

A project report on

# IONIC LIQUID-ENVIRONMENT BENIGN SOLVENT FOR ORGANIC REACTION, PROSPECT AND CHALLENGES



SINCE 1949

This project work has been submitted to the Department of Chemistry,  
D.R College, Golaghat, Assam for the partial fulfillment of award of  
Bachelors' Degree of Science of Dibrugarh University

Submitted by:

Akash Saikia

6<sup>th</sup> Semester, Dept. of Chemistry

Roll No.-10520006

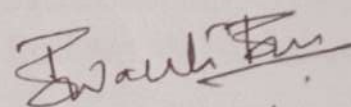
Year:-2021

## CERTIFICATE

This is to certify that the Project work titled "**Ionic liquid- Environment Benign Solvent For Organic Reaction, Propects and Challenges**" submitted by Akash Saikia, a student of B.Sc. (Major Chemistry), Debraj Roy College under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge, this report has not been submitted to any other institution or university for a degree or diploma.

Date:

Place:



(Sir Bedanta Kumar Borah)

Professor, Dept. of Chemistry

D.R. College, Golaghat - 785621

A project report on

# IONIC LIQUID-ENVIRONMENT BENIGN SOLVENT FOR ORGANIC REACTION, PROSPECT AND CHALLENGES



SINCE 1949

This project work has been submitted to the Department of Chemistry,  
D.R College, Golaghat, Assam for the partial fulfillment of award of  
Bachelors' Degree of Science of Dibrugarh University

Submitted by:

Monjuri Bora

6<sup>th</sup> Semester, Dept. of Chemistry

Roll No.-10520116

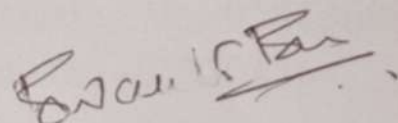
Year:-2021

## CERTIFICATE

This is to certify that the Project work titled "**Ionic liquid- Environment Benign Solvent For Organic Reaction, Propects and Challenges**" submitted by Monjuri Bora, a student of B.Sc. (Major Chemistry), Debraj Roy College under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge, this report has not been submitted to any other institution or university for a degree or diploma.

Date:

Place: 9-9-21



(Sir Bedanta Kumar Borah)  
Professor, Dept. of Chemistry  
D.R. College, Golaghat - 785621

ACKNOWLEDGEMENT

Literature Survey Report on

# ENVIRONMENTAL HAZARDS OF METAL CONTAMINATION IN THE SOIL SAMPLE OF GOLAGHAT DISTRICT



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

**Tridisha Bora**

6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520141

Year: 2021

# ACKNOWLEDGEMENT

First of all I would like to give special thanks to Mr. Jyoti Prashad Dutta, Associate Lecturer (Head of the Dept.) D.R College, Golaghat for his excellent technical and literacy guidance that has greatly improved the contents of this Project report.

I want to thank my entire family, without whose support and understanding, I would never have made it this far. Lastly, I would like to thank all my friends who helped me directly or indirectly during the time of preparation of this project.

Date: 09.09.21

*Tridisha Bora*

(Tridisha Bora)

6<sup>th</sup> Semester, Dept. of Chemistry

D.R College, Golaghat (Assam)

Registration no: S1813781

Roll no: 10520141

A LITERATURE SURVEY REPORT AS A FULFILMENT OF  
THE PROJECT WORK ON

# Graphene, It's Application and Recent Progress in Research



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

Manas Protim Saikia

6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520047

Year: 2021

## DECLARATION

I hereby declare that the work presented in this report has been Carried out under supervision of, Dr Roman Chutia, Assistant professor, Dept. Of chemistry, DR college.

I also declare that the project work has not been submitted to any other institution for a degree or diploma.

Date : 09-09-2021

Name : Manas Puslôm Saha

6th semester  
Dept. Chemistry



A LITERATURE SURVEY REPORT AS A FULFILMENT OF  
THE PROJECT WORK ON

# Graphene, It's Application and Recent Progress in Research



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

Juhee Rahman Hazarika

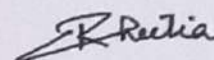
6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520105

Year: 2021

## Certificate

This to certify that the literature survey title---“Graphene, It’s Application and Recent Progress in Research” submitted by Juhee Rahman Hazarika a student of BSc (major Chemistry), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of her own investigation and to the best of my knowledge; this survey has not been submitted to any other institution or University for a degree or diploma.



(Dr Romen Chutia)

Assistant professor, Dept of Chemistry

D. R College, Golaghat – 785621 (Assam)

Date: 9/09/2021

Place: Golaghat

A LITERATURE SURVEY REPORT AS A FULFILMENT OF  
THE PROJECT WORK ON

# Graphene, It's Application and Recent Progress in Research



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

**Shabana Akhatar**

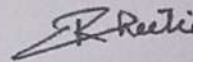
6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520132

Year: 2021

## Certificate

This to certify that the literature survey title---“Graphene, It's Application and Recent Progress in Research” submitted by Shabana Akhtar a student of BSc (major Chemistry), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of her own investigation and to the best of my knowledge; this survey has not been submitted to any other institution or University for a degree or diploma.



(Dr Romen Chu

Assistant professor, Dept of Chemi

D. R College, Golaghat – 785621 (As:

Date: 9/09/2021

Place: Golaghat

A LITERATURE SURVEY REPORT AS A FULFILMENT OF  
THE PROJECT WORK ON

# Graphene, It's Application and Recent Progress in Research



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat,  
Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh  
University

*Submitted by -*

**Kamal Nayan Hazarika**

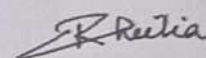
6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520043

Year: 2021

## Certificate

This to certify that the literature survey title---“Graphene, It’s Application and Recent Progress in Research” submitted by Kamal Nayan a student of BSc (major Chemistry), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of his own investigation and to the best of my knowledge; this survey has not been submitted to any other institution or University for a degree or diploma.



(Dr Romen Chutia)

Assistant professor, Dept of Chemistry

D. R College, Golaghat – 785621 (Assam)

Date: 9/09/2021

Place: Golaghat

A PROJECT REPORT ON  
**FLUORIDE CONTAMINATION IN GROUND  
WATER OF ASSAM**

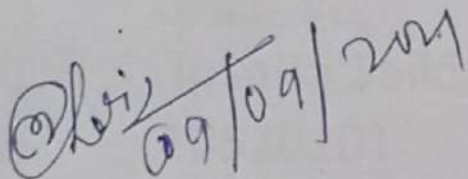


**DEBRAJ ROY COLLEGE, GOLAGHAT**

Submitted by  
**Ipshita Saikia**  
B.Sc. 6th Semester  
Deptt. of Chemistry  
Roll No : 10520101  
Regd. No. : S1813659

## CERTIFICATE

This is to certify that the project report entitled "FLUORIDE CONTAMINATION IN GROUND WATER OF ASSAM- A REVIEW " has been carried out by **Ipshita Saikia** a student of 6th semester chemistry major under my supervision. This project is a part of chemistry syllabus of 6th semester chemistry major and it is submitted to the Department of chemistry **Debraj Roy College** Golaghat Assam for the partial fulfilment for the award of degree of Bachelor of science (chemistry major )under semester of **Dibrugarh University**.

  
09/09/2021

**Dr. MRIDUL CHETIA**

**ASIASSISTANT PROFESSOR, DEPT. OF CHEMISTRY**

**D.R. COLLEGE.**



A project report on

# “FLUORIDE CONTAMINATION INGROUNDWATER OF ASSAM”



This project work has been submitted to Dept. Of Chemistry, Debraj Roy College, Golaghat, Assam for the partial fulfillment for award of Bachelor's Degree of Science of Dibrugarh University .

*( as per the syllabus of 6<sup>th</sup> semester major ,DU)*

**SUBMITTED BY:**

Ritam Raj Dutta

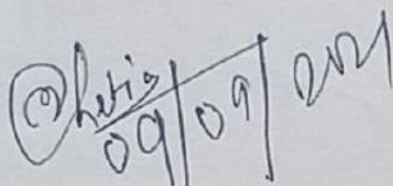
6<sup>th</sup> semester (Chemistry major)

Roll No. – 10520068

Dept. of Chemistry, Debraj Roy College

## CERTIFICATE

This is to certify that the project report entitled "FLUORIDE CONTAMINATION IN GROUND WATER OF ASSAM- A REVIEW" has been carried out by Ritam Raj Dutta a student of 6th semester chemistry major under my supervision. This project is a part of chemistry syllabus of 6th semester chemistry major and it is submitted to the Department of chemistry, Debraj Roy college, Golaghat, Assam for the partial fulfilment for the award of degree of Bachelor of science (chemistry major )under semester of Dibrugarh University.

  
09/09/2021

**Dr. MRIDUL CHETIA**

**ASIASSISTANT PROFESSOR, DEPT. OF CHEMISTRY**

**D.R. COLLEGE.**

A PROJECT REPORT ON  
**FLUORIDE CONTAMINATION IN GROUND  
WATER OF ASSAM**

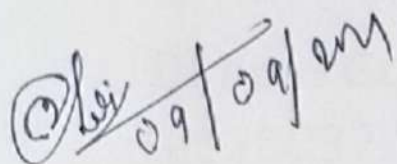


**DEBRAJ ROY COLLEGE, GOLAGHAT**

Submitted by  
**Dimpal Gogoi**  
B.Sc. 6th Semester  
Deptt. of Chemistry  
Roll No : 10520037  
Regd. No. : S1813644

## CERTIFICATE

This is to certify that the project report entitled "FLUORIDE CONTAMINATION IN GROUND WATER OF ASSAM- A REVIEW " has been carried out by **Dimpal Gogoi** a student of 6th semester chemistry major under my supervision. This project is a part of chemistry syllabus of 6th semester chemistry major and it is submitted to the Department of chemistry **Debraj Roy College** Golaghat Assam for the partial fulfilment for the award of degree of Bachelor of science (chemistry major )under semester of **Dibrugarh University**.

 09/09/2024

**Dr. MRIDUL CHETIA**

**ASIASSISTANT PROFESSOR, DEPT. OF CHEMISTRY**

**D.R. COLLEGE.**

A PROJECT REPORT ON  
**FLUORIDE CONTAMINATION IN GROUND  
WATER OF ASSAM**

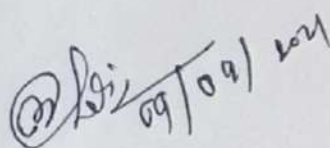


**DEBRAJ ROY COLLEGE, GOLAGHAT**

Submitted by  
**Iftikhar Mahmood Ali**  
B.Sc. 6th Semester  
Deptt. of Chemistry  
Roll No : 10520042  
Regd. No. : S1813658

## CERTIFICATE

This is to certify that the project report entitled "FLUORIDE CONTAMINATION IN GROUND WATER OF ASSAM- A REVIEW " has been carried out by **Iftikhar Mahmood Ali** a student of 6th semester chemistry major under my supervision. This project is a part of chemistry syllabus of 6th semester chemistry major and it is submitted to the Department of chemistry **Debraj Roy College Golaghat Assam** for the partial fulfilment for the award of degree of Bachelor of science (chemistry major )under semester of **Dibrugarh University**.

 09/09/2024

**Dr. MRIDUL CHETIA**

**ASIASSISTANT PROFESSOR, DEPT. Of CHEMISTRY**

**D.R. COLLEGE.**

Literature survey on

**“ Nanomaterials and their role in present day application”**



This Literature survey work has been submitted to the Department of Chemistry, D.R College, Golaghat, Assam for the partial fulfillment of award of Bachelors' Degree of Science of Dibrugarh University.

(as per syllabus of 6<sup>th</sup> Semester Major, DU)

**Submitted By**

**Samima Akhtar**

**6<sup>th</sup> semester, Dept. of Chemistry**

**Roll No : 10520130**

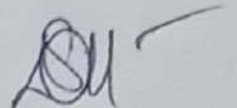
**Year : 2021**

## CERTIFICATE

This is to certify that the Literature Survey titled "Nanomaterials and their Role in Present Day Application" submitted by Samima Akhtar, a student of B.Sc (Major Chemistry), Debraj Roy College, under DU has been completed under my super vision. This work is the result of her own investigation and to the best of my knowledge ; this report has not been submitted to any other institution or University for a degree or diploma

Date:

Place :



(Dr. Suvangshu Dutta)

Associate Professor, Dept. of Chemistry  
D.R College, Golaghat – 785621(Assam)



**A Literature Survey on  
NANO MATERIALS AND THEIR ROLE IN PRESENT DAY APPLICATION**



**This literature survey has been submitted to the Department of Chemistry, D.R. College, Golaghat, Assam for the partial fulfillment of award of Bachelors' Degree of Science Of Dibrugarh University.  
(as per 6th Semester Major, DU)**

**Submitted by:-  
Ashish Boruah  
6th Semester, Dept. of Chemistry  
Roll No:- 10520013**

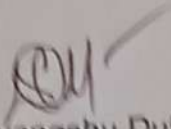
**Year:- 2021**

## CERTIFICATE

This is to certify that the Literature Survey titled "Nanomaterials and their role in present day applications" submitted by Ashish Baruah, a student of B Sc (Major Chemistry), Debraj Roy College, under DU has been completed under my supervision. This work is the result of his own investigation and to the best of my knowledge; this report has not been submitted to any other institution or University for a degree or diploma.

Date:

Place:

  
(Dr. Suvangshu Dutta)

Associate Dept of Chemistry

DR College, Golaghat-785621 (Assam)

# A BRIEF OVERVIEW ON ROOM TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS



This project work has been submitted to the Department of Chemistry , D. R College , Golaghat , Assam for partial full fillment of awards of Bachelor's Degree of Science of Dibrugarh University.

(As per syllabus of 6<sup>th</sup> semester major, DU)

Submitted by –

Bhskar Baruah

6<sup>th</sup> semester , Dept. Chemistry

Roll No. –10520018

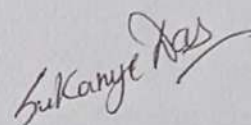
Year - 2021

## CERTIFICATE

This is to certify that the project report titled "ROOM-TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS"– A REVIEW has been carried out by **Bhaskar Baruah**, a student of B.Sc 6<sup>th</sup> Semester (Major Chemistry), Debraj Roy College, under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge; this report has not been submitted to any other institution or university for a degree or diploma.

Date: 09/09/2021

Place: Golaghat



(Ms. Sukanya Das)

Professor, Dept. of Chemistry

D.R. College, Golaghat - 785621

# A BRIEF OVERVIEW ON ROOM TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS



This project work has been submitted to the Department of Chemistry , D. R College , Golaghat , Assam for partial full fillment of awards of Bachelor's Degree of Science of Dibrugarh University.

(As per syllabus of 6<sup>th</sup> semester major, DU)

Submitted by –

Bhabesh Kr. Chutia

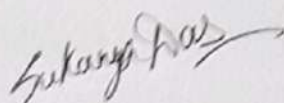
6<sup>th</sup> semester , Dept. Chemistry

Roll No. – 10520017

Year - 2021

## CERTIFICATE

This is to certify that the project report titled "ROOM-TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS"- A REVIEW has been carried out by **Bhabesh Kr. Chutia**, a student of B.Sc 6<sup>th</sup> Semester (Major Chemistry), Debraj Roy College, under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge; this report has not been submitted to any other institution or university for a degree or diploma.



(Ms. Sukanya Das)

Professor, Dept. of Chemistry

D.R. College, Golaghat - 785621

Date: 09/09/2021

Place: Golaghat

# A BRIEF OVERVIEW ON ROOM TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS



This project work has been submitted to the Department of Chemistry , D. R  
College , Golaghat , Assam for partial full fillment of awards of Bachelor's Degree  
of Science of Dibrugarh University.

(As per syllabus of 6<sup>th</sup> semester major, DU)

Submitted by –

Nikita kakoty

6<sup>th</sup> semester , Dept. Chemistry

Roll No. – 10520120

Year - 2021

## CERTIFICATE

This is to certify that the project report titled "ROOM-TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS" – A REVIEW has been carried out by **Nikita Kakoty**, a student of B.Sc 6<sup>th</sup> Semester (Major Chemistry), Debraj Roy College, under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge; this report has not been submitted to any other institution or university for a degree or diploma.

*Sukanya Das.*

Date: 09/09/2021

(Ms. Sukanya Das)

Professor, Dept. of Chemistry

Place: Golaghat

D.R. College, Golaghat - 785621



# A BRIEF OVERVIEW ON ROOM TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS



This project work has been submitted to the Department of Chemistry , D. R  
College , Golaghat , Assam for partial full fillment of awards of Bachelor's Degree  
of Science of Dibrugarh University.

(As per syllabus of 6<sup>th</sup> semester major, DU)

Submitted by –

Manash Protim Dutta

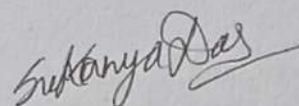
6<sup>th</sup> semester , Dept. Chemistry

Roll No. – 10520049

Year - 2021

## CERTIFICATE

This is to certify that the project report titled "ROOM-TEMPERATURE ACIDIC IONIC LIQUIDS AND THEIR APPLICATIONS IN ORGANIC SYNTHESIS"– A REVIEW has been carried out by **Manash Protim Dutta** , a student of B.Sc 6<sup>th</sup> Semester (Major Chemistry), Debraj Roy College, under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge; this report has not been submitted to any other institution or university for a degree or diploma.



(Ms. Sukanya Das)

Professor, Dept. of Chemistry

D.R. College, Golaghat - 785621

Date: 9.09.21

Place: Golaghat

Literature Survey Report on

# ENVIRONMENTAL HAZARDS OF METAL CONTAMINATION IN THE SOIL SAMPLE OF GOLAGHAT DISTRICT



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

**Borsha Rani Paul**

6<sup>th</sup> Semester, Department of Chemistry

Roll no: 105200 95

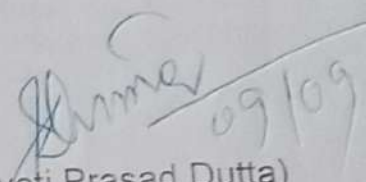
Year: 2021

# CERTIFICATE

This is to certify that the Project Work titled "**Environmental Hazards of Metal Contamination in the soil sample of Golaghat District**" submitted by *Borsha Rani Paul*, a student of B.Sc (Chemistry Hons.), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of her own investigation to the best of my knowledge; this report has been submitted to any other Institution or any University for a Degree or Diploma.

Date

Place

  
(Jyoti Prasad Dutta)  
Associate Lecturer, Dept. of Chemistry  
D.R College, Golaghat - 785621 (Assam)

Literature Survey Report on

# ENVIRONMENTAL HAZARDS OF METAL CONTAMINATION IN THE SOIL SAMPLE OF GOLAGHAT DISTRICT



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

**Tsemeho Nandu Rengma**

6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520087

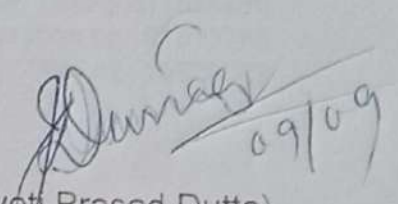
Year: 2021

# CERTIFICATE

This is to certify that the Project Work titled "**Environmental Hazards of Metal Contamination in the soil sample of Golaghat District**" submitted by *Tsemeho Nandu Rengma*, a student of B.Sc (Chemistry Hons.), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of his own investigation to the best of my knowledge; this report has been submitted to any other Institution or any University for a Degree or Diploma.

Date:

Place:

  
(Jyoti Prasad Dutta)

Associate Lecturer, Dept. of Chemistry  
D.R. College, Golaghat - 785621 (Assam)

Literature Survey Report on

# ENVIRONMENTAL HAZARDS OF METAL CONTAMINATION IN THE SOIL SAMPLE OF GOLAGHAT DISTRICT



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

Ashish Majumder

6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520014

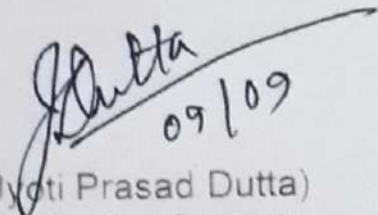
Year: 2021

# CERTIFICATE

This is to certify that the Project Work titled "**Environmental Hazards of Metal Contamination in the soil sample of Golaghat District**" submitted by *Ashish Majumdar*, a student of B.Sc (Chemistry Hons.), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of his own investigation to the best of my knowledge; this report has been submitted to any other Institution or any University for a Degree or Diploma.

Date

Place

  
09/09

(Jyoti Prasad Dutta)  
Associate Lecturer, Dept. of Chemistry  
D.R. College, Golaghat – 785621 (Assam)



Literature Survey Report on

# ENVIRONMENTAL HAZARDS OF METAL CONTAMINATION IN THE SOIL SAMPLE OF GOLAGHAT DISTRICT



This project work has been submitted to the Dept. of Chemistry, D.R College, Golaghat, Assam for the partial fulfilment of award of Bachelors' Degree of Science of Dibrugarh University

*Submitted by -*

**Sourav Lodh**

6<sup>th</sup> Semester, Department of Chemistry

Roll no: 10520080

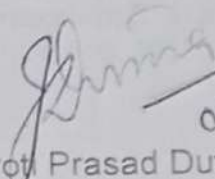
Year: 2021

# CERTIFICATE

This is to certify that the Project Work titled "**Environmental Hazards of Metal Contamination in the soil sample of Golaghat District**" submitted by *Sourav Lodh*, a student of B.Sc (Chemistry Hons.), Debraj Roy College, under Dibrugarh University has been completed under my supervision. This work is the result of his own investigation to the best of my knowledge; this report has been submitted to any other Institution or any University for a Degree or Diploma.

Date:

Place:

  
09/09/21

(Jyoti Prasad Dutta)  
Associate Lecturer, Dept. of Chemistry  
D R College, Golaghat – 785621 (Assam)

A Literature Survey on  
NANO MATERIALS AND THEIR ROLE IN PRESENT DAY APPLICATION



This literature survey has been submitted to the Department of Chemistry, D.R. College, Golaghat, Assam for the partial fulfillment of award of Bachelors' Degree of Science Of Dibrugarh University.  
(as per 6th Semester Major, DU)

Submitted by:-  
Mausum Dutta  
6th Semester, Dept. of Chemistry  
Roll No:- 10520050

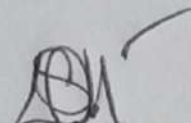
Year:- 2021

## CERTIFICATE

This is to certify that the Literature Survey titled "Nanomaterials and their role in present day applications" submitted by Mausum Dutta, a student of B Sc (Major Chemistry), Debraj Roy College, under DU has been completed under my supervision. This work is the result of his own investigation and to the best of my knowledge; this report has not been submitted to any other institution or University for a degree or diploma.

Date:

Place:



(Dr. Suvangshu Dutta)

Associate Dept of Chemistry

DR College, Golaghat-785621 (Assam)

A project report on

# IONIC LIQUID-ENVIRONMENT BENIGN SOLVENT FOR ORGANIC REACTION, PROSPECT AND CHALLENGES



SINCE 1949

This project work has been submitted to the Department of Chemistry,  
D.R College, Golaghat, Assam for the partial fulfillment of award of  
Bachelors' Degree of Science of Dibrugarh University

Submitted by:  
Geetashree Boruah  
6<sup>th</sup> Semester, Dept. of Chemistry  
Roll No.-10520100

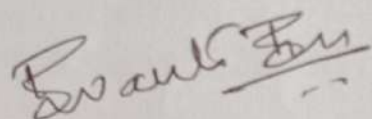
Year:-2021

## CERTIFICATE

This is to certify that the Project work titled "**Ionic liquid- Environment Benign Solvent For Organic Reaction, Propects and Challenges**" submitted by Geetashree Boruah, a student of B.Sc. (Major Chemistry), Debraj Roy College under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge, this report has not been submitted to any other institution or university for a degree or diploma.

Date: 9-09-2021

Place:



(Sir Bedanta Kumar Borah)  
Professor, Dept. of Chemistry  
D.R. College, Golaghat - 785621

A Literature Survey on  
**NANO MATERIALS AND THEIR ROLE IN PRESENT DAY APPLICATION**



This literature survey has been submitted to the Department of Chemistry, D.R. College, Golaghat, Assam for the partial fulfillment of award of Bachelors' Degree of Science Of Dibrugarh University.

(as per 6th Semester Major, DU)

**Submitted by:-**

**Nishant Dev**

**6th Semester, Dept. of Chemistry**

**Roll No:- 10520058**

**Year:- 2021**

A project report on

# **IONIC LIQUID-ENVIRONMENT BENIGN SOLVENT FOR ORGANIC REACTION, PROSPECT AND CHALLENGES**



SINCE 1949

This project work has been submitted to the Department of Chemistry,  
D.R College, Golaghat, Assam for the partial fulfillment of award of  
Bachelors' Degree of Science of Dibrugarh University

**Submitted by:**

Roshan Rai

6<sup>th</sup> Semester, Dept. of Chemistry

Roll No.-10520069

\* Year:-2021

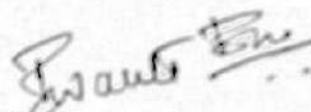


## CERTIFICATE

This is to certify that the Project work titled "**Ionic liquid- Environment Benign Solvent For Organic Reaction, Propects and Challenges**" submitted by Roshan Rai , a student of B.Sc. (Major Chemistry), Debraj Roy College under DU has been completed under my supervision. This work is the result of my own investigation and to the best of my knowledge, this report has not been submitted to any other institution or university for a degree or diploma.

Date: 9/9/2021

Place:



(Sir Bedanta Kumar Borah)  
Professor, Dept. of Chemistry  
D.R. College, Golaghat - 785621