

FURTHER OBSERVATIONS ON BIOLOGICAL EFFECTS OF NONTHERMALIZING, HIGH POWER MICROWAVE (HPM) PULSES

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Introduction

In a number of previous studies biological effects of electromagnetic field exposure have been reported. Some of these studies have been performed at levels of exposure that could produce heating of the tissue (Pakhomov, Mathur et al. 2000; Natarajan, Vijayalaxmi et al. 2002; Pakhomov, Gajsek et al. 2002). In this study we have focused on the possible effects of nonthermalizing, high power microwave (HPM) pulses. A radio frequency power generator, which delivers 1.6 GHz pulses with pulse duration of 0.55 microseconds was used at electrical field strength up to 21.7 kV/m.