

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC : AIR POLLUTION & RESPIRATORY ILLNESSES IN INDIA**

Submitted by : ANKAN PRADHAN

Student of B.Sc (Hons in Chemistry)

Semester : II

Roll : 1122121

No : 220021

Registration No : VU221211399

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Indranil Chakraborty, Associate Professor,** Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Ankan Anadhan*

Roll - *1122121 - ~~22~~*

No- *220021*

Registration No *VV221211399*

Session: *2022-23*



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that **Mr. ANKAN PRADHAN** , a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No 220021 and registration No. VU 220211399 of 2022-23 has conducted the project work on “**Air Pollution & Respiratory Illnesses In India**” under my supervision and has submitted the project report towards partial fulfilment of his B.Sc degree under Vidyasagar University.

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF .B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC: AIR POLLUTION & GLOBAL WARMING**

Submitted by : ANIMESH SANTRA

Student of B.Sc (Hons in Chemistry)

Semester : II

Roll : 1122121

No: 220019

Registration No : VU 221210934

Session 2022-23

Under the Supervision of

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College



## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Indranil Chakraborty, Associate Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Animesh Sanyal*

Roll - 1122121

No- 220019

Registration No VU221210934

Session: 2022 - 23



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr. ANIMESH SANTRA a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No 220019 and registration No. VU 221210934 of 2023-24 has conducted the project work on "AIR POLLUTION & GLOBAL WARMING" under my supervision and has submitted the project report towards partial fulfilment of his B.Sc degree under Vidyasagar University.

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC: AIR POLLUTION & TAJMAHAL

Submitted by: ANIRBAN GHOSH

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220020

Registration No : VU221210936

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Indranil Chakraborty**, Associate Professor, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Anirban Ghosh*

Roll - 1122121

No- 220020

Registration No - VU221210936

Session: 2022-2023



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that **Mr. ANIRBAN GHOSH** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No 220020 and registration NO. VU221210936 of 2022-23 has conducted the project work on “**AIR POLLUTION & TAJMAHAL** ” under my supervision and has submitted the project report towards partial fulfilment of his B.Sc degree under Vidyasagar University.

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College



# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC : OZONE LAYER DEPLETION & ITS IMPACT**

Submitted by : ASIM MANNA

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220023

Registration No VU221210946

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Indranil Chakraborty**, Associate Professor, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Azaim Manna  
Signature

Roll - 1122121

No- 220023

Registration No - VU 221210946

Session: 2022-23



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. ASIM MANNA, a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No.220023 and registration No. VU 221210946 of 2022-23 has conducted the project work on “Ozone Layer Depletion & Its Impact” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF .B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC : **CLIMATE CHANGE & INDUSTRIAL AIR POLLUTION**

Submitted by : ANUSPA DAS

Student of B.Sc (Hons in Chemistry)

Semester : II

Roll 1122121

No 220022

Registration No : VU221210939

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Indranil Chakraborty**, Associate Professor, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Anuspa Das.*

Roll - 1122121

No- 220022

Registration No VU221210939

Session: 2022-23





**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. ANUSPA DAS , a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220022 and registration No. VU221210939 of 2022-23 has conducted the project work on **Climate Change & Industrial Air Pollution** under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Dr. Indranil Chakraborty  
Associate Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



Project Report On: **“Green Vehicle : A Remedy To Air Pollution”**  
Submitted For Partial Fulfillment Of .B. Sc Degree Under  
Vidyasagar University

Paper: AECC

Submitted by

AVIJIT GHANTA

Roll 1122121

No 220024

Registration No VU221210949

Session 2022-23

Under the Supervision of

Dr. Subhra Mishra  
Associate Professor  
Department of Chemistry  
Kharagpur College

## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Subhra Mishra, Associate Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Anujit Ghanta.*

Roll - 1122121

No- 220029

Registration No VU221210949

Session: 2022-2023



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. AVIJIT GHANTA , a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No 220024 and registration No. VU 221210949 of 2022-23 has conducted the project work on “Green Vehicle : A Remedy To Air Pollution” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Subhra Mishra*

Dr. Subhra Mishra  
Associate Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT ON: **“ENVIRONMENTAL & HEALTH  
IMPACTS OF OPEN BURNING”** SUBMITTED FOR  
PARTIAL FULFILLMENT OF B. SC DEGREE UNDER  
VIDYASAGAR UNIVERSITY

PAPER: AECC

Submitted by

DEBABRATA DAS

Roll 1122121

No 220027

Registration No VU221210958

Session 2022-23

Under the Supervision of

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College



## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Subhra Mishra, Associate Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Debabrata Das*

Roll - 1122121

No- 220027

Registration No - VU221210958

Session: 2022 - 2023



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **DEBABRATA DAS** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll. 1122121 No 220027 and registration No. VU 221210958 of 2022-23 has conducted the project work on “**Environmental & Health Impacts of Open Burning**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Subhra Mishra*

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT ON “GREENHOUSE GAS EMISSIONS & REMOVALS” SUBMITTED FOR PARTIAL FULFILLMENT OF .B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

PAPER: AECC

Submitted by

BHASKAR KUNDU

Roll 1122121

No 220025

Registration No VU 221210952

Session 2022-23

Under the Supervision of

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Subhra Mishra, Associate Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature Bhaskar Kundu

Roll - 1122121

No- 220025

Registration No VU221210952

Session: 2022-23



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **BHASKAR KUNDU** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No 220025 and registration No. VU221210952 of 2022-23 has conducted the project work on “Greenhouse Gas Emissions & Removals” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Subhra Mishra*

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College



# VIDYASAGAR UNIVERSITY



**PROJECT REPORT ON AIR POLLUTION: EFFECT OF FOREST  
FIRE, SUBMITTED FOR PARTIAL FULFILLMENT OF .B. SC  
DEGREE UNDER VIDYASAGAR UNIVERSITY**

**PAPER: AECC**

Submitted by

**BISWAJIT MANDAL**

Roll 1122121

No 220026

Registration No VU221210955

Session 2022-23

Under the Supervision of

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College

## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Subhra Mishra, Associate Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature **Biswajit Mandal**

Roll - **1122121**

No- **220026**

Registration No **VU 221210955**

Session: **2022-23**



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **BISWAJIT MANDAL** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121. No 220026 and registration No. VU 221210955 of 2022-23 has conducted the project work on “**Air Pollution : Effect Of Forest Fire**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Subhra Mishra*

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT ON “**BURNING PLASTIC & ITS AFFECT ON AIR QUALITY & PUBLIC HEALTH**” SUBMITTED FOR PARTIAL FULFILLMENT OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

PAPER: AECC

Submitted by

DEBLINA MAITY

Roll 1122121

No 220028

Registration No VU221210959

Session 2022-23

Under the Supervision of

Dr. Subhra Mishra  
Associate Professor  
Department of Chemistry  
Kharagpur College

## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Subhra Mishra, Associate Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Debalina maity*

Roll - 1122121

No- 220028

Registration No VU221210959

Session: 2022-23





**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **DEBOLINA MAITY** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220028 and registration No. VU 221210959 of 2022-23 has conducted the project work on “**Burning Plastic & Its Affect On Air Quality & Public Health**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Subhra Mishra*

Dr. Subhra Mishra

Associate Professor

Department of Chemistry

Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC: AIR POLLUTION & CHILD HEALTH**

Submitted by: GAURAV DEBNATH

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220030

Registration No : VU221210937

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Forid Saikh

Assistant Professor

Department of Chemistry

Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Forid Saikh , Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Gaurav Debnath*

Roll - 1122121

No- 220030

Registration No - VU221210973

Session: - 2022 - 23



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. GAURAV DEBNATH a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220030 and registration No. VU 221210973 of 2022-23 has conducted the project work on "Air Pollution & Child Health" under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Forid Saikh*

Dr. Forid Saikh  
Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC: AIR POLLUTION & FORESTATION**

Submitted by: PALASH BERA

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220034

Registration No : VU221211014

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Forid Saikh

Assistant Professor

Department of Chemistry

Kharagpur College



## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Forid Saikh , Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Palash Bera*

Roll - *1122121*

No- *220034*

Registration No *VU221211014*

Session: *2022 - 2023*



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **PALASH BERA** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220034 and registration No. VU 221211014 of 2022-23 has conducted the project work on “**Air Pollution & Forestation**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Forid Saikh*

Dr. Forid Saikh  
Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC: Air Pollution: Role of Particulate Matter & SO<sub>2</sub>**

Submitted by: PRANAY PAN

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220035

Registration No : VU221211017

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Forid Saikh

Assistant Professor

Department of Chemistry

Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Forid Saikh , Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Pranay Pan*

Roll - 1122121

No- 220035

Registration No VU221211017

Session: 2022-23



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **PRANAY PAN** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No220035 and registration No. VU 221211017 of 2022-23 has conducted the project work on “**Air Pollution: Role of Particulate Matter & SO<sub>2</sub>**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Forid Saikh*

Dr. Forid Saikh  
Assistant Professor  
Department of Chemistry  
Kharagpur College



# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC: HOW DO TREES PREVENT AIR POLLUTION?

Submitted by: PURABI DEY

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220038

Registration No : VU221211024

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Forid Saikh

Assistant Professor

Department of Chemistry

Kharagpur College

## ACKNOWLEDGEMENT

I would like to express my deep sense of gratitude to my project supervisor **Dr. Forid Saikh , Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Purabi De*

Roll - *221122121*

No- *220038*

Registration No *VU221211024*

Session: *2022-23*



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **PURABI DEY** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220038 and registration No. VU 221211024 of 2022-23 has conducted the project work on “How Do Trees Prevent Air Pollution?” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*Forid Saikh*

Dr. Forid Saikh  
Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC: RENEWABLE ENERGY SOURCE & AIR POLLUTION

Submitted by: SARTHAK SEN

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220040

Registration No : VU221211062

Session 2022-23

Paper: AECC

Under the Supervision of

Dr. Forid Saikh

Assistant Professor

Department of Chemistry

Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Dr. Forid Saikh , Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Santhak Sen*

Roll - 1122121

No- 220040

Registration No VU221211062

Session: 2022-23





**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss SARTHAK SEN a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No.220040 and registration No. VU 221211062 of 2022-23 has conducted the project work on “Renewable Energy Source & Air Pollution” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Dr. Forid Saikh  
Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



## PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC: Air Pollution & Its World History

Submitted by: SHOVANNITA JANA

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220041

Registration No : VU221211070

Session 2022-23

Paper: AECC

Under the Supervision of

Kuheli Pramanik  
Assistant Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Kuheli Pramanik, Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project. I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Shovanrita Jana*

Roll - *1122121*

No- *220041*

Registration No - *VU221211070*

Session: *2022-23*



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **SHOVANWITA JANA** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220041 and registration No. VU 221211070 of 2022-23 has conducted the project work on “Air Pollution & Its World History” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

*K. Pramanik*

Kuheli Pramanik

Assistant Professor

Department of Chemistry

Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC:** AIR POLLUTION CAUSED BY BURNING OF CROPS

Submitted by: SHUVADIP GHOSH

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220042

Registration No : VU221211075

Session 2022-23

Paper: AECC

Under the Supervision of

Kuheli Pramanik  
Assistant Professor  
Department of Chemistry  
Kharagpur College



## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Kuheli Pramanik, Assistant Professor**, Department of Chemistry, Kharagpur collage, for his constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature ShuvadiP ghosh

Roll - 1122121

No- 220042

Registration No VU221211075

Session: 2022 - 2023



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. SHUVADIP GHOSH a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220042 and registration no. VU 221211075 of 2022-23 has conducted the project work on “Air Pollution Caused By Burning Of Crops” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Kuheli Pramanik

Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



## PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC: AIR POLLUTION & RELATED HEALTH IMPLICATIONS ON THE  
COMMUNITY

Submitted by: SNEHASHIS SENAPATI

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220044

Registration No: VU221211083

Session 2022-23

Paper: AECC

Under the Supervision of

Kuheli Pramanik  
Assistant Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Kuheli Pramanik, Assistant Professor**, Department of Chemistry, Kharagpur collage, for ~~his~~ constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Snehashis Senapati*

Roll - 1122121

No- 220044

Registration No RU 221211083

Session: 2022 - 2023



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **SNEHASHIS SENAPATI** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220044 and registration no. VU 221211083 of 2022-23 has conducted the project work on Air “**Pollution & Related Health Implications On The Community**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Kuheli Pramanik

Assistant Professor  
Department of Chemistry  
Kharagpur College



# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC: AIR POLLUTION & TRASPORTATION**

Submitted by: SUCHETA PAUL

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220048

Registration No: VU221211401

Session 2022-23

Paper: AECC

Under the Supervision of

Kuheli Pramanik  
Assistant Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Kuheli Pramanik, Assistant Professor**, Department of Chemistry, Kharagpur collage, for ~~his~~ constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature *Sucheta paul*

Roll - *1122121*

No- *220048*

Registration No - *VU221211401*

Session: *2022 - 2023*



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **SUCHETA PAUL** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220048 and registration No. VU 221211401 of 2022-23 has conducted the project work on “Air Pollution & Trasportation” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

  
Kuheli Pramanik

Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



## PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

**TOPIC: The Future of Technology In Air Pollution Control**

Submitted by: SWARNENDU DAS

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220052

Registration No: VU221211137

Session 2022-23

Paper: AECC

Under the Supervision of

Kuheli Pramanik  
Assistant Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Kuheli Pramanik, Assistant Professor**, Department of Chemistry, Kharagpur collage, for ~~his~~ constant encouragement, guidance and instructions for carrying out my project. I would also like to express my thanks to my parents for their encouragement, and support.

Signature Swarnendu Das

Roll - 1122121

No- 220052

Registration No VU221211137

Session: 2022 - '23





**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **SWARNENDU DAS** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220052 and registration No. VU 221211137 of 2022-23 has conducted the project work on “**The Future of Technology In Air Pollution Control**” under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Kuheli Pramanik

Assistant Professor  
Department of Chemistry  
Kharagpur College

# VIDYASAGAR UNIVERSITY



PROJECT REPORT OF ENVS FOR PARTIAL FULFILLMENT  
OF B. SC DEGREE UNDER VIDYASAGAR UNIVERSITY

TOPIC: THE ROLE OF TECHNOLOGY IN AIR POLLUTION  
DETECTION

Submitted by: SUDIP GHOSH

Student of B.Sc (Hons in Chemistry)

Semester: II

Roll 1122121

No 220050

Registration No: VU221211118

Session 2022-23

Paper: AECC

Under the Supervision of

Kuheli Pramanik  
Assistant Professor  
Department of Chemistry  
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my deep sense of gratitude to my project supervisor **Kuheli Pramanik, Assistant Professor**, Department of Chemistry, Kharagpur collage, for ~~his~~ constant encouragement, guidance and instructions for carrying out my project.

I would also like to express my thanks to my parents for their encouragement, and support.

Signature - *Sudip Ghosh.*

Roll - 1122121

No- 220050

Registration No - JU22121118 of 2022-2023

Session: 2022 - 2023



**Department of Chemistry  
Kharagpur College**

---

Dt:

Certified that Mr./Miss. **SUDIP GHOSH** a student of 2<sup>nd</sup> semester CBCS of B.Sc (Hons in Chemistry) bearing roll 1122121 No. 220050 and registration no. VU 221211118 of 2022-23 has conducted the project work on **“The Role of Technology In Air Pollution Detection”** under my supervision and has submitted the project report towards partial fulfilment of his / her B.Sc degree under Vidyasagar University.

Kuheli Pramanik

Assistant Professor  
Department of Chemistry  
Kharagpur College