

Comparative Study on the Properties of Magnetized Water versus Tap Water

Rodriguez-Garcia, Roberto (School: Florencia Garcia High School)

Water is the most important source for life and for the well-being maintenance of the planet earth. Economic and viable alternatives have been proposed for the treatment of waters, among them is presented magnetized water as a green technology. This research demonstrated the effect of the magnetic field on the properties of water when is compared to tap water. During this research, 6 official tests were carried out for the characterization for both of types of water: solvation capacity, pH, bacterial growth, total solids, germination, and conductivity among other physical tests to compare both waters. The magnetization of the water was investigated using one of the Rosset proposal (1992), "through a constant magnetic field by means of a permanent magnet for 48 hours." The results showed a significant difference between solvation capacity, pH, germination, and bacteria growth. However, the tests that did not show any difference between themselves were the conductivity test and total solids test. Through this research, it was found that magnetized water has different qualities when compared to tap water. This characterization will help to consider magnetized water as a potential environmental able to be used on industries with a low cost and no chemical products.