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Dr Ludwig, Geranienweg 14, D-76547 Sinzheim

## Institut für Wasser und Umweltverbesserung

14.6.1999

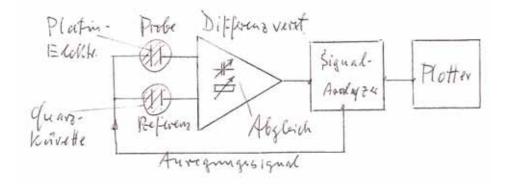
Dear Mr Ratheiser,

As I mentioned in our recent telephone call, my Rockland Signal Analyzer is not working and cannot be repaired. It will take a long time for the replacement device on order to be delivered. That is why Rockland lent me a Signal Analyzer for a few days so that I was finally in a position to test the two water samples

After a comprehensive series of preliminary tests, it turned out that the frequency range from 1 Hz to 100 Hz was best for measuring the samples. As a point of reference for my two-channel measurements, I used spring water which is recognized as being of good quality and which has almost the same electrical conductivity. I was able to compensate for the slight differences in conductivity by adjusting the magnitude and phase of the differential pre-amplifier.

I used the well-known Haderheck spring as a reference for the well water supplied by Mr Ernst Dedy-Wolesen, Mülheim/Ruhr, while water from St. Leonard's spring, which is known to be of very high quality, was eminently suitable as a point of comparison for the tap water from Cologne-Kalk supplied by Mr Horst Wittig.

The test set-up was as follows:



Spectrum (1) compares tap water from Cologne-Kalk with St. Leonard's spring; the most important signals, corresponding to wave patterns in the brain, are the  $\Theta$ ,  $\dot{\alpha}$  and  $\beta$  frequency bands (repeated several times).

Spectrum (2) shows the same water from Cologne which has passed through the UMH appliance, again in comparison to St. Leonhard's spring (which, of course, was not treated in the UMH appliance). In both spectra (1) and (2) there are no unfavourable frequencies. In other words, the tap water from Cologne-Kalk is of good quality (as Mr Wittig reported) and the positive frequencies are retained when the water flows through the UMH appliance.

Spectrum (3) shows the well water from Mülheim/Ruhr (compared with water from Haderheck spring), which has the so-called lower "unease frequency" (identified by Prof. Gray Walter, USA) at approx. 2.5 Hz, no  $\Theta$  frequencies, somewhat elevated  $\dot{\alpha}$  frequencies and no  $\beta$  frequencies.

Spectra (4) and (5) compare the well water after it has passed through the UMH appliance with the water from Haderheck. The "unease frequency" has disappeared and the  $\Theta$  frequency band is now present.

As biologically excellent spring water was used as a reference in both cases, the signals corresponding to wave patterns in the brain, which are known to exist in good-quality spring water, are assessed as being very positive as they are also present in the reference samples. That is also why they only appear very small (only as differentials).

Fortunately, the so-called "cancer frequency" of 1.8 Hz, which has been detected in some tap water samples and which has been identified in cancerous tissue by Siemens, did not appear in these samples.

The well water from Mülheim/Ruhr should not be held to be of bad quality but the positive effects of the UMH appliance are clearly identifiable.

In all, 64 repeated measurements were carried out with the same results and a so-called "waterfall diagram" was used. As it is not easy to interpret, it is only provided here for the well water sample from Mülheim/Ruhr: spectrum (6).

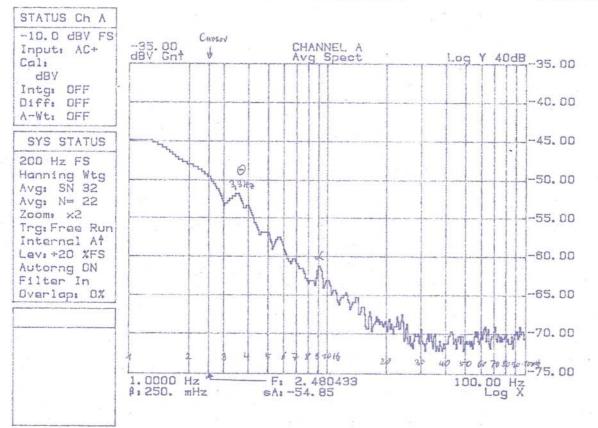
Closer inspection reveals that the "unease frequency" no longer appears after the water has passed through the UMH appliance (this is best seen at the bottom of spectrum (6)).

In conclusion, this simple example shows that the UMH appliance eliminates unfavourable frequencies from water and retains positive frequencies.

Best regards

Dr rer nat W. Ludwig

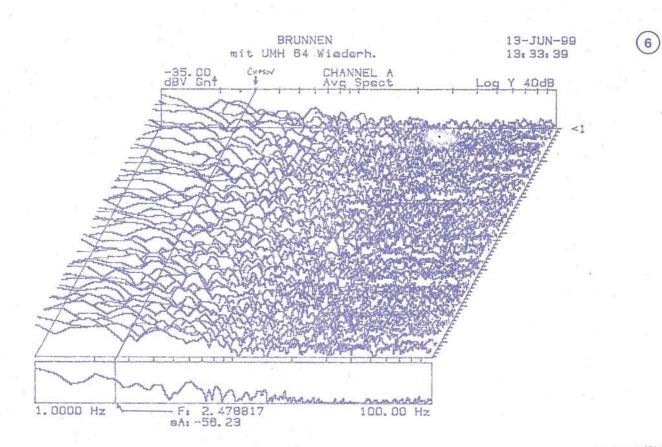
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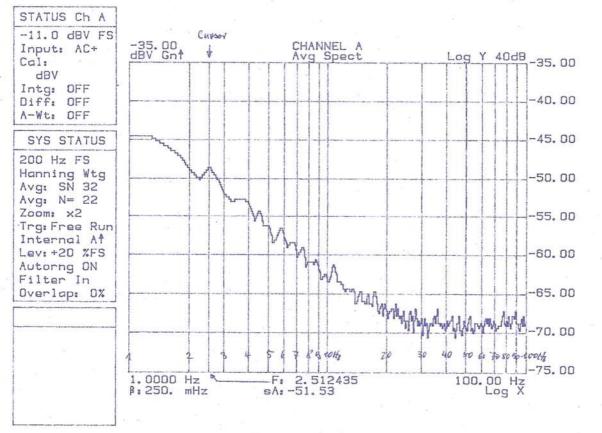
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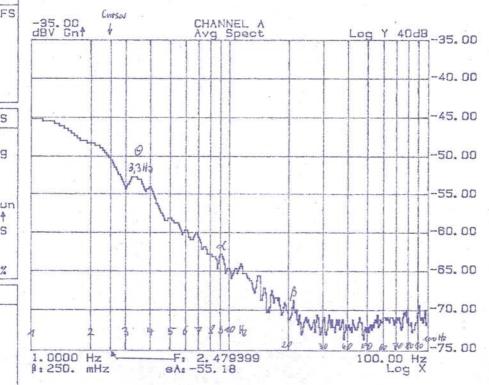


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BRUNNEN

mit UMH

Dr. rer. nat. W. Ludwig Institut für Biophysik Silcherstr. 21 D-72160 Horb a.N. KOELN-KALK DHNE

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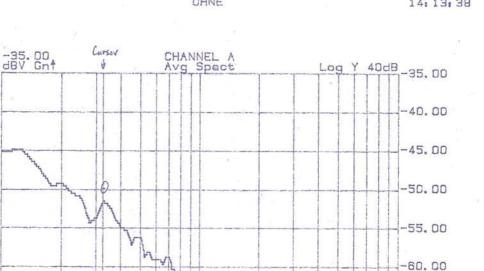
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-F: 3.264524 sA: -54.60

6

1.0000 Hz β:250. mHz

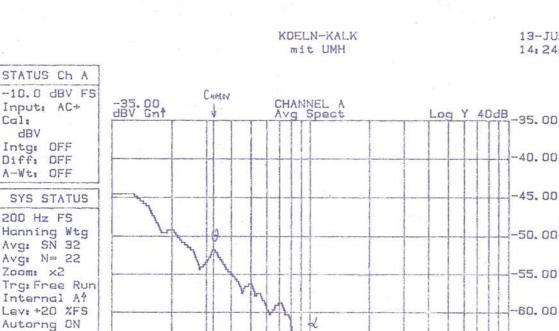
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