

**Students undertaking field projects / research projects / internships
during the year 2022-23**

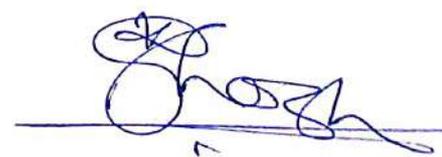
DEPARTMENT/ Institute	PAGE NO.
School of Studies in Chemistry	1 - 118

Dissertation Work
M.Sc. Chemistry (4th Semester)
Session 2022-23
School of Studies in Chemistry
Pt. Ravishankar Shukla University, Raipur

S.N.	Name of Student	Title of Dissertation Work	Supervised by
1.	Aanchal Verma	Host-Guest Complexation of β -Cyclodextrin with Imidazolium based Ionic Liquids	Prof. Kallol K. Ghosh
2.	Akanksha Singh	Spectrophotometric method for the determination of Fenoxyprop-p-ethyl herbicide using Fe(II) via Charge transfer complex	Prof. M. K. Rai
3.	Amit Kumar Mahant	Identification of Microplastics by FTIR Spectroscopy	Prof. Manas Kanti Deb
4.	Ankit Verma	One pot synthesis of graphene nano ink for electrochemical application.	Prof. Kamlesh K. Shrivastava
5.	Bhawesh Sinha	Synthesis and Characterization of Silver Nanoparticle from different plant extract	Dr. Sanyukta Patel
6.	Bodheswar Dhurve	Succinhydroxamate ion Mediated Hydrolytic Cleavage of Organophosphorus compound in Cationic Micelles Media	Dr. Manmohan L. Satnami
7.	Deepak Kumar Sahu	Spectrophotometric determination of Paraquat dichloride	Prof. M. K. Rai
8.	Deepesh Kumar Jagat	Spectrophotometric determination of Chromium concentration in different environmental water Samples.	Prof. Kamlesh K. Shrivastava
9.	Deepti Verma	Analysis of pesticide residue in agricultural sample using HPLC	Prof. Manas Kanti Deb
10.	Durgawati	Anionic components in ground water of Chhattisgarh.	Prof. Manas Kanti Deb
11.	Durgesh Nandini	B-Functionalized Tea Derived Carbon Based Smart Nano Bags for Methylene blue Removal	Dr. Indrapal Karbhal
12.	Durgeshwari	Inclusion Complexation of Antidepressants Drugs with β -Cyclodextrin	Prof. Kallol K. Ghosh
13.	Ekta Pandey	Determination of toxic element in waste water sample of Raipur, Chhattisgarh	Prof. Shamsh Pervez
14.	Gayatri Sahu	Role of Carboxyl-Functionalized Green Fluorescence Carbon Quantum Dots For Sensing of Mercury and Lead	Dr. Indrapal Karbhal
15.	Geetanjali	Determination of hardness of water samples using complexometric titration method	Prof. Kamlesh K. Shrivastava
16.	Jagriti Sahu	Determination of selected anions in waste water sample of Raipur by using ion chromatography.	Prof. Shamsh Pervez
17.	Jaya Sinha	Spectrophotometric determination of iron content in indigenous green leafy vegetables consumed in Chhattisgarh	Prof. Kamlesh K. Shrivastava
18.	Jinesh Kumar	Green Synthesis of Magnetic Nanoparticle via Murraya Koenigii	Dr. Sanyukta Patel


Head
 School Of Studies In Chemistry
 Pt. Ravishankar Shukla University
 RAIPUR (C.G.)

19.	Kunver Tejesver Vaidh	A sensitive spectrometric determination of Lambda-Cyhalothrin using Leuco-malachite Green	Prof. M. K. Rai
20.	Lilima Yadav	Determination of toxic metals concentration in airborne particulate matter using atomic absorption spectroscopy	Prof. Shamsh Pervez
21.	Litesh Kumar Thakur	Phytochemical screening and HPTLC fingerprinting of plant extract	Prof. Manas Kanti Deb
22.	Lokeshwar	Colorimetric determination of Kitazin by using functionalized silver Nanoparticle	Dr. Sanyukta Patel
23.	Meenu	Evaluation of the concentration of nitrogen dioxide from different anthropogenic activities in ambient air over urban environment f Chhattisgarh	Prof. Shamsh Pervez
24.	Mehul Nareti	Micelles Catalysed Hydrolysis of p-nitrophenyl Diphenyl Phosphate (PNPDPP)	Dr. Manmohan L. Satnami
25.	Minakshi Patel	Green Synthesis of Magnetic Nanoparticles using Tea Extracts	Prof. Kallol K. Ghosh
26.	Mukesh Kumar	Spectrophotometric determination of Imidacloprid	Prof. M. K. Rai
27.	Namrata Sahu	Optimization of 1D And 2D-NMR Profiling of Some Selected Edible Oils	Prof. Manas Kanti Deb
28.	Namrata Sahu	Synthesis of Silver Nanoparticle for determination of Mn ²⁺ as Chemical Sensor	Dr. Sanyukta Patel
29.	Nidhi Gupta	Detection of Gultathione using Gold Nanocluster Manganese Dioxide Nanosheets	Dr. Manmohan L. Satnami
30.	Nohar Singh	Nitrogen Doped Carbon Quantum Dots Sensor For the Detection of Fe ³⁺ ions	Dr. Manmohan L. Satnami
31.	Pooja Chandravanshi	Application of pencil graphite electrode in Cyclic voltammetry analysis	Prof. Kamlesh K. Shrivastava
32.	Pooja Das	Contaminations of heavy metals in milk, soil and water samples from industrial area of Bharpuri, Raipur.	Prof. Kamlesh K. Shrivastava
33.	Prabha Chandrakar	Green synthesis of silver nanoparticle by Manilkara zapota extract & their antimicrobial activity	Prof. Manas Kanti Deb
34.	Prabha Chaturvedi	Determination of toxic metals concentration in ambient particulate matter using atomic absorption spectroscopy.	Prof. Shamsh Pervez
35.	Pragya Sahu	A comprehensive review of microplastic analysis in food samples.	Prof. Kamlesh K. Shrivastava
36.	Pratiksha Kashyap	Comparative study on Synthesis & Characterization of Nitrogen, Boron and Nitrogen- Sulphur doped Quantum Dots.	Dr. Sanyukta Patel
37.	Preeti	Synthesis of Silver Nanoparticle and applications for Detection of Pb ²⁺	Dr. Manmohan L. Satnami
38.	Raghvendra	Synthesis of Silver Fabricated Nitrogen doped Carbon Quantum Dots As Chemisensor for the Spectrofluorometric Detection of Hg ²⁺ ions and Captopril	Dr. Indrapal Karbhal
39.	Roshan Lal Verma	Synthesis & Characterization of conducting silver poly aniline nanocomposite	Prof. Kamlesh K. Shrivastava
40.	Rupali Sahu	Synthesis and Characterization of Silver Nanoparticles/ Carbon Quantum Dots Nanocomposites	Prof. Kallol K. Ghosh



41.	Rupesh Kumar Murkute	Synthesis of functionalized nanoparticles and their characterization	Prof. Manas Kanti Deb
42.	Sakshi Mishra	Seasonal dynamic and chemical characterization of water-soluble inorganic ions in west water: insights from Raipur, (cg).	Prof. Shamsheer Pervez
43.	Sangeeta Patel	Forster Resonance Energy Transfer (FRET) Between Nitrogen Doped Carbon Quantum Dots and Gold Nanoparticle for Detection of Hg ²⁺	Dr. Manmohan L. Satnami
44.	Sanjay Kumar Sahu	Photocatalytic Degradation of Methylene Blue Using Molybdenum Sulphide Nanostructures	Dr. Manmohan L. Satnami
45.	Shashank Baghel	Synthesis Characterization and application of Gold Nanoparticle in detection of Metal ion	Dr. Manmohan L. Satnami
46.	Shikha Verma		
47.	Soumi Banerjee	A modified Fujiwara reaction for the determination of Captan using Spectrophotometric method	Prof. M. K. Rai
48.	Swati Dadsena	PANI grafted N-doped Carbon From Waste Tea: A Robust Material for High-Performance Supercapacitor	Dr. Indrapal Karbhal
49.	Tamesh	A New Insight into Highly Fluorescent Nitrogen-Sulphur Co-doped Graphene Quantum Dots for Detection of Ofloxacin	Prof. Kallol K. Ghosh
50.	Tushar Kumar Dhruw	Study on the Assembly Structure Variation of Cetyl Trimethyl Ammonium Bromide on the Surface of Silver Nanoparticles	Prof. Kallol K. Ghosh
51.	Tushar Sahu	Spectrophotometric determination of Phenthoate	Prof. M. K. Rai
52.	Upendra	PANI grafted N-doped Carbon Sphere As High-performance Supercapacitor Electrode	Dr. Indrapal Karbhal
53.	Varsha Janghel	Determination of SO ²⁻ concentration from solid fuel burning activity	Prof. Shamsheer Pervez
54.	Varsha Sahu	Ruthenium Oxide Nanoparticles Decorated on Nitrogen Doped Carbon Nano onion as High-performance Supercapacitor.	Dr. Indrapal Karbhal
55.	Veena	Boron Doped carbon Derived from Sugarcane Bagasse for Supercapacitor and Dye Removal	Dr. Indrapal Karbhal
56.	Versha Verma	Dye Removal of N-Doped Carbon Nano Onion From Automobile Emitted Black Carbon	Dr. Indrapal Karbhal
57.	Vinita Yadu	Micellization Behaviour of Cationic and Anionic Surfactants in the presence of Imidazolium based Ionic Liquids	Prof. Kallol K. Ghosh

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

**HOST-GUEST COMPLEXATION OF
 β -CYCLODEXTRIN WITH IMIDAZOLIUM-BASED
IONIC LIQUIDS**

**A DISSERTATION
SUBMITTED
TO
SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

**SUBMITTED BY
AANCHAL VERMA
(M. Sc. IV Semester)**

UNDER THE SUPERVISION OF

Prof. KALLOL K. GHOSH

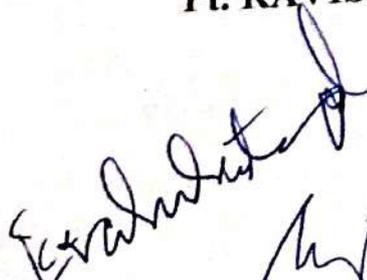
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SCHOOL OF STUDIES IN CHEMISTRY**

Pt. RAVISHANKAR SHUKLA UNIVERSITY, Raipur (C.G.)

2023


12/7




12/9/23


12/9/23



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY,

RAIPUR-492 010, CHHATTISGARH (INDIA)

Prof. KALLOL K. GHOSH

Raipur, 492010, C.G. (INDIA)

M. Sc., Ph. D.

Mobile : 9425216204

Professor

Email : kallolkghosh@gmail.com

INSA-JSPS VISITING FELLOW

LIFE MEMBER

Indian Association for Cultivation of Science

Indian Science Congress Association,

Indian Society for Surface Science & Technology

Chemical Research Society of India

Ref. No.:

Date : 19-06-23

CERTIFICATE BY THE SUPERVISOR

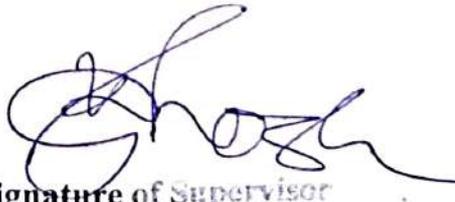
This is to certify that the work entitled, "HOST-GUEST COMPLEXATION OF β -CYCLODEXTRIN WITH IMIDAZOLIUM-BASED IONIC LIQUIDS" is a piece of project work done by AANCHAL VERMA, M. Sc. IV Semester, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur under my guidance and supervision for the degree of Master in Chemistry at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

To the best of my knowledge and belief the thesis:

1. Embodies the work of the candidate herself,
2. Has duly been completed,
3. Fulfills the requirements of the ordinance relating to the M.Sc. degree of the university, and
4. Is up to the standard both in respect of contents and language for being referred to the examiner.


Signature of the Head

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Signature of Supervisor

Dr. Kallol K. Ghosh 19/6/23
Professor and Head
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

**SPECTROPHOTOMETRIC METHOD FOR THE
DETERMINATION OF FENOXAPROP-P-ETHYL HERBICIDE
USING Fe(II) VIA CHARGE TRANSFER COMPLEX**

**A
PROJECT
SUBMITTED
TO**



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGARH**

SUBMITTED BY:

AKANKSHA SINGH

UNDER THE SUPER VISION OF:

PROF. MANISH K. RAI

SCHOOL OF STUDIES IN CHEMISTRY

**PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGARH**

2022-23

CERTIFICATE

This is to certify that **Miss Akanksha Singh** has completed the dissertation work entitled “ Spectrophotometric method for the determination of fenoxaprop-p-ethyl herbicide using Fe(II) via charge transfer complex.” under my supervision for the degree of “**Master of Science in Chemistry**”. The dissertation embodies the observation, interpretation and conclusion of his study.

She is allowed to submit the present work for the award of “ **Master of Science in Chemistry**” of Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.



Head of Department
Prof. Kallol K. Ghosh
School of studies in Chemistry
Pt. Ravishankar Shukla University,
Raipur (C.G)

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR, (C.G.)


29/05/2023

Prof. Manish K. Rai
(Supervisor)
School of studies in Chemistry
Pt. Ravishankar Shukla University,

DR. M.K. RAI
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.) 492010 INDIA

"IDENTIFICATION OF MICROPLASTICS BY FTIR"

A
Project Submitted to

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

FOR
THE DEGREE OF

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED
BY

AMIT KUMAR MAHANT
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
PROF. MANAS KANTI DEB



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23

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12/7/23



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. MANAS KANTI DEB

M.Sc., Ph.D.

Professor

INSA-JSPS Visiting Fellow

LIFE MEMBER

Indian Science Congress Association,

Indian Chemical Society,

Director-NCNR

Head, SOS in Environmental Science

Editor-in-Chief, J Ravishankar

University (Part-B, Science)



: (0771)2262843 (Off.)



: 94255-03750

Fax

: 91(771)2262583

Email

: debmanas@yahoo.com

CERTIFICATE

This is to certify that Amit Kumar Mahant M.Sc. Chemistry IV semester has been completed a project on "Identification of microplastics by FTIR". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors.

21.06.2023
Prof. Manas Kanti Deb

Dr. Manas Kanti Deb
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492010, C.G.
E-mail: debmanas@yahoo.com
Cell +91-9425503750

**“ONE-POT SYNTHESIS OF GRAPHENE
NANO INK FOR ELECTROCHEMICAL
APPLICATION”**

**A
Project Submitted to**

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

**ANKIT VERMA
(M.Sc. IV Sem. CHEMISTRY)**

**Under the supervision of
Prof. KAMLESH KUMAR SHRIVAS**



**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)**

**INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23**



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

CERTIFICATE

This is to certify that Ankit Verma M.Sc. Chemistry IV semester has been completed a project on "One-pot synthesis of graphene nano ink for electrochemical application". This project is submitted for the fulfillment degree in chemistry.

I wish her for bright future

K. Shrivastava

Signature 17/06/23

Prof. Kamlesh K. Shrivastava

Dr. Kamlesh Kumar Shrivastava
Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)

A
Project Report
On

Synthesis and characterization of Silver nano particle from different plant
extract

A project submitted to Pt. Ravishankar Shukla University Raipur (C.G.) for
the Degree of Master of Science in Chemistry



SoS in Chemistry
Pt. Ravishankar Shukla University
Raipur (C.G.)

Supervisor:

Dr. Sanyukta Patel

Submitted By:

Bhawesh Sinha

M.Sc. Chemistry (IV Sem)

Handwritten signatures and dates:
12/17/23
12/17/23
14/12/23

SoS in Chemistry

Pt. Ravishankar Shukla University

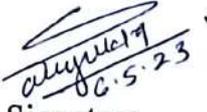
Raipur (C.G.)



Certificate

This is to certify that Bhawesh Sinha (M.Sc. Chemistry IV semester) has been completed a project on the topic "Synthesis and characterization of Silver nano particle from different plant extract" This project is submitted for the fulfillment Master Degree in Chemistry.

I wish him for bright future


Signature

Dr. Sanyukta Patel

**SUCCINIHYDROXAMATE ION MEDIATED HYDROLYTIC
CLEAVAGE OF ORGANOPHOSPHORUS COMPOUND IN
CATIONIC MECELLES MEDIA**

DISSERTATION SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR

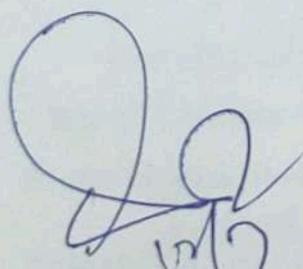
for the degree of Master of Science in Chemistry.

SUBMITTED BY

BODHESWAR DHURVE

UNDER THE SUPERVISION OF

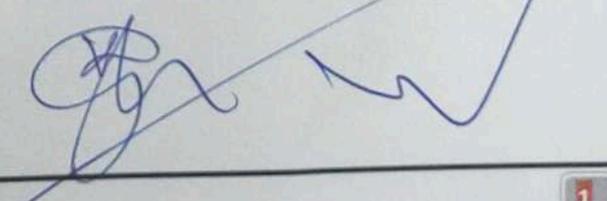
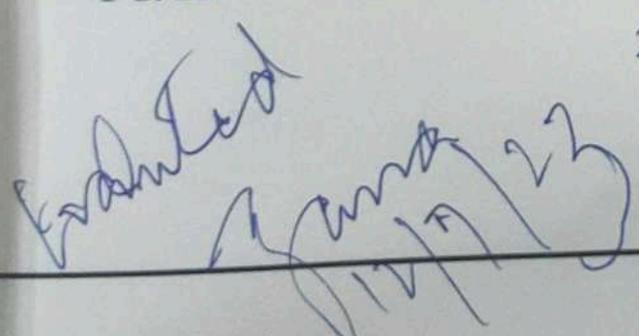
DR. MANMOHAN L. SATNAMI



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

2022-23



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)



Dr. Manmohan Lal Satnami
Associate Professor
M.Sc., M.Phil., Ph.D., CSIR-NET
TWAS-CNP q-Postdoctoral Fellow (Brazil)
Life member of Indian Society for Surface Science
& Technology:
Member of Indian Chemical Society

Mobile: 7999509271
Email: manmohanchem@gmail.com

CERTIFICATE

*This is to certify that **Mr. Bodheswar dhurve** has completed the dissertation work entitled "Succinihydroxamate ion mediated hydrolytic cleavage of organophosphorus compound in cationic mecelles media". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of his study.*

He is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).

Head of Department

School of Studies in Chemistry
Pt. Ravishankar Shukla University

Head
Raipur (C.G.)
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Dr. Manmohan L. Satnami

(Supervisor)

School of Studies in Chemistry
Pt. Ravishankar Shukla University

Raipur (C.G.)
Dr. Manmohan L. Satnami
Associate Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (CG.)
E-mail: manmohanchem@gmail.com

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

SCHOOL OF STUDIES IN CHEMISTRY

SESSION - 2022-23

A Project submitted to Pt. Ravishankar Shukla University, Raipur for the degree of

Master of Science in Chemistry



A

PROJECT REPORT

ON

**“SPECTROPHOTOMETRIC DETERMINATION OF CHROMIUM
CONCENTRATION IN DIFFERENT ENVIRONMENTAL WATER SAMPLES”**

SUBMITTED BY

DEEPESH KUMAR JAGAT

M.Sc. CHEMISTRY

UNDER THE GUIDANCE OF

PROF. KAMLESH K. SHRIVAS

Handwritten signature and date:
Jagat
12/7/23

Handwritten signature and date:
Kamlesh K. Shrivastava
12/7/23

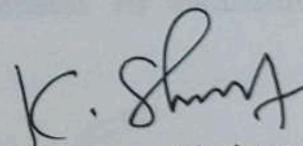


School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur (C.G)

Certificate

This is to certify that Deepesh Kumar Jagat, M.Sc. student of IV semester (chemistry) has completed a project on topic "Spectrophotometric Determination of concentration of Chromium in different environmental water samples". This project is submitted for the fulfillment of degree in chemistry.

I wish him for bright future


Dr. Kamlesh Kumar Shrivastava 19/06/23
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)

Signature

Prof. Kamlesh K. Shrivastava

SPECTROPHOTOMETRIC DETERMINATION OF PARAQUAT DICHLORIDE

A

PROJECT SUBMITTED TO



PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR, CHHATTISGARH

DEPARTMENT SCHOOL OF STUDIES IN CHEMISTRY

SUBMITTED BY:

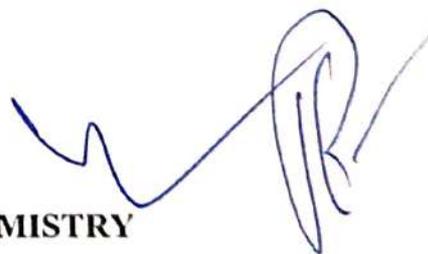
DEEPAK KUMAR SAHU

UNDER THE SUPER VISION OF:

Prof. MANISH K. RAI

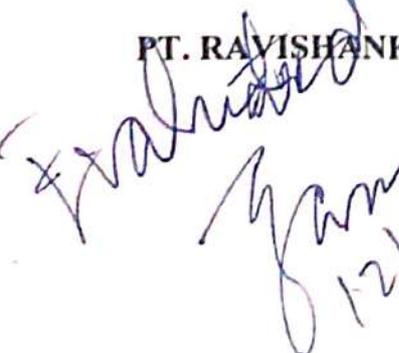

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SCHOOL OF STUDIES IN CHEMISTRY



PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR, CHHATTISGAARH

2022-23

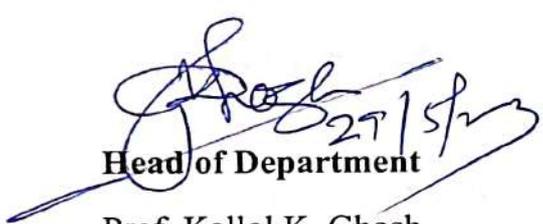

12/7/23



CERTIFICATE

This is to certify that Deepak Kumar Sahu has completed the dissertation work entitled "Spectrophotometric determination of Paraquat dichloride." under my supervision for the degree of "Master of Science in Chemistry". The dissertation embodies the observation, interpretation and conclusion of his study.

He is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.



Head of Department

Prof. Kallol K. Ghosh

School of studies in Chemistry

Pt. Ravishankar Shukla University,
Raipur (C.G)

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR



Prof. Manish K. Rai

(Supervisor)

School of studies in Chemistry

Pt. Ravishankar Shukla University,
Raipur (C.G)

Dr. M.K. RAI

Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.) 492010 INDIA



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. MANAS KANTI DEB

M.Sc., Ph.D.

Professor

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University (Part-B, Science)



: (0771)2262843 (Off.)



: 94255-03750

Fax

: 91(771)2262583

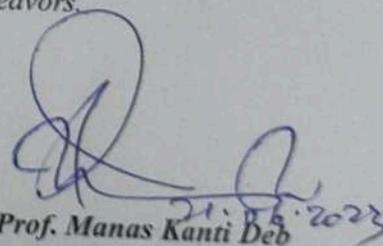
Email

: debmanas@yahoo.com

CERTIFICATE

*This is to certify that **Deepti Verma** M.Sc. Chemistry IV semester has been completed a project on “**Analysis of pesticide residue in agricultural sample using high performance liquid chromatography**”. This project is submitted for the fulfillment degree in chemistry.*

I wish her good luck for all his future endeavors.



Prof. Manas Kanti Deb

Dr. Manas Kanti Deb
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492010 C.G
E-mail: debmanas@yahoo.com
Cell: +91-9425503750

**“ANIONIC COMPONENTS IN GROUND
WATER OF CHHATTISGARH”**

**A
Project Submitted to**

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

**DURGAWATI
(M.Sc. IV Sem. CHEMISTRY)**

**Under the supervision of
PROF. MANAS KANTI DEB**



**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23**

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17/7/23

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12/7/23

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SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. MANAS KANTI DEB

M.Sc., Ph.D.

Professor

INSA-JSPS Visiting Fellow

LIFE MEMBER

Indian Science Congress Association,

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Editor-in-Chief, J Ravishankar

University (Part-B, Science)

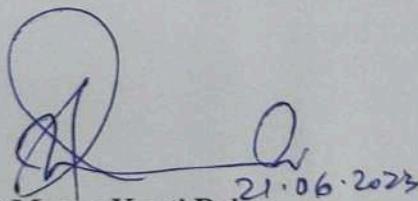
Phone: 94255-03750

Email : debmanas@yahoo.com

CERTIFICATE

This is to certify that **Durgawati** M.Sc. Chemistry IV semester has been completed a project on "Assessment on analysis of water by anionic components". This project is submitted for the fulfillment degree in chemistry.

I wish her good luck for all his future endeavors.



21.06.2023

Prof. Manas Kanti Deb
Dr. Manas Kanti Deb
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492010 C.G.
E-mail: debmanas@yahoo.com
Cell: +91-9425503750

**B-FUNCTIONALIZED TEA DERIVED CARBON BASED
SMART NANO BAGS FOR METHYLENE BLUE REMOVAL**

A
Project Submitted to
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

FOR
THE DEGREE OF

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED
BY

DURGESH NANDINI
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Dr. INDRAPAL KARBHAL



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

MSc., M Phil., Ph.D., CSIR-NET, GATE

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

Mob.: 8605985169

Email: ikarbhal@gmail.com

CERTIFICATE

This is to certify that Ms. Durgesh Nandini M.Sc. Chemistry IV semester has been completed a project on "B-functionalized tea derived carbon based smart nano bags for methylene blue removal". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors.

11.07.23

Dr. Indrapal Karbhal

Dr. Indrapal Karbhal
Assistant Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University,
RAIPUR-492010 (C.G.)
E-mail: ikarbhal@gmail.com

**INCLUSION COMPLEXATION OF ANTIDEPRESSANTS
DRUGS WITH β - CYCLODEXTRIN**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

SUBMITTED BY

DURGESHWARI

(M. Sc. IV Semester)

UNDER THE SUPERVISION OF

Prof. KALLOL K. GHOSH

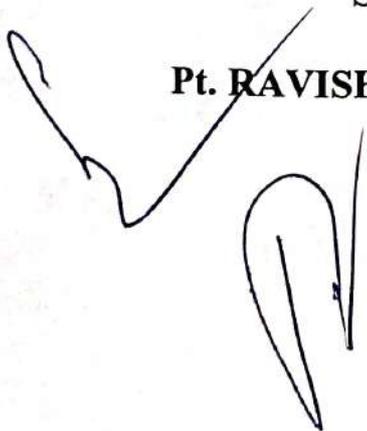
RESEACH CENTER

SCOOLOF STUDIES IN CHEMISTRY

Pt. RAVISHANKAR SHUKLA UNIVERSITY, Raipur (C.G.)

2023


12/7/23







SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY,

RAIPUR-492 010, CHHATTISGARH (INDIA)

Prof. KALLOL K. GHOSH

Raipur, 492010, C.G. (INDIA)

M. Sc., Ph. D.

Mobile : 9425216204

Professor

Email : kallolkghosh@gmail.com

INSA-JSPS VISITING FELLOW
LIFE MEMBER

Indian Association for Cultivation of Science
Indian Science Congress Association,
Indian Society for Surface Science & Technology
Chemical Research Society of India

Ref. No.:

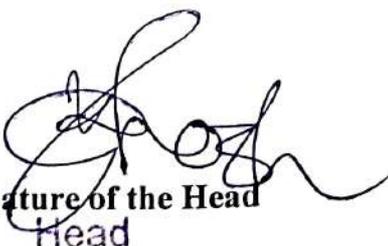
Date : 19-06-2023..

CERTIFICATE BY THE SUPERVISOR

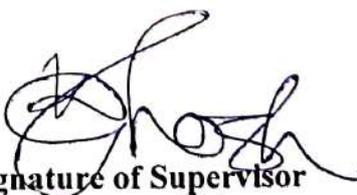
This is to certify that the work entitled, "INCLUSION COMPLEXATION OF ANTIDEPRESSANTS DRUGS WITH β - CYCLODEXTRIN" is a piece of project work done by **DURGESHWARI**, M. Sc. IV Semester, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur under my guidance and supervision for the degree of Master in Chemistry at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

To the best of my knowledge and belief the thesis:

1. Embodies the work of the candidate herself,
2. Has duly been completed,
3. Fulfills the requirements of the ordinance relating to the M.Sc. degree of the university, and
4. Is up to the standard both in respect of contents and language for being referred to the examiner.


Signature of the Head
Head

School Of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Signature of Supervisor

19/6/23
Dr. Kallol K. Ghosh
Professor and Head
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

**“DETERMINATION OF TOXIC ELEMENTS IN WASTEWATER SAMPLE OF
RAIPUR, CHHATTISGARH.”**

A

DISSERTATION

SUBMITTED TO

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)



IN PARTIAL FULFILMENT OF THE REQUIREMENT
FOR

The Degree of

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED BY
EKTA PANDEY

UNDER THE GUIDENCE OF
PROF. SHAMSH PERVEZ

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

2022-2023

Dr. SHAMSH PERVEZ

Professor & Fulbright Research Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India



Tel. : 0788-2280786
: 0771-2262843
Mob. : 09425242455; 07587199315
Email : shamshp@yahoo.co.in
shamshpervez@gmail.com
Resi. : MIG-1 767, Hudco
Bhilai (C.G.) 490009 India

Ref. No.....

Date.....

CERTIFICATE

This is to certify that Ekta Pandey has completed the dissertation work entitled
“**Determination of toxic elements in wastewater sample of Raipur**” under my
Supervision For the degree of “**Master of Science**”; the dissertation embodies the
observation, interpretation and discussion of her study.

She is allowed to submit the present work for the award of “**Master of Chemistry**”
of Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

Forwarded by

Head S.O.S. In Chemistry

Head
School Of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Signature of supervisor

Dr. Shamshe Pervez
Professor & Fulbright Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh) India
E-mail: shamshpervez@gmail.com

**“ROLE OF CARBOXYL - FUNCTIONALIZED GREEN
FLUORESCENCE CARBON QUANTUM DOT FOR SENSING OF
MERCURY AND LEAD”**

A

PROJECT SUBMITTED TO

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)



**FOR THE DEGREE OF
MASTER OF SCIENCE
CHEMISTRY**

SUBMITTED

BY

Gayatri Sahu

MSc. IV sem. CHEMISTRY

**UNDER THE GUIDANCE OF
DR. INDRAPAL KARBHAL**

Evaluator

SCHOOL OF STUDIES IN CHEMISTRY

Pt. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR C.G.

(2022-23)

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

Dr. Indrapal Karbhal

MSc., M phil., Ph.D., CSIR-NET

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India



Mob.: 8605985169

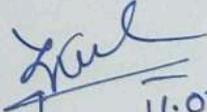
Email: ikarbhal@gmail.com

Date

CERTIFICATE

This is to certify that Ms. Gayatri Sahu has completed the dissertation work entitled "*Role of Carboxyl- Functionalized Green Fluorescence Carbon Quantum Dots for Sensing of Mercury and lead*" Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of her study.

She is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur (C.G.).


11.07.23

Dr. Indrapal Karbhal

Dr. Indrapal Karbhal

Assistant Professor

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

RAIPUR-492010 (C.G.)

E-mail: ikarbhal@gmail.com

**“DETERMINATION OF HARDNESS OF WATER SAMPLES USING
COMPLEXOMETRIC TITRATION METHOD”**



A

PROJECT

SUBMITTED TO

**IN PARTIAL FULFILLMENT FOR THE AWARD OF
MASTER OF SCIENCE
(CHEMISTRY)**

BY

**GEETANJALI MARKANDE
M.Sc. CHEMISTRY**

**UNDER THE GUIDANCE OF
PROF. KAMLESH K. SHRIVAS**

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR

2022-23

A handwritten signature in blue ink, likely belonging to the student Geetanjali Markande.

A handwritten signature in blue ink, likely belonging to the guide Prof. Kamlesh K. Shrivastava.

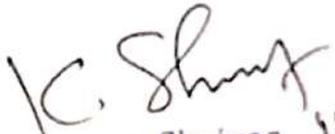
A handwritten signature in blue ink, likely belonging to an official of the university.

SoS in Chemistry
Pt. Ravishankar University
Raipur, (C.G.)

Certificate

This is to certify that Geetanjali Markande (M.Sc. Chemistry IVth Semester) has completed a project on topic "Determination of hardness of water sample using complexometric titration method". This project is submitted for the fulfilment of degree in Chemistry.

I wish her for bright future.


Dr. Kamlesh Kumar Shrivastava 19/06/20
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)
Signature

(Prof. Kamlesh K. Shrivastava)

**'DETERMINATION OF SELECTED ANIONS IN WASTE WATER SAMPLE
OF RAIPUR BY USING ION CHROMATOGRAPHY'**

A

DISSERTATION

SUBMITTED TO

Pt. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)



IN PARTIAL FULLFILMENT FOR THE AWARD OF

MASTER OF SCIENCE

(CHEMISTRY)

SUBMITTED BY

JAGRITI SAHU

UNDER THE GUIDANCE OF
PROF. SHAMSH PERVEZ

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

2022-23

1

SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

Dr. SHAMSH PERVEZ

Professor & Fulbright Research Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India



Tel. : 0788-2280786
: 0771-2262843
Mob. : 09425242455; 07587199315
Email : shamshp@yahoo.co.in
shamshpervez@gmail.com
Resi. : MIG-1 767, Hudco
Bhilai (C.G.)490009 India

Ref. No.....

Date 19/06/2023

CERTIFICATE

This is to certify that Ms. Jagriti Sahu has completed the dissertation work entitled **“Determination of selected anion in waste water sample of Raipur by using ion chromatography”** Under my supervision for the degree of **“Master of Science in Chemistry.”** The dissertation embodies the observation, interpretation, and conclusion of her study.

She is allowed to submit the present work for the award of **“Master of Science in Chemistry”** of Pt. RaviShankar Shula University, Raipur (C.G.).

Forwarded by

Head SOS. in Chemistry

Dr. Shamsheer Pervez

School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010
RAIPUR (C.G.)
E-mail: shamshpervez@gmail.com

Signature of Supervisor

Dr. Shamsheer Pervez
Professor & Fulbright Research Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India
E-mail: shamshpervez@gmail.com

**“SPECTROPHOTOMETRIC DETERMIATION OF IRON CONTENT
IN INDIGENOUS GREEN LEAFY VEGETABLES CONSUMED IN
CHHATTISGARH”**

**A
Project Submitted to**

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

**For
The degree of**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**Submitted
by**

JAYA SINHA

(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of

PROF. KAMLESH K. SHRIVAS



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)**

**INDIA
(NAAC 'A' GRADE UNIVERSITY)**

SESSION - 2022-23



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY

RAIPUR - 492010 (C.G.)

CERTIFICATE

This is to certify that Jaya Sinha, M.Sc. student of IV semester (Chemistry) has completed a project on topic "Spectrophotometric determination of iron content in indigenous green leafy vegetables consumed in Chhattisgarh". This project is submitted for the fulfillment of degree in chemistry.

I wish her for bright future

K. Shrivastava
17/06/23

Signature

Prof. Kamlesh K. Shrivastava
Dr. Kamlesh Kumar Shrivastava
Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)

A
Project Report
On

Green Synthesis of Magnetic Nanoparticle via *Murraya Koenogii*

A project submitted to Pt. Ravishankar Shukla University Raipur (C.G.) for
the Degree of Master of Science in Chemistry



SoS in Chemistry

Pt. Ravishankar Shukla University

Raipur (C.G.)

A handwritten signature in blue ink, appearing to be 'Sanyukta Patel', with the date '12/5' written below it.

Supervisor:

Dr. Sanyukta Patel

A handwritten signature in blue ink, appearing to be 'Jinesh Tandan', written over a large checkmark.

Submitted By:

Mr. Jinesh Tandan

M.Sc. Chemistry (IV Sem)

SoS in Chemistry

Pt. Ravishankar Shukla University

Raipur (C.G.)



Certificate

This is to certify that Jinesh Tandan (M.Sc. Chemistry IV semester) has been completed a project on the topic "Green Synthesis of Magnetic Nanoparticle via *Murraya Koenigii*" This project is submitted for the fulfillment Master Degree in Chemistry.

I wish him for bright future


Signature

Dr. Sanyukta Patel

A SENSITIVE SPECTROPHOTOMETRIC DETECTION OF LAMBDA-CYHALOTHRIN USING LEUCOMALACHITE GREEN

**A
PROJECT
SUBMITTED TO**



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGARH**

SUBMITTED BY:

KUNVER TEJESVER VAIDH

UNDER THE SUPER VISION OF:

Prof. MANISH K. RAI

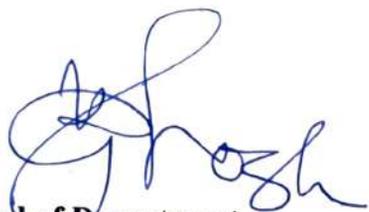
**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGARH**

2022-2023

CERTIFICATE

This is to certify that **Mr. KUNVER TEJESVER VAIDH** has completed the dissertation work entitled "A Sensitive Spectrophotometric Detection of Lambda-Cyhalothrin using Leucomalachite Green." under my supervision for the degree of "Master of Science in Chemistry". The dissertation embodies the observation, interpretation and conclusion of his study.

He is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur (C.G)



Head of Department

Prof. Kallol K. Ghosh

29/5/23

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

Raipur, Chhattisgarh

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)



Supervisor

Prof. Manish K. Rai

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

Raipur, Chhattisgarh

Dr. M.K. RAI

Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.) 492010 INDIA

**“DETERMINATION OF TOXIC METALS CONCENTRAION IN
AIRBORNE PARTICULATE MATTER USING ATOMIC
ABSORPTION SPECTROSOCOPY”**

A

DISSERTATION SUBMITTED TO
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)



IN PARTIAL FULFILLMENT FOR THE AWARD FOR
THE DEGREE OF
MASTER OF SCIENCE
(CHEMISTRY)

IN
CHEMISRTY
SUBMITTED BY

LILIMA YADAV
MSc. CHEMISTRY

UNDER THE GUIDANCE OF
PROF. SHAMSH PERVEZ
SCHOOL OF STUDIES IN CHEMISTRY

Pt. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

2022-23

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

Prof. Shamsh Pervez

Professor & Fulbright research fellow

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India



Tel : 0788-2280786

: 07712262843

Mob : 9753413202

Email : shamshpervez@gmail.com

: Shamhp@yahoo.co.in

Resi : MIG – 1 767, Hudco Bhilai

(C.G.) 490009 India

CERTIFICATE

This is to certify that Ms. Meenu Sahu has completed the dissertation work entitled **“Determination of toxic metals concentration in airborne particulate matter using atomic absorption spectroscopy”** Under my supervision for the degree of “Master of Science in Chemistry.” The dissertation embodies the observation, interpretation, and conclusion of her study.

She is allowed to submit the present work for the award of **“Master of Science in Chemistry”** of Pt. Ravishankar Shukla University, Raipur (C.G.).


Forwarded by
19/6/23
Head S.o.S. in Chemistry
Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Signature of supervisor
Dr. Shamsh Pervez
Professor & Fulbright Fellow
School of Studies In Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh) India
E-mail: shamshpervez@gmail.com

“PHYTOCHEMICAL SCREENING AND HPTLC FINGERPRINTING OF PLANT EXTRACT”

A
Project Submitted to

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

FOR
THE DEGREE OF

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED
BY

LITESH KUMAR THAKUR
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
PROF. MANAS KANTI DEB



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. MANAS KANTI DEB

M.Sc., Ph.D.

Professor

INSA-JSPS Visiting Fellow

LIFE MEMBER

Indian Science Congress Association,

Indian Chemical Society,

Director-NCNR

Head, SOS in Environmental Science

Editor-in-Chief, J Ravishankar

University (Part-B, Science)



: (0771)2262843 (Off.)



: 94255-03750

Fax

: 91(771)2262583

Email

: debmanas@yahoo.com

CERTIFICATE

This is to certify that Litesh Kumar Thakur M.Sc. Chemistry IV semester has been completed a project on "Phytochemical screening and HPTLC fingerprinting of plant extracts". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors.

27.06.2023
Prof. Manas Kanti Deb

Dr. Manas Kanti Deb
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492 010 C G
E-mail: debmanas@yahoo.com
Cell +91-9425503750

A
Project Report
On

Colorimetric determination of kitazin by using functionalized silver nanoparticles

A project submitted to Pt. Ravishankar Shukla University Raipur for the Degree of Master of Science in Chemistry



SoS in Chemistry

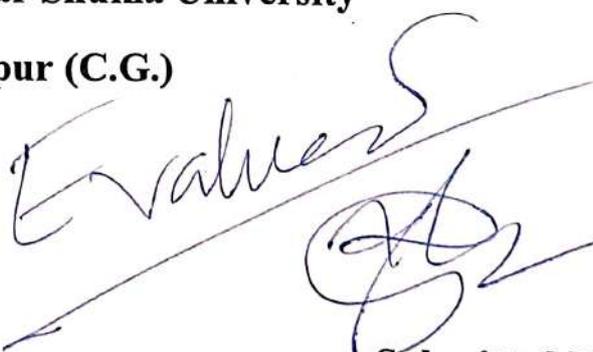
Pt. Ravishankar Shukla University

Raipur (C.G.)


12/17

Supervisor:

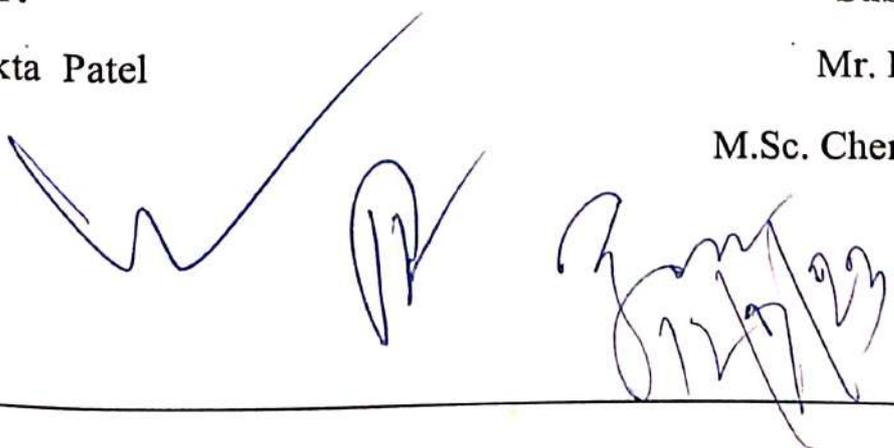
Dr. Sanyukta Patel


Evaluated

Submitted By:

Mr. Lokeshwar

M.Sc. Chemistry, (IV) Sem.



**“EVALUATION OF THE CONCENTRATION OF NITROGEN DIOXIDE
FROM DIFFERENT ANTHROPOGENIC ACTIVITIES IN AMBIENT AIR
OVER URBAN ENVIRONMENT OF CHHATTISHGARH”**

A

DISSERTATION

SUBMITTED TO

Pt. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)



**IN PARTIAL FULFILLMENT FOR THE AWARD OF
MASTER OF SCIENCE
(CHEMISTRY)**

SUBMITTED BY

MEENU SAHU

MSc. CHEMISTRY

UNDER THE GUIDANCE OF

PROF. SHAMSH PERVEZ

SCHOOL OF STUDIES IN CHEMISTRY

Pt. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

2022-23

Dr. SHAMSH PERVEZ

Professor & Fulbright Research Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India



Tel. : 0788-2280786
: 0771-2262843
Mob. : 09425242455; 07587199315
Email : shamshp@yahoo.co.in
shamshpervez@gmail.com
Resi. : MIG-1 767, Hudco
Bhilai (C.G.) 490009 India

Ref. No.....

Date. 19/06/2023

CERTIFICATE

This is to certify that Ms. Meenu Sahu has completed the dissertation work entitled **“Evaluation of the concentration of nitrogen dioxide from different anthropogenic activities in ambient air over urban environment of Chhattisgarh”** Under my supervision for the degree of **“Master of Science in Chemistry.”** The dissertation embodies the observation, interpretation and conclusion of her study.

She is allowed to submit the present work for the award of **“Master of Science in Chemistry”** of Pt. Ravishankar Shukla University, Raipur (C.G.).

Forwarded by

Head S.o.S. in Chemistry

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Signature of Supervisor

Dr. Shamsh Pervez

Professor & Fulbright Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India
E-mail: shamshpervez@yahoo.com

**Micelles Catalysed Hydrolysis of p-nitrophenyl
Diphenyl Phosphate (PNPDPP)**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR

SUBMITTED BY:

MEHUL NARETI

UNDER THE SUPERVISION OF:

Dr. MANMOHAN L. SATNAMI

SCHOOL OF STUDENT IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G)

2022-23

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

Dr. Manmohan L. Satnami

Associate Professor

M.Sc., M.Phil., Ph.D., CSIR-NET

TWAS-CNP q-Postdoctoral Fellow (Brazil)

Life member of Indian Society for Surface Science &
Technology:

Member of Indian Chemical Society



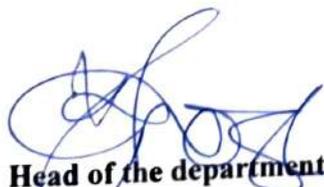
Mobile: 799909271

Email: manmohanchem@gmail.com

CERTIFICATE

This is to certify that Mr. Mehul Nareti has completed the dissertation work entitled "**Micelles Catalysed Hydrolysis of p-nitrophenyl Diphenyl Phosphate (PNPDPP)**". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation, and conclusion of his study.

He is allowed to submit the present work for the award of "**Master of Science in Chemistry**" of Pt. Ravishankar Shukla University, Raipur, (C.G.).


Head of the department

School of Studies in Chemistry
Pt. Ravi Shankar Shukla University,

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)



Dr. Manmohan L. Satnami

(Supervisor)

School of Studies in Chemistry

Pt. Ravi Shankar Shukla University,

Raipur(C.G.)

Dr. Manmohan L. Satnami

Associate Professor

School of Studies in Chemistry

Pt. Ravishankar Shukla University

RAIPUR-492010 (CG.)

E-mail: manmohanchem@gmail.com

**“GREEN SYNTHESIS OF MAGNETIC
NANOPARTICLES USING TEA EXTRACTS”**

M. Sc PROJECT

IN

CHEMISTRY

SUBMITTED BY

MINAKSHI PATEL

(M. Sc IVth Sem)

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

Raipur (C.G)

UNDER THE SUPERVISION OF

Prof. KALLOL K. GHOSH

RESEARCH CENTER

SCHOOL OF STUDIES IN CHEMISTRY

Pt. RAVISHANKAR SHUKLA UNIVERSITY

RAIPUR(C.G)



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY,

RAIPUR-492 010, CHHATTISGARH (INDIA)

Prof. KALLOL K. GHOSH

M. Sc., Ph. D.

Professor

INSA-JSPS VISITING FELLOW

LIFE MEMBER

Indian Association for Cultivation of Science

Indian Science Congress Association,

Indian Society for Surface Science & Technology

Chemical Research Society of India

Raipur, 492010, C.G. (INDIA)

Mobile : 9425216204

Email : kallolkghosh@gmail.com

Ref. No.:

Date : 10/06/2023

CERTIFICATE BY THE SUPERVISOR

This is to certify that the work entitled, "GREEN SYNTHESIS OF MAGNETIC NANOPARTICLE USING TEA EXTRACTS" is a piece of project work done by, **MINAKSHI PATEL** M. Sc. IV Semester, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur under my guidance and supervision for the degree of Master in Chemistry at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

To the best of my knowledge and belief the thesis:

1. Embodies the work of the candidate herself,
2. Has duly been completed,
3. Fulfills the requirements of the ordinance relating to the M.Sc. degree of the university, and
4. Is up to the standard both in respect of contents and language for being referred to the examiner.


Signature of the Head

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University,
RAIPUR (C.G.)


Signature of Supervisor

Dr. Kallol K. Ghosh 19/6/23
Professor and Head
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

**SPECTROPHOTOMETRIC DETERMINATION OF
IMIDACLOPRID**

A PROJECT SUBMITTED TO



**DEPARTMENT SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGARH**

SUBMITTED BY:

MUKESH KUMAR

UNDER THE SUPERVISION OF:

Prof. MANISH K. RAI

SCHOOL OF STUDIES IN CHEMISTRY

**PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGAARH**

2022-23
14/7/23

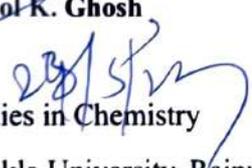
CERTIFICATE

This is to certify that **Mr. Mukesh Kumar** has completed the dissertation work entitled “Spectrophotometric determination of Imidacloprid” under my supervision for the degree of “**Master of Science in Chemistry**”. The dissertation embodies the observation, interpretation and conclusion of his study.

He is allowed to submit the present work for the award of “**Master of Science in Chemistry**” of Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.


Head of Department

Prof. Kallol K. Ghosh


School of studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Head
(C.G.)
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur (C.G.)


Supervisor

Prof. Manish K. Rai

School of studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Dr. (C.G.) M.K. RAI
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.) 492010 INDIA

A
Project Report
On

**Synthesis of silver nanoparticles for determination of Mn^{2+} as chemical
sensor**

**A project submitted to Pt. Ravishankar Shukla University Raipur (C.G.) for
the Degree of Master of Science in Chemistry**



SoS in Chemistry

Pt. Ravishankar Shukla University

Raipur (C.G.)

Supervisor:

Dr. Sanyukta Patel

Submitted By:

Namrata Sahu

M.Sc. Chemistry (IV Sem.)

SoS in Chemistry

Pt. Ravishankar Shukla University

Raipur (C.G.)



Certificate

This is to certify that Namrata Sahu (M.Sc. Chemistry IV semester) has been completed a project on the topic "Synthesis of silver nanoparticles for determination of Mn^{2+} as chemical sensor" This project is submitted for the fulfillment Master Degree in Chemistry.

I wish her for bright future


Signature

Dr. Sanyukta Patel

**“Optimization of 1D and 2D -NMR profiling of some
selected edible oils”**

**A
Project Submitted to**

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

Namrata Sahu
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Prof. M. K. DEB

[Handwritten signature]
12/17



**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23**

[Handwritten signature]
[Handwritten signature]



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. MANAS KANTI DEB

M.Sc., Ph.D.

Professor

INSA-JSPS Visiting Fellow

LIFE MEMBER

Indian Science Congress Association,

Indian Chemical Society,

Director-NCNR

Head, SOS in Environmental Science

Editor-in-Chief, J Ravishankar

University (Part-B, Science)



: (0771)2262843 (Off.)

: 94255-03750



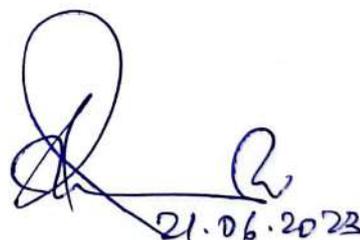
Fax : 91(771)2262583

Email : debmanas@yahoo.com

CERTIFICATE

This is to certify that Namrata Sahu M.Sc. Chemistry IV semester has been completed a project on "OPTIMIZATION OF 1D AND 2D NMR PROFILING OF SOME SELECTED EDIBLE OILS". This project is submitted for the fulfillment degree in chemistry.

I wish her good luck for all her future endeavors.



21.06.2022

Prof. M. K. Deb

Dr. Manas Kanti Deb
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492010, C.G.
E-mail: debmanas@yahoo.com
Cell: +91-9425503750

**“DETECTION OF GLUTATHIONE USING GOLD NANOCCLUSERS -
MANGANESE DIOXIDE NANOSHEETS”**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

SUBMITTED BY:

NIDHI GUPTA

UNDER THE SUPERVISION OF:

DR. MANMOHAN L. SATNAMI

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR(C.G.)

2022-23

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

Dr. Manmohan L. Satnami

Associate Professor

M.Sc., M.Phil., Ph.D., CSIR-NET

TWAS-CNP q-Postdoctoral Fellow (Brazil)

Life member of Indian Society for Surface Science & Technology:

Member of Indian Chemical Society



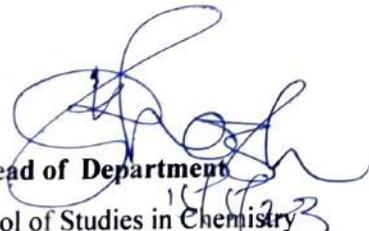
Mobile: 7999509271

Email: manmohanchem@gmail.com

CERTIFICATE

This is to certify that Ms. NIDHI GUPTA has completed the dissertation work entitled "Detection of Glutathione Using Gold Nanocluster- Manganese Dioxide Nanosheets". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of her study.

She is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).


Head of Department

School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Dr. Manmohan L. Satnami

(Supervisor)

School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Dr. Manmohan L. Satnami

Associate Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (CG.)
E-mail.manmohanchem@gmail.com

**“NITROGEN-DOPED CARBON QUANTUM DOTS SENSOR FOR THE
DETECTION OF Fe³⁺ IONS”**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

SUBMITTED BY:

NOHAR SINGH

UNDER THE SUPERVISION OF:

DR. MANMOHAN L. SATNAMI

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR(C.G.)

2022-23

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

Dr. Manmohan L. Satnami

Associate Professor

M.Sc., M.Phil., Ph.D., CSIR-NET

TWAS-CNP q-Postdoctoral Fellow (Brazil)

Life member of Indian Society for Surface Science & Technology:

Member of Indian Chemical Society



Mobile:7999509271

Email:manmohanchem@gmail.com

CERTIFICATE

This is to certify that Mr. NOHAR SINGH has completed the dissertation work entitled "NITROGEN-DOPED CARBON QUANTUM DOTS SENSOR FOR THE DETECTION OF Fe³⁺ IONS". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of his study.

He is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).

Head of Department

School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Dr. Manmohan L. Satnami

(Supervisor)

School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Dr. Manmohan L. Satnami
Associate Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (CG.)
E-mail.manmohanchem@gmail.com

“Application of Pencil Graphite Electrode in Cyclic Voltammetry Analysis”

A
Project Submitted to

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

FOR
THE DEGREE OF

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED
BY

POOJA CHANDRAVANSHI
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Prof. KAMLESH KUMAR SHRIVAS



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC- 'A' GRADE UNIVERSITY)
SESSION- 2022-23



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

CERTIFICATE

This is to certify that Pooja Chandravanshi M.Sc. Chemistry IV semester has been completed a project on "Application of Pencil Graphite Electrode in Cyclic Voltammetry Analysis".

This project is submitted for the fulfillment degree in chemistry.

I wish her for bright future

Signature 17/06/21

Prof. Kamlesh K. Shrivastava

Dr. Kamlesh Kumar Shrivastava
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)

A
PROJECT REPORT
ON
“CONTAMINATION OF HEAVY METALS IN MILK, SOIL AND
WATER SAMPLES FROM INDUSTRIAL AREA OF BHANPURI,
RAIPUR”

A Project submitted to Pt. Ravishankar Shukla University, Raipur for the degree of
Master of Science in Chemistry



PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)
SCHOOL OF STUDIES IN CHEMISTRY
SESSION - 2022-23

SUBMITTED BY
POOJA DAS
M.Sc. CHEMISTRY

UNDER THE GUIDANCE OF
PROF. KAMLESH K. SHRIVAS

Evaluator
[Signature]

[Signature]
[Signature]
12/17

[Signature]

[Signature]

[Signature]



School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur (C.G)

CERTIFICATE

This is to certify that Pooja Das, M.Sc. student of IV semester (chemistry) has completed a project on topic "Contamination of Heavy Metals in Milk, Soil and Water Samples from Industrial Area of Bhanpuri, Raipur". This project is submitted for the fulfillment of degree in chemistry.

I wish her for bright future.


17/06/23

Signature

Prof. Kamlesh K. Shrivastava
Dr. Kamlesh Kumar Shrivastava
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)

**GREEN SYNTHESIS OF SILVER NANOPARTICLE BY
MANILKARA ZAPOTA LEAF EXTRACT & THEIR
ANTIMICROBIAL ACTIVITY**

A DISSERTATION

SUBMITTED

TO

S.O.S. IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

SUBMITTED BY:

PRABHA CHANDRAKAR

UNDER THE SUPERVISION OF:

PROF. M.K. DEB

Evaluator



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR(C.G.)

2022-23



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR

Prof. M.K. Deb
M.Sc., PhD.
INSA-JSPS Visiting fellow
LIFE MEMBER
Indian Science Congress Association,
Indian Chemical Society,
Director-NCNR
Head SOS In Enviromental Science
Editor-In Chief, Rravishankar University(Part-B,Science)

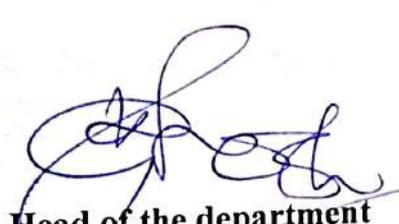


Mobile:9425503750
Email:debmanas@yahoo.com

CERTIFICATE

This is to certify that Ms. Prabha chandrakar has completed the dissertation work entitled "Green Synthesis Of Silver Nanoparticle By Manilkara Zapota Leaf Extract & Their Antimicrobial Activity". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of her study.

She is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).


Head of the department
School of Studies in Chemistry 21/4/23
Pt. Ravishankar Shukla
University Raipur(C.G.)
Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Prof. M.K. Deb 21.06.2023
(Supervisor)
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur(C.G.)

Dr. Manas Kanti Deb
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492010, C.G.
E-mail:debmanas@yahoo.com
Cell: +91-9425503750

“DETERMINATION OF TOXIC METALS CONCENTRATION IN
AMBIENT PARTICULATE MATTER USING ATOMIC ABSORPTION
SPECTROSCOPY(AAS)”

A
DISSERTATION SUBMITTED TO



PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)
IN PARTIAL FULFILLMENT FOR THE AWARD OF
MASTER OF SCIENCE
(CHEMISTRY)

SUBMITTED BY
PRABHA CHATURVEDI
M.Sc. CHEMISTRY

UNDER THE GUIDANCE OF
PROF. SHAMSH PERVEZ

SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

2022-23

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

Prof. Shamsh Pervez

Professor & Fullbright reasearch fellow

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India



Tel.: 0788-2280786

: 0771-2262843

Mob.: 09425242455; 07587199315

Email: shamshpervez@gmail.com

shamshp@yahoo.co.in

Resi: MIG-1 767, Hudco Bhilai
(C.G.) 490009 India

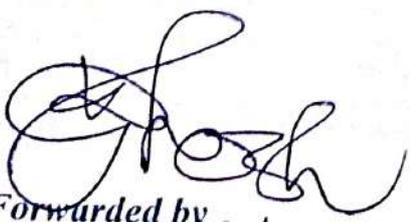
Ref. No.-

Date -

CERTIFICATE

This is to certify that Ms. Prabha Chaturvedi has completed the dissertation work entitled **“DETERMINATION OF TOXIC METALS CONCENTRATION IN AMBIENT PARTICULATE MATTER USING ATOMIC ABSORPTION SPECTROSCOPY(AAS)”** Under my supervision for the degree of “Master of Science in Chemistry.” The dissertation embodies the observation, interpretation and conclusion of her study.

She is allowed to submit the present work for the award of **“Master of Science in Chemistry”** of Pt. Ravishankar Shukla University, Raipur (C.G.).


Forwarded by
Head S.O.S. in Chemistry
Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Signature of supervisor
Dr. Shamsh Pervez
Professor & Fulbright Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh) India
E-mail: shamshpervez@gmail.com

**“A COMPREHENSIVE REVIEW OF MICROPLASTIC
ANALYSIS IN FOOD SAMPLES”**

**A
Project Submitted to**

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

For the degree of

**MASTER OF SCIENCE
IN
CHEMISTRY**

Submitted by

PRAGYA SAHU

(M.Sc. IV Semester Chemistry)

Under the supervision of

PROF. KAMLESH K. SHRIVAS



SCHOOL OF STUDIES IN CHEMISTRY

**PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)
INDIA**

(NAAC 'A' GRADE UNIVERSITY)

SESSION - 2022-23



SoS in chemistry

Pt. Ravishankar Shukla University

Raipur (C.G)

Certificate

This is to certify that **Pragya Sahu**, student of M.Sc IV Semester (Chemistry) has completed a project on topic “**A Comprehensive Review of Microplastic Analysis in Food Samples**”. This project is submitted for the fulfillment of degree in chemistry.

I wish her for bright future.


19/06/23

Dr. Kamlesh Kumar Shrivastava
Signature
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)

A
Project Report
On

Comparative study on Synthesis & characterization of Nitrogen, Boron and Nitrogen –Sulphur doped quantum dots.

A project submitted to Pt. Ravishankar Shukla University Raipur for the Degree of Master of Science in Chemistry.



**SoS in Chemistry
Pt. Ravishankar Shukla University
Raipur (C.G.)**

E. Valdes
Dr.

Submitted By :
Pratiksha Kashyap
M.Sc. Chemistry (IV Sem)

[Signature]
12/17

Supervisor:
Dr. Sanyukta Patel

[Signature]

[Signature]

[Signature]

[Signature]

SoS in Chemistry

Pt. Ravishankar Shukla University

Raipur (C.G)



Certificate

This is to certify that Pratiksha Kashyap (M.Sc. Chemistry IV semester) has been completed a project on the topic “Comparative study on Synthesis & characterization of Nitrogen, Boron and Nitrogen –Sulphur doped quantum dots.” This project is submitted for the fulfillment Master Degree in Chemistry.

I wish him for bright future


Signature

Dr. Sanyukta Patel

**SYNTHESIS OF SILVER NANOPARTICLES AND APPLICATIONS
FOR DETECTION OF Pb²⁺**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

SUBMITTED BY:

PREETI

UNDER THE SUPERVISION OF

DR. MANMOHAN L. SATNAMI

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

2022-23

Evaluator
M.L. Satnami
12/17
[Signature]
[Signature]
[Signature]
[Signature]

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

Dr.ManmohanLalSatnami

Associate Professor

M.Sc., M.Phil., Ph.D., CSIR-NET

TWAS-CNP q-Postdoctoral Fellow (Brazil)

Life member of Indian Society for Surface Science & Technology:

Member of Indian Chemical Society



Mobile:7999509271

Email:manmohanchem@gmail.com

CERTIFICATE

*This is to certify that Ms.Preeti has completed the dissertation work entitled "**Synthesis of silver nanoparticles and applications for detection of Pb^{2+}** ". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of her study.*

She is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. RavishankarShukla University, Raipur, (C.G.).

Head of the department

School of Studies in Chemistry
Pt. RavishankarShukla University
Raipur(C.G.)

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Dr.Manmohan L. Satnami

(Supervisor)

School of Studies in Chemistry
Pt. RavishankarShukla University
Raipur(C.G.)

Dr. Manmohan L. Satnami
Associate Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (CG.)
E-mail.manmohanchem@gmail.com

**SYNTHESIS OF SILVER FABRICATED NITROGEN DOPED CARBON
QUANTUM DOTS AS CHEMOSENSOR FOR THE
SPECTROFLUOROMETRIC DETECTION OF Hg²⁺ IONS AND
CAPTOPRIL**

**A
Project Submitted to
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

RAGHVENDRA

(M.Sc. IV Sem. CHEMISTRY)

**Under the supervision of
Dr. INDRAPAL KARBHAL**



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)**

**INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23**



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

MSc., M Phil., Ph.D., CSIR-NET, GATE

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

Mob.: 8605985169

Email: ikarbhal@gmail.com

CERTIFICATE

This is to certify that Raghvendra M.Sc. Chemistry IV semester has been completed a project on "Synthesis of Silver Fabricated Nitrogen Doped Carbon Quantum Dots as Chemosenser for the Spectrofluorometric Detection of Hg²⁺ Ions and Captopril". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavours.


11.07.23

Dr. Indrapal Karbhal
Dr. Indrapal Karbhal
Assistant Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University,
RAIPUR-492010 (C.G.)
E-mail: ikarbhal@gmail.com

**“SYNTHESIS AND CHARACTERIZATION OF CONDUCTING SILVER-
POLYANILINE NANOCOMPOSITE”**

**A
Project Submitted to**

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

ROSHAN LAL VERMA
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Prof. KAMLESH KUMAR SHRIVAS



**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC- 'A' GRADE UNIVERSITY)
SESSION- 2022-23**

(Handwritten signatures in blue ink are present around the text, including a large signature on the left and several smaller ones on the right and bottom.)

CERTIFICATE

This is to certify that Roshan Lal Verma M.Sc. Chemistry IV semester has been completed a project on "synthesis and characterization of conducting silver-polyaniline nanocomposite". This project is submitted for the fulfillment degree in chemistry.

I wish her for bright future


Signature 17/04/23

Prof. Kamlesh K. Shrivastava

Dr. Kamlesh Kumar Shrivastava
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University,
RAIPUR-492010 (C.G.)



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

**“Synthesis and Characterisation of Silver Nanoparticles /
Carbon Quantum Dots Nanocomposites.”**

**A
PROJECT
SUBMITTED
TO**

**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY, Raipur (C.G.)**

**SUBMITTED BY:
RUPALI SAHU
UNDER THE SUPERVISION OF
Prof. KALLOL K. GHOSH**

**RESEARCH CENTER
SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

2022-23

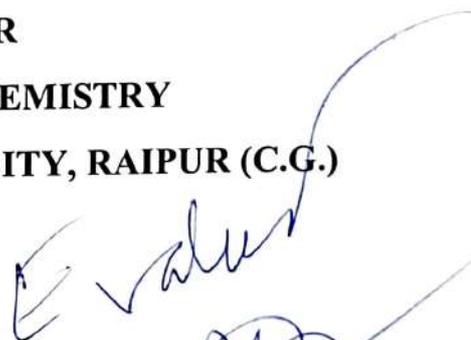

12/17













SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

RAIPUR -492010,CHHATTISGARH(INDIA)

Prof. KALLOL. K. GHOSH

M.Sc. , Ph.D .

Professor & Head (Chemistry)

INSA-JSPS VISITING FELLOW

LIFE MEMBER

Indian Association for Cultivation of Science

Indian Science Congress Association

Indian Society for Surface Science & Technology

Chemical Research Society of India



Mobile:9425216204

Email:kallokghosh@gmail.com

Ref. No.:

Date: 19-06-2023

CERTIFICATE

This is to certify that the work entitled , “Synthesis and Characterisation of silver Nanoparticles / Carbon Quantum Dots Nanocomposites.” is a piece of work done by RUPALI SAHU ,M.Sc.IV Semester ,school of studies in chemistry , Pt.Ravishankar Shukla University , Raipur under my guidance and supervisor for the degree of Master in Chemistry at Pt. Ravishankar Shukla University ,Raipur, Chhattisgarh , India.

To the best of my knowledge and belief the thesis:

1. Embodies the work of the candidate herself,
2. Has duly been complete,
3. Fulfills the requirements of the ordinance relating to the M.Sc. degree of the university,
4. It up to the standard both in respect of contents and language for referred to the examiner.

Signature of head

Forwarded By Head

Signature of Supervisor

Prof. Kallol K. Ghosh

Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Dr. Kallol K. Ghosh
Professor and Head
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

19/6/23

**“SYNTHESIS OF FUNCTIONALIZED NANOPARTICLES AND
THEIR CHARACTERIZATION”**

A

Project Submitted to

Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

FOR
THE DEGREE OF

**MASTER OF SCIENCE
IN
CHEMISTRY**

SUBMITTED
BY

RUPESH KUMAR MURKUTE
(M.Sc. IV Sem. Chemistry)

Under the supervision of
PROF. MANAS KANTI DEB



[Handwritten signature]
12/7

[Handwritten signature]
[Handwritten signature]

**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)**

INDIA
(NAAC- 'A' GRADE UNIVERSITY)

SESSION- 2022-23

[Handwritten signature]

[Handwritten signature]

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[Handwritten signature]



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA
UNIVERSITY

RAIPUR-492010, CHHATTISGARH(INDIA)

DR. MANAS KANTI DEB

M. Sc., Ph.D.

Professor

INSA-JSPS Visiting Fellow

LIFE MEMBER

INDIAN SCIENCE CONGRESS ASSOCIATION

INDIAN CHEMICAL SOCIETY,

Director-NCNR

Head, SOS in Environmental Science

Editor-in-Chief, Ravishankar

University (Part-B, Science)

Telephone no. – (0711)2262843(Off.)

Mobile no. – 94255-03750

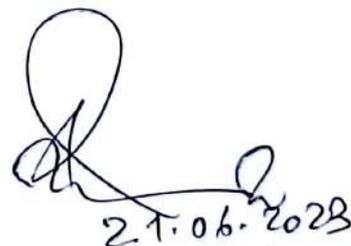
Fax – 91(0711)2262583

Email – debmanas@yahoo.com

CERTIFICATE

This is to certify that **Rupesh Kumar Murkute** M.Sc. Chemistry IV semester has completed a project on “**Synthesis of functionalized nanoparticles and their characterization**”. This project is submitted for the fulfillment of degree in chemistry.

I wish him good luck for all his future endeavors.



21.06.2023

Prof. Manas Kanti Deb

Dr. Manas Kanti Deb
Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur - 492010, C.G.

E-mail: debmanas@yahoo.com
Cell: +91-9425503750

**“ SEASONAL DYNAMICS AND CHEMICAL CHARACTERIZATION OF
WATER-SOLUBLE INORGANIC IONS IN WASTEWATER: INSIGHTS
FROM RAIPUR, CHHATTISGARH ”**

A
DISSERTATION
SUBMITTED TO
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)



IN PARTIAL FULFILMENT FOR THE AWARD OF
MASTER OF SCIENCE
(CHEMISTRY)

BY
SAKSHI MISHRA
M.Sc. CHEMISTRY

UNDER THE GUIDANCE OF
PROF. SHAMSH PERVEZ

SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

2022-23

Dr. SHAMSH PERVEZ

Professor & Fullbright Research Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India



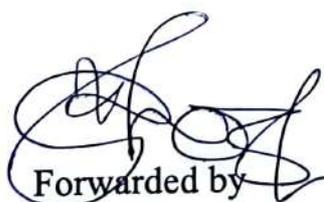
Tel. : 0788-2280786
: 0771-2262843
Mob. : 09425242455; 07587199315
Email : shamshp@yahoo.co.in
shamshpervez@gmail.com
Resi. : MIG-1 767, Hudco
Bhilai (C.G.)490009 India

Ref. No.....

Date.....19/06/23

CERTIFICATE

This is to certify that Sakshi Mishra has completed her dissertation work entitled "Seasonal Dynamics and Chemical Characterization of Water-Soluble Inorganic Ions in Wastewater: Insights from Raipur, Chhattisgarh " under my supervision for the degree of "Master of Science in Chemistry". The dissertation embodies the observation, interpretation and conclusion of her study. She is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).



Forwarded by

Head of the Department

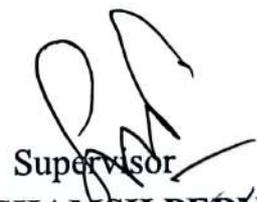
Prof. K.K. Ghosh

SoS in Chemistry

Pt. R.S.U. Raipur (C.G.)

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)



Supervisor

PROF. SHAMSH PERVEZ

SoS in Chemistry

Pt. R.S.U. Raipur (C.G.)

Dr. Shamsh Pervez

Professor & Fulbright Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India
E-mail: shamshpervez@gmail.com

**FÖRSTER RESONANCE ENERGY TRANSFER (FRET) BETWEEN
NITROGEN DOPED CARBON QUANTUM DOTS AND GOLD
NANOPARTICLES FOR DETECTION OF Hg²⁺**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

SUBMITTED BY

SANGEETA PATEL

UNDER THE SUPERVISION OF

DR. MANMOHAN L. SATNAMI

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

2022-23



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

Dr. Manmohan Lal Satnami

Associate Professor

M.Sc., M.Phil., Ph.D., CSIR-NET

TWAS-CNP q-Postdoctoral Fellow (Brazil)

Life member of Indian Society for Surface Science & Technology:

Member of Indian Chemical Society



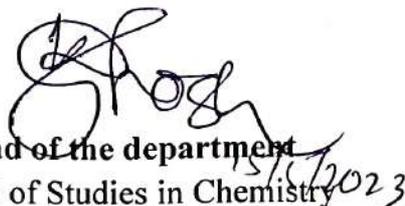
Mobile:799909271

Email:manmohanchem@gmail.com

CERTIFICATE

This is to certify that Ms. Sangeeta Patel has completed the dissertation work entitled "Forster Resonance Energy Transfer (FRET) between Nitrogen Doped Carbon Quantum Dots and Gold Nanoparticles for Detection of Hg²⁺". Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of her study.

She is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).



Head of the department
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur(C.G.)

Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)



Dr. Manmohan L. Satnami
(Supervisor)
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur(C.G.)

Dr. Manmohan L. Satnami
Associate Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (CG.)
e-mail.manmohanchem@gmail.com

**PHOTOCATALYTIC DEGRADATION OF METHYLENE BLUE
USING MOLYBDENUM SULPHIDE NANOSTRUCTURES**

A DESSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

SUBMITTED BY:

SANJAY KUMAR SAHU

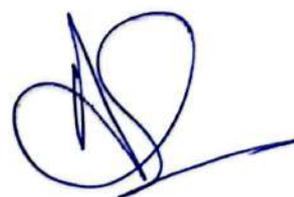
UNDER THE SUPER VISION OF:

Dr. MANMOHAN L. SATNAMI

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR(C.G.)

2022-23



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

Dr. Manmohan L. Satnami
Associate Professor
M.Sc., M.Phil., Ph.D., CSIR-NET
TWAS-CNP q-Postdoctoral Fellow
(Brazil)
Life member of Indian Society for
Surface Science & Technology:
Member of Indian Chemical Society



Mobile: 7999509271

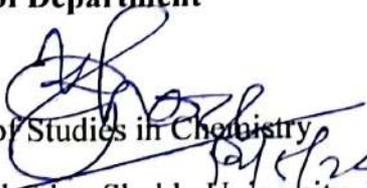
Email: manmohanchem@gmail.com

CERTIFICATE

This is to certify that **Mr. Sanjay Kumar Sahu** has completed the dissertation work entitled "**Photocatalytic degradation of methylene blue using molybdenum sulphide nanostructure.**" Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of his study.

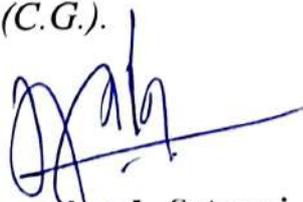
He is allowed to submit the present work for the award of "**Master of Science in Chemistry**" of Pt. Ravishankar Shukla University, Raipur, (C.G.).

Head of Department


School of Studies in Chemistry
Pt. Ravishankar Shukla University, Raipur

Head

School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Dr. Manmohan L. Satnami

(Supervisor)

School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Dr. Manmohan L. Satnami

Associate Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)
E-mail: manmohanchem@gmail.com

**SYNTHESIS, CHARACTERIZATION AND APPLICATION OF
GOLD NANOPARTICLE IN DETECTION OF METAL IONS.**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

SUBMITTED BY:

SHASHANK BAGHEL

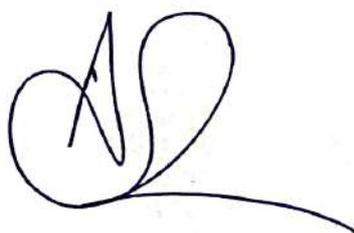
UNDER THE SUPERVISION OF:

Dr. MANMOHAN L. SATNAMI

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR(C.G.)

2022-23



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

Dr. Manmohan Lal Satnami
Associate Professor

*M.Sc., M.Phil., Ph.D., CSIR-NET
TWAS-CNP q-Postdoctoral Fellow (Brazil)
Life member of Indian Society for Surface
Science & Technology:
Member of Indian Chemical Society*



Mobile: 7999509271

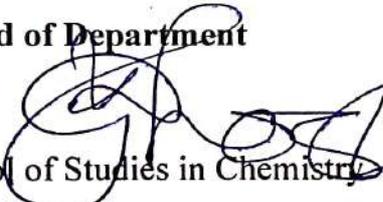
Email: manmohanchem@gmail.com

CERTIFICATE

This is to certify that Mr. Shashank Baghel has completed the dissertation work entitled "Synthesis, Characterization and Application of Gold Nanoparticle In Detection of Metal Ions." Under my supervision for the degree of "Master of Science in Chemistry." The dissertation embodies the observation, interpretation and conclusion of his study.

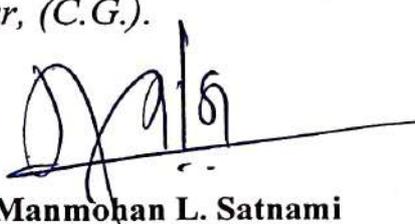
He is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.).

Head of Department


School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur
Raipur

Head
School Of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Dr. Manmohan L. Satnami

Dr. Manmohan L. Satnami
(Supervisor)
Associate Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR-492010 (C.G.)
E-mail: manmohanchem@gmail.com

A
Project Report

On

Green Synthesis of Magnetic Nanoparticles via *Ocimum sanctum*

A project submitted to Pt. Ravishankar Shukla University Raipur (C.G.) for
the Degree of Master of Science in Chemistry



SoS in Chemistry

Pt. Ravishankar Shukla University

Raipur (C.G.)

Supervisor:

Dr. Sanyukta Patel

A handwritten signature in blue ink, appearing to be 'Sanyukta Patel'.

Submitted By:

Shikha Verma

M.Sc. Chemistry (IV Sem)

A handwritten signature in blue ink, appearing to be 'Shikha Verma'.

A second handwritten signature in blue ink, appearing to be 'Shikha Verma'.

SoS in Chemistry

Pt. Ravishankar Shukla University

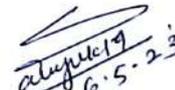
Raipur (C.G.)



Certificate

This is to certify that Shikha Verma (M.Sc. Chemistry IV semester) has been completed a project on the topic "Green Synthesis of Magnetic Nanoparticles via *Ocimum Sanctum*" This project is submitted for the fulfillment Master Degree in Chemistry.

I wish her for bright future


Signature

Dr. Sanyukta Patel

**A MODIFIED FUJIWARA REACTION FOR THE DETERMINATION OF
CAPTAN USING SPECTROPHOTOMETRIC METHOD**

**A
PROJECT
SUBMITTED TO**



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR, CHHATTISGARH
2022-23**

**SUBMITTED BY:
SOUMI BANERJEE
UNDER THE SUPER VISION OF:
Prof. MANISH K. RAI**

**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR, CHHATTISGARH
2022-23**

CERTIFICATE

This is to certify that **Miss Soumi Banerjee** has completed the dissertation work entitled "A modified Fujiwara reaction for the determination of Captan using Spectrophotometric method." under my supervision for the degree of "**Master of Science in Chemistry**". The dissertation embodies the observation, interpretation and conclusion of his study.

She is allowed to submit the present work for the award of "**Master of Science in Chemistry**" of Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.



Head of Department
Prof. Kallol K. Ghosh 29/5/23
School of studies in Chemistry
Pt. Ravishankar Shukla University
Raipur(C.G.)
Head
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)



Supervisor
Prof. Manish K. Rai
School of studies in Chemistry
Pt. Ravishankar Shukla University
Raipur(C.G.)

Dr. M.K. RAI
Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.) 492010 INDIA

**PANI-GRAFTED N-DOPED CARBON FROM WASTE TEA: A
ROBUST MATERIAL FOR HIGH-PERFORMANCE
SUPERCAPACITOR**

**A
Project Submitted to
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

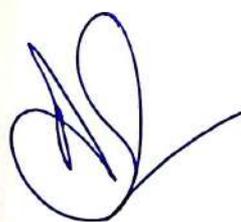
**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

SWATI DADSENA
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Dr. INDRAPAL KARBHAL



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23**





SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

MSc., M Phil., Ph.D., CSIR-NET, GATE

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

Mob.: 8605985169

Email: ikarbhal@gmail.com

CERTIFICATE

This is to certify that Ms. Swati Dadsena M.Sc. Chemistry IV semester has been completed a project on "PANI-grafted N-doped carbon from waste tea: A robust material for high-performance supercapacitor". This project is submitted for the fulfillment degree in chemistry.

I wish her good luck for all her future endeavors.


11.07.23

Dr. Indrapal Karbhal

Dr. Indrapal Karbhal
Assistant Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University,
RAIPUR-492010 (C.G.)
E-mail: ikarbhal@gmail.com

**“A NEW INSIGHT INTO HIGHLY FLUORESCENT NITROGEN-SULFUR
CODOPED GRAPHENE QUANTUM DOTS, FOR DETECTION OF
OFLOXACIN”**

**A
PROJECT
SUBMITTED
TO**



**SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY, Raipur (C.G.)**

**SUBMITTED BY
TAMESH VERMA**

**UNDER THE GUIDANCE OF
PROF. KALLOL K. GHOSH**

**RESEARCH CENTER
SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

2022-23

School of Studies in Chemistry

Pt. Ravishankar Shukla University, Raipur (C.G.)

Prof. K. K. Ghosh
Professor & Head (Chemistry)
M.Sc., Ph.D.,
INSA-JSPS VISITING FELLOW
LIFE MEMBER
Indian Association for Cultivation of Science
Indian Science Congress Association
Indian Society for Surface Science & Technology
Chemical Research Society of India



Mobile: 9425216204

Email: kallokghosh@yahoo.com

Ref. No. :

Date: 19/06/2023

CERTIFICATE

This is to certify that Tamesh Verma has completed dissertation work entitled "A New Insight Into Highly Fluorescent Nitrogen-Sulfur Co-doped Graphene Quantum Dots, For Detection Of Ofloxacin" Under my supervision for the degree of "Master of Science in Chemistry". The dissertation embodies the observation, interpretation and conclusion of him study.

He is allowed to submit the present work for the award of "Master of Science in Chemistry" of Pt. Ravishankar Shukla University, Raipur, (C.G.)

S O S in chemistry

Forwarded by Head

Head

19/6/23

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Prof. Kallol k. Ghosh

19-6-23

(Supervisor & Head of the Department)

Dr. Kallol K. Ghosh
Professor and Head
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

**STUDY ON THE ASSEMBLY STRUCTURE VARIATION OF
CETYLTRIMETHYLAMMONIUM BROMIDE ON THE
SURFACE OF SILVER NANOPARTICLES**

A DISSERTATION

SUBMITTED

TO

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

SUBMITTED BY

TUSHAR KUMAR DHRUW

(M. Sc. IV Semester)

UNDER THE SUPERVISION OF

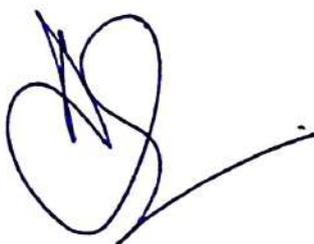
Prof. KALLOL K. GHOSH

RESEARCH CENTER

SCHOOL OF STUDIES IN CHEMISTRY

Pt. RAVISHANKAR SHUKLA UNIVERSITY, Raipur (C.G.)

2023



SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY,

RAIPUR-492 010, CHHATTISGARH (INDIA)

Prof. KALLOL K. GHOSH

Raipur, 492010, C.G. (INDIA)

M. Sc., Ph.D.

Mobile : 9425216204

Professor

Email : kallolkghosh@gmail.com

INSA-JSPS VISITING FELLOW
LIFE MEMBER

Indian Association for Cultivation of
Science Indian Science Congress
Association,

Indian Society for Surface Science & Technology
Chemical Research Society of India

Ref. No.:

Date : 28/06/2023

CERTIFICATE BY THE SUPERVISOR

This is to certify that the work entitled, “Study on the Assembly Structure Variation of Cetyltrimethylammonium Bromide on the Surface of Silver Nanoparticles” is a piece of project work done by TUSHAR KUMAR DHRUW, M. Sc. IV Semester, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur under my guidance and supervision for the degree of Master in Chemistry at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

To the best of my knowledge and belief the thesis:

1. Embodies the work of the candidate herself,
2. Has duly been completed,
3. Fulfills the requirements of the ordinance relating to the M.Sc. degree of the university, and
4. Is up to the standard both in respect of contents and language for being referred to the examiner.



Signature of the Head

Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)



Signature of Supervisor

Dr. Kallol K. Ghosh

Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

SPECTROPHOTOMETRIC DETERMINATION OF
PHENTHOATE

A PROJECT SUBMITTED TO



DEPARTMENT SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGARH

SUBMITTED BY:

TUSHAR SAHU

UNDER THE SUPERVISION OF:

Prof. MANISH K. RAI

SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR,
CHHATTISGAARH

2022-23

CERTIFICATE

This is to certify that **Mr. Tushar Sahu** has completed the dissertation work entitled "Spectrophotometric determination of Phenthoate" under my supervision for the degree of "**Master of Science in Chemistry**". The dissertation embodies the observation, interpretation and conclusion of his study.

He is allowed to submit the present work for the award of "**Master of Science in Chemistry**" of Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.

Head of Department

Prof. Kallol K. Ghosh

School of studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

Head

School Of Studies In Chemistry

Pt. Ravishankar Shukla University
Raipur (C.G.)

Supervisor

Prof. Manish K. Rai

School of studies in Chemistry

Pt. Ravishankar Shukla University, Raipur

(C.G)

Dr. M.K. RAI

Professor

School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.), 492010 INDIA

**PANI-GRAFTED N-DOPED CARBON SPHERE AS HIGH
PERFORMANCE SUPERCAPACITOR ELECTRODE**

**A
Project Submitted to
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

**UPENDRA
(M.Sc. IV Sem. CHEMISTRY)**

**Under the supervision of
Dr. INDRAPAL KARBHAL**



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23**



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

MSc., M Phil., Ph.D., CSIR-NET, GATE

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

Mob.: 8605985169

Email: ikarbhal@gmail.com

CERTIFICATE

This is to certify that Mr. Upendra M.Sc. Chemistry IV semester has been completed a project on " PANI-grafted N-doped carbon sphere as a high performance supercapacitors electrode ". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors


11.07.23

Dr. Indrapal Karbhal

Dr. Indrapal Karbhal

Assistant Professor

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

RAIPUR-492010 (C.G.)

E-mail: ikarbhal@gmail.com

**RUTHENIUM OXIDE NANOPARTICLE DECORATED ON
NITROGEN DOPED CARBON NANO OILION AS HIGH-
PERFORMANCE SUPERCAPACITOR**

A
Project Submitted to
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

FOR
THE DEGREE OF

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED
BY

VARSHA SAHU
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Dr. INDRAPAL KARBHAL



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
(NAAC-'A' GRADE UNIVERSITY)
SESSION- 2022-23



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

MSc., M Phil., Ph.D., CSIR-NET, GATE

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

Mob.: 8605985169

Email: ikarbhal@gmail.com

CERTIFICATE

This is to certify that Ms. Varsha Sahu M.Sc. Chemistry IV semester has been completed a project on "Ruthenium oxide nanoparticle decorated on nitrogen doped carbon nano onion as high-performance Supercapacitor". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors.


11.07.23

Dr. Indrapal Karbhal
Dr. Indrapal Karbhal
Assistant Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University,
RAIPUR-492010 (C.G.)
E-mail: ikarbhal@gmail.com

**BORON DOPED CARBON DERIVED FROM SUGARCANE
BAGASSE FOR SUPERCAPACITOR AND DYE REMOVAL**

A
Project Submitted to
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

FOR
THE DEGREE OF

MASTER OF SCIENCE
IN
CHEMISTRY

SUBMITTED
BY

VEENA DEWANGAN
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Dr. INDRAPAL KARBHAL



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
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SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

Mob.: 8605985169

Email: ikarbhal@gmail.com

MSc., M Phil., Ph.D., CSIR-NET, GATE

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

CERTIFICATE

This is to certify that Ms. Veena Dewangan M.Sc. Chemistry IV semester has been completed a project on "Boron doped carbon derived from sugarcane bagasse for supercapacitor and dye removal". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors


11.07.23

Dr. Indrapal Karbhal

Dr. Indrapal Karbhal

Assistant Professor

School of Studies in Chemistry

Pt. Ravishankar Shukla University,

RAIPUR-492010 (C.G.)

E-mail: ikarbhal@gmail.com

**“DETERMINATION OF SO₂ CONCENTRATION FROM SOLID
FUEL BURNING ACTIVITY”**

A

DISSERTATION SUBMITTED TO
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)



IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR

The Degree of
MASTER OF SCIENCE

IN

CHEMISTRY

SUBMITTED BY

VARSHA JANGHEL

M.SC CHEMISTRY

UNDER THE GUIDENCE OF

PROF. SHAMSH PERVEZ

SCHOOL OF STUDIES IN CHEMISTRY

PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G)

(2022 – 2023)

A handwritten signature in blue ink, likely belonging to the student Varsha Janghel.

A handwritten signature in blue ink, likely belonging to Prof. Shamsh Pervez.

A handwritten signature in blue ink, likely belonging to Prof. Shamsh Pervez.

Dr. SHAMSH PERVEZ

Professor & Fullbright Research Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India



Tel. : 0788-2280786
: 0771-2262843
Mob. : 09425242455; 07587199315
Email : shamshp@yahoo.co.in
shamshpervez@gmail.com
Resi. : MIG-1 767, Hudco
Bhilai (C.G.)490009 India

Ref. No.....

Date 19/6/23

CERTIFICATE

This is to certify that varsha janghel has completed the dissertation work entitled **“Determination of SO₂ concentration from solid fuel burning activity”** under my supervision for the degree of **“Master in chemistry”**; the dissertation embodies the observation, interpretation and discussion of her study.

She is allowed to submit the present work for the award of **“Master in chemistry”** of Pt. Ravishankar Shukla university, Raipur, Chhattisgarh, India

Forwarded by

Head S.O.S. In Chemistry
Head

School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)

Signature of Supervisor

Dr. Shams Pervez
Professor & Fulbright Fellow
School of Studies in Chemistry
Pt. Ravishankar Shukla University
Raipur-492010 (Chhattisgarh), India
E-mail: shamshpervez@gmail.com

**“DYE REMOVAL OF N-DOPED CARBON NANO ONION FROM
AUTOMOBILE EMITTED BLACK CARBON”**

A

**Project Submitted to
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

**FOR
THE DEGREE OF**

**MASTER OF SCIENCE
IN
CHEMISTRY**

**SUBMITTED
BY**

VERSHA VERMA
(M.Sc. IV Sem. CHEMISTRY)

Under the supervision of
Dr. INDRAPAL KARBHAL



**SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR (C.G.)
INDIA
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SESSION- 2022-23**



SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY,
RAIPUR-492 010, CHHATTISGARH (INDIA)

Dr. Indrapal Karbhal

Mob.: 8605985169

MSc., M Phil., Ph.D., CSIR-NET, GATE

Email: ikarbhal@gmail.com

Pt. Ravishankar Shukla University,

Raipur 492010 (C.G.) India

CERTIFICATE

This is to certify that Ms. Versha Verma M.Sc. Chemistry IV semester has been completed a project on "Dye removal of N-Doped Carbon Nano Onion from automobile emitted black carbon". This project is submitted for the fulfillment degree in chemistry.

I wish him good luck for all his future endeavors

11.07.23
Dr. Indrapal Karbhal

Dr. Indrapal Karbhal
Assistant Professor
School of Studies in Chemistry
Pt. Ravishankar Shukla University,
RAIPUR-492010 (C.G.)
E-mail: ikarbhal@gmail.com

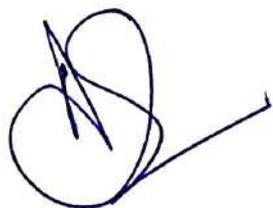
**MICELLIZATION BEHAVIOR OF CATIONIC AND ANIONIC
SURFACTANTS IN THE PRESENCE OF IMIDAZOLIUM-
BASED IONIC LIQUID**

**A
DISSERTATION
SUBMITTED
TO
SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY, Raipur (C.G.)**

**SUBMITTED BY:
VINITA YADU
UNDER THE SUPERVISION OF
Prof. KALLOL K. GHOSH**

**RESEARCH CENTER
SCHOOL OF STUDIES IN CHEMISTRY
Pt. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)**

2022-23



SCHOOL OF STUDIES IN CHEMISTRY
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR(C.G.)

Raipur, 492010, C.G. (INDIA)

Prof. K. K. Ghosh
Professor & Head (Chemistry)
M.Sc., Ph.D.,
INSA-JSPS VISITING FELLOW
LIFE MEMBER
Indian Association for Cultivation of Science
Indian Science Congress Association
Indian Society for Surface Science & Technology
Chemical Research Society of India



Mobile: 9425216204
Email: kallolkghosh@gmail.com

Ref. No.:

Date: 19/06/2023

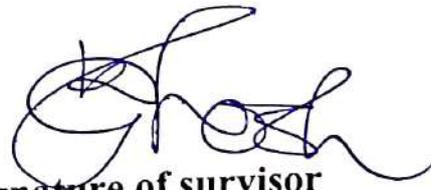
CERTIFICATE BY THE SUPERVISOR

This is to certify that the work entitled, "**Micellization behavior of cationic and anionic surfactants in the presence of imidazolium-based ionic liquid**" is a piece of project work done by Vinita Yadu, M.Sc. IV Semester, School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur under my guidance and supervision for the degree of Master in Chemistry at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India.

To the best of my knowledge and belief the thesis:

1. Embodies the work of the candidate herself,
2. Has duly been completed
3. Fulfils the requirements of the ordinance relating to the M.Sc. degree of the university, and
4. Is up to the standard both in respect of contents and language for being referred to the examiner.


Forwarded by Head
Head 19/6/23
School Of Studies In Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)


Signature of supervisor
19.6.23
Dr. Kallol K. Ghosh
Professor and Head
School of Studies in Chemistry
Pt. Ravishankar Shukla University
RAIPUR (C.G.)