

Gerald Pollack: “The Fourth Phase of Water” Part 3

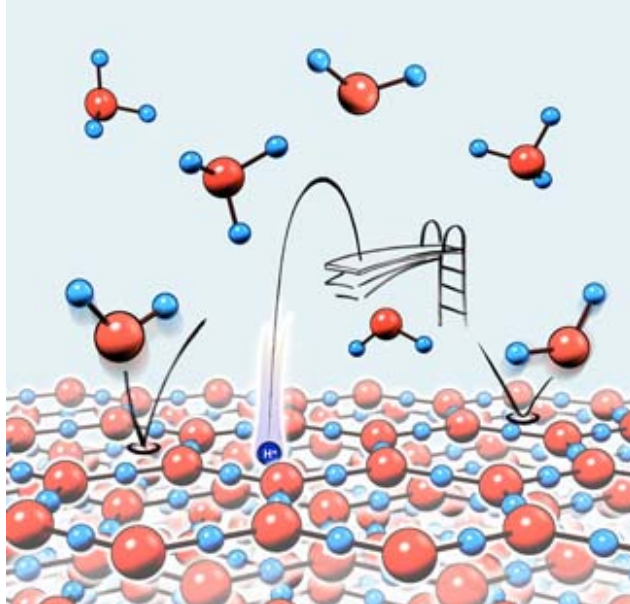


PHOTO: Ebner & Sons

What cosolargists have to say on the 4th phase of water (aka vicinal water and EZ water):

Below is a summary introduction to the 4th phase of water by physicist Dr. Stephan Fuelling: “The 4th State of Water, Zeta Potential and Colloidal Stability, Lymphatic System and the Dry State of the Cells”



Dr. Stephan Fuelling PHOTO:
Stephan Fuelling

"The 4th State of Water, Zeta Potential and Colloidal Stability, Lymphatic System and the Dry State of the Cells: A Short Introduction"

by Dr. Stephan Fuelling

This is a very brief summary of interesting facts that I have collected over the years on this topic.

We begin with the research of Dr. Gilbert Ling, microbiologist, who discovered that the water in the cells is not 'free' but in sort of a 'frozen' gel-like state. He discovered that the carbonyl end groups of the protein chains of large proteins in the cells attract cations (e.g., Na^+ and K^+) but that the potassium 'wins', due to its smaller size and due to molecular kinetics. That is the reason for the large concentration of potassium and the small amount of sodium in the cells, while the surrounding media is high in sodium and low in potassium. In addition, the carbonyl and amide end groups on the protein arms attract water molecules, and up to 7 layers of structured water molecules will surround these

protein chains, so that all the water in the cells is structured. This structured water also forms an impenetrable wall, where foreign objects such as sodium ions would not be able to pass without special ion channels and transport mechanisms. But there had already been Nobel Prizes given for the theory of 'membrane pumps' that would constantly pump the sodium that had entered the cells through osmosis (in this theory) out of the cell. So Dr. Ling was criticized for his research. And only due to the support of the inventor of magnetic resonance imaging (MRI), Dr. Raymond Damadian, from the company Fonar, who at the time was also criticized and ridiculed by his colleagues for his invention, was Dr. Ling able to continue his research.

Dr. Gerald Pollack from the University of Washington in Seattle (Dr. Gary Buchanan knows him) picked up on Dr. Ling's research about 10 years ago and looked further into the properties of this 4th state of water. He has published two books on this subject, and just a few days ago announced his third book, available now in print, *The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor* . (It can be ordered through Ebner and Sons at www.ebnerandsons.com.)

Dr. Gilbert Ling's website is www.gilbertling.org, and I recommend his book *Life at the Cell and Below-Cell Level*, which you can order through his website. Most important to note is that Ling founded the crucial theory of the living cell in his "A Physical Theory of the Living State: the Association-Induction Hypothesis" in 1962. All of his work is disregarded, unfortunately, by mainstream cell physiologists, his students fled in panic when they heard that Ling's research would not anymore be supported by the National Institutes of Health. Sounds a lot like what happened to Galileo when the supporters of the Ptolemaic system, through the Catholic Church, had the stronger hand (this is also what Ling is compared to).

Now I come to the second part of my summary, the discoveries

of the chemical engineer Thomas M. Riddick. He studied the stability of water colloidal suspensions and developed a technique to measure the Zeta potential, which is an electrical measure of the stability of a colloidal system. He may have founded the company Zeta Meter Inc., where you can order his out-of-print book *Control of Colloid Stability through Zeta Potential*, with a closing chapter on its relationship to cardiovascular disease; a short introduction about the Zeta potential can be downloaded also from: < <http://www.zeta-meter.com/downloads.htm> > and

< <http://web.archive.org/web/20110407125601/http://www.hbci.com/~wenonah/riddick/> >

The most important discovery is that aluminum electrolytes (such as aluminum chloride) in very small concentrations destroy the Zeta potential. Aluminum is found in some antacids, baking powders, deodorants, and vaccines. Also cookware made from aluminum should be avoided. Processed foods and baked goods often contain aluminum as well as hydrogenated fats (trans-fats).

The 98- or 99-year-old physician Dr. T.C. McDaniel applied Riddick's discoveries and attributes his old age and well-being to this (see: < <http://www.tcmcdaniel.com/> >).

There are a couple of YouTube links on that site that are worth watching as well. He sells an anionic surfactant as an electrolyte supplement to keep the Zeta potential in balance. (see 'Products')

So there are two completely opposite water systems in our body, the structured water (4th state of water) in our cells and the Zeta potential optimized liquid in our blood to carry colloidal particles without coagulation!

To wind things up, the last item I wanted to report on is the discovery by Dr. Samuel C. West. He studied the lymphatic

system and discovered that during injury blood plasma and lymphatic liquid floods the space between the cells (interstitial space) and blocks oxygen and nutrient support to the cells, but when you apply pressure right after the injury and you prevent swelling, then 'super healing' will take place, and the wound will heal in no time. The same holds for burns, you press the burnt side of your finger (for example) against a cold surface for a while and then keep a compression wrap around it, and then no water blister will form (I tried that out!) Dr. West also promoted the rebounder to exercise the lymph system: the lymphatic system is the waste system of the body and it requires motion to move the lymphatic liquid because it does not have a pump!

< www.speedhealing.com >

His son, Prof. Karl West, is continuing Dr. West's teachings with lectures offered during the year. There are also DVDs, etc., available for those more interested in this subject.

< PART 4 >

Gerald Pollack: "The Fourth Phase of Water" Part 1

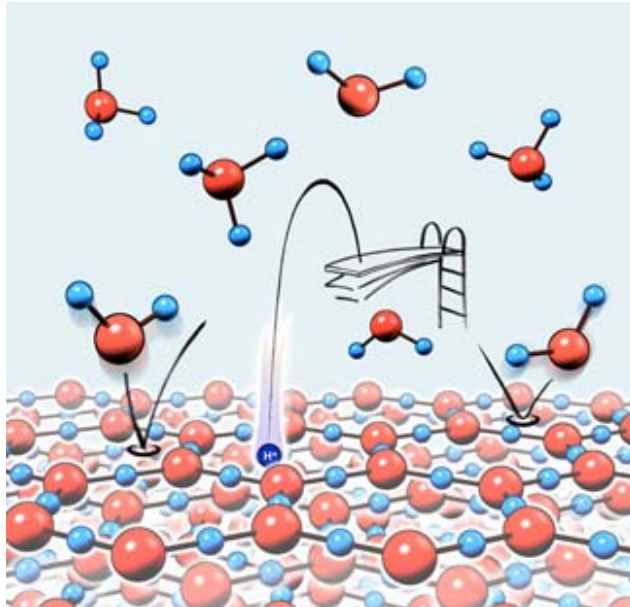


PHOTO: Ebner & Sons

In the YouTube video “The Fourth Phase of Water,” Dr. Gerald Pollack, a professor of bioengineering at the University of Washington, describes a fourth phase of water discovered at his laboratory that was not previously recognized. “You have learned about solid, liquid, and vapor, but fresh evidence reveals a fourth phase. This surprisingly ubiquitous phase resembles liquid water superficially, but it differs; in fact, its ordered molecular structure strays from ordinary H_2O ,” says Dr. Pollack. He calls this water EZ water (short for “exclusion zone”) and vicinal water.

Communiqué readers may find this video of interest as the research describes a new way in which all life is nourished by the sun. (Light in the ultraviolet range of 270 nanometers seems to be the main driver of this life-sustaining process. If you watch the short video, other, similar videos are offered if you want more information.) The evidence certainly supports Cosolargy’s claims. This is another instance of modern science’s catching up with the Teachings.

< [Watch the 3-minute video “The Fourth Phase of Water” on YouTube.](#) >

HERE ARE SOME OF DR. GERALD POLLACK’S CREDENTIALS:

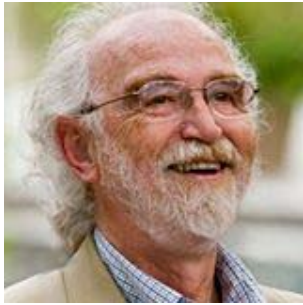


PHOTO:

Facebook.com

Doctor of Philosophy

Editor-in-chief, *WATER*

Professor, University of Washington

Founding Fellow, American Institute of Medical and Biological Engineering

Fellow, American Heart Association, Biomedical Engineering Society

Honorary Doctorate, Ural State University, Ekaterinburg, Russia

Honorary Professor, Russian Academy of Sciences

Foreign Member, Srpska Academy, Serbia

National Institutes of Health Director's Transformative R01 Research Award, 2009

Prigogine Medal, 2012

HERE IS SOME INFORMATION ON HIS NEW BOOK:

The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor outlines the evidence for this discovery and its significance for almost everything that water touches. A Cambridge University colleague of Dr. Pollack opines that the book resembles "an illustrated children's book with paradigm shifting content."

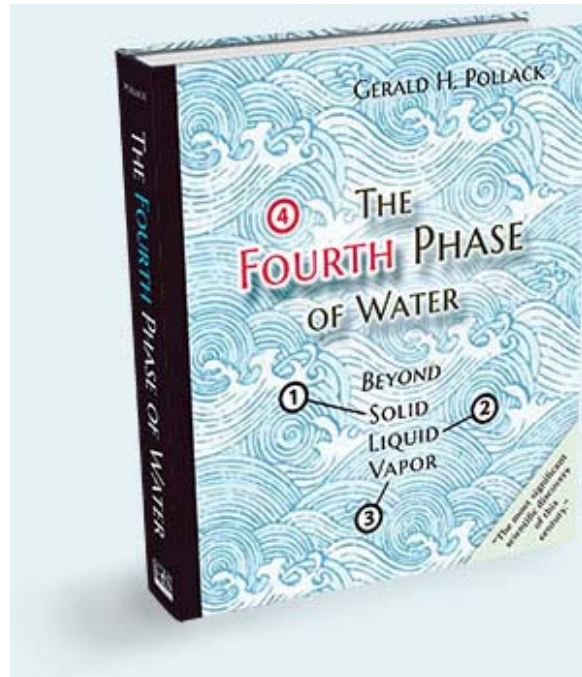


PHOTO: Ebner & Sons

Early reviews have called the book “the most interesting scientific book I’ve ever read,” “the most significant scientific discovery of this century,” and “unputdownable.” Nobel laureate Brian Josephson suggests that these discoveries “can be expected to have important implications.”

[Preview several chapters of the book *The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor* online at Ebners & Sons Publishers.](#)

AND HERE ARE LINKS TO ANOTHER RELATED LECTURE BY DR. POLLACK:



PHOTO: YouTube.com

“Electrically Structured Water”: In this lecture Pollack

discusses new insights into structured water arrived at in his lab during the past year. Pollack has spent the last 10 years researching the role of water in biological tissues, and his discoveries could have a profound impact on our understanding of disease and healing.

[Watch “Electrically Structured Water” Part One \(32 minutes\)](#) .

[Watch “Electrically Structured Water” Part Two \(26 minutes\)](#).

– links submitted by David Mitchell (aka Devashish)

<PART 2>