

## **SEMINAR ON**

# "MICROPLASTICS- AN INVISIBLE DISASTER"

Date: 28th April, 2023 (Friday)

Time: 9 am - 10.35 am

#### Speaker:

Dr. Punarbasu Chaudhuri, Associate Professor, Department of Environmental Science,

**University Of Calcutta** 

### Organized by

## Department of Environmental Studies

In collaboration with
The Study Circle and Seminar Committee, MKC

#### MAHARANI KASISWARI COLLEGE

20, Ramkanto Bose Street, Kolkata-700003

Venue:

Venue: College Premises (Room No- 08)

#### MAHARANI KASISWARI COLLEGE

Seminar on the topic: Microplastics- an invisible disaster

Organisers: Department of Environmental Studies in collaboration with the Study Circle and Seminar Committee, MKC Guest Speaker: Dr. Punarbasu Chaudhuri

(Associate Professor, Department of Environmental Science, University of Calcutta)

Date: 28.04.2023

Department of Environmental Studies in collaboration with the Study Circle and Seminar Committee of Maharani Kasiswari College had organised a seminar on the topic "Microplastics- an invisible disaster" for the academic year 2023. This initiative had been taken to aware the participants of this college and other institutions regarding the overall environmental effect of the microplastic pollution. As an outstanding speaker, Dr. Punarbasu Chaudhuri, was invited to deliver lecture on the emerging environmental issues related to the microplastic. The programme started at about 9 am and the Teacher-in-charge of the Maharani Kasiswari College, Dr. Chaitali Pal, delivered the welcome address to the gathering. Smt. Paushali Guha (Sarkar), Head of the Department of Environmental Studies introduced the eminent speaker before starting the lecture session. It is expected that the seminar will be productive, enjoyable and fruitful for all participants.

The valuable lecture was delivered by Dr. Punarbasu Chaudhuri, Associate Professor, Department of Environmental Science, University of Calcutta. It is learnt that, Dr. Punarbasu Chaudhuri has completed his Post-graduation and PhD in Environmental Science from University of Kalyani. He also engaged himself in Post-Doctoral research on Mangroves from University of Sydney, Australia. His research interests cover the area of mangrove ecology, air pollution, climate change and polar environment. He has published many books and several articles in many renowned journals.

Dr. Punarbasu Chaudhuri enlightened about the future effect of the excessive use of plastic on the biotic and abiotic components of the environment. He discussed that marine microplastic pollution originates from a variety of sources (35% microplastics produced from textile industries, 28% from tyres,0.3% from plastic granules,24% from city dust,3.7% from marine coating, 2% from personal care products). He explained that the microplastics are small plastic pieces less than five millimetres long and are harmful to thirty percent of marine life. Primary and secondary microplastics, which are produced by the Photo-oxidation of daily used plastic products (such as toothpaste, face wash, single use plastic bag etc.) retain around 200-300 years in every sphere of the environment, even in the ice core. So, it easily enters into different trophic levels of the food -chain of an ecosystem and lead to acute and chronic toxicity, carcinogenicity, developmental toxicity, mental illness, neurodegenerative disorders (Alzheimer's disease) etc. He had focused on 7R's of sustainability (Rethink, Refuse, Reduce, Repurpose, Reuse, Recycle, ROT) and gave a suggestion to replace the plastic with alternative eco-friendly materials. He had vividly explained about the invisible disaster related to the nonbiodegradable microplastics and given an idea about the different possibilities of plastic-free sustainable lifestyle for the better future.

Following this speech, there was a wonderful interactive session where the audience interacted with the speakers clarifying their doubts and asking interesting questions. The question-and-answer segment was conducted by Smt. Shreya Ghosh, teaching faculty, Department of Environmental Studies, MKC. The speaker's response to the enquiries were well received and satisfied. The seminar concluded with vote of thanks proposed by Dr. Anindita Ray Chakravarti, Head of the Department of Food and Nutrition and Joint Convenor of the Study Circle and Seminar Committee, MKC. The programme wrapped up around 10:45 am. The session was enriched with the active participation of faculty members, students of various Departments of this college and other institutions, other stakeholders. The seminar was very informative and provided the participants with enormous knowledge on various aspects on microplastic pollution.

#### **REPORT SUBMITTED BY:**

Smt. Paushali Guha (Sarkar), Faculty of the Department of Environmental Studies, Maharani Kasiswari college













