

Criterion 1 – Curricular Aspects

| Key Indicator | 1.3 | Curriculum Enrichment |
|----------------------|-------|---|
| Metric | 1.3.4 | Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year 2023-2024) |

DEPARTMENT OF PHYSICS

| S.No. | Description |
|-------|--|
| 1. | List of students undertaking the field projects/ research projects / internship program-wise in the last completed academic year along with the details of title, place of work etc. |
| 2. | Internship / research projects completion certificate from the organization where internship / research projects was completed along with the duration. Report of the field visit / sample photographs of the field visit / permission letter from the competent authority will be considered |

Summery

| S.No | Programme | No of students | No of | No of students | Total No of |
|------|---------------|----------------------------------|------------|-------------------------------|-------------|
| | | Field Projects | students – | Internships | students |
| | | (a) | Research | (c) | (d) |
| | | | Projects | | |
| | | | (b) | | |
| 1 | B.Sc. Physics | - | 10 | 10 | 10 |
| 2 | M.Sc. Physics | - | 16 | - | 16 |

List of students - Internship

| S | Programme | Programme | REGNO | NAME | Batch | Year |
|-----|------------------------|-----------|--------------|------------------|-------|-------|
| NO | Name | code | code | NAME | Daten | 1 cai |
| 1. | | | 121012161055 | ARUN KUMAR S | | |
| 2. | | | 121011161056 | KANISHKA K | | |
| 3. | | | 121011161057 | KAVIYA SHREE T | | |
| 4. | | | 121011161058 | KEERTHI S | | |
| 5. | B.Sc. | 161 | 121011161059 | PRIYANTHI K | 2021- | 2022- |
| 6. | D .5 c . | 101 | 121012161060 | SANTHOSH KUMAR M | 2024 | 2023 |
| 7. | | | 121011161061 | SAROJINI C | | |
| 8. | | | 121012161063 | THENDRAL R | | |
| 9. | | | 121011161064 | AJITHA C | | |
| 10. | | | 121011161065 | RITHU M.S | | |











22nd JUNE 2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms.K.PRIVANTHI (REG NO: 121011161059) Student of B.Sc "PHYSICS" final year PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY, VALLAM, THANJAVUR has successfully completed certificate of Internship training program in "DIGITAL ELECTRONICS" during 1st JUNE 2023 to 21st JUNE 2023.

During her course period, her level of commitment, involvement and attitude were found to be exemplary.

We wish her all success in future endeavors.



With Warm Regards, SAMCKO Technologies

N. y 22/6/2-23

(N.GopalaKrishnan, B.E) HR-Manager

Sc

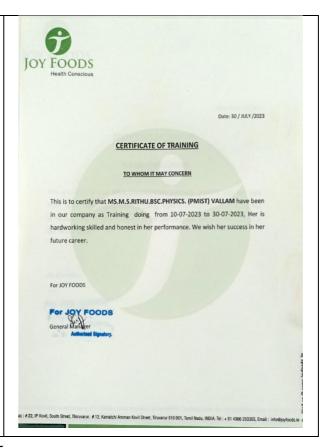
1783-84, Kanaga Complex, 2nd Floor, (Canara bank Upstairs) South Main Street, Thanjavur -613 009. Mobile : 8870797168











Students Research Projects – B.Sc. Physics

Department of Physics Periyar Nagar, Vallam Thanjavur - 613 403, Tamil Nadu, India Phone: +91 - 4362 - 264660, Fax: +91 - 4362 - 264660 Email: headphy@pmu.edu Website: www.pmu.edu



Programme / Department: III B.Sc. Physics (VI Semester)

Course Code / Name: XPH606 / Project

| S. No. | Reg. No. | Name | Title | Guide |
|--------|--------------|----------------|---|--|
| 1. | 121012161055 | ARUN KUMAR S | FREE ENERGY WATER PUMP | Dr. K. KESAVAN |
| 2. | 121011161056 | KANISHKA K | GREEN SYNTHESIS OF SILVER NANO PARTICLES USING ALOE VERA EXTRACT | Dr.R.ANANDHI |
| 3. | 121011161057 | KAVIYA SHREE T | CHARACTERIZATION OF PADDY SEED BY THERMAL IR IMAGING WITH MATLAB | Dr.D.KUMAR Dr.J.SRIVIND |
| 4. | 121011161058 | KEERTHI S | EXTREME EVENTS IN NONLINEAR OSCILLATOR | Dr. T. BHAGYARAJ |
| 5. | 121011161059 | PRIYANTHI K | DESIGN AND ANALYSIS OF IOT BASED AIR QUALITY MONITORING SYSTEM | Dr. AR. UMAYAL SUNDARI Dr. J. JAYARUBI |
| 5. | 121012161060 | SANTHOSH | FREE ENERGY WATER PUMP | Dr. K. KESAVAN |

| | | KUMAR M | | |
|-----|--------------|------------|---|--|
| 7. | 121011161061 | SAROJINI C | DESIGN AND ANALYSIS OF IOT BASED AIR QUALITY MONITORING SYSTEM | Dr. AR. UMAYAL SUNDARI Dr. J. JAYARUBI |
| 8. | 121012161063 | THENDRAL R | L-VALINE AS A PROMISING NLO MATERIAL- EXPERIMENTAL AND THEORETICAL STUDY | Dr. P. GAYATHRI |
| 9. | 121011161064 | АЈІТНА С | GREEN SYNTHESIS OF SILVER NANO PARTICLES USING ALOE VERA EXTRACT | Dr. R. ANANDHI |
| 10. | 121011161065 | RITHU M S | CHARACTERIZATION OF PADDY SEED BY THERMAL IR IMAGING WITH MATLAB | Dr. D. KUMAR Dr. J. SRIVIND |

HoDAPhysics
Head,
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Dr.K.KESAVAN, M.Sc., M.ed., M.Phil.,Ph.D. Assistant Professor (SG), Department of Physics Periyar Maniammai Institute of Science and Technology , Vallam, Thanjavur-613403,

CERTIFICATE

This is to certify that the thesis entitled "FREE ENERGY WATER PUMP" being submitted by S.ARUNKUMAR(121012161055) and M.SANTHOSH KUMAR(121012161060) and in a partial fulfillment of the requirements for the award of the degree of BACHELOR OF SCIENCE IN PHYSICS is a bonafide record of the research work carried out by her at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur, under my supervision. Also I certify that it has not formed the basis for any other degree or diploma or fellow ship of any other University or Institution.

Place: Vallam.

Date: 7/5/2024



HOD/Physics

Department of Physics,
Penyar Menammal
Institute of Setence & Technology,
(PMIST) Penyar Nagar, Voltan
Thenjayur, 819 nest, Tarillnadi.

External Examiner

Dr. N. CHIDHAMBARAM

Assistant Professor

Department of Physics

Rajah Serfoji Gout. College (A,

pr. R. ANANDHI M.Sc., M.Phil., Ph.D.,

Assistant Professor
Department of Physics

Periyar Maniammai Insitute of Science & Technology Vallam, Thanjavur – 613 403.



CERTIFICATE

This is to certify that the project entitled "GREEN SYNTHESIS OF SILVER NAOPARTICLES USING ALOE VERA EXTRACT" submitted by C.A.JITHA (Reg. No. 121011161064) and K. KANISHKA (Reg. No. 121011161056) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on Partial fulfilment for the award of the Degree of Bachelor of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts, has not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: PMIST
Date: 07/05/24



(R.ANANDHI)
PROJECT SUPERVISOR

Submitted for the University Examination held at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur on ____01(05/24)

HOD/Physics
Department of Physics,
Market Ma

External Examine

External Examine

1)1. N. CHIDHAMBARAM
Assistant Professor
Department of Physics
Rajah Serfoji Gout. College (A)
Thanjavur-613 005

Dr.J.SRIVIND Assistant Professor, Department of Physics, Periyar Maniammai Institute of Science and Technology, Vallam-613403, Thanjavur, Tamilnadu.



CERTIFICATE

This is to certify that the thesis entitled "CHARACTERIZATION OF PADDY SEED BY THERMAL IR IMAGING WITH MATLAB" being submitted by T.KAVIYA SHREE (121011161057) and M.S.RITHU (121011161065) in a partial fulfillment of the requirements for the award of the degree of BACHELOR OF SCIENCE IN PHYSICS is a bonafide record of the research work carried out by her at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur, under my supervision. Also I certify that it has not formed the basis for any other degree or diploma or fellowship of any other University or Institution.

Place: Vallam.

Date: 07 · 05 · 214



Dr.J.SRIVIND
(PROJECT SUPERVISOR)

Submitted for the University Examination held at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur on 07.05.24

HOD/Physics

Department rilyaice, religion buttoning.

Fill of Science & Technology.

MINIST) Perplay Marie Chieflesy.

External Examiner

Dr. N. CHIDHAMBARAM
Assistant Professor
Department of Physics
Rajah Serfoji Gowt, College (A)
Thaujus
3005

CERTIFICATE

This is to certify that dissertation entitled "EXTREME EVENTS IN A NONLINEAR OSCILLATOR" being submitted by S. KEERTHI (Reg. No. 121011161058) in a partial fulfillment of the requirement for the award of the degree of BACHELOR OF SCIENCE IN PHYSICS is a boandifact ecrods for the research work carried out by the rat Periyar Manianman institute of science & technology, vallam, Thanjavur, under my supervision. Also, has not been included in any other thesis submitted previously for the award of any degree.

Place: PMIST

Date:



T. Shapverey Dr. T. BHAGYARAJ (PROJECT GUIDE)

submitted for the University Examination held at Periyar Maniammai Institute of Science and rechnology, Vallam, Thanjavur on

HOD Physics

external Examiner

Dr. N. CHIDHAMBARAM
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Dr. AR. UMAYAL SUNDARI, M.Sc., M.Phil., B.Ed., MA(Edn)., Ph.D.

Dr. J. JAYARUBI., M.Sc., Ph.D.

Assistant Professor

Department of Physics

Periyar Maniammai Institute of Science & Technology,

Vallam, Thanjavur-613403.

CERTIFICATE

This is to certify that the project entitled "DESIGN AND ANALYSIS OF IOT BASED AIR QUALITY MONITORING SYSTEM" submitted by K. PRIYANTHI (121011161059) and C. SAROJINI (121011161061) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on Partial fulfilment for the award of the Degree of BACHELOR OF SCIENCE in PHYSICS is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts, has not been submitted to any other Institute or University for the award of any other degree or dislocate.

Place: PMIST

Date: 07 | 05 | 2024 |

Dr.AR. UMAYAL SUNDARI

Dr. J. JAYARUBI
(RESEARCH GUIDE)

Submitted for the University Examination held at Periyar Maniammai Institute of science and technology, Vallam, Thanjavur on __07 105 124_ .

HOD/PHYSICS

Person Managemal
Institute or Season & Technology,
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External Examiner

I.— N. CHIDHAMBARAM Assistant Professor Department of Physics Rajah Serfoji Gout, College (A) Thanjavur-613 005 Dr. P. GAYATHRI, M.Sc., M.Phil., Ph.D.,

Assistant Professor (SG) & Head,
Department of Physics,
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Vallam, Thanjavur - 613 403.

CERTIFICATE

This is to certify that the project entitled L-Valine as Promising NLO Material - Experimental and Theoretical Study submitted by R.THENDRAL (Reg. No. 121012161063) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on Partial fulfillment for the award of the Degree of Bachelor of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: PMIST Date: 7/5/24 Department of Physics Department of Physics

(P.GAYATHRI)
PROJECT SUPERVISOR

Submitted for the University Examination held at Periyar Maniammai Institute of Science and technology, vallam, Thanjavur on 7/5/24

HOD/Physics

Head,
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External Examiner
Dr. N. CHIDHAMBARAM
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Students Research Projects – M.Sc. Physics

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Programme / Department: II M.Sc. Physics (IV Semester)

Course Code / Name: YPH401 / Project

| S. No. | Reg. No. | Name | Title | Guide |
|-----------|--------------|------------------|--|---------------------------|
| 1. | 122011355042 | ABINAYA J | FABRICATION AND CHARACTERIZATION OF COPPER SUPHATE DOPED WITH NICKEL CARBONATE HYDROXIDE THIN FILM BY SPRAY PYROLISIS METHOD | Dr. K. KESAVAN |
| 2. | 122011355043 | BENAZEER BEGUM N | ALOE VERA MEDIATED EXTRACT SYNTHESIS OF AG DOPED COBALT OXIDE FOR HIGH PERFORMANCE SUPERCAPACITOR | Dr.R.ANANDHI |
| 3. | 122011355044 | BHUVANA T | VERMIWASH DERIVED IRON OXIDE NANOPARTICLES-A BIOSYNTHESIS | Dr. AR. UMAYAL SUNDARI |

| | | | APPROACH FOR ENHANCED ANTIBACTERIAL ANTIBACTERIAL APPLICATIONS | |
|----|--------------|--------------------------|---|-----------------|
| 4. | 122011355045 | DHARANI R | GROWTH AND CHARACTERIZATION OF THIOUREA-SODIUM THIOSULPHATE (TST) FOR NON- LINEAR OPTICAL APPLICATION | Dr. P. GAYATHRI |
| 5. | 122011355046 | GAYATHRI G | FABRICATION AND. CHARACTERIZATION OF VANADIUM PENTOXIDE DOPED WITH COPPEER SULFATE THIN FILM BY SPRAY PYROLYSIS METHODS | Dr. K. KESAVAN |
| 6. | 122011355047 | KANISHMA S | GROWTH AND CHARACTERIZATION OF THIOUREA -SODIUM THIOSULPHATE (TST) FOR NON- LINEAR OPTICAL APPLICATION | Dr. P. GAYATHRI |
| 7. | 122012355049 | NITHISH KARTHIKEYAN K | NANOCOMPOSITE FORMULATION OF ZINC AND TIN OXIDE UTILIZING BAEL (AEGLE MARMELOS) EXTRACT FOR BIOMEDICAL ADVANCEMENTS | Dr. J. JAYARUBI |

| | | | GREEN SYNTHESIS OF REDUCED | Dr. AR. UMAYAL |
|-----|--------------|--------------------|--|----------------------------|
| 8. | 122011355050 | 0 PRIYADHARSHINI V | GRAPHENE OXIDE USING THE LEAF EXTRACT OF DENDROPHTHOE | SUNDARI |
| | | | FALCATA FOR ENHANCED BIOMEDICAL APPLICATIONS | |
| 9. | 122011355051 | RANJANI A N | L VALINE AS PROMISING NLO MATERIAL- EXPERIMENTAL AND THEORETICAL STUDY | Dr. P. GAYATHRI |
| 10. | 122011355052 | SABETHA S | CHARACTERIZATION OF PADDY SEED BY THERMAL IR IMAGING WITH MATLAB | Dr.D.KUMAR Dr.J.SRIVIND |
| 11. | 122011355053 | SAKTHI VAISHNAVI G | EXTREME EVENT IN MEMRISTOR BASED HIDDEN OSCILLATOR | Dr. T. BHAGYARAJ |
| 12. | 122011355054 | SAROJINI N | L VALINE AS PROMISING NLO MATERIAL- EXPERIMENTAL AND THEORETICAL STUDY | Dr. P. GAYATHRI |
| 13. | 122011355055 | SARUMATHI A K | EXTREME EVENT IN MEMRISTOR BASED HIDDEN OSCILLATOR | Dr. T. BHAGYARAJ |
| 14. | 122011355056 | SHALINI C | CHARACTERIZATION OF PADDY SEED BY THERMAL IR IMAGING WITH MATLAB | Dr.D.KUMAR Dr.J.SRIVIND |

| 122011355058 | VANISHA C | MALTIFACETED APPLICATION OF CATHARANTHUS ROSEUS MEDICATED GREEN SYNTHESIS OF | Dr. J. JAYARUBI |
|--------------|-------------|--|-----------------|
| 122011355057 | SHALINI K R | FABRICATION AND COMPARISON EVALUATION OF ORGANIC DYE (SENNA PLANT, DRUMSTICK LEAVES, BALLOON VINE) COATING OVER TITANIUM DIOXIDE MESOPOROUS FILM SOLAR CELLS | Dr. K. KESAVAN |

HoD/ Physics
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DR.K.KESAVAN

ASSISTANT PROFESSOR

PeriyarManiammai Institute Of Science And Technology

Vallam, Thanjavur 613403

CERTIFICATE

This is to certify that this project entitledFABRICATION ANDCHARECTERIZATION OF NICKEL CARBONATE HYDROXIDE WITH COPPER SULFATE DOPEDTHIN FILMS FOR SOLAR CELL APPLICATIONSsubmitted by ABINAYA.J (Reg no:122011355042) toPeriyarManiammai Institute Science &Technology(deemed to be university) on partil fulfillment for the award of the Degree of Master of Science inPhysics is a bonified record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other institute or university fir the award of any other degreeor diploma.

Place:PIMST Date:07.05.2024

(K.KESAVAN) PROJECT SUPERVISOR

Submitted for the University Examination heled at Perjyar Maniammai Institute of Science and Technology Vallam, Thanjavur

Dr. N. CHIDHAMBARAM Assistant Professor

Dr. R. ANANDHI M.Sc., M.Phil., Ph.D.,

Assistant professor

Department of Physics .

Periyar Maniammai Insitute of Science & Technology

Vallam, Thanjavur - 613 403.



CERTIFICATE

This is to certify that the project entitled "ALOE VERA MEDIATED-EXTRACT SYNTHESIS OF Ag-COBALT OXIDE NANOPARTICLES FOR HIGH-PERFORMANCE SUPERCAPACITORS" submitted by N. BENAZEER BEGUM (Reg. No. 122011355043) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on Partial fulfilment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts, has not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: PMIST



PROJECT SUPERVISOR

Submitted for the University Examination held at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur on 07 · 05 · 2024

External Examine
Dr. N. CHIDHAMBARAM

Dr. AR. UMAYAL SUNDARI ., M.Sc .,M.Phil., B.Ed., MA(Edn).,Ph.D

Associate Professor,

Department of Physics,

Periyar Maniammai Institute of Science & Technology,

Vallam,

Thanjavur - 613 403.

CERTIFICATE

This is to certify that the project entitled "VERMIWASH-DERIVED IRON

OXIDE NANOPARTICLES A BIOSYNTHESIS APPROACH FOR ENHANCED ANTIBACTERIAL APPLICATIONS" submitted by T.BHUVANA (Reg. No.122011355044) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on partial fulfilment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

Date: 07/05/2024



AR. umayal sundari) PROJECT SUPERVISOR

Submitted for the University Examination held at Periyar Maniammai Institute of Science & Technology, vallam, Thanjavur on 07/05/2024

HOD/Physics

External Examiner

Dr. N. CHIDHAMBARAM
Assistant Professor
Department of Processor

Assistant Professor Department of Physics Rajah Serfoji Govt. College (A) Thanjavur-613 005

Dr. P. GAYATHRI, M.Se., M.Phil., Ph.D..,

Assistant Professor (sg)

Head of the department, Department of Physics

Periyar Maniammai Institute of Science and Technology

Vallam, Thanjavur- 613403.

CERTIFICATE

This is to certify that the project entitled "GROWTH AND CHARACTERIZATION OF THIOUREA-SODIUM THIOSULPHATE(TST) FOR NON-LINEAR OPTICAL APPLICATION" submitted by R.DHARANI (Reg.No.122011355045) to Periyar Manianmai Institute of Science and Technology (Deemed to be University) on partial fulfillment for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diplomus.

Place: Vallam Date: 7/5/24

(PROJECTSUPERVISOR)

Submitted for the University Examination held at periyar Man-

nd Technology, vallam, Thanjavur on _ Alaha

HOD/PHYSICS,

Holips 124 External Examiner
Dr. N. CHIDHAMBARAM
Assistant Professor
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Rajeh Serfoji Gout, College (A)
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DR.K.KESAVAN

Assistant Professor (SG)
Department Of Physics
Periyar Maniammai Institute Of Science And Technology
Vallam, Thanjavur 613403

CERTIFICATE

This is to certify that this project entitled FABRICATION AND CHARECTERIZATION OF VANADIUM PENTOXIDE with COPPER SULFATE doped THIN FILMS FOR SOLAR CELL APPLICATIONS is the bonafide work of G.GAYATHRI G (Reg. No.122011355046) who carried out the project under my guidance and submitted to Periyar Maniammai Institute Of Science And Technology in partial Hillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS. Certified further that the content of this thesis have not formed the basis for the award of any degree, diploma or other similar title of any university or institution.

PLACE : VALLAM

Opportunity of Physics Opportunity of Physics

Signature of the guide

Submitted for the University Examination held at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur on Office 12.



DreNterhil Extendise ARAM Assistant Professor Department of Physics Rajah Serfoji Gout. College (A) Thanjaurr-613 005 Dr. P. GAYATHRI, M.Sc., M.Phil., Ph.D.,

Assistant Professor (sg)

Head of the department, Department of Physics

Periyar Maniammai Institute of Science and Technology

Vallam, Thanjavur- 613403



CERTIFICATE

This is to certify that the project entitled "GROWTH AND CHARACTERIZATION OF THIOUREA-SODIUM THIOSULPHATE(TST) FOR NON-LINEAR OPTICAL APPLICATION" submitted by S.KANISHMA (Reg. No. 122011355947) to Periyar Maniammai Institute of Science and Technology (Deemed to be University) on partial fulfillment for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a boundide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: Vallam

Date: 715/24



Dr. P. GAYATHRI

(PROJECTSUPERVISOR)

Submitted for the University Examination held at periyar Maniammai Institute of Science

and Technology, vallam, Thanjavur on 0965/04

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External Examine MBARAM
Dr. N. CHIDHAM
Assistant Professor
Department of Physics
Department of Physics
Department of College (A)

Dr. J. JAYARUBI,

Assistant Professor, Department of Physics,

Periyar Maniammai Institute of Science & Technology,

Vallam

Thanjavur - 613 403.

BONAFIDE CERTIFICATE

This is to certify that the project entitled "NANOCOMPOSITE FORMULATION OF ZINC AND TIN OXIDE UTILIZING BAEL (AEGLE MARMELOS) EXTRACT FOR BIOMEDICAL ADVANCEMENTS" submitted by NITHISH KARTHIKEYAN K (Reg. No.122012355049) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on partial fulfilment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: PMIST
Date: 07 105 24



(Dr. J. JAYARUBI)
PROJECT SUPERVISOR

Submitted for the University Examination held at Periyar Maniammai Institute of Science & Technology, vallam, Thanjavur on 177 D.S. 24

Department of Physics, Department of Physics, Pertyar Menlammal Institute of Science & Technology, (2005) Pertyal Nagar Voltan External Examiner
Dr. N. CHIDHAMBARAM
Assistant Professor
Department of Physics
Rajah Serfoji Gout. College (A)
Thanjauur-613 005

Dr. AR. UMAYAL SUNDARI., M.Sc., M.Phil., B.Ed., MA(Edn)., Ph.D

Associate Professor,

Department of Physics,

Periyar Maniammai Institute of Science & Technology

Vallam, Thanjavur-613 403.

CERTIFICATE

This is to certify that the thesis entitled "GREEN SYNTHESIS OF REDUCED GRAPHENE OXIDE USING THE LEAF EXTRACT OF DENDROPHTHOE FALCATA FOR ENHANCED BIOMEDICAL APPLICATIONS" submitted by V.PRIYADHARSHINI (Reg. No. 122011355050) Periyar Maniammai Institute of Science & Technology (Deemed to be University) on partial Infillment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur, under my supervision and guidance. The content of the report, in full or parts, has not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: PMIST

Date:



AR. U. J. U.

Submitted for the University Examination held at Periyar Maniammai of Science Techonolgy, & vallam, Thanjavur on

HOD/Physics of Physics, Perfyer Maniammai Institute of Science & Technology, (PMIST) Periyar Nagar, Vallam External Examiner
Dr. N. CHIDHAMBARAM
Assistant Professor
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Thompsuur 613 005

Dr. P. GAYATHRI, M.Sc., M.Phil., Ph.D.,
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Department of Physics,
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CERTIFICATE

This is to certify that the project entitled L-Valine as Promising NLO Material - Experimental and Theoretical Study submitted by A.N.RANJANI (Reg. No. 122011355051) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on Partial fulfillment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

Place: PMIST
Date: 06/05/2024



(P.GAYATHRI) PROJECT SUPERVISOR

Submitted for the University Examination held at Periyar Maniammai Institute of Science and technology, vallam, Thanjavur on 01/05/2024

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CERTIFICATE

This is to certify that the thesis entitled "CHARACTERIZATION OF PADDY SEED BY THERMAL IR IMAGING WITH MATLAB" being submitted by S.SABETHA (122011355052) and C.SHALINI (122011355056)in a partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a bonafide record of the research work carried out by her at Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavar, under my supervision. Also I certify that it has not formed the basis for any other degree or diploma or fellowship of any other University or Institution.

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This is to certify that dissertation entitled "EXTREME EVENTS IN FORCED PARALLEL NONLINEAR OSCILLATOR" being submitted by G. SAKTHI VAISHNAVI (Reg.No.122011355053) and A.K. SARUMATHI (Reg.No.122011355055) in a partial fulfillment of the requirement for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a bonafide records for the research work carried out by her at Periyar Maniammai Institute of Science & Technology, Vallam, Thanjavur, under my supervision. Also, has not been included in any other thesis submitted previously for the award of any degree

Place: VALLAM
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CERTIFICATE

This is to certify that the project entitled L-Valine as Promising NLO Material - Experimental and Theoretical Study submitted by N. SAROJINI (Reg. No. 122011355054) to Periyar Maniammai Institute of Science & Technology (Deemed to be University) on Partial fulfilliment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

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CERTIFICATE

This is to certify that the project entitled "Fabrication and comparison of organic dye (from Senna plant, drumstick leaves, balloon vine) coating over Titanium dioxide (TiO2) mesoporous film (M-TiO2) solar cells" submitted by K.R.SHALINI (Reg.no. 122011355057) to Periyar Maniammai Institute of Science &Technology (Deemed to be University) on partial fulfillment for the award of the Degree of Master of Science in Physics is a bonafide record of the research work carried out by her under my supervision and guidance. The content of the report, in full or parts have not been submitted to any other Institute or University for the award of any other degree or diploma.

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This is to certify that the thesis entitled "MULTIFACETED APPLICATIONS OF Catharanthus roseus MEDICATED GREEN SYNTHESIS OF ZnO NANOPARTICLES" being submitted by C.VANISHA (122011355058) in a partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a bonafide record of the research work carried out by heart Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur, under my supervision. Also I certify that it has not formed the basis for any other degree or diploma or fellowship of any other University or Institution.

Dr. J. JAYARUBI (RESEARCH GUIDE)

Dr. N. CHIDHAMBARAM