

Gerald Pollack: “The Fourth Phase of Water” Part 4

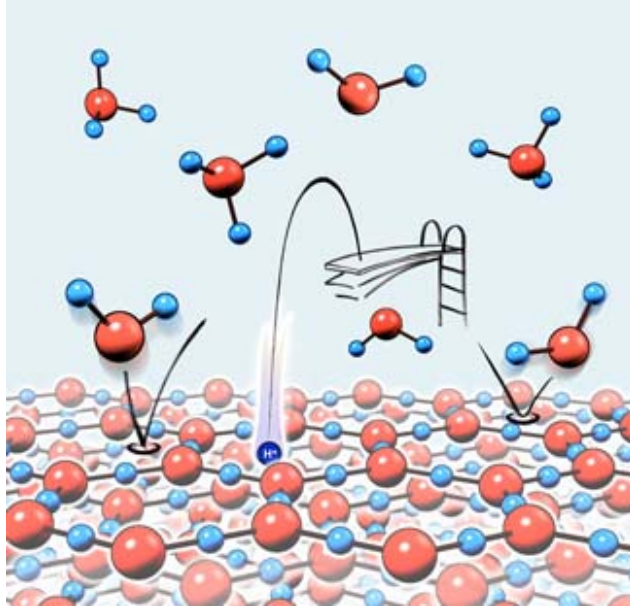


PHOTO: Ebner & Sons

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

The following is an email discussion between the Reverend Dr. Gary Buchanan, author of Sona and Sonatherapy, and physicist Dr. Stephan Fuelling on the 4th phase of water (aka vicinal water and EZ water):



PHOTO:
Scribd.com

Reverend Dr. Gary Buchanan:

Pollack has done wonderful research on 4th-phase (EZ) water, and it is important, for sure. I have discussed a lot of this in my books, and in conversations with Dr. Pollack, of course.

The main point I perceive is that EZ water in the body, and on the surface of standing water, is that it is a negative ionic field that is impervious to solutes. That is, particles, bacteria, viruses, et al. have a difficult time penetrating that/those layer(s), if [they even can] at all. In other words, the natural state of the body's interior is coatings of this kind of *protective* water.

What Pollack has proven is that *LIGHT shining on EZ water increases the ion layers . . .* up to a millionfold. This is to say, sunbathing and solar techniques almost certainly strengthen the 4th-phase water viscosity, thus providing additional protection from outside influences—disease, etc. Perhaps help better lubricate, etc.

The thing I have discussed with him personally is the application of sound waves/frequency combinations at different amplitudes: how may those affect the layers of the water, how does EZ water transport the phonons, different kinds of bosons, solitons, oscillons, etc.?

Unfortunately, he has not really followed up in that area, which would be tremendously helpful information in the vibrational healing field, obviously. He did put a speaker by some of the water, ionic layers observed under a microscope, and noted that the ionic field moved away from the sound/speaker. But, he was using a high-powered (big) speaker, with a huge electromagnetic coil, and employing extremely high and loud sound in the kilohertz range!

I suggested perhaps the reason the fields moved “away” was because of the huge coil next to the water—not [because of] the sound, per se. So, I suggested using a smaller speaker, at

least six inches away from the water (to eliminate EM influences), and use normal sounds, e.g., within the human audible range, at low amplitude.

In recent correspondence he said he might look into that, if he has time!

Oh well, one tries.

Stephan, you might like to do a little experiment along these lines, as you have access to a lab and equipment. EZ water is easily available online from several places. The effects of light and sound on this vital water within the body may prove quite revealing and important to our understandings of health and healing, as well as solar techniques. "Baptism" may also be relevant; the global emphasis upon the healing and purifying qualities of water among religious orders, for example.



Dr. Stephan
Fuelling
PHOTO: Stephan
Fuelling

Dr. Stephan Fuelling:

Infrared [IR] & sound must work even better! But the sound level can't be too high, or it has to go from high to low over a treatment period. What I envision is that sound will shake the 'frozen' water layer and it may allow temporarily the mobilization of toxins that would otherwise be frozen inside

the cell and enable them to get out. Then IR lamps are turned and the IR is absorbed and then the sound level is slowly diminished, which will promote the structured water to be built up again and that pushes the toxins out [of the cells and] into the lymphatic system, which also needs agitation, and the sound will do that, too.

I remember that infrared sauna is so good for detoxification, even of mercury. Could it be that the IR promotes the structured water and it pushes the mercury out of the cells??

If one would include rebounding on a little trampoline, maybe after the IR/Sona therapy, then this will activate the lymphatic system on a larger scale, meaning that the fluid is transported out of the lymph and into the bloodstream, where the liver and kidneys can remove it.

I read the fascinating story about Dr. T.C. McDaniel with his cardiovascular problems that he had when he was 57. He must be 99 years old now, and he retired just a few years ago! He sells an anionic surfactant that helps stabilize the Zeta potential in the blood. This is the other extreme: the blood must be in a highly liquid state, and NOT structured like the water in the cells! Here the water is used to transport nutrients and oxygen and to get toxins removed from the cells.

The two systems go hand in hand but with quite opposite states of water. The water in the cell – highly structured – and the water in the blood – highly liquid state – two opposite extremes but both extremely important for good health.



PHOTO:

Reverend Dr. Gary Buchanan:

Yes, Stephan. Pollack talks about using IR on the water.

Of course, the problem I have researched is that IR has an immediate, beneficial effect, certainly. However, prolonged usage can begin tearing down the cells! Red stimulates dramatically, so cell stimulation is a given. However, once set into motion that speeding-up can often lead to rapid “dying-off.” (Niels Bohr stuff). Once turned on, those cellular energies are difficult to manage. This is why in therapies I normally use orange, orange-lime, etc. Stimulation, but moderate.

And, sure, the blood is a different type of water structure from that of the vicinal waters, which is why it would be so nice to do microscopic analyses with sound and light on the different kinds of bodily fluids, cells, etc.

It would also be quite interesting to see what [founder of Cymatic Therapy, Dr. Peter] Manners’ “detox” commutations [healing frequencies] do in that regard!

Deliver Me from the Darkness



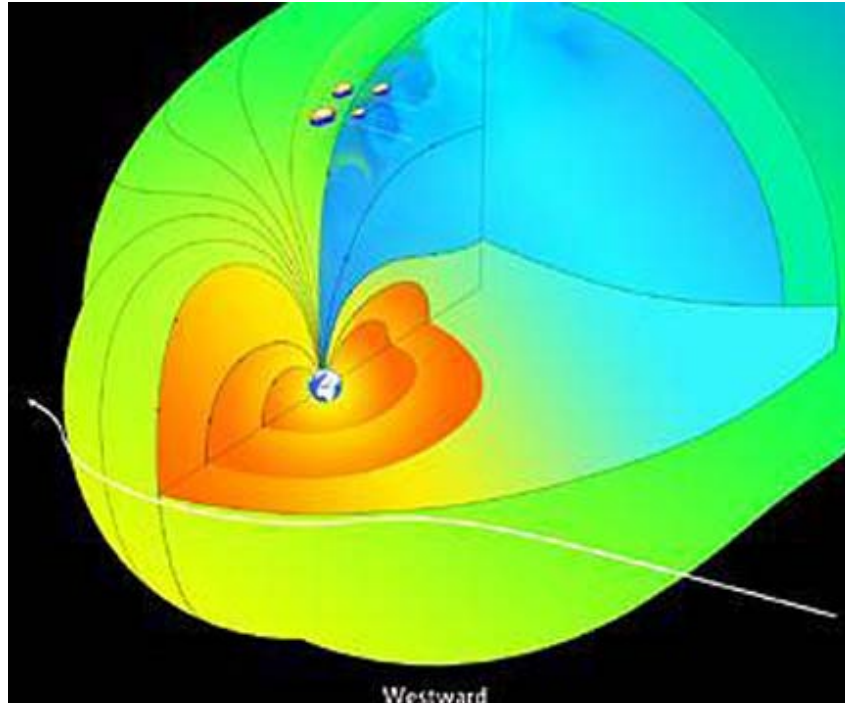
Deliver me from the darkness
Out of the mist that lingers beyond.
Be gentle and patient
For I am a Chosen one
Here to learn and grow, experience and expand
Seeking wisdom and the gift of knowing
Peace and harmony, ebb and flowing
Here on the Earth, a School of learning
Of mystery, forever evolving
Life and death until the end of the line
When at last I Become . . . I reach the sublime.
Take my hand and show me the way.
Lead me and guide me forever, I pray.
Open the door to knowledge and truth
To mystery and insight, miracles and more

For I am a learner seeking to grow
To Become and to Be . . . til at last I am Home.

Diana Carragher

5-20-13

“NASA Study Using Cluster Reveals New Insights Into Solar Wind”



When the interplanetary magnetic field (IMF) is oriented westward (dawnward) or eastward (duskward), magnetopause boundary layers at higher latitude become most subject to Kelvin-Helmholtz

instabilities – shown here in an artist's representation as giant swirls.
PHOTO: A0ES Medialab.

“A new study based on data from European Space Agency's Cluster mission shows that it is easier for the solar wind to penetrate Earth's magnetic environment, the magnetosphere, than had previously been thought.”□

< [Read the full article by Karen C. Fox for Goddard Space Flight Center online at spacedaily.com.](#) >

This article may be a bit too abstruse for nonscientists, says Consociate Stephan Fuelling, a research physicist at the Desert Research Center in Nevada, but the topic is fascinating. “I am familiar with Kelvin-Helmholtz waves. These are studied at our Physics Department at the Nevada Terawatt Facility. This is an interesting subject in plasma physics.”



Kelvin-Helmholtz waves occur at a shear boundary. PHOTO: toptenz.net

“Kelvin-Helmholtz waves occur at a shear boundary in the

picture above, where the lower air layer may be at rest, while the upper layer moves from the right to the left. The waves are made visible due to cloud formation in this shear layer.”

< [Click here to see the picture of this cloud formation online at toptttenz.net](http://toptttenz.net). >

“In an analog way, the solar wind creates this shear when it encounters Earth’s magnetic field. These waves tear up the magnetic field lines and reconnect, allowing the plasma of the solar wind to enter Earth’s magnetic field.

“Magnetic reconnection is another hot topic in plasma physics, how tangling magnetic field lines that may twist and turn around each other come close enough to finally ‘reconnect’. This also happens during a solar mass ejection: a plasma bubble forms that slowly rises, and at its back the magnetic field lines are stretched and twisted. When they reconnect, the plasma bubble is ejected with high velocity.”

As Dr. Fuelling said: “Although this is a fascinating topic, it may be too difficult to follow for most readers.”

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

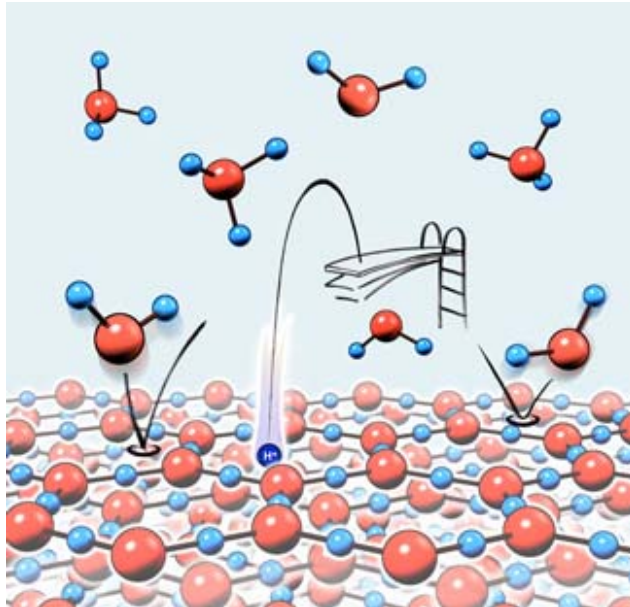


PHOTO: Ebner & Sons

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 2

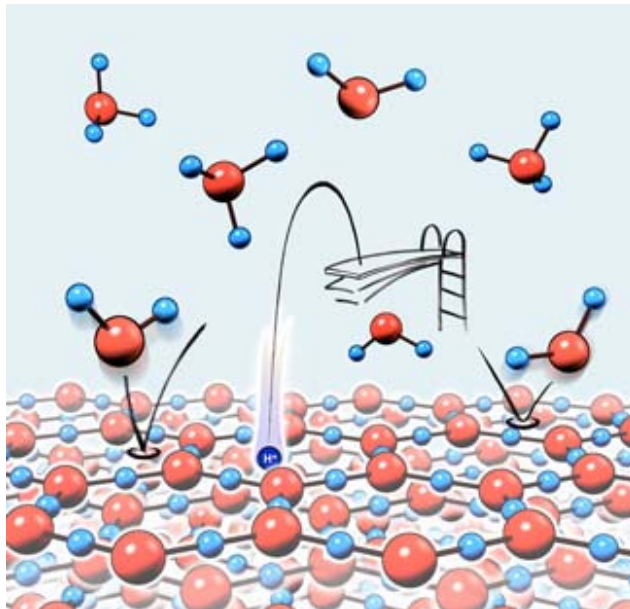


PHOTO: Ebner & Sons

READ WHAT COSOLARGISTS HAVE TO SAY ON THE 4TH PHASE OF WATER:



Gary Buchanan lecturing in Kyoto.
PHOTO: Jim Elliott

Interview with the Reverend Dr. Gary Buchanan, author of SONA and Sonatherapy, by the Communiqué:

Community Communiqué:

What do you think of the YouTube videos of Dr. Gerald Pollack on 4th-phase water?

Gary Buchanan:

I viewed these. Good stuff. The kinds of things Pollack and I have been discussing privately over the years.

I just blogged on Energy Medicine and gave the link. Here's that post:

This video series, from colleague Gerald Pollack, explains how 4th-phase/vicinal water in the body is quite different from bulk water. There are orderly ionic/electrical potentials taking place which help explain why Cymatic formations [i.e., healing frequencies] in water, with sound and light, are so critical to vibrational therapies. Phonon chains [i.e., sound formations] induced into the body's EZ (H_3O_2) water create biophotonic (biofield) discharge –

altering ionic bonds (Hexagonal Water).

Exclusion Zones (EZ) created reject solutes, like pollutants, etc. A body with healthy EZs is more protected from disease, while natural EM fields are strengthened. Chi/Prana/Vital Life Energies are increased, via light (and color bands), sound, oxygen/hydrogen, and sacred geometry. (Claude Swanson)

Negative ionic fields (Yin) are anti-inflammatory. The bonds are helical, resonating with the DNA. Such fields are also absorptive of specific light bands, nurturing the Biofield, as well as Subtle Energies.

Light irradiations (especially infrared from the sun) increase the Exclusion Zones to millions of negative ionic layers. Such energy build-ups can be controlled, e.g., for healing.

Fundamental premises within Sonotherapy, and Cosolargy, and the kind of R & D we have been undertaking since 1975.

Community Communiqué:

I had no idea that you knew the man personally.

Gary Buchanan:

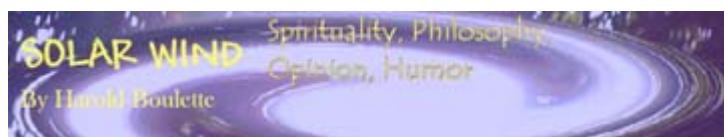
Well, yes, I have talked with Pollack on the phone, and emailed a few times. And, of course, I have read his books. He has been very helpful in talking about water states, what's going on inside, the effects of light and sound, etc.

The blog I posted is really concise. It covers a great deal of information with the fewest number of words. I am not sure that it would be all that helpful or revealing to readers. For example, even among the therapists online who saw the post there have been only a couple who "got it," as it were. That blog is something of an encapsulation of dozens of principles laid out in my two books . . . and an article would require

much more expansive discussion. Plus, there are some assumptions made that many may disagree with due to their scientific thinking.

< PART 3 >

“Esoteric and Spiritual Writings”



The greatest teachers of Divinity agree that nearly all ancient books were written symbolically and in a language intelligible only to the initiate. The biographical sketch of Apollonius of Tyana affords an example. As every Kabalist knows, it embraces the whole of the Hermetic Philosophy, being a counterpart in many respects of the traditions left us of King Solomon. ... His long discourses with the Brahmans, their sage advice, and the dialogues with the Corinthian Menippus would, if interpreted, give the esoteric catechism. ~H. P. Blavatsky

“This is true of nearly all ancient books of a spiritual, occult, or mystical nature, including the Bible. The language used to write such books is rarely, if ever, straightforward.”

< [Read the entire article online at Solar Wind.](#) >

< Visit and bookmark Harold Boulette's blog Solar Wind at:
<http://blog.spiritsun.net/> >

contributed by Harold Boulette

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

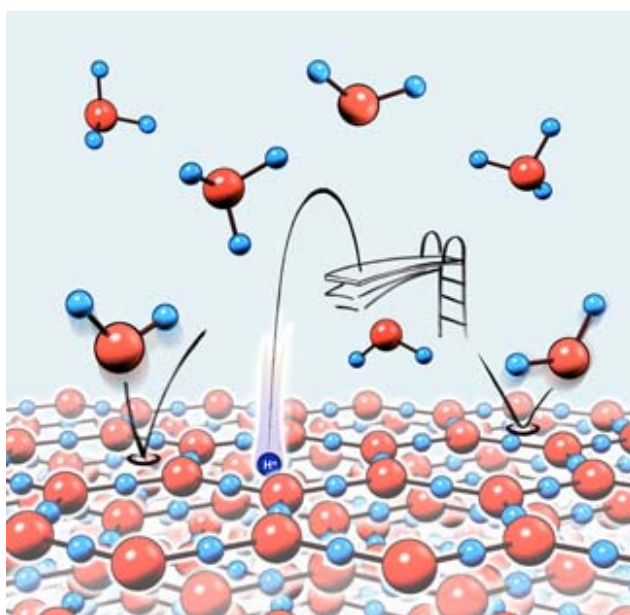


PHOTO: Ebner & Sons

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 H₂O," 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:

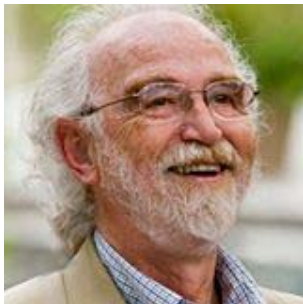


PHOTO:

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."

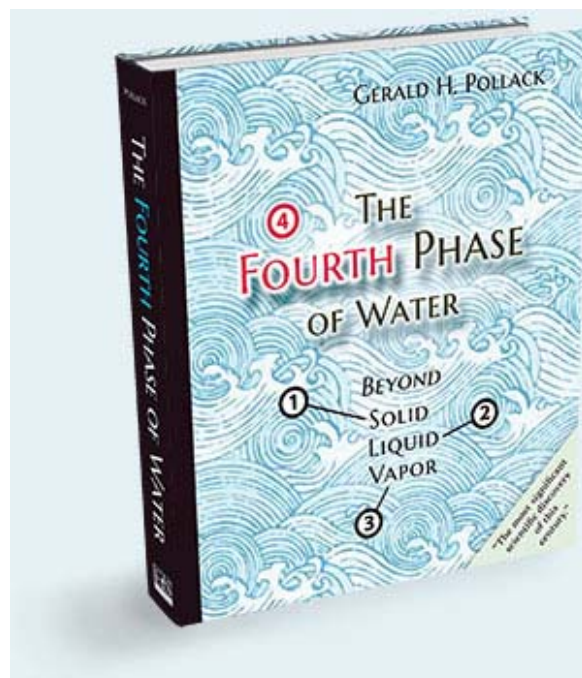


PHOTO: Ebner & Sons

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>

“The Value of Empathy”



A natural result of reaching the end phases of transformation is that a refined level of empathy—an empathic resonance—becomes your preferred mode of perception. When you’re in your home frequency, feeling into the world with conscious sensitivity and no hidden agendas, you become highly empathic. Empathy is so much more than is conveyed in the typical definition: feeling someone else’s pain. It brings information about what it’s like to be the person who just lost her husband or won the lottery, or to be that unmowed yard or that beautiful peach ready to be picked. Empathy is directly knowing through vibration; it is sensitivity filtered through the heart. ~Penney Peirce

“I may not be very close to the end of my quest for spiritual enlightenment, but I have been empathic for as long as I can remember. As the quote indicates, empathy can be both a blessing and a curse, or it can at least seem that way. I used to read a blog on empathy regularly, and many of the young empaths complained about it and considered it a curse, but is it?”

< [Read the entire article online at Solar Wind.](#) >

< Visit and bookmark Harold Boulette’s blog Solar Wind at: <http://blog.spiritsun.net/> >

contributed by Harold Boulette

“Oldest Maya solar observatory gives rise to new origin theory” (Photos)



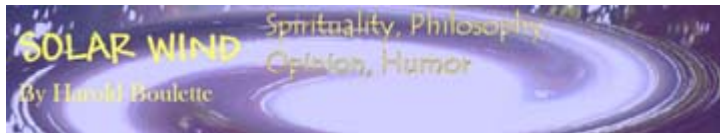
Building at the Mayan site of Ceibal or Seibal, Guatemala. The thatched modern building in the foreground shades a stela/stele, or carved stone monument. PHOTO: Chixoy

“A newly excavated building at the Mayan archaeological site of Ceibal, Guatemala, has yielded the oldest solar observatory in Central America discovered so far. It has also cast more light on the origin of the Maya civilization, altering a decades-long view of how the Mesoamerican culture came to be.”

< [View the gallery of photos and read the entire article by D. M. Murdock \(aka Acharya S\) posted online April 26, 2013 at](#)

link submitted by Marianne Menges

“Effective Prayer and Contemplation”



If the intellect has not risen above the contemplation of the created world, it has not yet beheld the realm of God perfectly. For it may be occupied with the knowledge of intelligible things and thus involved in their multiplicity. ... He who prays in spirit and in truth is no longer dependent on created things when honoring the Creator, but praises Him for and in Himself. ... When your intellect, in its great longing for God, gradually withdraws from the flesh and turns away from all thoughts that have their source in your sense perceptions, memory, or soul-body temperament, and when it becomes full of reverence and joy, then you may conclude that you are close to the frontiers of prayer. ~The Philokalia

“We all know the old joke where someone tells you to close your eyes and think of anything but an elephant. What happens is that an image of an elephant immediately pops into your mind (assuming you know what an elephant is). In a slightly more complex example, if you’re told to think of a peanut butter sandwich, but not to think of an elephant, your mind will form an image of a sandwich, then promptly replace it

with an image of an elephant. A few people might see some combination like an elephant eating a peanut butter sandwich, but most will completely replace the sandwich image with the elephant.”

< [Read the entire article online at Solar Wind.](#) >

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<http://blog.spiritsun.net/> >

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