

Activated Oxygen, Ozone and its History

Activated Oxygen is an activated, trivalent (three atoms) form of oxygen. Oxygen is O₂, ozone is O₃. Over a period of 20-30 minutes, ozone or O₃ breaks down into two atoms of regular oxygen O₂ - by giving up one atom of oxygen.

How is Activated Oxygen or Ozone formed in Nature?

In nature, there is a cycle of oxygen just like there is a cycle of water. Oxygen is released from plants on land and plankton in the sea during photosynthesis. The oxygen is lighter than air and floats upward in the atmosphere. At the 20-30 km region, strong ultraviolet radiation in the 185-200 nanometer wavelength bombards the oxygen and turns some of it into ozone or O₃. The ozone created exists as a thin layer in the atmosphere and it blocks out the small portion of the UV spectrum that it absorbs. The produced oxygen is in the upper atmosphere as long as the sun is shining. Since ozone is heavier than air, it begins to fall earthward. As it falls, it combines with any pollutant it contacts, cleaning the air -- nature's wonderful self-cleaning system. If ozone contacts water vapor as it falls, it forms hydrogen peroxide, a component of rainwater, and the reason why rainwater causes plants to grow better.

Activated oxygen is also created by lightning, and the amount produced in an average storm is often triple the allowable amount of 0.15 ppm as set by the U.S.A. Environmental Protection Agency. This activated oxygen or ozone is what gives the air the wonderful fresh smell after a rain and is of the highest benefit to anyone fortunate enough to be breathing it.

Another way ozone is produced is by photons from the sun breaking apart nitric oxide, a pollutant formed by the combustion of hydrocarbons in the internal combustion engine. This ozone can accumulate in smog due to temperature inversions and can be a lung and eye irritant_*

The History of Ozone aka Activated Oxygen

The first ozone generators were developed by Werner von Siemens in Germany in 1857, while 1870 saw the first report that ozone was being used therapeutically to purify blood by C. Lender in Germany. There is evidence of the use of ozone as a disinfectant from 1881, mentioned by Dr. Kellogg in his book on it.

In October of 1893, the world's first water treatment plant using ozone was installed in Ousbaden, Holland and today there are over 3000 municipalities around the world that use ozone to clean their water and sewage.

In 1885, the Florida Medical Association published "Ozone" by Dr. Charles J. Kenworthy, MD, detailing the use of ozone for therapeutic purposes.

In September 1896, the electrical genius Nikola Tesla patented his first ozone generator, and in 1900, he formed the Tesla Ozone Company. Tesla sold ozone machines to doctors for medical use.

In 1898, the Institute for Oxygen Therapy was started in Berlin by Thauerkauf and Luth. They injected ozone into animals and bonded ozone to magnesium, producing Homozon.

Beginning in 1898. Dr. Benedict Lust, a German doctor practicing in New York, who was the originator and founder of Naturopathy, wrote many articles and books on ozone.

In 1902, JH. Clarke's "A Dictionary of Practical Materia Medica", London describes the successful use of ozonated water in treating anemia, cancer, diabetes, influenza, morphine poisoning, canker sores, strychnine poisoning and whooping cough.

In 1911, "A Working Manual of High Frequency Currents" was published by Dr. Noble Eberhart, MD. Dr. Eberhart was head of the Department of Physiologic Therapeutics at Loyola University. He used ozone to treat tuberculosis, anemia, chlorosis, tinnitus, whooping cough, asthma, bronchitis, hay fever, insomnia, pneumonia, diabetes, gout, and syphilis.

In 1913, the Eastern Association for Oxygen Therapy was formed by Dr. Blass and some German associates.

During World War 1_ ozone was used to treat wounds, trench foot, gangrene and the effects of poison gas. Dr. Albert Wolff of Berlin also used ozone for colon cancer, cervical cancer and decubitus ulcers in 1915.

In 1920, Dr. Charles Neiswanger, MD, the President of the Chicago Hospital College of Medicine published "Electro Therapeutical Practice". Chapter 32 was entitled "Ozone as a Therapeutic Agent."

In 1926, Dr. Otto Warburg of the Kaiser Institute in Berlin announced that the cause of cancer is lack of oxygen at the cellular level. He received the Nobel Prize for Medicine in 1931 and again in 1944, the only person to ever receive two Nobel Prizes for Medicine. He was also nominated for a third.

In 1929, a book called "Ozone and Its Therapeutic Action" was published in the U.S. listing 114 diseases and how to treat them with ozone. Its authors were the heads of all the leading American hospitals.

The Swiss dentist E.A. Fisch was using ozone in dentistry before 1932, and introduced it to the German surgeon Erwin Payr who used it from that time forward.

In 1933, the American Medical Association, headed up by Dr. Simmons set out to destroy all medical treatments that were competitive to drug therapy. The suppression of ozone therapy began then, and it continues in the US to this day.

Aubourg and Lacoste were French physicians using ozone insufflation from 1934-1938.

In 1948, Dr. William Turska of Oregon began using ozone, employing a machine of his own design, and in 1981, Dr. Turska wrote the article "Oxidation" which is still relevant today. Dr. Turska pioneered injection of ozone into the portal vein, thereby reaching the liver

From 1953 onward, German doctor Hans Wolff used ozone in his practice, writing the book "Medical Ozone" and training many doctors in ozone therapy.

In 1957, Dr. J. Hansler patented an ozone generator which has formed the basis of the German revival of ozone therapy over the last 35 years.

In 1961, Hans Wolff introduced the techniques of major and minor autohemotherapy.

In 1977, Dr. Renate Viebahn provided a technical overview of ozone action in the body.

In 1979, Dr. George Freibott began treating his first AIDS patient with ozone, and in 1980, Dr. Horst Kief also reported success treating AIDS with ozone.

In 1987, Dr. Rilling and Dr. Viebahn published "The Use of Ozone in Medicine".

In 1990, the Cubans reported on their success in treating glaucoma, conjunctivitis and retinitis pigmentosa with ozone.

In 1992, the Russians revealed their techniques of using ozone bubbled into brine to treat bum victims with astounding results.

Today, after 125 years of usage, ozone therapy is a recognized modality in sixteen nations.