

RADIATION AND HAARP IMPLICATIONS

November 30 2000

Edited December 12 2000

Edited Jan 25 2001

Clifford E Carnicom

NOTES FROM CURRENT RESEARCH :

1. A prominent characteristic of the element barium is the ability to absorb x-rays and radiation. Research indicates that the use of barium is a viable means of absorbing energy from nuclear explosions.

From the SETI website, the following statement is noted
(<http://www.coSETI.org/lemarch1.htm>)

"When a nuclear weapon explodes, about seventy percent of the energy released is in the form of kilovolt X-rays."

2. Also, from a site on the General Principles of Nuclear Explosions:
(<http://www.enviroweb.org/issues/nuketesting/nukeeffct/enw77a.htm>)

"The initial nuclear radiation from an air burst will also penetrate a long way in air, although the intensity falls off fairly rapidly at increasing distances from the explosion. Different materials are thus required for the most efficient removal of these radiations; but concrete, *especially if it incorporates a heavy element, such as iron or barium*, represents a reasonable practical compromise for reducing the intensities of both gamma rays and neutrons."

3.EASTLUND BARIUM REFERENCE

From the patent report:

"It has also been proposed to release large clouds of barium in the magnetosphere so that photoionization will increase the cold plasma density, thereby producing electron precipitation through enhanced whistler-mode interaction."

4. RADIATION BIOLOGY

(<http://www.bio.calpoly.edu/BioSci/Courses/BIO/BIO311/Bio311.html>)

From the section on Biological Aspects of Ionizing Radiation:

"Injury due to irradiation is caused mainly by ionization within the tissues of the body. When radiation interacts with a cell, ionizations and excitations are produced in either biological macromolecules or in the medium in which the cellular organelles are suspended, predominantly water. Based on the site of interaction, the radiation-cellular interactions may be termed as either direct or indirect.

Direct action occurs when an ionizing particle interacts with and is absorbed by a macromolecule in a cell (DNA, RNA, protein, enzymes, etc.). These macromolecules become abnormal structures which initiate the events that lead to biological changes.

Indirect action involves the absorption of ionizing radiation in the medium in which the molecules are suspended. The molecule which most commonly mediates this action is water. Through a complex set of reactions the ionized water molecules form free radicals that can cause damage to macromolecules.

The most important target for radiation in the cell is DNA in the nucleus. Biological effects result when DNA damage is not repaired or is improperly repaired. Extensive damage to DNA can lead to cell death. Large numbers of cells dying can lead to organ failure and death for the individual. Damaged or improperly repaired DNA may develop into lymphoma and cancers in somatic cells."

5. BERNARD EASTLUND AND THE ROOTS OF HAARP

6. THE MILITARY'S PANDORA BOX

7. Notes from Crystal Chemistry and Refractivity, by Howard W. Jaffe, Dover 1996:

A. The phenomenon of electronic polarizability refers to the temporary displacement of valence electrons in an atom or ion induced by the electric vector of electromagnetic radiation operative at optical frequencies. After this type of displacement, centers of gravity of the atomic nucleus and the electric charge no longer coincide, and the atom acquires an induced dipole moment.

B. Spectroscopy has shown that electrons in s orbitals are easy to excite, and yield spectral lines of high sensitivity, permitting their detection even when present in very minute quantities.

C. An element having its valence electrons in s orbitals, which have low ionization potential, will ionize readily. Such elements include the alkalis and alkaline earth elements of Groups IA and IIA of the periodic table.

D Ionization potential is the energy required to move an electron from its normal quantum level to infinity.

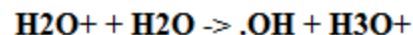
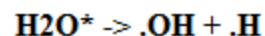
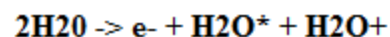
E. First five ionization potentials of the elements (Groups IA and IIA) in electron volts:

Element	I First Ionization Potential	II Second Ionization Potential
H	13.60	
Li	5.39	75.62
Na	5.14	47.29
K	4.34	31.62
Rb	4.18	27.50

Cs	3.89	25.07
Fr	4.14	~21.76
Be	9.32	18.21
Mg	7.64	15.03
Ca	6.11	11.87
Sr	5.69	11.03
Ba	5.21	10.00
Ra	5.28	10.15

8. From the Oxford Dictionary of Science, 1999:

Ionizing Radiation : Radiation of sufficiently high energy to cause ionization in the medium through which it passes. It may consist of a stream of high-energy particles (e.g., electrons, protons, alpha-particles) or short-wavelength electromagnetic radiation (ultraviolet, X-rays, gamma-rays). This type of radiation can cause extensive damage to the molecular structure of a substance either as a result of the direct transfer of energy to its atoms or molecules or as a result of the secondary electrons released by ionization. In biological tissue the effect of ionizing radiation can be very serious, usually as a consequence of the ejection of an electron from a water molecule and the oxidizing or reducing effects of the resulting highly reactive species:



where the dot before a radical indicates an unpaired electron and an * denotes an excited species.

9. From : <http://www-istp.gsfc.nasa.gov/Education/wposion.html>

"An atom can become ionized by the absorption of light. **The atom of barium is particularly easy to ionize**, because its outermost electron is very loosely bound. If a mass of barium is vaporized in space, producing a barium cloud, much of the barium becomes ionized by sunlight within less than a minute. The cloud then moves in response to electric forces in space, and can be used to study the electrical field in space."

10. HEPA Air Filtration information available at:

<http://www.engr.psu.edu/ae/wjk/wjkfiltr.html>

11. Air Filter Comparison Chart available at:

<http://www.indoorpurifiers.com/air-cleaner-comparison.htm>

[Back to Contrail\Chemtrail Main Page](#)