

# Mathematical Biology and Biological Physics

This is a book on interdisciplinary topics of the Mathematical and Biological Sciences. The treatment is both pedagogical and advanced in order to motivate research students as well as to fulfill the requirements of professional practitioners. There are comprehensive reviews written by senior experts on the important problems of

growth and agglomeration in biology, on the algebraic modelling of the genetic code and on multi-step biochemical pathways.



There are new results on the state of the art research in the pattern recognition of probability distribution of amino acids, on somitogenesis through reaction-diffusion models, on the mathematical modelling of infectious diseases, on the biophysical modelling of physiological disorders, on the sensitive analysis of parameters of malaria models, on the stability and hopf bifurcation of ecological and epidemiological models, on the viral infection of bee colonies and on the structure and motion of proteins. All these contributions are also strongly recommended to professionals from other scientific areas aiming to work on these interdisciplinary fields.

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