

PROVEN: HUMAN IS ESSENTIALLY A BEING OF LIGHT

Prof. Fritz-Albert Popp: "Today we know that man is essentially a being of light."

Integral biophysics*: biophotonics. 2003

The modern science of photobiology is now proving this. This has enormous implications for treatment. For example, we now know that light quanta can initiate or stop cascade-like reactions in cells, and that genetic damage to cells can be practically repaired within a few hours with weak light rays.

Fritz-Albert Popp, a German biophysics and biophotonics researcher, states: "We are still on the verge of understanding the very complex relationship between light and life, but we can now confidently state that our entire metabolic function depends on light."

Fritz-Albert Popp acquired:Diploma in experimental physics (University of Würzburg), X-ray group of the Institute of Physics of the University of Würzburg, doctorate in theoretical physics (quantum theory of many-particle systems, University of Mainz), habilitation in biophysics (University of Marburg), diploma as a professor of radiology at the University of Marburg 1972–1980; appointed professor (H2) by the Senate of the University of Marburg, head of industrial research groups (1981–1983); University of Kaiserslautern (cell biology from 1983 to 1985), Technology Center and Technology Park Kaiserslautern (1986–present).

He conducted research confirming the existence of biophotons, these massless particles of light that transmit information within and between cells.

His works show that **The DNA of living cells stores and releases photons, creating "biophotonic emission," which may be the key to disease and health.**

Popp's eight books and more than 150 scientific journal articles and studies address key issues in theoretical physics, biology, complementary medicine, and biophotons.

In 1970, Popp, as a specialist in theoretical biophysics at the University of Marburg in Germany, taught radiology –**the interaction of electromagnetic (EM) radiation with biological systems**
Popp was already beginning to worry about things like cell phones and microwave towers, which are now often linked to cancer and leukemia.

Dr. Popp founded the International Institute for Biophysics in Noize, Germany.This institute is a global network of biologists, chemists, medical researchers, physicists and other scientists from 14 universities and government research institutes.

Biophotonics is a branch of quantum biology that studies the interaction of single photons with biological matter in order to understand the inner workings of cells and tissues of living organisms. This is probably the best solution to understanding cell function by integrating molecular

activity in living cells. **Fritz-Albert Popp is the inventor of the biophoton theory and the author of the term "biophotons". Biophotons refer to coherent photons emitted by biological organisms. The biophoton theory states that DNA is the most likely source of biophoton emission.**

Biological photon emission (biophoton emission) is a term used to describe the continuous emission of extremely weak (1–100 photons/sec/cm²) coherent (phase and/or frequency fixed) photons from living systems. (FA Popp 1976) Popp considered it a quantum biological phenomenon with a bioinformatic nature, distinct from incoherent photon emission as by-products of metabolism, such as thermal radiation and bioluminescence/chemiluminescence caused by radical reactions, oxidation, etc.

Biophoton/ultraweak photon emission occurs due to the relaxation of electronically excited states of living cell constituents, which is typically associated with oxidative metabolism, accompanied by the production of reactive oxygen species (ROS), which are involved in the regulation of a wide range of biochemical and physiological functions.

Biophoton/ultraweak photon emission reflects the pathophysiological state of mitochondrial energy (ATP) production and susceptibility to oxidative stress, which results from excessive ROS production or lack of antioxidant defense activity.

Biophotons consist of highly ordered light, in other words, biological "laser" light. Such light is very quiet (low noise) and has a very stable intensity, without the fluctuations normally observed in light. Due to the stable field strength, its waves can overlap, which makes constructive and destructive interference effects possible that do not occur in ordinary light.

Ultralow photon emission (UPE) or biophoton emission (BPE) is the phenomenon of continuous and spontaneous light emission (from all biological systems, including humans) associated with metabolic activity, without excitation or amplification. It occurs in the visible and UV part of the electromagnetic spectrum, at extremely low intensities, approximately 10^{-6} – 10^{-6} W/cm².

Coherent biophoton emission is related to energy and information transfer processes in biological organisms and is associated with DNA function and gene regulation.

Why ultraviolet light?

Dr. Popp chose to work specifically with UV light because of experiments by Russian biologist Alexander Gurwitsch, who in 1923 discovered while working with onions that its roots could stimulate the roots of a neighboring plant if the two adjacent plants were in quartz glass pots, but not if they were in silica glass pots. The only difference is that silica filters out UV wavelengths of light, while quartz does not. **Gurwitsch theorized that onion roots could communicate with each other through ultraviolet light. All energy vibrations are in the electromagnetic spectrum.**

part of the spectrum. This includes electricity, heat, sound, light, radio waves, and radioactive waves. UV light is only a small part of the EM energy spectrum, having a very short wavelength.

Dr. Popp discovered that benzo[a]pyrene (**cancer-causing molecule**) absorbs UV light and then re-emit it at a completely different frequency – it was a light “mixer”. Benzo[e]pyrene (harmless to humans) passes UV light unchanged.

Popp was puzzled by this difference and continued to experiment with UV light and other compounds. He conducted his test with 37 different chemicals, some of which caused cancer, some of which did not. After a while, he was able to predict which substances were likely to cause cancer. In each case, the carcinogenic compounds took in the UV light, absorbed it, and changed or mixed the frequency.

There was another strange property of these compounds: each carcinogen only responded to light at a specific frequency—380 nm (nanometers) in the ultraviolet range. Popp wondered why a cancer-causing substance could be a light mixer. He began reading the scientific literature specifically on human biological reactions and came across information about a phenomenon called “photorepair.”

Light inside the body

Popp was terrified by this. He wrote about it in an article that a prestigious medical journal agreed to publish.

Shortly thereafter, Popp was approached by a student, Bernhard Ruth, who asked Popp to supervise his doctoral dissertation. Popp told Ruth that he was willing to do so if the student could prove that light emanated from the human body.

This meeting was fortunate for Popp, as Ruth was an excellent experimental physicist. Ruth thought the idea was absurd and immediately set about constructing equipment to prove Popp's hypothesis wrong.

Over the course of two years, Ruth built a device that resembled a large X-ray detector that used a photomultiplier to count light photon by photon. Today, it is still one of the best devices in the field. The device had to be very sensitive because it had to measure what Popp considered to be extremely faint emissions.

This “biophoton emission,” as Popp called it, provided an ideal communication system for transmitting information to many cells in the body. But the most important question remained: **Where does the light come from?**

This gifted student persuaded him to conduct another experiment. It is known that when DNA samples are coated with ethidium bromide, it penetrates between the base pairs of the double helix, causing the DNA to unwind. The student suggested that after applying the chemical, they measure the light emitted from the sample. Popp found that the higher the concentration of ethidium, the more

The DNA unwinds, but the stronger the light intensity. Conversely, the less it was used, the less light was emitted.

He also found that DNA can emit a wide range of frequencies, some of which appear to be associated with specific functions. If DNA stored this light, it would naturally emit more light when unwound.

These and other studies proved to Popp that one of the most important sources of light and biophoton emission is DNA. **DNA was like the body's tuning fork.** It would hit at a certain frequency, and certain molecules would follow. He realized that it was also possible that **he discovered a missing link in the current theory of DNA that could explain perhaps the greatest miracle in human biology - how a single cell can develop into a fully formed human being.**

Cancer is the loss of coherent light

So far, Popp has only studied healthy individuals and found exceptional coherence at the quantum level. But what kind of light is there in the bodies of sick people?

Popp tested his device on a series of cancer patients. In each case, these patients lost both their natural periodic rhythms and their coherence. **The lines of internal communication were distorted. They lost touch with the world. Essentially, their light went out.**

The exact opposite is observed in multiple sclerosis: multiple sclerosis is in a very orderly state. **Patients with this disease receive too much light, which inhibits the ability of their cells to do their job.** Too much cooperative harmony hindered flexibility and individuality – like too many soldiers marching at one pace across a bridge, causing it to collapse. **Perfect harmony is the optimal state between chaos and order.** With too much collaboration, it seems that individual orchestra members can no longer improvise. **Essentially, patients with multiple sclerosis are drowning in light.**

Popp also studied the effects of stress. In a state of stress, the rate of biophoton emission increases - this is a defense mechanism designed to restore the patient's balance.

Now Popp realized that what he was experimenting with was more than a cancer cure or Gestaltbildung. It was a model that provided **a better explanation than the current neo-Darwinian theory** how all living things evolve on the planet. /.../

The ramifications of Dr. Popp's discovery

In the 1970s, Dr. Veljko Veljkovic, now head of the Center for Multidisciplinary Research and Engineering, Institute for Nuclear Sciences Vinca, also discovered a method to predict which of the hundreds of new chemicals produced by the rapidly expanding chemical industry were carcinogenic by calculating certain electronic, biophotonic properties of the molecules. **It soon became clear that this method was equally suitable for**

to detect mutagenic, toxic and even antibiotic or cytostatic (anticancer) organic chemicals.

Since then, the Veljkovic Institute in Belgrade has been collaborating with other European laboratories to apply the same method to the development of drugs, especially for AIDS.

Biophoton therapy

Biophoton therapy is the application of light to specific areas of the skin for therapeutic purposes.

The light, or photons, emitted by these devices are absorbed by photoreceptors in the skin and then travel through the body's nervous system to the brain, where they help regulate what is called our bioenergy. By stimulating certain areas of the body with a certain amount of light, **Biophoton therapy can help reduce pain and aid in various healing processes throughout the body..**

The theory of biophoton therapy is based on the work of Dr. Franz Morello and was expanded upon by the work of doctors LC Vincent and FA Popp, who theorized that **light can affect electromagnetic vibrations, or body waves, and regulate enzyme activity.**

It took Popp about 25 years to gather a following in the scientific community. Gradually, a select few scientists around the world began to consider that **the body's communication system can be a complex network of resonance and frequency. Eventually, they founded the International Institute of Biophysics, made up of 15 groups of scientists from international centers around the world.**

Popp and his new colleagues continued to study the light emitted by several organisms of the same species, first experimenting with the water flea Daphnia. Their findings were simply astonishing. **Experiments with a photomultiplier showed that water fleas absorbed each other's light.** Popp did the same experiment with small fish and got the same result. According to his photomultiplier, sunflowers were like biological vacuum cleaners, moving in the direction of objects generating the most solar photons to suck them up. Even bacteria swallowed photons from the medium in which they were placed.

Popp became a member of the New York Academy of Sciences and a foreign member of the Russian Academy of Natural Sciences (RANS). Popp is the founder (1996) of the International Institute for Biophysics in Noise (Germany), an international network of 19 research groups from 13 countries engaged in the study of biophotons and coherence systems in biology.

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Translated using Google Translate, editing the meaning of the text.

***Integral biophysics**–This is a new field of physics that combines quantum physics with biology.

We will talk about the Integral Modern Theory, which touches almost all areas of science, including spiritual and religious spheres, later. I am preparing very interesting material with one of the most famous philosophers in the world, the author of Integral Psychology...who proves that

Meditation is the path to pure light. Without Light (Spirit), a person becomes a useless creature neither for himself nor for the world. And even if I was intrusive,but I will remind you again that Jesus Christ called us CHILDREN OF LIGHT. So let us be THAT, and not bearers of darkness, trusting only in our own minds and changeable egos.

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