

## 1. Introduction

During my work in the institute of Prof. Dr. Reinhard Mecke at the university of Freiburg in the black forest I developed a dipolmeter to measure the dielectric constants (DCs) of liquids up to 4 decimals behind the decimalpoint. R. Mecke himself had made his doctor thesis about water. He published several papers regarding the physical properties of water and I, too, found that the DC of water depends on its history. All other measured liquids showed constant DCs, but in water the DC changed even before the decimalpoint. At 20°C one can find values between 79 and 82, dependent on the history, e.g. boiled and shock cooled resp. slowly cooled.

This phenomenon can be explained by means of the structure of water. Water consists of one oxygen atom (O) and two hydrogen atoms (H). The oxygen atom has 6 electrons in its valence shell, but 8 are possible according to quantum physics. Therefore its valence is 2 and O is an electron acceptor, becoming a negative ion. H has only one electron, its valence is 1 and it is an electron donor, becoming a positive ion.

## 2. The Clusterstructure of Water

It is well known that liquid water, ice and also water vapour does not consist of single molecules (only above 400°C this is possible). Table 1 shows the so called anomaly of liquid water:

Table 1: Anomaly of water

	<u>Cluster</u>	<u>Single molecule</u>
Critical point	374 degree C	60 degree C
Boiling point	100 degree C	-80 degree C
Melting point	0 degree C	-100 degree C
Vaporization heat	9,7 kcal/mol	4,0 kcal/mol
Specific heat	18 cal/degree a.mol	9 cal/degree a.mol
Vaporization entropy	26 Cal/degree a.mol	19 Cal/degree a.mol
Specific weight	1g/ml at 4 degree C	0,5g/ml falling with temp.
Molvolume	18 ml/mol	40 ml/mol
Freezing volumechange	+ 1,62 ml/mol	- 1,5 ml/mol
Viscosity	1,7 c-poise	0,2 c-poise
Surface tension	75 dyn/cm	7 dyn/cm

Table 1 compares the true physical values (clusters) with the theoretical physical values (single molecules). From the differences between these two value pairs it can be calculated that in liquid water nearly 400 H<sub>2</sub>O-molecules at room temperature are clustered. These big molecules are called associated or polymere mixed.

One column in the periodic system of elements is called a „homolog row“, because the properties of the chemical compounds with the atoms in one column are similar, but the boiling and melting points become larger with larger atomic mass.

This is shown in Fig. 1. In Fig. 1 different chemical compounds with hydrogen in homolog rows and their boiling points are listed. In this rows the compounds of hydrogen with halogens, with the oxygen row and with the nitrogen row the smallest atoms step out of line. From this, too, one can calculate that these compounds are larger than those with single molecules.

	Substanz (Verbindung mit H)	Siedepunkt (steigt normalerweise mit Molekül-Masse)	
Fluorwasserstoff	(HF) <sub>n</sub>	293° K	!
	HCl	188° K	
	HBr	207° K	▲
	HJ	238° K	▲
Wasser	(H <sub>2</sub> O) <sub>n</sub>	373° K	!
	H <sub>2</sub> S	214° K	
	H <sub>2</sub> Se	232° K	▲
	H <sub>2</sub> Te	271° K	▲
Ammoniak	(H <sub>3</sub> N) <sub>n</sub>	240° K	!
	H <sub>3</sub> P	186° K	
	H <sub>3</sub> As	218° K	▲
	H <sub>3</sub> Sb	256° K	▲
Methan	H <sub>4</sub> C	112° K	▲
	H <sub>4</sub> Si	161° K	
	H <sub>4</sub> Ge	185° K	
	H <sub>4</sub> Sn	221° K	▲

Fig. 1: The anomaly of water in comparison with homolog sequences

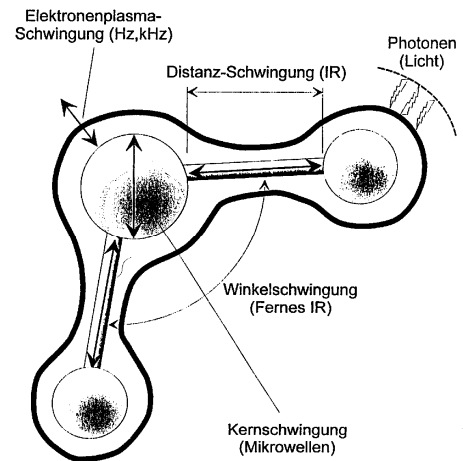


Fig. 2: vibration of a single water molecule

### 3. The resonances of water

Fig. 2 explains that even a single water molecule has many vibrations and emits electromagnetic signal in a wide frequency region. At room temperature the atoms are not in rest, but vibrate all the time. The energy comes from the environmental heat. Because the atoms inside the molecule are ions and have electric charges, they emit electromagnetic signals like an antenna with its vibrating electrons.

The atomic nucleus with several protons and neutrons vibrates in the microwave region. The electric shell vibrates in the low frequency region. This was demonstrated in the TV series „Our Cosmos“ from Carl Sagan: an electron microscope with an amplification of 100 million times showed uranium atoms: they had a periodical vibration near 10 Hz.

The distance between O and H vibrates in the infrared region (the wavelength is 3.2 μm) and the angle of the connecting lines of both H ions with the O ion vibrates in the far infrared region.

Finally the daylight activates the valence electrons of O in higher energy levels and within 10<sup>-7</sup> sec. the electrons return to the ground level emitting photons (light) with a frequency of about 10<sup>15</sup> Hz. This is the highest frequency in water.

More frequencies are present in the clustered water. Fig 3 shows three associated water molecules by means of so called hydrogenium bonds. Because of its dipole character every O<sup>-</sup> ion attracts a H<sup>+</sup> ion and this bond also is vibrating in a rotation manner with frequencies in the far infrared region. In Fig. 3 also is shown that these rotation leads to an electromagnetic coupling and the hydrogenium bond becomes stronger (see § 4.).

One can imagine that in clusters with 400 water molecules a very high quantity of different electromagnetic frequencies are possible and that a very high amount of different structures are possible. So „water is not like water“.

Fig. 4 compares two storage media: iron (Fig. 4a) and water (Fig. 4b). It is well known that iron is able to store information, even in motionless iron (in this case by means of so called „forced spot changes“: e.g. filling up inter lattice spots or creating deficitary spots in the lattice). In Fig. 4a iron ions in groups are shown, called Weiss' areas (according to the French physicist P.-E. Weiss), with all magnetic dipoles in line. Only the quantum physics could explain why they do not repel each other (normally corresponding poles repel each other).

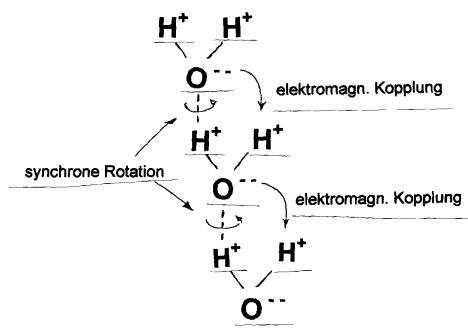


Fig. 3: the two phase model of  $(\text{H}_2\text{O})_n$

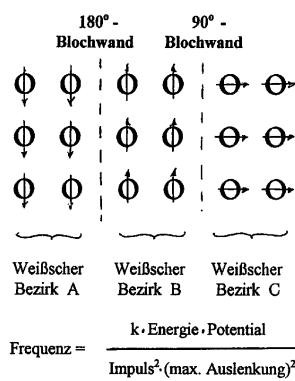


Fig. 4a storage in iron

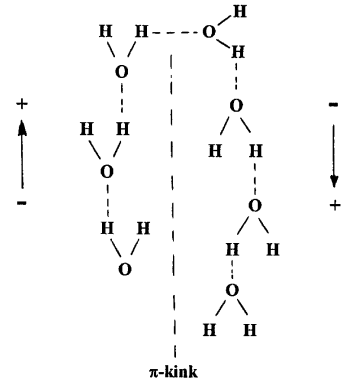


Fig. 4b storage in water

The Weiss' areas are separated by so called Bloch walls (according to the Swiss physicist F. Bloch). Both, the iron ions and the Bloch walls vibrates at room temperature and emit electromagnetic signals. This spectrum can be altered by means of the mentioned spot changes.

In water we have also (analogous to the Bloch walls in iron) partition walls, called kinks. The clusters correspond with the Weiss' areas in iron. The difference between iron and water is the kind of dipol: in iron we have magnetic dipols, in water electric ones. In Fig 4b a special kind of structure is shown: two clusters are reciprocally orientated. This corresponds with an angle of  $180^\circ = \pi$  and this special kink is called a  $\pi$ -kink.

The kinks vibrate in the low frequency region, the clusters in the high frequency region. The clustered water so has many more vibration than a single water molecule.

#### 4. The ability of water to store information

The theoretical physicist Emilio del Giudice at the university of Milano, Italy, could explain together with cooperators that water has the ability to store information over long periods of time. In former times there was the opinion that the hydrogenium bonds in the water clusters are instabil. This is true for the normal liquid water, called water I, but not true for the cristallin-liquid water II as shown in Fig. 3. The electromagnetic coupling leads to an enlargement of the bond power with the factor 20. This factor can be calculated by means of quantum physics: it is the square root of the number of molecules in one cluster (about 400):

$$\sqrt{400} = 20$$

Only strong fields (heat, x rays, power lasers, power magnetic fields etc.) are able to destroi these strong bonds. Today we even have homeopathic remedies, made by Samuel Hahnemann itself more than 150 years ago inside a save in the Robert Bosch hospital, Stuttgart, Germany, and these substances have the same spectra like modern substances of the same kind (see § 9 regarding spectroscopy).

#### 5. The complete quants of water

It was even mentioned that water has a lot of electromagnetic vibrations, called photons. Only a very small part of the whole spectrum are visible (light), all other quants of the electromagnetic spectrum are called „dark photons“. Now, water consists essentially of photons and only to a very small amount of matter. In quantum physics it is well known that our cosmos (and also water) is made of two different parts: matter (protons, neutrons etc. called fermions, according to the Italian physicist Enrico Fermi) and interaction quants, called bosons, according to the Indian physicist Subhas Tschandra Bose. The most important bosons are the photons and the relation between photons and material quants (nucleons) is known as the „photon-nucleon ratio“. Jules T. Muheim, a Swiss physicist in the university of Zuerich, calculates this ratio in agreement with the measured value to  $9.746 \cdot 10^8$  to 1. This is about 1000 millions to one, see Fig. 5.

<b>Photonen</b>	<b>9,746 · 10<sup>8</sup></b>
H <sub>3</sub> O <sup>+</sup>	}
H <sub>2</sub> O	
HO <sup>-</sup>	
CO <sub>2</sub>	
Minerale	
	<b>1</b>

Fig. 5: shows the parts in water: 9,746 x10<sup>8</sup> parts (nearly thousand millions) are photons and only one part consists of positive H<sub>3</sub>O<sup>+</sup>-ions, neutral H<sub>2</sub>O-molecules (clustered), negative HO<sup>-</sup>-ions and in most of the cases solved carbon dioxide CO<sub>2</sub> (also in distilled water, because it goes through the air during distillation); finally natural water also has minerals.

The interaction quanta (bosons) are relevant for the cohesion of matter, for their structure, also they control the consistence of all materials and they are higher than fermions (matter). All this was published in a TV series by the chief manager of the particle accelerator CERN near Genf in Switzerland, Carlo Rubbia, who got the Nobel price 1984 for the experimental proof of special bosons. An other Nobel price winner, Ilya Prigogine explained the importance of the interchange quanta by the statement: „When I become older not my molecules change, but the interchange quanta“.

Fig. 5 Relation of photons to materials in water

A recently published paper again proved that water is a two phase system and that water II gets irreversible changes in its cluster structure through weak electromagnetic fields (1). This was shown by means of IR spectroscopy and inelastic neutron scattering.

## 6. Homeopathy

What is happening during the production of a homeopathic remedy can be explained by means of a mechanical model: Fig. 6.

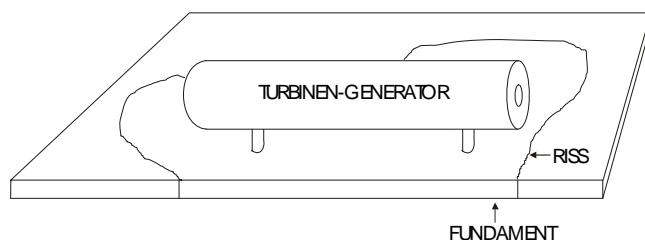


Fig. 6

Fig. 6 shows a turbine driving a 60 Hz power generator upon a concrete basis. When the turbine has a unbalance (e.g. one blade is deformed) the base gets in vibration with the same frequency (60 Hz). Finally the base gets a crack. Now it is a well known fact in vibration technics that the crack moves such a way in the base until the part of the base with the turbine gets totally in resonance with the turbine.

Transmitting this fact in the very small matter of water molecules, we can compare the base with the water, the turbine with the mother tincture (having its own vibration spectrum) and the crack with changing hydrogen bonds in water I. The changed clusters get totally in resonance with the frequencies of the mother tincture. By means of succussion the information is transferred to water II. Because of the law of the conservation of energy water and mother tincture could not vibrate in phase. This would be an increase of the total energy. Therefore water and mother tincture oscillate counter-phase (this is shown in § 14).

In homeopathy the dilutions are normally 1:10, called 1X (9 parts of water to 1 part of the mother tincture). During the potency process this is done step by step with succussions between the dilutions. 2X means a dilution of 1:100 in two steps etc. As long as the frequency spectrum of the mother tincture in the mixture with water predominates over the frequency spectrum of the changed water, the mother tincture predominates with its phase. Now it is necessary to explain some facts about the phase relations.

## 7. Schumannwaves as a trigger

Several liquids inclusive the water in the human body vibrate extensively synchron. This must be done by means of a trigger signal that is world wide present. This follows from experiments with the medicament testing according to VOLL: R. Voll could show that a remedy can be used for diagnosis when the patient puts it in his hand.

Now it was shown that this also is possible when the proper values of the remedy is modulated upon a carrier frequency (similar to radio and TV), transmitted over a large distance and demodulated near the patient, using an electrode in his hand connected to the demodulator (so called „test-emitter-receiver“). This again is a proof that the vibrations of the remedies are the real effect and not the chemistry. But, the effectiveness transmitting the remedy's own signals over large distances only could be possible

when there is a phase relation between the remedy's vibration and the patient. For, the remedy's signals (which have a very weak intensity) must get in resonance with structures inside the patient's body. And to this end no phase shift is allowed. (Only strong signal would be able to trigger the patient's structures).

In the traditional medicine the receptor model is used to explain the effect of a remedy: e.g. a remedy for the kidney must have similar atom groups in its periphery like the parenchyma tissue of the kidney. The idea is a key-lock mechanism according to Paul Ehrlich. In this case the dosis-action principle is relevant: The higher the dosis the higher the effect (because more parts of the tissue are involved).

But, similar atom groups in the remedy and in the tissue have similar resonance frequencies. So it is also possible that the remedy's effect is an electromagnetic one. In this case we have a resonance effect. All experiments in the last 30 years showed that this is the main effect of a remedy. The chemistry only leads to side effects! Nearly every remedy works through resonance. Exceptions are only some antibiotica which need the key-lock mechanism.

When the above mentioned test-emitter-receiver experiment is carried out in a magnetic shielded room, it does not operate, because there is no phase relation between the remedy and the patient. The trigger for a synchronous vibration must be a world wide present signal. Such a signal is e.g. the Schumann resonance generated between the surface of the earth and the ionosphere (TM waves = transversal magnetic waves).

## 8. Experimental proof for the ability of water to store information

Cyril VV. Smith, university of Salford, England, had carried out during 10 years together with two physicians in London, R.V.S.Choy and J.A. Monro experiments on 150 voluntary allergy patients using structure-modified water as an agent. These patients were hypererg and very sensitive against special allergens. The reactions were unconsciousness, disturbances during walking etc. These patients were ideal for tests with homeopathic remedies and with special informed water. The allergen was prepared in the above mentioned homeopathic way, not in dilution steps 1:10 but in steps 1:5 to have a finer graduation. Avogadro's constant then is reached after 35 steps. The results of these experiments are shown in Fig. 7.

In Fig. 7 the abbreviations D1, D2 etc. mean the potencies 1:5, 1:25 etc.  $\emptyset$  means the mother tincture (the allergen in solution). On the right side on top in Fig. 7 the results are shown in a diagram: Not only had the mother tincture bad effects, but also higher potencies up to ultra high dilutions above Avogadro's constant. Between these negative effects there were neutralizing potencies. One patient who got unconscious when she only had a skin contact with her allergen (a mould fungus) awaked again when she had a skin contact with one of these neutralizing potencies up to very high dilutions. These were proved several times in controlled double blind experiments.

The same experiments were also carried out with electromagnetic signals, using a frequency generator, shown in the 2. row in Fig. 7. The mentioned patient got unconscious with a very weak signal of 3 Hz. The first neutralizing frequency was 10 Hz. In these experiments a wire of 3 feet length at the output of the frequency generator (output voltage 1 volt) was used as an antenna. The patient was seated in a distance of 6 feet from the antenna.

Also with electromagnetic signals there was a periodic effect with alternating bad effects and neutralizing effects. The next row in Fig. 7 (left side) shows a third experiment: The neutralizing frequency was stored in water by means of a wire coil round a well with water, using some mA current through the coil and 5 minutes time. After this the water was succussed. With this water, too, the unconscious patient awaked when she get skin contact with this water. The water had stored this information over several months.

On the right side below in Fig. 7 it is shown a fourth experiment: One of the tested patients was so sensitive, that she had reactions even in a distance of one foot to her allergen. In this case it was possible to use a wire-grate between the allergen and the patient in order to shield the patient from the electromagnetic signals of the allergen. When the mesh distance is smaller than the wavelength of the signal, the wire-grate is impenetrable to it. The results were: distances between 0.1 and 1 cm shielded the patient, dependent on the value of the neutralizing frequency, because several such frequencies were possible, higher and lower ones, as shown in Fig. 7 on the 2. row at the right side.

Wavelengths in the mm region are microwaves which work as a carrier for the low frequencies, similar to radio and TV. To this end we can look at Fig. 2: The frequencies, shown in Fig. 2 are mixed in such a way that the lower frequencies are modulations of the higher ones. This is also true for the IR frequencies.

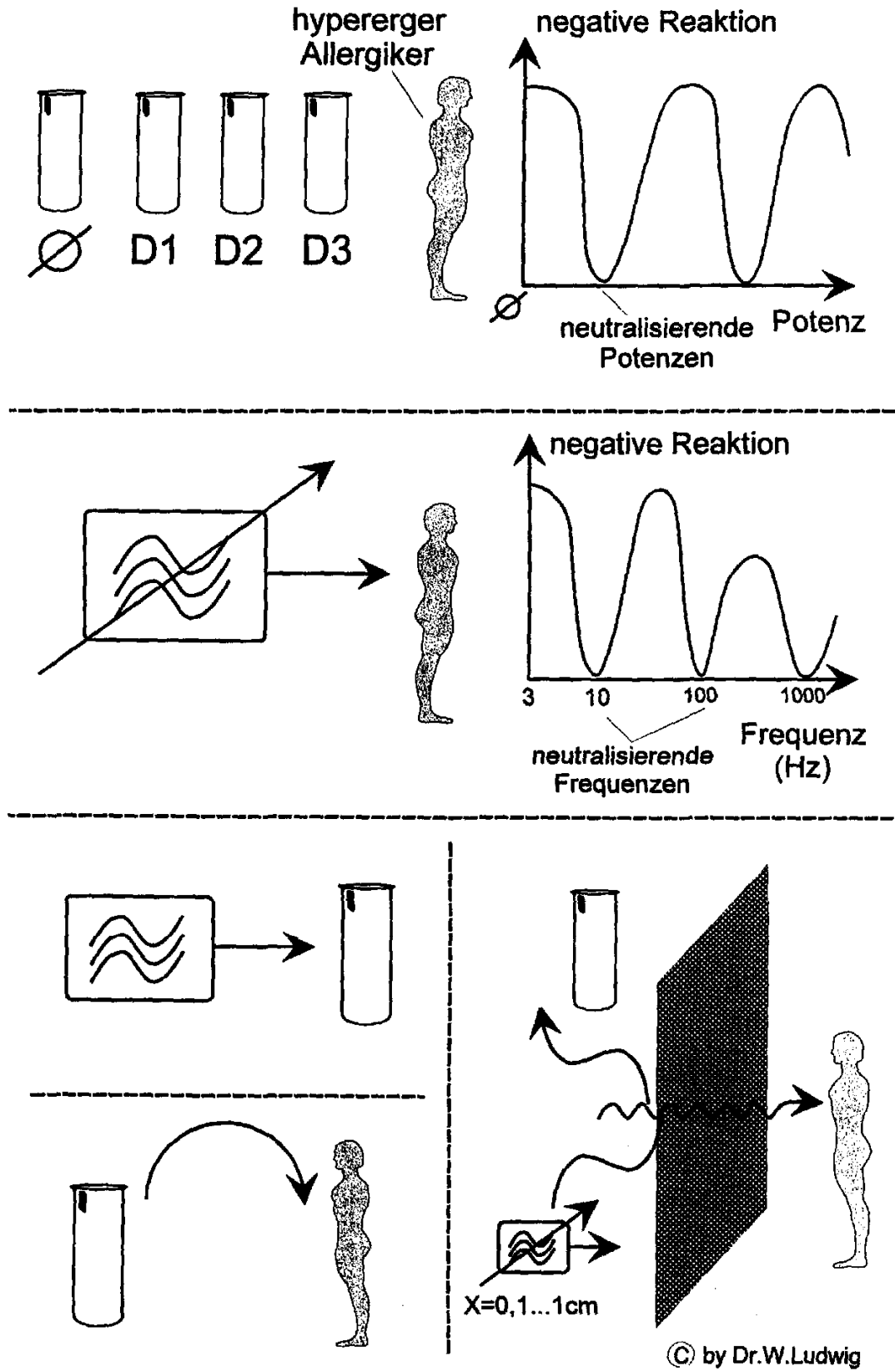


Fig.7 the experimental proof for the storage of information in water

According to Planck's formula for the energy of one quant: Quantumenergy =  $h \cdot \nu$  ( $h$  = Planck's actionquantum,  $\nu$  = frequency), the energy of the IR frequencies is higher than that of microwave fre-

quencies. Therefore also these IR frequencies are important. Experiments with the medicament testing according to VOLL showed that it could not work when the IR signals are shielded by means of plexiglass (which is impenetrable against 3,2  $\mu\text{m}$ , the distance vibration of O and H, see Fig. 2). Also cooling of the remedy has the same effect, but heating improves the effect according to VOLL.

All these experiments show that the frequency spectrum of water has effects on the human body. The important experiments made by J. Beneviste et al. are explained in detail in the book „The Memory of Water“ from Michel Schiff (3). Therefore it is not necessary to repeat this here.

## 9. Spektra of water in the lowfrequency region

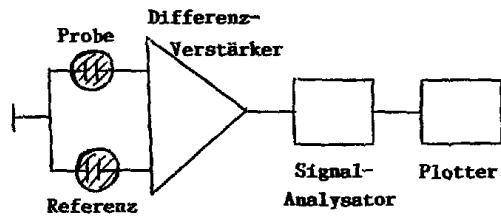


Fig. 8 shows the diagram, used for measurements in the low frequency region: a low noise difference amplifier is connected to the input of a signal generator and a plotter to its output. To the input of the differential amplifier two wells with platin electrodes are connected. The wells are made of quartz and have a magnetic shield against electro smog. The procedure is explained below.

Fig. 8 principle diagram of the signal analyzer

To each substance a placebo is necessary (the pour solvent). At first in both wells (Fig. 8) the placebo is filled and the preamplifier is adjusted in amplitude and phase by means of a resistor and a condenser. This procedure must be repeated several times. Then in the well for the sample („Probe“) the placebo is changed against the verum (substance to be measured). On the analyzer the sensitivity (SN in decibel Volt = dBV), full scale (FS in dBV), the frequency span (SPAN), the resolution (e.g.  $\beta = 12.5$  Hz) and the averages (AVG to reduce the noise) are adjusted. Often AVG = 1000 averages are necessary: the coherent signal remains constant while the incoherent noise is reduced. (The human organism uses the parallel method with the same result, but in shorter time).

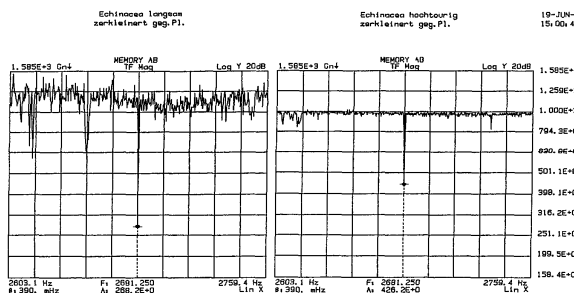


Fig. 9: spectrum of slowly grinded echinacea (left) and with high speed (right)

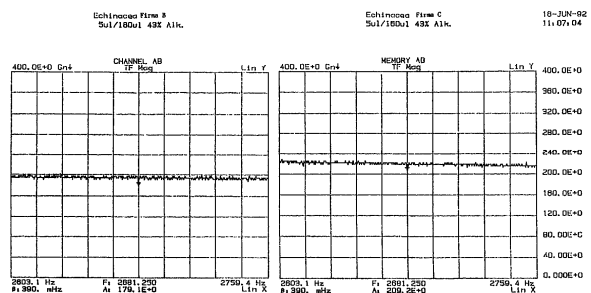


Fig.10 spectra of mechanical succussed echinacea

Fig. 9/10 show the influence of the kind of crusher and of succussion upon the quality of the signal, in this case echinacea 6X. In Fig 9, left, a very smooth method, developed by Dr. Kalbermatten, Switzerland, was used (CERES remedies) using a special mill. In Fig. 9, right, a high speed crusher was used (this is the normally used way!): the signal is smaller and more averages were necessary. In both cases hand-succussion was used. Fig. 10 shows echinacea 6X from two different companies using mechanical succussion. This gives very small signals. In Fig. 9/10 a special mode was used (transfer function magnitude = TF mag). In this case the signals are negative.

## 10. Storage of elektromagnetic signals in water

Fig. 11 shows water which was induced with a weak 10 kHz signal by means of a magnetic coil (20 minutes). It is interesting that also sidebands + 50 Hz occurred, coming from the power line frequency (the signal generator was run with power line 50 Hz). This normally is an undesired effect, but in this case it proved the stored signal. In several repetitions the 3 signals 9.950 Hz, 10.000 Hz and 10.050 Hz were present while all other noise signals changed their position.

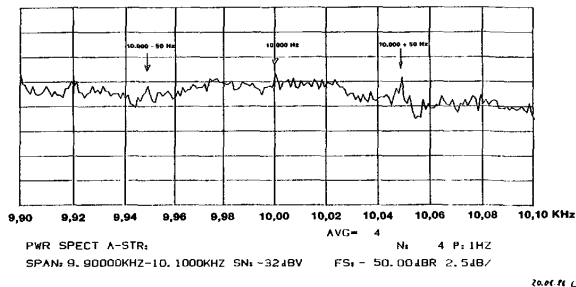


Fig.11: storage of 10 kHz in water

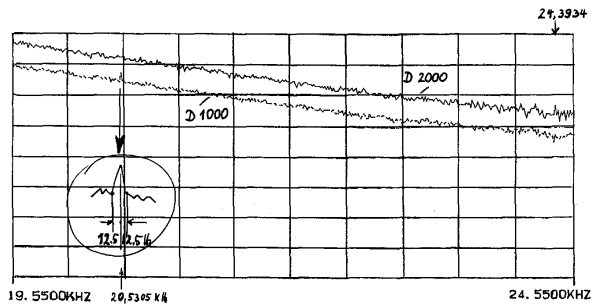


Fig.12: high potency spectra: arnica 1000X and 2000X

## 11. High potencies

In Fig. 12 two spectra are shown: arnica 1000X with a small peak at 20.5305 kHz with a bandwidth of 25 Hz and arnica 2000X with a very small peak at 24.39336 Hz. All repetitions gave the same frequencies.

## 12. Big lowfrequency signals

Fig.13 shows the spectrum from a remedy (VITACUR, sections of a series, 20 repetitions) with very strong signals in the ELF region at 4 Hz and the 2. harmonic vibration at 12 Hz. This remedy is in development and the signals were stored by a special method, called „soliton induction“. It is ridiculous that several scientists in universities could not believe that water is able to store such low frequencies, but this is true!

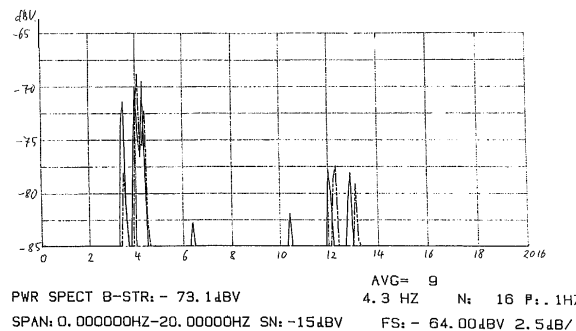
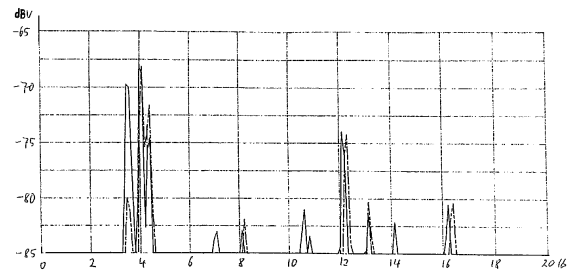


Fig.13: Spectra in the ELF-region („ Vitakur“, 4 repetitions)



## 13. Distinct lowfrequency signals of remedies

Fig. 14 shows two spectra of remedies with frequencies at 6.6 kHz and 6.7 kHz in accordance with theoretical calculations made by C.W.Smith (see Fig. 7) with the result that circular shaped water clusters should have frequencies near 6 kHz.

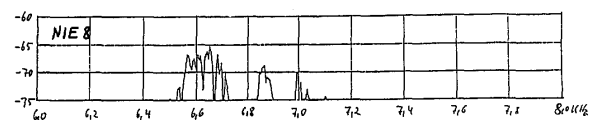
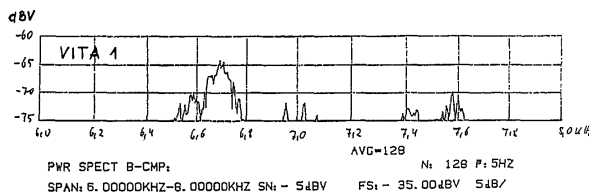
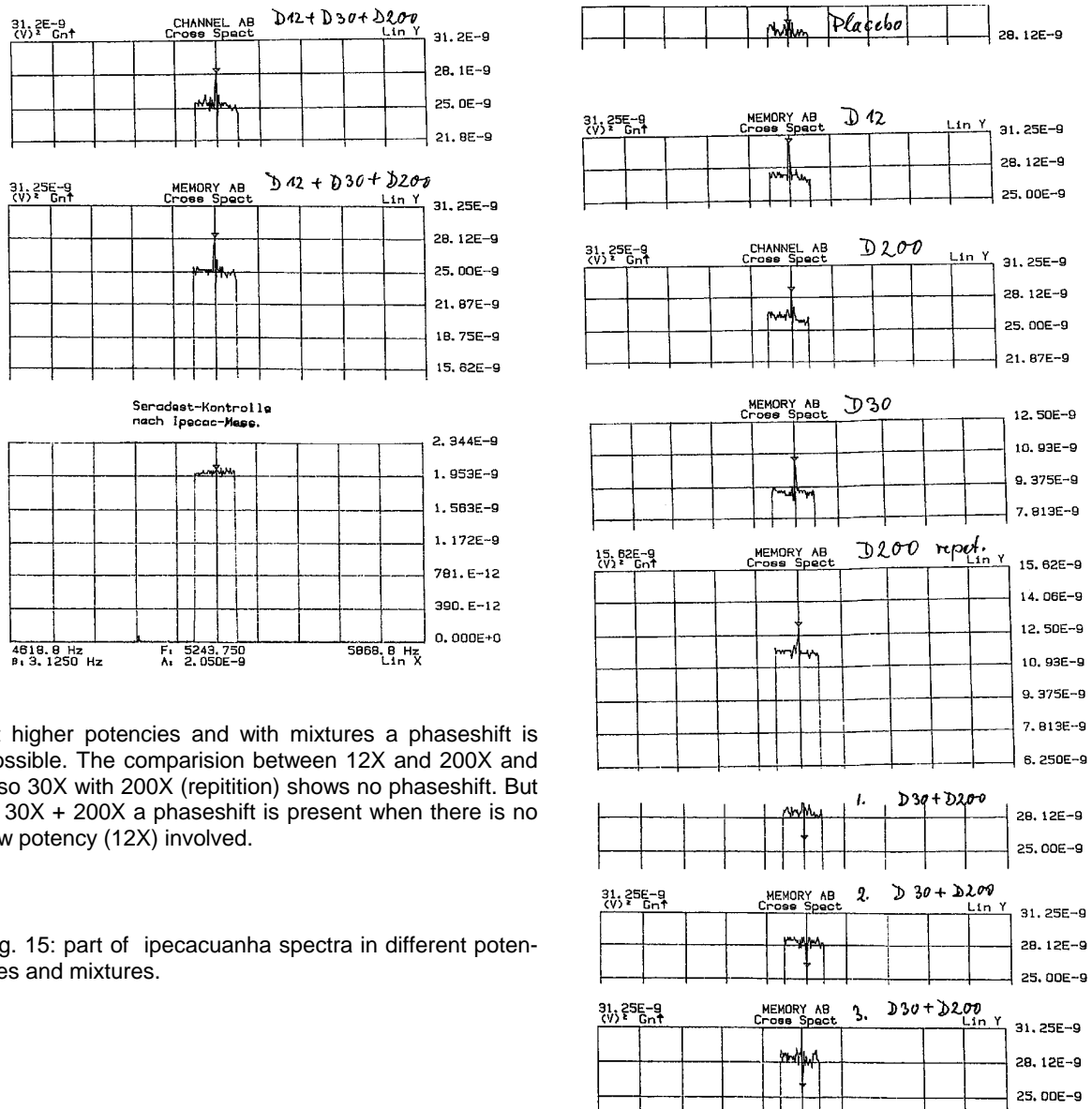


Fig.14: Spectra in the kilohertz region of 2 remedies



## 14. Mixed potencies

Fig. 15 shows measurements from ipecacuanha, a plant from South America, used as a remedy against migrain and nausea. These measurements were carried out with potencies from 5X to 200X. Here only 12X, 30X and 200X are shown and also mixtures of these potencies. To reduce the time consuming measurements, only a small part of the spectrum was plotted. Primary measurements showed that the basic frequency for all potencies is 5.24375 kHz, so only this part was plotted which reduces the time extremely.



At higher potencies and with mixtures a phaseshift is possible. The comparison between 12X and 200X and also 30X with 200X (repetition) shows no phaseshift. But in 30X + 200X a phaseshift is present when there is no low potency (12X) involved.

Fig. 15: part of ipecacuanha spectra in different potencies and mixtures.

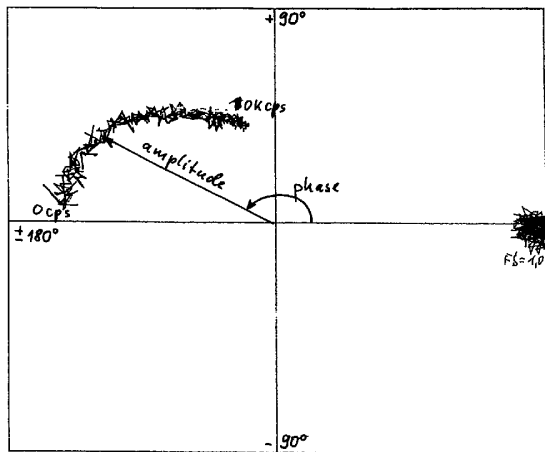


Fig. 16a

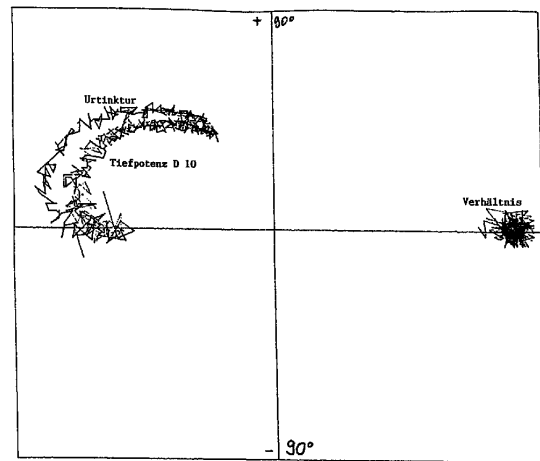


Fig. 16b

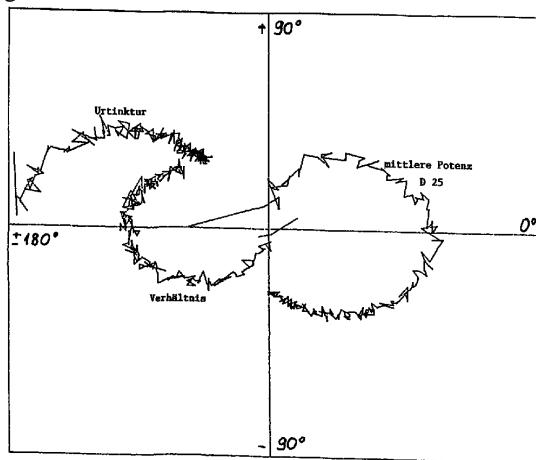


Fig. 16c

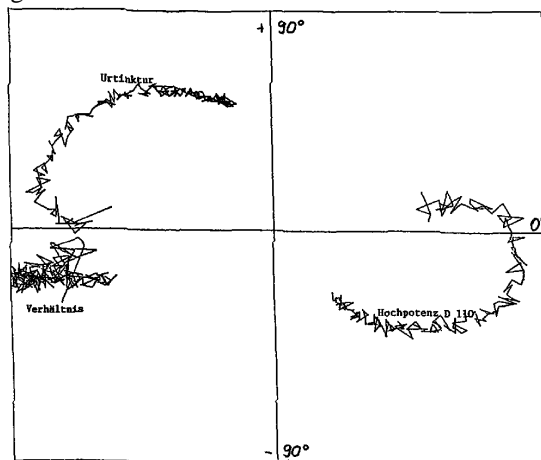


Fig. 16d

Fig. 16: spectra in polar coordinates from ipecacuanha in different potencies

With the signal analyzer it is not only possible to run cartesian plots, but also spectra in polar coordinates. Fig. 16 shows a section of the series from 5X to 200X. The frequencies from 0 to 10 kHz were plotted in polar coordinates and Fig. 16a shows the principle: The vector from the zero point is the amplitude, the angle from 0 phase (right side) to the vector is the phase angle and the quotient out of two measurements is plotted in the same diagram, in this case both fillings in the sample well were the same, therefore the quotient = 1 with 0° phase angle (spot at the right side „FS = 1.0“).

Fig. 16b shows ipecacuanha 10X (hand succussed) in comparison with the diluted (and not succussed) mother tincture. The amplitude is a bit smaller than that of the mother tincture and the phase angle is 0°.

Fig. 16c shows ipecacuanha 25X (hand succussed, from an other production than shown in Fig. 15) in comparison with the diluted mother tincture like Fig. 16b. The 25X is at the right side and the quotient is running nearly through all phase angles (marked with „Verhältnis“ in Fig. 16c). Also the amplitude changes with the frequency from nearly 0 to 1/2 of the value from the mother tincture. In this transitional state near Avogadro's constant the mother tincture in the potency is balanced with the storage in water II.

Fig. 16d shows ipecacuanha 110X. Here the phase shift is nearly 180°. All low potencies showed diagrams like Fig. 16b, all transitional potencies 20X to 30X showed diagrams like Fig. 16c and all high potencies diagrams like Fig. 16d. Remember § 6: in a high potency the phase of the water cluster predominates with 180° phase shift in respect to the mother tincture and is (according to § 7) synchronized with a world wide trigger signal. Low potencies, medium potencies and high potencies have therefore very different properties.

## 15. UV spectra

Water clusters absorb very different in the ultra violet region according to their shape. Experiences since 25 years showed that water of high biological quality have high UV absorption in respect to a placebo. A placebo is used to eliminate the absorption of solved minerals. To measure this, a double beam spectral photometer with quartz cuvettes is used and in both cuvettes water with the same chemistry is filled in. The two samples of water differ only in its physical structure. We will see that physical disturbed water has lower UV absorption than the placebo.

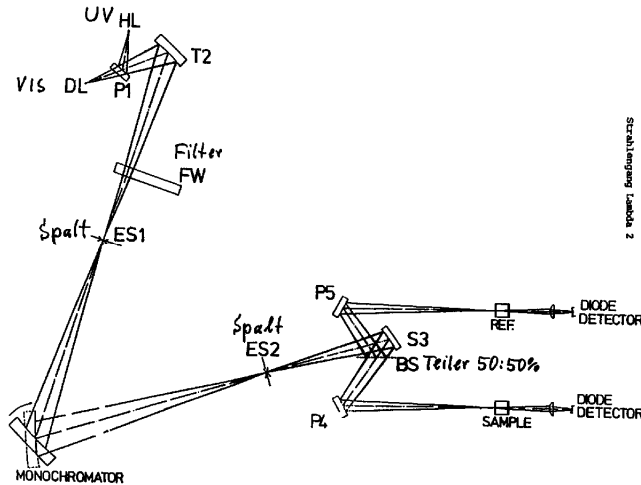


Fig.17: path of rays in a double beam photometer

The background correction corresponds with the adjustment of the preamplifier in Fig. 8. This is made with the same liquids (two times placebo) in both cuvettes.

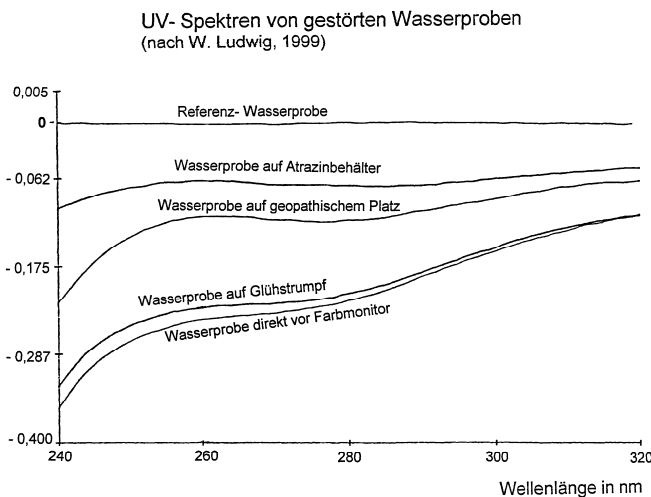


Fig.18: UV-Spektren of disturbed water

The two lowest spectra show very hard disturbances: one water was near a radioactive Auer incandescent mantle, the other water was in front of a color monitor, 5 hours each. All these waters were succussed after the influences.

Fig. 17 shows the path of rays in the used photometer ( $\lambda 2$  from Perkin Elmer). HL is the halogen lamp for UV light. The monochromator is a holographic grid that separates the UV light in its different wavelengths. The half transparent mirror BS divides the ray in two beams. These go through the quartz cuvettes REF = reference (placebo) and SAMPLE = verum and then to two detectors. By means of a background correction an unbalance between both beams can be eliminated.

Fig. 18 shows examples of disturbed water, showing negative absorption in respect to the placebo in UV wavelengths from 240 nm to 320 nm. The zero line was received with placebo in both cuvettes after background correction. The spectrum below the zero line shows water which was 24 hours near a bottle with atrazin, a poison against parasites, used in agriculture in some countries (in most of the countries to day it is forbidden). Even the weak electromagnetic signals coming out of this substance is able to disturb the water near by.

The next spectrum below the atrazin experiment shows water which was 8 hours upon a geopathic disturbed place. This is a proof for the existence of geopathic lines.

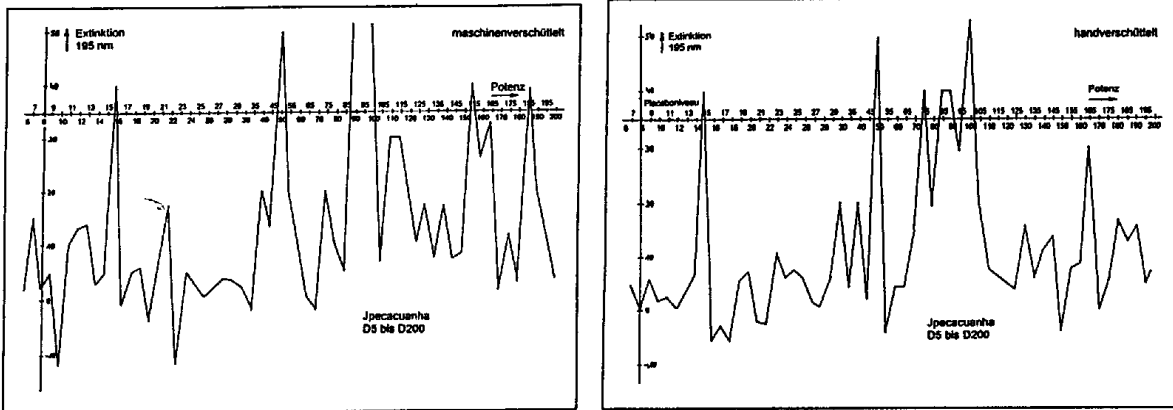


Fig.19: UV-absorption of different ipecacuanha-potencies (5X to 200X) at 195nm

Fig. 19 shows the complete potency row of ipecacuanha 5X up to 200X at the wavelength of 195 nm. The left spectrum belongs to hydraulic succused samples (without electro smog), the right one to hand succused samples. Both spectra are very similar and show the same periodicity like in the experiments of C.W.Smith (2 and Fig. 7) and also of J. Benveniste (3).

### 16. Measurements in the highfrequency region

Below spectra from ipacacuanha in the radio frequency region are shown. These are the same substances which were measured in the low frequency region (Fig. 15). Fig. 20 shows the isolated potencies and Fig. 21 the mixtures in the frequency region from 250 kHz up to 930 kHz. In this case a special resonance spectrometer with 60 fixed frequencies was used („REDEM“). It is obvious that the higher the potency the refinder the spectra.

The spectra of the mixtures gave complete new pictures with interference-frequencies. This is a proof for the right of exist for such „homaccord“ remedies.

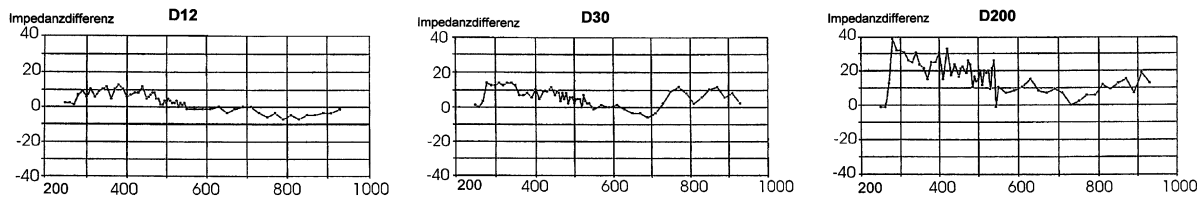


Fig.20: impedance-difference-spektra of ipecacuanha 12X, 30X and 200X

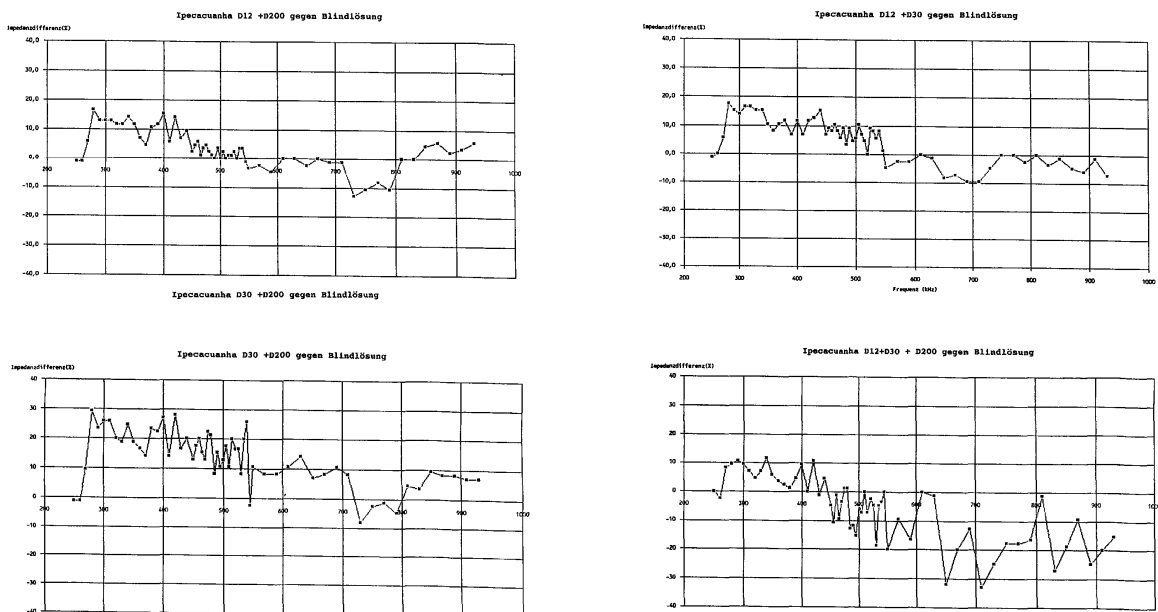


Fig.21: impedance-difference-spektra of 4 different ipecacuanha-potency-mixtures

## 17. Spectra of „light-waters“

From the university of Milano, Italy, we got samples of waters which are said to have healing qualities. They have strong signals in the brainwave frequencies (4).

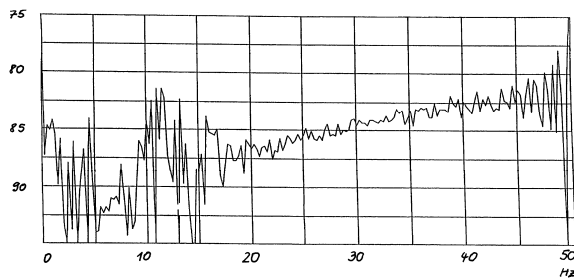


Fig.22: Spectrum of water from Lourdes

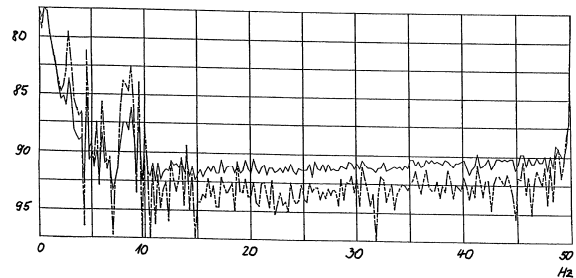


Fig. 23. Spectrum of water from Fatima

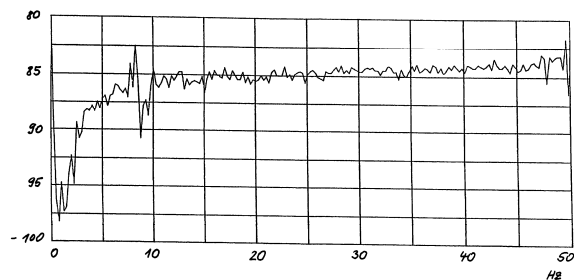


Fig. 24: Spectrum of water from a spring 300m near „Madonna degli Angeli“

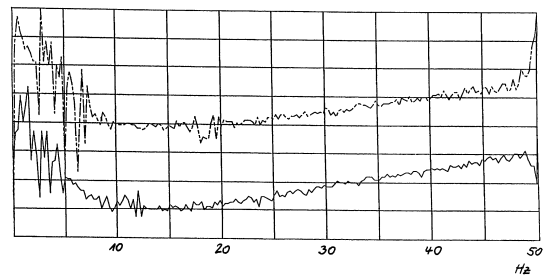


Fig. 25: Spectrum of water from the spring „Ma-donna degli Angeli“

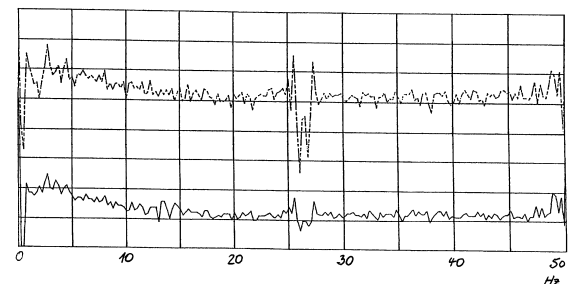


Fig.26: Spectrum of water from a spring in San Damiano

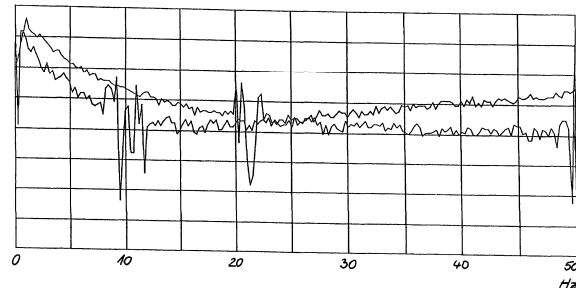


Fig.27: Spectrum of tap water from Neuchatel

## 18. Summary

The demonstrated measurements are only a very small part out of a very comprehensive work at the technology centre in Horb a.N. in Germany. They prove the memory of water and that homeopathic remedies have a lot of stored signals which can react with human resonators inside the organism. The opinion „in a homeopathic high potency nothing is inside“ is due to the mistake that matter does only consist of fermions. But, it mainly consists of bosons which control matter. Water consists of much more interaction quants (photons) than material quants (oxygen and hydrogen).

## 19. Literature

[ 1 ] V.D. Khavryntchenko and O.V. Zhalko-Tytarenko: Memory Effects in Water. Quantum Chemistry Modelling and Vibrational Spectra Verification. 2<sup>nd</sup> World Congress for Electricity and Magnetism in Biology and Medicine, June 8-13, 1997, Bologna, Italy.

[ 2 ] C.W.Smith: Is a Living System a Macroscopic Quantum System? The Center for Frontier Sciences at Temple University, Z, no. 1 (1998), in this paper more literature

[ 3 ] M. Schiff: The memory of water

[ 4 ] C. Dalla Via: Phänomen Wasser, vgs-Verlag, Köln, 1997