



“Gheorghe Asachi” Technical University of Iasi, Romania



SOME PRACTICAL CONSIDERATIONS IN ELECTROMAGNETIC BIOCOMPATIBILITY

Mircea I. Buzdugan*, Horia Bălan

Technical University of Cluj-Napoca, 28 Memorandumului Street, Cluj-Napoca, Romania

Abstract

The paper presents a review of the authors' results in recent years, concerning possible harmful effects of electromagnetic fields on human beings. It is quite obvious that modern life and civilization came along with a great amount of man made electric and magnetic fields. In this respect every living being is increasingly exposed to electromagnetic fields of various frequency components. Perhaps the most common source of exposure is represented by the extremely low frequency electromagnetic fields of 50Hz (60Hz), coming from the transmission and distribution electric power lines and equipments, but in the same time from the modern household electric appliances. A prudential avoidance policy on this matter must take into consideration, despite any contrary opinions, that the international regulations on long term human exposure should definitely change and a new set of lower threshold for extremely low frequency magnetic fields must be settled. Several examples of possible harmful effects determined by extremely low frequency magnetic fields existing in different quotidian environments are depicted, along with some straightforward countermeasures. The authors consider that the responsibility for a “clean” electromagnetic environment and the fight against this virtual insidious form of “bioterrorism” and disharmony on the earth should become a constant issue.

Key words: biocompatibility, electromagnetic compatibility, electromagnetic fields, extremely low frequency, magnetic fields

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* Author to whom all correspondence should be addressed: e-mail: mircea.buzdugan@insta.utcluj.ro; Phone: +40744560833; +402642022520