

**“EFFECTIVE REMOVAL OF COPPER IONS FROM AQUEOUS
SOLUTION USING CHITOSAN TREATED KARUVELAM
LEAVES”**

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

S. APPASAMY (Reg:No:20PCH1281)

**Dr. P. SUMATHI,
Assistant Professor & Head,
Department of Chemistry**

**Muthayammal College of Arts & Science (A unit of Vanetra Groups) Autonomous,
Rasipuram
Namakkal – 637 408**



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This is to certify that the project work dissertation entitled "EFFECTIVE REMOVAL OF COPPER IONS FROM AQUEOUS SOLUTION USING CHITOSAN TREATED NEEM LEAVES" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by S. APPASAMY (Reg: No: 20PCH1281) under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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Dr. P. Sumathi M.Sc., M.Phil., B.Ed., Ph.D

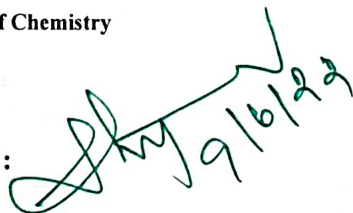
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Examiner 1:


9/16/22

Examiner 2:



**“SYNTHESIS, CHARACTERISATION OF 3,4-DIHYDROPYRIMIDONE -2-(1H)-
ONES TOWARDS BIOLOGICAL APPLICATIONS**

Submitted to
Periyar University

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

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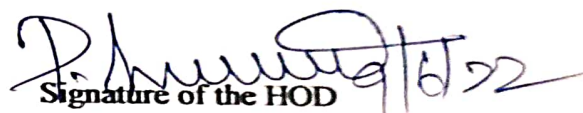
Mr.V.SANTHOSHKUMAR M.Sc.,
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This is to certify that the project dissertation entitled **"SYNTHESIS, CHARACTERISATION OF 3,4-DIHYDROPYRIMIDONE -2-(III)-ONES TOWARDS BIOLOGICAL APPLICATIONS** submitted to Periyar University in partial fulfillment for the award of the degree of Master of science in Chemistry, is a bonafide record of original research work carried out by **Mr.S.KARTHIKEYAN (Reg. No : 20PCH1282)**, under my supervision and guidance, that no part of the dissertation has been submitted for the award of any degree, diploma, fellowship or other similar titles and that the work has not been published in parts or full in any scientific popular journals or magazine.



Signature of the Research Supervisor

Mr.V.SANTHOSHKUMAR M.Sc.,
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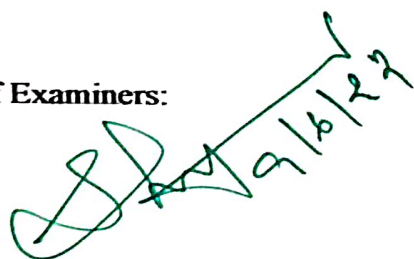
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Dr. P. SUMATHI, M. Sc., M. Phil., B. Ed., Ph.D.,
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**“SYNTHESIS AND CHARACTERIZATION OF N((E)-4-METHOXY
DENE))-N(2-PHENYLMETHYLIDENE)ETHANE-1,2-AMINE”**

Submitted to
Periyar University

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

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By

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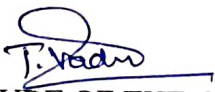
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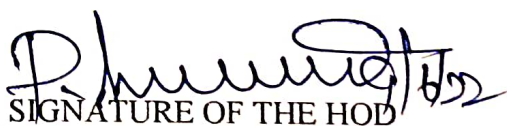
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This is to certify that the project work dissertation entitled "**SYNTHESIS AND CHARACTERIZATION OF N-(4-METHOXYDENE) N-(2-PHENYLMETHYLIDINE) ETHANE-1,2-AMINE**" submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM**, is a bonafide record of the project work carried out by **A.KISHORE Reg: 20PCH1283** No: ~~20PCH1283~~ under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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**EFFECTIVE REMOVAL OF COPPER IONS FROM AQUEOUS SOLUTION
USING CHITOSAN TREATED NEEM LEAVES**

Submitted to

periyar university

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

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**“SYNTHESIS AND CHARACTERISATION OF
HYDROXYAPATITE POWDER FROM EGGSHELL”**

Submitted to
Periyar University

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

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Rasipuram-637 408. Namakkal (Dt)

Submitted for the viva voice examination held on :

EXAMINAR: 1)


2) N. Nithiya
9/6/22

**SYNTHESIS AND CHARACTERISATION OF $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ AS
CATHODE MATERIAL USED IN LITHIUM-ION BATTERIES**

Submitted to
Periyar University

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

MASTER OF SCIENCE
IN
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Under the Guidance of

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Touching Lives Through Electrochemistry.


International Collaboration & Publicity Section

No.14-03-03-2021- 22- ICP

May 13, 2022

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This is to certify that this Dissertation entitled "*Synthesis and Characterization of $LiNi_{0.6}Mn_{0.2}Co_{0.2}O_2$ as Cathode Material used in Lithium Ion Batteries*" towards the partial fulfilment the degree of M.Sc. (Chemistry) Master Degree Programme at Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal - District represents original research carried out by Mr. L. Pradeep at CSIR-Central Electrochemical Research Institute, Karaikudi under the supervision of Dr. M. Raju, Chief Scientist, Electrochemical and Power Sources Division from 22.02.2022 to 13.05.2022.


(Dr. S. Sathyanarayanan)
Chief Scientist

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EXAMINER 1

EXAMINER 2

**“SYNTHESIS, CHARACTERISATION AND ANTIBACTERIAL
ACTIVITY OF BIS(SALICYNIDENE)ETHYLENE DIAMINE(SALEN)
AND ITS ZINC COMPLEXES”**

Submitted to

Periyar University

In partial fulfillment of the requirements for the award of the degree of
MASTER OF SCIENCE

**IN
CHEMISTRY**

By

R. RAGAVAN (Reg. No: 20PCH1287)

Under the Guidance of

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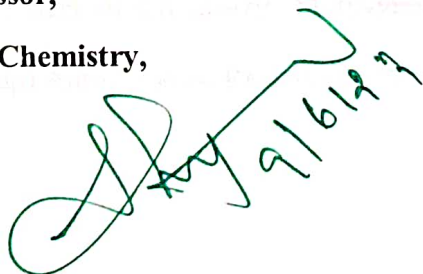


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EXAMINER 1



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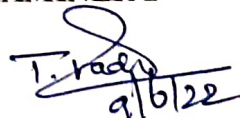


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9/6/22

**SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE FROM
SUBSTITUTED ALDEHYDE WITH *p*-NITROANILINE**

**DISSERTATION SUBMITTED TO
PERIYAR UNIVERSITY SALEM – 636 011**

*In partial fulfillment of the requirements
For the award of the degree of*

**MASTER OF SCIENCE
in
CHEMISTRY**

By

**A. SARDHARBHASHA
(Reg. No. 20PCH1288)**

Under the guidance of

**Dr. N. SUDHA, M. Sc., M. Phil., Ph. D.
Assistant Professor of Chemistry,
Department of Chemistry**



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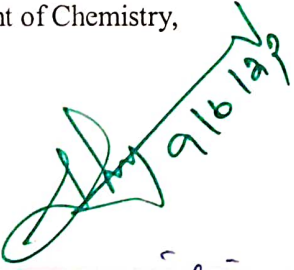

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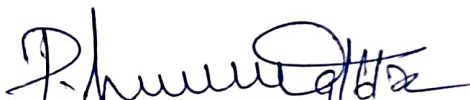
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SYNTHESIS, CHARACTERISATION OF REACTION OF 4-HYDROXY BENZALDEHYDE AND 2-AMINOPYRIDINE AND ITS ANTI-MICROBIAL ACTIVITY

**Submitted to
Periyar University**

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

MASTER OF SCIENCE

IN

CHEMISTRY

BY

S.SELVARAJ (Reg. No : 20PCH1289)

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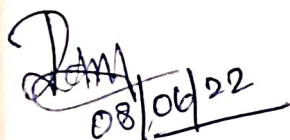
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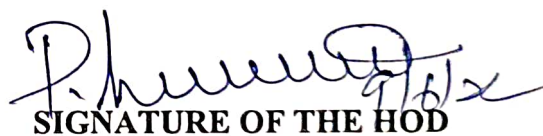
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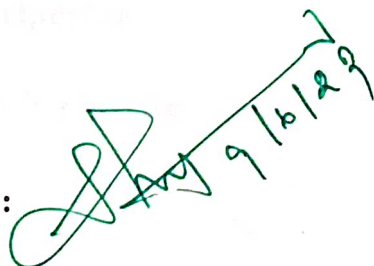
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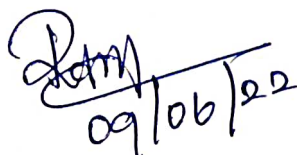
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Examiner 1:


9/6/22

Examiner 2:


09/06/22

**“SYNTHESIS, CHARACTERISATION AND ANTIBACTERIAL
ACTIVITY OF BIS(SALICYNIDENE)ETHYLENE DIAMINE(SALEN)
AND ITS COPPER COMPLEXES”**

Submitted to

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**In partial fulfillment of the requirements for the award of the degree of
MASTER OF SCIENCE
IN
CHEMISTRY**

By

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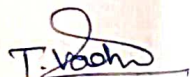
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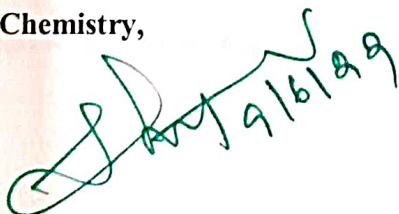
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EXAMINER 1



9/6/22

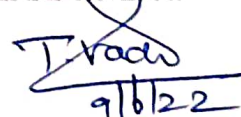


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Department of Chemistry,
Assistant Professor and Head,
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Department of Chemistry,

EXAMINER 2



9/6/22

**"CONVENTIONAL AND MICROWAVE- ASSISTED
SYNTHESIS,CHARACTERISATION OF 6,2-DIARYL-1,3,5-
TRIAZIN-2,4-DIAMINES**

*Submitted to
Periyar University*

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

S. SIVASAKTHI (Reg. No. 20PCH1291)

Under the Guidance of

**Dr. P.SUMATHI M.Sc, M.Phil.,B.Ed.,Ph.D.,
Assistant Professor & Head
Department of Chemistry**

Muthayammal College of Arts & Science (A unit of Vanetra Group) Autonomous,
Rasipuram
Namakkal – 637 408



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JUNE 2022

CERTIFICATE

Dr.P. SUMATHI M.Sc., M.Phil., B.Ed., Ph.D.,

Assistant Professor and Head

Department of Chemistry

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Rasipuram.

"CONVENTIONAL AND
MICROWAVE-ASSISTED

This is to certify that the project work dissertation entitled "**SYNTHESIS,**

CHARACTERISATION OF 6,2-DIARYL-1,3,5-TRIAZIN-2,4-DIAMINES"

submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUP) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by S.SIVASAKTHI Reg: No:20PCH1291 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

SIGNATURE OF THE GUIDE

EXAMINAR :1

SIGNATURE OF THE HOD

EXAMINAR :2

GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES

**DISSERTATION SUBMITTED TO
PERIYAR UNIVERSITY SALEM - 636 011**

**In partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE**

**IN
CHEMISTRY**

By

S. SRINIVASAN

(Reg. No. 20PCH1292)

Under the guidance of

Dr. N. NITHIYA (M. Sc., Ph.D.)

Assistant Professor,

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Dr. N. NITHIYA

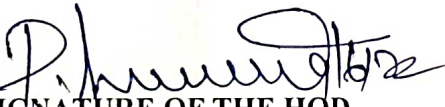
Assistant Professor of Chemistry

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Rasipuram.

This is to certify that the project work s dissertation entitled **GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES** submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY** to **PERIYAR UNIVERSITY**, in **MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A unit of VANETRA group)** in **RASIPURAM**, is a bonafide record of the project work carried out by **S.SRINIVASAN** **Reg:No:20PCH1292** under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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HEAD OF THE DEPARTMENT,
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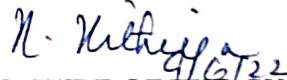
Submitted for the viva voce examination held on

EXAMINER:

1)

2)


N. Nithiya
9/16/22


SIGNATURE OF THE GUIDE

DECLARATION

“PREPERATION AND CHARACTERISATION OF

2-(2-CHLOROPHENYL)-1,3,5-TRIAZINE

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

G.UKKESH (Reg. No. 20PCH1293)

Under the Guidance of

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This is to certify that the project work dissertation entitled "PREPARATION AND CHARACTERISATION OF 2-(2-chlorophenyl)-1,3,5-triazine" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY" IN MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by G. UKKESH Reg: No:20PCH1293 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.



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Mrs.A.DHIVYA M. Sc., M. Phil.,
Assistant Professor

Department of Chemistry

Department of Chemistry

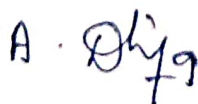
Dr. P. SUMATHI, M.Sc., M.Phil., B.Ed., Ph.D.,

HEAD OF THE DEPARTMENT,
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SIGNATURE OF THE EXAMINERS:

EXAMINER 1:

EXAMINER 2:



**“SYNTHESIS AND CHARACTERISATION OF
2, 4-DIHYDROPYRIMIDONE TOWARDS POTENTIAL BIOLOGICAL
APPLICATIONS”**

*Submitted to
Periyar University*

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

M.VIGNESH WARAN (Reg. No. 20PCH1294)

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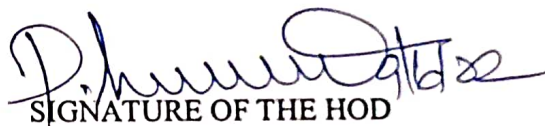
CERTIFICATE

Mr. V.SANTHOSHKUMAR M.Sc.,
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This is to certify that the project work dissertation entitled "SYNTHESIS AND CHARACTERISATION OF 2,4-DIHYDROPYRIMIDONE TOWARDS POTENTIAL BIOLOGICAL APPLICATIONS" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY at PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS), RASIPURAM, is a bonafide record of the project work carried out by M. VIGNESH WARAN (Reg. No. 20PCH1294) under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.



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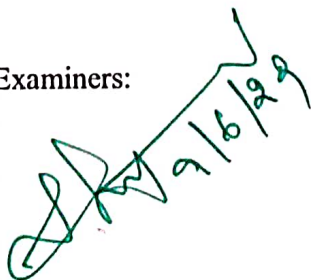
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Mr. V. SANTHOSHKUMAR, M.Sc.,
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Dr. P. SUMATHI, M.Sc., M.Phil., B.Ed., Ph.D.,
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Signature of Examiners:

Examiner 1



Examiner 2



**"SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL
STUDIES OF SCHIFF BASE Ag(I) Cd(II) COMPLEXES
DERIVED FROM 4-CHOROBENZALDEHYDE AND
ETHYLENE DIAMINE DERIVATIVES"**

Submitted to

Periyar University

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

MASTER OF SCIENCE IN CHEMISTRY

By

**G.VIJAYAKUMAR
(Reg. No. 20PCH1295)**

Under the guidance of

Mr. S.RAMKUMAR M.Sc., MPhil. B.Ed.,

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DEPARTMENT OF CHEMISTRY

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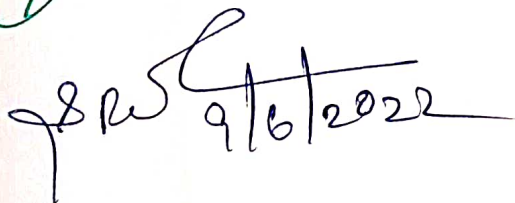
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This is to certify that the project work dissertation entitled “SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL STUDIES OF SCHIFF BASE Ag(I)Cd(II) COMPLEXES DERIVED FROM 4-CHOROBENZALDEHYDE AND ETHYLENE DIAMINE DERIVATIVES” submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by G.VIJAYAKUMAR RegNo:20PCH1295 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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9/6/2022


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HEAD OF THE DEPARTMENT,
Department of Chemistry,
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**GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES
FROM PARTHENIUM FLOWER AND ITS
CHARACTERIZATION**

Submitted to
Periyar University

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

MASTER OF SCIENCE

IN

CHEMISTRY

by

S. ARTHISRI (Reg. no: 20PCH1296)

Dr. N. NITHIYA,

Assistant Professor

Department of Chemistry

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Rasipuram

This is to certify that the project work entitled **GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES FROM PARTHENIUM FLOWER AND ITS CHARACTERIZATION** submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY** to **PERIYAR UNIVERSITY**, in **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A unit of VANETRA Group) RASIPURAM**, is a bonafide record of the project work carried out by **S.ARTHISRI (Reg No: 20PCH1296)** under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.

N. Nithiya
9/6/22
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EXAMINER.1

EXAMINER.2

N. Nithiya
9/6/22


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HEAD OF THE DEPARTMENT,
Department of Chemistry,
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GREEN SYNTHESIS CORIANDUM SATIVUM WITH ZINC OXIDE

NANOPARTICLES AND ITS CHARACTERIZATION

Submitted to
periyar university

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

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Assistant professor

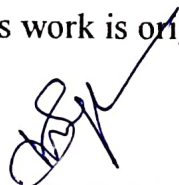
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Rasipuram

This is to certify that the project work dissertation entitled "**GREEN SYNTHESIS CORIANDUM SATIVUM WITH ZINC OXIDE NANOPARTICLES and ITS CHARACTERIZATION**" submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS), RASIPURAM,** is a bonafide record of the project work carried out by **V.DEEPIKA REG.NO:20PCH1297** under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

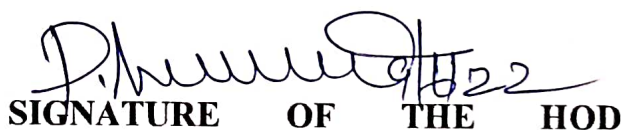


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Rasipuram-637 468, Namakkal (Dt)

Examiner 1:



Examiner 2:



ACKNOWLEDGEMENT

**“EXTRACTION AND CHARACTERIZATION OF TRIGONELLA
FOENUM – GRAECUM”**

*Submitted to
Periyar University*

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

T. GOWSHALYA (Reg: No: 20PCH1298)

Under the Guidance of

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Namakkal – 637 408



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Assistant Professor,
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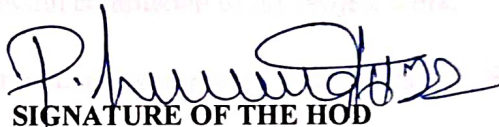
This is to certify that the project work dissertation entitled **“EXTRACTION AND CHARACTERIZATION OF TRIGONELLA FOENUM GRAECUM”** submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY** to **PERIYAR UNIVERSITY**, in **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE** (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by **T.GOWSHALYA** (Reg No:20PCH1298) under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.

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Mrs. M. Sathya, M.Sc., M. Phil., (Ph. D)
Assistant Professor
Department of Chemistry

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Dr.P. Sumathi M.Sc., M.Phil., B.Ed., Ph.D
Assistant professor and Head
HEAD OF THE DEPARTMENT,
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Examiner 1:



Examiner 2:



**“PREPERATION AND CHARACTERISATION OF 2-(4-chlorophenyl)-1,3,5-
triazine”**

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

P.JEEVITHA (Reg. No. 20PCH1299)

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A. D. J. 20

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EXAMINAR :1

EXAMINAR :2

9/16/22

A. D. J. 20

D. J. J. 20

SIGNATURE OF THE HOD

HEAD OF THE DEPARTMENT,
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**"SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL
STUDIES OF SCHIFF BASE Mn(II) Ni(II) COMPLEXES
DERIVED FROM 3-NITROBENZALDEHYDE AND ETHYLENE
DIAMINE DERIVATIVES"**

Submitted to

Periyar University

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

MASTER OF SCIENCE

IN

CHEMISTRY

By

K.KAVITHA(Reg. No. 20PCH1300)

Under the guidance of

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Examiner:1

Examiner:2


SIGNATURE OF THE HOD

HEAD OF THE DEPARTMENT,
Department of Chemistry,
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**SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASE WITH
IRON OXIDE NANOPARTICLES**

Submitted to

Periyar University

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

MASTER OF SCIENCE
IN
CHEMISTRY

BY

K.KEERTHI.,(Reg. No: 20PCH1301).

Under the Guidance of

Mrs. M. SATHYA.,M. Sc., M. Phil., (Ph. D),

Assistant professor,
Department of Chemistry,

Rasipuram, Namakkal – 637 408.

**Muthayammal College of Arts & Science (A unit of Vanetra Groups)
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Namakkal**



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JUNE-2022

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Mrs. M. SATHYA M. Sc., M. Phil., (Ph. D).

Assistant Professor,

Department of Chemistry,

Muthayammal College of Arts and Science,

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Rasipuram.

This is to certify that the project work entitled **“SYNTHEIS AND CHARACTERISATION OF SCHIFFBASE WITH IRON OXIDE NANO PARTICLES”** submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS ANDSCIENCE (A unit of VANETRA Groups) AUTONOMOUS, RASIPURAM is a bonafide record of the project work carried out by **K.KEERTHI.,(Reg No: 20PCH1301)** under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.


SIGNATURE OF THE GUIDE

Mrs. M. SATHYA.,M. Sc., M. Phil.

Assistant professor

Department of chemistry

Examiner 1:

Examiner 2:


SIGNATURE OF THE HOD

Dr.P.Sumathi M.SC.,M.Phil.,B.ED.,Ph.D

Assitant professor and head

Department of chemistry

**HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)**

**SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE AND
IT'S COPPER COMPLEX**

**DISSERTATION SUBMITTED TO
PERIYAR UNIVERSITY SALEM – 636 011**

*In partial fulfillment of the requirements
For the award of the degree of*

MASTER OF SCIENCE

in

CHEMISTRY

By

**M. KRISHNA PRIYA
(Reg. No. 20PCH1302)**

Under the guidance of

**Dr. N. SUDHA, M. Sc., M. Phil., Ph. D.
Assistant Professor of Chemistry,
Department of Chemistry**



**MUTHAYAMMAL
COLLEGE OF ARTS & SCIENCE**

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JUNE 2022

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This is to certify that the project work dissertation entitled "SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE AND ITS COPPER COMPLEX" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A unit of VANETRA group) RASIPURAM, is a bonafide record of the project work carried out by M. KRISHNA PRIYA, Reg. No: 20PCH1302, under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

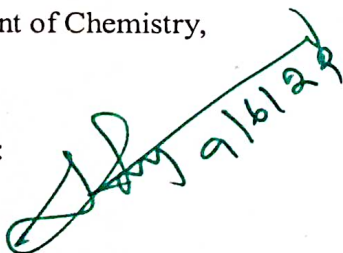


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Assistant Professor of Chemistry,
Department of Chemistry,

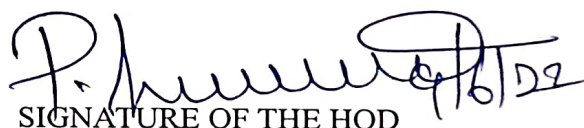
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1.



2.

N. Nithya
9/6/22



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Dr. P. Sumathi, M. Sc., M. Phil., B. Ed., Ph. D.,
Assistant Professor and Head,
Department of Chemistry,

HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

**REFURBISHING OF NMC 532 CATHODE MATERIAL AND ITS
PERFORMANCE EVALUATION**

**Submitted to
Periyar University**

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

**MASTER OF SCIENCE IN
CHEMISTRY BY**

T.LAVANYA (REG NO: 20PCH1303)

Under the Guidance of

Ms. S.ESWARI M.Sc.,M.Phil.,B.Ed.,

Assistant professor Department
of Chemistry

Muthayammal college of arts and science (A Unit of Vanetra Groups)

**Autonomous Rasipuram, Namakkal –
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Ms.S.ESWARI M.Sc., M.Phil., B.Ed.,
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Department of Chemistry,
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Rasipuram.

This is to certify that the project work entitled "REFURBISHING OF NMC 532 CATHODE MATERIAL AND ITS PERFORMANCE EVALUATION" submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY** to **PERIYAR UNIVERSITY**, in **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A unit of VANETRA Group) AUTONOMOUS RASIPURAM**, is a bonafide record of the project work carried out by **T.LAVANYA (Registered No: 20PCH1303)** under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.


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Examiner 1:

Examiner 2:


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HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science
Rasipuram-637 408, Namakkal (D)

**SYNTHESIS, CHARACTERISATION OF REACTION OF ANILINE
AND 4-HYDROXY BENZALDEHYDE AND ITS ANTI MICROBIAL
ACTIVITY**

Submitted to

Periyar university

In partial fulfillments of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

CHEMISTRY

BY

D.MAHALAKSHMI (Reg.No:20PCH1304)

Under The Guidance Of

Mr.P.AYYANAR M.Sc.,B.Ed.,

Assistant professor

Department of Chemistry

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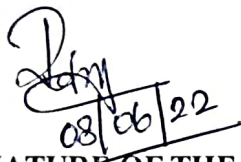
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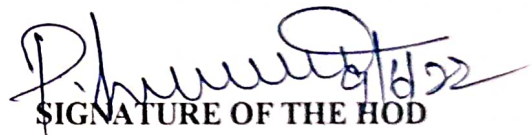
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Rasipuram.

This is to certify that the project work entitled
**SYNTHESIS , CHARACTERISATION OF REACTION OF ANILINE AND
4-HYDROXYBENZALDEHYDE AND ITS ANTI-MICROBIAL ACTIVITY** submitted
in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to
PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A
Unit of VANETRA group) RASIPURAM, is a bonafide record of the project work carried
out by **MAHALAKSHMI D** (Reg.No: 20PCH1304) under my guidance and supervision
and I certify that work is original and has not been submitted elsewhere for any degree.



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Mr.P.Ayyanar M.Sc., B.Ed.,
Assistant professor,
Department of Chemistry.

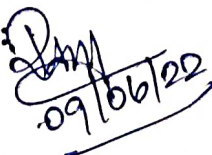
Dr.P.Sumathi M.Sc., B.Ed., M.Phil., Ph.D.,

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Associate professor and head, Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)
Department of Chemistry.

EXAMINER 1:



EXAMINER 2:



**GREEN SYNTHESIS OF IRON OXIDE NANO PARTICLES FROM
COFFEE SEED EXTRACT**

**Submitted to
Periyar University**

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

MASTER OF SCIENCE

IN

CHEMISTRY BY

N. NALINASHANKARI (REG NO: 20PCH1305)

Under the Guidance of

Mrs. R.JEGANMOHINI, M. Sc., B.Ed., M. Phil.

Assistant professor

Department of Chemistry

Rasipuram, Namakkal – 637 408



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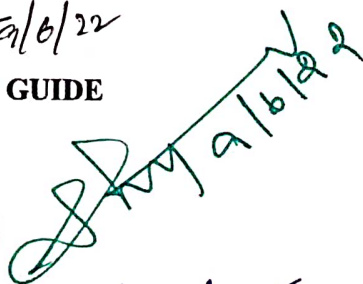
Mrs. R.JEGANMOHINI M. Sc., B. Ed., M. Phil.,
Assistant Professor, Department of Chemistry,
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Science,(A unit of VANETRA group).
Rasipuram.

This is to certify that the project work entitled "GREEN SYNTHESIS OF IRON OXIDE NANOPARTICLES FROM COFFEE SEED EXTRACT" submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY** to **PERIYAR UNIVERSITY**, in **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE** (A unit of VANETRA Group) Autonomous RASIPURAM, is a bonafide record of the project work carried out by **N.NALINASHANKARI** (Registered No: 20PCH1305) under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.

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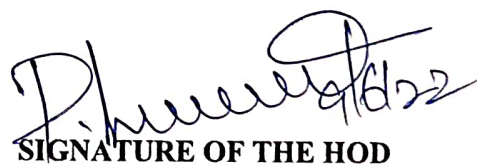
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EXAMINER 1

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EXAMINER 2

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 9/6/22

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HEAD OF THE DEPARTMENT,
Department of Chemistry,
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Rasipuram-637 408, Namakkal (Dt)

**GREEN SYNTHESIS, CHARACTERIZATION AND EVALUATION OF
CAMELLIAS SINENSIS SILVER NANOPARTICLES**

**Submitted to
periyar university**

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

M. NITHYASRI(Reg. No. 20PCH1306)

Under the Guidance of

**Mrs.M.SARANYA,M.Sc.,M.Phil.,B.Ed.,
Assistant Professor,
Department of Chemistry**

**Muthayammal College of Arts & Science (A unit of Vanetra Groups), Rasipuram
Namakkal – 637 408**



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Assistant professor

Department of Chemistry

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Rasipuram

This is to certify that the project work dissertation entitled "**GREEN SYNTHESIS, CHARACTERIZATION AND EVALUATION OF CAMELLIA SINENSIS SILVER NANOPARTICLES**" submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS), RASIPURAM,** is a bonafide record of the project work carried out by **M. NITHYASRI REG NO:20PCH1306** under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

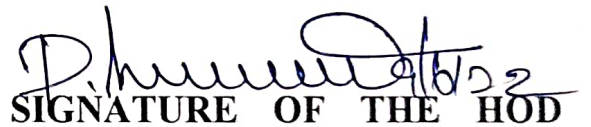


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ASSISTANT PROFESSOR OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE

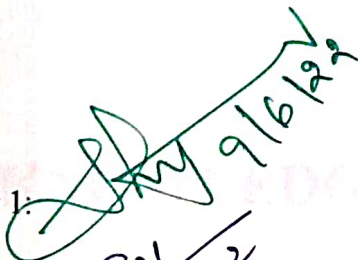


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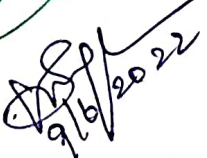
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HEAD OF THE DEPARTMENT,
ASSISTANT PROFESSOR OF CHEMISTRY and HEAD
Department of Chemistry
Muthayammal College of Arts & Science.
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
Rasipuram

Examiner 1:



Examiner 2:



**“SYNTHESIS, SPECTRAL AND CHARACTERIZATION OF
BIS (2-HYDROXYBENZYLIDENE) HYDRAZINE
CARBOXAMIDE TOWARDS POTENTIAL BIOLOGICAL
APPLICATION”**

*Submitted to
Periyar University*

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

**MASTER OF SCIENCE
IN
CHEMISTRY
By**

**M.PRIYA(Reg. No. 20PCH1307)
Under the guidance of**

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Namakkal – 637 408**



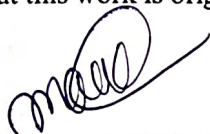
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Mr. V.SANTHOSHKUMAR M.Sc.,
Assistant Professor,
Department of Chemistry,
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Rasipuram

This is to certify that the project work dissertation entitled "SYNTHESIS, SPECTRAL AND CHARACTERIZATION OF BIS (2-HYDROXYBENZYLIDENE) HYDRAZINE CARBOXAMIDE TOWARDS POTENTIAL BIOLOGICAL APPLICATION" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by M. PRIYA Reg No : 20PCH1307 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.



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Mr. V. SANTHOSHKUMAR M.Sc.,
Assistant Professor,
Department of Chemistry



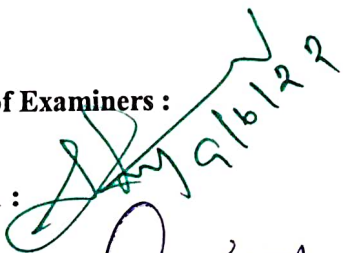
SIGNATURE OF THE HOD

Dr. P. SUMATHI M.Sc., M.Phil., B. Ed., Ph.D.,
Head and Assistant Professor,
Department of Chemistry

HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

Signature of Examiners :

Examiner 1 :



Examiner 2 :



ACKNOWLEDGEMENT

Cobalt-Free Layered Oxide electrodes for Lithium-Ion Batteries

Submitted to

Periyar University

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

MASTER OF SCIENCE

IN

CHEMISTRY

By

M.PRIYADHARSHINI (REG No: 20PCH1308)

Under the guidance of

Mr. S. RAMKUMAR M.Sc., MPhil., B.Ed.,

Assistant Professor

Department of Chemistry



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**Muthayammal College of Arts & Science (A unit of Vanetra Groups) Autonomous, Rasipuram
Namakkal – 637 408**

and co-guidance of

Dr. S. T. NISHANTHI, M.Sc, Ph.D.,

Scientist, Electrochemical power source division,

CSIR-CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE,

KARAIKUDI-630006



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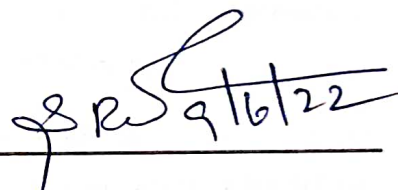
CERTIFICATE

Mr. S. RAMKUMAR, M.Sc., M.Phil, B.Ed.,
Assistant Professor,
Project Guide & Supervisor,
Department of Chemistry,
Muthayammal College Of Arts and Science,
(A unit of Vanetra Groups) Autonomous, Rasipuram
Namakkal – 637 408

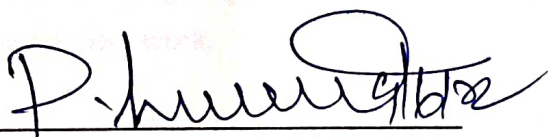
This is to certify that this project report entitled “**COBALT-FREE LAYERED OXIDE ELECTRODES FOR LITHIUM-ION BATTERIES**” submitted to Muthayammal College Of Arts And Science, Affiliated to Periyar University, Salem in partial fulfilment for the award of degree of **Master of Science in Chemistry** during the year **2021- 2022** is an original work done by **Ms. M. PRIYADHARSHINI, [Reg.No. 20PCH1308]** under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.



Dr. S.T. NISHANTHI
Joint Supervisor, Scientist
CSIR-CECRI,
KARAIKUDI-630006.

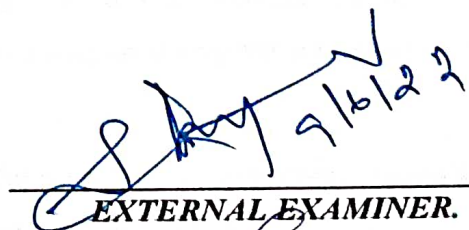


S. RAMKUMAR
Supervisor
Assistant professor
Department of chemistry
Muthayammal College of Arts & Science
Rasipuram, Namakkal-637 408

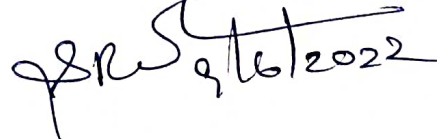


HEAD OF THE DEPARTMENT

HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)



EXTERNAL EXAMINER.



**SYNTHESIS OF SCHIFF BASE ENCAPSULATED ZnS
NANOPARTICLES:CHARACTERIZATION
AND ANTIBACTERIAL SCREENING**

**Submitted to Periyar
University**

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

**MASTER OF SCIENCE
IN
CHEMISTRY
BY**

S.PRIYANKA.,(Reg. No:20PCH1309)

Under the Guidance of

Mrs. M. SATHYA, M. Sc., M. Phil., (Ph. D),

**Assistant professor
Department of Chemistry**

Muthayammal College of Arts & Science (Aunit of Vanetra Group)

Autonomous, Rasipuram

Namakkal-637 408



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Mrs. M. SATHYA M. Sc., M. Phil., (Ph. D).

Assistant professor,

Department of Chemistry,

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Rasipuram.

This is to certify that the project work dissertation entitled "SYNTHESIS OF SCHIFF BASE ENCAPSULATED ZINCSULFIDE(ZnS) NANOPARTICLES: CHARACTERIZATION AND ANTIBACTERIAL SCREENING" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A unit of VANETRA Group) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by **S.PRIYANKA.,(Reg No:20PCH1309)** under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.

SIGNATURE OF THE GUIDE

Mrs. M. Sathya, M.Sc., M. Phil., (Ph. D)

Assistant professor,

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Examiner 1:

Examiner 2:

SIGNATURE OF THE HOD

Dr.P. Sumathi, M.Sc., M. Phil., B. Ed., Ph.D

Assistant professor and Head

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**HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)**

**SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE AND
ITS NICKEL COMPLEX**

**DISSERTATION SUBMITTED TO
PERIYAR UNIVERSITY SALEM – 636 011**

*In partial fulfillment of the requirements
For the award of the degree of*

MASTER OF SCIENCE

in

CHEMISTRY

By

M. ROJA

(Reg. No. 20PCH1310)

Under the guidance of

**Dr. N. SUDHA, M. Sc., M. Phil., Ph. D.
Assistant Professor of Chemistry,
Department of Chemistry**



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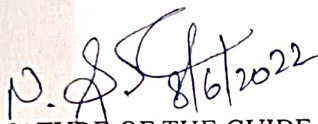
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Rasipuram, Namakkal – 637 408**

JUNE 2022

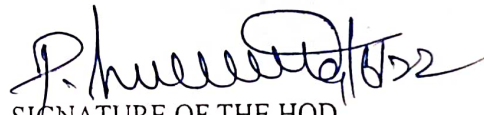
CERTIFICATE

Dr. N. SUDHA M. Sc., M. Phil., Ph. D.,
Assistant Professor of Chemistry
Muthayammal College of Arts and Science,
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Rasipuram.

This is to certify that the project work dissertation entitled "SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE AND ITS NICKEL COMPLEX" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A unit of VANETRA group) RASIPURAM, is a bonafide record of the project work carried out by M. ROJA, Reg. No: 20PCH1310, under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

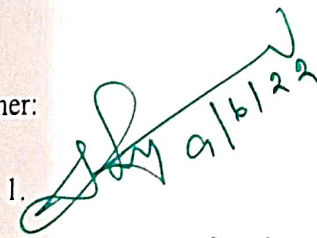
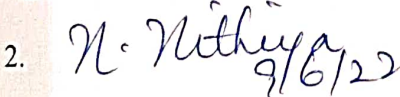

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Dr. N. Sudha, M. Sc., M. Phil., Ph.D.,
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HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

Examiner:

- 
1. N. Nithya 9/6/22
- 
2. N. Nithya 9/6/22

**“Synthesis and Biological Studies on 3,3,6,6-tetramethyl-
10(phenyl)tetradecahydro Acridine-1,8-Diol”**

**Submitted to
Periyar University**

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

M.SATHIYAPRIYA (Reg. No. 20PCH1311)

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Ms.S.ESWARI M. Sc., M. Phil.,B. Ed.,

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Rasipuram

This is to certify that the project work dissertation entitled “**SYNTHESIS AND BIOLOGICAL STUDIES ON 3,3,6,6-TETREMETHYL 10-(PHENYL)TETREDECAHYDRO ACRIDINE-1,8-DIOL**” submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY** to **PERIYAR UNIVERSITY**, in **MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM**, is a bonafide record of the project work carried out by **M.SATHIYAPRIYA(Reg No: 20PCHI311)** under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

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Examiner :2

P. Muthayammal 9/6/22
SIGNATURE OF THE HOD

HEAD OF THE DEPARTMENT,
Department of Chemistry,
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Rasipuram-637 408, Namakkal (Dt)

**“GREEN SYNTHESIS AND CHARACTERIZATION OF SILVER
NANOPARTICLES BY USING CITRUS SINENSIS RIND EXTRACT”**

Dissertation Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
CHEMISTRY**

By

SHENEHA R K (Reg. No. 20PCH1312)

Mrs. R. JEGANMOHINI M.Sc., B.Ed., M.Phil.,

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Muthayammal College of Arts & Science (A unit of Vanetra Groups) Autonomous,

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(A Unit of Vanetra Group),
Rasipuram.

This is to certify that the project work entitled **GREEN SYNTHESIS AND CHARACTERISATION OF SILVER NANO PARTICLES BY USING CITRUS SINENSIS FRUIT RIND EXTRACT** submitted in partial fulfillment of the degree of **MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A unit of vanetra Group) RASIPURAM**, is a bonafide record of the project work carried out by **SHENEHA R K (Reg No: 20PCH1312)** under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.


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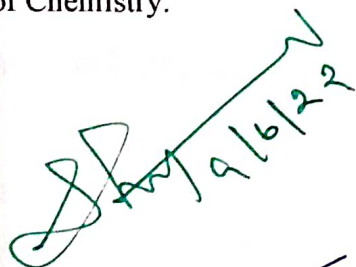
Mrs. R.Jeganmohini M.Sc.,B.Ed., M.Phil.,
Assistant Professor of Chemistry,
Department of Chemistry.

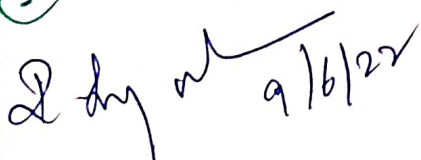

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Dr. P.Sumathi M.Sc., M.Phil., B.Ed., Ph.D.,
HEAD OF THE DEPARTMENT,
Department of Chemistry,
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Rasipuram-637 408, Namakkal (Dt)

Examiner 1:

Examiner 2:


9/6/22


9/6/22

CoFe-ZIF derived bifunctional oxygen catalyst for Zn-air batteries

Submitted to
Periyar University

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

MASTER OF SCIENCE
IN
CHEMISTRY

By

A. THARANI (Reg. No. 20PCH1313)

Under the Guidance of

Mrs. M. SARANYA, M. Sc., M. Phil., B. Ed.,
Assistant Professor,
Department of Chemistry

Muthayammal College of Arts & Science (A unit of Vanetra Groups), Rasipuram
Namakkal – 637 408



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JUNE 2022

Mrs. M. SARANYA, B.Ed., M.Sc., M.Phil.,

Assistant Professor,
Project Guide & Supervisor,
Department of Chemistry,
Muthayammal college of Arts and Science,
Rasipuram, Namakal-637 408

CERTIFICATE

This is to certify that this project report entitled “CoFe-ZIF DERIVED BIFUNCTIONAL OXYGEN CATALYST FOR Zn-AIR BATTERIES” submitted to Muthayammal college of Arts and Science, Affiliated to Periyar University Rasipuram in partial fulfilment for the award of degree of Master of Science in Chemistry during the year 2022 is an original work done by Ms. A. THARANI, [Reg.No. 20PCH1313] at CSIR-CECRI, Karaikudi, under the supervision and guidance of Dr. AISWARYABHASKAR, Scientist and Mrs. M. SARANYA, B.Ed., M.Sc., M.Phil.,

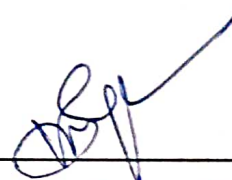
DATE: 09. 6. 2022

A. Tharani
A. THARANI,
Reg.No. 20PCH1313.

This is to certify that this project work, carried out by A. THARANI, [Reg.No. 20PCH1313] is a bonafide work and is performed under our supervision.



Dr. AISWARYA BHASKAR
Project Guide & Supervisor, Scientist
CSIR-CECRI

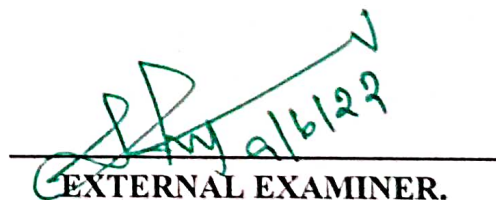


Mrs. M. SARANYA
Guide

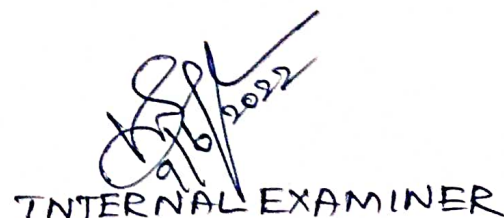


HEAD OF THE DEPARTMENT

HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)



EXTERNAL EXAMINER.



INTERNAL EXAMINER

**“CONVENTIONAL AND MICROWAVE-ASSISTED SYNTHESIS,
CHARACTERISATION OF 2-(3-BROMOPHENYL)-1,3,5-TRIAZINE**

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

K.ANBARASU (Reg. No. 20POC1001)

Dr. P. SUMATHI.M.Sc., M.Phil.,B.Ed.,Ph.D.,

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Namakkal – 637 408



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JUNE 2022

CERTIFICATE

Dr. P. SUMATHI M. Sc., M. Phil., B. Ed., Ph. D.,

Assistant Professor and Head

Department of Chemistry

Muthayammal College of Arts and Science,

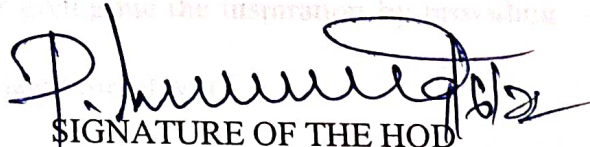
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Rasipuram

"CONVENTIONAL AND
MICROWAVE-ASSISTED

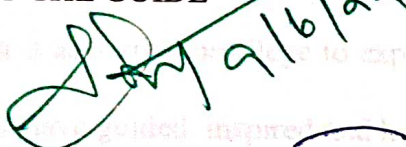
This is to certify that the project work dissertation entitled "SYNTHESIS AND CHARACTERISATION 2-(3-BROMOPHENYL)-1-3-5-TRIAZIE submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGAIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUP) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by K. ANBARASU Reg: No:20POC1001 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree

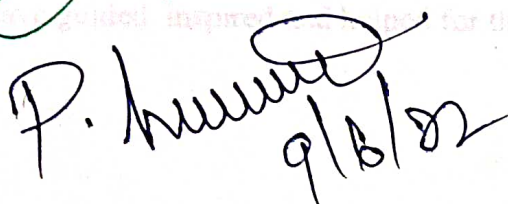

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EXAMINAR:1

EXAMINOR:2


9/16/22


9/16/22

“SYNTHESIS AND STUDY OF SCHIFF BASE LIGAND”

Submitted to
Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

S.ARUNKUMAR (Reg. No. 20POC1002)

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Assistant Professor

Department of Chemistry

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Namakkal – 637 408



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CERTIFICATE

Mrs.R.JEGANMOHINI M. Sc., M. Phil.,B. Ed.,

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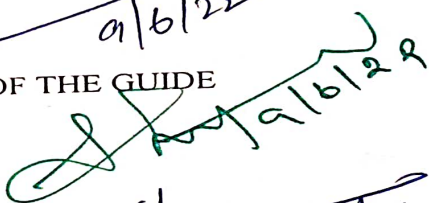
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Rasipuram

This is to certify that the project work dissertation entitled "SYNTHESIS AND STUDY OF SCHIFF BASE LIGAND" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by S.ARUNKUMAR Reg: No:20POC1002 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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EXAMINER:1


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EXAMINER:2


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HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
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REGISTRATION

**“PREPERATION AND CHARACTERISATION OF 2-(3-chlorophenyl)-1,3,5-
triazine”**

Submitted to
Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

G.BOOPATHI (Reg. No. 20POC1003)

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Assistant Professor

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JUNE 2022

CERTIFICATE

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Rasipuram.

This is to certify that the project work dissertation entitled "PREPARATION AND CHARACTERISATION OF 2-(3-cholorophenyl)-1,3,5-triazine" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by G.BOOPATHI Reg: No:20POC1003 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree

A. Dhivya

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A. Dhivya

P. Muthayammal

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HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

**“SYNTHESIS , SPECTRAL & CHARACTERISTION OF
2- (4-HYDROXYBENZYLIDENE)AMINO PHENOL TOWARDS POTENTIAL
MICROBIAL APPLICATIONS”**

*Submitted to Periyar
University*

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

MASTER OF SCIENCE

IN

ORGANIC CHEMISTRY

BY

D.DHATCHINAMOORTHY (Reg. No: 20POC1004)

Under the Guidance of

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Assistant professor

Department of Chemistry

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Mr. V.SANTHOSHKUMAR, M. Sc.,
Assistant Professor,
Department of Chemistry,
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(A unit of VANETRA group).
Rasipuram.

This is to certify that the project work entitled "SYNTHESIS & CHARACTERIZATION OF SCHIFF BASES OF SALICYLALDEHYDE AND 2-AMINOPYRIDINE TOWARDS POTENTIAL MICROBIAL APPLICATIONS" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A unit of VANETRA Group) RASIPURAM, is a bonafide record of the project work carried out by **D.DHATCHINAMOORTHY** (Reg. No: 20PC1004) under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.


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HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

DECLARATION

**"SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL
STUDIES OF SEMICARBAZONE DERIVATIVES FROM
CARBONYL COMPOUNDS"**

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**
By

T.DIWAKAR(Reg. No. 20POC1005)

Under the guidance of

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Department of Chemistry

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Namakkal – 637 408



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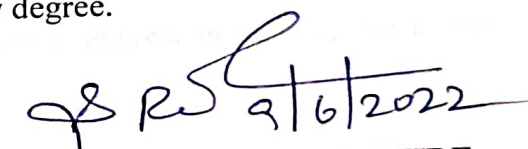
CERTIFICATE

Mr. S.RAMKUMAR M.Sc., MPhil. B.Ed.,
Assistant Professor
Department of Chemistry
Muthayammal College of Arts and Science,
(A unit of Vanetra Groups)
Rasipuram

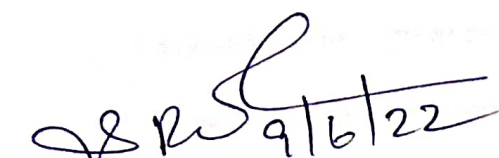
This is to certify that the project work dissertation entitled "SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL STUDIES OF SEMICARBAZONE DERIVATIVES FROM CARBONYL COMPOUNDS" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by T.DIWAKAR RegNo 20POCH1005 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.



SIGNATURE OF THE HOD

Dr. P. SUMATHI
Head and Asst. Prof.,
Department of Chemistry


SIGNATURE OF THE GUIDE

Mr. S.RAMKUMAR
HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)


INTERNAL EXAMINER


EXTERNAL EXAMINER

“SYNTHESIS AND STUDY OF SCHIFF BASE LIGAND”

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

N.HARIHARAN (Reg. No. 20POC1006)

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Muthayammal College of Arts & Science (A unit of Vanetra Groups) Autonomous,

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Mrs.T.VADIVU M. Sc., M. Phil.,B.Ed

Assistant Professor and Head

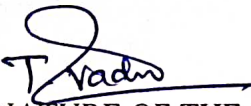
Department of Chemistry

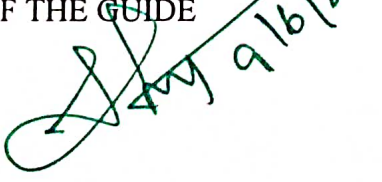
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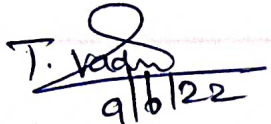
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Rasipuram

This is to certify that the project work dissertation entitled "SYNTHESIS AND STUDY OF SCHIFF BASE LIGAND" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by N.HARIHARAN Reg: No:20POC1006 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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EXAMINER:1  9/6/22

EXAMINER:2  9/6/22


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HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

**SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE FROM p-
HALO SUBSTITUTED ALDEHYDE AND p-NITROANILINE,**

**DISSERTATION SUBMITTED TO
PERIYAR UNIVERSITY SALEM – 636 011**

In partial fulfillment of the requirements

For the award of the degree of

MASTER OF SCIENCE

in

ORGANIC CHEMISTRY

By

S. JAWAHAR

(Reg. No. 20P0C1007)

Under the guidance of

Dr. N. SUDHA, M. Sc., M. Phil., Ph. D.

Assistant Professor of Chemistry,

Department of Chemistry



**MUTHAYAMMAL
COLLEGE OF ARTS & SCIENCE**

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Muthayammal College of Arts & Science

(A unit of VANETRA Groups)


Rasipuram, Namakkal – 637 408

JUNE 2022

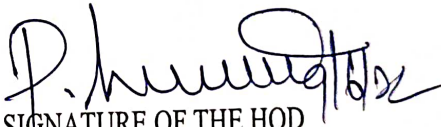
CERTIFICATE

Dr. N. SUDHA M. Sc., M. Phil., Ph. D.,
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(A unit of VANETRA Groups)
Rasipuram.

This is to certify that the project work dissertation entitled "SYNTHESIS AND CHARACTERISATION OF SCHIFF'S BASE FROM *p*-HALO SUBSTITUTED ALDEHYDE AND *p*-NITRO ANILINE" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A unit of VANETRA group) RASIPURAM, is a bonafide record of the project work carried out by S. JAWAHAR, Reg. No: 20POC1007, under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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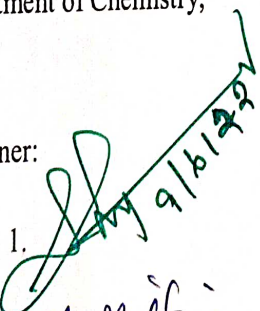
Dr. N. Sudha, M. Sc., M. Phil., Ph.D.,
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Department of Chemistry,


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Dr. P. Sumathi, M. Sc., M. Phil., B. Ed., Ph. D.,
Assistant Professor and Head,
Department of Chemistry

HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

Examiner:

1. 
2. N. Nithya
9/6/22

DECLARATION

“Synthesis and Biological Studies on 3,3,6,6 – tetramethyl-10-(2-methyl phenyl) 3,4,6,7,9, 10-hexahydro-1,8(2h,5h) acridinedione”

Submitted to
Periyar University

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

MASTER OF SCIENCE IN
ORGANIC CHEMISTRY
BY

J.MANIKANDAN (REG NO: 20POC1008)

Under the Guidance of

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Assistant professor

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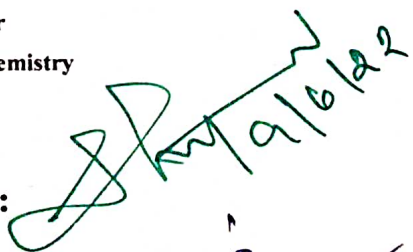
Ms.S.ESWARI M.Sc., M.Phil., B.Ed.,
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Rasipuram.

This is to certify that the project work entitled "SYNTHESIS AND BIOLOGICAL STUDIES ON 3,3,6,6 - TETRAMETHYL-10-(2-METHYL PHENYL) 3,4,6,7,9, 10-HEXAHYDROL-1,8(2H,5H)ACRIDINEDIONE" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A unit of VANETRA Group) AUTONOMOUS RASIPURAM, is a bonafide record of the project work carried out by J.MANIKANDAN (REG NO: 20POC1008) under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.


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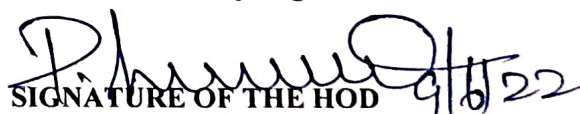
MS. S. Eswari M.Sc., M. Phil., B.Ed
Assistant Professor
Department of Chemistry

Examiner 1:


9/6/22

Examiner 2:


9/6/22


SIGNATURE OF THE HOD 9/6/22

Dr.P. Sumathi M.Sc., M.Phil., B.Ed., Ph.D
Assistant professor and Head
HEAD OF THE DEPARTMENT,
Department of Chemistry,
Muthayammal College of Arts & Science,
Rasipuram-637 408, Namakkal (Dt)

DECLARATION

**“SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASE
OF 2-AMINO PYRIDINE AND BENZOPHENONE”**

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**
By

P.MOULIDHARAN (Reg. No. 20POC1009)

Under the guidance of

Mr. P.Ayyanar.M.Sc., B.Ed.,

Assistant Professor

Department of Chemistry

Muthayammal College of Arts & Science (A unit of Vanetra Groups), Rasipuram

Namakkal – 637 408



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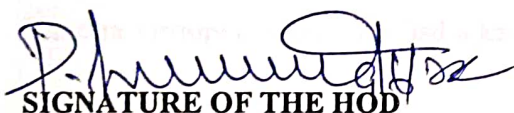
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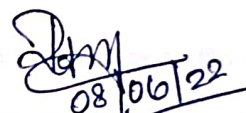
Mr. P.Ayyanar M.Sc., B.Ed.,
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Rasipuram

This is to certify that the project work dissertation entitled "SYNTHESIS, CHARACTERIZATION OF SCHIFF BASE OF 2-AMINO PYRIDINE AND BENZOPHENONE" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by P.MOULIDHARAN RegNo:20POC1009 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.



SIGNATURE OF THE HOD

Dr. P. SUMATHI
Head and Asst. Prof.,
Department of Chemistry,
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Rasipuram-637 408, Namakkal (Dt)



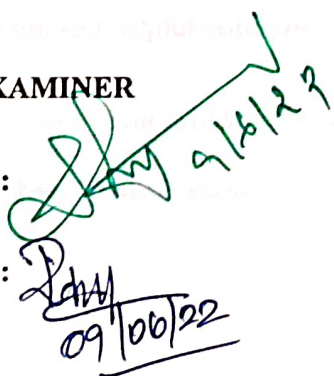
SIGNATURE OF THE GUIDE

Mr. P. AYYANAR
Asst. Prof.,
Department of Chemistry

INTERNAL EXAMINER

EXAMINER 1:

EXAMINER 2:



EXTERNAL EXAMINER

**“Synthesis and Biological Studies on 3,3,6,6 tetramethyl-10
(2-methyl phenyl) tetradecahydro acridine-1,8 diol”**

Submitted to

Periyar University

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

**MASTER OF SCIENCE IN
ORGANIC CHEMISTRY
BY**

S.NAVEENPRASATH (REG NO: 20POC1011)

Under the Guidance of

Ms. S.ESWARI M.Sc.,M.Phil.,B.Ed.,

Assistant professor

Department of Chemistry

**Muthayammal college of arts and science (A Unit of Vanetra Groups) Autonomous,
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JUNE-2022

CERTIFICATE

Ms. S. Eswari M. Sc., M. Phil., B.Ed.,
Assistant Professor,
Department of Chemistry,
Muthayammal College of Arts and Science,
(A unit of VANETRA Groups),
Rasipuram.

This is to certify that the project work dissertation entitled "SYNTHESIS AND BIOLOGICAL STUDIES ON 3,3,6,6 TETRAMETHYL-10(2-METHYL PHENYL) TETRADECAHYDROACRIDINE-1,8 DIOL" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by S. NAVEENPRASATH (Reg No:20POC1011) under my guidance and supervision and I certify that work is original and has not been submitted elsewhere for any degree.

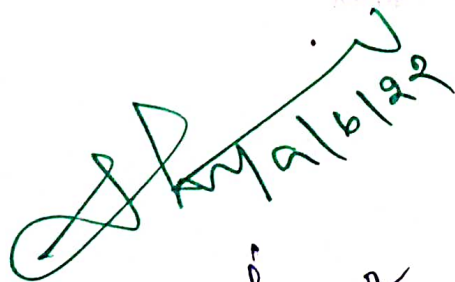

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Assistant Professor
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Dr.P. Sumathi M.Sc., M.Phil., B.Ed., Ph.D
Assistant Professor and Head
HEAD OF THE DEPARTMENT,
Department of Chemistry,
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Rasipuram-637 408, Namakkal (Dt)

Examiner 1:


9/6/22

Examiner 2:


9/6/22

DECLARATION

**“SYNTHESIS AND CHARACTERIZATION OF REACTION OF ANILINE AND
ACETOPHENONE”**

Submitted to

Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY
By**

M.VASUDEVAN (Reg. No. 20POC1012)

Under the guidance of

**Mr. P.Ayyanar.M.Sc., B.Ed.,
Assistant Professor
Department of Chemistry**

**Muthayammal College of Arts & Science (A unit of Vanetra Groups), Rasipuram
Namakkal – 637 408**



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Mr. P.Ayyanar M.Sc., B.Ed.,
Assistant Professor
Department of Chemistry
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(A unit of Vanetra Groups)
Rasipuram

This is to certify that the project work dissertation entitled "SYNTHESIS, CHARACTERIZATION OF SCHIFF BASE OF ANILINE AND ACETOPHENONE" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by M.VASUDEVAN RegNo:20POC1012 under my guidance and supervision and

I certify that this work is original and has not been submitted elsewhere for any degree.

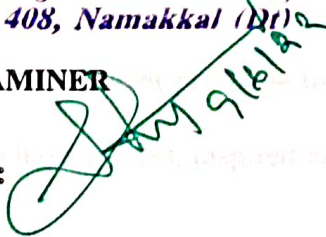

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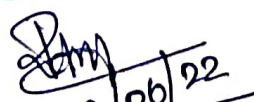
Dr. P. SUMATHI
Head and Asst. Prof.,
HEAD OF THE DEPARTMENT,
Department of Chemistry,
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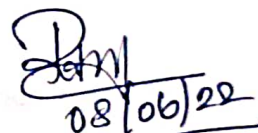
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Mr. P.AYYANAR
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Department of Chemistry

EXTERNAL EXAMINER

**“SYNTHESIS AND CHARACTERISATION OF SCHIFF BASE OF
SALICYLADEHYDE AND ANILINE TOWARDS POTENTIAL
MICROBIAL APPLICATION”**

Submitted to
Periyar University

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

P.VIJAY (Reg. No. 20POC1013)

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**Assistant Professor of
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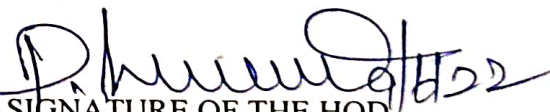
Rasipuram

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DECLARATION

**GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES
FROM PARTHENIUM HYSTEROPHORUS**

**Submitted to
Periyar University**

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

S. ANUREKA (Reg. No. 20POC1014)

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This is to certify that the project work dissertation entitled "GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES FROM PARTHENIUM HYSTEROPHORUS" submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUP) AUTONOMOUS, RASIPURAM, is a bonafide record of the project work carried out by S.ANUREKA Reg: No:20POC1014 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

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SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASE

**Submitted to
periyar university**

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

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

R.BHARATHI (Reg. No. 20POC1015)

Under the Guidance of

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Assistant professor

Department of Chemistry

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Rasipuram

This is to certify that the project work dissertation entitled “SYNTHESIS AND CHARACTERIZATION OF SCHIFF BASE” submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS), RASIPURAM, is a bonafide record of the project work carried out by R.BHARATHI REG.NO:20P OC1015 under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.


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Mrs.M.SARANYA. M.Sc., M.Phil.,B.Ed.,

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ASSISTANT PROFESSOR OF CHEMISTRY and HEAD

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Examiner 1:

Examiner 2:



HEAD OF THE DEPARTMENT,
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**"SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL ACTIVITY OF SCHIFF BASE
AND METAL COMPOUND**

Submitted to periyar University

partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY

By

C. DURGA (Reg. No. 20POC1016)

Under the Guidance of

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Assistant Professor & Head,
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Rasipuram

Namakkal – 637 408



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Assistant Professor and Head

Department of Chemistry

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Rasipuram

This is to certify that the project work dissertation entitled **"SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL ACTIVITY OF SCHIFF BASE AND METAL COMPOUNDS"** submitted in partial fulfillment of the degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY to PERIYAR UNIVERSITY, in MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (A UNIT OF VANETRA GROUPS) RASIPURAM, is a bonafide record of the project work carried out by **C.DURGA Reg: No:20POC1016** under my guidance and supervision and I certify that this work is original and has not been submitted elsewhere for any degree.

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Assistant professor and Head

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Rasipuram-637 408, Namakkal (Dt)

**A NEW BIO-ENCRYPT APPROACH TO SECURE AND RETRIEVE USER DATA
EFFECTUALLY**

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

By

BALAMURUGAN M

20PCS1163



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Mr.P.SUBRAMANIAM MS(IT&M), M.Phil., [Ph.D].,

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RASIPURAM-637 408,

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APRIL/MAY 2022.

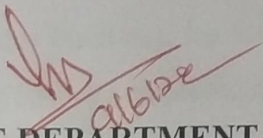
Mr.P.SUBRAMANIAM MS(IT&M), M.Phil., [Ph.D].,
Head of the Department, Department of Computer Science,
Muthayammal college of arts and science,
Rasipuram-637 408, Namakkal (dt).

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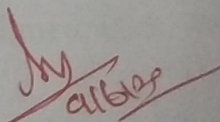
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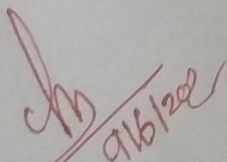

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DEPARTMENT OF COMPUTER SCIENCE
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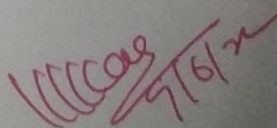

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INTERNAL GUIDE

Date of viva-voce: 09/06/2022


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INTERNAL EXAMINER


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This is to certify that **M.Balamurugan (20PCS1163)** as a student of M.Sc (Master Of Computer Science), Muthayammal college of arts and science, Rasipuram, Namakkal District, Tamilnadu has successfully completed his 4 months (Feb 2022 - May 2022) internship program at **Maxpro Infotech**.

During the internship, he has showed good interest in learning new domain and made valuable queries to our programs. He has successfully completed his internship on "JAVA".

During the training, he took keen interest in the assigned work. We wish him all success in his academic endeavors and life.

Date: May 23, 2022

Maxpro Infotech,



HR Manager.

**EFFICIENT AND PATH ALLOCATION FOR DATA COLLECTION AND
TRANSACTION IN WSN**

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

By

KABILAN A

20PCS1164



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RASIPURAM-637 408,

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TAMILNADU,

APRIL/MAY 2022.

Mr.P.SUBRAMANIAM MS(IT&M), M.Phil., [Ph.D].,

Head of the Department, Department of Computer Science,

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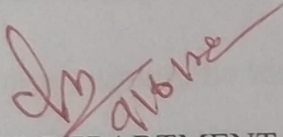
Rasipuram -637408, Namakkal (DT).

CERTIFICATE

This is to certify that the dissertation entitled **EFFICIENT AND PATH ALLOCATION FOR DATA COLLECTION AND TRANSACTION IN WSN** submitted in partial fulfillment of the requirement for the degree of Master of Computer Science to the Periyar University, Salem, is a record of bonafide work carried out by **KABILAN.A, Register No: 20PCS1164** under my supervision and the guidance and that no part of the dissertation has been submitted for the award of any degree .

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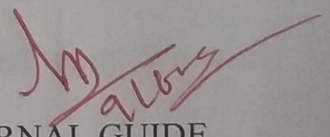
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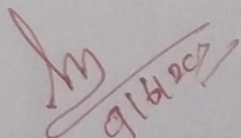
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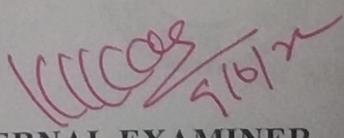
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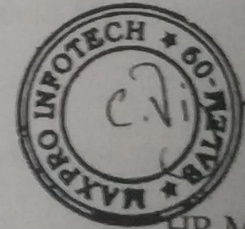
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During the internship, he has showed good interest in learning new domain and made valuable queries to our programs. He has successfully completed his internship on "JAVA".

During the training, he took keen interest in the assigned work. We wish him all success in his academic endeavors and life.

Date: May 23, 2022

Maxpro Infotech,



HR Manager

WEB BASED PROMOTING AGRICULTURAL PRODUCTS

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

By

MURALI KRISHNAN V

20PCS1165



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DATE: 09.06.22

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M.S. Sudha
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Submitted for the viva-voce examination held on..09.06.22

M.S. Sudha
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M.S. Sudha
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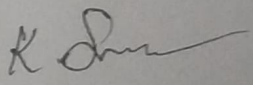
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We wish best of luck on completion of his Internship training with us.

SMATRIX INFOTECH
With Best Regards,


Project Manager

Prince Infocity,
Old Mahabalipuram Rd,
Perungudi,
Chennai - 600096

**A HYBRID FAULT TOLERANTE ROUTING BASED ON GAUSSIAN NETWORK
FOR WIRELESS SENSOR NETWORK**

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

BY

SATHEESH KUMAR P

20PCS007



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NAMAKKAL (DT),

TAMILNADU,

JUNE 2022.

Mrs. A.M. NIRMALA, MCA., M.Phil., B.Ed

Assistant Professor, Department of Computer Science

Muthayammal College of Arts & Science,

Rasipuram -637408, Namakkal District.

CERTIFICATE

This is to certify that the dissertation entitled **A HYBRID FAULT TOLERANTE ROUTING BASED ON GAUSSIAN NETWORK FOR WIRELESS SENSOR NETWORK** submitted in

partial fulfillment of the requirement for the degree of Master of Computer Science to the Periyar University, Salem, is a record of bonafide work carried out by **SATHEESH KUMAR.P**, Register No: 20PCS1166 under my supervision and the guidance and that no part of the dissertation has been submitted for the award of any degree.

DATE: 09-06-2022

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Date of viva-voce: 09-06-2022

Submitted for the viva-voca examination held on... 9-6-22

Nirmala
INTERNAL EXAMINER

VCCCS
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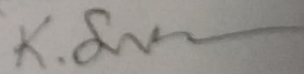


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We wish best of luck on completion of his Internship training with us.

With Best Regards,
SMATRIX INFOTECH
Chennai, India

Project Manager

Prince Infocity,
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Perungudi,
Chennai - 600096

**ENABLING TRUSTWORTHY SERVICE EVALUATION IN SERVICE
ORIENTED MOBILE SOCIAL NETWORK**

A Dissertation submitted in partial
fulfillment of the requirements for the degree

of

Master of Computer Science

to the

Periyar University, Salem-11

By

ANJALI.P

20PCS1167



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JUNE 2022.

Dr.A.ANUSHA PRIYA M.C.A., M. Phil., Ph.D.,

ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE

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RASIPURAM , NAMAKKAL-637408.

CERTIFICATE

This is to certify that the dissertation entitled **ENABLING TRUSTWORTHY SERVICE EVALUATION IN SERVICE – ORIENTED MOBILE SOCIAL NETWORKS** submitted in partial fulfillment of the requirement for the degree of Master of Computer Science to the Periyar University, Salem, is a record of bonafide work carried out by **ANJALI.P** , Register No:20PCS1167 under my supervision and the guidance and that no part of the dissertation has been submitted for the award of any degree .

DATE: 09.06.22

PLACE: RASIPURAM

M. Anusha Priya
INTERNAL GUIDE

Anusha Priya
HEAD OF THE DEPARTMENT
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MUTHAYAMMAL COLLEGE OF ARTS&SCIENCE
RASIPURAM-637 408.
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Submitted for the viva-voce examination held on....09.06.2022....

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M. Anusha Priya
EXTERNAL EXAMINER

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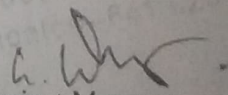
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This is to certify that **Ms. P. ANJALI (Reg. No: 20PCS1167)** student of **M.Sc (Computer Science)** in **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE** has completed her internship project entitled **“ENABLING TRUSTWORTHY SERVICE EVALUATION IN SERVICE-ORIENTED MOBILE SOCIAL NETWORKS”** in our concern during the period from Feb 2022 to May 2022 in partial fulfillment of the M.Sc degree course.

We wish best of luck on completion of her Internship training with us.

With Best Regards,

CALISTRO SOFTWARE PVT. LTD
Coimbatore - 641025


Project Manager

**IMPROVING SECURITY AND PRIVACY ATTRIBUTE BASED DATA SHARING
IN CLOUD COMPUTING**

A Dissertation submitted in partial
fulfillment of the requirements for the degree
of

Master of Computer Science

to the

Periyar University, Salem-11

By

DHIVYA K

20PCS002



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Mr.P.SUBRAMANIAM MS(IT&M), M.Phil., [Ph.D].,

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RASIPURAM-637 408,

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Mr.P.SUBRAMANIAM MS(IT&M), M.Phil., [Ph.D].,

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CERTIFICATE

This is to certify that the dissertation entitled **IMPROVING SECURITY AND PRIVACY ATTRIBUTE BASED DATA SHARING IN CLOUD COMPUTING** submitted in partial fulfillment of the requirement for the degree of Master of Computer Science to the Periyar University, Salem, is a record of bonafide work carried out by **DHIVYA.K**, Register No: **20PCS1168** under my supervision and the guidance and that no part of the dissertation has been submitted for the award of any degree .

DATE: 09/06/2022

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9/6/22

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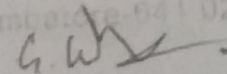
This is to certify that Ms. K. DHIVYA (Reg. No: 20PCS1168) student of M.Sc (Computer Science) in MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE has completed her internship project entitled "IMPROVING SECURITY AND PRIVACY ATTRIBUTE BASED DATA SHARING IN CLOUD COMPUTING" in our concern during the period from Feb 2022 to May 2022 in partial fulfillment of the M.Sc degree course.

We wish best of luck on completion of her Internship training with us.

With Best Regards,

CALISTRO SOFTWARE PVT. LTD.

Coimbatore - 641 025


Project Manager

**DIABETES PREDICTION MODEL BASED ON AN ENHANCED DEEP
NEURAL NETWORK**

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

By

HARINI P

20PCS010



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(Affiliated to Periyar University)

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This is to certify that the dissertation entitled **DIABETES PREDICTION MODEL BASED ON AN ENHANCED DEEP NEURAL NETWORK** submitted in partial fulfillment of the requirement for the degree of Master of Computer Science to the Periyar University, Salem, is a record of bonafide work carried out by **HARINI P**, Register No: 20PCS1169 under my supervision and the guidance and that no part of the dissertation has been submitted for the award of any degree .

DATE: 09.06.2022

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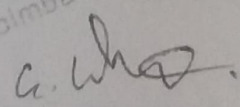
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We wish best of luck on completion of her Internship training with us.

With Best Regards,



Project Manager

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Coimbatore - 641 025

OPTIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICES

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

By

RASIGAPRIYA M

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DATE: 09.06.22

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INTERNAL GUIDE

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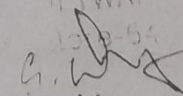
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We wish best of luck on completion of her Internship training with us.

With Best Regards,

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Coimbatore - 641025


Project Manager

**EXPLAINABLE MACHINE LEARNING FOR EARLY ASSESSMENT OF
COVID-19 RISK PREDICTION EMERGENCY DEPARTMENTS**

A Dissertation submitted in partial fulfillment of

the requirements for the degree of

Master of Computer Science

to the

Periyar University, Salem-11

By

SUGANYA S

20PCS008



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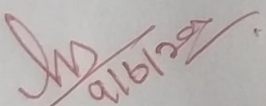
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Rasipuram -637408, Namakkal District.

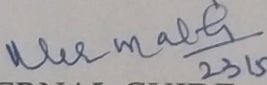
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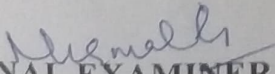
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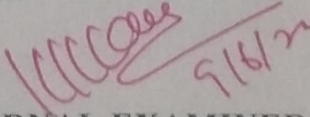

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NAMAKKAL (DN)

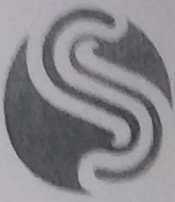

INTERNAL GUIDE

Date of viva-voce: 09.06.2022

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INTERNAL EXAMINER


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SMATRIX INFOTECH

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We wish best of luck on completion of her Internship training with us.

With Best Regards,

SMATRIX INFOTECH
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Project Manager

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“MOBILE CONTROLLED INTELLIGENT FIRE FIGHTING ROBOT USING ATMEGA 328”

Dissertation submitted to the **Periyar University, Salem-636011**

In partial fulfilment for the requirement of the degree of

**MASTER OF SCIENCE IN
ELECTRONICS AND COMMUNICATION**

Submitted by

NAVINKUMAR.S

Reg.No:20PEL1024

Under the guidance of

Mr.I. BALAKRISHNAN, M.Sc,M.Phil,PGDCA,MISTE.,



Batch: 2020-2022

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

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CERTIFICATE

This is to certify that, the project dissertation "**MOBILE CONTROLLED INTELLIGENT FIRE FIGHTING ROBOT USING ATMEGA 328**". submitted in partial fulfilment of the requirement for the degree of **Master of Science in Electronics and Communication** to the Periyar University, Salem is a record of research work carried out by **NAVINKUMAR.S (20PEL1024)** Under my supervision and guidance and that no part of this dissertation has been submitted for the award of any degree, diploma, fellowship or other similar titles or prizes and the work has not been published in part or full in any scientific or popular journals or magazines.


Supervisor / Guide

Department


Head of the

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Rasipuram - 637 408, Namakkal (T)
Tamil Nadu

Submitted for viva-voice examination held on 11.06.2022 (F.W)

Place: Rasipuram.

Date: 11.06.2022

Examiners

1. 
11/6/2022

2. 
11/6/2022

“LIBRARY MANAGEMENT SYSTEM”

Dissertation submitted to the **Periyar University, Salem-636011**

In partial fulfillment for the requirement of the degree of

MASTER OF SCIENCE IN ELECTRONICS AND COMMUNICATION

Submitted by

SANTHIYA.R

Reg.No:20PEL1025

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Batch: 2020-2022

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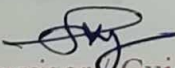
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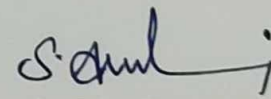


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Supervisor/Guide

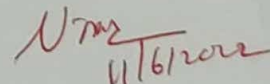
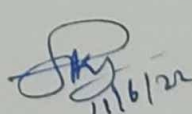

Head of the Department
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Tamil Nadu

Submitted for viva-voice examination held on 11.6.22

Place: Rasipuram.

Date: 11.6.22

Examiners

1. 
11/6/22
2. 
11/6/22

“ARTIFICIAL INTELLIGENCE(AI) BASED SMART WATER TANK MANAGEMENT SYSTEM USING RASPBERRY PI PICO”

Dissertation submitted to the Periyar University, Salem-636011
In partial fulfillment for the requirement of the degree of

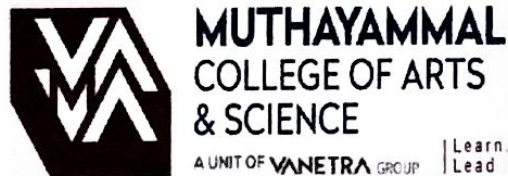
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Submitted by

MANIKANDAN.S	Reg.No.19UEL1096
NAVEENKUMAR.P	Reg.No.19UEL1100
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Batch:2019-2022

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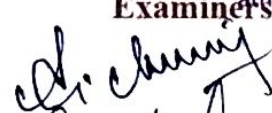


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Head of the Department

Submitted for viva-voice examination held on 27-05-2022
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Rasipuram - 637 408, Namakkal Dt
Tamil Nadu

Place: Rasipuram.

Date: 27-05-2022

Examiners
1. 
2. 

“IOT BASED AGRICULTURE CROP MONITORING AND ANIMAL WARNING SYSTEM”

Dissertation submitted to the Periyar University, Salem-636011
In partial fulfillment for the requirement of the degree of

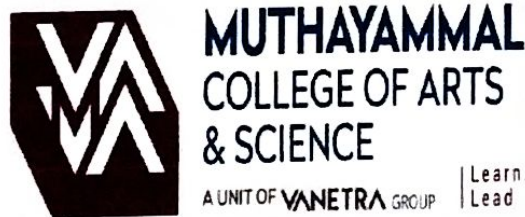
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Submitted by

SANJALS	Reg.No:19UEL1101
BOOPATHI.P	Reg.No:19UEL1086
DHAYALAN.G	Reg.No:19UEL1087
BHUVANESHWARAN.M	Reg.No:19UEL1085
HARIHARASUDAN.D	Reg.No:19UEL1090

Under the guidance of

Mr.S.ARULMANI M.Sc.,



Batch: 2019-2022

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RASIPURAM-637408
DEPARTMENT OF ELECTRONICS AND COMMUNICATION



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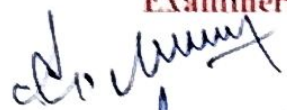

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Supervisor Guide 24/5/22


Head of the Department 24/5/22

Submitted for viva-voice examination held on 27-05-2022 **HEAD OF THE DEPARTMENT**
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Rasipuram - 637 408, Namakkal Dt
Tamil Nadu.
Examiners

Place: Rasipuram.
Date: 27-05-2022

- 
- 

**“AUTOMATIC SPEED BREAKER AND ACCIDENT
ALERT SYSTEM USING ARDUINO UNO”**

Dissertation submitted to the **Periyar University, Salem-636011**
In partial fulfillment for the requirement of the degree of

**BACHELOR OF SCIENCE
IN
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Submitted by

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ARAVINTH.M	Reg.No:19UEL1083
BHARATH KUMAR.R	Reg.No:19UEL1084
GOBINATHAN.K	Reg.No:19UEL1088
GOKUL.K	Reg.No:19UEL1089

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Batch: 2019-2022

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This is to certify that, the project dissertation "**AUTOMATIC SPEED BREAKER AND ACCIDENT ALERT SYSTEM USING ARDUINO UNO**" submitted in partial fulfillment of the requirement for the degree of **Bachelor of Science in Electronics and Communication** to the Periyar University, Salem is a record of research work carried out by **AJAY.P(19UEL1082), ARAVINTH.M(19UEL1083), BHARATH KUMAR.R(19UEL1084), GOBINATHAN.K(19UEL1088), GOKUL.K(19UEL1089)** Under my supervision and guidance and that no part of this dissertation has been submitted for the award of any degree, diploma, fellowship or other similar titles or prizes and the work has not been published in part or full in any scientific or popular journals or magazines.


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Rasipuram - 637 408, Namakkal Dt
Tamil Nadu

Place: Rasipuram.

Examiners

Date: 27/05/2022

- 
- 

“LIBRARY MANAGEMENT SYSTEM”

Dissertation submitted to the Periyar University, Salem-636011
In partial fulfillment for the requirement of the degree of

BACHELOR OF SCIENCE IN ELECTRONICS AND COMMUNICATION

Submitted by

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Tamil Nadu

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Submitted for viva-voice examination held on 27.05.2022

Place: Rasipuram.

Date: 27.05.2022

1.

2.

**“NOVEL APPROACH FOR RAILWAY TRACK FAULT
PREDICTION AND WARNING SYSTEM”**

Dissertation submitted to the **Periyar University, Salem-636011**
In partial fulfillment for the requirement of the degree of

**BACHELOR OF SCIENCE
IN
ELECTRONICS AND COMMUNICATION**

Submitted by

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Submitted for viva-voice examination held on 27.05.2022

Place: Rasipuram.

Date: 27.05.2022

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“MOBILE CONTROLLED INTELLIGENT FIRE FIGHTING ROBOT USING ATMEGA 328”

Dissertation submitted to the **Periyar University, Salem-636011**
In partial fulfilment for the requirement of the degree of

**BACHELOR OF SCIENCE IN
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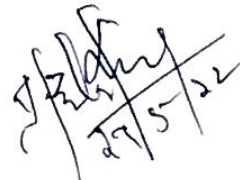
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Place: Rasipuram.

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**A STUDY ON MIXED VARIATIONAL INEQUALITY PROBLEM
INVOLVING GENERALIZED YOSIDA APPROXIMATION
OPERATORS IN q -UNIFORMLY SMOOTH BANACH SPACE**

**Project submitted to
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MASTER OF SCIENCE IN MATHEMATICS

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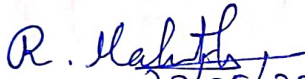
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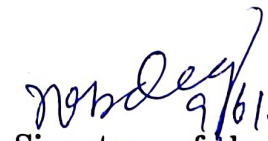
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A STUDY ON SEMI VECTOR SPACES AND SEMI ALGEBRAS

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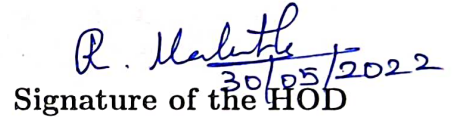
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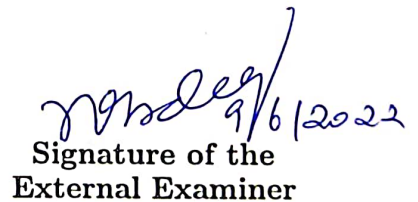
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A STUDY ON A UNIQUE PAIR OF TRIANGLE

**Project submitted to
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in partial fulfillment of the requirements for
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MASTER OF SCIENCE IN MATHEMATICS

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A STUDY ON THE NEW FIRST ORDER TAYLOR LIKE THEOREM WITH AN OPTIMIZED REDUCED REMAINDER

**Project submitted to
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in partial fulfillment of the requirements for
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MASTER OF SCIENCE IN MATHEMATICS

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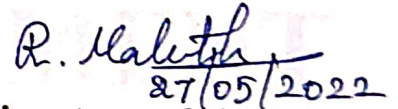
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**A STUDY ON GLUING MINIMAL PRIME IDEALS
IN LOCAL RINGS**

**Project submitted to
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in partial fulfillment of the requirements for
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MASTER OF SCIENCE IN MATHEMATICS

By

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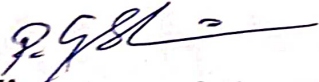
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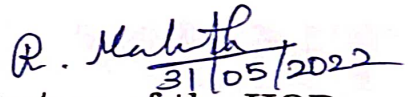
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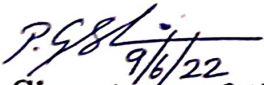


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**A STUDY ON m -QUASI-IDEALS IN m -REGULAR ORDERED
SEMIGROUPS**

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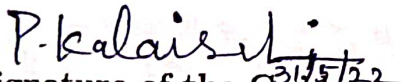
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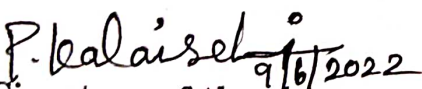
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**A STUDY ON NOVEL OF IDEALS AND FUZZY IDEALS OF
GAMMA-SEMIGROUPS**

Project submitted to
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MASTER OF SCIENCE IN MATHEMATICS

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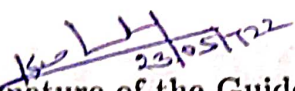
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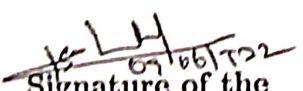
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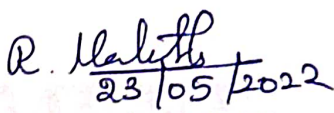
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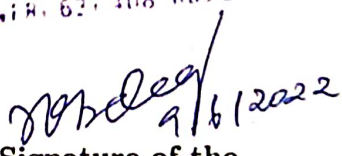
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**A STUDY ON ANTI Q-FUZZY AND Q-FUZZY SUBGROUPS UNDER
T-CONORMS AND T-NORMS**

**Project submitted to
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By

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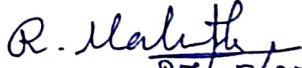
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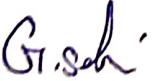
This is to certify that the project work entitled "A STUDY ON ANTI Q-FUZZY AND Q-FUZZY SUBGROUPS UNDER T-CONORMS AND T-NORMS" is a bonafide work carried out independently by K.DHARANI (20PMA1436) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

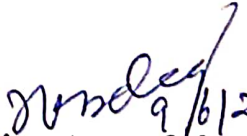
ACKNOWLEDGEMENT


Signature of the Guide
G.SELVI


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R.MALATHI
Head of The Department
Department of Mathematics,
Muthayyammal College of Arts & Science
K. K. K. V. R. 627 308, Rasipuram, TN.


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Internal Examiner
[G. SELVI]


9/6/2022
Signature of the
External Examiner

Dr. P. S. DEEPA
M.Sc., M.Phil., PGDCA., SET., Ph.D.,
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**A STUDY ON EVERY CONTINUUM HAS A COMPACT
UNIVERSAL COVER**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**T.DHARSHINI
Reg. No. 20PMA1437**

**Under the Guidance of
Mrs. R.MALATHI, M.Sc., M.Phil., B.Ed.,**



**MUTHAYAMMAL
COLLEGE OF ARTS
& SCIENCE**

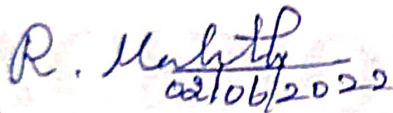
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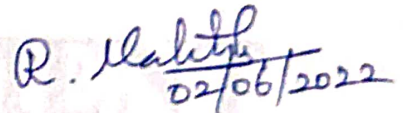
MAY- 2022

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This is to certify that the project work entitled "A STUDY ON EVERY CONTINUUM HAS A COMPACT UNIVERSAL COVER" is a bonafide work carried out independently by T.DHARSHINI (20PMA1437) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title .

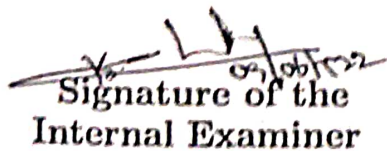

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Signature of the Guide
R.MALATHI

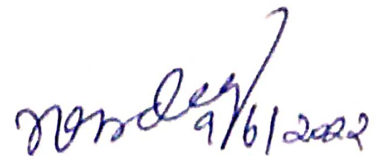

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M.Sc.,M.Phil.,PGDCA.,SET.,Ph.D.,
Assistant Professor & Head
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Salem Sowdeswari College (SFCW)
Salem-636 010.

**A STUDY ON ANTI FUZZY VECTOR SPACES AND
INTUITIONISTIC ANTI FUZZY VECTOR SPACES**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**V.DIVYAPRABHA
Reg. No. 20PMA1438**

**Under the Guidance of
Mrs.P.KALAISELVI, M.Sc., M.Phil., B.Ed.,**



**MUTHAYAMMAL
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CERTIFICATE

This is to certify that the project work entitled "A STUDY ON ANTI FUZZY VECTOR SPACES AND INTUITIONISTIC ANTI FUZZY VECTOR SPACES" is a bonafide work carried out independently by V.DIVYAPRABHA (20PMA1438) towards the partial fulfillment of the requirements for the award of Master of Science degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

P. Kalaiselvi
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P.KALAISELVI

R. Malathi
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Signature of the HOD

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Head of The Department
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Deepa
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**A STUDY ON RIEMANN-HILBERT THEORY WITHOUT LOCAL
PARAMETRIX PROBLEMS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**R.GOKULAPRIYA
Reg. No. 20PMA1439**

**Under the Guidance of
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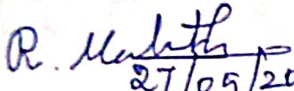
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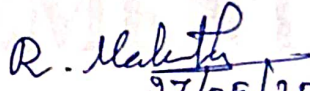
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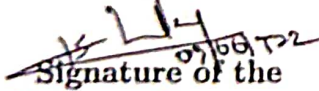
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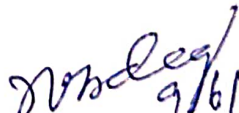
CERTIFICATE

This is to certify that the project work entitled "A STUDY ON REIMANN-HILBERT THEORY WITHOUT LOCAL PARAMETRIX PROBLEMS" is a bonafide work carried out independently by R.GOKULAPRIYA(20PMA1439) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


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**A STUDY ON FUZZY RIESZ HOMOMORPHISM ON FUZZY
RIESZ SPACE**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**R.HARSHINI
Reg. No. 20PMA1440**

**Under the Guidance of
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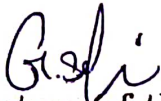
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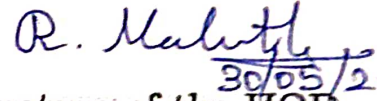
This is to certify that the project work entitled "A STUDY ON FUZZY RIESZ HOMOMORPHISM ON FUZZY RIESZ SPACE" is a bonafide work carried out independently by R.HARSHINI (20PMA1440) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

ACKNOWLEDGEMENT



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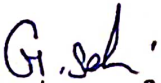
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A STUDY ON IDEAL ELEMENTS IN ORDERED SEMIGROUPS

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**JK.ILAKKIYAA DEVI
Reg. No. 20PMA1441**

**Under the Guidance of
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This is to certify that the project work entitled "A STUDY ON IDEAL ELEMENTS IN ORDERED SEMIGROUPS" is a bonafide work carried out independently by JK.ILAKKIYAA DEVI (20PMA1441) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

P. Kalaiselvi
26/5/22
Signature of the Guide
P.KALAI SELVI

R. Malathi
27/05/2022
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KAKKAVERI-627 408, Rasipuram (Tk)

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Dr. P.S. Deepa
9/6/2022
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Salem-636 010.

**A STUDY ON MONOTONE METHOD FOR RIEMANN-LIOUVILLE
FRACTIONAL DIFFERENTIAL EQUATIONS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**K.JAYASRI
Reg. No. 20PMA1442**

**Under the Guidance of
Mr.P.GOWRISHANKAR, M.Sc., M.Ed., SET.,**



**MUTHAYAMMAL
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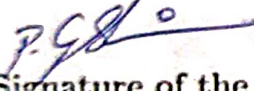
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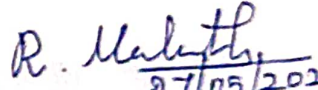
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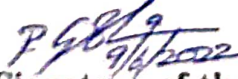
CERTIFICATE


This is to certify that the project work entitled "A STUDY ON MONOTONE METHOD FOR RIEMANN-LIOVILLE FRACTIONAL DIFFERENTIAL EQUATIONS" is a bonafide work carried out independently by K.JAYASRI (20PMA1442) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


Signature of the Guide
P.GOWRISHANKAR


Signature of the HOD
R.MALATHI

Head of The Department
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Internal Examiner
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Signature of the
External Examiner
Dr. P.S.DEEPA
M.Sc., M.Phil., PGDCA., SET., Ph.D.,
Assistant Professor & Head
Department of Mathematics
Salem Sowdeswari College (SFCW)
Salem-636 010.

**A STUDY ON TWISTED GROUP RING ISOMORPHISM PROBLEM
AND COHOMOLOGY GROUPS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**R.JAYASRI
Reg. No. 20PMA1443**

**Under the Guidance of
Mrs.R.PARVATHA, M.Sc., M.Phil., B.Ed.,**



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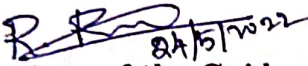
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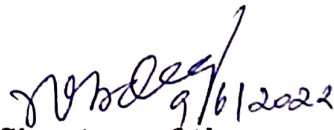
This is to certify that the project work entitled "A STUDY ON TWISTED GROUP RING ISOMORPHISM PROBLEM AND COHOMOLOGY GROUPS" is a bonafide work carried out independently by R.JAYASRI (20PMA1443) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


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R.PARVATHA


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Salem Sowdeswari College (SFCW)
Salem-636 010.

**A STUDY ON SCHATTEN CLASSES FOR HILBERT MODULES
OVER COMMUTATIVE C*-ALGEBRAS**

Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

By

A.JEEVITHA
Reg. No. 20PMA1444

Under the Guidance of
Mrs.G.SELVI, M.Sc., M.Phil., B.Ed.,



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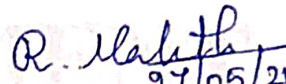
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RASIPURAM – 637 408.**

MAY– 2022


CERTIFICATE


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Signature of the Guide
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Head of The Department
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Muthayyammal College of Arts & Science
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[G.SELVI]


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External Examiner
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M.Sc., M.Phil., PGDCA., SET., Ph.D.,
Assistant Professor & Head
Department of Mathematics
Salem Sowdeswari College (SFCW)
Salem-636 010.

**A STUDY ON GEOMETRY OF BIQUADRATIC AND CYCLIC
CUBIC LOG – UNIT LATTICES**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**S.KAVIYA
Reg. No. 20PMA1445**

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Mrs.P.KALAISELVI, M.Sc., M.Phil., B.Ed.,**



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P. Kalaiselvi
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Signature of the Guide
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P. Kalaiselvi
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[P.KALAISELYI]

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M.Sc.,M.Phil.,PGDCA.,SET.,Ph.D.,
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**A STUDY ON CONTROLLED FRAMES IN n -HILBERT SPACES
AND THEIR TENSOR PRODUCTS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**K.MAHESWARI
Reg. No. 20PMA1446**

**Under the Guidance of
Mrs.G.SELVI, M.Sc., M.Phil., B.Ed.,**



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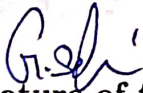
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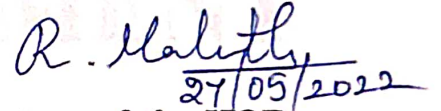
CERTIFICATE

This is to certify that the project work entitled "A STUDY ON CONTROLLED FRAME IN n -HILBERT SPACE AND THEIR TENSOR PRODUCTS" is a bonafide work carried out independently by K.MAHESWARI (20PMA1446) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.



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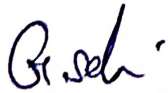
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27/05/2022

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Internal Examiner

[G. SELVI]


9/6/2022

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**A STUDY ON HOMEOMORPHISM AND QUOTIENT MAPPINGS
INFRA-SOFT TOPOLOGICAL SPACES**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**J.MAMTHASHRI
Reg. No. 20PMA1447**

**Under the Guidance of
Mr.P.GOWRISHANKAR, M.Sc., M.Ed., SET,**



**MUTHAYAMMAL
COLLEGE OF ARTS
& SCIENCE**

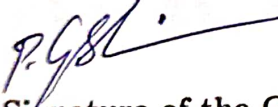
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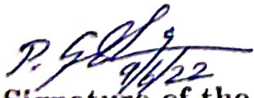
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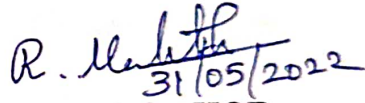
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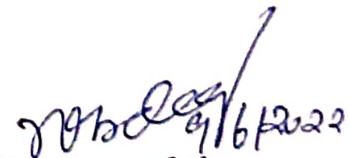
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Signature of the Guide
P.GOWRISHANKAR


Signature of the
Internal Examiner
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R.MALATHI
Head of The Department
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Signature of the
External Examiner

Dr. P. S. DEEPA
M.Sc., M.Phil., PGDCA., SET., Ph.D.,
Assistant Professor & Head
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Salem Sowdeswari College (SFCW)
Salem-636 010.

**A STUDY ON POSITIVE THIRD AND FOURTH ORDER
BOUNDARY VALUE PROBLEM**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**M.MONISHA
Reg. No. 20PMA1448**

**Under the Guidance of
Mr.K.DHINESH KUMAR, M.Sc., M.Phil., B.Ed.,**



**MUTHAYAMMAL
COLLEGE OF ARTS
& SCIENCE**

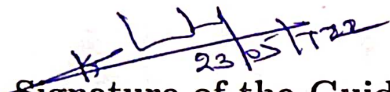
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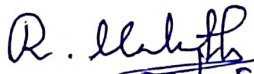
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RASIPURAM – 637 408.**

MAY-2022


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This is to certify that the project work entitled "A STUDY ON POSITIVE SOLUTION OF THIRD AND FOURTH ORDER BOUNDARY VALUE PROBLEM" is a bonafide work carried out independently by M.MONISHA (20PMA1448) towards the partial fulfillment of the requirements for the award of Master of Science degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


Signature of the Guide
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Signature of the HOD
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M.Sc.,M.Phil.,PGDCA.,SET.,Ph.D.,
Assistant Professor & Head
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Salem-636 010.

**A STUDY ON ODD VALUES AND EVEN VALUES OF
RAMANUJAN'S TAU FUNCTIONS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**S.NAGALAKSHMI
Reg. No. 20PMA1449**

**Under the Guidance of
Mr.K.DHINESH KUMAR, M.Sc., M.Phil., B.Ed.,**



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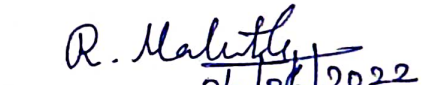
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RASIPURAM – 637 408.**

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CERTIFICATE


This is to certify that the project work entitled "A STUDY ON ODD VALUES AND EVEN VALUES OF RAMANUJAN'S TAU FUNCTIONS" is a bonafide work carried out independently by S.NAGALAKSHMI (20PMA1449) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


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External Examiner

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M.Sc.,M.Phil.,PGDCA.,SET.,Ph.D.,
Assistant Professor & Head
Department of Mathematics
Salem Sowdeswari College (SFCW)
Salem-636 010.

**A STUDY ON COMPLETE HAUSDORFFNESS AND COMPLETE
REGULARITY ON SUPRA TOPOLOGICAL SPACES**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**M.NANDHINI
Reg. No. 20PMA1450**

**Under the Guidance of
Mrs.R.PARVATHA, M.Sc., M.Phil., B.Ed.,**



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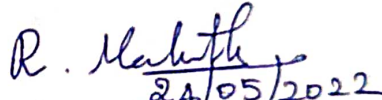
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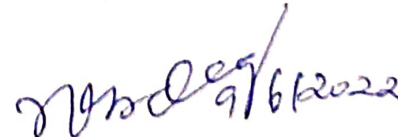
This is to certify that the project work entitled "A STUDY ON COMPLETE HAUSDORFFNESS AND COMPLETE REGULARITY ON SUPRA TOPOLOGICAL SPACES " is a bonafide work carried out independently by M.NANDHINI (20PMA1450) towards the partial fulfillment of the requirements for the award of Master of Science degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


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Assistant Professor & Head
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Salem-636 010.

**A STUDY ON SYMMETRIC SOLUTIONS TO NONLINEAR
VECTORIAL SECOND ORDER ODE'S**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**V.NAVEENA
Reg. No. 20PMA1451**

**Under the Guidance of
Mrs.P.KALAISELVI, M.Sc., M.Phil., B.Ed.,**



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This is to certify that the project work entitled "A STUDY ON SYMMETRIC SOLUTIONS TO NONLINEAR VECTORIAL SECOND ORDER ODE'S" is a bonafide work carried out independently by V.NAVEENA (20PMA1451) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

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P.KALAISELVI

R. Malathi
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Head of The Department
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Salem-636 010.

**A STUDY ON GENERALIZED ATOMIC SUBSPACES FOR
OPERATORS IN HILBERT SPACES**

Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

By

H.NITHYA SHREE
Reg. No. 20PMA1452

Under the Guidance of
Mr.P.GOWRISHANKAR, M.Sc., M.Ed., SET,



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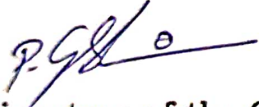
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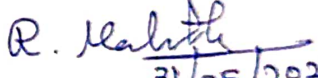
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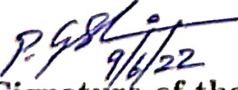
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This is to certify that the project work entitled "A STUDY ON GENERALIZED ATOMIC SUBSPACES FOR OPERATORS IN HILBERT SPACES" is a bonafide work carried out independently by H.NITHYA SHREE (20PMA1452) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


Signature of the Guide
P.GOWRISHANKAR


31/05/2022
Signature of the HOD
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Head of The Department
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Salem-636 010.

**A STUDY ON SOME PROPERTIES OF PRE - TOPOLOGICAL
GROUPS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**S.PARKAVI
Reg. No. 20PMA1453**

**Under the Guidance of
Mrs.R.PARVATHA, M.Sc., B.Ed., M.Phil.,**



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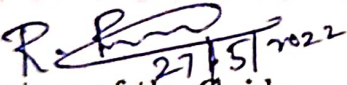
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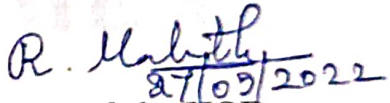
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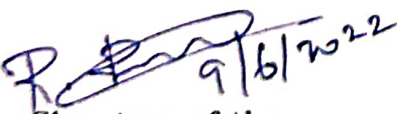
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Head of The Department
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Assistant Professor & Head
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Salem-636 010.

**A STUDY ON SOME ALGEBRAIC PROPERTIES OF
 μ AND \circ ANTI FUZZY SUBGROUPS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**D.POOVIZHI
Reg. No. 20PMA1454**

**Under the Guidance of
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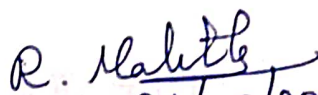
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This is to certify that the project work entitled "A STUDY ON SOME ALGEBRAIC PROPERTIES OF μ AND \circ ANTI FUZZY SUBGROUPS" is a bonafide work carried out independently by D.POOVIZHI (20PMA1454) towards the partial fulfillment of the requirements for the award of Master of Science degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.



Signature of the Guide

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Signature of the HOD

R.MALATHI
Head of The Department
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M.Sc., M.Phil., PGDCA., SET., Ph.D.,
Assistant Professor & Head
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Salem-636 010.

**A STUDY ON COMPATIBLE TOPOLOGIES ON MIXED LATTICE
VECTOR SPACES**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**R.RAJA NANDHINI
Reg. No. 20PMA1455**

**Under the Guidance of
Mrs.R.MALATHI, M.Sc., M.Phil., B.Ed.,**



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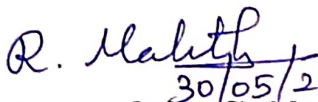
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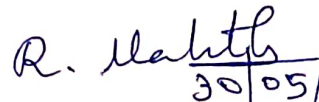
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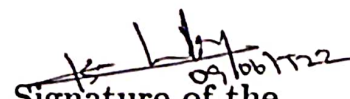
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ACKNOWLEDGEMENT


30/05/2022
Signature of the Guide
R.MALATHI


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Assistant Professor & Head
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Salem-636 010.

**A STUDY ON SYSTEM OF LINEAR DIFFERENTIAL EQUATION IN
ORDINARY DIFFERENTIAL EQUATION**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**S.RAMYA
Reg. No. 20PMA1456**

**Under the Guidance of
Mrs.R.MALATHI, M.Sc., M.Phil., B.Ed.,**



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RASIPURAM – 637 408.**

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This is to certify that the project work entitled "A STUDY ON SYSTEM OF LINEAR DIFFERENTIAL EQUATION IN ORDINARY DIFFERENTIAL EQUATION" is a bonafide work carried out independently by S.RAMYA (20PMA1456) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

R. Malathi
30/05/2022
Signature of the Guide
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R. Malathi
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Head of The Department
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09/06/2022
Signature of the
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[S. DAINESA KUMAR]

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9/6/2022
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External Examiner
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Assistant Professor & Head
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Salem-636 010.

**A STUDY ON NEW ELEMENTS IN THE CENTER OF FREE
ALTERNATIVE ALGEBRA**

Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

By

A.ROHINISHREE
Reg. No. 20PMA1457

Under the Guidance of
Mr.P.GOWRISHANKAR, M.Sc., M.Ed., SET.,



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RASIPURAM – 637 408.**

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This is to certify that the project work entitled "A STUDY ON NEW ELEMENTS IN THE CENTER OF FREE ALTERNATIVE ALGEBRA" is a bonafide work carried out independently by A.ROHINISHREE (20PMA1457) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

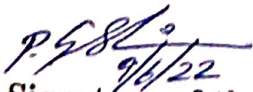


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9/6/22

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M.Sc.,M.Phil.,PGDCA.,SET.,Ph.D.,
Assistant Professor & Head
Department of Mathematics
Salem Sowdeswari College (SFCW)
Salem - 626 010.

**A STUDY ON ROUGH PYTHAGOREAN
INTUITIONISTIC FUZZY IDEALS IN SEMIGROUPS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**M.SANDHIYA
Reg. No. 20PMA1458**

**Under the Guidance of
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MAY– 2022

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This is to certify that the project work entitled "A STUDY ON ROUGH PYTHAGOREAN INTUITIONISTIC FUZZY IDEALS IN SEMIGROUPS" is a bonafide work carried out independently by M.SANDHIYA (20PMA1458) towards the partial fulfillment of the requirements for the award of Master of Science degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

P. Kalaiselvi
30/5/22
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A STUDY ON CATEGORIES OF ORTHOGONALITY SPACES

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**N.SHANMATHI
Reg. No. 20PMA1459**

**Under the Guidance of
Mr.K.DHINESH KUMAR, M.Sc., M.Phil., B.Ed.,**



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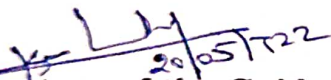
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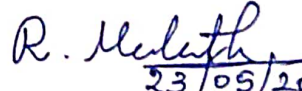
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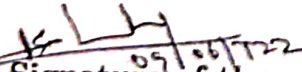
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ORBITAL FUZZY ITERATED FUNCTION SYSTEMS

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
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MASTER OF SCIENCE IN MATHEMATICS

By

**G.SHREENISHA
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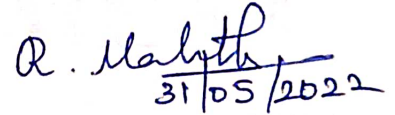
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This is to certify that the project work entitled "ORBITAL FUZZY ITERATED FUNCTION SYSTEMS" is a bonafide work carried out independently by G.SHREENISHA (20PMA1460) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


31/5/2022

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31/05/2022

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**A STUDY ON GENERALISED VECTOR PRODUCTS IN THREE-
DIMENSIONAL GEOMETRY**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**M.SINDHUJA
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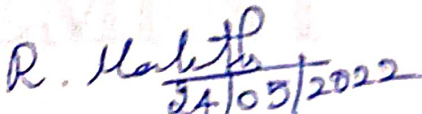
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This is to certify that the project work entitled "A STUDY ON GENERALISED VECTOR PRODUCTS IN THREE-DIMENSIONAL GEOMETRY" is a bonafide work carried out independently by M.SINDHUJA (20PMA1461) towards the partial fulfillment of the requirements for the award of Master of Science degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.



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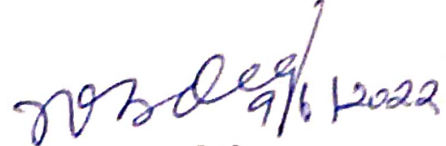
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A STUDY ON FUZZY ALGEBRA AND FUZZY NEAR RING

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**S.SOUNDHARYA
Reg. No. 20PMA1462**

**Under the Guidance of
Mrs.G.SELVI, M.Sc., M.Phil., B.Ed.,**



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MAY– 2022

CERTIFICATE

This is to certify that the project work entitled "A STUDY ON FUZZY ALGEBRA AND FUZZY NEAR RING" is a bonafide work carried out independently by S.SOUNDHARYA (20PMA1462) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.

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R. Malathi
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**A STUDY ON Γ -SEMIRING WITH IDENTITY AND
FIELD Γ -SEMIRING**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**R.SUBA
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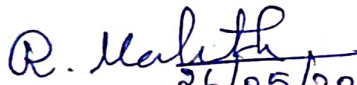
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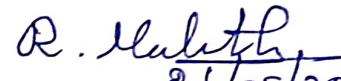
MAY– 2022

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This is to certify that the project work entitled "A STUDY ON Γ -SEMIRING WITH IDENTITY AND FIELD Γ -SEMIRING" is a bonafide work carried out independently by R.SUBA (20PMA1463) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


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Salem-636 010.

**A STUDY ON DESCRIPTIVE APPROACH TO HIGHER
DERIVED LIMITS**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**S.SUMITHA
Reg. No. 20PMA1464**

**Under the Guidance of
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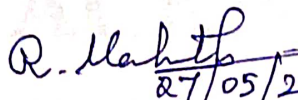
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RASIPURAM – 637 408.**

MAY– 2022

CERTIFICATE

This is to certify that the project work entitled "A STUDY ON DESCRIPTIVE APPROACH TO HIGHER DERIVED LIMITS" is a bonafide work carried out independently by S.SUMITHA (20PMA1464) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.


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Salem-636 010.

**A STUDY ON NABALA FRACTIONAL INEQUALITIES,
DERIVATIVES AND INTEGRAL ON TIME SCALE**

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

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**Under the Guidance of
Mrs.G.SELVI, M.Sc., M.Phil., B.Ed.,**



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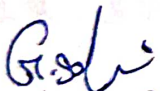
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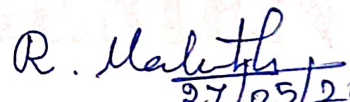
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RASIPURAM – 637 408.**

MAY– 2022


CERTIFICATE

This is to certify that the project work entitled "A STUDY ON NABLA FRACTIONAL INEQUALITIES, DERIVATIVE AND INTEGRAL ON TIME SCALES" is a bonafide work carried out independently by A.SUMITHRA (20PMA1465) towards the partial fulfillment of the requirement for the award of Master of Science Degree in Mathematics and that the project work has not formed the basis for the award previously at any Degree, Diploma, Associateship, Fellowship or any other similar title.



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G.SELVI


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A STUDY ON BANACH ALGEBRAS AND GROUP ALGEBRAS

**Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of**

MASTER OF SCIENCE IN MATHEMATICS

By

**V.VIDHYA
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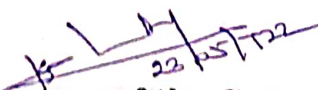
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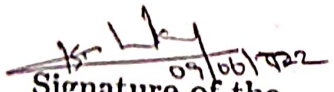
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**A STUDY ON SOFT α -SEPARATION AXIOMS AND α -FIXED SOFT
POINTS IN SOFT TOPOLOGICAL SPACES**

Project submitted to
THE PERIYAR UNIVERSITY
in partial fulfillment of the requirements for
the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

By

R.S.VISESHIKA
Reg. No. 20PMA1467

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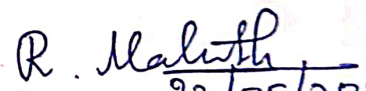
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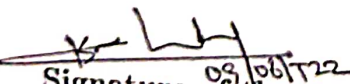
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Salem-636 010.

**“ECO- FRIENDLY OF SrTiO₃ NANOPARTICLES VIA SOL- GEL
METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

In partial fulfillment of the requirements For

the award of the degree of

MASTER OF SCIENCE IN PHYSICS

Submitted by

D. ARAVINTH

(Reg.No. 20PPH1216)

Under the Guidance of

Miss. L. MOHANA M.Sc., M.Phil., B.Ed

Assistant Professor, Department of Physics



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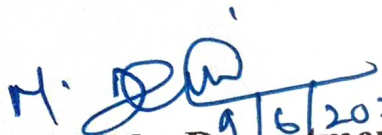
JUNE - 2022


CERTIFICATE

This is to certify that the dissertation entitled "ECO- FRIENDLY OF SrTiO₃ NANOPARTICLES VIA SOL- GEL METHOD" Submitted to the Periyar University, Salem in partial fulfillment of the requirement for the award of the degree of **MASTER OF SCIENCE IN PHYSICS** is a record of original research work done by **D.ARAVINTH (REG.NO:20PPH1216)** during the period of his study in the Department of physics under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.

Date: 09/06/2022

Place: Rasipuram


Head of the Department
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Head Department of Physics
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Namakkal (Dt.) Tamilnadu.


Internal examiner


Signature of the guide


External examiner

**“SYNTHESIS AND CHARACTERISATION OF TIN MANGANESE
OXIDE (SnMnO₄) NANOPARTICLES, VIA WET CHEMICAL
PRECIPITATION TECHNIQUE”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

In partial fulfillment of the requirements for

the award of the degree of

MASTER OF SCIENCE IN PHYSICS

Submitted by

A.ARULMURUGAN

(Reg.No. 20PPH1217)

Under the Guidance of

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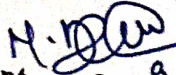
CERTIFICATE


This is to certify that the dissertation entitled “SYNTHESIS AND CHARACTERISATION OF TIN MANGANESE OXIDE NANOPARTICLES, VIA WET CHEMICAL PRECIPITATION TECHNIQUE” Submitted to the Periyar University, Salem in partial fulfillment of the requirement for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a record of original research work done by A.ARULMURUGAN (REG.NO:20PPH1217) during the period of his study in the Department of physics under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.

Date: 09 - 06 - 2022

Place: Rasipuram


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**“GREEN SYNTHESIS OF SrTiO₃ NANOPARTICLES VIA
SOL GEL COMBUSTION METHOD”**

A Dissertation submitted to

**PERIYAR UNIVERSITY
SALEM-630 611**

In partial fulfillment of the requirements For
the award of the degree of

MASTER OF SCIENCE IN PHYSICS

Submitted by

P. CHINNADURAI

(Reg.No. 20PPH1218)

Under the Guidance of

Miss. L. MOHANA M.Sc., M.Phil., B.Ed

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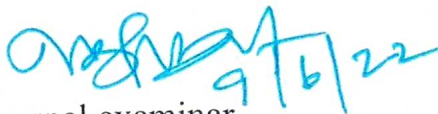
Date: 09/06/2022

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**LUMINESCENCE PROPERTIES OF Dy³⁺ ACTIVATED NaBaB₉O₁₅
PHOSPHOR FOR WHITE LED APPLICATIONS**

A Dissertation submitted to

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**In partial fulfillment of the requirements For
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SYNTHESIS AND CHARACTERIZATION OF ZINC OXIDE NANOPARTICLES BY USING CO-PRECIPITATION METHOD

A Dissertation submitted to

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In partial fulfillment of the requirements for
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**“NOVEL GREEN SYNTHESIS OF CARBON DOPED TiO₂
NANOPARTICLES FOR CONVENTIONAL SOLAR CELL
APPLICATION”**

A Dissertation submitted to

PERIYAR UNIVERSITY

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In partial fulfillment of the requirements For

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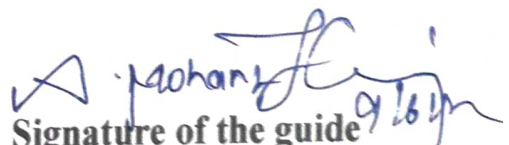
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**STRUCTURAL AND OPTICAL PROPERTIES OF Pr³⁺ DOPED
NaBaB₉O₁₅ PHOSPHORS FOR WHITE LEDs**

A Dissertation submitted to

PERIYAR UNIVERSITY SALEM-630 611

In partial fulfillment of the requirements

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**SYNTHESIS AND CHARACTERIZATION OF Ag-DOPED ZnO
NANOPARTICLES BY USING CO-PRECIPIATION METHOD**

A Dissertation submitted to

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In partial fulfillment of the requirements For

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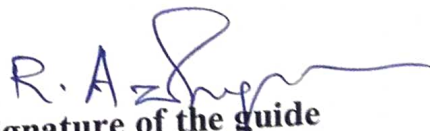
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**“SYNTHESIS AND CHARACTERISATION OF SrTiO₃ VIA
SIMPLE SOLID STATE METHOD”**

A Dissertation submitted to

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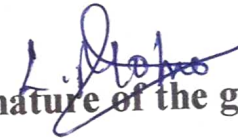
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**SPECTROSCOPIC PROPERTIES OF BLUE EMITTING Er³⁺ DOPED NaBaB₅O₁₅
PHOSPHORS FOR OPTOELECTRONIC APPLICATION**

A Dissertation submitted to

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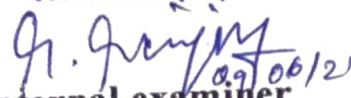
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**“BIO SYNTHORIZED TITANIUM DIOXIDE NANOPARTICLES
USING TRIBULUS TERRESTRIS HERBAL”**

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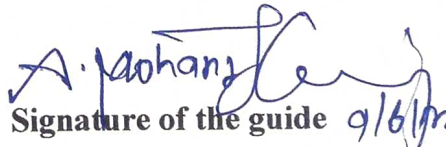
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**“ONE STEP SOLID STATE SYNTHESIS OF V₂O₅/rGO
NANOPARTICLES AND ITS CHARACTERISATION”**

A Dissertation submitted to

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**“SYNTHESIS AND CHARACTERISATION OF NiO NANOPARTICLE
VIA CO-PRECIPIATION METHOD”**

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**“STUDY ON SOLAR ACTIVITY AND THEIR IMPACT ON GEO
ENVIRONMENT: ENERGETIC PARTICLES PERSPECTIVE”**

A Dissertation submitted to

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In partial fulfillment of the requirements For

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**“SYNTHESIS AND CHARACTERIZATION OF ZnTiO₃ USING BY
CO-PRECIPIATION METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630611

**In partial fulfillment of the requirements For
the award of the degree of
MASTER OF SCIENCE IN PHYSICS**

Submitted by

M.DHANUSHIYA

(Reg.No.20PPH1230)

Under the Guidance of

**Mrs.M.S.LOGAPPRIYA, M.Sc.,M.Phil.,B.Ed.,
Assistant Professor, Department of Physics**



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RASIPURAM - 637 408


JUNE - 2022


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Date: 09-06-2022

Place: Rasipuram


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**“GREEN SYNTHESIS AND CHARACTERIZATION OF CaTiO_3
NANOPARTICLES USING LEAF EXTRACTS OF AZADIRACHTA INDICA
(NEEM) BY SOLGEL METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

**In partial fulfillment of the requirements For
the award of the degree of**

MASTER OF SCIENCE IN PHYSICS

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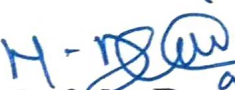
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**“SYNTHESIS AND CHARACTERIZATION OF CaTiO_3 USING BY
SOLID STATE METHOD”**

A Dissertation submitted to

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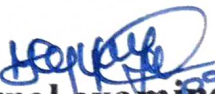
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**“ SYNTHESIS AND CHARACTERIZATION OF MG DOPED TiO₂
NANOPARTICLES VIA COPRECIPITATION METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

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In partial fulfillment of the requirements

For the award of the degree of

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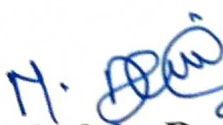
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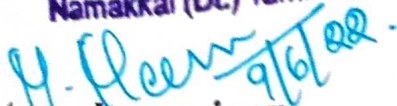
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**FABRICATION OF ELECTROSPUN
GELATIN/POLYCAPROLACTONE/POLYETHYLENE OXIDE NANOFIBERS
FOR SOFT TISSUE ENGINEERING APPLICATIONS**

A dissertation submitted to

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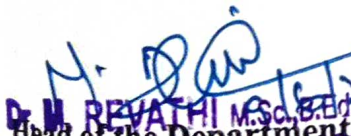
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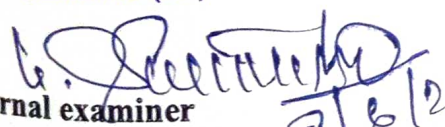
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**“SYNTHESIS AND CHARACTERISATION OF TIN CADMIUM
OXIDE NANOPARTICLES (SnCdO₄), VIA WET CHEMICAL
PRECIPITATION TECHNIQUE”**

A Dissertation submitted to

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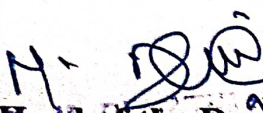
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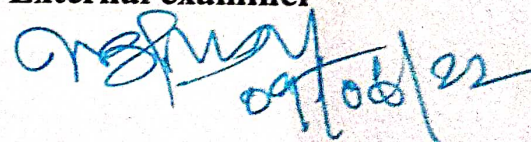

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**“PREPARATION OF COBALT OXIDE (Co₃O₄) AND COBALT
FERRITE (CoFe₂O₄) NANOPARTICLES BY MICROWAVE
ASSISTED WET PRECIPITATION METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

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**In partial fulfillment of the requirements for
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**“PREPARATION AND CHARACTERIZATION OF PURE TiO₂
NANOPARTICLES VIA COPRECIPITATION METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

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In partial fulfillment of the requirements

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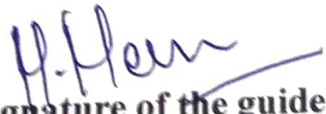
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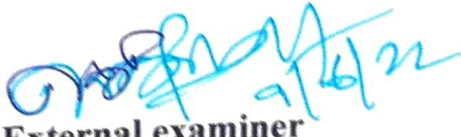
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**“ SYNTHESIS AND CHARACTERIZATION OF ZINC OXIDE(ZNO)
NANOPARTICLES VIA COPRECIPITATION METHOD”**

A Dissertation submitted to

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In partial fulfillment of the requirements

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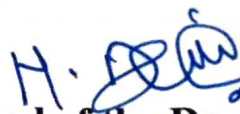
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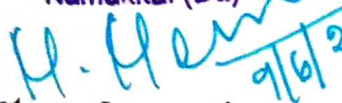
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**“MICROWAVE IRRADIATED CTAB ASSISTED NICKEL FERRITE
(NiFe₂O₄) NANOPARTICLES BY WET PRECIPITATION METHOD”**

A Dissertation submitted to

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In partial fulfillment of the requirements for

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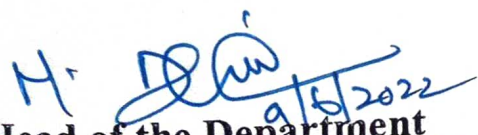
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**PHOTOLUMINESCENCE STUDIES ON Dy³⁺ AND Sm³⁺ CO-DOPED
NaBaB₉O₁₅ PHOSPHORS FOR WHITE LIGHT LED APPLICATIONS**

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This is to certify that the dissertation entitled “**PHOTOLUMINISCENCE STUDIES ON Dy³⁺ AND Sm³⁺ CO-DOPED NaBaB₉O₁₅ PHOSPHORS FOR WHITE LED APPLICATIONS**” Submitted to the Periyar University, Salem in partial fulfillment of the requirement for the award of the degree of **MASTER OF SCIENCE IN PHYSICS** is a record of original research work done by **N.SHANMATHI (REG.NO:20PPH1240)** during the period of his study in the Department of physics under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree / Diploma / Associate ship / Fellowship or other similar title to any candidate of any University.

Date: 9 - 06 - 2022

Place: Rasipuram


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External examiner

**“SYNTHESIS AND CHARACTERISATION OF TIN ZINC OXIDE
NANOPARTICLES (SnZnO₄), VIA WET CHEMICAL
PRECIPITATION TECHNIQUES”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

In partial fulfillment of the requirements

for the award of the degree of

MASTER OF SCIENCE IN PHYSICS

Submitted by

S.SRI RAJARAJESWARI

(Reg.No.: 20PPH1241)

Under the Guidance of

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Date: 09.06.2022

Place: Rasipuram

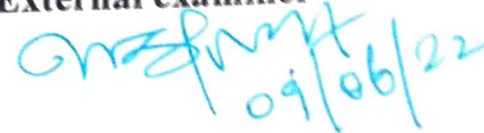

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**INVESTIGATIONS ON ELECTROSPUN GELATIN/ POLYCAPROLACTONE
NANOFIBERS FOR BIOMEDICAL APPLICATIONS**

A dissertation submitted to

PERIYAR UNIVERSITY

SALEM-636 011

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

MASTER OF SCIENCE IN PHYSICS

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**“PREPARATION OF NICKEL OXIDE (NiO) AND NICKEL
COBALTITE (NiCo₂O₄) NANOPARTICLES BY MICROWAVE
ASSISTED WET PRECIPITATION METHOD”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

In partial fulfillment of the requirements for

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MASTER OF SCIENCE IN PHYSICS

Submitted by

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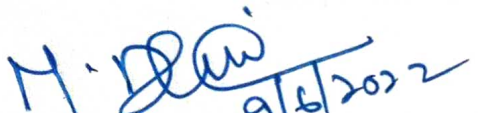
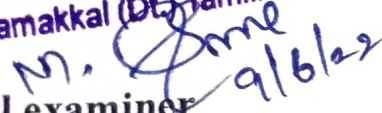
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“SYNTHESIS OF TiO_2 NANO PARTICLES BY GREEN SYNTHESIS METHOD AND THEIR MULTIFACETED PROPERTIES”

A Dissertation submitted to

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In partial fulfillment of the requirements for

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**REPARATION OF ELECTROSPUN GELATIN NANOFIBER FOR DRUG
DELIVERY APPLICATIONS**

A dissertation submitted to

PERIYAR UNIVERSITY SALEM-636 011

**in partial fulfillment of the requirement
for the award of the degree of**

MASTER OF SCIENCE IN PHYSICS

Submitted by

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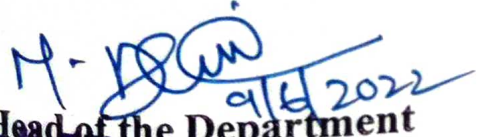
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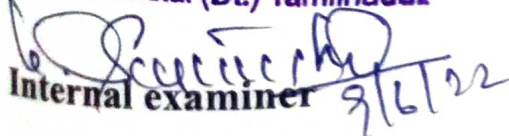
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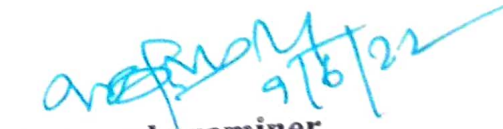
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**“PREPARATION & CHARACTERIZATION (TiO₂) OF NANO
COMPOSITE MATERIAL BY USING HYDROTHERMAL METHOD
FOR SOLAR DESALINATION APPLICATION”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

In partial fulfillment of the requirements for
the award of the degree of
MASTER OF SCIENCE IN PHYSICS

Submitted by

C.VANMATHI

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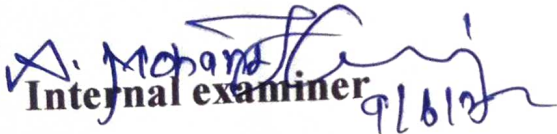
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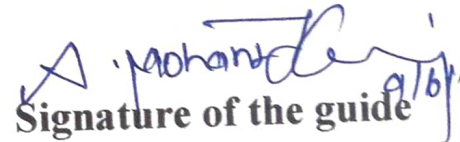
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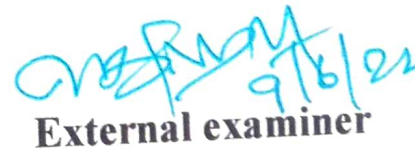
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**"GREEN SYNTHESIS OF ACTIVATED CARBON WITH TiO₂ NANOPARTICLES BY
USING SOL-GEL METHOD FOR SOLAR APPLICATION"**

A dissertation submitted to

PERIYAR UNIVERSITY

SALEM-636 011

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Submitted by

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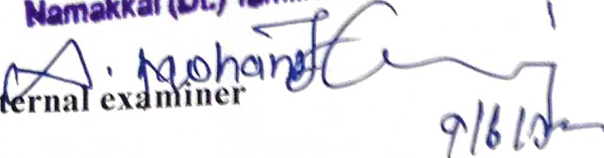
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**“ONE STEP SOLID STATE SYNTHESIS OF V₂O₅/MWCNT_s
NANOPARTICLES AND ITS CHARACTERISATION”**

A Dissertation submitted to

PERIYAR UNIVERSITY

SALEM-630 611

In partial fulfillment of the requirements For

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MASTER OF SCIENCE IN PHYSICS

Submitted by

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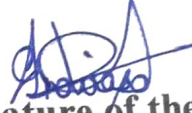
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Date: 09/06/2022

Place: Rasipuram


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