

SAHODARAN AYYAPPAN SMARAKA SNDP Yogam College, Konni

PATHANAMTHITTA, KERALA, PIN- 689691

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MASTER OF SCIENCE IN PHYSICS				
Roll No.	Reg. No.	Name	Project Title/ Topic	
1	19011020171	AMRUTHA S	SYNTHESIS OF NANOCRYSTALLINE BY AN AUTO IGNITING COMBUSTION TECHNIQUE AND IT'S STRUCTURAL SPECTROSCOPIC AND DIELECTRIC PROPERTIES	
2	190011020172	ANAKHA RAJ	SYNTHESIS OF NANOCRYSTALLINE BY AN AUTO IGNITING COMBUSTION TECHNIQUE AND IT'S STRUCTURAL SPECTROSCOPIC AND DIELECTRIC PROPERTIES	
3	190011020173	ANJANA S	SYNTHESIS AND CHARACTERIZATION OF TeO2 THIN FILM	
4	190011020174	ANJANA MOHAN	STRUCTURAL AND OPTICAL PROPERTIES OF BiV1-xMxO4(M=NV,Ta,P) PIGMENTS SYNTHESIZED THROUGH CITRATE-GEL METHOD	
5	190011020175	ARAVIND V RAJ	TROPICAL CYCLONE INTENSITY EXAMINATION USING MACHINE LEARNING TECHNIQUES	
6	190011020176	ARDHRA REMESH	MAGNETIC PROPERTIES OF NANOPARTICLES SYNTHESIZED BY SOL GEL METHOD:THE INFLUENCE OF PARTICLE SIZE- A REVIEW	
7	190011020177	ARYA	SYNTHESIS AND CHARACTERIZATION OF ZINC SULPHIDE NANOSTRUCTURE	
8	190011020178	ARYA U	QUANTUM MECHANICAL STUDY OF NATURAL DYES FOR POSSIBLE APPLICATIONS AS DYE SENSITISED SOLAR CELLS	
9	190011020179	ASWATHY C K	SYNTHESIS AND CHARACTERIZATION OF TeO2 THIN FILM	
10	190011020180	ATHIRA R	SYNTHESIS AND CHARACTERIZATION OF NI DOPED ZnO	



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Roll No.	Reg. No.	Name	Project Title/ Topic
11	190011020181	ATHIRA SANAL	SEMIEMPIRICAL STUDY ON STRUCTURAL AND ELECTRONIC PROPERTIES OF CORROSION INHIBITOR
12	190011020182	GOPIKA GOPAKUMAR	SYNTHESIS AND CHARACTERIZATION OF TeO2 THIN FILM
13	190011020183	JIBIYA BABU	GREEN SYNTHESIS AND CHARACTERISATION OF ZnO NANO PARTICLES AND THEIR ANTIOXIDENT AND ANTI BACTERIAL APPLICATIONS - A REVIEW
14	190011020184	M S GAYATHRY	GREEN SYNTHESIS AND CHARACTERISATION OF ZnO NANO PARTICLES AND THEIR ANTIOXIDENT AND ANTI BACTERIAL APPLICATIONS - A REVIEW
15	190011020185	MALVIKRISHNA M	MAGNETIC PROPERTIES OF NANOPARTICLES SYNTHESIZED BY SOL GEL METHOD:THE INFLUENCE OF PARTICLE SIZE- A REVIEW
16	190011020186	NAIR MEKHA MADHU	SYNTHESIS AND CHARACTERIZATION OF ZnO AND MN DOPED ZnO
17	190011020187	RAVEENA P VENU	SYNTHESIS AND CHARACTERIZATION OF TeO2 THIN FILM
18	190011020188	SILPA NAIR B	SYNTHESIS OF NANOCRYSTALLINE BY AN AUTO IGNITING COMBUSTION TECHNIQUE AND IT'S STRUCTURAL SPECTROSCOPIC AND DIELECTRIC PROPERTIES
19	190011020189	SOUMYA KRISHNA S R	A STUDY ON THE EFFECT OF SINTERING ON THE PHASE EVOLUTION OF PRISTINE MnFe2O4 AND IMPACT OF DYSPROSIUM SUBSTITUTION ON ITS STRUCTURAL PROPERTIES.
20	190011020190	SREELEKSHMI P V	INVESTIGATION ON THE STRUCTURE -PROPERTY RELATIONSHIP OF ANTIOXIDANTS USING QUANTUM MECHANICAL TOOLS
21	19001020191	VEENA SASI	EFFECT OF NEODYMIUM SUBSTITUTION ON THE STRUCTURAL PROPERTIES OF CoFe2O4

CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterisation of Nanocrystalline Ba₃MgNb₂O₃ and Ba₃ZnNb₂O₃ ceramics" was carried by Ms. Amrutha S, under my guidance, in partial fulfilment for the degree of Masters of Science in Physics during the academic year 2019-2021 of Mahatma Gandhi University, Kottayam.

Project Guide

MENT OF RANNY

Dr. Suresh M K Assistant Professor Department of Physics St. Thomas College, Ranni

Date:

Ranni



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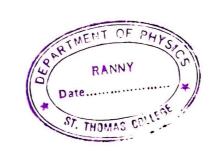
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CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterisation of Nanocrystalline Ba₃MgNb₂O₉ and Ba₃ZnNb₂O₉ ceramics" was carried by Ms. Anakha Raj, under my guidance, in partial fulfilment for the degree of Masters of Science in Physics during the academic year 2019-2021 of Mahatma Gandhi University, Kottayam.

Project Guide Dr. Suresh M K

Assistant Professor Department of Physics St. Thomas College, Ranni





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Date:

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CERTIFICATE

This is to certify that *ANJANA S* (Reg.No: 190011020173) has worked on the project entitled *"SYNTHESIS AND CHARACTERIZATION OF TeO₂ THIN FILM"* under my supervision of the requirement for the award of the Degree Of Master Of Science in Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University, Kottayam.

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Dr JIJOY P MATHEW ASSISTANT PROFESSOR DEPARTMENT OF PHYSICS ST. THOMAS COLLEGE, KOZHENCHERRY



DEPARTMENT OF PHYSICS N.S.S.COLLEGE, PANDALAM

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This is to certify that ANJANA MOHAN (Reg. No. 190011020174) has worked on the project entitled "STRUCTURAL AND OPTICAL PROPERTIES OF $BiV_{1*}M_*O_4$ (M=Nb/Ta) YELLOW PIGMENTS " under my supervision of the requirement for the award of the Degree Of Master Of Science In Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University, Kottayam.

Dr. Mahesh S.K Assistant Professor Department Of Physics N.S.S.College, Pandalam





Artificial Intelligence Research and Intelligent Systems

Professor Ninan Sajeeth Philip, PhD Dean and Director DIN: 08164662

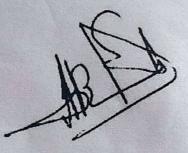
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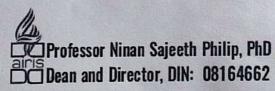
Date: 26/06/2021

Certificate

It is certified that Mr ARAVIND V RAJ (reg. No. 190011020175) has done the Project "TROPICAL CYCLONE INTENSITY ESTIMATION USING MACHINE LEARNING TECHNIQUES" under my supervision and the systematic interaction and guidance of Mr Robin Jacob Roy at airis4D.

It is also certified that the thesis is his original work and that it has not been published or used elsewhere for the award of any degree.





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DEPARTMENT OF PHYSICS

Date 10/8/2021



CERTIFICATE

This is to certify that the report title *"Magnetic properties of nano particles synthesized by Sol-Gel method: The influence of particle size-a review",* submitted to Department of Physics SAS SANDP yogam college, Konni in partial fulfillment of requirements for the award of the degree of Master of Science in Physics is a record of original work carried out by **ARDRA RAMESH** (190011020176) under my guidance.

Mrs. ANJU RATHEESH Head of the department of Physics SAS SNDP Yogam College Konni Konni, 10/08/21



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Dr.Arun Aravind Research Guide and Assistant Professor Department of Physics Email: <u>bmcarun@gmail.com</u> Phone: 9447946947

This is to certify that dissertation entitled **"SYNTHESIS** AND CHARACTERIZATION OF ZINC SULPHIDE NANOPARTICLES" is a record of original work carried out by Ms.ARYA (RegNo:190011020177) under my supervision and guidance during 2020-2021 in partial fulfillment of the requirement for the award of the degree of Master of Science in Physics (Electronics), under Mahatma Gandhi University, Kottayam. Neither this dissertation nor any part of it has been submitted for any degree or diploma to any institute or university in India or abroad.

Thanking you,

Dr.Arun Aravind Supervising Teacher



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CERTIFICATE

This is to certify that ARYA U (Reg.No. 190011020178) has worked on the project entitled "QUANTUM MECHANICAL STUDY OF NATURAL DYES FOR POSSIBLE APPLICATIONS AS DYE SENSITIZED SOLAR CELLS" under my supervision of the requirement for the award of the Degree Of Master Of Science In Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University,Kottayam.



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Dr. S. SARAVANAKUMAR Assistant Professor Department of Physics NSS College, Pandalam



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CERTIFICATE

This is to certify that ASWATHY C K (Reg.No: 190011020179) has worked on the project entitled "SYNTHESIS AND CHARACTERIZATION OF TeO_2 THIN FILM" under my supervision of the requirement for the award of the Degree Of Master Of Science in Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University, Kottayam.

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Dr.D.Sajan

Associate Professor Head of the Department Email: <u>drsajanbmc@gmail.com</u> Phone:9495043765

10 August 2021

Certificate

This is certify to that dissertation entitled "SYNTHESIS AND CHARACTERIZATION OF Ni DOPED ZINC OXIDE NANOPARTICLES" record of original work carried out by Ms.ATHIRA R is a (RegNo:190011020180) under my supervision and guidance during 2020-2021 in partial fulfillment of the requirement for the award of the degree of Master of Science in Physics (Electronics), under Mahatma Gandhi University, Kottayam. Neither this dissertation nor any part of it has been submitted for any degree or diploma to any institute or university in India or abroad.

Dr. D. Sajan Supervising Teacher



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This is to certify that ATHIRASANAL (Reg.NO. 190011020181) has worked on the project entitled "SEMI EMPIRICAL STUDY ON THE STRUCTURAL AND ELECTRONIC PROPERTIES OF CORROSION INHIBITORS "under my supervision of the requirement of the award of the Degree in Master of Science during the year 2019-2021 under the faculty of science of Mahatma Gandhi University Kottayam.

Dr .S. Saravana Kumar Assistant professor Department of physics, N.S.S College , Pandalam

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CERTIFICATE

This is to certify that **GOPIKA GOPAKUMAR** (Reg.No: 190011020182) has worked on the project entitled "SYNTHESIS AND CHARACTERIZATION OF **TeO₂ THIN FILM**" under my supervision of the requirement for the award of the Degree Of Master Of Science in Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University, Kottayam.

Dr JIJÓY P MATHEW ASSISTANT PROFESSOR DEPARTMENT OF PHYSICS ST. THOMAS COLLEGE, KOZHENCHERRY



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Date. 10/8/2021



CERTIFICATE

This is to certify that the report title *"Green synthesis and characterization of ZnO nanoparticles and their antioxidant and antibacterial applications-a review"*, submitted to Department of Physics SAS SANDP yogam college, Konni in partial fulfillment of requirements for the award of the degree of Master of Science in Physics is a record of original work carried out by JIBIYA BABU (190011020183) under my guidance.

Mrs. ANJU RATHEFSH Head of the department of Physics SAS SNDP Yogam College Konni Konni, 10/08/21

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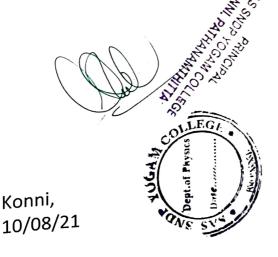
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Date 10/8/2021

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M

Mrs. ANJU RATHEESH Head of the department of Physics SAS SNDP Yogam College Konni



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Date 10/8/2021



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Konni, 10/08/21

Mrs. ANJU RATHEESH Head of the department of Physics SAS SNDP Yogam College Konni





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Dr.Arun Aravind Research Guide and Assistant Professor Department of Physics Email: <u>bmcarun@gmail.com</u> Phone: 9447946947

This AND is entitled **"SYNTHESIS** to certify that dissertation **CHARACTERIZATION** ZINC **OXIDE** DOPED **O**F MANGANESE NANOPARTICLES" is a record of original work carried out by Ms. NAIR MEKHA MADHU (Reg. No: 190011020186) is a record of original work carried out by under my supervision and guidance during 2020-2021 in partial fulfillment of the requirement for the award of the degree of Master of Science in Physics (Electronics), under Mahatma Gandhi University, Kottayam. Neither this dissertation nor any part of it has been submitted for any degree or diploma to any institute or university in India or abroad.

Thanking you,

fur chizo-

Dr.Arun Aravind Supervising Teacher



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CERTIFICATE

This is to certify that *RAVEENA P VENU* (Reg.No: 190011020187) has worked on the project entitled "SYNTHESIS AND CHARACTERIZATION OF TeO_2 *THIN FILM*" under my supervision of the requirement for the award of the Degree Of Master Of Science in Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University, Kottayam.

Knol

Dr JÍJOY P MATHEW ASSISTANT PROFESSOR DEPARTMENT OF PHYSICS ST. THOMAS COLLEGE, KOZHENCHERRY



CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterisation of Nanocrystalline Ba₃MgNb₂O₉, Ba₃ZnNb₂O₉ ceramics" was carried by Ms.SILPA NAIR B, under my guidance, in partial fulfilment for the degree of Masters of Science in Physics during the academic year 2019-2021 of Mahatma Gandhi University, Kottayam.

Project Guide Dr. Suresh M K

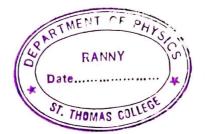
Assistant Professor Department of Physics St. Thomas College, Ranni

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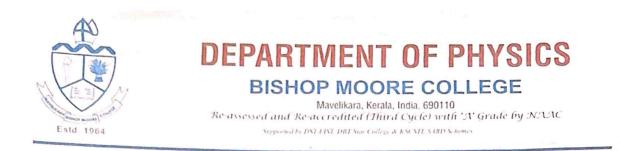
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<u>Certífícate</u>

This is to certify that the dissertation entitled "A Study on the Effect of Sintering on the Phase Evolution of Pristine MnFe₂O₄ and Impact of Dy Substitution on its Structural Properties" is an original and independent work done by Soumya Krishna S. R. (Reg. No : 190011020189) in partial fulfilment for the award of degree of Master of Science in physics. It is a bonafide work carried out by her under my guidance and supervision during the academic year 2019-2021. This dissertation partially or fully has not been submitted for any other degree or diploma of this university or other universities.



Dr. Líja X Joy Assistant professor (Supervising guide)

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CERTIFICATE

This is to certify that SREELEKSHMI.P.V(Reg.No. 190011020190) has worked on the project entitled "INVESTIGATION ON THE STRUCTURE-PROPERTY RELATIONSHIP OF ANTIOXIDANTS USING QUANTUM MECHANICAL TOOLS " under my supervision of the requirement for the award of the Degree Of Master Of Science In Physics during the year 2019-2021, under the faculty of science of Mahatma Gandhi University,Kottayam.



Dr.S.Saravana Kumar Assistant Professor Department of physics, N.S.S College,Pandalam

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<u>Certífícate</u>

This is to certify that the dissertation entitled "Effect of Neodymium substitution on the structural properties of $CoFe_2O_4$ " is an original and independent work done by Veena Sasi (Reg. No : 190011020191) in partial fulfilment for the award of degree of Master of Science in physics. It is a bonafide work carried out by her under my guidance and supervision during the academic year 2019-2021. This dissertation partially or fully has not been submitted for any other degree or diploma of this university or other universities.



Dr. Líja K Joy Assistant professor (Supervising guide)