Quantum Mechanics of Biological Systems is a growing field of biology in which quantum mechanics principles are utilised to address key biological processes. This field not only reveals underlying mechanisms active in molecular biology but also helps us translate the information to applied medical research, aiming at the discovery of means to deal with the molecular-level origins of various pathologies. Beginning with a brief history of quantum biology, this book explores some of the ways in which quantum mechanics methods have made huge breakthroughs in addressing the molecular basis of diseases and drug discovery. Included in this book are chapters on the role of neutron scattering in protein energy landscapes, modelling of photosynthetic spectra, quantum processes of life and quantum and tempus theories of food science. Also discussed is the quantum mechanical understanding of genetic correlation and evolution. A history of the development of quantum biology is provided too. This book will appeal to undergraduate and graduate students, as well as academics working in the fields of Physics, Chemistry, Biochemistry, Mathematics, Oncology, Bioinformatics, Biomedical Engineering, Electrical Engineering, Medicine, Pharmacology and Biology.

Key Features:

- Explores the growing and exciting new interdisciplinary field of QMBS.
- Contains chapter contributions from world-leading experts.
- Discusses the impact of quantum mechanics methods in biomedical research.

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