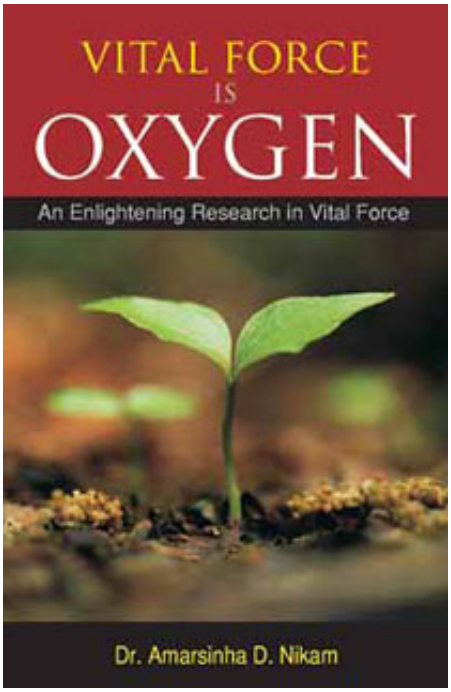
Amarsinha D. Nikam
Vital Force is Oxygen

Leseprobe

Vital Force is Oxygen
von Amarsinha D. Nikam



http://www.narayana-verlag.de/b9138

Narayana Verlag GmbH
Blumenplatz 2
D-79400 Kandern
Tel. +49 7626 9749 700
Fax +49 7626 9749 709
Email info@narayana-verlag.de
http://www.narayana-verlag.de

In unserer Online-Buchhandlung werden alle deutschen
und englischen Homöopathie Bücher vorgestellt.

Narayana Verlag

Oxygen

Oxygen is derived from the Greek word, where *oxys* means acid, literally sharp from the taste of acids and *genes* means producer, literally begetter. It is the element with atomic number 8 and represented by the symbol 'O'. It is a highly reactive non-metallic period 2 element that readily forms compounds (notably oxides) with almost all other elements. Oxygen is the third most abundant element in the universe by mass after hydrogen and helium. Diatomic oxygen gas constitutes 21% of the volume of air. Water is the most familiar oxygen compound.

OXYGEN HISTORY

Oxygen makes up 21% of the atmosphere we breathe, but it was not discovered as a separate gas until the late i8th century. Oxygen was independently discovered by Carl Wilhelm Scheele, in Uppsala in 1773 or earlier and by Joseph Priestley in Wiltshire, in 1774. The name oxygen was coined in 1777 by Antoine Lavoisier.

Although oxygen plays a life-supporting role, it took

about 150 years for the gas to be used in a proper manner for patients. After this discovery, therapeutic use of oxygen was only occasional or rare. The oxygen therapy was placed on a rational, scientific basis and was being used in the 2Oth century.

18th Century

- 1783 - Caillens: First case in which oxygen actually employed as a remedy (as quoted by Smith).

19th Century

- *182.0-* Hill: Practical observations on the use of oxygen, or vital air in the cure of diseases.
- 1857 - Birch: On the therapeutic use of oxygen.
- 1869 - Mackey: On the therapeutical value of the inhalation of oxygen gas.
- 1870 - Earth: Oxygen: A remedy in disease.
- 1870 - Smith: Oxygen gas as a remedy in disease.
- 1872 - Davenport: Oxygen as a remedial agent.
- 1886 - Wallian: A further word on oxygen treatment and oxygen charlatans.
- 1886 - Smith: Clinical notes: Oxygen in therapeutics.
- 1887 - Osier: The treatment of pneumonia.
- 1888 - Kellogg: Oxygen enemata as a remedy in certain diseases.

20th Century

- 1908 - Bainbridge: Oxygen in medicine and surgery.
- 1912 - Hill: The administration of oxygen.

- 1914 - Howitt: The subcutaneous injection of oxygen gas.
- 1916 - Tunnicliff & Stebbing: The intravenous injection of oxygen gas.
- 1917 - Haldane: The therapeutic administration of oxygen.
- 1917 - Meltzer: The therapeutic value of oral rhythmic insufflation of oxygen.
- 1920 - Haldane & Barcroft: Oxygen' therapy.
- 1922 - Haldane: Respiration.
- 1928 - Cunningham: 'Monster Steel Ball' hyperbaric chamber.

STRUCTURE

At standard temperature and pressure, oxygen is a colourless, odorless gas with the molecular formula O2 in which the two oxygen atoms are chemically bonded to each other with a spin triplet electron configuration.

PHYSICAL PROPERTIES

Oxygen is soluble in water. Oxygen condenses at 90.20 K (-i82.95°C, - 297.3i°F) and freezes at 54.36 K (-2i8.79°C, -361.82 °F)

It is a highly reactive substance.

Oxygen is artificially produced by fractional distillation of liquefied air, use of zeolites to remove carbon dioxide and nitrogen from air, electrolysis of water and other means. Oxygen exists in three forms solid, liquid, and gaseous form. Liquid oxygen is pale blue in colour.

OCCURRENCE

Oxygen is the most abundant chemical element by mass, in our biosphere, air, sea, and land. Earth is unusual among the planets of the solar system in having such a high concentration of oxygen gas in its atmosphere.

The unusually high concentration of oxygen gas on earth is the result of the oxygen cycle. This biogeochemical cycle describes the movement of oxygen within and between its three main reservoirs on earth that is the atmosphere, the biosphere and the lithosphere. The main driving factor of the oxygen cycle is photosynthesis, which is responsible for modern earth's atmosphere. Photosynthesis releases oxygen into the atmosphere, while respiration and decay remove it from the atmosphere.

BIOLOGICAL ROLE

The molecular dioxygen (O2) is essential for cellular respiration in all aerobic organisms. Oxygen is used in mitochondria to generate adenosine triphosphate (ATP) during oxidative phosphorylation. The oxygen remaining after oxidation of the water molecule is released into the atmosphere.

ALLOTROPES OF OXYGEN

There are several known allotropes of oxygen.

1. Dioxygen, O2 - Colourless
2. Ozone, 03 - Blue
3. Tetraoxygen, 04 - Metastable

4. Solid oxygen exists in six variously coloured phases - of which one is O_8 and another one metallic.

Dioxygen

The common allotrope of elemental oxygen on earth, O2, is known as dioxygen. Elemental oxygen is most commonly encountered in this form, as about 21% (by volume) of Earth's atmosphere.

Singlet oxygen

Singlet oxygen is the common name used for the two metastable states of molecular oxygen (O2) with higher energy than the ground state triplet oxygen.

Ozone

Triatomic oxygen (Ozone, 03), is a very reactive allotrope of oxygen that is destructive to materials like rubber and fabrics and is also damaging to lung tissue. Traces of it can be detected as a sharp, chlorine-like smell coming from electric motors, laser printers, and photocopiers.

Ozone is thermodynamically unstable towards the more common dioxygen form, and is formed by reaction of O2 with atomic oxygen produced by splitting of O2 by UV radiation in the upper atmosphere. Ozone absorbs strongly the ultraviolet rays and functions as a shield for the biosphere against the mutagenic and other damaging effects of solar UV radiation. Ozone is formed near the earth's surface by the photochemical disintegration of nitrogen dioxide from the exhaust of automobiles. Ground-level ozone is an air pollutant that is especially harmful for senior citizens, children, and people with heart and lung conditions such as

Emphysema, Bronchitis, and Asthma. The immune system produces ozone as an antimicrobial. Liquid and solid 03 have a deeper-blue colour than ordinary oxygen and they are unstable and explosive.

Electrical discharges cause dioxygen to split into oxygen radicals. Most of these recombine to form dioxygen, but a few react with dioxygen to give ozone:

O2 + O -> 03

The ozone molecules themselves can also react with oxygen free radicals, to reform dioxygen, and so the actual concentration of atmospheric ozone is quite small. It is believed that ozone is formed in the upper atmosphere by the photo dissociation of dioxygen by the intense ultraviolet radiation from the sun. This light energy is thus absorbed; otherwise it would reach the Earth and destroy all life quite rapidly. Ozone is a greenhouse gas and, as such, would contribute to global warming if present in the lower atmosphere.

Tetraoxygen

Tetraoxygen had been suspected to exist since the early 1900, when it was known as oxozone, and was identified in 2001. The molecule 64 was thought to be in one of the phases of solid oxygen later identified as O_8.

ISOTOPES

Planetary geologists have measured different abundances of oxygen isotopes in samples from the earth, the moon, mars, and meteorites. Analysis of a silicon wafer exposed to solar wind in space has shown that the sun has a higher

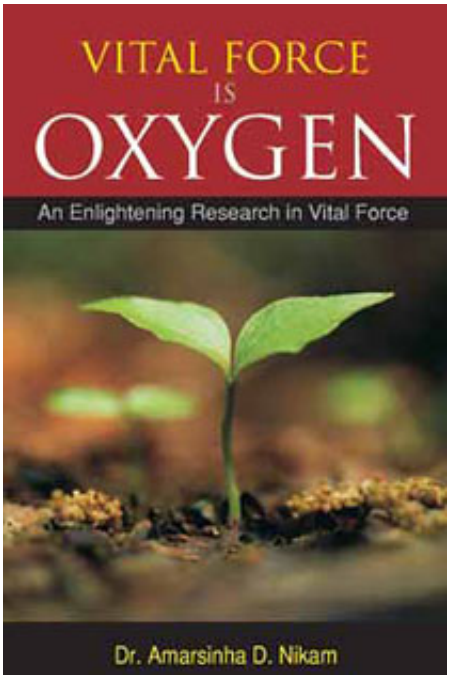
proportion of oxygen-i6 than does the earth. Also oxygen-16 is synthesized at the end of the helium fusion process in stars.

OXIDES AND OTHER INORGANIC COMPOUNDS

Many minerals for example, Calcium Carbonate (CaCOs) require oxygen for formation of compounds (oxidation) and also for completion of their atomic structure by ion binding (oxidation).

Oxygen as a compound is present in the atmosphere in trace quantities in the form of carbon dioxide.

The earth's crustal rock is composed in large part of oxides of silicon, aluminium and other metals. The rest of the earth's crust is also made of oxygen compounds, in particular calcium carbonate and silicates.



Amarsinha D. Nikam

Vital Force is Oxygen

An enlightening research in vital force

192 Seiten, paperback
erschienen 2009

bestellen

Mehr Homöopathie Bücher auf www.narayana-verlag.de