

Bioelectromagnetic Interference Analysis*

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Abstract

Recent studies on the effects of Electromagnetic fields on biomaterials is an active research area. These studies has not found yet the induce mutation mechanism in cells.

In this paper, classical electromagnetic and Quantum Electrodynamics (QED) have been explained. An experimental study is made to investigates Bioelectromagnetics interaction with the aid of modern measuring and analysis systems. This effect has been simulated using computational system Technology (CST)software.

It was found that the Electromagnetic pulses could cause resonance at frequency range which is associated with maximum absorption of EM energy from Biomaterials. It would affect the characteristics of the materials.

Keywords: Electromagnetics interference(EMI), Bioelectromagnetic interference, (BEMI).

*For the paper in Arabic see pages (155-178)

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