## RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G.



Session 2023-24

A DISSERTATION ON

Entitled

## SOLID WASTE MANAGEMENT IN SARGUJA



## Submitted To Department Of Chemistry In

the partial fulfilment of requirements for the award of the degree of

#### MASTERS OF SCIENCE IN CHEMISTRY

#### **SUBMITTED BY**

**ANJALI MINJ** 

M.Sc. Chemistry IV SEM Enrolment no. – RGPGS/22/027 Roll no.- 240402001

#### Supervised by:

r.Sandeep Kushwaha

i. Prof. Dept. of Chemistry G.P.G. College Ambikapur

#### **Head of Department:**

Smt. Saroj Tirkey

H.O.D of Chemistry R.G.P.G. College Ambikapur

AFFILIATED TO SANT GAHIRA GURU YISHWAIDALAYA SARGUJA, AMBIKAPUR"

#### CERTIFICATE

#### DEPARTMENT OF CHEMISTRY

## "RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G."

This is to certify that the Dissertation of "SOLID WASTE MANAGEMENT IN SARGUJA" is a record of independent research work done by ANJALI MINJ under my supervision during 2023 - 2024 session submitted to the Rajeev Gandhi Govt. Post Graduate Autonomous College Ambikapur Surguja C.G. India in partial fulfilment for the award of the degree of M.Sc. Chemistry and that the Dissertation has not previously formed the basis for the award of any other degree or other title.

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Signature of

Supervisor

Signature of

H.O.D. of Chemistry

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#### **DECLARATION**

I ARTI SINGH, a regular student of M.Sc. (Chemistry), declare that the dissertation entitled "ANALYSIS OF GROUND WATER QUAILTY OF TATAPANI DISTRICT BALRAMPUR" is my own work conducted under the supervision of Mr. Sandeep Kumar Kushwaha Assit. Prof. Department of Chemistry Rajeev Gandhi P.G. college Ambikapur Surguja (C.G.)

Place - Ambikapur

Date - 12/08/2024

ARTI SINGH

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This is to Certify that ARTI SINGH, M.Sc. Chemistry Semester RAJIV GANDHI GOVT. P.G. COLLEGE AMBIAKPUR C.G. has submitted the dissertation entitled ""ANALYSIS OF GROUND WATER QUAILTY OF TATAPANI DISTRICT BALRAMPUR" I hereby recommended and dissertation to the Govt. R.G.P.G. College for the award of M.Sc. Chemistry during academic session 2023-24

Submitted by

**ARTI SINGH** 

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**Assistant Professor** Department of Chemistry

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H.O.D.

Smt. Saroj Tirkey Chemistry Department

(R.G.P.G College Ambikapur

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#### A

## DISSERTATION REPORT ON

"SOIL ANALYSIS OF PARPATIYA MAINPAT"

"IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTY

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



**SESSION - 2023-24** 

#### **GUIDED BY.**

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#### SUBMITTED BY

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This is to Certify that Arvind Kumar Yadav, M.Sc. Chemistry 4<sup>th</sup> Semester RAJIV GANDHI GOVT. P.G. COLLEGE AMBIAKPUR C.G. has submitted the dissertation entitled "SOIL ANALYSIS OF PARPATIYA MAINPAT" I hereby recommended and dissertation to the Govt. R.G.P.G. College for the award of M.Sc. Chemistry during academic session 2023-24.

Submitted by

**Arvind Kumar Yadav** 

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#### A

# DISSERTATION REPORT

"WATER ANALYSIS OF FISH RIVER IN SURGUJA"

"IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTY

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



#### **SESSION - 2023-24**

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Submitted by

Ashram Bara

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# RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G.



**Session 2023-24** 

A DISSERTATION ON

Entitled

Study of Drinking Water Quality and Their Impact of Human Being of Bagicha Area



#### Submitted To Department Of Chemistry In

the partial fulfilment of requirements for the award of the degree of

## MASTERS OF SCIENCE IN CHEMISTRY

#### SUBMITTED BY

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Roll no.- 240402005

#### Supervised by:

Mr. Sandeep kushwaha Assi. Prof. Dept. of Chemistry R.G.P.G. College Ambikapur

#### Head of Department: Smt. Saroj Tirkey

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AFFILIATED TO SANT GAHIRA GURU VISHWAIDALAYA SARGUJA, AMBIKAPUR"

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This is to certify that the Dissertation of "Study of Drinking Water Quality and Their Impact of Human Being of Bagicha Area" is a record of independer research work—done by Devkey Bhagat under my supervision during 2023 - 202 session submitted to the Rajeev Gandhi Govt. Post Graduate Autonomous Colleg Ambikapur Surguja C.G. India in partial fulfilment for the award of the degree of M.Sc. Chemistry—and—that the Dissertation has not previously formed the basis for the award of any other degree or other title.

3108124

Signature of

Supervisor

Signature of

H.O.D. of Chemistry

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## Rajeev gandhi govt. Post graduate Autonomous college ambikapur sarguja c.g.



Session 2023-24

A DISSERTATION ON

Entitled

## Analysis of Milk Processing



#### Submitted To Department Of Chemistry In

the partial fulfilment of requirements for the award of the degree of

#### MASTERS OF SCIENCE IN CHEMISTRY

#### SUBMITTED BY

Diksha Soni M.Sc. Chemistry IV SEM Enrolment no. – RGPGS/22/33 Roll no.- 240402006

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#### "RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G."

This is to certify that the Dissertation of "ANALYSIS OF MILK PROCESSING" is a record of independent research work done by Diksha Soni under my supervision during 2023 - 2024 session submitted to the Rajeev Gandhi Govt. Post Graduate Autonomous College Ambikapur Surguja C.G. India in partial fulfilment for the award of the degree of M.Sc. Chemistry and that the Dissertation has not previously formed the basis for the award of any other degree or other title.

Signature of

Supervisor

Signature of

H.O.D. of Chemistry

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## RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G.



**Session 2023-24** 

A DISSERTATION ON

**Entitled** 

Assessment of water quality around curface coal mine in Bhatgaon area (5.2.5.2)



#### Submitted To Department Of Chemistry In

the partial fulfilment of requirements for the award of the degree of

#### MASTERS OF SCIENCE IN CHEMISTRY

#### SUBMITTED BY

GARIMA SINGH

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Enrolment no. – RGPGS/22/34 Roll no. - 240402007

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## "RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G."

This is to certify that the Dissertation of "Assessment Of Water Quality Around Surface Coal Mine In Bhatgaon Area (S.E.C.L)" is a record of independent research work—done by GARIMA SINGH—under my supervision during 2023 - 2024 session—submitted to the Rajeev Gandhi Govt. Post—Graduate Autonomous College Ambikapur Surguja C.G. India in partial fulfilment for the award of the degree of M.Sc. Chemistry and that the Dissertation has not previously formed the basis for theaward of any other degree or other title.

Signature of

Supervisor

Signature of

H.O.D. of Chemistry

External Examiner

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### RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G.



**Session 2023-24** 

A DISSERTATION ON

**Entitled** 

STUDY OF SUSTAINABLE AGRICULTURE AND SOIL FERTILITY IN PATPARIYA AMBIKAPUR AKEA



Submitted To Department Of Chemistry In

the partial fulfilment of requirements for the award of the degree of

MASTERS OF SCIENCE IN CHEMISTRY

SUBMITTED BY

Gayatri Yadav

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## "RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G."

This is to certify that the Dissertation of "STUDY OF SUSTAINABLE AGRICULTURE AND SOIL FERTILITY IN PATPARIYA AMBIKAPUR AREA" is a record of independent research work done by Gayatri Yadav under my supervision during 2023 - 2024 session submitted to the Rajeev Gandhi Govt. Post Graduate Autonomous College Ambikapur Surguja C.G. India in partial fulfilment for the award of the degree of M.Sc. Chemistry and that the Dissertation has not previously formed the basis for theaward of any other degree or other title.

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Supervisor

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Signature of

H.O.D. of Chemistry

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	Kishan Rice Mill Vivekanand			
2.2	Nagar, Ambikapur			
	Sive Mandir			
2.3				
	Patpariya, Ambikapur Mahatma Gandhi Road			
.2.4	Mahatma Gandili Road			
	Patpariya, Ambikapur			
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# **DISSERTATION REPORT** ON

"A Study of environmental impact due to coal mines"

"IN PARTIAL FULFILMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTRY"

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



**SESSION - 2023-24** 

**DEPARTMENT OF CHIMESTRY** 

RAJEEV GANDHI GOVT. P.G. AUTONOMOUS COLLEGE AMBIKAPUR SURGUJA (C.G)

Dr. RAMESHWARI BANJARA ASST, PROF, OF CHEMISTRY

MISS, KANCHAN RATRE M.Sc. CHEMISTRY 4TH ENROLL. NO. - RGPGS/22/037 **ROLL NO.- 240402009** 

#### CERTIFICATE OF SUPERVISOR

This is certify that Miss. KANCHAN RATRE, M.Sc. semester Rajeev Gandhi P.G. College Chemistry 4<sup>th</sup> Ambikapur Surguja (C.G.) has submitted that dissertation entitled "A Study of environmental impact due to coal mines". I hereby recommended and dissertation to the R.G.G. P.G. College for the award of M.Sc. Chemistry during academic session 2023-24.

## Submitted By

Kanchan Ratre

SUPERVISOR

SMT. SAROJ TIRKEY

Asst. Prof. of Chemistry &

H.O.D. of Chemistry

R.G.G.P.G. College ambikapur

DR. RAMESHWARI BANJARA

Asst. Prof. of Chemistry

R.G.G.P.G. College ambikapur

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# DISSERTATION REPORT

ON

"ENVIRONMENTAL APPLICATIONS OF CHALCOGENS INCORPORATED NANOCOMPOSITES"

PARTIAL FULFILMENT FOR THE AWARD OF MASTER OF SCIENCE WI CHEMISTRY

(SANT GAHIRA GURU VISHWAVIDYALAYA SARGUJA, AMBIKAPUR, C.G.)



Session: 2023-24

**DEPARTMENT OF CHEMISTRY** 

RAJIV GANDHI GOVT. POST GRADUATE (AUTONOMOUS) COLLEGE AMBIKAPUR, C.G.

GUIDED BY

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st. Professor in Chemistry

SUBMITTED BY

M.Sc. Chemistry IV<sup>th</sup> Sem

Enrolment No. RGPGS/22/03

Roll No. 240402010

## CERTIFICATE OF SUPERVISOR

This is to certify that Devyashish Chandel, M.Sc. Chemistry IV<sup>th</sup> semester regular student of M.Sc. Chemistry, Rajiv Gandhi PG College Ambikapur has submitted the dissertation entitled "ENVIRONMENTAL APPLICATIONS OF CHALCOGENS INCORPORATED NANOCOMPOSITES". I hereby recommend this dissertation to the Rajiv Gandhi Govt. PG College Ambikapur for the award of M.Sc. Chemistry during academic session 2023-24.

SUPERVISOR

Dr. Rameshwari Ashish Banjara

Asst. Professor in Chemistry

SUBMITTED BY

**Devyashish Chandel** 

M.Sc. Chemistry IVth Sem.

Enrolment No. RGPGS/22/038

Roll No. 240402010

HOD Jum SMT. SAROJ TIRKEY CHEM. DEPT.

#### 1 - MILLY

- Introduction.
- Reference

#### II - FILMI)

Design of Gd<sub>2</sub>O<sub>3</sub> nanorods: A challenging 39 – 55 photocatalyst for the degradation of neurotoxicity chloramphenicol drug.
 Reference

#### III - MILLEN - III

• CuS incorporated Gd<sub>2</sub>O<sub>3</sub> nanorods : facile 56 – 75 synthesis with enhanced photocatalytic performance.

## VI - ASTAAN)

Reference

ZnS supported Gd<sub>2</sub>O<sub>3</sub> nanocomposite: An efficient and reusable catalyst for selective knoevenagel condensation.
 Reference

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#### A

# DISSERTATION REPORT

"A COMPARATIVE ACCOUNT OF VARIOUS SOAPS AND DETERGENT SURFACTANT WIDELY USED"

"IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTY

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



**SESSION - 2023-24** 

GUIDED BY.

Or. RAMESHWARI BANJARA

Assistant Professor

Department of Chemistry

SUBMITTED BY

Praveen Kiran

M.Sc. Chemistry IVth Sem.

Enrolment no RGPGS/22/039

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This is to Certify that Praveen Kiran, M.Sc. Chemistry 4<sup>th</sup> Semester RAJIV GANDHI GOVT. P.G. COLLEGE AMBIAKPUR C.G. has submitted the dissertation entitled "A COMPARATIVE ACCOUNT OF VARIOUS SOAPS AND DETERGENT SURFACTANT WIDELY USED" I hereby recommended and dissertation to the Govt. R.G.P.G. College for the award of M.Sc. Chemistry during academic session 2023-24.

Submitted by

Praveen Kiran

SUPERVISOR

Dr. RAMESHWARI BANJARA

Assistant Professor Department of Chemistry (R.G.P.G Collge ambikapur) H.O.D.

Smt. Saroj Tirkey

Chemistry Department

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Cyama Cashyab

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#### A

# DISSERTATION REPORT

"FLY ~ ASH BRICKS"

"IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTY

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



**SESSION - 2023-24** 

GUIDED BY.

Dr. RAMESHWARI BANJARA

Assistant Professor

Department of Chemistry

SUBMITTED BY

Rahul Das

M.Sc. Chemistry IV<sup>th</sup> Sem. Enrolment no RGPGS/22/040 Roll no.- 240402012

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This is to Certify that Rahul Das, M.Sc. Chemistry 4<sup>th</sup> Semester RAJIV GANDHI GOVT. P.G. COLLEGE AMBIAKPUR C.G. has submitted the dissertation entitled "FLY - ASH BRICKS". I hereby recommended and dissertation to the Govt. R.G.P.G. College for the award of M.Sc. Chemistry during academic session 2023-24.

Submitted by

Rahul Das

SUPÉRVĬSOR

18/2024

Dr. RAMESHWARI BANJARA

Assistant Professor Department of Chemistry (R.G.P.G Collge ambikapur) H.O.D.

Smt. Saroj Tirkey
Chemistry Department
(R.G.P.G College Ambikapur)

## **Department of Chemistry**

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CERTIFICATE

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**ACKNOWLEDGEMENT** 

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# Phytochemical Study of Medicinal Plants in Surguja

A dissertation submitted to Rajeev Gandhi Govt. P.G. College in partial fulfillment of the requirements for the award of the Degree of Master of Science in Chemistry under the Faculty of Science

*By*RESHMA SINGH
(240402013)



# DEPARTMENT OF CHEMISTRY RAJEEV GANDHI GOVT. P.G. COLLEGE Of An Autonomous College

## SANT GAHIRA GURU UNIVERSITY

AMBIKAPUR SURGUJA (C.G.) – 497001 SESSION 2023 - 24



#### DEPARTMENT OF CHEMISTRY

# RAJEEV GANDHI GOVT. POST GRADUATE COLLEGE

(Re-accredited by NAAC with 'B' Grade)

Date: 12/08/2024

#### **CERTIFICATE**

"Phytochemical Study of Medicinal Plants in Surguja" is an authentic record of the research work carried out by Ms. Reshma Singh (Enroll. No. RGPGS/22/041) under my supervision and guidance in partial fulfillment of the requirements for the Degree of Master of Science in Chemistry of Rajeev Gandhi Govt. P.G. College, Ambikapur, Surguja (C.G.), during the academic year 2023-24 and further that no part of this has been presented elsewhere for any other degree.

Smt. SAROJ ŤIRKEY (HOD) DR. RAMÉSHWARI BANJARA (Assistant Professor)

Place: Ambikapur Date: 12/08/2024 External Examines

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## EFFICIENT UTILIZATION OF BIOWASTE AS ENVIRONMENTAL CONSERVATIONIST AND NANOFERTILIZER

A THESIS

Submitted by

#### ROHAN RAI

in partial fulfillment of the requirements for the degree of

#### MASTER OF SCIENCE IN CHEMISTRY



RAJEEV GANDHI GOVT. POST GRADUATE COLLEGE

AMBIKAPUR, CHHATTISGARH

**AUGUST 2024** 

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#### DISSERTATION REPORT

ON

#### PET DEGRADING ENZYMES AND PET WASTE MANAGEMENT

A report submitted in partial fulfillment of the requirements for the Award of Degree of MASTER OF SCIENCE

in

**CHEMISTRY** 

#### SAINT GAHIRA GURU UNIVERSITY, AMBIKAPUR



**SESSION 2022-24** 

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# RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G.



**Session 2023-24** 

A DISSERTATION ON

**Entitled** 

BAR SOAP PRODUCTION FROM ALOE VERA GEL IN SARGUJA



#### Submitted To Department Of Chemistry In

the partial fulfilment of requirements for the award of the degree of

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**Session 2023-24** 

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# RAJEEV GANDHI GOVT. POST GRADUATE AUTONOMOUS COLLEGE AMBIKAPUR SARGUJA C.G.



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# A DISSERTATION REPORT ON

"TO STUDY OF PHOTOCHEMICAL OF OXALIS CORNICULATALINN BY CHROMATOGRAPHIC METHOD AND ITS USES

"IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTY

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



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# DISSERTATION REPORT

"AIR POLLUTION ANALYSIS IN AMBIKAPUR"

"IN PARTIAL FULFILLMENT FOR THE AWARD OF MASTER OF SCIENCE IN CHEMISTY

(SANT GAHIRA GURU UNIVERSITY AMBIKAPUR)



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**Session 2023-24** 

A DISSERTATION ON

**Entitled** 

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