

CONTENTS

1. FROM MITOGENETIC RAYS TO BIOPHOTONS.....	1
V.L. Voeikov and L.V. Belousov	
2. PHOTON SUCKING AS AN ESSENTIAL PRINCIPLE OF BIOLOGICAL REGULATION.....	17
F.-A. Popp and W. Klimek	
3. QUANTUM SQUEEZED STATE DESCRIPTION OF SPECTRAL DECOMPOSITIONS OF A BIOPHOTON SIGNAL AND THE POSSIBILITY OF REMOTE INTERVENTION.....	33
R.P. Bajpai	
4. BIOLOGICAL STRUCTURE AS A CONVERTER OF COHERENT RADIATION	47
A. Budagovsky, O. Budagovskaya, and I. Budagovsky	
5. THE OSCILLATION BEHAVIOR OF THE DELAYED LUMINESCENCE OF PLANT LEAVES	65
Yu Yan, F.-A. Popp, S. Sigrist, D. Schlesinger, A. Dolf, Zhongchen Yan, S. Cohen, A. Chotia, and D. Busch	
6. HUMAN GENOME REALIZATION AT THE VIEWPOINT OF PHYSICS OF THE ALIVE.....	75
S.P. Sit'ko	
7. FUNDAMENTAL ROLE OF WATER IN BIOENERGETICS.....	89
V.L. Voeikov	
8. THE HYDROPHOBIC-HYDROPHILIC BALANCE IN WATER SOLUTIONS OF PROTEINS AS THE POSSIBLE TARGET FOR EXTREMELY LOW FREQUENCY MAGNETIC FIELDS	105
V.S. Martynyuk and Yulia V. Tseyslyer	
9. FEATURES OF REACTIONS OF BIOLOGICAL AND PHYSICO-CHEMICAL SYSTEMS TO EXTERNAL FACTORS.....	123
I.A. Stepanyuk	

- 10. NEWS AND VIEWS IN UVA-LASER-INDUCED ULTRAWEAK DELAYED LUMINESCENCE OF CULTURED MAMMALIAN CELLS 129**
H.J. Niggli, S. Tudisco, G. Privitera, L.A. Applegate, A. Scordino, and F. Musumeci
- 11. ULTRAWEAK PHOTON EMISSION AS A TOOL FOR ANALYSING COLLECTIVE PROCESSES IN CELLS AND DEVELOPING EMBRYOS 139**
L.V. Belousov
- 12. DISTANT INTERACTION DURING GERMINATION OF *BACILLUS SUBTILIS* SPORES 159**
Y.A. Nikolaev, G.I. El'-Registan, and S.B. Desu
- 13. INFLUENCE OF RADIOFREQUENCY EMF ON THE YEAST *SACCHAROMYCES CEREVISIAE* AS MODEL EUKARYOTIC SYSTEM 167**
E.N. Gromozova, and S.I. Voychuk
- 14. SPATIAL CHARACTERIZATION OF HUMAN ULTRA-WEAK PHOTON EMISSION 177**
R. Van Wijk, M. Kobayashi, and E.P.A. Van Wijk
- 15. INFLUENCE OF ELECTROMAGNETIC FIELDS OF EXTREMELY DIFFERENT FREQUENCY DIAPASON ON INFRA DIAN RHYTHMS OF PHYSIOLOGICAL PROCESSES 191**
N.A. Temuryants, V.S. Martynyuk, and E.N. Chuyan
- 16. ABSORPTION AND EMISSION OF PHOTONS BY COLLAGEN SAMPLES 203**
T.G. Troshina, N.N. Loochinskaia, E. Van Wijk, R. Van Wijk, and L.V. Belousov
- 17. INTERACTION OF PLANT SHOOTS AND ROOTS: DYNAMICS AND STABILITY 213**
N.V. Budagovskaya
- 18. CORRELATION OF THE “NEAR-ZONE EFFECT” AMPLITUDE DYNAMICS WITH SOLAR-GEOPHYSICAL INDICES 225**
T.A. Zenchenko, A.A. Konradov, and K.I. Zenchenko
- 19. FREE WILL AND VIOLATION OF PHYSICAL LAWS 235**
M. Lipkind

**20. VERNADSKY'S NOOSPHERE AND SLAVOPHILE
SOBORNOST'279**
M. Bischof

**21. A LIFE THAT LINKED MITOGENETIC RAYS
AND BIOPHOTONS299**
L.V. Belousov, M. Lipkind, F.-A. Popp, and V.L. Voeikov

INDEX.....303