

## Wonders of Water – Presentation by Sue Lilly, Kuwait 2009

I have always had a firm belief that no experience or learning is wasted in our lives. This is certainly very true of my own experience with regards to chemistry. It was my favourite subject at school and my first jobs were in research laboratories for Johnson & Johnson (cosmetics & health products) and Wyeths (pharmaceuticals). The one topic that really fascinated me was water. I found its aberrant qualities quite magical. Little did I realise that 30 years after studying chemistry at college that I would return to water as part of my teaching complementary and alternative health practitioners about essences.

### **The importance bit**

Water covers around 70% of the surface of the Earth. We are also 70% water. We also have other special relationships with water – too much – we die; too little – we die.

Water is a prerequisite for life to even have evolved on this planet. Enzymes and other compounds that are necessary for life do not work without water.

Water is the second most common molecule in the universe (1<sup>st</sup> is Hydrogen H<sub>2</sub>).

Although water has been widely studied, it is probably still not understood.

### **The chemistry bit**

Most people know the chemical formula for water:



This means that for every oxygen atom, there are two hydrogen ones.

In crystal healing, for example,



Beryllium 3; Aluminium 2, Silicon 6, Oxygen 18

is the chemical formula for Aquamarine, Emerald, Heliodor and Morganite.

Most people, I guess have seen this and have maybe been put off by it.

hydrogen 1 <b>H</b>																	helium 2 <b>He</b>																													
lithium 3 <b>Li</b>	beryllium 4 <b>Be</b>											boron 5 <b>B</b>	carbon 6 <b>C</b>	nitrogen 7 <b>N</b>	oxygen 8 <b>O</b>	fluorine 9 <b>F</b>	neon 10 <b>Ne</b>																													
sodium 11 <b>Na</b>	magnesium 12 <b>Mg</b>											aluminium 13 <b>Al</b>	silicon 14 <b>Si</b>	phosphorus 15 <b>P</b>	sulfur 16 <b>S</b>	chlorine 17 <b>Cl</b>	argon 18 <b>Ar</b>																													
potassium 19 <b>K</b>	calcium 20 <b>Ca</b>	scandium 21 <b>Sc</b>	titanium 22 <b>Ti</b>	vanadium 23 <b>V</b>	chromium 24 <b>Cr</b>	manganese 25 <b>Mn</b>	iron 26 <b>Fe</b>	cobalt 27 <b>Co</b>	nickel 28 <b>Ni</b>	copper 29 <b>Cu</b>	zinc 30 <b>Zn</b>	gallium 31 <b>Ga</b>	germanium 32 <b>Ge</b>	arsenic 33 <b>As</b>	selenium 34 <b>Se</b>	bromine 35 <b>Br</b>	krypton 36 <b>Kr</b>																													
rubidium 37 <b>Rb</b>	strontium 38 <b>Sr</b>	yttrium 39 <b>Y</b>	zirconium 40 <b>Zr</b>	niobium 41 <b>Nb</b>	molybdenum 42 <b>Mo</b>	technetium 43 <b>Tc</b>	ruthenium 44 <b>Ru</b>	rhodium 45 <b>Rh</b>	palladium 46 <b>Pd</b>	silver 47 <b>Ag</b>	cadmium 48 <b>Cd</b>	indium 49 <b>In</b>	tin 50 <b>Sn</b>	antimony 51 <b>Sb</b>	tellurium 52 <b>Te</b>	iodine 53 <b>I</b>	xenon 54 <b>Xe</b>																													
caesium 55 <b>Cs</b>	barium 56 <b>Ba</b>	57-70 *	lutetium 71 <b>Lu</b>	hafnium 72 <b>Hf</b>	tantalum 73 <b>Ta</b>	tungsten 74 <b>W</b>	rhenium 75 <b>Re</b>	osmium 76 <b>Os</b>	iridium 77 <b>Ir</b>	platinum 78 <b>Pt</b>	gold 79 <b>Au</b>	mercury 80 <b>Hg</b>	thallium 81 <b>Tl</b>	lead 82 <b>Pb</b>	bismuth 83 <b>Bi</b>	polonium 84 <b>Po</b>	astatine 85 <b>At</b>	radon 86 <b>Rn</b>																												
francium 87 <b>Fr</b>	radium 88 <b>Ra</b>	89-102 **	lawrencium 103 <b>Lr</b>	rutherfordium 104 <b>Rf</b>	dubnium 105 <b>Db</b>	seaborgium 106 <b>Sg</b>	bohrium 107 <b>Bh</b>	hassium 108 <b>Hs</b>	meitnerium 109 <b>Mt</b>	darmstadtium 110 <b>Ds</b>	roentgenium 111 <b>Rg</b>	ununbium 112 <b>Uub</b>	ununtrium 113 <b>Uut</b>	ununquadium 114 <b>Uuq</b>	ununpentium 115 <b>Uup</b>	ununhexium 116 <b>Uuh</b>	ununseptium 117 <b>Uus</b>	ununoctium 118 <b>Uuo</b>																												
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Yet it holds a lot of information for anyone interested in crystals or in essences.

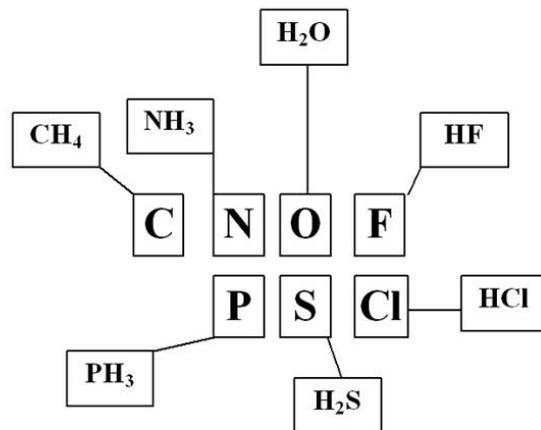
Basically what we have here is a table showing the different elements that make up our environment and how they relate to one another.

This table as we see it today was built up over 150 years, though most people attribute it to Mendeleev in 1869, it was still being adjusted in the 20<sup>th</sup> century to accommodate knowledge.

What we have here shows the lightest element, hydrogen (H). As you work down the table the number of electrons, protons and neutrons in the atom increases, the atomic number reflecting that, the atoms itself also gets heavier and the element changes name and quality.

The table also shows what Mendeleev did and that was to arrange the elements with similar properties together. This also enabled scientists to show where there were gaps for unknown elements, like the later named, germanium. For example, in the second column we have several elements that are related to one another and that we know of from crystal healing – Beryllium, Magnesium, Calcium, Strontium and Barium. The further down the listing, the heavier the atom, so if you compared a piece of gypsum/selenite (calcium sulphate) with a similar sized piece of celestite, the celestite would be noticeably heavier. Celestite is strontium sulphate  $\text{SrSO}_4$ , strontium being a much heavier atom.

If we look at where oxygen is in the table, you can see it is surrounded by lots of other elements.



C—Carbon	CH <sub>4</sub> is Methane
N—Nitrogen	NH <sub>3</sub> is Ammonia
F—Fluorine	FH is Hydrogen Fluoride
P—Phosphorus	PH <sub>3</sub> is Phosphine
S—Sulphur	H <sub>2</sub> S is Hydrogen Sulphide
Cl—Chlorine	HCl is Hydrogen Chloride or Hydrochloric acid

C – Carbon  
 N – Nitrogen  
 F – Fluorine  
 P – Phosphorus  
 S – Sulphur  
 Cl – Chlorine

Their proximity in the Table would dictate that these form similar compounds which behave in a similar way. When these combine with hydrogen this is indeed the case, apart from the mix of oxygen and hydrogen.

Carbon	+ Hydrogen	= Methane	- a gas at room temperature
Nitrogen	+ Hydrogen	= Ammonia	- a gas at room temperature
Fluorine	+ Hydrogen	= Hydrogen Fluoride	- a gas at room temperature
Phosphorus	+ Hydrogen	= Phosphine	- a gas at room temperature
Sulphur	+ Hydrogen	= Hydrogen Sulphide	- a gas at room temperature
Chlorine	+ Hydrogen	= Hydrogen Chloride	- a gas at room temperature

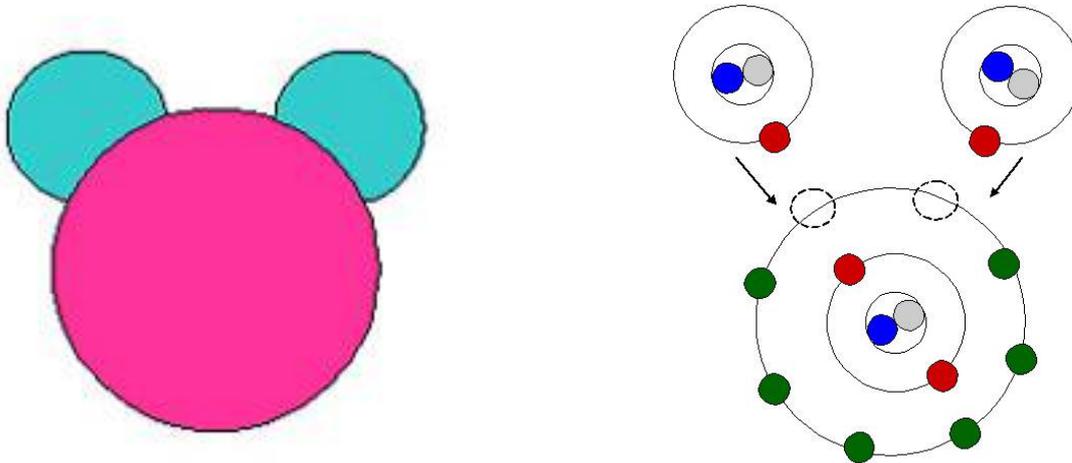
All of which are dangerous to health, poisonous in large quantities.

It would follow that the combination of oxygen with hydrogen would be a gas at room temperature and also be poisonous – but it is neither. It breaks the rules. Water is weird.

### The ‘Why is Water Weird’ bit

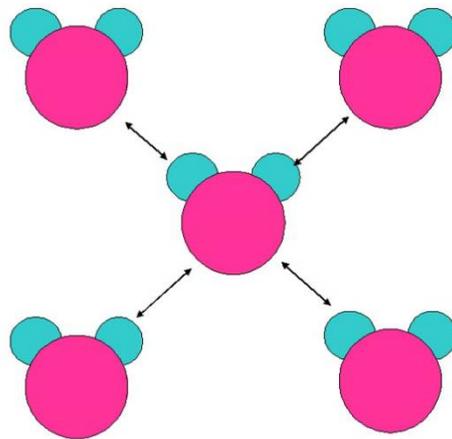
One of the reasons for the weird behaviour of water is thought to be how the molecules of water interact with each other.

The water molecule is sometimes called the ‘Mickey Mouse’ molecule, mainly because it can be represented like this:



However there is an imbalance or inequality of how the oxygen atom and hydrogen atoms share their electrons. In effect the atoms become tiny magnets and they start to attract other molecules. This effect is called ‘hydrogen bonding’

## Hydrogen Bonding or Attraction between Water Molecules



These bonds are strong enough in water to give it its unusual properties. DNA and enzymes both depend on the hydrogen bonding of water. Surface tension is also evidence of hydrogen bonding.

If there was no hydrogen bonding	- there would be no life
If there was slightly weaker bonding	- life would exist at lower temperatures
If there was slightly stronger bonding	- life would exist at higher temperatures
If the bonding was much stronger	- there would be no life

Hydrogen bonding in water means that at 4 degrees C water is at its maximum density, above that its volume expands and below that its volume expands. Water becomes crystalline (ice) at 0 degrees C. Other compounds become denser as they get colder.

## **The ‘How do healers use hydrogen bonding in water’? bit**

You might be thinking – what is importance does all this hold for me?

At atomic levels small clusters of water group together. This can happen in several ways and many ‘types’ of water have been identified. Ordinarily the clusters form and reform, some identical to others, some with similar part-patterns. This was only confirmed in 1998, but the idea of molecules replicating a pattern has been summed up by the phrase ‘The Memory of Water’, coined by Jacques Benveniste (1935-2004). This brilliant man created a lot of controversy over his experiments with water, which cost him his research post and some say he never recovered from the stress of those events.

His work was reported widely. Several laboratories tried to replicate his experiments and all succeeded except one, yet it was this one that was brought to everyone’s notice through the media. He was subsequently labelled as a quack and fraudster.

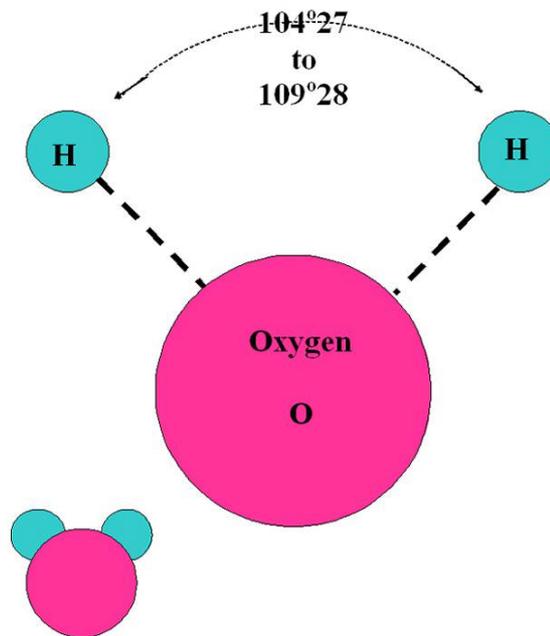
The memory of water is very short unless other materials or substances are present. So if water has memory you want to preserve, you could introduce some ethanol (this is what Dr Edward Bach did with the Bach flower Remedies in 1928-1936) or other preservatives (vinegar, citric acid, honey, glycerol etc). Using spring water as your start point helps too as it contains minute amounts of minerals which encourage the creation of the bonding mechanism. Even using glass equipment helps as some ions from the glass move into the water.

Succussion, or rapid shaking of a liquid, encourages the patterns to replicate, as in homeopathic dilutions, but there is no evidence as to why a human being is then able to react and use this pattern as a healing tool.

As crystal therapists, you probably know that individual gems and crystals can be identified by the way the crystal lattice deflects laser light, and the angle between the atoms is so precise, correct identification can be made because the angle is always the same for that molecule.

The atomic bonding angle in water, however, is not constant. It varies from 104.27 to 109.28, the norm being accepted as 104.35 – this could suggest that there are lots of different ‘waters’, a belief held by many water energy experts.

## Water Molecule



Water patterning can also be changed by people. Dr Grad of McGill University discovered in the 1960s that if you subjected water to a small magnetic field or light the atomic bonding in the water gets altered and there is a reduction in surface tension.

Reduction in surface tension increases the 'flow' of water, which makes water and solutions easier to absorb. When this water or imploded (spun) water is introduced to other water through contact or proximity, it reduces the surface tension of that water too— making it more 'wet' – which seems to help the body to heal quicker and become more strong. (Imploding water is carried out by passing the water through a magnetic vortex that spins the water (anticlockwise towards the apex)). Viktor Schauberger discovered this. (1855-1958)

### **The ‘Easiest way to use the memory of water’ bit**

If we are 70% water and human beings have an electromagnetic energy field, which will affect water – is a primary transmitter of healing energy the water in our body? Is this why homoeopathy works? Is this why essences - flower, gem etc work? Could it be that not only does life depend on water our healing depends on water too.

We can borrow from Benveniste and Grad and use a glass of water and the healing item you want the energies of.

You can place it in the glass

You can place it beside the glass (in essence terms, known as the ‘indirect method’. Or you can place the glass on it:

All of these techniques create healing waters, which would need to be used within a couple of days, as they have no preservative. However, the healing water can be made again and again, even daily, negating the need for preservatives anyway.

The resulting water can be taken by, mouth, placed on pulse points, used in a spray, bathed in – all the ways a preserved essence could be used.