY

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Post Graduate & Research Department of Physics
Vimala College (Autonomous)
Thrissur-09

CERTIFICATE

This is to certify that the project work entitled **"Investigation on the Structural and Dielectric Properties of Cobalt Substituted Lanthanum Sodium Manganite Synthesized by Sol-Gel Auto-Combustion Method"** is bonafide work done by **Ms. Aibel John**(Reg No:SHAVMPH001) under the guidance of **Dr. Veena Gopalan E**, Assistant Professor, Post Graduate and Research Department of Physics, Vimala College (Autonomous), Thrissur during the academic year of 2022-2023 and submitted for partial fulfilment of requirement of the award of Degree of Master of Science in Physics.

Dr. Veena Gopalan E
(Project Guide)
Assistant Professor,
Department of Physics
Vimala College (Autonomous), Thrissur

Examiner 1: JISWIN VARGHESE

Examiner 2: SRUTHY. N. S.

PG DEPT OF PHYSICS

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ONE-POT SYNTHESIS OF LUMINESCENT CARBON QUANTUM DOTS WITH HIGH QUANTUM YIELD

Msc Project Report
Submitted to

SACRED HEART COLLEGE CHALAKUDY

Affiliated to the University of Calicut in partial fulfillment of the requirement for the award of degree of

MASTER OF SCIENCE IN PHYSICS
MARCH 2023

Submitted by
AMEESHA K V
SHAVMPH003

Under the Guidance of
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Assistant professor,
Department of
Physics, KKTM Govt.
College, Kodugallur

SACRED HEART COLLEGE PG DEPT OF PHYSICS CHALAKUDY

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Department of Physics

KKTM Govt. College, Kodugallur

CERTIFICATE

is to certify that the dissertation entitled "**ONE - POT SYNTHESIS OF LUMINESCENT CARBON QUANTUM DOTS WITH HIGH QUANTUM YIELD**" has been successfully completed during the academic year 2022-23 in partial fulfillment of the requirements for the award of degree of Masters in Physics at Calicut University. The project work was conducted under my supervision and guidance in the Department of Physics, KKTM Govt. College, Kodugallur. The project work has been found to be original and satisfactory in terms of content, presentation, and relevance to the field of Physics.

Place: Pallut

Date: 4/8/'23

(Signature of the guide)
Dr. Vinayasree S.
Assistant Professor
Department of Physics
KKTM Govt. College,

DEPARTMENT OF PHYSICS
PULLUT - 680 663
K.K.T.M. GOVT. COLLEGE

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CIRCULAR MICRO STRIP PATCH ANTENNA FOR GPS APPLICATIONS

Project report submitted to the

UNIVERSITY OF CALICUT

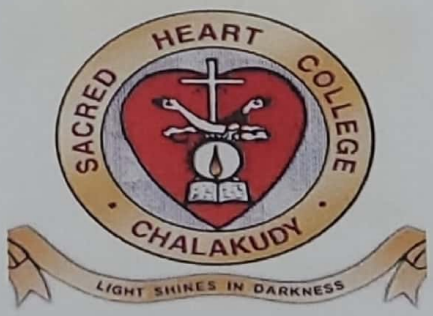
in partial fulfilment of the requirement for the award of the degree

MASTER OF SCIENCE IN PHYSICS

By

ANILA K J

SHAVMPH004





Under the guidance of

Dr. JOE KIZHAKOODEN

HEAD & ASSISTANT PROFESSOR

DEPARTMENT OF PHYSICS

ST.THOMAS COLLEGE, AUTONOMOUS, THRISSUR

2021-2023

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DEPARTMENT OF PHYSICS
ST.THOMAS COLLEGE, AUTONOMOUS, THRISSUR

CERTIFICATE

This is to certify that the project work entitled "CIRCULAR MICROSTRIP PATCH ANTENNA FOR GPS APPLICATIONS" by Ms.ANILA K J, Department of Physics, Sacred Heart College Chalakudy, in partial fulfilment of the requirement for the award of the Degree of Master of Science in Physics, is an authentic record of the work carried out under my supervision and guidance.

Dr. JOE KIZHAKOODEN
HEAD & ASSISTANT PROFESSOR,
DEPARTMENT OF PHYSICS,
ST..THOMAS COLLEGE, AUTONOMOUS,
THRISSUR

DATE: 05/08/2023

PLACE: Thrissur

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SONOCATALYTIC REMOVAL OF CONGO RED FROM WASTE WATER USING FACILE SYNTHESIZED Cu DOPED ZnS

Project report submitted in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

ALENGREEN THOMAS

Reg. No : SHAVMPH002

Under the guidance of

Dr. Libu K. Alexander

Assistant Professor

Department of Physics

University of Calicut



DEPARTMENT OF PHYSICS

SACRED HEART COLLEGE, CHALAKKUDY



CERTIFICATE

Certified that the work incorporated in the project entitled ' SONOCATALYTIC REMOVAL OF CONGO RED FROM WASTEWATER USING Cu- DOPED ZnS' submitted by ALENGREEN THOMAS for the partial fulfilment of M.Sc. course in the Department of Physics, Calicut University Campus during 2021-2023 comprises the results of independent and original work done by the candidate under my guidance.

2/8/2023

Dr. Libu K. Alexander
Assistant Professor
Department of Physics
University of Calicut

External Examiners :-

1) JISWIN VARGHESE

2) Sruthy. N. S

RECTANGULAR PATCH ANTENNA WITH SYMMETRICAL U SLOT ON PARTIAL GROUND FOR UWB APPLICATION

Project report submitted to the

UNIVERSITY OF CALICUT

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

MASTER OF SCIENCE IN PHYSICS

BY

NEENA MOL U.T

SHAVMPH007

Under the guidance of

DR. JOE KIZHAKOODEN

HEAD &ASSISTANT PROFESSOR

DEPARTMENT OF PHYSICS

ST. THOMAS COLLEGE, AUTONOMOUS, THRISSUR

2021-2023

CERTIFIED AS BONAFIDE RESEARSH WORK

HEAD OF THE DEPARTMENT

EXTERNAL EXAMINER

1. Sruthy. N S

2. JISWIN VARGHESE

H O D
Department of physics
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Chalakudy

DEPARTMENT OF PHYSICS
ST. THOMAS COLLEGE, AUTONOMOUS, THRISSUR

CERTIFICATE

This is to certify that the project work entitled "RECTANGULAR PATCH ANTENNA WITH SYMMETRICAL U SLOT ON PARTIAL GROUND FOR UWB APPLICATION" by NEENA MOL U.T, Department of Physics, Sacred Heart College Chalakudy, in partial fulfilment of the requirement for the award of the Degree of Master of Science in Physics, is an authentic record of the work carried out under my supervision and guidance.

DATE: 05/08/2023

DR.JOE KIZHAKOODEN
HEAD & ASSISTANT PROFESSOR,
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