

Student Projects (2019-20)

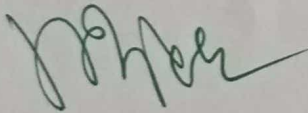
Sl. No.	Reg. No.	Name of the Student	Project Title
1	BP180301	Muthuvel V	Investigation on the green synthesis of metal oxide (CuO, MgO, Cu and Mg oxide) nano particle bio-medical applications
2	BP180302	Kirubakaran R	Effect of Shock waves on highly stable barium ferrite (BaFe ₁₂ O ₁₉) nano particles
3	BP180303	Joice Mary J	Growth and characterization of 4-nitrophenol thiourea single crystals grown by slow evaporation method
4	BP180304	Sivakumar M	Effect of precursor concentration and calcination temperature of CuO nano structures using sonication method
5	BP180305	Alphin Daisy D	Effect of shock waves on vanadium oxide (V ₂ O ₅) Nano particles prepared by microwave assisted wet chemical method
6	BP180306	Nandhini M	Investigations on the phase transformation of amorphous to crystalline SiO ₂ nano particles
7	BP180307	Rahul S	Structural, Optical And Anti-Microbial Investigations Of ZnO And Cobalt Substituted ZnO Nanoparticles Using <i>Costus Igneus</i> Leaf Extracts
8	BP180308	Ragavi R	Growth and characterization of 4-dimethylamino benzaldehyde doped with hippuric acid crystal
9	BP180309	James Abraham	Synthesis And Characterization of An Organometallic Crystal: Manganese Mercury Thiocyanate As A Nonlinear Material
10	BP180310	Navanetha C	Investigation on Green Synthesis and Antibacterial Activity of CeO ₂ and Ni Doped CeO ₂ Nanoparticles Using <i>Tridax Procumbens</i> Leaf Extract
11	BP180311	Umapathi S	Microwave assisted synthesis of copper oxide nano particles using silk cocoon
12	BP180312	Arunachalam D	Green Synthesis of Tio ₂ Nanoparticles By Using Aqueous Extract Of <i>Catharanthus Roseus</i> Flower And Its Antimicrobial Properties
13	BP180313	Elavarasi A	Growth And Characterization of Aspirigine Monohydrate Doped With Sulphamic Acid Crystal
14	BP180314	Sakthimani P	A combined spectroscopic (FTIR, FT-Raman, NMR), FMO, NBO, NLO) analysis of 2-chloro benzyl alcohol with propyl amine – A DFT study
15	BP180315	Jenifer Deepa Arasi	Synthesis and characterization of ZnO, MgO and Mg-ZnO Nanoparticles by co-precipitation method
16	BP180316	Niha T	Synthesis and characterization of pure and cobalt doped cerium oxide Nanoparticles by Hydrothermal method
17	BP180317	Govindasamy A	Green Synthesis of Zinc Ferrite(ZnFe ₂ O ₄) nanoparticle using <i>Jastica Adhatoda</i> leaf extract for antibacterial and antibiotic applications – and eco-friendly approach

18	BP180318	Jayasuriya J	Growth and Characterization of few amino acid crystals
19	BP180319	Senbagavalli S	Effect of shock waves on aluminum oxide Nano particles prepared by co precipitation method
20	BP180320	Kethrin Thresa S	Investigation on Solvothermal Synthesis, Properties and Effect of Solvent and Calcination Temperature of Lanthanum Oxide Nanoparticles
21	BP180321	Yamini V	Green synthesis of iron and nickel oxide nanoparticles using aqueous extract of <i>Plectranthus amboinicus</i>
22	BP180322	Akshadha P	Synthesis and Characterization of Cerium oxide and Cerium Manganite Perovskite thin films by Dip coating method
23	BP180323	Aswani Vidhya P	Investigating the role of surfactant and the effect of reaction time on the properties of copper oxide Nanoparticles using sonochemical method
24	BP180324	Shailaja P	Impact of Shock waves on structural, optical and morphological properties of calcium carbonate
25	BP180325	Praveen C	TiO ₂ thin films preparation via adsorptive self-assembly for self-cleaning application
26	BP180326	Vaishnavi V	Structural and optical properties of pure zinc and barium doped cobalt oxide Nanoparticles
27	BP180327	Sridevi L	Synthesis and characterization of titanium oxide nanostructures using bio template
28	BP180328	Gomathy Y	Spectroscopic analysis and Archeological Values of Recently Evacuated Potteries In Kundureddiyur, Tirupattur District, Tamil Nadu, India
29	BP180329	Nithiyaprakash R T	Synthesis and characterization of copper oxide nano particles using different surfactants (EDTA&CTAM) by sonication method

CERTIFICATE

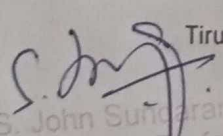
This is to certify that the dissertation "INVESTIGATION ON THE GREEN SYNTHESIS OF METAL OXIDE (CuO, MgO, Cu & Mg OXIDE) NANOPARTICLES BIOMEDICAL APPLICATIONS " entitled submitted to the Sacred Heart College, Tirupattur in partial fulfillment of the requirements for the award of the Degree of Master of Science in Physics is a record of original research work done by **MUTHUVEL.V**

(Reg.No:BP180301) during the period of 2019-2020 of his study in the Department of Physics at Sacred Heart College, Tirupattur, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree or other similar title to any candidate of any colleges and Universities.



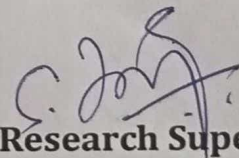
Signature of the Head

(Dr. M. Jose) **Dr. M. JOSE**, M.Sc.,M.Phil.,Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.



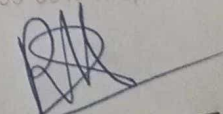
Dr. S. John Sundaram, M.Sc., Ph.D.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635 601. Tirupattur Dist. (TN)

EXAMINER - I



Research Supervisor

(Dr.S. John Sundaram)
Dr. S. John Sundaram, M.Sc., Ph.D.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635 601. Tirupattur Dist. (TN)

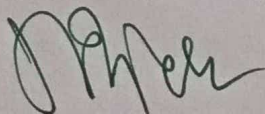


Examiner. - II

CERTIFICATE

This is to certify that the dissertation "**Effect of Shock Waves on Highly Stable Barium Ferrite (BaFe₁₂O₁₉) Nanoparticles**" entitled submitted to the Sacred Heart College, Tirupattur in partial fulfillment of the requirements for the award of the Degree of Master of Science in Physics is a record of original research work done by **R.KIRUBAKARAN**

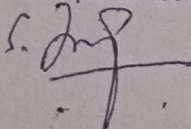
(Reg.No:BP180302) during the period of 2019-2020 of his study in the Department of Physics at Sacred Heart College, Tirupattur, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree or other similar title to any candidate of any colleges and Universities.



Signature of the Head

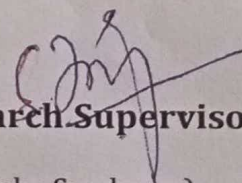
(Dr. M. Jose)

Dr. M. JOSE, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.



EXAMINER I

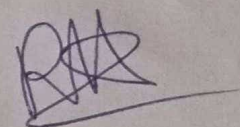
Dr. S. John Sundaram, M.Sc., Ph.D.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635 601. Tirupattur Dist. (TN)



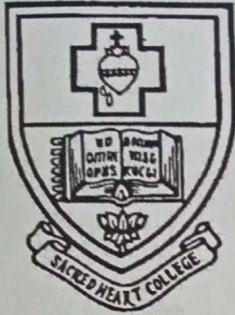
Research Supervisor

(Dr.S. John Sundaram)

Dr. S. John Sundaram, M.Sc., Ph.D.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635 601. Tirupattur Dist. (TN)



Examiner - II



Mr. L. ANANDARAJ, M.Sc., M.Phil. B.Ed.,
Assistant Professor of Physics, Department of
Physics, Sacred Heart College (Autonomous),
Tirupattur-635 601.

CERTIFICATE

This is to certify that the dissertation, entitled "Growth and characterization of 4-nitro phenol thiourea single crystal grown by slow evaporation method" submitted to the Sacred Heart College, Tirupattur in partial fulfilment of the requirements for the award of the Degree of Master of Science in Physics is a record of original research work done by **JOICE MARY.J**

(Reg.No:BP180303) during the period of 2019-2020 of her study in the Department of Physics at Sacred Heart College, Tirupattur, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree or other similar title to any candidate of any colleges and Universities.

Signature of the Head

(Dr. M. Jose)

Dr. M. JOSE, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.

Research Supervisor & Guide

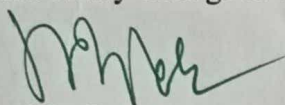
(Prof. L. Anandaraj)

Examiner-I:

Examiner-II:

CERTIFICATE

This is to certify that the dissertation entitled “Effect of precursor concentration and calcinations temperature of CuO nanostructures using sonication method” submitted to the Sacred Heart College(Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **M.SIVAKUMAR (BP180304)** during the period (2019-2020) of her studying the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



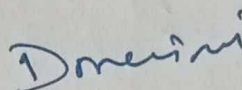
Head of the Department,

(Dr. M. Jose)

Assistant Professor

Department of Physics

Sacred Heart College, Tirupattur.



Supervisor & Guide

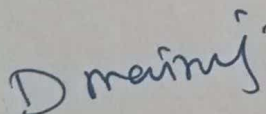
Mr. D. MAGIMAI ANTONI RAJ

Assistant Professor

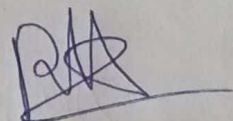
Department of Physics

Sacred Heart College, Tirupattur.

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination held on.....



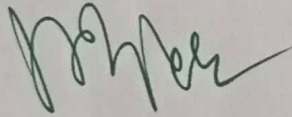
Examiner 1



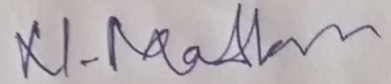
Examiner

CERTIFICATE

This is to certify that the dissertation entitled “ **EFFECT OF SHOCK WAVE ON VANADIUM OXIDE NANOPARTICLES PREPARED BY MICROWAVE ASSISTED WET CHEMICAL METHOD**” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **D.ALPHIN DAISY (BP180305)** during the period **2019-2020** of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.

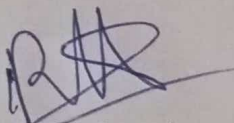


Head of the Department
Dr. M. Jose
PG and Research Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur – 635601.

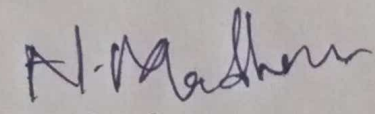


Supervisor & Guide
Mr. N. Madhavan, M.Sc., M.Phil., B.Ed.,
Assistant Professor
Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur – 635601.

Submitted to **Sacred Heart College (Autonomous), Tirupattur** at the Viva-Voice examination held on _____.



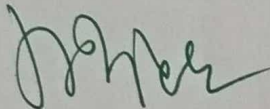
Examiner 1



Examiner 2

CERTIFICATE

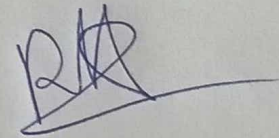
This is to certify that the dissertation entitled “Investigations on the Phase Transformation of Amorphous to Crystalline SiO₂ Nanoparticles” submitted to the Sacred Heart College(Autonomous), Tirupattur in the fulfilment of the requirements for the award of the degree of Master of Science in Physics is a record of original work done by M.NANDHINI (BP180306) during the period (2019-2020) of her studying in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Signature of the Head

(Dr. M. Jose)

Assistant Professor
Department of Physics
Sacred Heart College,
Tirupattur.

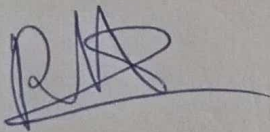


Research Supervisor & Guide

(Dr.S.A.Martin Britto Dhas)

Assistant Professor
Department of Physics
Sacred Heart College,
Tirupattur.

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voce examination held on _____



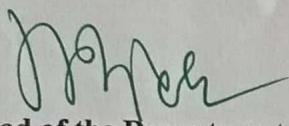
Examiner 1



Examiner 2

CERTIFICATE

This is to certify that the dissertation entitled “**Structural, optical and anti-microbial investigation of ZnO and cobalt substituted ZnO nanoparticles using CostusIgnus leaf extract**” submitted to the Sacred Heart College(Autonomous), Tirupattur in the fulfillment of the requirements for the award of the degree of Master of Science in Physics is a record of original work done by **S.RAHUL (BP180307)** during the period (2019-2020) of his studying in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Head of the Department

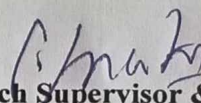
(Dr.M.Jose)

Assistant Professor

PG and Research Department Of Physics

Sacred Heart College (Autonomous),

Tirupattur - 635601



Research Supervisor & Guide

(Mr.C.Thirupathy)

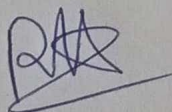
Assistant Professor

Department Of Physics

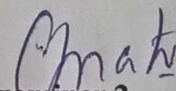
Sacred Heart College (Autonomous),

Tirupattur - 635601

Submitted to **Sacred Heart College (Autonomous), Tirupattur** at the Viva-Voce examination held on _____



Examiner 1



Examiner 2



Mr. L. ANANDARA, JM.Sc., M.Phil.B.Ed.,
Assistant Professor of Physics, Department of
Physics, Sacred Heart College (Autonomous),
Tirupattur-635 601.

CERTIFICATE

This is to certify that the dissertation entitled **“Growth and characterization of 4-Dimethylaminobenzaldehyde doped with Hippuric acid crystal”** submitted to the Sacred Heart College(Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **R.RAGAVI (BP180308)** during the period **(2019-2020)** of her studying the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.

Head of the Department,

(Dr. M. Jose)

Assistant Professor

Department of Physics

Sacred Heart College, Tirupattur.

Supervisor & Guide

Mr. L. ANANDARAJ

Assistant Professor

Department of Physics

Sacred Heart College, Tirupattur.

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination held on....20.....

Examiner 1

Examiner



MR. R. RAMESH, M.Sc., M.Phil., B.Ed.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur - 635601.

14-07-2020

CERTIFICATE

This is to certify that the project report entitled "SYNTHESIS AND CHARACTERIZATION OF AN ORGANOMETALLIC CRYSTAL: MANGANESE MERCURY THIOCYANATE AS A NONLINEAR OPTICAL MATERIAL" is an authentic record of the project work carried out by Mr. JAMES ABRAHAM, Reg.No: BP180309 on partial fulfillment of the requirement for the award of the M.Sc. Degree in Physics at Sacred Herat College, (Autonomous) Tirupattur, during the period of 2018-2020 under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree or other similar title to any candidate of any colleges and Universities.

Head of the Department

Dr. M. JOSE

Dr. M. JOSE, M.Sc., M.Phil., Ph.D.,
 Head (P.G)
 Department of Physics,
 Sacred Heart College,
 Tirupattur-635 601. Vellore District.

Research Supervisor and guide

Prof. R. RAMESH

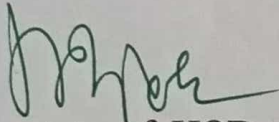
R. RAMESH, M.Sc., M.Phil., B.Ed.,
 Assistant Professor of Physics (Shift-
 Sacred Heart College (Autonomous)
 Tirupattur (Vlr.Dt.) 635 601

Examiner - I

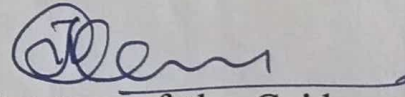
Examiner - II

CERTIFICATE

This is to certify that the dissertation, entitled **INVESTIGATION ON GREEN SYNTHESIS AND ANTIBACTERIAL ACTIVITY OF CeO₂ AND Ni DOPED CeO₂ NANOPARTICLES USING *Tridax procumbens* LEAF EXTRACT** submitted to the Sacred Heart College (Autonomous) Tirupattur, 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 **C. NAVANETHA (Reg. No. BP180310)** during the academic year 2019 - 2020 of her study in the Department of Physics at Sacred Heart College (Autonomous) Tirupattur, under my supervision and guidance and the dissertation has not formed the basis for the award of any degree or other similarities title to any candidate of any colleges and universities.



Signature of HOD

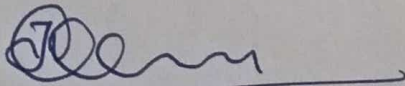


Signature of the Guide

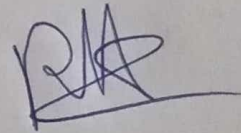
(Dr. M. Jose) **Dr. M. JOSE**, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.

(Mr. G. Jayakumar)

Submitted to Sacred Heart College (Autonomous) Tirupattur, at the viva – voice examination held on



Internal Examiner



External Examiner

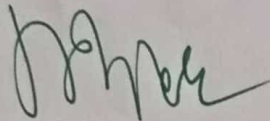
Place : Tirupattur

Date :

BONAFIDE CERTIFICATE

This is to certify that the dissertation, entitled "**MICROWAVE ASSISTED SYNTHESIS OF COPPER OXIDE NANOPARTICLES USING SILK COCOON**" submitted to the Sacred Heart College (Autonomous), Tirupattur in partial fulfillment of the requirement for the Degree of Master of science in Physics is a record of original research work done by **S. UMAPATHI,**

Reg. No. BP180311 during the period 2019-2020 of her study in the department of physics, Sacred Heart College (Autonomous), Tirupattur under the supervision and guidance. The dissertation has not formed the basis for award of any degree of similar title to any candidate of any college or university.

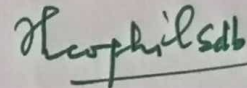


Dr. M. Jose

Head of the Department (PG)

Sacred Heart College (Autonomous)

Tirupattur-635601



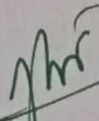
Rev. Dr. G. Theophil Anand, SDB

Assistant Professor

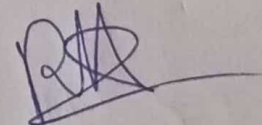
Sacred Heart College (Autonomous)

Tirupattur- 635601

Submitted to **Sacred Heart College (Autonomous), Tirupattur** at the Viva-voce examination held on



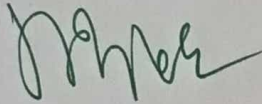
Examiner-1



Examiner-2

BONAFIDE CERTIFICATE

This is to certify that the dissertation, entitled "GREEN SYNTHESIS OF TiO_2 NANOPARTICLES BY USING AQUEOUS EXTRACT OF CATHARANTHUS ROSEUS FLOWER AND ITS ANTIMICROBIAL PROPERTIES" submitted to the Sacred Heart College (Autonomous), Tirupattur in partial fulfillment of the requirement for the Degree of Master of science in Physics is a record of original research work done by **D.ARUNACHALAM, Reg. No. BP180312** during the period 2019-2020 of his study in the department of physics, Sacred Heart College (Autonomous), Tirupattur under the guidance. The dissertation has not formed the basis for award of any degree of similar title to any candidate of any college or university.

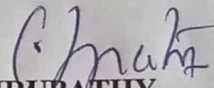


Dr. M. JOSE

Head of the Department (PG)

Sacred Heart College (Autonomous)

Tirupattur-635601



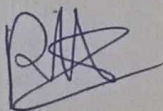
C. THIRUPATHY

Head (UG), Assistant Professor

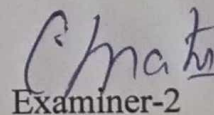
Sacred Heart College (Autonomous)

Tirupattur- 635601

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-voce examination held on



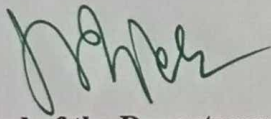
Examiner-1



Examiner-2

CERTIFICATE

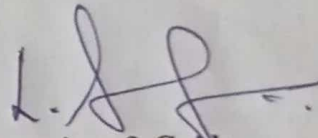
This is to certify that the dissertation entitled "Growth and characterization of L-Asparagine Monohydrate doped with Sulphamic acid Crystal" submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **A.ELAVARASI (BP180313)** during the period **2019-2020** of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Head of the Department

Dr.M.Jose

PG and Research Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur - 635601



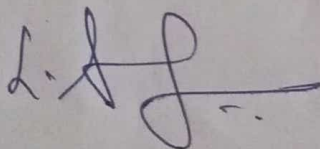
Supervisor & Guide

Mr.L.Anandaraj M.Sc., M.Phil,

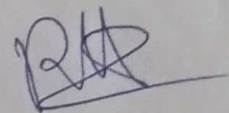
Assistant Professor
Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur - 635601

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination held on 20.07.2020.

Examiner 1

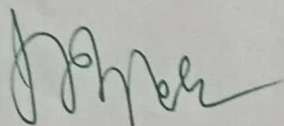


Examiner



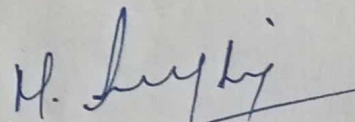
CERTIFICATE

This is to certify that the dissertation, entitled "A COMBINED SPECTROSCOPIC (FT-IR, FT-RAMAN, NMR), FMO, NBO, NLOANALYSIS OF 2-CHLORO BENZYL ALOCHOL WITH PROPYL AMINE – A DFT STUDY", submitted to the Sacred Heart College (Autonomous), Tirupattur in partial fulfillment of the requirements for the award of the Degree of Master of Science in Physics in a record of original research work done by **P.SAKTHIMANI**, (Reg. No: BP180314) during the period of 2019 – 2020 of her study in the PG and Research Department of Physics at Sacred Heart College (Autonomous), Tirupattur, under my guidance and the dissertation has not formed the basis for the award of any Degree or other similar title to any candidate of any colleges and Universities.



Signature of the HOD

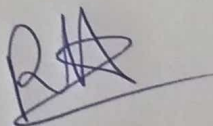
(Dr. M. Jose)



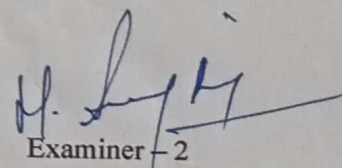
Signature of Research Guide

(Mr. M. Aravinthraj)

Dr. M. JOSE, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.



Examiner – 1



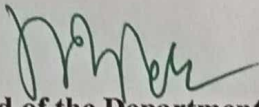
Examiner – 2

Place: Tirupattur,

Date:

CERTIFICATE

This is to certify that the dissertation entitled "SYNTHESIS AND CHARACTERIZATION OF ZnO, MgO AND Mg-ZnO NANOPARTICLES BY CO-PRECIPITATION METHOD" submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **A.JENIFER DEEPA ARASI (BP180315)** during the period (2019-2020) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



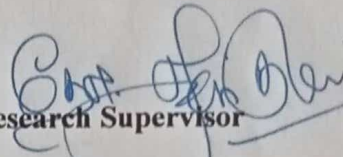
Head of the Department

Dr.M.Jose

Assistant Professor of Physics

Sacred Heart College (Autonomous)

Tirupattur – 635 601.



Research Supervisor

Mr. D. Rajkumar M.Sc.,M.Phil.,SET

Assistant Professor of Physics

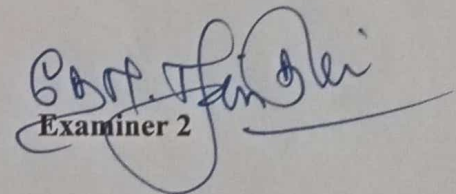
Sacred Heart College (Autonomous)

Tirupattur – 635 601.

Submitted to **Sacred Heart College (Autonomous)**, Tirupattur at the Viva-Voice examination held on.....



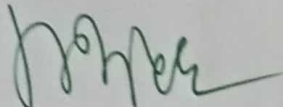
Examiner 1



Examiner 2

CERTIFICATE

This is to certify that the dissertation entitled "SYNTHEIS AND CHARACTERIZATION OF PURE AND COBALT DOPED CERIUM OXIDE NANOPARTICLES" submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by T. NIHA (BP180316) during the period (2019-2020) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.

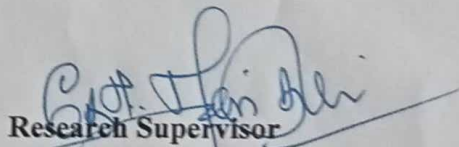


Head of the Department

Dr. M. Jose

Assistant Professor of Physics

Sacred Heart College, Tirupattur.



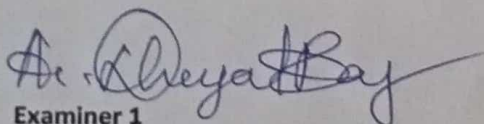
Research Supervisor

Mr. D. Rajkumar M.Sc., M.Phil., SET

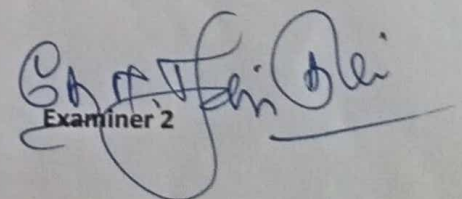
Assistant Professor of Physics

Sacred Heart College, Tirupattur.

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination held on.....



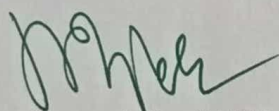
Examiner 1



Examiner 2

CERTIFICATE

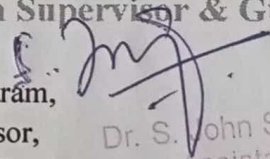
This certify that the dissertation, entitled "GREEN SYNTHESIS OF ZINC FERRITE NANOPARTICLES USING JUSTICIA ADHATODA LEAF EXTRACT FOR ANTIBACTERIAL AND ANTIBIOTIC APPLICATIONS -AN ECO-FRIENDLY APPROACH" Submitted to the Sacred Heart College (Autonomous), Tirupattur in the partial fulfilment of the requirement for the award of the degree of Master of Science in Physics is a record of original research work done by Mr.A.Govindasamy (BP180317) during the academic year 2019-2020 under my supervision and guidance, the dissertation has not formed the basis for the award of any degree or other similar title to any candidate of any college and university.



Signature of the HOD

Dr. M. Jose ,
PG Head & Assistant professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635601.

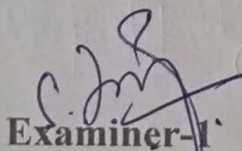
Research Supervisor & Guide



Dr.S.John Sundaram,
Assistant professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635601.

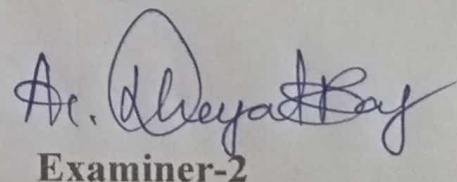
Dr. S. John Sundaram, M.Sc.,Ph.D.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635 601. Tirupattur Dist. (TN)

Submitted to Sacred Heart College (Autonomous), Tirupattur at the viva-voce examination held on 20.07.2020.



Examiner-1

Dr. S. John Sundaram, M.Sc.,Ph.D.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur-635 601. Tirupattur Dist. (TN)



Examiner-2

CERTIFICATE

This is to certify that the dissertation entitled “**Growth and Characterization of few amino acid crystals**” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **JAYASURIYA J (BP190318)** during the period (2020-2021) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Head of the Department
Dr. M. Jose
PG and Research Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur – 635601.



Supervisor & Guide
Mr. N. Madhavan, M.Sc., M.Phil., B.Ed.,
Assistant Professor
Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur – 635601.

Submitted to **Sacred Heart College (Autonomous), Tirupattur** at the Viva-
Voice examination held on _____.



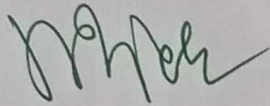
Examiner 1



Examiner 2

CERTIFICATE

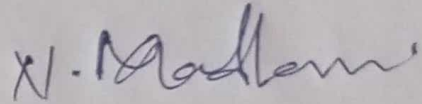
This is to certify that the dissertation entitled “**Effect of shock wave on Aluminum Oxide Nano particles by Co-precipitation Method**” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **S.SENBAGAVALLI (BP180319)** during the period **2019-2020** of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Head of the Department

Dr. M. Jose

PG and Research Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur – 635601

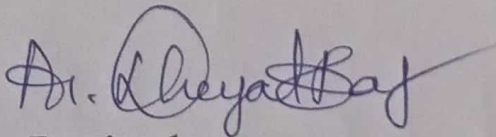


Supervisor & Guide

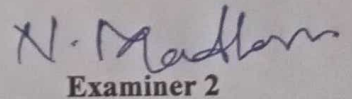
**Mr. N. Madhavan, M.Sc., M. Phil.,
B.Ed**

Assistant Professor
Department Of Physics
Sacred Heart College (Autonomous),
Tirupattur - 635601

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination
held on _____.



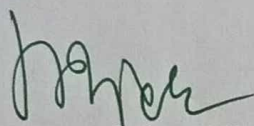
Examiner 1



Examiner 2

CERTIFICATE

This is to certify that the dissertation, entitled "INVESTIGATION ON SOLVOTHERMAL SYNTHESIS, PROPERTIES AND EFFECT OF SOLVENT AND CALCINATION TEMPERATURE OF LANTHANUM OXIDE NANOPARTICLES" submitted to the Sacred Heart College (Autonomous), Tirupattur 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 **MISS. S. KETHRIN THERESA (Reg. No. BP180320)** during the academic year 2019-2020 of her study in the Department of Physics at Sacred Heart College (Autonomous) Tirupattur, under my supervision and guidance and the dissertation has not formed the basis for the award of any degree or other similar title to any candidate of any colleges and universities.

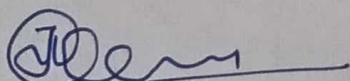


Signature of the HOD

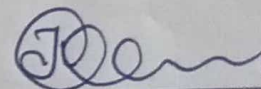
(Dr. M. Jose)

Dr. M. JOSE, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.

Submitted to Sacred Heart College (Autonomous) Tirupattur, at the viva – voice examination held on

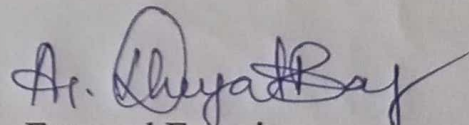


Internal Examiner



Signature of the Guide

(Mr. G. Jayakumar)



External Examiner

Place : Tirupattur

Date :



MR. R.RAMESH, M.Sc., M.Phil., B.Ed.,
Assistant Professor,
Department of Physics,
Sacred Heart College (Autonomous),
Tirupattur - 635601.

CERTIFICATE

This is to certify that the dissertation, entitled “**SYNTHESIS AND CHARACTERIZATION OF NICKEL AND IRON OXIDE NANOPARTICLES USING FRESH LEAF EXTRACT OF PLECTRANTHUS AMBOINICUS**”, submitted to the Sacred Heart College (Autonomous), Tirupattur in partial fulfillment of the requirements for the award of the Degree of Master of Philosophy in Physics is a record of original research work done by **MISS.V.YAMINI**, (REG. NO: **BP180321**) during the period of 2018-2020 of her study in the Department of Physics at Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree or other similar title to any candidate of any colleges and Universities.

Signature of the HOD

(Dr. M. Jose)

Dr. M. JOSE, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.

Research Supervisor & Guide

(Mr. R. Ramesh)

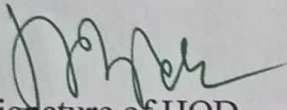
R. RAMESH, M.Sc., M.Phil., B.Ed.,
Assistant Professor of Physics (Shift-II)
Sacred Heart College (Autonomous)
Tirupattur (Vlr.Dt.) 635 601

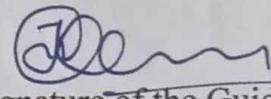
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Examiner - II

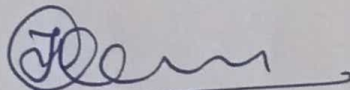
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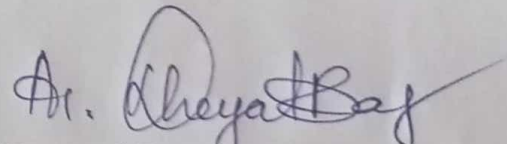
This is to certify that the dissertation, entitled **SYNTHESIS AND CHARACTERIZATION OF CERIUM OXIDE AND CERIUM MANGANITE THIN FILMS BY DIPCOATING METHOD** submitted to Sacred Heart College (Autonomous), Tirupattur in partial fulfilment of the requirement for the award of degree Master of Science in Physics is a record of original research work done by **P.AKSHADHA (Reg No. BP180322)** during the academic year 2019 - 2020 of her study in the Department of Physics at Sacred Heart College (Autonomous) Tirupattur, under my supervision and guidance the dissertation has not formed the basis for the award of any degree or other similarities title to any candidate of any colleges and universities.


Signature of **HOD**
Dr. M. Jose, M.Sc., M.Phil., Ph.D.,
Head (P.G)
Department of Physics,
Sacred Heart College,
Tirupattur-635 601. Vellore District.


Signature of the Guide
Mr. G. Jayakumar

Submitted to Sacred Heart College (Autonomous) Tirupattur, at the viva – voice examination held on ()


Internal Examiner

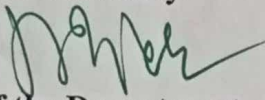

External Examiner

Place: Tirupattur

Date:

CERTIFICATE

This is to certify that the dissertation entitled “**Investigating the role of surfactant and effect reaction time on the properties of copper oxide nanoparticles using sonochemical method**” submitted to the Sacred Heart College(Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **P. ASWANI VIDHYA (BP180323)** during the period (2019-2020) of her studying the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



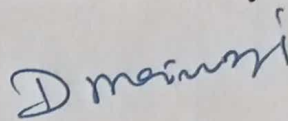
Head of the Department,

Dr. M. Jose

Assistant Professor

Department of Physics

Sacred Heart College, Tirupattur.



Supervisor & Guide

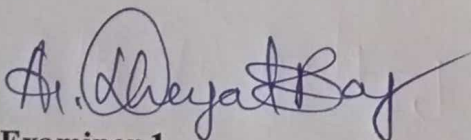
Mr. D. Magimai Antoni Raj

Assistant Professor

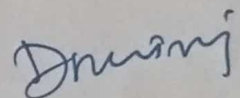
Department of Physics

Sacred Heart College, Tirupattur.

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination held on.....



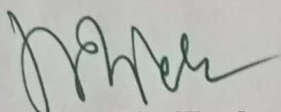
Examiner 1



Examiner

CERTIFICATE

This is to certify that the dissertation entitled “**Impact of Shock Waves on Structural, Optical and Morphological Properties of Calcium Carbonate**” submitted to the Sacred Heart College(Autonomous), Tirupattur in the partial fulfillment of the requirements for the award of the degree of Master of Science in Physics is a record of original research work done by **Miss. P. SHAILAJA (BP180324)** during the period of (2019-2020) of her studying in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my Supervision and Guidance. The dissertation has not formed the basis for the award of any degree or other similar title to any candidate of any College or University.



**Signature of the Head
Guide**

**(Dr. M. Jose)
BrittoDhas)**

Assistant Professor

Department of Physics

Sacred Heart College, Tirupattur.
Tirupattur



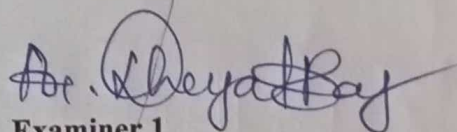
Research Supervisor &

(Mr.S.A.Martin

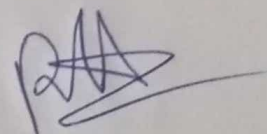
Assistant Professor

Department of Physics
Sacred Heart College,

Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voce examination held on _____



Examiner 1



Examiner 2

CERTIFICATE

This is to certify that the dissertation entitled “**TiO₂ thin films preparation via adsorptive self- assembly for self-cleaning application**” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **Praveen C (BP190325)** during the period (2020-2021) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Dr.M.Jose

Head of the Department (PG)

Sacred Heart College (Autonomous)

Tirupattur-635601



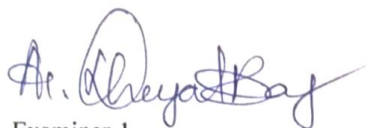
Dr.S. Kalalarasi

Assistant Professor

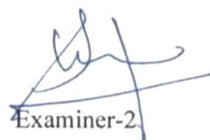
Sacred Heard College (Autonomous)

Tirupattur- 635601

Submitted to **Sacred Heart College (Autonomous), Tirupattur** at the Viva-voce examination held on



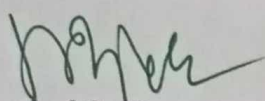
Examiner-1



Examiner-2

CERTIFICATE

This is to certify that the dissertation entitled “SYNTHEIS AND CHARACTERIAZATION OF PURE,ZINC AND BARIUM DOPED Co_3O_4 NANO PARTICLES” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by V.VAISHNAVI (BP180326) during the period (2019-2020) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



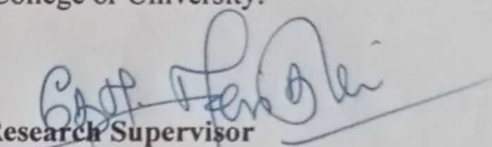
Head of the Department

Dr.M.Jose

Assistant Professor of Physics

Sacred Heart College (Autonomous)

Tirupattur – 635 601



Research Supervisor

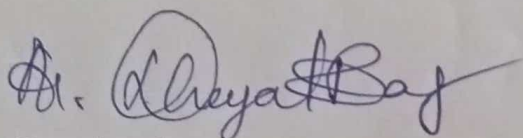
Mr. D. Rajkumar M.Sc.,M.Phil.,SET

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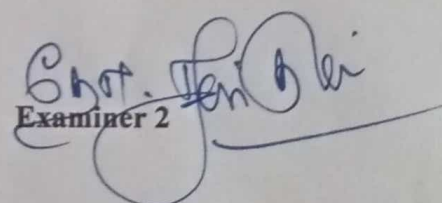
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Examiner 1

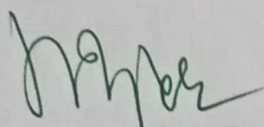


Examiner 2

BONAFIDE CERTIFICATE

This is to certify that the dissertation, entitled "SYNTHESIS AND CHARACTERIZATION OF TITANIUM OXIDE NANOSTRUCTURES USING BIOTEMPLATE" submitted to the Sacred Heart College (Autonomous), Tirupattur in partial fulfillment of the requirement for the Degree of Master of science in Physics is a record of original research work done by **L.Sridevi**,

Reg. No. BP180327 during the period 2019-2020 of her study in the department of physics, Sacred Heart College (Autonomous), Tirupattur under the supervision and guidance. The dissertation has not formed the basis for award of any degree of similar title to any candidate of any college or university.

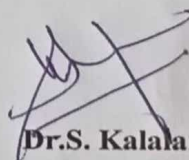


Dr.M.Jose

Head of the Department (PG)

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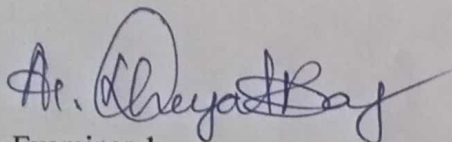
Dr.S. Kalalarasi

Assistant Professor

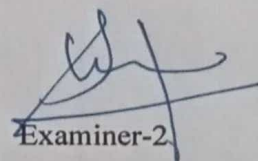
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Tirupattur- 635601

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Examiner-1



Examiner-2

CERTIFICATE

This is to certify that the dissertation entitled “**Spectroscopic analysis and Archeological Values of Recently Evacuated Potteries In Kundureddiyur, Tirupattur District, Tamil Nadu. India**” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **Gomathy Y (BP190328)** during the period (2020-2021) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Signature of the HOD

(Dr. M. Jose)



Signature of Research Guide

(Mr. M. Aravinthraj)

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Examiner – 1



Examiner – 2

Place: Tirupattur,

Date:

CERTIFICATE

This is to certify that the dissertation entitled “**Synthesis and characterization of copper oxide nano particles using different surfactants (EDTA&CTAM) by sonication method**” submitted to the Sacred Heart College (Autonomous), Tirupattur in the fulfillment of the requirements for the award of degree of Mater of Science in Physics is a record of original work done by **NITHIYAPRAKASH R T (BP190329)** during the period (2020-2021) of her study in the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, under my supervision and guidance. The dissertation has not formed the basis for the award of any degree or similar title to any candidate of any College or University.



Head of the Department,

(Dr. M. Jose)

Assistant Professor

Department of Physics

Sacred Heart College, Tirupattur.



Supervisor & Guide

Mr. D. MAGIMAI ANTONI RAJ

Assistant Professor

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Submitted to Sacred Heart College (Autonomous), Tirupattur at the Viva-Voice examination held on.....



Examiner 1



Examiner