1. Introduction

It is for some time known that paramagnetic/diamagnetic properties of matter, including water, can be measured (Fig 4a), and that these are a result of complex dynamics – constant making and breaking of water clusters [1]. The method of Opto-Magnetic spectroscopy introduced by Koruga et al. [2,3] is based on the polarization properties of water and in result gives a summarized magnetic properties (paramagnetic and diamagnetic) of the sample (Fig 4b), among other useful information. Thus, Opto-magnetic spectroscopy was shown to be a valuable tool with great potential in various biomedical and other applications [3-5].

Aquaphotomics is a scientific method which gives insight into water organization through specific “water-memories” approach, using near infrared light [6]. Using near infrared spectroscopy and Aquaphotomics it is possible to observe and analyze water molecular vibrations in relation to other molecular vibrations and function of the whole system analyzed under various perturbations [6-7].

So, what happens to water and its magnetic properties in cancerous tissues? Or what happens to water exposed to light? Or plants in dark and light environment? How anesthetics change paramagnetic properties of tissues? How water reacts to the words spoken is it? And does water really remember?

2. Methods

**Method I**

Opto-Magnetic Imaging Spectroscopy (OMIS)

0=90°

53°, Brewster angle

![Opto-Magnetic Imaging Spectroscopy](image)

**Method II**

Near Infra Red Spectroscopy (NIRS) & Aquaphotomics

- NIR spectrometer: Hamamatsu TG 5113GC (Hamamatsu, Japan)
- Sample cell: quartz cell, path length 1mm
- Mode: Transmittance

![NIR and Aquaphotomics](image)

3. Anesthetics disrupt order?

The Effects of Anesthetics on the Electroencephalogram

- Effects of Anesthetics on the Electroencephalogram
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![Anesthetics disrupt order](image)

4. Light induces order?

**Fig. 3** Basic principles of Aquaphotomics and an example of aquagram derived from NIR water spectrum

**Fig. 4** Opto-magnetic spectra of pure water

5. Cancer – disruption of order or consequence?

**Fig. 5** Colorectal cancer, mucosa, cancer

![Cancer](image)

6. Homeopathy and water memory

**Fig. 6** Adrenaline (Epinephrine)

**Fig. 7** Adrenaline and Water

![Homeopathy and water memory](image)

7. Conclusions

1) Paramagnetic/Diamagnetic (PD) property of water may be determinate by proton magnetometers based on Overhauser effect (measuring changes in n) and by Opto-Magnetic Imaging Spectroscopy: OMIS (qualitative method giving relative PD change in normalized arbitrary units, during light-water interaction).

2) Since these two methods are compatible and complementary we used OMIS to characterize skin, plants, mucous tissue of colon and different drug types of medicines, including placebo.

3) Applying anesthesics on skin leads to diminished paramagnetic properties.

4) After exposure to sun, paramagnetic of plants’ leaves is increased.

5) Paramagnetic properties of adenocarcinoma tissues are decreased comparing to healthy mucous tissue of colon.

6) NIRS diagrams of paramagnetic/diamagnetic properties of water, adenalin, homeopathic solutions of adrenalin and different placentas were different. This is also confirmed by using Aquaphotomics. These are very preliminary results and more research is necessary for final conclusion.

**References**


**Acknowledgments**

This research has been partially funded by Ministry of Science and Technological Development of Republic of Serbia through Projects III 41006 and III 41039

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**Comparative study of water and aqueous systems using near infrared and opto – magnetic imaging spectroscopy**

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