

New Technology Provides Scientific Evidence of Water's Capacity to Store and Amplify Weak Electromagnetic and Subtle Energy Fields

**Dana Tomasino
HeartMath Research Center**

The Memory of Water

Research has shown that water is a liquid crystal with a pliable lattice matrix that is capable of adopting many structural forms. The structure of water gives it an infinite capacity to store information within its matrix. A growing body of recent scientific evidence is now confirming traditional intuitive understandings of water's role as mediator between the energetic and material worlds and its function as an accumulator, transmitter and transducer of energy patterns and information. Much evidence points to water's ability to effectively memorize energy patterns with which it comes in contact and retain the energetic memory of vibrational frequencies for extended periods of time. Homeopathic medicine, for example, is based on water's capacity to store within its structural matrix the energetic imprint or vibrational signature of physical substances.

A particularly striking example of water's "memory" of energetic information are the sources of water found throughout Europe at Marian sanctuaries, sites traditionally recognized as sacred, where apparitions of the Virgin Mary have been reported and numerous healings have taken place. These sites include Lourdes in France, Medjugorje in Croatia, Fatima in Portugal, and Montichiari and San Damiano in Italy. Recognized throughout the ages for their healing properties, the sources of water found at these sacred sites are believed to have recorded within them the frequencies of spiritual or higher dimensional energy associated with each of the sanctuaries.

Scientific analyses have demonstrated that the Marian waters possess unique properties that are transferable to normal water through successive dilutions. Studies performed at the University of Milan showed that small quantities of the Marian waters added to normal tap water acted to modify the pH, conductivity and redox potential of the tap water. It was also found that bacteria exhibit a significantly enhanced growth rate and two species of fungi show greatly increased sporulation rates when grown in media made with the Marian waters.

Water Research Underway

At the HeartMath Research Center, we have been investigating the energetic properties of the Marian waters and water treated by exposure to the coherent electromagnetic fields produced by the human heart. Our preliminary research has shown that there are measurable changes in these waters that have intriguing effects on various physical and chemical systems.

Crystallization experiments: The crystallization of substances from solution is a phenomenon that has proven extremely sensitive to subtle energetic influences. We have shown that solutions of sodium chloride, sodium chloride and albumin, and cupric chloride to which a small quantity of the water of Medjugorje is added tend to crystallize in more finely divided, filamentary patterns than control solutions. These differences in crystallization patterns resemble those that have been observed in samples treated by healers' bioenergy and by magnetic fields.

HeartMath Research Center, Institute of HeartMath, Publication No. 97-002. Boulder Creek, CA, 1997.

*Address for correspondence: Dana Tomasino, HeartMath Research Center, Institute of HeartMath, 14700 West Park Avenue, Boulder Creek, CA 95006. Phone: 831.338.8500, Fax: 831.338.1182, Email: info@heartmath.org.
Institute of HeartMath web site: www.heartmath.org*

Gold colloid test: This chemical reaction has previously been used as a detector of subtle energies, particularly the activation of water samples by healers' bioenergetic fields. The reaction is the reduction of gold trichloride (AuCl_3) by formolin in aqueous solution made alkaline by sodium carbonate (Na_2CO_3). This reaction gives rise to metallic gold in colloid form. The color of the colloid (measurable spectrophotometrically) varies from red to blue depending on the presence or absence of activating subtle energies in the system. We have shown that the gold colloid test performed in water to which small quantities of Marian waters have been added yields a product that appears significantly more blue with respect to the product formed in control reactions. This difference is quantifiable by comparing the visible absorption spectra of the solutions (Figure 1). The color differences obtained in Marian water samples with respect to controls resemble the color differences previously observed when the reaction was performed in samples of water treated by healers. As the colloidal reaction acts merely as a detector of the "activation" previously effected on the water, these results suggest that the Marian waters are intrinsically energetically "active" by virtue of the higher dimensional information they have absorbed and stored within their molecular structure. Moreover, our results indicate that this energy is transferable by the waters to another chemical system, in this case the gold colloid reaction, where it ultimately acts to modify the structure—and thus the color—of the colloid particles formed. These sorts of experiments may eventually help us begin to understand the effects that the subtle energies contained in the Marian waters may have on the water and suspended biological colloids that characterize living systems.

Amplification of electromagnetic fields by water: The HeartMath Research Center has developed a new technology that can detect and measure the capacity of water to amplify weak electromagnetic fields. For example, the electromagnetic field produced by the human heart can be detected in a glass of water placed a number of feet away. We have shown that water exposed to a weak electromagnetic field has the property of amplifying the signal many times and that different types of water amplify the signal to different extents. We have found that the amplification of an electromagnetic field by distilled water is significantly increased when only a few drops of water from Mediugorje is added to it (Figure 2). This new technology holds great potential to scientifically measure and document the storage of information in water. The system is also significantly less subject to variation due to background environmental fluctuation than are crystallization experiments and many chemical tests. Of the many types of analyses we have performed at our laboratories, we believe this method of measuring the effects of information transfer into water currently holds the most promise for furthering our understanding of the capacity of water to store and transduce higher dimensional information associated with special environments such as the Marian sanctuaries.

The Water Within Us

Water is the universal medium for all biological activity. Nearly two-thirds of the human body and one-half of each of our organs, by volume, consist of water. This amounts to approximately 10 gallons of water, largely enclosed within trillions of cells. Increasing evidence indicates that the water within living cells is highly structured, arranged in various intermolecular conformations held together by extensive hydrogen bonding networks, giving it quite different properties and behavior from bulk water. It appears, further, that the structuring of cellular water is critical to the healthy chemical functioning of the cell. Increased knowledge of the mechanisms underlying electromagnetic and subtle information storage, amplification and transduction by water may open the doorway to comprehending how these processes operate in the water within us. This could aid in building a solid model to explain the effects of weak electromagnetic and subtle energies on living organisms and possibly significantly expand our understanding of the function of water in biological systems. Studies designed to advance our understanding of water's role as a bridge between the worlds of energy and matter will provide a crucial link between the realms of science and spiritual phenomena, bear profound implications for the betterment of human and environmental health, and may well help lay the foundations for a newly emerging scientific paradigm.

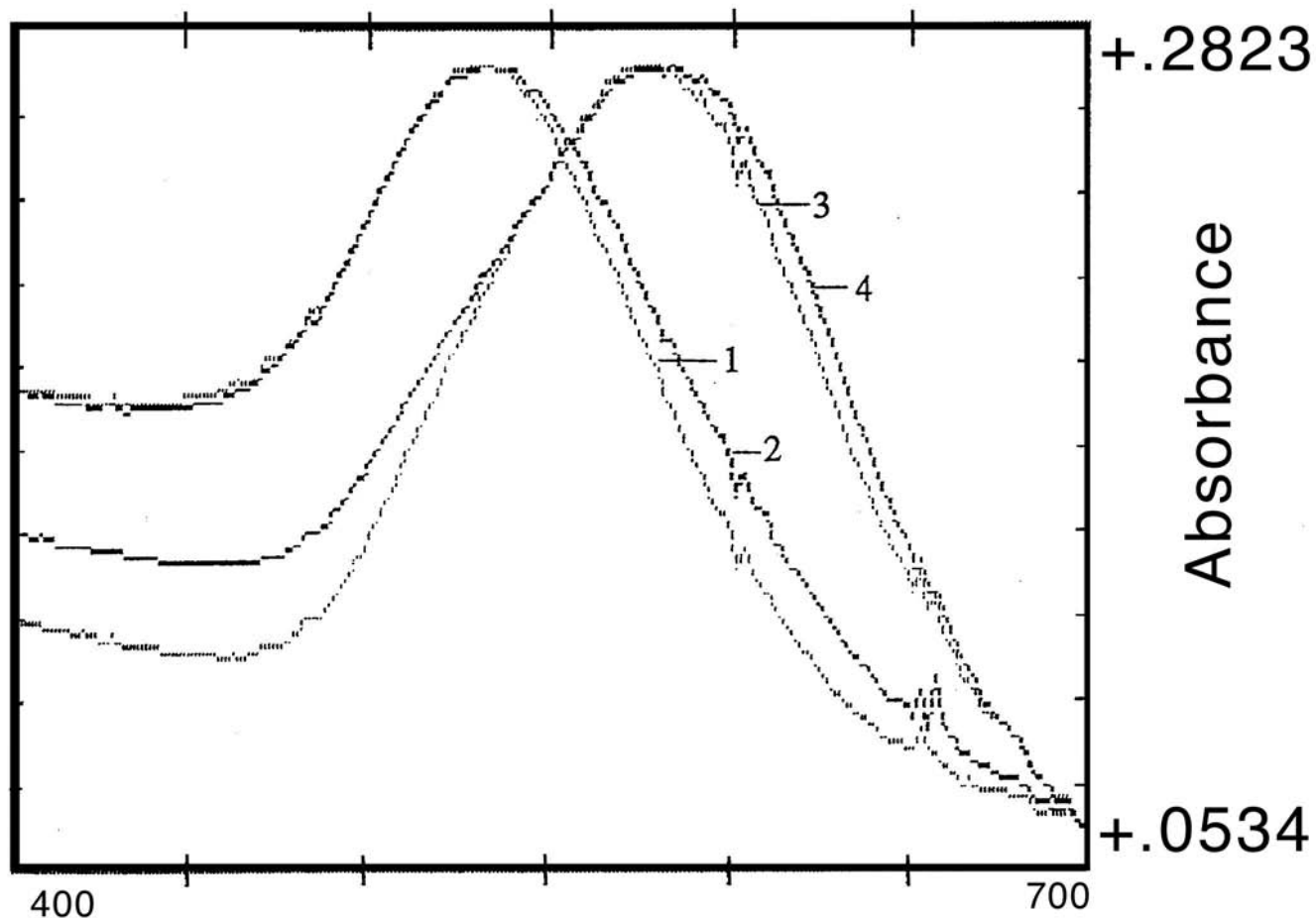


Figure 1. Visible absorption spectra of gold colloid product formed in control versus Montichiari water samples. 1 and 2: Duplicate control samples of distilled water containing 400 μ l tap water/500 ml. 3 and 4: Duplicate samples of distilled water containing 400 μ l Montichiari water/500 ml. The visible contrast between the red/pink color of the control samples and the blue/purple color of the Montichiari water samples is clearly reflected in the difference in the samples' absorption maxima in the visible range, and is most likely due to structural differences in the colloid products.



Figure 2. Increased amplification of electromagnetic fields by the water of Mediugorje. Two separate trials showing increased amplification of a weak electromagnetic field signal when 3 drops of water of Mediugorje are added to 20 ml distilled water. Each data point is the average of 10 successive measurements.

** $p < 0.01$, *** $p < 0.001$.