

J.J.COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

(A Silver Jubilee Institution)

(Re-Accredited by NAAC with B** Grade - 4th Cycle)

(Affiliated to Bharathidasan University, Tiruchirappalli)



Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms. ABINAYA.J** (Register No. **P21PH1001**) doing II M.Sc. Physics has successfully completed her project work in our College entitled "**Effect of catharanthus rosous flower extract doping level on the antibacterial activity of CuO nanopowders using soft chemical route**" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (A)
J.J. NAGAR, SIVAPURAM,
PUDUKKOTTAI - 622 422



Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.C.A.
M.Phil., B.Ed., Ph.D.

PRINCIPAL

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. ALAGAMATHIS (Register No. P21PH1002) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Spectra analysis of silver nanoparticles identification of bio actives metalbalities from draceara trifascita leaf extract" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS,
J.J. COLLEGE OF ARTS AND SCIENCE (AUI)
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Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. AMALA SOBIYA . T (Register No. P21PH1003) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Influence of simultaneous doping of Zn and Fe on certain physical properties of CuO thin film deposited by using Modified SILAR technique" during January 2023 to March 2023.



Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. ANU.S (Register No. P21PH1004) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Green synthesis of Titanium Dioxide using Ethanol Extract of Boerhavia Diffusa.R. Root with Spectral Characterization" during January 2023 to March 2023.

9.4.21

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (AU)
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9.4.21

Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms. ANUSUYA DEVI. C.K.** (Register No. P21PH1005) doing II M.Sc. Physics has successfully completed her project work in our College entitled **“Synthesis of Dopamine Modified Sodium Alginate Nanoparticle Prepared via Simple Chemical Method”** during January 2023 to March 2023.

T. W. 2 I

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (AU),
J.J. NAGAR, SIVAPURAM,
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(Signature)

Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. DEVAYANI.V (Register No. P21PH1006) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Synthesis of Fe Doped ZnO₂ Nanocomposite Through Co-Precipitation Method." during January 2023 to March 2023.

TFH 2-1

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms. DIVYA.C** (Register No. **P21PH1007**) doing II M.Sc. Physics has successfully completed her project work in our College entitled **"Growth and characterization of the semi organic singal crystal:DL-Norvaline DL-Malic acid."** during January 2023 to March 2023.

TFW2

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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J.J. COLLEGE OF ARTS AND SCIENCE (AU)
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Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. DIVYADHARSHINI .R (Register No. P21PH1008) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Enhancement in the antibacterial efficiency of CuO Nanoparticles by tuning the shape of the Nanograms through hibiscuss sabdharifa leaf extract doping by a simple soft chemical method." during January 2023 to March 2023.

M.K. Murali

Head of the Department
Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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D.J. Parasuraman

Principal

Dr.J.PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms. GAYATHRI. C** (Register No. P21PH1009) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Synthesis, Growth and characterization of picric acid mixed Alpha amino butyric acid-Biologically active single crystal." during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms.HIMA M.K (Register No. P21PH1011) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Preparation and characterization of polyimide / polyrotaxane blend membranes for direct methanol fuel cell applications." during January 2023 to March 2023.

T. M. 2

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
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G. P.

Principal

Dr.J.PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms.JAYANTHI J. (Register No. P21PH1012)** doing II M.Sc. Physics has successfully completed her project work in our College entitled **“Enhancement of structural and antibacterial properties of CuO nanopowders through catharanthus roseus leaf extract doped by a simple soft chemical method”** during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
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Principal

Dr.J.PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. KARTHIKA.R (Register No. P21PH1013) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Extraction and Evaluation of Copper Nanoparticles using Ethanol Leaf Extract of Coccinia Grandis." during January 2023 to March 2023.

T. M. 2

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (AU)
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C. R.

Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. KAVIYA. R (Register No. P21PH1014) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Effect of doubly doping Zn and Al on certain physical properties of CuO thin film deposited thin film using modified SILAR technique." during January 2023 to March 2023.

T. M. 2

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR
P.G. AND RESEARCH DEPARTMENT OF PHYSICS
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G. P.

Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.C.,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. KEERTHIKA.K (Register No. P21PH1015) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Structural, Optical and Antibacterial Properties of Cobalt Nickel Co-doped Zinc Oxide Nanoparticles by Co-Precipitation Method." during January 2023 to March 2023.

M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYS.
J.J. COLLEGE OF ARTS AND SCIENCE (Autonomous)
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J. Parasuraman

Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. MARIA JOSEPHIN.X (Register No. P21PH1016) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Structural and Thermal properties of Alpha amino butyric acid mixed picric acid single crystal by slow evaporation method" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. MOUNIKA.N (Register No. P21PH1017) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Green synthesis and characterization of Cadmium oxide nanoparticles using *Eclipta prostrata* leaf extract" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE
J.J. NAGAR, SIVAPURAM,
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Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. PARKAVIR (Register No. P21PH1019) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Synthesis and characterization of Nd doped CuO nanoparticles prepared by co-precipitation method" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (A)
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Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms. RAGIKRISHNA.R** (Register No. P21PH1020) doing II M.Sc. Physics has successfully completed her project work in our College entitled **“Preparation and characterisation of polyvinyl alcohol/chitosan nanocomposite blend membranes for direct methanol fuel cell applications”** during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.A.,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. RATHIMEENA . R (Register No. P21PH1021) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Enhancement in the structural and optical properties of CuO thin films by Modified SILAR technique of simultaneous doping of Fe and Zn" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
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Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. RATHIKA.R (Register No. P21PH1022) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Biosynthesis and Characterisation Study of Silver Nanoparticles in Cucumis Maderasootanus L. Leaf Extract" during January 2023 to March 2023.

T.K.2

Head of the Department
Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS,
J.J. COLLEGE OF ARTS AND SCIENCE (Autonomous),
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Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. SHARMILA R. (Register No. P21PH1024) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Tuning the structural and antibacterial efficiency of CuO nanopowders through aloe vera extract doping by a simple soft chemical method." during January 2023 to March 2023.

M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
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J. Parasuraman

Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. SONA.K (Register No. P21PH1025) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Synthesis of Titanium Dioxide with Characterization and identification of Phytoconstituents in Leaf Extract of Asparagus Racemosus" during January 2023 to March 2023.

Dr. M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (Autonomous)
J.J. NAGAR, SIVAPURAM,
PUDUKKOTTAI - 622 422



Dr. J. Parasuraman

Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Ms. SRI VAISHNAVI .R** (Register No. P21PH1026) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Enhancement in the antibacterial efficiency of ZnO nanopowders by tuning the shape of the nanograins through ocimum tenuifbrium doping by a simple soft chemical method" during January 2023 to March 2023.

Head of the Department
Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
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Principal

Dr. J. PARASURAMAN, M.A., M.B.A., M.C.A.,
M.Phil., B.Ed., Ph.D.

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. SURYAGANDHIM (Register No. P21PH1027) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Growth and characterization of the semi organic single crystal:DL-2Amino butyric acid and DL-D-Methionine" during January 2023 to March 2023.

T. M. I

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHY-
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G. P.

Principal

Dr.J.PARASURAMAN, M.A., M.B.A., M.C.A.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. SWATHI RAJESHWARI K.R (Register No. P21PH1028) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Structural and Optical Properties of Fe-doped NiO Nanoparticles Prepared via Co-Precipitation Method" during January 2023 to March 2023.

M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS,
J.J. COLLEGE OF ARTS AND SCIENCE (AU),
J.J. NAGAR, SIVAPURAM,
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Dr. J. Parasuraman

Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. SWATHI (Register No. P21PH1029) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Green Synthesis and characterization of Cadmium oxide Nanoparticles using Eclipta Prostrata." during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (AU)
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Dr. J. PARASURAMAN, M.A., M.B.A., M.C.A.,
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CERTIFICATE

This is to certify that Ms. SWATHIKA C.M. (Register No. P21PH1030) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Sythesis of Folic Acid Modified Sodium Alginate Nanoparticles Prepared by Co-Precipitation Method" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Ms. PUVINA.V (Register No. P21PH1031) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Folic Acid doped CuO Nanoparticles Synthesis by Co-Precipitation Method" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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CERTIFICATE

This is to certify that Ms. SRINITHLE (Register No. P21PH1032) doing II M.Sc. Physics has successfully completed her project work in our College entitled "Synthesis of Curcumin Dopamine Folic Acid Sodium Alginate Hybrid" during January 2023 to March 2023.

M.K. Murali

Head of the Department
Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR
PG. AND RESEARCH DEPARTMENT OF
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Dr. J. Parasuraman

Principal

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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. AJAY.A** (Register No. P21PH2001) doing
II M.Sc. Physics has successfully completed his project work in our College entitled "**Green
synthesis of Zinc oxide nanoparticles using *Eclipta prostrata* leaf extract**" during
January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Mr. ALAGUMUTH.PL** (Register No. P21PH2002) doing II M.Sc. Physics has successfully completed his project work in our College entitled **“Influence of Hibiscus leaf extract doping on the physical and antibacterial properties of ZnO nanopowders prepared by simple soft chemical method”** during January 2023 to March 2023.

Handwritten signature

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (A),
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Principal

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M.Phil., B.Ed., Ph.D.

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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. BOOPATHI RAJA.G** (Register No. P21PH2003) doing
II M.Sc. Physics has successfully completed his project work in our College entitled
“Isolation and Characterization of Copper Nanoparticles and Investigation of
Phytochemical Compounds using Methanol Leaf Extract of Citrullus Colocynthis(L.)”
during January 2023 to March 2023.

M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
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PG. AND RESEARCH DEPARTMENT OF
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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. EALIYAS.S** (Register No. P21PH2004) doing II M.Sc. Physics has successfully completed his project work in our College entitled "**Green synthesis and characterization of copper sulphate nanoparticles using *Eclipta prostrata* leaf extract**" during January 2023 to March 2023.

M.K. Murali

Head of the Department

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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. KARUPPASAMY.P** (Register No. P21PH2005) doing
II M.Sc. Physics has successfully completed his project work in our College entitled
“Structural, Morphological and Optical properties of Ce doped CUO Nanoparticles
prepared through co-precipitation method” during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. KAVIYARASAN. R** (Register No. P21PH2006) doing II M.Sc. Physics has successfully completed his project work in our College entitled **“Growth and characterization of the semi organic single crystal:DL-Isolucine DL-Malic acid”** during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Mr. MOHAMEDGANI. S** (Register No. P21PH2007) doing II M.Sc. Physics has successfully completed his project work in our College entitled "Synthesis, Growth and characterization of Glycine mixed Alpha amino butyric acid-Biologically active single crystal" during January 2023 to March 2023.

M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Principal

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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. RAJASEKAR.R** (Register No. P21PH2008) doing II M.Sc. Physics has successfully completed his project work in our College entitled "**Green synthesis of Zinc oxide nanoparticles using *Eclipta prostrata* leaf extract**" during January 2023 to March 2023.

M.K. Murali

Head of the Department
Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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J. Parasuraman

Principal

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Mr. SARAVANASURYA.P** (Register No. P21PH2009) doing II M.Sc. Physics has successfully completed his project work in our College entitled **“Impact Ferrous Ions on Structural, Optical and Antibacterial properties of Zinc Oxide Nanoparticles”** during January 2023 to March 2023.

M.K. Murali

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (AU)
J.J. NAGAR, SIVAPURAM,
PUDUKKOTTAI - 622 422



J. Parasuraman

Principal

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M.Phil., B.Ed., Ph.D.

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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Mr. SIVA PRASATH.K** (Register No. P21PH2010) doing II M.Sc. Physics has successfully completed his project work in our College entitled "**Green synthesis of copper oxide nanoparticles using pyllanthus emblica extract**" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS
J.J. COLLEGE OF ARTS AND SCIENCE (AU),
J.J. NAGAR, SIVAPURAM,
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Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Mr. VIJAY.S** (Register No. P21PH2012) doing II M.Sc. Physics has successfully completed his project work in our College entitled "Structural, Morphological and Optical properties of CuO Nanoparticles prepared through co-precipitation Method" during January 2023 to March 2023.

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Principal

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Date : 12.04.2023

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CERTIFICATE

This is to certify that **Mr. VIGNESH.N** (Register No. P21PH2011) doing II M.Sc. Physics has successfully completed his project work in our College entitled **“Enhancement in the structural and antibacterial properties of CuO nanopowders by a simple soft chemical method through doping of neem leaf extract”** during January 2023 to March 2023.

Th 2 I

Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
P.G. AND RESEARCH DEPARTMENT OF PHYSICS
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G. P.

Principal

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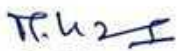


Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that Mr. ANITH.A (Register No. P21PH2013) doing II M.Sc. Physics has successfully completed his project work in our College entitled “Green synthesis and characterization of copper sulphate nanoparticles using *Eclipta prostrata* leaf extract” during January 2023 to March 2023.


Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
PG. AND RESEARCH DEPARTMENT OF PHYSICS
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Principal

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M.Phil., B.Ed., Ph.D.

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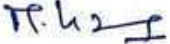


Date : 12.04.2023

Ref :

CERTIFICATE

This is to certify that **Mr. SARAVANAN.T** (Register No. P21PH2014) doing II M.Sc. Physics has successfully completed his project work in our College entitled "Enhancing the structural growth of this thiourea zinc sulphate single crystal" during January 2023 to March 2023.


Head of the Department

Dr. M.K. MURALI, M.Sc., M.Phil., Ph.D.
HEAD AND ASSISTANT PROFESSOR,
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Principal

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