About the Book

This book contains selected overviews on several important aspects of photosynthesis and provides both tutorial content and critical insight into the future of photosynthesis research.

Photosynthesis has been a challenging scientific topic since it deals with the process by which a wide range of organisms from bacteria to higher plants convert solar energy to chemical energy for producing food, fibre and fuel out of small molecules of carbon dioxide and water. Deeper and greater understanding of this process holds a promise for a more sustainable Earth with enjoyable pollution-free environment with new technologies for food and cleaner energy for a peaceful and progressive society. Thus, there have been global efforts to mimic the photosynthetic process to meet the needs of the future world.

This book having 19 chapters, gives glimpses of recent progress and future projections on photosynthesis, a process that feeds all living organisms and sustains the globe honours Professor Govindjee, Emeritus Professor of Biophysics Biochemistry & Plant Biology at the University of Illinois, USA. He is an outstanding researcher & teacher of photosynthesis and a global leader for stimulating photosynthesis research throughout the world. This book is useful for researcher/faculty and students as reference/text for courses in plant biology, environmental biology and agriculture.

Salient Features

- The 19 articles contributed by 64 eminent researchers and scientists from across the globe discusses various aspects of photosynthesis
- Each article provides tutorial content and deep insights for carrying out further research.
- The articles are appropriately illustrated with diagrams and pictures, and are profusely referenced.

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Prasanna Mohanty: Prasanna Mohanty was a Professor in the School of Life Sciences, Jawaharlal Nehru University, New Delhi, India. He had a 1972 Ph.D. in Biology from the University of Illinois at Urbana-Champaign, USA. Mohanty had also held academic positions at the University of Western Ontario, Canada; National Institute for Basic Biology, Okazaki, Japan; and in India at the University of Hyderabad; University of Indore; Indian National Science Academy, New Delhi; and the Regional Plant Resource Center, Bhubaneswar, Odisha. He was an international authority on Bioenergetics and Photo-biochemistry of Oxygenic Photosynthesis; he had worked with cyanobacteria, algae and plants.