

CONTENTS

Historical Development of the Study of the Effects of ELF Fields.....	1
S. M. Michaelson, M. Grandolfo, and A. Rindi	
Criteria for Electric, Magnetic or Electromagnetic Field Bioeffects Investigations.....	15
S. M. Michaelson	
Physical Description of Exposure to Static and ELF Electromagnetic Fields.....	31
M. Grandolfo, and P. Vecchia	
Natural and Man-Made Environmental Exposures to Static and ELF Electromagnetic Fields.....	49
M. Grandolfo, and P. Vecchia	
Mechanisms for Biological Effects of Magnetic Fields..	71
T. S. Tenforde	
Biological Effects of Stationary Magnetic Fields.....	93
T. S. Tenforde	
Effects of DC Magnetic Fields on Behaviour.....	129
J. de Lorge	
Preliminary Observations: the Effects of a Static Magnetic Field on Chick Embryo Growth.....	141
F. Bersani, and Q. Zini	
Dosimetry for Extremely Low-Frequency Electric Fields.....	145
W. T. Kaune, and R. D. Phillips	
Mathematical Models of Bodies Exposed to ELF Fields and Scaling Criteria.....	167
R. Brambilla	

Dosimetric Probes and Concept of Dose for Power Frequency Electric Field Exposures.....	183
F. Lattarulo	
Instrumentation for Measurement of Power Frequency Electromagnetic Fields.....	187
R. Conti	
Dipole Antenna for ELF EMF Measurements.....	211
H. Trzaska	
Biophysical Principles of the Interaction of ELF Fields with Living Matter: I. Properties and Mechanisms.....	221
H. P. Schwan	
Biophysical Principles of the Interaction of ELF-Fields with Living Matter: II. Coupling Considerations and Forces.....	243
H. P. Schwan	
Interaction of ELF Electromagnetic Fields with Cell Membrane Receptors.....	273
M. Grattarola, F. Caratozzolo, and A. Chiabrera	
Interactions of ELF-Fields with Excitable Tissues.....	295
H. P. Schwan	
Synchronization of Neural Firing Patterns by Relatively Weak ELF Fields.....	313
H. Wachtel	
Effect of Low Frequency Pulsing Electromagnetic Fields on the Response of Human Normal and Leukemic Lymphocytes to Lectins.....	329
R. Cadossi, G. Emilia, and G. Torelli	
Effects Induced "in vitro" by Extremely Low Frequency Electromagnetic Fields (E.L.F.) on Blastogenesis of Human Lymphocytes and on Thromboxane B-2-Release by Ionophore-Stimulated Neutrophils...	335
P. Conti, G. E. Gigante, M. G. Cifone, E. Alesse, M. Reale, and P. U. Angeletti	
Experimental Evidence of Superconducting Properties in Human Ceruloplasmin.....	339
G. Giaquinta, C. Di Mauro, S. Onori, and S. Cannistraro	

Biological Effects of Electric Fields: an Overview.....	345
L. E. Anderson, and R. D. Phillips	
The Effect of High Intensity (50-60 Hz) Electric Fields on Animals.....	379
A. Veicsteinas	
Physiological Studies of Monkeys in Electric and Magnetic Fields at ELF Frequencies.....	409
J. D. Grissett, and W. G. Lotz	
Behavioral Studies of Monkeys in Electric and Magnetic Fields at ELF Frequencies.....	433
J. de Lorge	
Effect of ELF Fields on Bone Growth and Fracture Repair.....	441
M. Hinsenkamp, B. Tuerlinckx, and M. Rooze	
The Electromagnetic Environment and the Circadian Rhythms of Human Subjects.....	477
R. A. Wever	
Hematological and Biochemical Effects of ELF Fields in Man - Laboratory Experiments.....	525
R. Hauf	
Medical Control of Employees in the Electrical Industry Exposed to Low Frequency Electric Fields.....	539
J. Cabanes	
An Epidemiological Investigation of HV Substation Workers: Study Design and Preliminary Results.....	557
A. Checcucci	
Epidemiologic Studies of Persons Exposed to Power Frequency Electric and Magnetic Fields: A Critical Analysis.....	571
S. M. Michaelson	
Epidemiological Studies on Effects of Exposure to ELF Electromagnetic Fields.....	607
B. G. Knave, and S. G. Törnqvist	
Some Thoughts on the Socio-Political Aspects of Radiation Protection.....	621
B. F. M. Bosnjakovic	

Some Considerations About "Philia" and "Phobia" in Radioprotection.....	631
A. Checcucci	
Health Risk Assessment of Static and ELF Electric and Magnetic Fields.....	635
M. H. Repacholi	
Standards on Static and ELF Electric and Magnetic Fields and Their Scientific Basis.....	667
M. H. Repacholi	
Participants.....	685
Index.....	693

