St. Paul's Cathedral Mission College

Department of Chemistry

Report on Student Participation in Inter-College Quiz Competition & Oral Presentation

This report details the participation of the students of the Department of Chemistry of St. Paul's C. M. College in the 29th All Bengal Chemiquiz, Memorial Lectures, & Oral Presentation organized by the Department of Chemistry Presidency University, Kolkata on 07.04.2026 & 08.04.2026.

Event Overview:

- **Event Name:** 29th All Bengal Chemiquiz, Memorial Lectures, & Oral Presentation
- **Host Institution:** Chemistry Department of Presidency University, Kolkata
- **Total Participants:** 4 (Four); 2 (Two) teams
- **Team Members:**

Team-1: For Quiz Competition

Sl. No.	Name	Semester	College Roll No.	Univ. Roll No.
1.	Ms. Swastika Acharya	VI	3006	233114-11-0002
2.	Ms. Arpita Mondal	VI	3007	233114-11-0007
3.	Mr. Sourjo Mukhopadhyay	VI	3026	233114-21-0007

Team-2: For Oral Presentation

Sl. No.	Name	Semester	College Roll No.	Univ. Roll No.
1.	Mr. Saiujyo Dey	VI	1048	233114-21-0003

Topic: BIOPLASTICS

Abstract:

Conventional plastics, derived from petrochemical sources, are non-biodegradable and pose serious environmental concerns. This has led to increasing interest in sustainable alternatives such as bioplastics derived from renewable biomass.

Starch, a naturally abundant biopolymer composed of amylose and amylopectin, is a promising candidate for biodegradable material development.

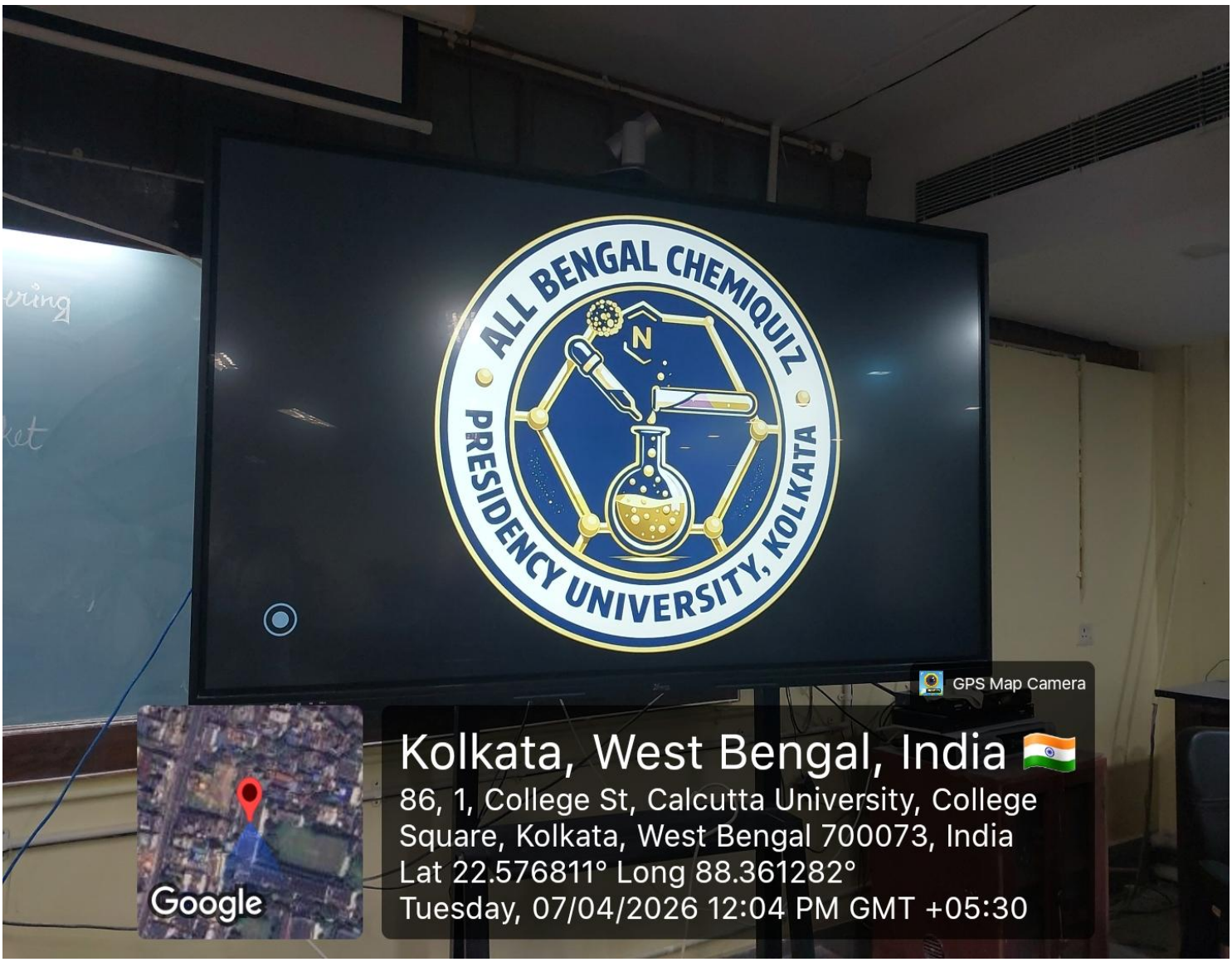
This study focuses on the synthesis of bioplastics using corn starch due to its availability and cost-effectiveness. Native starch-based plastics, however, exhibit poor mechanical properties, including low tensile strength, high stiffness, and low moisture resistance. To overcome these limitations, bioplastic films were prepared using corn starch, distilled water, acetic acid, and glycerine, with varying compositions. Glycerine acted as a plasticizer to improve flexibility and reduce brittleness.

The production process involved gelatinization, blending, and casting techniques, with further enhancements achieved through structural modification. The resulting materials showed improved physico-mechanical properties and demonstrated effective biodegradability in soil and enzymatic conditions.

These starch-based bioplastics show potential for applications in packaging and other disposable products, contributing to sustainable material development and reduced environmental impact.

Our students demonstrated exceptional knowledge and significantly enhancing the department's reputation within the academic community.

A few glimpses are:



PRESIDENCY UNIVERSITY
KOLKATA

CERTIFICATE
of Participation

This is to certify that Swastika Acharya of St. Paul's Cathedral Mission College has successfully participated in ***29th ALL-BENGAL CHEMIQUIZ*** held on ***7th April, 2026*** at ***Department of Chemistry, Presidency University, Kolkata.***

We appreciate their enthusiasm, dedication and active involvement throughout the event.
We wish them continued success in their future endeavors.

Head of the Department

ALL BENGAL CHEMIQUIZ PRESIDENCY UNIVERSITY, KOLKATA

Rachana Nag.
Shubhradip Sen
Joint Secretaries

PRESIDENCY UNIVERSITY
KOLKATA

CERTIFICATE
of Participation

This is to certify that Arpita Mondal of St. Paul's Mission College has successfully participated in ***29th ALL-BENGAL CHEMIQUIZ*** held on ***7th April, 2026*** at ***Department of Chemistry, Presidency University, Kolkata.***

We appreciate their enthusiasm, dedication and active involvement throughout the event.
We wish them continued success in their future endeavors.

Head of the Department

ALL BENGAL CHEMIQUIZ PRESIDENCY UNIVERSITY, KOLKATA

Rachana Nag.
Shubhradip Sen
Joint Secretaries

CERTIFICATE

of Participation

This is to certify that Sourjo Mukhopadhay of St. Paul's Cathedral Mission College has successfully participated in *29th* ***ALL-BENGAL CHEMIQUIZ*** held on *7th* ***April, 2026*** at ***Department of Chemistry, Presidency University, Kolkata.***

We appreciate their enthusiasm, dedication and active involvement throughout the event. We wish them continued success in their future endeavors.

Head of the Department

Rachana Nag.
Shubhradip Sen
Joint Secretaries

CERTIFICATE

OF PARTICIPATION

This is to certify that Saiujo Dey of St. Paul's Cathedral Mission College has successfully participated in the **ORAL PRESENTATION COMPETITION** held on ***8th April, 2026*** at ***Department of Chemistry, Presidency University, Kolkata.***

We appreciate their enthusiasm, dedication and active involvement throughout the event. We wish them continued success in their future endeavors.

Head of the Department

Rachana Nag
Shubhradip Sen
Joint Secretaries