

ABSTRACT NO.: 528

TITLE: **Research of radiation in biological systems 1 (Effects on the cognitive functions from radiofrequency exposure emitted by cell phones)**

AUTHORS: **Shaun Gafoor**
 Prashant Maharaj

SUPERVISORS: **Dr. Andrews**
 Dr. De Souza

This research examines the possible effects on the cognitive functions from radiofrequency (RFR) exposure emitted by cellular phones. Literature from previous studies detailing various experiments that were conducted was thoroughly examined in order to show any similarities and the major differences between results and to investigate whether RFR exposure from cellular phones had any positive effects, negative effects or no effect at all on the cognitive functions in human beings in order to determine if cell phones affect human health. Experiments reviewed, used animals such as rats, mice, lizards and monkeys while other studies used human subjects. There were various conditions used before and during the experiments from previous studies in the scientific literature in which the thermal and non-thermal effects were investigated. As such, different results were obtained for the different parameters of the cognitive functions. While some studies showed that RFR exposure increased response time, others showed that it slightly affected spatial memory, decreased concentration and increased temperature levels in tissue which can be hazardous to the organism. In contradiction, several studies showed that there were either very little or no effects found and it is quite possible that such fluctuating results could have been obtained from the specific conditions that were applied.