Discoveries in Photosynthesis (Advances in Photosynthesis and Respiration)

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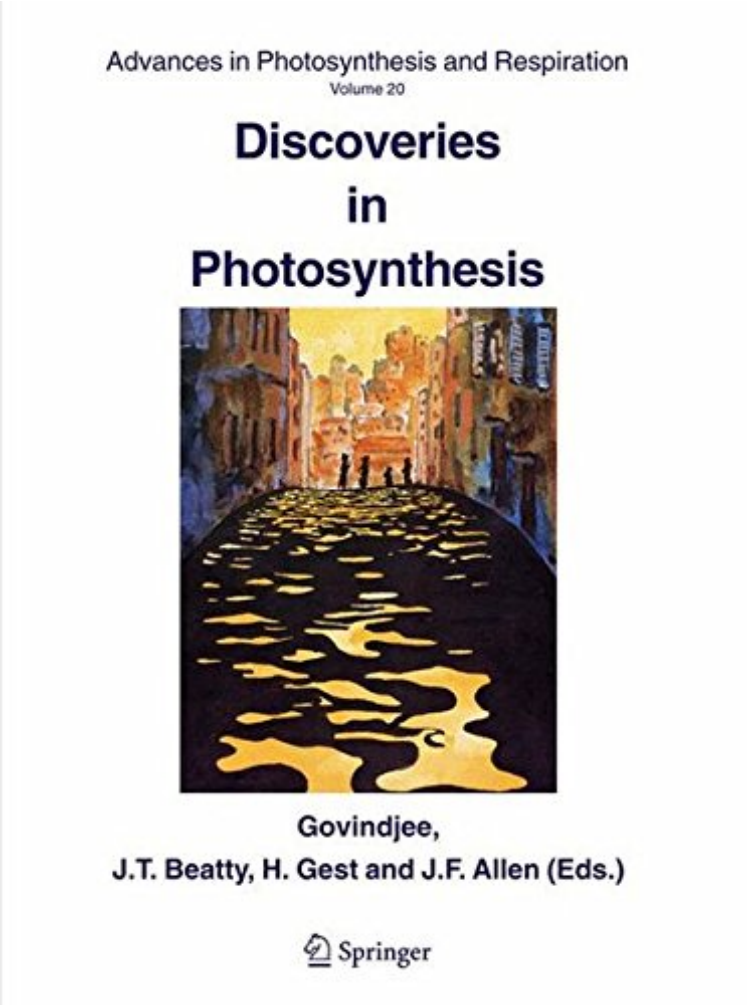

#5541945 in Books Springer 2006-07-28Original language:EnglishPDF # 1 11.00 x 2.80 x 8.40l, 6.48 #File Name: 14020332301304 pages | File size: 37.Mb

From Brand: Springer : Discoveries in Photosynthesis (Advances in Photosynthesis and Respiration) before purchasing it in order to gage whether or not it would be worth my time, and all praised Discoveries in Photosynthesis (Advances in Photosynthesis and Respiration):

0 of 0 people found the following review helpful. An interesting bookBy Rafael V. RibeiroThis book contains the main historical facts related to photosynthesis, giving details and photos about our wonderful photosynthetic World! Congratulations Govindjee!

"Life Is Bottled Sunshine" [Wynwood Reade, Martyrdom of Man, 1924]. This inspired phrase is a four-word summary

of the significance of photosynthesis for life on earth. The study of photosynthesis has attracted the attention of a legion of biologists, biochemists, chemists and physicists for over 200 years. Discoveries in Photosynthesis presents a sweeping overview of the history of photosynthesis investigations, and detailed accounts of research progress in all aspects of the most complex bioenergetic process in living organisms. Conceived of as a way of summarizing the history of research advances in photosynthesis as of millennium 2000, the book evolved into a majestic and encyclopedic saga involving all of the basic sciences. The book contains 111 papers, authored by 132 scientists from 19 countries. It includes overviews; timelines; tributes; minireviews on excitation energy transfer, reaction centers, oxygen evolution, light-harvesting and pigment-protein complexes, electron transport and ATP synthesis, techniques and applications, biogenesis and membrane architecture, reductive and assimilatory processes, transport, regulation and adaptation, Genetics, and Evolution; laboratories and national perspectives; and retrospectives that end in a list of photosynthesis symposia, books and conferences. Informal and formal photographs of scientists make it a wonderful book to have. This book is meant not only for the researchers and graduate students, but also for advanced undergraduates in Plant Biology, Microbiology, Cell Biology, Biochemistry, Biophysics and History of Science.

From the reviews: "This book is a unique example of the tale of the historic development of a fascinating branch of contemporary science as told by the protagonists themselves. Professor Govindjee and his co-editors have done a magnificent work by producing an impressive lively picture of how the knowledge on Photosynthesis progressed during the twentieth century. The book will be of great value not only for the specialists of the subject but also for students and scholars interested in understanding the essence of the trial and error process governing modern science." (Giovanni Giacometti, Professor Emeritus of Physical Chemistry, Dept. of Chemical Sciences, University of Padova, Italy)"The book Discoveries in Photosynthesis, edited by Govindjee, J. Thomas Beatty, Howard Gest and John F. Allen, is a remarkable Encyclopedia of Research in Photosynthesis, its discoveries, and its difficulties during the last century. Biologists, biochemists, physicists and molecular biologists were involved with their successes, as well as their failures, in putting together today's overall picture of this uniquely important physiological process, on which life on this planet depends. This book should not be missed by anyone interested in photosynthesis: It is a must for all libraries around the World."(Giorgio Forti, Professor of Biology, University of Milano, Italy)"A wonderful collection of the most interesting articles on all aspects of photosynthesis. The personal perspectives are delightful, it is truly a "must own" book for its focus on the personal historical context surrounding most of the important breakthroughs in photosynthesis research." (Douglas Bruce, Professor of Biological Sciences, Brock University, St. Catharines, ON, Canada)"Discoveries in Photosynthesis, edited by Govindjee, J.T. Beatty, H. Gest and J.F. Allen, is a splendid compendium of the great leaps forward in the research on photosynthesis, paralleling the advances in technology for the study of the life sciences in general. From the early use of isotopes to the electron microscope, the mechanisms of solar energy conversion are defined by over 100 authorsA must reading for scholars in the field of plant sciences of microbiology, as well as those interested in the history of science."(R. Clinton Fuller, Professor Emeritus, Department of Biochemistry, University of Massachusetts, Amherst, USA)"Congratulations on another volume in the Advances in Photosynthesis and Respiration (AIPH) series. Govindjees mentor Eugene Rabinowitch wrote the story of photosynthesis in the 1940s and 1950s. No one could ever hope to do that again; the amount of information is just too vast for any one person to ever hope to do a proper job of giving the real state of knowledge. However, Govindjee has really duplicated Rabinowitchs accomplishment in the only way it could be done nowadays, by enlisting editors who are expert in areas of the field and having them in turn enlist expert authors. When I look at the AIPH books on my shelf I am struck with how effectively they collectively summarize the field. I am continually impressed with how Govindjee has added new books to the series that make sense and really provide the level of detail that is needed." (Robert Blankenship, Professor of Chemistry and Biochemistry, Arizona State University, Tempe, USA) "Discoveries in Photosynthesis is easily among the most outstanding and valuable books published in the biological sciences in the last 100 years. The book is richly illustrated with nearly 800 photographs. In addition, there are many diagrams, tables and other supplementary material. I do not know of any comparable effort in the plant sciences or even the broader area of biology. Govindjee and his colleagues are to be congratulated for preparing this extraordinary book, indeed without a parallel." (S. C. Maheshwari, Current Science, Vol. 92 (2), January, 2007) " It is an outstanding assembly of more than 100 articles: of personal reflections, of methods and approaches, of dedications and obituaries of those involved in the unravelling of photosynthesis, . The amount of information in these recollections is impressive in this book, and almost a complete source for references for a decisive time in a scientific field. It is with nostalgic pleasure that I read and recall those years. This book is a mine for everybody who wants to know more than just pure facts and what is condensed into a few pages in the textbooks." (Professor Emeritus Achim Trebst, Bochum University, Bochum, Germany, February 2007) "Discoveries in Photosynthesis is a new edited volume out of the Advances in Photosynthesis and Respiration series . It is the first comprehensive scholarly attempt to gather original materials in order to understand the long and complex history of photosynthesis research. the volume is every inch as impressive as its important subject demands. Its coverage and perspectives are equally vast . It is, in short, a monumental effort." (Vassiliki Betty Smocovitis, Plant Science Bulletin, Vol. 53 (1), 2007) "History of research is very important and

much time of young researchers would be spared if they would know what had been done, in some cases many years ago. 112 review articles were published once more in one, very thick book. scientists interested in photosynthesis this volume is certainly an important material to have on the book shelf." (Z. estk, Photosynthetica, Vol. 45 (2), 2007) "111 papers, written by 132 authors from 19 countries, have been compiled to a real encyclopedia of photosynthesis research with a clear arrangement. A remarkable feature of the book is its rich illustration. All chapters include informal and formal photographs of the scientists. The book is meant not only for researchers and graduate students, but also for advanced undergraduates in plant biology, microbiology, cell biology, biochemistry, biophysics and, not to forget, history of science." (Ekkehard Hxtermann, History and Philosophy of the Life, Issue 28, 2006)