

OUR BODIES ARE 99% WATER MOLECULES, AND 70% WATER BY WEIGHT. INSIDE LIVING ORGANISMS WATER ACTS VERY DIFFERENTLY THAN IT DOES IN BULK. NEXT TO SURFACES LIKE MEMBRANES OR MOLECULES, AND BORDERING VESICLES AND BUBBLES, IT ACTS NOT LIKE SOLID ICE AND NOT LIKE BULK WATER, BUT LIKE A LIQUID CRYSTAL -- A 4TH STATE OF BEING WITH UNIQUE PROPERTIES OF INTEREST TO US.

LIQUID CRYSTALLINE WATER IS BELIEVED BY "NEW CELL BIOLOGY" RESEARCHERS TO BE THE TARGET OF EMF (NATURAL AND ARTIFICIAL) BIO-EFFECTS. THIS MAP COVERS SOME OF THE INFORMATION PROVIDED IN THE OTHER WATER MAP, BUT WITH SPECIFIC ATTENTION TO LIQUID CRYSTAL (EXCLUSION ZONE) WATER. MUCH OF IT IS HIGHLY TECHNICAL, BUT FASCINATING.

WATER RESPIRATION AND LIFE

ILLUMINATING WATER AND LIFE

EMF, QUANTUM COHERENT WATER

MICROWAVES AND WATER SURFACE TENSION

JACK KRUSE: COHERENT WATER QUANTUM WATER CHEMISTRY

"In this work, we present evidence that the primary "receptor" of the electromagnetic radiation is a gas/water interface."

[Colic and Morse](#)

"Coherent domains can also trap electromagnetic frequencies from the environment to orchestrate and activate specific biochemical reactions through resonance, a mechanism for the most precise regulation of gene function."

[Mae-Wan Ho](#)

"The starting point of the new cell biology is the quantum electro-dynamical nature of life, based on quantum coherent water created by fluctuations of the ambient electromagnetic field... and stabilized on interfaces as liquid crystalline water. Liquid crystalline water not only provides the excited electrons and protons to fuel the redox dynamo that generates life, but also the activation energy and specific resonances that super-facilitate the numerous chemical reactions that life entails." [Mae-Wan Ho](#)

"... water turns DNA into an electrical conductor and gives it magnetic properties..."

[Mae-Wan Ho](#)

Mae-Wan Ho

[Rainbow Worm](#)

[Living Rainbow H2O](#)

[Life is Water Electric, Parts 1, 2](#)

[Interfacial liquid crystalline H2O](#)

Gilbert Ling

[Debunking old theories](#)

Luc Montagnier

[Water creates DNA](#)

[PPT: DNA and water, EM](#)

[Video: Informationability of Water](#)

Philippa Wiggins

[Life, two kinds of water](#)

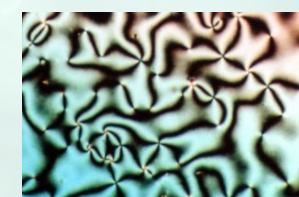
Martin Chaplin

[Importance of Cell Water](#)

Emilio del Giudice

[Water Respiration](#)

[Organization of water](#)

 [Liquid crystal Minuteman](#)

[Illuminating Water and Life](#)
[Water, EM field, close to surfaces](#)
[Water dynamics, living organisms](#)
[Water, DNA transduction, EM signals](#)

WATER SCIENCE WHO IS WHO

Gerald Pollack

[Research Themes](#)

[Interfacial water, 4th phase](#)

[YouTube: 4th Phase Water](#)

[Audio: Ben Greenfield Interview](#)

[DVD: Batteries made from water](#)

[YouTube: Electrically Structured Water](#)

[High pressure and high O2 increase EZ size](#)

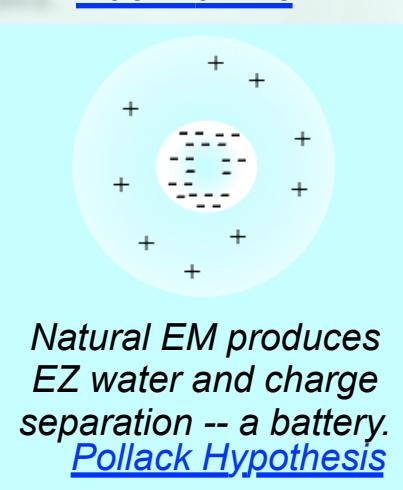
[YouTube: 4th Phase of Water, Role in Biology](#)



Jacques Benveniste

[Nature](#)

Water is special



Natural EM produces EZ water and charge separation -- a battery.
[Pollack Hypothesis](#)

Water Journal

[Positive electricity](#)

[Water has Memory](#)

[The Story of Water](#)

[Living cells and water](#)

★ [Structured cluster water, LF information](#)

Liquid crystals

Interfacial water

EMF, INTERFACIAL (EXCLUSION ZONE, EZ, LIQUID CRYSTALLINE) WATER

AND THE NEW CELL BIOLOGY



DNA Recovered in Water by EM Signals

[Mae-Wan Ho](#)

EMF and interfacial water:

[RF enzyme-water interaction](#)
[Hydration properties may change](#)

Interfacial water, EMF



Home: [Oscillatorium](#)
Newest version [this map](#)
Date of this update: 09-02-18

I-SIS EMF links

[MF changes water structure](#)

[Pulsed ELF, interfacial water](#)

[EMF is trapped by CD, "cannot" escape](#)

[Quantum Coherence, EMF, Homeopathy](#)

[Electrical susceptibility of structured water](#)

[EMF, domain formation, aqueous solutions](#)

[Effect of EMF is at the gas/water interface](#)

[Mobile phones, water, solution becomes gel](#)

[MW, water structure altered, physiol. disrupted](#)

[Hydrated membranes, transfer of vibrational energy](#)

[RF deliberately used in Tx for effects on water bonds](#)

[Terahertz perturbation, interfacial water, membranes](#)

[Transient water pores, EMF, ion membrane leakage](#)

"Coherent domains... trap EMF's inside and produce coherent oscillations."

[Mae-Wan Ho](#)

"In this work, we present evidence that the primary "receptor" of the electromagnetic radiation is a gas/water interface."

[Colic and Morse](#)

"Coherent domains can also trap electromagnetic frequencies from the environment to orchestrate and activate specific biochemical reactions through resonance, a mechanism for the most precise regulation of gene function."

[Mae-Wan Ho](#)

"We have shown that water retains some lasting effects following microwave irradiation. The mechanism by which the interfacial layer is manipulated, resulting in a reduction in surface tension, appears to be similar to that for magnetically treated water."

[Parmar et al](#)

"... water exhibits changes in physicochemical properties in response to variations of field intensity and/or frequency..."

[Vallee and Lafait](#)

"... living organisms are dynamic liquid crystalline phases in which all the molecules in the cells and tissues of the body are aligned and moving coherently together, including especially the water molecules that are intrinsic to the liquid crystalline matrix and essential to the function of macromolecules..."

[Mae-Wan Ho](#)

"It has been shown that in the liquid state water self-organizes and produces extended regions (coherence domains, CD) where the component molecules behave in unison, having the phase locked with the phase of a self-trapped electromagnetic field. It is therefore conceivable that externally applied electromagnetic fields should have the collective organization of water as their primary target and they are able to affect the other biomolecules through the mediation of water."

[Emilio del Giudice](#)

WHAT DOES THIS NEW SCIENCE TEACH US (THE NON-PHYSICISTS)?

Water has many different liquid states

Liquid water can behave like a crystal, even being coherent

Water can be high-density or low-density

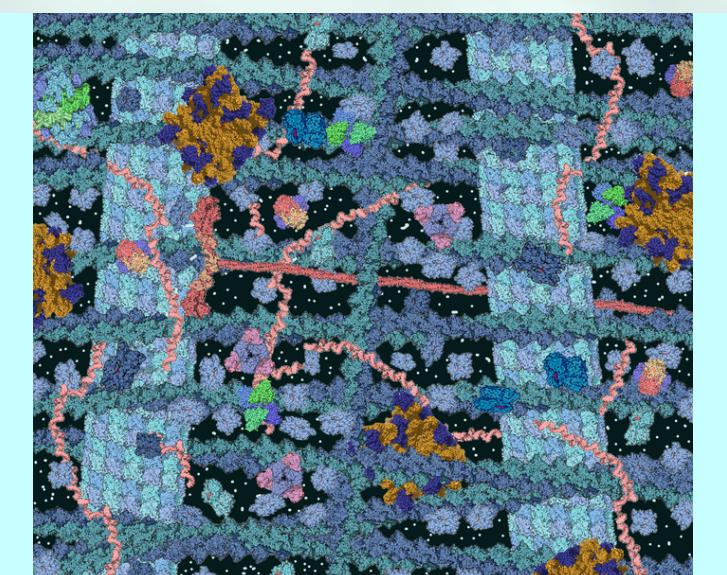
Water shifts states rapidly

Next to a surface, water excludes everything -- the exclusion zone (EZ)

Effects on water -- e.g. by EMF -- may vary with surface configuration

Effects on water -- e.g. by EMF -- may vary with state of water

EZ thickness greater with light, especially infrared



Intracellular matrix: a filled, complex, organized, structured, dynamic, water-mediated system of functions

