

# Selection of the scientific project 'Products from Bio-plastic' made by students of Class XI for 108th Indian Science Congress, Nagpur

Two students of Class XI, Parvanya Singh and Samaira Gulati competed to participate in the National Children Science Congress sponsored by the National Council for Science, Technology and Communication, Dept. of Science and Technology, Govt. of India under the guidance of their teacher in-charge, Ms. Manisha Tiwari. The competition encouraged young minds to think analytically, demonstrate their scientific temperament and find innovative technological solutions. The students chose to analyse the problem of plastic waste and fabric waste as per the focal theme of 2023, 'Understanding Ecosystem for Health and Well-being'.

The team collected the data, techniques and components to make bioplastic in the school lab itself. Using the scientific approach of experimentation, the students successfully made bioplastic (biodegradable plastic). The bioplastic made from corn starch, glycerin, water and vinegar was then used with the fabric waste to make different products like pen stands etc. The bioplastic sheets were used to make bags.

Various improvements and updates were done as per the recommendation of the scientists in the National Science Congress panel which further encouraged the students and enhanced the scientific process. Some of them are: measuring the strength of bioplastic, making products and collection of experimental data. The team cleared the District Level and went on to clear the State level of the National Science Congress. Their work was also published in the prestigious 'Kishore Vaigyanik Sammelan' magazine by Indian Science Congress.

#### **HIGHLIGHTS OF THE JOURNEY**

<u>Winning at District level of National Children Science Congress (NCSC):</u> The District Level NCSC of Delhi State was held on 29th and 31st October 2022 in the virtual mode (online). On recommendation of the evaluation team, participants of our school cleared the District Level of Children Science Congress.

Winning at State level of NCSC held on 28th November 2022: The school's senior team with Parvanya Singh of Class XI was selected from the entire Delhi state to exhibit the project at the 108th Indian Science Congress (ISC).

Exhibit at 108th Indian Science Congress, one of the largest scientific meet and exhibition of our nation: ISC was held at Nagpur from 3rd to 7<sup>th</sup> January 2023. It was inaugurated virtually by the Prime Minister, Mr. Narender Modi on 3rd January 2023. The Kishore Vaigyanik Sammelan was inaugurated on 4th January 2023 followed by the visit from several scientists and students. Our team got certification in the valedictory

ceremony held on 6th January 2023. The team's work got published in the 'Kishore
Vaigyanik Sammelan' magazine by Indian Science Congress Association.

## A GLIMPSE OF THE STUDENTS' JOURNEY

## Product made from Bioplastic

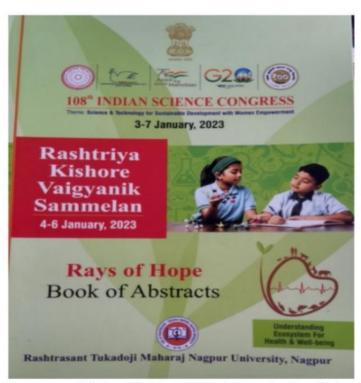




Team representing Delhi state at the 108th Indian Science Congress

Team leader: Parvanya Singh XI A Team member: Samaira Gulati XI A

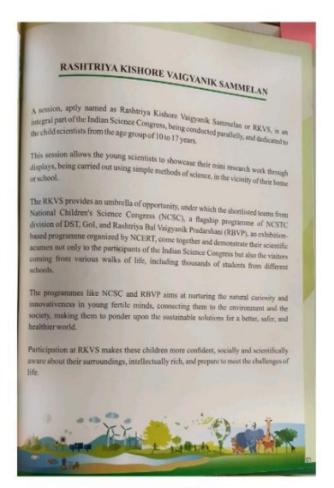
Mentor Teacher: Manisha Tiwari (PGT Bio)



Our team's abstract published in the magazine by Indian Science Congress circulated to the participants from all over India.







## Students at Work:



Parvanya Singh, XI A



Samaira Gulati, XI A