



Sree Siddaganaga Education Society (R)

Siddaganga Institute of Technology

(An Autonomous Institution Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC with 'A++' grade & ISO 9001:2015 certified)

B.H. Road, Tumakuru- 572 103, Karnataka, INDIA.

Ph. Direct +91-816-2282696, 2214001 (Off.) +91-816-224000 Fax: +91 816 2282994
E-mail: principal@sit.ac.in, Web. www.sit.ac.in

Dr. G. NAGARAJU

Assoc. Professor

Energy Materials Research Laboratory

Dept. of Chemistry

Siddaganga Institute of Technology

Tumakuru-572103

Mobile: 9448808353

9620157141

E-mail: nagarajugn@sit.ac.in

nagarajugn@gmail.com

To,

01-08-2024

The Principal

Sahyadri Science College

Shivamogga-577203

It is my pleasure to certify that, the list of the following students from department of PG Studies and Research in Chemistry, Sahyadri Science College, Shivamogga, has carried out an internship on the topic "**Combustion synthesized $\text{Cu}_3\text{Mo}_2\text{O}_9$ nanomaterial: A pathway to sustainable biofuels and effective photocatalytic degradation**" from 8th of January to 24th of January of 2024, in our esteemed institution. And also I would like to inform that I am satisfied with their performance.

Detailsof the student

Name	Register Number	Programme
Varsha N Pawar	P06CS22S032011	M.Sc. IV Semester

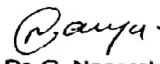
Date: 24-01-2024

Place: Tumkur

Signature


PRINCIPAL

SAHYADRI SCIENCE COLLEGE
(Constituent College of Kuvempu University)
SHIMOGGA, Karnataka State.


Dr. G. Nagaraju
M.Sc., Ph.D.,
Associate Professor
Department of Chemistry
Siddaganga Institute of Technology
Tumakuru - 572 103





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01-08-2024

To,

The Principal

Sahyadri Science College

Shivamogga-577203

It is my pleasure to certify that, the list of the following students from department of PG Studies and Research in Chemistry, Sahyadri Science College, Shivamogga, has carried out an internship on the topic "**Synthesis and Characterization of NiMn₂O₄ NPs via combustion using green fuel for efficient photocatalytic dye degradation and colourless effluent remediation**" from 8th of January to 24th of January of 2024, in our esteemed institution. And also I would like to inform that I am satisfied with their performance.

Detailsof the student

Name	Register Number	Programme
Shilpa H A	P06CS22S032012	M.Sc. IV Semester

Date: 24-01-2024

Place: Tumkur

Signature

Dr. G. Nagaraju
M.Sc., Ph.D.,
Associate Professor
Department of Chemistry
Siddaganga Institute of Technology
Tumakuru - 572 103





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Assoc. Professor

Energy Materials Research Laboratory

Dept. of Chemistry

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Tumakuru-572103

Mobile: 9448808353

9620157141

E-mail: nagarajugn@sit.ac.in

nagarajugn@gmail.com

01-08-2024

To,

The Principal

Sahyadri Science College

Shivamogga-577203

It is my pleasure to certify that, the list of the following students from department of PG Studies and Research in Chemistry, Sahyadri Science College, Shivamogga, has carried out an internship on the topic "Green synthesis of MnMo₄nanomaterials via Garcinia Combogiaseed powder for photocatalytic dye degradation and colourless effluent remediation" from 8th of January to 24th of January of 2024, in our esteemed institution. And also I would like to inform that I am satisfied with their performance.

Detailsof the student

Name	Register Number	Programme
Sneha M M	P06CS22S032006	M.Sc. IV Semester

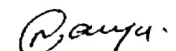
Date: 24-01-2024

Place: Tumkur

Signature


PRINCIPAL

SAHYADRI SCIENCE COLLEGE
(Constituent College of Kuvempu University)
SHIMOGA, Karnataka State.


Dr. G. Nagaraju
M.Sc., Ph.D.,
Associate Professor
Department of Chemistry
Siddaganga Institute of Technology
Tumakuru - 572 103





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Dr. G. NAGARAJU

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nagarajugn@gmail.com

To

01-08-2024

The Principal

Sahyadri Science College

Shivamogga-577203

It is my pleasure to certify that, the list of the following students from department of PG Studies and Research in Chemistry, Sahyadri Science College, Shivamogga, has carried out an internship on the topic "Synthesis and characterization of green combustion derived $\text{CuNiMn}_2\text{O}_4$ nanoparticles using Garcinia Combogiaseed powder for efficient photocatalytic dye degradation and colourless effluent remediation" from 8th January to 24th of January, 2024, in our esteemed institution. Also I would like to inform that I am satisfied with their performance.

Details of the student

Name	Register Number	Programme
Bindu T	P06CS22S032005	M.Sc. IV Semester

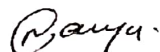
Date: 24-01-2024

Place: Tumkur

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(Constituent College of Kuvempu University)
SHIMOGA, Karnataka State.


Dr. G. Nagaraju
M.Sc., Ph.D.,
Associate Professor
Department of Chemistry
Siddaganga Institute of Technology
Tumakuru - 572 103



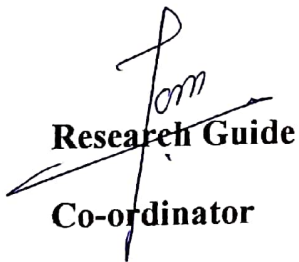
KUVEMPU UNIVERSITY
DEPARTMENT OF PG STUDIES AND RESEARCH IN CHEMISTRY
SAHYADRI SCIENCE COLLEGE, SHIVAMOGGA-577203

CERTIFICATE

This is to certify that the project work report entitled “Combustion-Synthesized $\text{Cu}_3\text{Mo}_2\text{O}_9$ Nanomaterials: Effective Photocatalytic Degradation of Dyes and Colorless Effluents” is carried out by **VARSHA N PAWAR** submitted for the partial fulfillment of academic curriculum of M.Sc. Chemistry, IV semester, under the guidance of **Dr. Yuvaraj T.C.M.**, Associate Professor Department of PG Studies and Research in Chemistry, Sahyadri Science College, Shivamogga-577203.

I further declare that this Dissertation or any part of it has not been submitted elsewhere for any other department or diploma to any other University or Institute.

Signature


Research Guide
Co-ordinator

Dr. Yuvaraj T.C.M.


PRINCIPAL
SAHYADRI SCIENCE COLLEGE
(Constituent College of Kuvempu University)
SHIMOGA, Karnataka State.


Dr. Prabhakar Chavan
M.Sc., M.Phil., Ph.D.
Assistant Professor & Co-ordinator
Dept. of PG Studies & Research in Chemistry
Sahyadri Science College
Kuvempu University, Shivamogga-577203

2023-2024

KUVEMPU UNIVERSITY

Sahyadri Science College

Shivamogga-577203

CERTIFICATE

This is to certify that the project work report entitled "**Synthesis and Characterization of $\text{NiMn}_2\text{O}_4\text{NPs}$ via Combustion Using Green Fuel for Efficient Photocatalytic Dye Degradation and Colourless Effluent Remediation**" is carried out by **Shilpa H A** submitted for the partial fulfillment of academic curriculum of **M.Sc. Chemistry, IV semester**, under the guidance of **Dr. Yuvaraj T.C.M.**, Guest lecturer, Department of Chemistry, Sahyadri Science College -577203.

I further declare that this Dissertation or any part of it has not been submitted elsewhere for any other department or diploma to any other University or Institute.

Signature

Research Guide

Dr. Yuvaraj T.C.M,

Co-ordinator

Dr. Prabhakar Chavan

M.Sc., M.Phil., Ph.D.

Assistant Professor & Co-ordinator
Dept. of PG Studies & Research in Chemistry
Sahyadri Science College
Kuvempu University, Shivamogga-577203

Raj-a-N

PRINCIPAL

SAHYADRI SCIENCE COLLEGE

(Constituent College of Kuvempu University)

SHIMOGGA, Karnataka State.

Examiners

1. _____

2. _____



2023-2024

KUVEMPU UNIVERSITY

Sahyadri Science College

Shivamogga-577203

CERTIFICATE

This is to certify that the project work report entitled "**Green Synthesis of $MnMoO_4$ Nanomaterials via *Garcinia Cambogia* Seed Powder for Photocatalytic Dye Degradation and Colorless Effluent Remediation**" is carried out by Sneha M M submitted for the partial fulfillment of academic curriculum of **M.Sc. Chemistry, IV semester**, under the guidance of **Dr.K.P.Latha**, Guest lecturer, Department of Chemistry, Sahyadri Science College -577203.

I further declare that this Dissertation or any part of it has not been submitted elsewhere for any other department or diploma to any other University or Institute.

Signature



Research Guide

Dr.K.P.Latha,



Co-ordinator

Dr. Prabhakar Chavan

M.Sc., M.Phil., Ph.D.

Assistant Professor & Co-ordinator

Dept. of PG Studies & Research in Chemistry

Sahyadri Science College

Kuvempu University, Shivamogga-577203



PRINCIPAL

SAHYADRI SCIENCE COLLEGE

(Constituent College of Kuvempu University)

SHIMOGA, Karnataka State.

Examiners

1. _____

2.



KUVEMPU UNIVERSITY

Sahyadri Science College

Shivamogga-577203

CERTIFICATE

This is to certify that the internship work report entitled "Synthesis and Characterization of Green Combustion Derived $\text{CuNiMn}_2\text{O}_4$ Nanoparticles Using Garcinia Cambogia Seed Powder For Efficient Photolytic Dye Degradation and Colourless Effluent Remediation" is carried out by Bindu T submitted for the partial fulfilment of academic curriculum of M.Sc. Chemistry, IV semester, under the guidance of Dr. K P Latha, Professor Department of Chemistry, Sahyadri Science College -577203.

I further declare that this Dissertation or any part of it has not been submitted elsewhere for any other department or diploma to any other University or Institute.

Signature


Research Guide

Dr. K P Latha,




Co-ordinator

Dr. Prabhakar Chavan

M.Sc., M.Phil., Ph.D.
Assistant Professor & Co-ordinator
Dept. of PG Studies & Research in Chemistry
Sahyadri Science College
Kuvempu University, Shivamogga-577203

Examiners

1. _____

2. _____

GST : 29BSDPS2997H129

Ph : 08182-475355
© 9886243332
B 9164221219



BHARATH HALLMARKING CENTER (*Chivalry is of Gold, Silver & Platinum*)

Gandhi Bazaar, 2nd Cross, Uppar keri, Shivamogga - 577202
E-mail : bharathhallmarking2023@gmail.com

Rf.No:

Date:

To,

The Principal

Sahyadri Science College

Shivamogga-577203

It is my pleasure to certify that, the list of the following students from department of PG Studies and Research in Chemistry, Sahyadri Science College, Shivamogga, has carried out an internship on the topic '**GOLD REFINING AND HALLMARKING**' from 5th of February to 10th of February of 2024, in our esteemed centre. And also I would like to inform that I am satisfied with their performance.

List of the students

Name	UUCMS Number	Programme
Ananya A	U06CS21S0200	B.Sc. VI Semester
Chandana R	U06CS21S0110	B.Sc. VI Semester
Deeksha M	U06CS21S0865	B.Sc. VI Semester
Kavya D	U06CS21S0152	B.Sc. VI Semester
H C Sanjana	U06CS21S0203	B.Sc. VI Semester
Reena J M	U06CS21S0112	B.Sc. VI Semester
RakshitakKadaramandalagi	U06CS21S0164	B.Sc. VI Semester
Shrinidi S	U06CS21S0121	B.Sc. VI Semester

Date: 10-02-2024

Place: Shivamogga

[Signature]
PRINCIPAL

SAHYADRI SCIENCE COLLEGE
(Constituent College of Kuvempu University)
SHIMOGA, Karnataka State.



KUVEMPUR UNIVERSITY



DEPARTMENT OF PG STUDIES AND RESEARCH IN CHEMISTRY

SAHYADRI SCIENCE COLLEGE, SHIVAMOGGA-577203

A Project Report On

“Combustion-Synthesized $\text{Cu}_3\text{Mo}_2\text{O}_9$ Nanomaterials: Effective Photocatalytic Degradation of Dyes and Colorless Effluents’

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

Master of Science

In

Chemistry

Submitted to

Department of PG studies and Research in Chemistry

Sahyadri Science College, Shivamogga-577203

Submitted by

Varsha N Pawar(Reg. No. PO6CS22S032011)

M.Sc., 4th Semester

Under the Guidance of

Dr. Yuvaraj T.C.M M.Sc.,M.Phil.,Ph.D

Associate Professor

Department of PG Studies and Research in Chemistry

Sahyadri Science College, Shivamogga-577203



2023-2024

P. a. n.
PRINCIPAL

SAHYADRI SCIENCE COLLEGE
(Constituent College of Kuvempu University)
SHIMOGGA, Karnataka State.

KUVEMPU UNIVERSITY

Sahyadri Science College,

Shivamogga-577203

A Project Report On

"Synthesis and Characterization of NiMn_2O_4 NPs via Combustion Using Green Fuel for Efficient Photocatalytic Dye Degradation and Colourless Effluent Remediation."

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

Master of Science

In

Chemistry

Submitted to

Department of PG studies and Research in Chemistry

Sahyadri Science College, Shivamogga-577203

Submitted

by

Shilpa H A

Reg. No. P06CS22S032012

M.Sc., 4th Semester

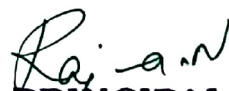
Under the Guidance of

Dr. Yuvaraj T.C.M

Associate professor

Department of Chemistry

Sahyadri Science College, Shivamogga-577203


PRINCIPAL

SAHYADRI SCIENCE COLLEGE

(Constituent College of Kuvempu University)

SHIMOGA, Karnataka State.

KUVEMPU UNIVERSITY

Sahyadri Science College,

Shivamogga-577203

A Project Report On

"Green Synthesis of MnMoO_4 Nanomaterials via Garcinia Cambogia Seed Powder for Photocatalytic Dye Degradation and Colorless Effluent Remediation."

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

Master of Science

In

Chemistry

Submitted to

Department of PG studies and Research in Chemistry

Sahyadri Science College, Shivamogga-577203

Submitted

by

Sneha M M

Reg. No. P06CS22S032006

M.Sc., 4th Semester

Under the Guidance of

Dr.K.P.Latha

Professor

Department of Chemistry

Sahyadri Science College, Shivamogga-577203

Raj-an

PRINCIPAL

SAHYADRI SCIENCE COLLEGE

(Constituent College of Kuvempu University)

SHIMOGA, Karnataka State.



KUVEMPU UNIVERSITY

Sahyadri Science College,

Shivamogga-577203

A Internship Report On

**“Synthesis and Characterization of Green Combustion Derived CuNiMn₂O₄
Nanoparticles Using Garcinia Cambogia Seed Powder For Efficient Photolytic Dye
Degradation and Colourless Effluent Remediation”**

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

Master of Science

In

Chemistry

Submitted to

Department of PG studies and Research in Chemistry

Sahyadri Science College, Shivamogga-577203

Submitted

by

Bindu T

Reg. No. P06CS22S032005

M.Sc., 4th Semester

Under the Guidance of

Dr.K P Latha

Professor

Department of Chemistry

Sahyadri Science College, Shivamogga-577203

