

Oxygen Deficiency Forms Ozone Hole Over Antarctica New Evidence.

Dr. Uma Shankar Patel (NET)

Department of Biological Sciences,
Rani Durgavati University Jabalpur M. P. India.
Email: up1932066@gmail.com

Abstract

In estimation approximately 50 million tonnes ozone per day generates and degenerates in stratosphere over Antarctica which is almost equivalent to OMD per year. Role of Oxygen deficiency into Ozone depletion justified.

Keyword: Replenish, Ozone, Depletion, Oxygen

1. Introduction

Now a days Ozone hole is a prevailing prominent problem of our planet. Hitherto it was accepted worldwide by scientists that Ozone depletion and Ozone hole formation over the Antarctica was on account of action of Chlorine like catalysts in stratosphere released thereon from breakdown of Chlorofluorocarbons (CFCs) like anthropogenic pollutants (Mollina and Rawland, 1974). But, recently postulated and proved that Ozone depletion in the stratosphere within the polar vortex over Antarctica is due to deficiency of Oxygen thereon (Patel, 2025). Approximately 675 million tonnes deficiency of Oxygen results about 1 million tonnes less Ozone formation equivalent to 1 tonne Ozone depletion. Evidences in this regard found and explained (Patel, 2026). Approximately 3 billion tonnes Ozone is in atmosphere and around 13% daily generates and generates according to Ozone Oxygen cycle Wikipedia seen on 5th February, 2026 (Minus Bot, 2025). According to an estimation around 382,320,000 tonnes Ozone is in stratosphere of Antarctica. A probable Oxygen Ozone deficiency ratio is about 675:1 in stratosphere over Antarctica (Patel, 2026). This is about 382 million tonnes in round figures following Patel Plan of Decimal Clock (Patel, 2022). Approximately 50 to 60 million tonnes Ozone Mas Deficit occurs from Ozone hole over Antarctica per year (Sonkaew *et al.* 2013).

Discussion

About 13% of 382 million tonnes is around 49,701,600 tonnes, in round figures about 50 million tonnes, this quantity of Ozone daily degenerates as well as generates in stratosphere over Antarctica. If, Ozone depletion occurs on account of action of Chlorine like catalysts then Antarctica stratospheric capacity to generate around 50 million tonnes of Ozone per day may replenish Ozone loss in one day which is lost during 1 winter / spring season by Chlorine, provided that Oxygen is sufficiently available thereon. Definitely role of Chlorine like catalysts may be into degeneration and generation of Ozone around 50

million tonnes per day in stratosphere over Antarctica but no role of Chlorine into Ozone depletion. Ozone depletion is possible only on deficiency of Oxygen (reverse reactant) in the reaction sites. Replenishment of Ozone is a natural management by reversible reactions of Ozone-Oxygen cycle (Chapman cycle). The Le Chatlier principle also supports replenishment of Ozone by reverse reaction. Instrumental as well as laboratory verification needed in this regard.

Conclusion

Ozone depletion occurs on account of Oxygen deficiency in stratosphere over Antarctica. If, Chlorine causes OMD of around 50 million tonnes in a season this much quantity could be generated in 1 day by Ozone Oxygen cycle.

Author's Biography

Author was selected to post of Professor by MPPSC in 2011 but appointment is pending in Honorable High Court of Madhya Pradesh. At present no post holder. Few recent research papers are available on Google search: (i) Patel Hypothesis of Research Evaluation Amended. IJMDRR, 2020; (ii) Patel Assumption About Increase In global Warming. IJMDRR, 2021; (iii) Global Warming Problem Is Only of Twenty Years: Patel's Theory Of Thirty Three. Quest journals, 2022; (iv) Global Warming Rise Not By Carbon Dioxide (CO₂), Quest journals, 2023; (v) Patel's Concept Of Global Warming Potentials, IJMDRR, 2023; (vi) Global Warming Potentials of Deforested Earth Surface, IJMDRR, 2023; (vii) Patel's Plan Of Ozone Depletion And Solution, IJMDRR, 2024.

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