

Abstract Submitted  
for the MAR17 Meeting of  
The American Physical Society

**Effect of high electromagnetic fields on cellular growth** ABDULLAH ALBALAWI, MOHAMMED MUSTAFA, SAMINA MASOOD, Univ of Houston - Clear Lake — It is already known that high-intensity electromagnetic field affect the human lung growth and forces the T-cells to decrease by 20-30 percent. The electromagnetic field had a severe impact on human T-cells in contrast to lung cells. Due to the high-intensity electromagnetic field, the growth of T-cells becomes low and release of  $Ca^{+2}$  increases up to 3.5 times more than the lung cells. The high-intensity electromagnetic radiations do not directly produce cancer cells but had a severe impact on the growth of T-cells. It can also be said that electromagnetic field acts a role in the cancer initiation. It creates disordered in the structure of membranes and gesture transduction. The higher exposure to electromagnetic field increases PKC-alpha and this larger release from membranes cannot be controlled. It was concluded that greater exposure to the electromagnetic field is dangerous and had a severe impact on T-cells growth and lung cells growth and due to this greater possibility of leukemia occurrence. We show a similar effect of electromagnetic fields single celled bacteria to compare the bacterial cellular growth with the human cells using the bacteria strains which are commonly found in human body.

Abdullah Albalawi  
Univ of Houston - Clear Lake

Date submitted: 15 Feb 2017

Electronic form version 1.4