

Lithium Ion Battery & Its Uses

Project submitted

By

ALOK KUMAR PATRA

Roll No.: 23CHEM133

Regd No: 01231/2020

Student of

Govt.Science College, Chatrapur



For the evaluation of paper CHEM D 408 of semester-IV

In partial fulfillment for the award

of

Master of Science

in

Chemistry

Berhampur University, Berhampur



APRIL 2025

DECLARATION

No part of this project has yet been published or submitted for any degree in an university, college or institution. I hereby declare that the report work entitled "Lithium Ion Battery & Its Uses" undertaken by me at the department of Chemistry Govt. Science College, Chatrapur, Ganjam as the summery of my work knowledge acquired through the relevant literature references from various sources .it is submitted for the partial fulfillment of semester IV according to the CBCS PG syllabus as recommended by the UGC. Govt. of India.

Date -

Place -

Alok Kumar Patra
ALOK KUMAR PATRA

Exam Roll No- 23CHEM133

Regd. No- 01231/2020

“SYNTHESIS, REACTION & APPLICATION OF ORGANIC CARBONATES”

A Dissertation Submitted

By

BIBHU PRASAD SAHU

Exam Roll No.: 23CHEM134

Regd No.: 44610/2020

Student of

Government Science College, Chatrapur, Ganjam, Odisha



*For the evaluation of paper CHEM D-408 of Semester-IV
in partial fulfillment for the award of the degree*

of

Master of Science

in

Chemistry

Berhampur University



APRIL, 2025

DECLARATION

I hereby declare that the report work entitled "**Synthesis, Reaction & Application Of Organic Carbonates**" undertaken by me at the department of Chemistry Government Science College, Chatrapur, Ganjam, Odisha as the summery of my work knowledge acquired through the relevant literature references from various sources. It is submitted for the partial fulfilment of semester-IV according to the CBCS PG syllabus as recommended by the UGC, Govt. of India.

I too declare that it is my solely responsibility of any errors or omissions that appears in the text. I do and shall appreciate your inputs for improvement in my future exertion.

Date:

Place: Chatrapur

Bibhu Prasad Sahu

Signature of the student

Bibhu Prasad Sahu

Exam roll no.: 23CHEM134

Regd. No.: 44610/2020

**CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM
D-CELLOBIOSE**

A PROJECT REPORT SUBMITTED

BY

D Supriya Reddy

Exam Roll No :- 23CHEM135

Registration No:- 04330/2020

Student Of

GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020, ODISHA



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree
of
Master of Science
in
CHEMISTRY**

BERHAMPUR UNIVERSITY



10 MAY 2025

Berhampur University

Declaration of student

I **D Supriya Reddy** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.



Full signature of the student :

Exam Roll No :- 23CHEM135

Registration No:- 04330/2020

**CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM
D-GALACTOSE**

A PROJECT REPORT SUBMITTED

BY

JAGANNATH NAYAK

Exam Roll No :- 23CHEM136

Registration No:- 09778/2020

Student Of

**GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020,
ODISHA**



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree**

of

Master of Science

in

CHEMISTRY

BERHAMPUR UNIVERSITY



10 MAY 2025

Declaration of student

I **Jagannath Nayak** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Jagannath Nayak

Full signature of the student

Exam Roll No :- 23CHEM136

Registration No:- 09778/2020

**CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM
D-GLUCOSE**

A PROJECT REPORT SUBMITTED

BY

JYOTIPRAKASH SAHOO

Exam Roll No :- 23CHEM137

Registration No:- 20200/2023

Student Of

GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020, ODISHA



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree
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Master of Science
in
CHEMISTRY**

BERHAMPUR UNIVERSITY



10 MAY 2025

Declaration of student

I **Jyotiprakash Sahoo** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Jyoti prakash Sahoo

Full name of the student

Exam Roll No :- 23CHEM137

Registration No:- 20200/2023

CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM

N-ACETYLGLUCOSAMINE

A PROJECT REPORT SUBMITTED

BY

Niranjan Sahu

Exam Roll No :- 23CHEM139

Registration No:- 20201/2023

Student Of

**GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020,
ODISHA**



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree**

of

Master of Science

in

CHEMISTRY

BERHAMPUR UNIVERSITY



10 MAY 2025

Declaration of student

I **Niranjana Sahu** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Full name of the student

Exam Roll No :- 23CHEM139

Registration No:- 20201/2023

**CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM
D-XYLOSE**

A PROJECT REPORT SUBMITTED

BY

PREETI CHHANDA NAYAK

Exam Roll No :- 23CHEM140

Registration No:- 14340/2020

Student Of

**GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020,
ODISHA**



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree
of
Master of Science
in
CHEMISTRY**

BERHAMPUR UNIVERSITY



10 MAY 2025

Declaration of student

I **Preeti Chhanda Nayak** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

preeti chhanda nayak
Full signature of student

Exam Roll No :- 23CHEM140

Registration No:- 14340/2020

**PROJECT ON: "APPLICATION OF 3D PRINTING TECHNOLOGY
IN PHOTOCATALYSIS- A LITERATURE REVIEW"**

SUBMITTED BY:

PUJA BEHERA

ROLL NO: 23CHEMI41

REGD NO: III42/2020

STUDENT OF MSc 2nd YEAR CHEMISTRY OF

GOVERNMENT SCIENCE COLLEGE CHATRAPUR



For the evaluation of paper CHEM D- 408 of Semester – VI

in partial fulfillment for the award of the degree of

Master of Science in Chemistry

BERHAMPUR UNIVERSITY



MAY, 2025

DECLARATION OF STUDENT

I hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Puja Behera

Full signature of student

ROLL NO: 23CHEM141

REGD NO: 11142/2020

CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM

D-MANNOSE

A PROJECT REPORT SUBMITTED

BY

SAGARIKA BEHERA

Exam Roll No :- 23CHEM143

Registration No:- 11892/2020

Student Of

**GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020,
ODISHA**



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree**

of

Master of Science

in

CHEMISTRY

BERHAMPUR UNIVERSITY



10 MAY 2025

Declaration of student

I **Sagarika Behera** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Sagarika Behera

Full signature of the student :

Exam Roll No :- 23CHEM143

Registration No:- 11892/2020

CLICK MEDIATED SYNTHESIS OF NOVEL GLYCOLIPID FROM L-ARABINOSE

A PROJECT REPORT SUBMITTED

BY

SUBRAT DEHURY

Exam Roll No :- 23CHEM145

Registration No:- 20202/2023

Student Of

**GOVERNMENT SCIENCE COLLEGE, CHATRAPUR, 761020,
ODISHA**



**for the evaluation of paper CHEM D408 of Semester – IV
in partial fulfillment for the award of the degree**

of

Master of Science

in

CHEMISTRY

BERHAMPUR UNIVERSITY



08 MAY 2025

Declaration of student

I **Subrat dehury** hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Subrat Dehury

Full signature of student

Exam Roll No :- 23CHEM145

Registration No:- 20202/2023

PROJECT ON: "ORGANIC SYNTHESIS INVOLVING CYCLODEXTRINS"

SUBMITTED

BY

TAPASWINI PATTANAİK

ROLL NO: 23CHEM146

REGD NO: 10120/2019

STUDENT OF M Sc. 2nd YEAR CHEMISTRY

GOVERNMENT SCIENCE COLLEGE CHATRAPUR



For the evaluation of paper CHEM D 408 of Semester – IV
in partial fulfillment for the award of the degree of

Master of Science in Chemistry

BERHAMPUR UNIVERSITY



MAY, 2025

Declaration

I hereby declare that the project work presented in this report has been carried out by me and this project has not been carried out earlier in this institute and the university.

Tapaswini Pattanaik

Full signature of student

Exam Roll Number-23CHEM146

Registration Number-10120/2019