

their “metastatic potency” seems to be reduced, as it is evident from our results on Wistar rats. There is also data that the EMFs, as well as the generalized electromagnetic radiation fields, are able to induce differentiation in cancer cells and other types of undifferentiated cells (27,28).

It must be emphasized that for the first time a low intensity RFs EMF is used and it is essential this electromagnetic field to be carefully designed on the basis of the emitted electromagnetic frequencies from the target cells, in order to be effective. Also, the intensity of the electric field we used was 75 times lower and the intensity of the magnetic field was more than 1800 times less than the average of the international safety standards according to the International Committee of Atomic Energy (E.K.E.F.E DEMOKRITOS, Athens Greece) (17). Because of that, the use of this device as an electronic instrument in cancer treatment seems safe. Unpublished data of ours, from the follow up of tumor-bearing animals and cancer patients exposed to similar with the present investigation EMFs, are very encouraging.

### **Future targets**

Our data concerning the alterations of radio-frequency pattern of sarcoma cells after repeated exposures to EMFs, indicate that in order to affect the biological system of these cells, it is crucial to make readjustments of the RF, in order achieve a better electromagnetic resonance of cells, as close as possible as can be to that of the normal cells. If this hypothesis is right, it is expected that the final radio-frequencies of the sarcoma cells would be close to those of the smooth muscle cells. In this case the sarcoma cells should lose their malignant phenotype, so that their inoculation to