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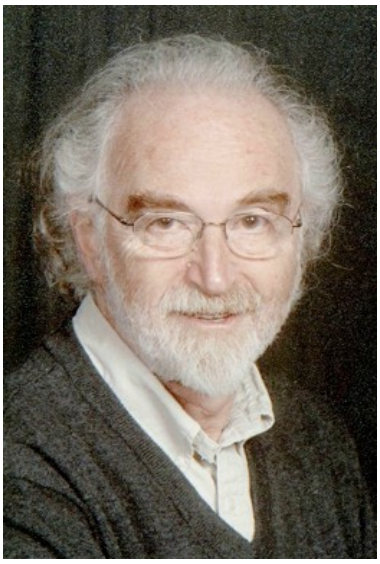
the Fourth Phase of Water



by Miles Mathis

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I recently read (parts of) Gerald Pollack's book *The Fourth Phase of Water*, and wish to comment extensively. That is Pollack in the picture above. He is taking a lot of heat lately for republishing and re-running some old water experiments the mainstream would like to keep hidden. As we have seen over and over, the mainstream loves to bury data that is negative to their pet theories, and so they are not happy to see Pollack dragging this data back out into the open. If you search on "Gerald Pollack Quack", you get pages and pages of results, which is to be expected. Also to be expected is that none of these pages have any content. They are all *ad hominem* attacks or dishonest reporting, saying he said things he did not say. For instance, I discovered that the main talking point against Pollack appears to be that he said the body is 99% water. I read his book and he never said that. He is a tenured professor at a major university with all the requisite degrees, so it is unlikely he wouldn't know the percentage of water in the human body. He says that water molecules are about 99% *by number*, not by total weight or volume. But since his critics don't want to address his actual data or ideas, they have to make up something.

Pollack is also taking heat for promoting other against-the-mainstream figures like Gilbert Ling. I will show in this paper that Pollack, Ling, and the rest of those mentioned in Pollack's book are far more correct than the mainstream. None of them appear to be fully aware of the role of charge in all this, but for the rest they are mostly correct.

Any of my faithful readers who read Pollack's book will be clicking their tongues and nodding their heads on almost every page, saying to themselves over and over "charge, charge, charge." They will be looking ahead to the last chapters, to see if Pollack comes to this conclusion himself. He never really

does. In some places he recognizes the role of charge in creating the structures of the EZ (Exclusionary Zone), but—disappointingly—none of his final four rules of Nature have anything much to do with charge. Those four rules are:

1) Water has four phases
2) Water stores energy
3) Water gets energy from light
4) Like-charged entities can attract one another

If it had been my book, those four rules would have been replaced by this one: **charge channels explains everything.**

Although most who haven't read my papers won't see it, Pollack's rule three is really the same as my rule. I have shown that charge *is* light. Both are composed of photons, and there is no difference between the two. Charge is photons that are being recycled through nucleons, atoms, and molecules; while light is photons in the ambient field that we are seeing or measuring in a variety of ways. Charge is normally composed of smaller photons, below the visible range, but other than that there is no fundamental difference. Charge is also the same as heat. Heat is caused by the motion of photons.

Pollack's second rule or principle isn't really either one. It is just a statement of fact. The question is, *Why* does it store energy, and *how*? You can then have rules or principles about how and why it stores energy. But a raw statement of fact is not a rule.

And Pollack's statement is not really true. His data doesn't show that water stores energy. His data shows that water *transmits* energy in a very defined manner, and that (in some cases) it retains charge paths even after the specific causes of those paths have gone. Regardless, this is all very important; but he should strive for a bit more precision, especially when putting rules into bold type.

This will be important in what I say below, or I wouldn't mention it so early here. Since all of Pollack's data is explained by charge channeling, we can't allow storing of energy. You can't store a photon. Photons are always moving, and they are never slowed, much less stopped. They can only be channeled. It is water's remarkable ability to channel—and to maintain channels even in liquid form—that explains its unique properties.

I am here mainly to support Pollack, but we will also see that his first rule and title of his book is also not really true. It works well as a leading hypothesis and generator of interest, but his own data shows that again, it strictly isn't true. For instance, his own experiments show an increased viscosity in the EZ, which is great data, but the increased viscosity medium would still qualify as a liquid. I suppose Pollack could say that the definition of "liquid" includes lack of structure, which would make a structured liquid a fourth phase. But that isn't really true either. All liquids have some limited structure, and some others besides water have quite a bit, especially at lower temperatures. Mercury is not structure-less, for instance. We will see below that what is interesting about the EZ and polywater and other oddities of water is not the fourth phase, but the role of charge channeling. In this way, the so-called fourth phase of water is akin to the fourth phase of matter—which is what plasma has been sometimes called. In other words, these are charge oddities, not "phase" oddities.

We will also see that his fourth rule is also not strictly true. The attraction he is talking about is not caused in the way he proposes. He is roughly on the right track, but because his idea of charge is still naïve (like the mainstream's idea of charge), he doesn't have the right mechanics.

But let us return to the beginning of his book. You will understand why I tend to like Pollack from the very first sentences. The book is purposely written in a very friendly manner, but it isn't that. I don't require politeness or smiles, obviously. What impressed me was his willingness to question authority and go against the mainstream. In his meeting with Andrew Huxley, he was awed but never over-awed. Pollack ended up siding with the young Iwazumi against Huxley, based on logical arguments rather than upon reputation. Pollack even had the nerve to attack Feynman, something I have seen few besides myself do. In the Preface, Pollack is already standing firm beside Gerald Ling, defending him against claims of scientific heresy. This is important, since Ling's discovery of water alignment in the cell not only contradicted mainstream models, it pointed directly at my discovery of charge channeling as the cause of transport in the phloem and xylem, as you will remember from this paper.

In chapter two, Pollack lists seven previous structural theories of water, most of them from the mainstream. As you might expect, none of them mention charge at all, much less charge channeling through atoms and between molecules. Pollack implies they are all useless, but even he doesn't appear to understand **why** they are all useless: *they aren't based on charge channeling structures.*

Pollack then tells us why water theory is so moribund: two major discoveries that the mainstream didn't like were forcibly suppressed in recent decades, leading everyone but the berzerkers to bail. First, polywater was discovered by Nikolai Fedyakin in the late 1960's. Polywater was just water forced through narrow capillary tubes, as in a plant. It showed some structured characteristics, including increased viscosity. Since mainstream science didn't like the idea of polywater (they later said, "it should have been dismissed on theoretical grounds alone"), great pressure was applied to force the researchers to admit that there were impurities in the water and that these impurities explained the new qualities. This wasn't true, because the amount of impurities said to be in the water couldn't explain the qualities of the water using mainstream theory. Small amounts of impurities don't cause water to gain that much viscosity. We will see more proof of this in a moment with Pollack's experiments in the EZ. But for now, I beg you to notice that polywater confirms my charge channeling as well as my theory of transport in plants. This is the real reason the mainstream was so irrationally militant against the idea of polywater. Polywater immediately provided an easy alternative explanation to the pressure-flow theory that had been ascendant since 1926. It also threatened to undermine all mainstream theory of cell transport in animals as well as plants. Beyond that, many probably saw it as a threat to electron orbital theory—which it was. Since this fiasco was in the late 1960's and early 70's, it also threatened the rising theory of the strong force, and through it all of QCD. For this reason, all of mainstream physics, chemistry, and biology combined forces to bury this data by any means possible, including intimidation, character assassination, and outright lies.

For instance, Denis Rousseau claimed that polywater was structurally similar to human sweat, using that to dismiss polywater as "pathological" or junk science. The problem? If polywater was acting like human sweat, it was doing so with many orders of magnitude fewer solutes like salt. Sweat commonly has more than 1gram/liter of sodium, plus many other "impurities" including lactate and urea. No polywater ever was shown to be contaminated in that amount, or anything like it. Therefore, Rousseau's argument is misdirection. And neither Rousseau nor any other mainstream stuffed shirt ever looked at the role of the capillary in creating this charged water. The scientific thing to do is study the water itself, and the apparatus, not to study sweat. The mainstream response just proves their own inadequacy, since if the water was really not acting as Fedyakin claimed, that should be easy to prove. You shouldn't have to hold up a vial of sweat in response. You can see this for yourself by going to Wikipedia. Their page on polywater is nothing but a sad slur. There you find this statement:

Denis Rousseau and Sergio Porto of Bell Labs carried out infrared spectrum analysis which showed

polywater was made mostly of chlorine and sodium.

You have to be kidding me! So we are supposed to believe Fedyakin just failed to notice his water samples were "mostly chlorine and sodium"? Was there any water in the tube, or are we supposed to believe it was just liquid salt? Something is pathological here, but it isn't Fedyakin's experiment.

Before we leave polywater, let me just say that part of the problem was the name. As we will see below, the water was not being polymerized, it was being charged. This is not polywater, it is charged water.

The next debacle was the water memory debacle of Jacques Benveniste, in 1988. Although Benveniste had no initial interest in homeopathy, his results were claimed by homeopaths, which ultimately doomed him. Although I have no interest in arguing about homeopathy, I find Benveniste's data easy to believe, given charge channeling. *Under some circumstances*, we would expect these paths to remain in the water even without the solute, due to the fact that the charge paths remain. But the charge paths would remain only if the water were not disturbed by later charge fields or ambient E/M fields. Given that *in most cases*, any homeopathic solution would have been disturbed in transport, it is highly unlikely the required paths would remain. This would also explain the difficulty in repeating Benveniste's results. Since no one, including Benveniste himself, seems to have understood that these were residual charge paths, they made no attempt to shield the experiment from E/M or charge contamination. In some cases, the paths remained, confirming Benveniste. In some cases, they didn't. Since at least one of Benveniste's assistants was adept at preventing this contamination, it is possible he or she may have been aware of what I am talking about, either consciously or unconsciously. Unfortunately, the ability of this assistant has been used as proof of fraud, instead of indication of ability.

The mainstream reaction to this research is again a series of red flags. The scientific response would be an open mind. Instead, the mainstream has consistently pre-judged the results as impossible, based only on their incompatibility with mainstream theory. They then did everything in their power to tarnish the results, up to and including funding cut-offs, slander and character assassination.

Curious that "amateurs" are not allowed to have any scientific opinions, and yet we see the mainstream bringing in "The Amazing Randi" to help slander Benveniste. I guess Randi was assigned temporary professional status, like a deputy. Also curious that the mainstream only hires people like Randi to attack data they don't like, but never hire him to check data they do like. I don't remember seeing Randi or anyone like him dogging the footsteps of the Higgs boson crowd at LHC, although I have shown their own publication of data was little more than a compendium of data pushes. The same goes for the more recent announcement of gravity waves. You won't find the mainstream hiring the Amazing Randi or Penn and Teller or Siegfried and Roy to check that data.

As in everything else we have looked at over the past decade, the mainstream's inability to incorporate new data has been due to their ignorance of the charge field. It is not just "pathological" data like that of Benveniste and Fedyakin that they haven't been able to countenance or incorporate. They haven't been able to incorporate an increasingly embarrassing pile of respected data from their own mainstream colleagues, including dark matter, the vacuum catastrophe, the PLANCK map, data from all the planets and moons—including icecaps on Mercury, slowing rotation on Venus, burning atmosphere on Uranus, 9 times over-unity brightness from Enceladus, Saturn's magnetic field—mysterious data from the Heliopause, the galactic rotation problem, the recent experiments with salt, and on and on. They have given up on blacklisting or slandering all these people, since they don't have enough print to do it, so

they just ignore everything they don't like, continuing to hide out in their zero-data holes like the black hole, the first three seconds of the universe, the string, and the virtual Higgs field.

Now we move to chapter 3, where Pollack explains his results in studying the EZ. What we find is that the EZ confirms the results of Fedyakin without using a capillary tube. It turns out that any hydrophilic surface can create strange properties in water, with no necessity of compression into a small cross section and no necessity of a solute (the EZ forcibly excludes solutes of all sizes). These strange properties include an unexplained rise in viscosity. Even more threatening to the mainstream is the width of the EZ. According to mainstream theory based on the Debye length, the EZ of water should be only a few molecules thick. *It is five orders of magnitude larger.*

But the most interesting test Pollack did is one of the tests to rule out "trivial explanations." In trying to rule out long-range electrostatic repulsion in the EZ, Pollack reversed both the polarity of his surface and the polarity of his microspheres. He found that,

> We found that the positively charged microspheres did sometimes collapse the exclusion zone; in other instances, the exclusion zone not only remained, but also remained the same size as seen with the negative microspheres. . . . It didn't matter whether the beads' surface contained negatively charged or positively charged polymers. Simple electrostatic repulsion cannot explain these results. [p. 30]

This data is like music to my ears, as my loyal readers will understand. I have shown that in most cases, charge will drive positive ions and negative ions in the same way. For instance, if the charge photons are moving to the left, all ions will be moved to the left as well, both positive and negative. They may not move at the same *rates*, but they will move in the same *direction*. This is what Pollack and his assistants found. This confirms my theory of charge as a sort of wind, one that blows the same direction for all free particles. It also confirms my separation of the charge field from the E/M field. The charge field drives the E/M field, but the E/M field is strictly composed of ions; the charge field is composed of photons. The charge field is primary, and is mathematically the same as Maxwell's displacement field D. It can exist even when no ions are present, which is exactly why it can persist even when a solution contains no solute. It can also exist in "empty" space where we measure no ions. It is this charge we are seeing at the quantum level when we think we are seeing vacuum fluctuations. The fluctuations are there, but they are not in the vacuum and are not virtual. They are real photon fluctuations in the ambient charge field. Charge is not "between" charged particles in some abstract sense. Charge is real photons that are being channeling through and between all quanta above the size of the photon.

This explains the Exclusionary Zones without further effort, since any surface will be emitting a charge field. Provided that charge field "likes" the channels of water—making it hydrophilic—the water will align to those fields, channeling them extremely efficiently.

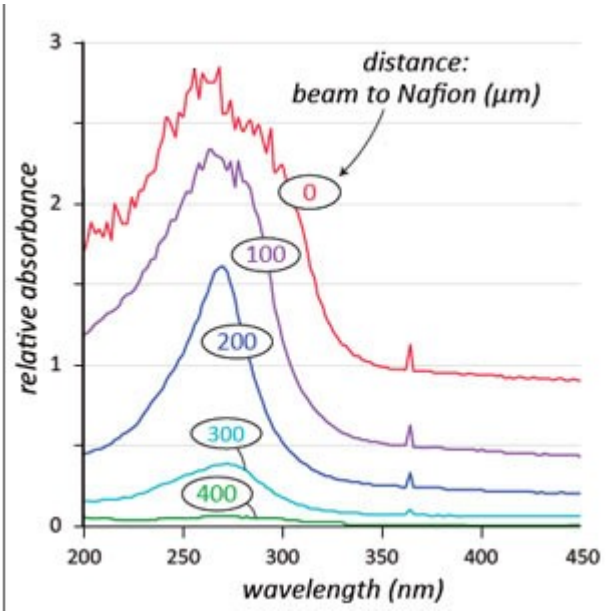
What makes the emitted charge field and the water *like* one another? Well, the emission simply has to match the profile of the water molecules in some way. I would assume the molecular width has to be divisible by some round number, so that the channels align in some fashion. The better the alignment, the more hydrophilic the relationship will be.

But back to the cause. After showing the effect, Pollack proposes the cause may be a crystal structure. Not a bad idea, but then we are left asking what causes the crystal structure. Pollack's mentor Ling is a bit closer to the right answer, since he has written

the cell's charged surfaces order nearby water molecules, which in turn exclude most solutes. According to Ling, this ordering is the very reason why most solutes occur in low concentrations inside the cell: the cell's ordered water excludes them.

That's right, as far as it goes, but Ling still can't explain how the charge does this to such great lengths and strong effects. Since neither Ling nor Pollack know of charge channeling, they can't explain the effects mechanically. They can only *list* the effects. This they have done meticulously, and I applaud them for it. But now that all the evidence is back on the table, we need to graduate to the real answer: charge channeling.

Just as important as Pollack's experiments with pole reversals were his experiments with light absorption in the EZ. This graph from his book [p. 35] shows that at all distances from the surface, the absorption was of infrared light. As you see, all the peaks are at about 270nm.



This matches my calculation for the energy of the charge field. I have shown that the charge field peaks in the infrared, with an average energy around 10^{-7}m. In my paper using G as the scaler between proton and photon size, I found a radius of the photon of 2.74 x 10^{-24}m. If we multiply that by c^2, we get 2.5 x 10^{-7}m or 250nm. That is the wavelength we measure.*

Pollack uses this absorption to indicate the crystal structure again, telling us that crystals emit less infrared energy because they are more ordered. But that isn't quite right. The reason the EZ is absorbing in the infrared is that the charge densities and strengths are greater there. This charge field then absorbs in the infrared because the absorbed light is matching the charge streams in the EZ. The absorbed light is simply joining a charge stream that matches its own energy. Light with a greater energy passes through and light with a lesser energy is bounced back. Only light that matches the charge stream is absorbed. Straight mechanics, as usual.

Pollack also used MRI to show shorter relaxation times in the EZ [p. 37]. Once again, this is straight confirmation of my charge field being channeled. The relaxation time is shorter because charge is channeling stronger in those areas. There is more flow, so naturally the relaxation times will be shorter.

Next Pollack confirms the greater viscosity in the EZ, which of course confirms polywater and the

work of Fedyakin. It also confirms charge channeling, since greater charge channeling takes the liquid closer to a solid. Solids are solid precisely because the charge channels are stronger and firmer. So any increase in charge channeling will include an increase in viscosity, by definition. I have shown in my nuclear diagrams that stronger solids are stronger because they have stronger charge channels through the nucleus and between nuclei. So even solids have variances in viscosity.

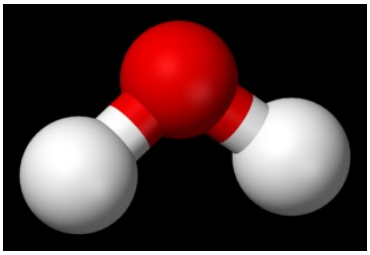
Again, Pollack uses his data to propose "ordered water." That isn't wrong, but of course it begs the question: what is ordering it? The order is being given to the water by the charge field being channeled through it. It is charge that creates the order, and without channeling, it could not possibly create this amount of order.

At the end of chapter 3, Pollack says

Neither the experimental evidence nor these theoretical considerations answers the questions: How exactly do the water molecules order themselves? Do water molecules merely stack? Or is some more elaborate type of reorganization at play? Answers to those questions will be coming next.

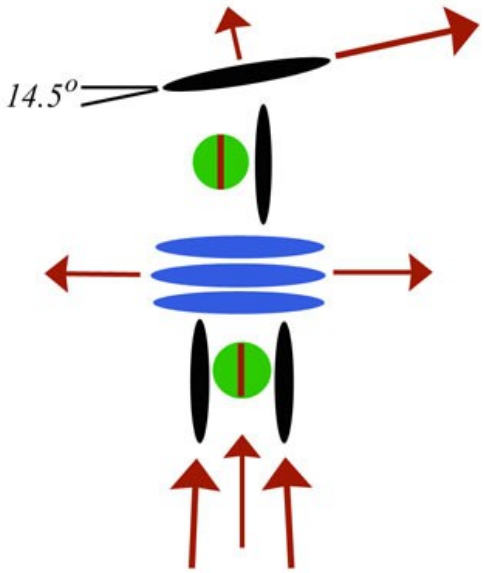
Since he has asked the wrong questions, it is doubtful he will find the right answers. Although I suppose it is possible he matches all my answers exactly, I can't tell you since his sample chapters end there. Since I already know the right answer, I am not compelled to spend money on his book. Even so, I recommend it to others, as a lovely introduction to the problem. Even if he goes completely off the rails in chapters 4 through 17 (which I seriously doubt), the book is probably worth your time. It reads very quickly, contains no math, and won't tire you out regardless.

More important to my mind than continuing a line-by-line analysis of Pollack is showing exactly how water creates these charge channels. Since water is normally drawn with a hard angle, it is not clear at a glance how water channels so effectively.



Water is said to be bonded with a 104.5º angle between the two protons. Our first question should be, "How and why does it do that?" Our second question should be, "Does it *always* do that?"

The first question is difficult, and even with my diagrams I didn't understand it until recently. In earlier papers on the hydrogen bond, I drew some rough diagrams to explain some of the properties of water, but at that time I still couldn't penetrate the finer points of the water diagram. Even after diagraming Methane—which also has an angle—I couldn't see why water would have a angle like this. Only in my recent paper on Deuterium and Tritium did I begin to see how to solve the problem of water. There I was forced to draw all the neutrons to understand the mechanics of heavy water, and that helped see how the angle could be created in normal water.



That is my latest best guess at the diagram of water. Drawing the neutrons in the configuration helps us understand some of the architectural subtleties. The blue disks are alphas, the black disks are protons, and the green circles are neutrons. There are understood to be two neutrons in each alpha, as well as two protons. I draw the neutrons as circles and as smaller only to differentiate them at a glance from the other particles. I am not implying they really are smaller; the smaller size is only to indicate the smaller size of their normal charge emission.

Since the Oxygen already had one proton top and bottom, the protons of hydrogen will join those polar charge streams coming in from top and bottom. But since the field in unbalanced, they will not fit in the same way. More charge is coming in from the South, as I have shown in many previous papers. The ambient field here on Earth and in this system is not balanced, and we may assume most celestial fields are not balanced. This simply means we have more photons than anti-photons, or more left spinners than right spinners. I first showed this is what causes the loss of parity in beta decay, then went on to use the fact to explain many other things.

Because more charge is coming in from the South in this diagram, we must conform to that configuration as we plug in the two new protons. On the South pole of the Oxygen, we plug the new proton in parallel, since it has to help the existing proton and neutron channel charge into the nucleus. But since there is less charge at the North pole, the configuration doesn't need the new proton plugged in parallel. A proton plugged in parallel would actually pull in charge in the same amount as the South pole, and as we have seen that isn't necessary. The charge field here is split 2 to 1, so the existing proton and neutron are pulling in enough charge as it is. What is needed on the North pole is stabilization of through charge.

Through charge is charge that channels from pole to pole in the atom, rather than pole to equator. [See my paper on Period 4 for more on this.] Charge can do either one, depending on the nuclear configuration. In most configurations it does both. Since we have plugged in a second proton in the South pole, we will have more through charge coming *out* at the North pole. Since the Oxygen nucleus has a proton and neutron North, the charge exit is not very stable. It is split by unequal particles, as you

see. With the extra charge from the hydrogen South, the North exiting charge is even more unstable. So the North Hydrogen is used as a cap. It is plugged into the architecture perpendicular instead of parallel. This stabilizes and focuses the exiting charge, making it more coherent. Any added coherence like this adds to the stability of the molecule as a whole.

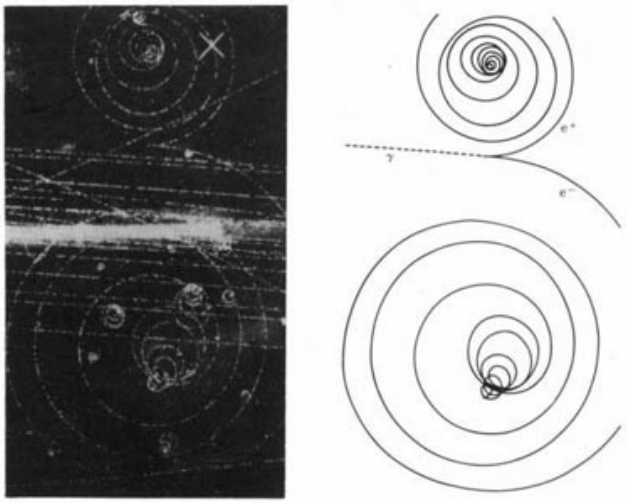
As you see, I have also drawn the cap proton at a slight angle, to explain the 104.5° angle of water. You can see how that slant might be created mechanically, by the neutron/proton imbalance. The neutron is not really shorter than the proton, as a matter of radius; but it *is* channeling charge along that line at a lesser rate than the proton—which leads to the same effect. All my disks and diagrams are meant to represent the charge fields of the particles, not the particles themselves, you see.

And that is why my diagram explains the mainstream diagram of water. The mainstream thinks they are measuring an angle between particles, but they are really measuring an angle between main charge streams. Every such measurement is done with E/M field machines, usually magnets, so in this case it is the fields they are measuring, not the particles themselves.

So you see that the mainstream diagram is not right. They draw both Hydrogen/Oxygen bonds as about 52°. But I have shown that one bond is in-line with the Oxygen pole, and one is perpendicular, giving us about 90°. The extra 14.5° is then caused by the slant of the cap proton. I can even calculate the 14.5° degree angle straight from known characteristics of the proton and neutron. The neutron has a magnetic moment that is .685 that of the proton. Since we have neutrons plugged in both North and South, we will have that effect in both North and South running charge. Therefore we have to square the effect. The North pole charge is 1/3rd of the total field, with the South pole supplying the other 2/3rd. Therefore, if we include all those variations, we get this calculation:

$(.685)^2(1/3) = .156$
$.156 \times 90^\circ = 14.1^\circ$

The error is due to the fact that the charge split of the ambient field isn't exactly 1/3 to 2/3. That is only a rough calculation I did from electron/positron curls in the ambient field.

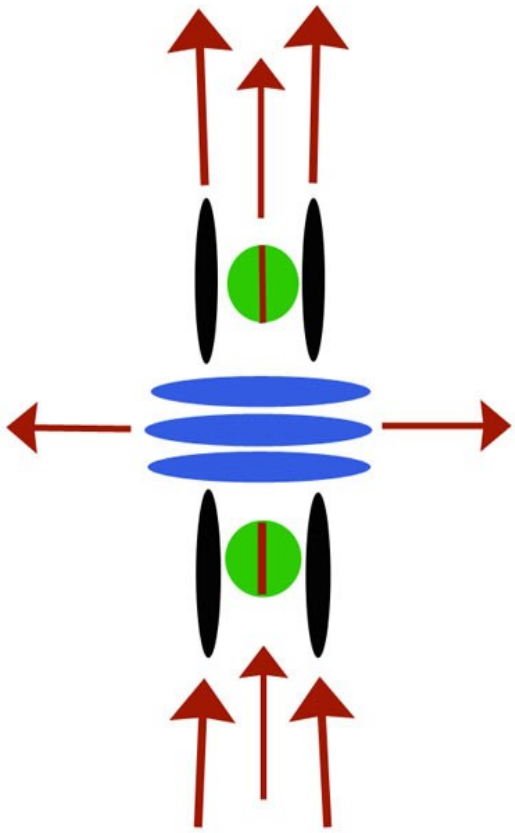


If you don't wish to link to that paper, just notice that the electron is spinning out in the ambient field in a spiral that is roughly twice as large as the spiral of the positron. This indicates more photons in the

ambient charge field than antiphotons. The positron hits twice as many photons spinning against it as the electron does.

The mainstream can't provide you a simple equation like that to explain the angle of water. They also can't provide you the accompanying mechanics.

Now that we have solved that, let us ask if the water molecule must have that configuration in all charge fields. I assume the answer is no. We have seen in many previous problems that a strong charge field is capable of re-arranging nucleons in the outer shells of atoms and molecules. Therefore, if we apply a strong, directionalized charge field to this water molecule, we should be able to change it in minor ways. I propose that in situations like we have studied with Pollack—as in the EZ—the water molecule takes this configuration:



If water is forced into that configuration by a strong ambient charge field, it becomes an extraordinary charge channeler itself. In that configuration, it would be a superior channeler in most ways even to Fluorine. Fluorine has one proton top and two bottom, but this configuration of water allows for more through-charge to pass through the nuclear axis, and we would expect this configuration to be a very good magnetic conductor, sharing some of the basic structure of Iron, though on a smaller scale. The biggest difference is in the bond at the level above this. Iron can bond to itself because it has holes left top and bottom in which we can plug more protons. But water doesn't have that. We have no plugs left to bond molecule to molecule. Therefore the water/water bonds are not plugged bonds; they are just channels in the stream. You could say that about any bond, I suppose, but the point is that water/water bonds are longer and weaker than Iron's bonds to itself. This not only makes water a liquid at temperatures Iron is not, it weakens the magnetic potential.

Some may ask, “Why doesn't water just take that configuration to start with?” Well, in some places in the galaxy, it may. Given a very balanced ambient field, it is possible water would not show the angle it shows in an unbalanced field like we have. It is also possible that in places where the imbalance is not at 1/3rd to 2/3rd, the angle may be there but slightly different. I have shown that even in our own Solar System, the imbalance changes as we move out from the Sun. So I would say it is probable that water shows a different angle on different planets. The number 104.5 is only true on Earth. Also, when the Solar System moves through various patches of charge in the galaxy, this number should also vary to some degree. That is, I doubt that the number 104.5 is firm and unvarying. It must be function of the charge field, and the charge field is not unvarying itself.

Others may say, “I though you told us water couldn't take the same configuration top and bottom, due to imbalance in the ambient field.” That's right, so the local field has to become strong enough to overpower and wash out the ambient field. Once the charge channeling through the nuclei becomes stronger than the channeling in the ambient field, the imbalance in the ambient field no longer determines the configuration.

As you can see, if water takes that configuration, it must also change the way water bonds to itself. Charge channels don't just run through the water molecule, they run from molecule to molecule. Whereas the angled molecule would bond to adjacent molecules in one way, the newly straightened molecule would bond more linearly, creating long line of charge and long paths, even in the liquid. This is what we are seeing with so-called structured water. The water molecule has been forced into a more linear structure, which linearizes all paths through the water.

This is what explains the oddities of the EZ and of all charged water. Pollack and his mentors were correct in their assumption that water was taking on structure, but because they were unaware of charge channeling through the nucleus, they had no way to show the cause of the structure from the fundamental level. At the quantum level, charge channeling explains pretty much everything.

In his book, Pollack tries to explain the qualities in the EZ by giving water the honeycomb configuration of ice [p. xxiv]. But while that would explain the “easy transformation” of EZ water to ice, it doesn't begin to explain the charge channeling qualities. It is not clear to me that the honeycomb configuration would channel linearly at a power to create the EZ out to the width it is found. It would also not explain the other data, like the absorption at 270nm. Neither ice nor honeycomb water does that. I think a loose honeycomb configuration is the normal configuration of water. To explain the qualities in the EZ, we need something even more radical. We need these linear charge streams that can reach thousands of layers of molecules into the medium. The same thing applies to water in capillaries, since honeycomb water in no way explains the features of that medium. Again, all evidence points to linearized charge channels.

Another problem with Pollack's linking of EZ water to hexagonal ice is that the angles in hexagonal ice don't match the angle of the water molecule. The interior angle of a hexagon is of course 120^{o}, while water is supposed to have an angle of 104.5^{o}. All hexagonal ice has this problem, which is never explained mechanically by the mainstream. In a previous paper, I have drawn the structure of water as a pentagon at the first level, and I assume the hexagonal nature of ice only shows at a slightly larger scale in the architecture. We will look at hexagonal ice in an upcoming paper.

In closing, I would like to return to the polywater controversy for a moment. Richard Feynman got involved in the dust-up, saying that polywater was an idea that disproved itself, since if it existed, there

should be an animal that could live by taking in water and excreting polywater. This just proves that once again Feynman didn't understand the charge field. To start with, he has it upside down. The animal would have to take in polywater and excrete water. Polywater is both more ordered and more energetic. Therefore if the animal wished to excrete negative entropy or disorder—as the mainstream tells us living organisms do—it would have to excrete water. Beyond that, if we only look at energy levels, polywater must have more energy. It is channeling more charge more efficiently, therefore the animal would want to take in polywater, given the choice.

And, in fact, Feynman's "animal" does exist. It is called a plant. Plant's don't exist *only* on this eating and excreting, but it is one of the things they do. They use narrow tubes to create polywater from the charge field, then excrete water through transpiration. In this way they feed almost directly on the charge field in this process. As a side effect, the charged water helps them transport other molecules, which they also use to live.

All plants and animals ultimately feed on the charge, either directly or indirectly. Every entity above the size of an electron feeds on the charge field, including protons, planets, and galaxies. If Feynman had understood physics to the extent he thought he did, he would have known that. Like me, he would have immediately seen the footprint of charge in the data of Fedyakin.

From the amount of absurdity in the polywater dust-up, including the involvement of military, any sensible person quickly comes to the conclusion that there was a cover-up. In this way, it is likely Feynman was simply hired by the Pentagon to supply misdirection. I have no idea what use the military is putting polywater—and don't much care—but surely they have figured out by now that charge channeling is involved. Perhaps this is just one more reason that physics is claiming ignorance of charge. It may be that the entire charge field has become a military secret. It won't be long before all knowledge becomes a military secret, and you are left holding nothing but a bag of lies.

For more, go to part two of this paper.

*If you were confused by my calling 250nm photons infrared, go to this paper, which explains why I do that.