





### World Ozone Day: 16<sup>th</sup> Sept, 2020 Theme: "Ozone for life"

## ENVIS Resource Partner on Environmental Biotechnology Hosted by: University of Kalyani, West Bengal

Sponsored by Ministry of Environment, Forests & Climate Change



## What is Ozone Layer?

Ozone is created in the atmosphere when the sun's rays split oxygen molecules into single atoms. These atoms combine with nearby oxygen to form a three-oxygen molecule, called ozone ( $\mathbf{O}_3$ ). The ozone layer is a region of Earth's stratosphere that absorbs most of the Sun's ultraviolet radiation. It contains high concentrations of ozone ( $\mathbf{O}_3$ ) in relation to other parts of the atmosphere, although still small in relation to other

gases in the stratosphere. The ozone layer contains less than 10 ppm of ozone, while the average ozone

concentration in Earth's atmosphere as a whole is about 0.3 ppm. The ozone layer is mainly found in the lower portion of the stratosphere, from approximately 20 to 30 kilometers (12 to 19 miles) above Earth, although its thickness varies seasonally and geographically.

# Stratosphere Ozone Layer Ozone Layer Ozone CFC's etc Troposphere

## Causes of Ozone layer depletion

The problems and causes associated with ozone depletion arise from human activities. Unlike pollution which has several causes. The Chlorofluorocarbons (CFCs) and other halogenated ozone depleting substances (ODS) are mainly responsible for man-made chemical ozone

substances (ODS) are mainly responsible for man-made chemical ozone breakdown /depletion.





The ozone layer depletion does not affect a region or a country. In fact whole world is vulnerable to its after affects. Ozone layer depletion increases the amount of UV-B that reaches the Earth's surface. Laboratory and epidemiological studies demonstrate that UV-B causes non-melanoma skin cancer and plays a major role in malignant melanoma development.

# Celebration of World Ozone Day

The Vienna Convention was the first international treaty to address the depletion of the stratospheric ozone layer by halogenated chemicals, and the

forerunner of the Montreal Protocol.

In 2020, the theme for World Ozone Day is "Ozone for life: 35 years of ozone layer protection," signaling that "not only is ozone crucial for life on Earth, but that we must continue to protect the ozone layer for future generations," . World Ozone Day has been celebrated since 1994 and was established by the United Nations General Assembly. It is



celebrated on 16<sup>th</sup> of September every year to spread awareness and bring attention to the depletion of the ozone layer. The day is mainly intended to spread awareness of the depletion of the Ozone Layer and search for solutions to preserve it. World Ozone Day provides a great platform among the people of the world to make them aware that it's high time and we must all put our best of efforts to preserve the ozone layer.