

# TABLE OF CONTENTS

Introduction .....	1
<b>Charles Polk</b>	
<b>PART I — DIELECTRIC PERMITTIVITY AND ELECTRICAL CONDUCTIVITY OF BIOLOGICAL MATERIALS</b>	
Dielectric Properties of Tissues.....	27
<b>Kenneth R. Foster and Herman P. Schwan</b>	
<b>PART II — EFFECTS OF DC AND LOW FREQUENCY FIELDS</b>	
Chapter 1	
Interaction of DC Electric Fields with Living Matter.....	99
<b>Frank S. Barnes</b>	
Chapter 2	
Extremely Low Frequency (ELF) and Very Low Frequency Electric Fields: Rectification, Frequency Sensitivity, Noise, and Related Phenomena .....	121
<b>Frank S. Barnes</b>	
Chapter 3	
Extremely Low Frequency (ELF) Electrical Fields: Experimental Work on Biological Effects.....	139
<b>Morton W. Miller</b>	
Chapter 4	
Biological Effects of Static Magnetic Fields.....	169
<b>Richard B. Frankel</b>	
Chapter 5	
Interaction of ELF Magnetic Fields with Living Matter .....	197
<b>T. S. Tenforde</b>	
<b>PART III — EFFECTS OF RADIO FREQUENCY (INCLUDING MICROWAVE) FIELDS</b>	
Chapter 1	
Experimental Radio and Microwave Dosimetry .....	229
<b>Maria A. Stuchly and Stanislaw S. Stuchly</b>	
Chapter 2	
Computer Methods for Field Intensity Predictions.....	273
<b>James C. Lin</b>	
Chapter 3	
Thermoregulation in the Presence of Microwave Fields .....	315
<b>Eleanor R. Adair</b>	
Chapter 4	
Interaction of Nonmodulated Fields with Living Matter .....	339
<b>Sol M. Michaelson</b>	

Chapter 5  
Modulated Fields and ‘‘Window’’ Effects .....425  
**Elliot Postow and Mays L. Swicord**

APPENDIXES

Important Constants and Frequently Used Units of Measurement .....463  
Safety Standards.....465  
Index .....483