

Preface

Geomicrobiology is a combination of geology and microbiology, which includes the study of interaction of microorganisms with their environment, such as in sedimentary rocks. This is a new and rapidly-developing field that has led in the past decade to a radically-revised view of the diversity and activity of microbial life on Earth. Geomicrobiology examines the role that microbes have played in the past and are currently playing in a number of fundamental geological processes.

Microorganisms are very important for the environment. Biogeochemical cycles performed by these organisms are necessary to maintain normal life on Earth. These microorganisms are very important in the petroleum and pharmaceutical industries from the economic point of view. Beside which, increased agricultural productivity through soil microorganisms, natural products and a wide range of industrially important substances isolated from these microorganisms, have popularized this field as a thrust area for present and future researchers. The curiosity to know about life on other planets is also evident in present-day researchers. The Earth's earliest biological sediments can solve the enigma about the origin of life on Earth and give an indication about the presence of life on other planets. The future of this field is definitely bright, people are dependent on these microorganisms not only for their food but also for maintaining a proper healthy environment.

Inspite of the bright future of this field, quality literature related to geomicrobiology is not sufficient to fulfil the requirements of students and researchers. There is an immense need to gather quality literature for scientists working in this thrust area.

The present book is of great importance for researchers working in the field of microbiology, biotechnology, geology and environmental science. It can be a major reference book for students as well as researchers.

Sudhir K. Jain
Abdul Arif Khan
M.K. Rai