

Report of District Level Student-Youth Science Fair

No. of Student's participation: 2

Name of Exhibition Topic: *Universal Indicator*

Date of Exhibition: 30th January, 2024

Place: Krishnagar Collegiate School

Science Fair participation is an important and rewarding experience for students who are interested in science actually. It can help students gain confidence, learn new skills, and explore the world around them. In this regards 'District Level Student-Youth Science Fair 2023-24' has been held on 29th & 30th January, 2024, organised by Youth Science Department, Nadia at Krishnagar Collegiate School. In this even the students of **Department of Chemistry, Srikrishna College, Bagula** have been participated with an exhibition. Science fair also helps students to develop important research skills and for deep thinking. This participation also ignite student for social development and presentation skills. Applied learning also enhances non-science-specific skills, such as project management and communication. The public competition aspect of the science fair fosters excitement for scientific inquiry and can inspire students to pursue careers in science and engineering.


In this exhibition students prepare a universal indicator solution by mixing various pH indicators in a fixed proportion and which exhibits a smooth colour change when the pH of the solution changes from 0 to 14. Different daily life items like food, cosmetic and agricultural element's pH have been investigated and explained their usages. Students hypothesized that the universal indicator would change colour according to the pH scale, from red for acidic solutions to violet for alkaline solutions, with green for neutral solutions. Different materials used for exhibition like: Universal indicator solution, Distilled water, Vinegar, Lemon, ginger, raw turmeric, powder turmeric, tomato, spinach juice, 3 different band shampoo, Na_2CO_3 , conc. H_2SO_4 , HCl, KOH, NaOH, 15 test tubes, 15 droppers. During conduction of exhibition students simultaneously described their work with poster presentation in their background and thorough process was conducting with some question-answering sessions by some judges or some participants or teachers.

Benefits of participating in science fair:

1. Growing interest in Science
2. Students are able to network with their peers who have similar interests
3. An exceptional way for engaging students in active learning and develop sufficient science literacy
4. Students gain confidence and crucial presentation skills
5. Students are able to take their natural curiosity and advance their understanding in a given area through research.


Students Name: Anusua Sadhukha, Ankita Nath
 Guide Name: Dr. Nabadyuti Barman, Dr. Paramita Hajra





DEPARTMENT OF CHEMISTRY

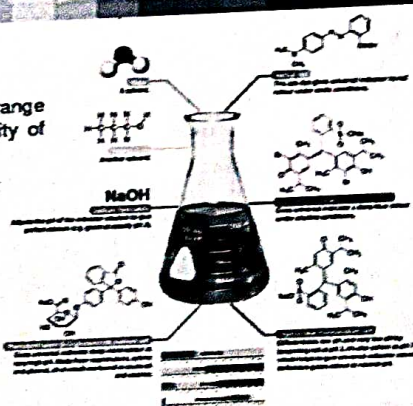
Srikrishna College, Bagula, Nadia



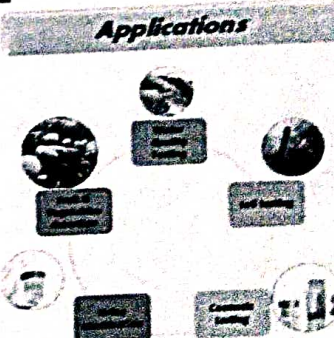
UNIVERSAL INDICATOR

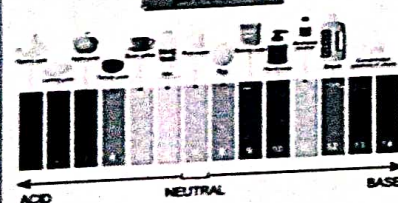
What is Universal Indicator?

- > A pH indicator.
- > Exhibit various color changes over a wide range pH values to indicate the acidity or alkalinity of solutions.
- > Paper form or present in a form of a solution.



Applications





← ACID NEUTRAL BASE →

Presented by
Anusua Sadhukha & Ankita Nath
 Semester I

District Level Student-Youth Science Fair 2023-24

Nadia
 30/01/2024