

General appendix

A list of photosynthesis conferences and of edited books in photosynthesis

Govindjee

Departments of Biochemistry and Plant Biology, and the Center of Biophysics and Computational Biology, University of Illinois, 265 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801-3707, USA (e-mail: gov@uiuc.edu; fax: +1-217-244-7246)

Received 12 November 2003; accepted 19 November 2003

Key words: edited books in photosynthesis, Helmut Metzner, photosynthesis conferences, symposia volumes, Jan Barth Thomas, Woudschoten, René Wurmser

Abstract

This paper is a general appendix to the three parts of 'Celebrating the millennium – historical highlights of photosynthesis research' (Photosynth Res, Vols 73 (2002), 76 (2003), 80 (2004)). The major part of this paper includes a comprehensive list of most of the edited volumes on research in the area of photosynthesis. However, I begin this paper by describing selected conferences, related to photosynthesis, held in USA, during 1935–1965, followed by the 1963 International Colloquim held in Gif-sur-Yvette, France (René Wurmser (1890–1993), President); and the 2nd Western European Congress (1965), held in the Netherlands, under the leadership of Jan B. Thomas (1907–1991), both these European conferences being the precursors of the first International Congress on Photosynthesis (1968), organized by Helmut Metzner (1925–1999) at Freudenstadt, Germany. A list of the subsequent international photosynthesis congresses is available in Govindjee and David Krogmann (this issue).

Photosynthesis conferences in USA: 1935–1965

Some of the conferences during the period 1935–1965, held in the USA, are briefly described below.

1935: Cold Spring Harbor Symposium

One of the earliest discussions on photosynthesis was included in the 1935 Cold Spring Harbor Symposium on Quantitative Biology (Cold Spring Harbor Laboratory, 1935). This conference, held when I was only a three-year-old boy, was focused on *'reactions and processes initiated by light'*; it was held for 11 full days and 14 half days, and included presentation of 35 papers followed by discussions. According to the frontmatter in the proceedings, many hours were spent in carefully considering and revising discussions as originally presented, and many days (\sim 10) were then

spent for informal consultation. About 84 scientists took part in the symposia and discussions, out of which 36 communicated discussions by mail.

To give a flavor of what went on then in photosynthesis, I list below the topics (and authors) of the papers presented at the above symposium. (1) Protochlorophyll (Paul Rothemund); (2) Behavior of chlorophyll in inheritance (M. Demerec); (3) Fluorescence of the chlorophylls (V.M. Albers and H.V. Knorr); (4) Quantitative photochemical study of photosynthetic system (F. Paul Zscheile); (5) Light intensity and CO_2 as factors in wheat photosynthesis (F.S. Brackett); (6) Kinetics of photosynthesis in Chlorella (William Arnold); (7) Effect of intense light and its bearing on the CO₂ factor (Robert Emerson); (8) Photosynthesis of bacteria (Cornelis B. van Niel); (9) Chemistry of photosynthesis (Neel Ratan Dhar); (10) Kinetic mechanism of photosynthesis (Dean Burk and Hans Lineweaver); (11) Evolution of O_2 in the process

of photosynthesis (O.L. Inman); (12) Absorption of radiation by leaves and algae (Harold Mestre). Others who took part in the discussions included: G.E. Briggs, C. Stacy French, E.D. MacAlister and H.A. Spoehr.

1949: Photosynthesis in Plants, Ames, Iowa

The first known symposium volume devoted solely to photosynthesis in the USA was published in 1949, edited by the physicist James Franck and the plant physiologist W.E. Loomis. 'Photosynthesis in Plants' was the second volume of the monograph series of the American Society of Plant Physiologists; (Franck and Loomis 1949). Two major areas discussed were: (1) The question of the maximum quantum yield of oxygen evolution; (2) Carbon fixation, using tracer methods. Also included were discussions on the use of 'Chlorophyll fluorescence in understanding photosynthesis.'

The 1949 monograph 'Photosynthesis in Plants' contained the following 22 papers (authors). (1) Introduction (W.E. Loomis); (2) Photosynthesis under field conditions (Moyer D. Thomas and George R. Hill); (3) Products of photosynthesis (James H.C. Smith); (4) Diffusion through multiperforate septa (J. Verduin); (5) Chloroplasts: their structure, composition and development (Sam Granick); (6) Functions and properties of the chloroplast pigments (Harold H. Strain); (7) Photochemistry of chlorophyll (Robert Livingston); (8) Chlorophyll studies (P. Rothemund); (9) Processes accompanying chlorophyll formation (James H.C. Smith); (10) Quantum requirement of photosynthesis (Robert Emerson and M.S. Nishimura); (11) Quantum efficiency of photosynthesis in Chlorella (W.E. Moore and B.M. Duggar); (12) Quantum efficiencies for photosynthesis and photoreduction in green plants (Foster F. Rieke); (13) Calorimetric determination of the quantum yield in photosynthesis (William Arnold); (14) Photochemical liberation of oxygen from water by isolated chloroplasts (A. Stanley Holt and C. Stacy French); (15) Chlorophyll fluorescence as an energy flowmeter for photosynthesis (E.E. Katz); (16) Relation of the fluorescence of chlorophyll to photosynthesis (James Franck); (17) Pattern of photosynthesis in Chlorella (Jack Myers); (18) Some remarks on tracer researches in photosynthesis (Martin D. Kamen); (19) ¹⁴C in photosynthesis (Andrew A. Benson, Melvin Calvin, V.A. Haas, Sam Aronoff, A.G. Hall, James A. Bassham and

J.W. Weigl); (20) Kinetics of photochemical intermediate in photosynthesis (Allan H. Brown, E.W. Fager and Hans Gaffron); (21) Investigation of the chemical properties of intermediates in photosynthesis (E.W. Fager); (22) Comparative biochemistry of photosynthesis (Cornelis B. van Niel).

1952 and **1955**: Gatlinburg Conferences on photosynthesis

In 1952, the first Gatlinburg Photosynthesis Congress was held. No written proceedings are available. A group photograph of those attending this congress is shown in Part 2 of these History issues (see p. vii of Govindjee et al. 2003a) under the title 'Celebrating the Golden Jubilee of the 1952 Conference on Photosynthesis, Gatlinburg, Tennessee, USA.' The second Gatlinburg conference on 'Research in Photosynthesis' was held on 25-29 October 1955, and its proceedings (524 pages) were published in 1957, and were edited by Hans Gaffron, Allan H. Brown, C. Stacy French, Robert Livingston, Eugene I. Rabinowitch, Bernard L. Strehler and N. Ed Tolbert (Gaffron et al. 1957). This conference deliberately deemphasized the topics of the quantum yield of oxygen evolution and the path of carbon, covered extensively in the 1952 conference. Instead, it focused on: (1) Absorption, fluorescence, luminescence, and photochemistry of pigments in vitro (8 papers); (2) Absorption, scattering, fluorescence, luminescence, and photochemistry of pigments in vivo (12 papers); (3) Possible roles of cytochromes (7 papers); (4) Dark reactions: fixation of CO_2 (4 papers); Photoreduction (3 papers); reduction of various oxidants (2 papers); Reactions in chloroplasts and cell extracts (5 papers); Phosphate metabolism (6 papers); (5) Kinetics, transients and induction phenomena (15 papers); (6) Formation and the condition of chlorophyll in the living cell (5 papers). This conference was unique in that it attracted more than 65 papers from many of the pioneers of photosynthesis, several from outside the USA.

Among the almost 80 contributors, I mention some examples (in alphabetical order): Mary Belle Allen; William Arnold; Daniel Arnon; Sam Aronoff; Margreta Baltscheffsky (Sweden); James Al Bassham; Andrew Benson; Lawrence Blinks; Lawrence Bogorod; Allan Brown; Warren Butler; Melvin Calvin; Britton Chance; Louis N.M. Duysens (The Netherlands); Robert Emerson; James Franck; C. Stacy French; Albert Frenkel; Hans Gaffron; Howard Gest; Martin Gibbs; Norman Good; Sam Granick;



Figure 1. Photographs of some of the scientists attending the 1958 Conference at Brookhaven National Laboratory, Upton, New York (Fuller 1959). *Top row (left)*: Martin Kamen (center) exchanging jokes with other participants; (*right*): Leo Vernon (left) with Martin Gibbs (right). *Bottom row (left)*: Robert Emerson and Hans Gaffron (I assume they were discussing the quantum yield controversy between Emerson and Otto Warburg; is Gaffron making a bet with dollar bills in his hand?); (*center*): William Arnold explaining his physical theories to Tom Punnett; (*right*): Bessel Kok (seated in the middle) talking with Clint Fuller (standing). Joop Goedheer is standing with a cup in his hand.

A. Stanley Holt; Martin Kamen; Bessel Kok (The Netherlands); Robert Livingston; Shigetoh Miyachi (Japan); Jack Myers; John Olson; André Pirson (Germany); Eugene Rabinowitch; Kazuo Shibata (Japan); James H.C. Smith; Bernard Strehler; Hiroshi Tamiya (Japan); N. Ed Tolbert; Leo P. Vernon; Wolf Vishniac; E.C. Wassink (The Netherlands); F.R. Whatley; C.P. Whittingham (UK); Horst Witt (Germany).

In 1971, a conference on 'Photosynthetic Unit,' organized by Bob Pearlstein, was held in Gatlinburg, honoring William Arnold, Hans Gaffron, C. Stacy French, Eugene Rabinowitch and Lawrence Blinks (see Govindjee and D. Krogmann for a photograph).

1958: Brookhaven symposia on photosynthesis

I draw attention to an outstanding symposium, organized in 1958 by Brookhaven National Laboratory (Long Island, New York), 'Photochemical Apparatus' (Fuller 1959). The symposium committee included R. Clinton Fuller, J.A. Bergeron, L.G. Augustine, M.E. Koshland and H.J. Curtis. There were 31 papers arranged in seven sections. Speakers in Section I (Physical Chemical Aspects; chair, James A. Bassham) were: William Arnold (& H.K. Maclay); Louis N.M. Duysens; James A. Bassham; Earl E. Jacobs; Gordon Tollin; in Section II (Biochemical Aspects; chair, C. Stacy French), they had: Roger Y. Stanier; Wolf Vishniac; C. Stacy French; Britton Chance; J.J. Wolken; in Section III (Morphological Aspects; chair, Lawrence Bogorad): Ruth Sager; J.A. Brgeron; L. Bogorad (and coworkers); D. von Wettstein; in unnamed Section IV (chair, D.E. Koshland Jr.): the speaker was Melvin Calvin; in Section V (Enzymatic Activities of Chloroplasts; chair, Andrew A. Benson): Daniel I. Arnon; André T. Jagendorf; L.A. Delavan and Andrew A. Benson; Anthony San Pietro; N.E. Tolbert; in Section VI (Enzymatic Properties of Primitive Photochemical Structures; chair, Martin D. Kamen): Albert W. Frenkel; J.W. Newton; and James H.C. Smith; and in *Section VII* (Contributed Papers, chair Martin D. Kamen): Rodney A. Olson (& E.K. Engel); L. Smith (& J. Ramirez); John M. Olson; Joop C. Goedheer; Norman I. Bishop; Mary Belle Allen; S. Scheer (& S. Aaronson); F.H. Hulcher and Wolf Vishniac. The proceedings contains nine photographs of the participants including: William Arnold; Martin Gibbs; Robert Emerson; Hans Gaffron; Martin Kamen, Bessel Kok,

these scientists in Figure 1).
This first Brookhaven symposium was later followed by three other symposia (not discussed here):
(1) Energy Conversion (Olson 1967);
(2) Chlorophyll proteins (Olson and Hind 1977);
(3) Photosynthetic Carbon Assimilation (Siegelmann and Hind 1978). Readers may consult the original publications for details. A photograph of the speakers at the 1966 Brookhaven Symposium (Olson 1967) appears in Pearlstein (2002).

Leo Vernon and others (see photographs of some of

1960: Light and Life Symposium

A symposium on 'Light and Life,' 28–31 March 1960, at the Johns Hopkins University, was held after the publication of the Emerson enhancement effect in 1957 (see Govindjee and David Krogmann, this issue; McElroy and Glass 1961) when the concept of twolight reactions and two-pigment systems was evolving, and it included several other related areas of photochemistry and photobiology: (1) Molecular structure and excited states; (2) excited states of molecules of biological interest; (3) light emission by chemical reactions; (4) biological responses to light.

Several speakers touched upon the question of twolight effects: Melvin Calvin; C. Stacy French; Robert Hill (& Walter D. Bonner); Bessel Kok (& George Hoch); Eugene Rabinowitch (& Govindjee). Mary Belle Allen; Daniel Arnon; Andrew A. Benson; Barry Commoner; Albert Frenkel; Martin D. Kamen; David Krogmann; Fritz Lipmann; M. Losada; Anthony San Pietro; Lucille Smith; Bernard Strehler; Jan B. Thomas; Cornelis B. van Niel; Birgit Vennesland participated in this conference, among others.

1963: The Airlie House Conference

From 14–18 October 1963, about 15 months after the *La Photosynthèse* (Gif-sur-Yvette) conference (see next Section), Bessel Kok and André Jagendorf organized a symposium on 'Photosynthetic Mechanisms of Green Plants' at the Airlie House in Warrenton, Virginia. This conference was a successor to the 1955 conference held at Gatlinburg, Tennessee. After giving credit to Lawrence Blinks and Robert Emerson's work, Kok and Jagendorf wrote in their Preface: 'Every so often someone manages to remove another stone from the wall through which we all want to see, and the crowds tend to flock around the new peep hole' (see Kok and Jagendorf 1963). At this conference, I had been on the faculty at the University of Illinois at Urbana for two years. It was a very important meeting where the two-light reaction and two-pigment system ('Z-Scheme' of photosynthesis) became fully accepted.

A group photograph of this conference adorns the frontispiece of this issue. Hans Rurainski (this issue) has written a detailed account and a perspective of this meeting; photographs of many scientists, attending this conference, are shown in his article.

Precursors to international conferences on photosynthesis: 1962 and 1965

1962: La Photosynthèse, Gif-sur-Yvette, France

A full-fledged conference (Colloques Internationaux du Centre National de la Recherche Scientifique,



Figure 2. A 1961 photograph of Jan B. Thomas (third from left) at 51 Laan van Minsweerd, Utrecht, The Netherlands. Others are: Govindjee (first from left); Mrs Jan B. Thomas (second from left); Jan's daughter Tineke Thomas (extreme right). Photo taken in Utrecht, The Netherlands, by Rajni Govindjee.



Figure 3. Participants at the 2nd Western European Photosynthesis meeting, held at 'Woudschoten,' Zeist, The Netherlands, 6-12 September 1965. This photograph is a courtesy of Yaroslav de Kouchkovsky. Question marks imply that we are unsure of the identity listed. Sitting on chairs are: (1) N. Jeeji Bai; (2) M. van Kooten-Hertogs; (3) Joan H. Argyroudi-Akoyunoglou; (4) Giuliana Zanetti; (5) Unidentified; (6) Marie-Rose Michel-Wolwertz; (7) Anne Joliot. Standing are: (8) F.W.J. Teale; (9) Danuta Franckowiak; (10) H. Sagromsky; (11) Ryuzi Kanai; (12) Zdenek Sestak; (13) W. Verwer; (14) W. Lindeman; (15) Wilhelm Nultsch; (16) Unidentified; (17) R. Chabaud; (18) Helmut Metzner; (19) Unidentified; (20) Jacques Garnier; (21) Charles P. Whittingham; (22) J.F.G.M. Wintermans; (23) Unidentified; (24) George Akoyunoglou; (25) Gert H.M. Kronenberg; (26) C. Stacy French; (27) Achim Trebst (?); (28) G. Albert Pieters; (29) Alexis Moyse; (30) J.S.C. Wessels; (31) Cyrille H.V. Sironval; (32) Jan B. Thomas; (33) Unidentified; (34) Joop C. Goedheer; (35) Pierre Guérin de Montgareuil; (36) Louis N.M. Duysens; (37) Jean-Marie Michel; (38) Jaques Duranton; (39) Joseph (?) Weikard; (40) Daniel I. Arnon; (41) David C. Fork; (42) Unidentified; (43) Christiaan Sybesma; (44) Bacon Ke; (45) Giorgio Forti; (46) Pierre Joliot; (47) J. Zurzycki; (48) Widmar H. Tanner; (49) René Delosme; (50) Wilhelm Simonis; (51) M. Sangster; (52) Wim J. Vredenberg; (53) John M. Olson; (54) Mordhay Avron; (55) Noun Shavit; (56) Jan Amesz; (57) Richard E. Dale; (58) Peter (?) Massini; (59) Manuel Losada; (60) Gunter Jacobi; (61) Govindjee; (62) P. Schmidt-Mende (some readers suggest that no. 62 may be Richard P.F. Gregory); (63) Bernd Rumberg; (64) Jacques Aghion; (65) Achim Trebst (??, cf. 27); (66) Gabriel Gingras (?); (67) Horst T. Witt; (68) Unidentified; (69) Unidentified; (70) Unidentified; (71) Jean Lavorel; (72) Yaroslav de Kouchkovsky; (73) Unidentified; (74) Gaston Ducet; (75) Willemke Terpestra; (76) Tom Buegeling; (77) Unidentified; (78) Unidentified; (79) Ulrich W. Heber; (80) Unidentified; (81) Herrick Baltscheffsky; (82) Roderick K. Clayton; (83) Bessel Kok; (84) Leo P. Vernon. There are only 12 persons unidentified in the photo from a list of the following 15: Marcel André (France); Reinhard Bachofen (Germany); J.L. Bailey (UK); Jiri Catsky (Czecholslovakia); R.E. Clijsters (UK); Gunt(h)er (?) Döhler (Germany); H.D. Dorrer (Germany); Karl Egle (Germany); Richard P.F. Gregory (UK); David O. Hall (UK); Knud W. Henningsen (Denmark); J.M. D'Olieslager (Belgium); Gerald Oster (USA); Aloysius (or Augustus?) Ried (Germany); G. Throm (Germany); R. van der Veen (The Netherlands). Please note that J.F.G.M. Wintermans is recognized above, but he is not in the participants list in the book. Also note that the list of participants has 95 names. We note that the following eight, present in the list of the participants, are not in the photograph: J.-M. Bové, J.-M. Briantais, J.-M. Galmiche, G. Giraud, C.J.P. Spruit; A. San Pietro; E.C. Wassink and J.Chr. Wesselius. The list was prepared by one of us (G) with the help of many including Yaroslav de Kouchkovsky; Bacon Ke and Wim Vredenberg.

CNRS), that covered all aspects of photosynthesis including the then two-light reaction and two-pigment system concept, was held on 23–27 July 1962, at Gif-sur-Yvette, France. Its proceedings were published in 1963 (Wurmser 1963). Photographs and further discussion of this colloquium is found in Yaroslav de Kouchkovsky (2002). The 1931 Nobel laureate in Physiology or Medicine, Otto Warburg, ended this conference with words that included: I felt happy to be again in the country of the great Pasteur, who has taught me, if not personally, the spirit and the method of Science. It is this spirit of Pasteur, that has reigned over our meeting and made it the most successful meeting in photosynthesis many of us have attended.

At this conference, the following scientists discussed two-light reaction schemes: Jan Amesz; Daniel Arnon; Melvin Calvin; Louis N.M. Duysens; Hans Gaffron (& Norman Bishop); Joop C. Goedheer; Bessel Kok (& George Hoch); Eugene Rabinowitch; Horst T. Witt (with A. Müller & B. Rumberg). Other participants included: Mordhay Avron; V.B. Evstigneev; Ulrich Heber; Pierre Joliot; Jean Lavorel; Rod Park; A.A. Shlyk; C. Sironval; Achim Trebst; Wim Vredenberg; Otto Warburg.

1965: Currents in Photosynthesis Research, Woudschoten, Zeist, The Netherlands

The second Western European Photosynthesis Conference was held in the Netherlands in 1965 (Thomas and Goedheer 1965). I celebrate the initiative of Jan Bartholomeus Thomas (1907–1991). Figure 2 is a photograph of Jan Barth Thomas taken in 1961. On 6 September 1965, A. Moyse, at the Conference Center 'Woudschoten' in Zeist, The Netherlands, stated 'C'est en 1959 que Monsieur le Professeur J.B. Thomas suggéra d'organiser périodiquement en Europe des symposiums consacrés à la photosynthèse. Nous devons, à ce propos, lui témoigner toute notre gratitude.' [It was in 1959 that Professor J.B. Thomas suggested periodic symposia in Europe devoted to photosynthesis. For this proposal we must all be grateful.] This conference was the second Western European Conference on Photosynthesis, the first one being the one in 1962 held in Gif-sur-Yvette, France, although it was not so called. The proceedings 'Currents in Photosynthesis' were edited by Thomas and Goedheer (1965). (See van Ginkel and Goedheer (1991) for an obituary of Thomas.)

Figure 3 is a group photograph of this conference (provided by Yaroslav de Kouchkovsky). At the conference, 52 papers were presented, and the proceedings had 486 pages. As already mentioned above, this and the 1962 'La Photosynthèse' conferences were the precursors of the three-yearly International Congresses on Photosynthesis Research. For a complete list of all the international congresses, see Govindjee et al. (1962) and Govindjee and Krogmann (this issue).

The authors in 'Currents in Photosynthesis' included: Jan Amesz; Daniel I. Arnon; Mordhay Avron; H. Baltscheffsky; Britton Chance; Rod Clayton; Yaroslav de Kouchkovsky; Louis N.M. Duysens; David Fork; Giorgio Forti; Joop C. Goedheer; Govindjee; Ulrich Heber; Günter Jacobi; Pierre and Anne Joliot; Otto Kandler; Bacon Ke; Bessel Kok; Jean Lavorel; M. Losada; John Olson; B. Rumberg; W. Simonis; C. Sironval; Christiaan Sybesma; Jan B. Thomas; Leo Vernon; Wim J. Vredenberg; J.S.C. Wessels; Horst Witt.

The first International Photosynthesis Congress: 1968

First International Conference on Photosynthesis Research: Freudenstadt, Germany

During 4–8 June 1968, the first international conference on photosynthesis was held in Freudenstadt, Germany. It was organized by Helmut Metzner (Director of the Institute of Chemical Biology, University of Tübingen, Germany). Metzner (1969) did a wonderful job in securing attendance by scientists from the former Soviet Union, and single-handedly published its proceedings in three volumes (Volume I: Structure of the Photosynthetic Apparatus; Physiology of Photosynthesis; Volume II: Plastid Pigments; Electron Transfer; Volume III: Photophosphorylation; CO₂ Fixation; Mechanisms of Action of Herbicides; 1807 pages) containing 215 papers from 362 authors. [See Karin Fischer-Zeh (2000) for an obituary of Metzner.]

A bit of historical statistics: about 10% of the authors of the 1968 conference are also authors in these historical volumes (Govindjee and Gest 2002; Govindjee et al. 2003a, b; Govindjee, Thomas and Allen, this issue). Figure 4 shows some of the participants at the Freudenstadt conference. After the presentation of the Presidential address by Helmut Metzner, Melvin Calvin delivered a unique 'perspective' of the entire field of photosynthesis discussing the contributions of different groups of scientists (organic chemists; physical chemists; biochemists; physicists) followed by recent developments that included the Z-scheme.



Figure 4. A photograph of some of the participants at the 1st International Congress of Photosynthesis Research, held in June 1968, at Freudenstadt. In the front row, I recognize C.P. Whittingham (first from left) and Giorgio Forti (third from left); in the second row Wolfgang Junge (second from left), Govindjee (third from left); in the third row R. Gregory (first from left); Helmut Metzner (organizer, second from left; wearing striped tie and glasses), Wim Vredenberg (third from left); in the forth row Nam Hai Chua (first from right, holding the railing) and Paul Levine (second from right, behind Chua). Readers may send corrections, and additional identities by e-mail: gov@uiuc.edu. Photo by FOTO-LENGERER (photo no. 6V): courtesy of the late Helmut Metzner.

List of edited books, symposia volumes, and selected special issues of journals: author's choice

In Part 2 of the history issues, Govindjee et al. (2003b) provided a list of selected books published on photosynthesis. Here, I provide a list of selected edited volumes since 1935 (Proceedings of conferences, discussed thus far, are, however, listed under 'References').

The following list is arranged chronologically, but within the same year, it is alphabetical. N/A stands for 'Not applicable,' or 'Not available.' LCCC no.: Library of Congress Catalog Card Number; ISBN: International Standard Book Number; in some cases special notes and additional information are provided; *the special issues of the journals are italicized*.

The 1950s

Danielli JF and Brown R (eds) (**1951**) Carbon Dioxide Fixation and Photosynthesis. Symposia for Experimental Biology Number V. The University Press, Cambridge, UK (ISBN/LCCC no.: N/A) Biological Section of USSR Academy of Science and Biology Department of Moscow State University (organizers) (**1959**) Problems of Photosynthesis (symposium held in 1957). Publishing House of the USSR Academy of Sciences, Moscow, USSR (ISBN/LCCC no.: N/A)

The 1960s

- Allen MB (ed) (1960) Comparative Biochemistry of Photoreactive Systems. Symposia on Comparative Biology of the Kaiser Foundation Research Institute, Vol. I. Academic Press, New York (LCCC no.: 60-14262)
- Daniels F (ed) (**1960**) Photochemistry in the Liquid and Solid States. Based on Some of the Papers Presented at a Symposium Arranged by the Sub-committee of the National Academy of Sciences-National Research Council on the Photochemical Storage of Energy, 1957, Endicott House. John Wiley and Sons, New York (ISBN/LCCN: N/A)
- Pirson A (ed) [Ruhland W (General ed)] (1960) Encyclopedia of Plant Physiology, Vol. V, Parts 1 and 2: The Assimilation of Carbon Dioxide. Springer-Verlag, Berlin (ISBN: N/A) (see a discussion in Govindjee, Beatty, J. Thomas and Gest, Howard (2003) Photosynth Res 76: 1–11.)
- Steward FC (ed) (1960) Plant Physiology, A Treatise, Vol. IB: Photosynthesis and Chemosynthesis. (See chapters by Hans Gaffron and by Martin Gibbs and Jerome Schiff) Academic Press, New York (LCCC no.: 59-7689)

and H.E. Sweers, pp 353–372.)
Gest H, San Pietro A and Vernon LP (eds) (1963) Bacterial Photosynthesis, a Symposium Sponsored by the Charles F. Kettering Research Laboratory. The Antioch Press, Yellow Springs, Ohio (ISBN/LCCC no.: N/A) (At this conference Robin Hill presented a toast to Cornelis B. van Niel; see the photograph in Vernon (2003) Photosynth Res 76: 379–388.)

of 'Q' (QA) in Photosystem II was born, Louis N.M. Duysens

- Tamiya H (ed) (1963) Mechanisms of Photosynthesis: Proceedings of the 5th International Congress of Biochemistry, Moscow, 10– 16 August 1961, Vol. 6. IUB Symposium Series, 26. PWN – Polish Scientific Publishers and Pergamon Press, London (LCC no.: 59-8791)
- Krogmann DW and Powers WH (eds) (1965) Biochemical Dimensions of Photosynthesis. Wayne State University Press, Detroit, Michigan/Ambassador Books, Toronto, Ontario (LCCC no.: 65-18209)
- Goldman CR (ed) (1966) Primary Productivity in Aquatic Environments. Proceedings of an I.B.P. P.F. Symposium, Pallanza, Italy, 26 April–1 May 1965. University of California Press, Berkeley, California (ISBN: 0520014251)
- Goodwin TW (ed) Davies BH, Goodwin TW (director) Kirk JTO, Mercer EI, Rogers LJ, Threlfall DR and Wasdell MR (organizers) (1966) Biochemistry of Chloroplasts. Vol. I – Proceedings of a NATO Advanced Study Institute held at Aberystwyth, UK, August 1965. Academic Press, London (LCCC no.: 66-25085)
- Sanadi DR (ed) (1966) Current Topics in Bioenergetics, Vol. 1. Academic Press, New York (LCCC no.: 66-28678) (It contains chapters by Warren Butler, George Cheniae, Norman Good, Geoffrey Hind, Seikichi Izawa, and Bessel Kok, among others.)
- Vernon LP and Seely GR (eds) (1966) The Chlorophylls. Academic Press, New York (LCCC no.: 66-24176)
- Goodwin TW (ed) Davies BH, Goodwin TW (director) Kirk JTO, Mercer EI, Rogers LJ, Threlfall DR and Wasdell MR (organizers) (1967) Biochemistry of Chloroplasts. Vol. II – Proceedings of a NATO Advanced Study Institute held at Aberystwyth, UK, August 1965. Academic Press, London (LCCC no.: 66-25085)
- Nichiporovich AA (ed) (**1967**) Photosynthesis of Productive Systems. Israel Program for Scientific Translations, Israel. Academy of the Sciences of USSR. (IPST catalog no.: 2182)
- San Pietro A, Greer FA and Army TJ (eds) (1967) Harvesting the Sun: Photosynthesis in Plant Life. A symposium sponsored by International Minerals and Chemical Corporation (IMC), Chicago, Illinois, 5–7 October 1966. Academic Press, New York
- Gurinovich GP, Sevchenko AN and Solov'ev KN (1968) Spectroscopy of Chlorophyll and Related Compounds. [in Russian] Izdatel'stvo Nauka I Tekhnika, Minsk, The Soviet Union (translation, prepared in 1971, is available from the National Technical Information Service, US Department of Commerce, Springfield, Virginia 22151; AEC-tr-7199, Translation Series, US Atomic Energy Commission)
- Shibata K, Takamiya A, Jagendorf AT and Fuller RC (eds) (1968) Comparative Biochemistry and Biophysics of Photosynthesis. University Park Press, State College, Pennsylvania/University of Tokyo Press, Tokyo (LCCC no.: 68-24152)

The 1970s

- Gibbs M (ed) (**1971**) Structure and Function of Chloroplasts. Springer-Verlag, New York (ISBN: New York 0387052585; Berlin 3540052585)
- Hatch MD, Osmond CB and Slatyer RO (eds) (1971) Photosynthesis and Photorespiration; Proceedings of a Conference Held at Australian National University, Canberra, Australia, 23 November–5 December 1970. Wiley-Interscience, New York (ISBN: 0471359009)
- Pearlstein RM (ed) (Smith KC, executive editor) (1971). The Photosynthetic Unit. Proceedings of the International Conference held in Gatlinburg, Tennessee, 18–21 May 1970. Photochem Photobiol 14: 231–471. This conference honored five pioneers of photosynthesis: William A. Arnold; Lawrence R. Blinks; C. Stacy French; Hans Gaffron; Eugene I. Rabinowitch. It included papers (numbers are given in parenthesis) on 'Luminescence' (5); The oxygen side (3); Reaction centers (4); The Z-scheme (4); 'The photosynthetic unit' (1). In addition to those honored, the list of speakers included: Daniel I. Arnon; Warren Butler; George Hoch; George Feher; R. Clinton Fuller; Leo P. Vernon; J. Philip Thornber; Bessel Kok; Pierre Joliot; Jean Lavorel; Derrel Fleischmann; Walter Bertsch.
- San Pietro A (ed) (1971) Photosynthesis. Part A. Methods in Enzymology, Vol. XXIII. Academic Press, New York (LCCC no.: 59-9110)
- Desikachary TV (ed) (**1972**) Taxonomy and Biology of Blue-Green Algae. University of Madras, Centre for Advanced Study in Botany, Madras, India (ISBN/LCCC no.: N/A)
- Govindjee (ed) (**1972**) Photosynthesis: A special issue dedicated to Eugene I. Rabinowitch. Biophys J 12: 707–925
- San Pietro A (ed) (1972) Photosynthesis and Nitrogen Fixation. Part B. Methods in Enzymology, Vol. XXIV. Academic Press, New York (LCCC no.: 54-9110)
- Gibbs M, Hollaender A, Kok B, Krampitz LP and San Pietro A (organizers) (**1973**) Proceedings of the Workshop on Bio-Solar Energy Conversion. A Report on a workshop held 5–6 September 1973, at Bethesda, Maryland (ISBN/LCCC no.: N/A)
- Packer L (ed) (1974) Biomembranes: Architecture, Biogenesis, Bioenergetics and Differentiation: Proceedings of the International Symposium on Biomembranes, Madurai University, Madurai, Tamilnadu, India, 11–15 December 1973. Academic Press, New York (ISBN: 0125434405, LCCC no.: 74-19997)
- Stewart WDP (ed) (1974) Algal Physiology and Biochemistry. (Botanical Monographs, Vol. 10) Blackwell Scientific Publications, Oxford, UK (ISBN: 0632091002)
- Cooper JP (ed) (**1975**) Photosynthesis and Productivity in Different Environments. Cambridge University Press, Cambridge (ISBN: 0521205735)
- Govindjee (ed) (**1975**) Bioenergetics of Photosynthesis. In: Cell Biology: A Series of Monographs, Buetow DE, Cameron IL, Padilla GM and Zimmerman AM (series eds) Academic Press, New York (ISBN: 0122943503) (This was the beginning of my activities as an editor of books.)
- Marcelle R (ed) (1975) Environmental and Biological Control of Photosynthesis: Proceedings of a Conference Held at 'Limburgs Universitair Centrum', Diepenbeek, Belgium, 26–30 August 1974. Dr W. Junk, The Hague, The Netherlands (ISBN: 9061931797)
- Barber J (ed) (**1976**) The Intact Chloroplast. In: Topics in Photosynthesis (TIP), Vol. 1, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444414517) (This was the first book in Jim Barber's TIP series.)

- Alberda Th (ed) (**1977**) Crop Photosynthesis: Methods and Compilation of Data Obtained With Mobile Field Equipment. In: Agricultural Research Reports No. 865. Centre for Agricultural Publishing and Documentation, Wageningen, The Netherlands (ISBN: 902200628X)
- Barber J (ed) (1977) Primary Processes of Photosynthesis. In: Topics in Photosynthesis, Vol. 2, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444415858)
- Ketskemety I (Chairman) (1977) II. Conference on Luminescence. Held in Szeged, 24–26 August 1976. (Editorial Board had 10 members including Peter Maroti and Janos Hevesi). Published in Acta Physica et Chemica, Vol. 23(1), pp 1–208. Szeged, Hungary (ISBN/LCCC no.: N/A)
- Mitsui A, Miyachi S, San Pietro A and Tamura S (eds) (1977) Biological Solar Energy Conversion: papers presented at a conference held at the Rosenstiel School of Marine and Atmospheric Science, University of Miami, 15–18 November 1976, under the sponsorship of the United States–Japan Cooperative Science Program, US National Science Foundation, and the Japanese Society for Promotion of Science. Academic Press, New York (ASIN: 0125006500)
- Miyachi S, Katoh S, Fujita Y and Shibata K (eds) (**1977**) Photosynthetic Organelles: Structure and Function. In: Plant and Cell Physiology, Special issue, No. 3. Japanese Society of Plant Physiologists, Tokyo (ISBN/LCCN: N/A)
- Packer L, Papageorgiou GC and Trebst A (eds) (1977) Bioenergetics of Membranes. Developments in Bioenergetics and Biomembranes, Vol. 1. Proceedings of the International Symposium on Membrane Bioenergetics held on the Island of Spetsai, Greece, 10–15 July 1977. Elsevier/North Holland Biomedical Press, Amsterdam (ISBN: 0444800166)
- Trebst A and Avron M (eds) (1977) Photosynthesis I: Photosynthetic Electron Transport and Photosphorylation. In: Encyclopedia of Plant Physiology; New Series, Vol. 5. Springer-Verlag, Berlin (New York ISBN: 3540079629; Berlin ISBN: 3540079629)
- Zalenskii OV (ed) (translated from Russian into English by B.R. Sharma) (**1977**) Photosynthesis and Solar Energy Utilization. Amerind Publishing, New Delhi (ISBN/LCCC no.: N/A)
- Akoyunoglou G and Argyroudi-Akoyunogluo JH (eds) (1978) Chloroplast Development: Proceedings of the International Symposium on Chloroplast Development held on the Island of Spetsai, Greece, 9–15 July 1978. Development in Plant Biology Series, Vol. 2. Elsevier/North-Holland Biomedical Press, Amsterdam (ISBN: 0444800840)
- Clayton RK and Sistrom WR (eds) (**1978**) The Photosynthetic Bacteria. Plenum Press, New York (ISBN: 030631133X)
- Deamer DW (ed) (**1978**) Light Transducing Membranes, Structure, Function, and Evolution. Academic Press, New York (ISBN: 0122076509)
- Fiala J (ed) (1978) Proceedings of the Third International Seminar on Energy Transfer in Condensed Matter, Prague, Czechoslovakia, 29 June–2 July 1976. Vacek K (Chairman of the programs), Univerzita Karlova, Prague, Czechoslovakia (ISBN/LCCC no.: N/A)
- Metzner H (ed) (**1978**) Photosynthetic Oxygen Evolution. Academic Press, London (ISBN: 012491750X)
- Monsi M and Saeki T (eds) (1978) Ecophysiology of Photosynthetic Productivity. In: JIBP Synthesis, Vol. 19, Japanese Committee for the International Biological Program, University of Tokyo Press, Tokyo (ISBN/LCCC no.: N/A)

- Clijsters MH and Poucke M (eds) (**1979**) Photosynthesis and Plant Development: Proceedings of a Conference Held at the 'Limburgs Universitair Centrum,' Diepenbeek, Belgium, 23–29 July 1978. Dr W. Junk Publishers, The Hague, The Netherlands
- Gibbs M and Latzko E (eds) (1979) Photosynthesis II: Photosynthetic Carbon Metabolism and Related Processes. In: Encyclopedia of Plant Physiology (New Series) Vol. 6. Springer-Verlag, Berlin (ISBN: 03540092889)
- Porter G (Chairman) (1979) Chlorophyll Organization and Energy Transfer in Photosynthesis. Ciba Foundation Symposium 61 (New Series) Excerpta Medica, Amsterdam (ISBN: 0444900446)

The 1980s

- Bauer C, Gros G and Hartels H (eds) (**1980**) Biophysics and Physiology of Carbon Dioxide. Springer-Verlag, Berlin (ISBN: Berlin 3540098925; New York 0387098925)
- Gnanam A, Krishnaswamy S and Kahn JS (eds) (1980) Proceedings of the International Symposium on Biological Applications of Solar Energy, 1–5 December 1978. Macmillan, Madras (now Chennai) (ISBN/LCCC no.: N/A)
- Hesketh JD and Jones JW (eds) (1980) Predicting Photosynthesis for Ecosystem Models. CRC Press, Boca Raton, Florida (ISBN: Vol. I 0849353351; Vol. II 084935336X)
- San Pietro A (ed) (1980) Photosynthesis and Nitrogen Fixation, Part C. Methods in Enzymology, Vol. 69. Academic Press, New York (ISBN: 01218196978)
- Hatch MD and Boardman NK (eds) (**1981**) Photosynthesis. In: The Biochemistry of Plants – a Comprehensive Treatise, Vol. 8 (Series editors: Stumpf PK and Conn EE). Academic Press, New York (ISBN: 012675408X)
- Pantoflicek J and Zachoval L (eds) Vacek K (chairman of the organizing committee) (1981) Proceedings of the Fourth International Seminar on Energy Transfer in Condensed Matter, Prague, Czechoslovakia, 30 June–3 July 1981. Society of Czechoslovak Mathematicians and Physicists, Prague, Czechoslovakia (ISBN/LCCC no.: N/A)
- Selman BR and Selman-Reimer S (eds) (1981) Energy Coupling in Photosynthesis: Proceedings of the Eleventh Harry Steenbock Symposium held 6–8 July 1981, at the University of Wisconsin-Madison, Madison, Wisconsin Elsevier/North Holland, Amsterdam (ISBN: 0444006753)
- Alfano RR (ed) (1982) Biological Events Proved by Ultrafast Laser Spectroscopy. Academic Press, New York (ISBN: 0120499509)
- Barber J (ed) (1982) Electron Transport and Photophosphorylation. In: Topics in Photosynthesis, Vol. 4, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444803750)
- Carr NG and Whitton BA (eds) (1982) The Biology of Cyanobacteria. Blackwell Scientific Publications, Oxford, UK
- Coombs J and Hall DO (eds) (1982) Techniques in Bioproductivity and Photosynthesis. Pergamon, Oxford, UK (ISBN: Hardcover 0080273823; Flexicover 0080273831)
- Edelman M, Hallick RB and Chua N-H (eds) (1982) Methods in Chloroplast Molecular Biology. Elsevier Biomedical Press, Amsterdam (ISBN: 044403688)
- Fong FK, Beddard GS, Clarke RH, Cogdell RJ, Hoff A, Levanon H, Norris JR, Scheer H and Wasielewski MR (eds) (1982) Light Reaction Path of Photosynthesis. Springer-Verlag, Berlin (ISBN: 0387113797)
- Govindjee (ed) (1982) Photosynthesis, Vol. I Energy Conversion by Plants and Bacteria. In: Cell Biology: A Series of Monographs. Buetow DE, Cameron IL, Padilla GM and Zim-

merman AM (Series eds). Academic Press, New York (ISBN: 0122943015)

- Govindjee (ed) (1982) Photosynthesis, Vol. II Development, Carbon Metabolism and Plant Productivity. In: Cell Biology: A Series of Monographs. Buetow DE, Cameron IL, Padilla GM and Zimmerman AM (Series eds) Academic Press, New York (ISBN: 0122943023)
- Hall DO and Coombs J (eds) (**1982**) Techniques in Bioproductivity and Photosynthesis. Pergamon Press, Oxford (ISBN: Hardcover 0080273823; Paperback 0080273831)
- Inoue S and Yamazaki N (eds) (1982) Organic and Bioorganic Chemistry of Carbon Dioxide. Kodansha, Tokyo (ISBN: 0470273097)
- Trumpower BL (ed) (1982) Function of Quinones in Energy Conserving Systems. Academic Press, New York (ISBN: 012701280X)
- Inoue Y, Crofts AR, Govindjee, Murata N, Renger G and Satoh K (eds) (1983) The Oxygen Evolving System of Photosynthesis: Proceedings of the International Symposium on Photosynthetic Water Oxidation and Photosystem II Photochemistry, held 15–17 March 1983. Academic Press, Tokyo (ISBN: 0123723604)
- Marcelle R, Clijsters H and Van Poucke M (eds) (1983) Effects of Stress on Photosynthesis: Proceedings of a Conference held at the Limburgs Universitair Centrum, Diepenbeek, Belgium, 22–27 August 1982. M Nijhoff/Dr W. Junk, The Hague, The Netherlands (ISBN: 9024727995)
- Metzner H (ed) (1983) Photosynthesis and Plant Productivity: Joint Meeting of O.E.C.D. and Studienzentrum Weikersheim, Ettlingen Castle, Germany, 11–14 October 1981. Wissenschaftliche Verlagsgesellschaft, Stuttgart, Germany (ISBN: 3804707238)
- Papageorgiou GC and Packer L (eds) (1983) Photosynthetic Prokaryotes: Proceedings of the Special FEBS Meeting on Cell Differentiation and Function, 25–29 April 1982, Athens, Greece. Elsevier Biomedical, New York (ISBN: 0444007326)
- Baker NR and Barber J (eds) (1984) Chloroplast Biogenesis. In: Topics in Photosynthesis, Vol. 5, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444805486)
- Sironval C and Brouers M (eds) (1984) Protochlorophyllide Reduction and Greening. Contributions Presented During an International Meeting Organized by the Laboratory of Photobiology of the University of Liège, Belgium, 8–9 August 1983. In: Advances in Agricultural Biotechnology. M. Nijhoff/Dr W. Junk, The Hague, The Netherlands (ISBN: 9024729548)
- Tashian RE and Hewett-Emmett D (eds) (1984) Biology and Chemistry of the Carbonic Anhydrases, Vol. 429. In: Annals of the New York Academy of Sciences, Boland B, Hitchcock J and Mehta L (eds) New York Academy of Sciences, New York (ISBN: Hardback 0897662520; Paperback 0897662539; ISSN: 00778923)
- Thornber JP, Staehelin LA and Hallick RB (eds) (1984) Biosynthesis of the Photosynthetic Apparatus: Molecular Biology, Development, and Regulation: Proceedings of the UCLA symposium held in Keystone, Colorado, 23–29 April 1983. In: UCLA Symposia on Molecular and Cellular Biology; Vol. 14. A.R. Liss, New York (ISBN: 084512613X)
- Heath RL and Preiss J (eds) (1985) Regulation of Carbon Partitioning in Photosynthetic Tissue: Proceedings of the Eigth Annual Symposium in Plant Physiology, 11–12 January 1985, University of California, Riverside, California. American Society of Plant Physiologists, Rockville, Maryland (ISBN: Paperback 0943088070)
- Lucas WJ and Berry JA (eds) (1985) Inorganic Carbon Uptake by Aquatic Photosynthetic Organisms: Proceedings of an Interna-

tional Workshop on Bicarbonate Use in Photosynthesis, 18–22 August 1984. Commemorating the 75th Anniversary of the University of California, Davis, California, 1909–1984. American Society of Plant Physiologists, Rockville, Maryland (ISBN: 0943088054)

- Michel-Beyerle ME (ed) (1985) Antennas and Reaction Centers of Photosynthetic Bacteria: Structure, Interactions, and Dynamics: Proceedings of an International Workshop, Feldafing, Bavaria, Germany, 23–25 March 1985. Springer-Verlag, Berlin (ISBN: 0387161546)
- Pancoska P and Pantoflicek J (eds) (1985) Proceedings of the Fifth International Seminar on Energy Transfer in Condensed Matter: Structure, Conformation, and Function of Molecular Systems Largely Related to Photosynthesis. Prague, Czechoslovakia, 8– 12 July 1985. Society of Czechoslovak Mathematicians and Physicists, Prague, Czechoslovakia (ISBN/LCCC no.: N/A)
- Sesták Z (ed) (1985) Photosynthesis During Leaf Development. In: Tasks for Vegetation Sciences; 11. Dr W. Junk Publishers, Dordrecht (ISBN: 9061939518)
- Steinback KE, Bonitz S, Arntzen CJ and Bogorad L (eds) (1985) Molecular Biology of the Photosynthetic Apparatus. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York (ISBN: 0879691883)
- Amesz J, Hoff AJ and van Gorkom HJ (eds) (1986) Current Topics in Photosynthesis: Dedicated to Professor L.N.M. Duysens on the Occasion of his Retirement. Martinus Nijhoff Publishers (now Kluwer Academic Publishers), Dordrecht (ISBN: 9024733448) (also published in Photosynth Res: 1–283)
- Barber J and Baker NR (eds) (1986) Photosynthetic Mechanisms and the Environment. In: Topics in Photosynthesis, Vol. 6, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444806741) (contains obituary of A.A. Shlyk, written by A.A. Krasnovsky)
- Baker NR and Long SP (eds) (1986) Photosynthesis in Contrasting Environments. In: Topics in Photosynthesis, Vol. 7, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444807721)
- Gibbs M (ed) (1986) Hungary-USA Binational Symposium on Photosynthesis: A conference held at Salve Regina College, Newport, Rhode Island, 15–18 August 1986. Salve Regina College, Newport, Rhode Island (ISBN/LCCC no.: N/A)
- Govindjee, Amesz J and Fork DC (eds) (1986) Light Emission by Plants and Bacteria. In: Buetow DE, Cameron IL, Padilla GM and Zimmerman AM (series eds). Cell Biology: a Series of Monographs. Academic Press, Orlando, Florida (ISBN: 0122943104) (contains a tribute to Warren Butler, written by William Cramer; this book is one of the first comprehensive books on 'Chlorophyll fluorescence')
- Govindjee, Barber J, Cramer W, Goedheer JC, Lavorel J, Marcelle R and Zilinskas B (eds) (1986) Excitation and electron transfer in photosynthesis – a special issue dedicated to Warren Lee Butler. Photosynth Res 10: 147–518
- Hipkins MF and Baker NR (eds) (1986) Photosynthesis, Energy Transduction: a Practical Approach. IRL Press, Oxford (ISBN: 0947946632)
- Papageorgiou G, Barber J and Papa S (eds) (1986) Ion Interactions in Energy Transfer Biomembranes. Plenum Press, New York (ISBN: 0306422204)
- Staehelin LA and Arntzen CJ (eds) (1986) Photosynthesis III. Photosynthetic Membranes and Light Harvesting Systems. In: Encyclopedia of Plant Physiology, New Series, Vol. 19, Series Editors: Pirson A and Zimmerman MH. Springer-Verlag, Berlin (ISBN: 3540161406 Berlin; 3387161406 New York)
- Youvan D and Daldal F (eds) (1986) Microbial Energy Transduction: Genetics, Structure, and Function of Membrane Proteins. Current Communications in Molecular Biology. Proceedings

- Amesz J (ed) (1987) Photosynthesis. In: New Comprehensive Biochemistry Series (Neuberger A and van Deenen LLM, Series eds) Elsevier, Amsterdam (ISBN: 0444808647)
- Barber J (ed) (1987) The Light Reactions. In: Topics in Photosynthesis, Vol. 8, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444808779)
- Govindjee, Barber J, Cramer WA, Goedheer JHC, Lavorel J, Marcelle R and Zilinskas B (eds) (1987) Excitation Energy and Electron Transfer in Photosynthesis. Martinus Nijhoff Publishers (now Kluwer Academic Publishers), Dordrecht (ISBN: 9024734347)
- Kyle DJ, Osmond CB and Arntzen CJ (eds) (1987) Photoinhibition. In: Topics in Photosynthesis, Vol. 9, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444808906)
- Breton J and Vermeglio A (eds) (1988) The Photosynthetic Bacterial Reaction Center: Structure and Dynamics. Proceedings of NATO Advanced Research Workshop on the Structures of the Photosynthetic Bacterial Reaction Center held 20–25 September 1987, Cadarache, France. In: NATO ASI Series A, Life Sciences, Vol. 149. Plenum Press, New York (ISBN: 0306429179)
- Govindjee, Bohnert HJ, Bottomley W, Bryant DA, Mullet JE, Ogren WL, Pakrasi H and Somerville CR (eds) (1988) Special Issue: Molecular Biology of Photosynthesis 1. Photosynth Res 16: 5–186
- Govindjee, Bohnert HJ, Bottomley W, Bryant DA, Mullet JE, Ogren WL, Pakrasi H and Somerville CR (eds) (1988) Special Issue: Molecular Biology of Photosynthesis 2. Photosynth Res 17: 5–194
- Govindjee, Bohnert HJ, Bottomley W, Bryant DA, Mullet JE, Ogren WL, Pakrasi H and Somerville CR (eds) (1988) Special Issue: Molecular Biology of Photosynthesis 3. Photosynth Res 18: 5–260
- Govindjee, Bohnert HJ, Bottomley W, Bryant DA, Mullet JE, Ogren WL, Pakrasi H and Somerville CR (eds) (1988) Special Issue: Molecular Biology of Photosynthesis 4. Photosynth Res 19: 5–196
- Lichtenthaler HK (ed) (1988) Applications of Chlorophyll Fluorescence in Photosynthesis Research, Stress Physiology, Hydrobiology and Remote Sensing. Kluwer Academic Publishers, Dordrecht (ISBN: 9024737877)
- Stevens SE and Bryant DA (1988) Light-energy Transduction in Photosynthesis: Higher Plant and Bacterial Models. Proceedings of the 3rd Annual Penn State Symposium in Plant Physiology, 19–21 May 1988. American Society of Plant Physiologists, Rockville, Maryland (ISBN: 0943088135)
- Barber J and Malkin R (eds) (1989) Techniques and New Developments in Photosynthesis Research. In: NATO Science Series: A: Life Sciences, Plenum Press, New York (ISBN: 030643220X)
- Blankenship RE, Amesz J, Holten D and Jortner J (eds) (1989) Special Issue: Tunneling Processes in Photosynthesis 1. Photosynth Res 22: 1–122
- Blankenship RE, Amesz J, Holten D and Jortner J (eds) (**1989**) Special Issue: Tunneling Processes in Photosynthesis 2. Photosynth Res 22: 173–301
- Briggs WR (ed) (1989) Photosynthesis: Proceedings of the C.S. French Symposium Held in Stanford, California, 17–23 July 1988. Plant Biology, Vol. 8. John Wiley & A.R. Liss, New York (ISBN: 0845118072) (The book honors C. Stacey French at his 80th birthday; here, I provided a historical note on my association with French.)

- Govindjee, Bohnert HJ, Bottomley W, Bryant DA, Mullet JE, Ogren WL, Pakrasi H and Somerville CR (eds) (1989) Molecular Biology of Photosynthesis. Kluwer Academic Publishers, Dordrecht (ISBN: 0792300971)
- Harashima K, Shiba T and Murata N (eds) (1989) Aerobic Photosynthetic Bacteria. Japan Scientific Societies Press, Tokyo, Japan/Springer-Verlag, Berlin (ISBN: 4762225799)
- Singhal GS, Barber J, Dilley RA, Govindjee, Haselkorn R and Mohanty P (eds) (1989) Photosynthesis: Molecular Biology and Bioenergetics – Proceedings of the International Workshop on Molecular Biology and Bioenergetics of Photosynthesis. Narosa Publishing House, New Delhi (ISBN: Narosa Publishing House 81-85198-09-8; Springer-Verlag, Berlin 3540504516; Springer-Verlag, New York 0387504516)
- Walker DA and Osmond CB (eds) (1989) New Vistas in Measurement of Photosynthesis: Proceedings of a Royal Society Discussion meeting held on 25–26 May 1989. Royal Society, London (ISBN: 0854033777)

The 1990s

- Drews G and Dawes EA (ed) (**1990**) Molecular Biology of Membrane-bound Complexes in Phototrophic Bacteria. Plenum Press, New York
- Jortner J and Pullman B (ed) (**1990**) Perspectives in Photosynthesis: Proceedings of the 22nd Jerusalem Symposium on Quantum Chemistry and Biochemistry held in Jerusalem, Israel, 15–18 May 1989. Kluwer Academic Publishers, Dordrecht (ISBN: 0792305345)
- Snel JFH and van Kooten O (eds) (1990) Special Issue: The use of chlorophyll fluorescence and other non-invasive spectroscopic techniques in plant stress physiology. Photosynth Res 25: 147– 327
- Wiessner W, Robinson DG and Starr RC (eds) (1990) Cell Walls and Surfaces, Reproduction, Photosynthesis In: Experimental Phycology 1. Springer-Verlag, Berlin (ISBN: 0387524967)
- Zelitch I (ed) (1990) Perspectives in Biochemical and Genetic Regulation of Photosynthesis. In: Plant biology, Vol. 10. Wiley-Liss, New York (ISBN: 0471567221)
- Abrol YP (ed) (1991) Studies on Photosynthesis and Crop Productivity Under Tropical Environment. A Co-ordinated Effort: US–India Fund Project. Oxford & IBH Publishing, New Delhi (ISBN: N/A)
- Abrol YP, Wattal PN, Gnanam A, Govindjee, Ort DR and Teramura AH (eds) (1991) Impact of Global Climatic Changes on Photosynthesis and Plant Productivity: Proceedings of the Indo–US Workshop held on 8–12 January 1991 at New Delhi, India. Oxford & IBH Publishing, New Delhi (ISBN: 8120406141)
- Baker NR and Percival MP (eds) (1991) Herbicides. In: Topics in Photosynthesis, Vol. 10, Series Editor: Barber J. Elsevier, Amsterdam (ISBN:0444812288)
- Bogorad L and Vasil IK (eds) (1991) The Molecular Biology of Plastids. Cell Culture and Somatic Cell Genetics of Plants, Vol. 7A. Academic Press, San Diego, California (ISBN: 0127150072)
- Bogorad L and Vasil IK (eds) (**1991**) The Photosynthetic Apparatus: Molecular Biology and Operation. Cell Culture and Somatic Cell Genetics of Plants, Vol. 7B. Academic Press, San Diego, California (ISBN: 0127150102)
- Boote KJ and Loomis RS (eds) (1991) Modeling Crop Photosynthesis – From Biochemistry to Canopy: Proceedings of a Symposium Sponsored by Division C-2 of the Crop Science Society of America and Division A-3 of the American Society of Agronomy in Anaheim, California, 29 November 1988. Crop

Science Society of America: American Society of Agronomy, Madison, Wisconsin (ISBN: 089118533X)

- Mache R, Stutz E and Subramanian AR (eds) (1991) The Translational Apparatus of Photosynthetic Organelles: Proceedings of the NATO Advanced Workshop on the Translational Apparatus of Photosynthetic Organelles held in Grenoble, France, 3–6 July 1990. In: NATO ASI Series H, Cell Biology. Vol. 55. Springer-Verlag, Berlin (ISBN: 3540517790)
- Scheer H (ed) (1991) Chlorophylls. CRC Press, Boca Raton, Florida (ISBN: 0849368421; LCCC no.: 90-15061)
- Baker NR and Thomas H (eds) (1992) Crop Photosynthesis: Spatial and Temporal Determinants. In: Topics in Photosynthesis, Vol. 12, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444896082)
- Barber J (ed) (1992) The Photosystems: Structure, Function, and Molecular Biology. In: Topics in Photosynthesis, Vol. 11, Series Editor: Barber J. Elsevier, Amsterdam (ISBN: 0444894403) (contains obituaries of Robin Hill, by F.R. Whatley, of Mordhay Avron, by A. Jagendorf and Z. Gromet-Elhanan and of Don DeVault, by M. Seibert)
- Breton J and Vermeglio A (eds) (1992) The Photosynthetic Bacterial Reaction Center II: Structure, Spectroscopy and Dynamics. Proceedings of a NATO Advanced Research Workshop on the Photosynthetic Bacterial Reaction Center: Structure, Spectroscopy, and Dynamics, held 10–15 May 1992, at the Centre d'Etudes Nucléaires de Cadarache, France. In: NATO ASI Series A, Life Sciences, Vol. 237. Plenum Press, New York (ISBN: 0306443546)
- Rich P (ed) (1992) Robert Hill. A special issue of perspectives and appreciations. Photosynth Res 34: 319–477
- Hartman H (ed) (1992) Special Issue: Photosynthesis and the Origin of Life. Photosynth Res 33: 73–176
- Tobin AK (ed) (1992) Plant Organelles: Compartmentation of Metabolism in Photosynthetic Cells. In: Society for Experimental Biology Seminar Series; 50. Cambridge University Press, Cambridge (ISBN: 0521401712)
- Abrol YP, Mohanty P and Govindjee (eds) (**1993**) Photosynthesis: Photoreactions to Plant Productivity. Kluwer Academic Publishers, Dordrecht, The Netherlands/Narosa Publishers, New Delhi (ISBN: 0792319435)
- Barber J, Guerrero MG and Medrano H (eds) (**1993**) Trends in Photosynthesis Research. Intercept Limited, Andover, New Hampshire (ISBN: 0946707375)
- Deisenhofer J and Norris JR (eds) (1993) The Photosynthetic Reaction Center. Vol. I. Academic Press, San Diego, California (ISBN: 0122086619)
- Deisenhofer J and Norris JR (eds) (**1993**) The Photosynthetic Reaction Center. Vol. II. Academic Press, San Diego, California (ISBN: 0122086627)
- Hall DO, Scurlock JMO, Bolhar-Nordenkampf HR, Leegood RC and Long SP (eds) (1993) Photosynthesis and Production in a Changing Environment: A Field and Laboratory Manual. Chapman & Hall, London (ISBN: Hardcover 0412429004; Paperback: 0412429101)
- Renger G and Govindjee (eds) (**1993**) Special Issue: How plants and cyanobacteria make oxygen: 25 years of period four oscillations. Photosynth Res 38: 211–469
- Yamamoto HY and Smith CM (eds) (1993) Photosynthetic Responses to the Environment. American Society of Plant Physiologists, Rockville Maryland (ISBN: 0943088240)
- Yoshida S, Oettmeier W and Böger P (eds) (1993) Chloroplast Metabolism and its Inhibition by Herbicides. Proceedings of an International Workshop at Omiya, Japan, 26–28 August 1992. Published in Z Nat Forsch C, Vol. 48: 119–405. Verlag der Zeits-

chrift für Naturforschung, Tübingen, Germany (ISBN/LCCC no.: N/A)

- Young A and Britton G (eds) (**1993**) Carotenoids in Photosynthesis. Chapman & Hall, London (ISBN: 0412562502)
- Baker NR and Bowyer JR (eds) (1994) Photoinhibition of Photosynthesis: From Molecular Mechanisms to the Field. BIOS Scientific Publishers, Oxford (ISBN: 1872748031)
- Barber J (ed) (1994) Molecular Processes of Photosynthesis. In: Advances in Molecular and Cell Biology, Vol. 10 (Series Editor: Bittar EE). Jai Press, Greenwich, Connecticut (ISBN: 1559387106)
- Brändén C-I and Schneider G (eds) (1994) Carbon dioxide Fixation and Reduction in Biological and Model Systems: Proceedings of the Royal Swedish Academy of Sciences Nobel Symposium, 1991. Oxford University Press, London (ASIN: 019854782X)
- Bryant DA (ed) (**1994**) The Molecular Biology of Cyanobacteria. In: Advances in Photosynthesis (AIPH) Series, Vol. 1 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792332229) (This is the first book published in the AIPH Series.)
- Falkowski PG, Long SP and Edwards GE (eds) (1994) Special Issue: Photosynthesis and Global Changes in the Environment. Photosynth Res 39: 207–489
- Olson JM, Amesz J, Ormerod JG and Blankenship RE (eds) (**1994**) Special Issue: Green and Heliobacteria. Photosynth Res 41: 1– 294
- Tolbert NE and Preiss J (eds) (**1994**) Regulation of Atmospheric CO₂ and O₂ by Photosynthetic Carbon Metabolism. Oxford University Press, New York (ISBN: 0195079329)
- Blankenship RE, Madigan MT and Bauer CE (eds) (1995) Anoxygenic Photosynthetic Bacteria. In: Advances in Photosynthesis Series, Vol. 2 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 079233681X)
- Cogdell RJ, Nechustai R and Malkin R (eds) (1995) Special Issue: Structure, Function and Biogenesis of Chlorophyll–Protein Complexes. Photosynth Res 44: 1–219
- Guyot G (ed) (1995) Assessment of Remote Sensing Tools for the Estimation of Photosynthesis and Primary Production: Present and Future Potential. Proceedings of the International Colloquium on Photosynthesis and Remote Sensing. European Association of Remote Sensing Laboratories, Paris, France (ISBN: 2908885166)
- Melis A and Buchanan BB (eds) (1995) Special Issue: A tribute to Daniel I. Arnon. Photosynth Res 46: 1–376
- Wydrzynski T, Chow WS and Badger MR (eds) (1995) Chlorophyll Fluorescence: Origins, Measurements, Interpretations and Applications. Invited Papers from a Robertson Symposium. Reprinted from Aust J Plant Physiol 1995; Vol. 22, CSIRO, Colingwood, Australia
- Amesz J and Hoff AJ (eds) (1996) Biophysical Techniques in Photosynthesis. In: Advances in Photosynthesis Series, Vol. 3 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792336429)
- Anderson B, Salter AH and Barber J (eds) (1996) Molecular Genetics of Photosynthesis. In: Frontiers in Molecular Biology, Vol. 14. IRL Press/Oxford University Press, Oxford (ISBN: 0199634483)
- Baker NR (ed) (**1996**) Photosynthesis and the Environment. In: Advances in Photosynthesis Series, Vol. 5 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792343166)
- Bhattacharya P, Engineer M, Kumar A, Gupta D and Mitra R (eds) (**1996**) Acharya J.C. Bose, a Scientist & a Dreamer. Bose Institute, Calcutta, India (ISBN/LCCC no.: N/A)

- Govindjee, Amesz J and Knox RS (eds) (1996) Special Issue Dedicated to William A. Arnold: Photosynthetic Unit: Antenna and Reaction Center. Photosynth Res 48: 1–319
- Ort DR and Yocum CF (eds) (1996) Oxygenic Photosynthesis: The Light Reactions. In: Advances in Photosynthesis Series, Volume 4 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: Hardback: 0792336836; Paperback: 0792336844)
- Zamski E and Schaffer AA (eds) (1996) Photoassimilate Distribution in Plants and Crops: Source-Sink Relationships. In: Books in Soils, Plants, and the Environment. Marcel Dekker, New York (ISBN: 0824794400)
- Mimuro M, Gantt E and Byrant DA (eds) (**1997**) Special Issue: Molecular Approaches to Light Acclimation from Cyanobacteria to Higher Plants. Photosynth Res 53: 81–261
- Osmond B (ed) (1997) C4 photosynthesis: 30 (or 40) years on. Aust J Plant Physiol 24: 409–554
- Pessarakli M (ed) (**1997**) Handbook of Photosynthesis. Marcel Dekker, New York (ISBN: 0824797086)
- Blankenship R, McDermott AE and Yachandra VK (eds) (1998) Special issue in honor of Melvin P. Klein and Kenneth Sauer. J Phys Chem 102: 8122–8352
- Breton J, Nabedryk E and Verméglio A (eds) (1998) Special Issue: Reaction Centers of Photosynthetic Purple Bacteria: Structure, Spectroscopy, Dynamics. Photosynth Res 55: 117–378
- Jagendorf AT (ed) (1998) Special Issue: Proton-transporting ATPases and ATP Synthase. Photosynth Res 57: 215–345
- McIntosh L (ed) (1998) Photosynthesis: Molecular Biology of Energy Capture. Methods in Enzymology, Vol. 297. Academic Press, San Diego, California (ISBN: 0121821986)
- Raghavendra AS (ed) (1998) Photosynthesis: a Comprehensive Treatise. Cambridge University Press, Cambridge (ISBN: 052157000X)
- Rochaix J-D, Goldschmidt-Clermont M and Merchant S (eds) (1998) The Molecular Biology of Chloroplasts and Mitochondria in Chlamydomonas. In: Advances in Photosynthesis Series, Vol. 7 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792351746)
- Satoh K and Murata N (eds) (**1998**) Stress Responses of Photosynthetic Organisms: Molecular Mechanisms and Molecular Regulations. Elsevier, Amsterdam (ISBN: 0444828842)
- Siegenthaler P-A and Murata N (eds) (1998) Lipids in Photosynthesis: Structure, Function, and Genetics. In: Advances in Photosynthesis Series, Vol. 6 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792351738)
- Frank HA, Young AJ, Britton G and Cogdell RJ (eds) (1999) The Photochemistry of Carotenoids. In: Advances in Photosynthesis Series, Vol. 8 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792359429)
- Osmond B (ed) (1999) Why grana? Special Issue Honoring Dr. Jan Anderson. Aust J Plant Physiol 26: 625–724
- Singhal GS, Renger G, Sopory SK, Irrgang K-D and Govindjee (eds) (1999) Concepts in Photobiology: Photosynthesis and Photomorphogenesis. Narosa Publishing House, New Delhi (ISBN: 8173191514)

The 2000s

- Brzezinski P (ed) (2000) Proton transfer reactions in bioenergetics. Biochim Biophys Acta 1458: 1–219
- Chitnis P and Mohanty P (organizers) (2000) A special issue on Photosynthesis Research in the Post Genomic Era. Ind J Biochem Biophys 37: 351–505

- Kramer DM (ed) (2000) Special Issue: Emerging Techniques. Photosynth Res 66: 1–158
- Leegood RC, Sharkey TD and Caemmerer S (eds) (2000) Photosynthesis: Physiology and Metabolism. In: Advances in Photosynthesis Series, Vol. 9 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792361431)
- Osmond CB, Foyer CH and Bock G (ed) (**2000**) Photoprotection of the photosynthetic apparatus: alternative photon and electron sinks. Photoprotection of the photosynthetic apparatus: new biochemical methods. Discussion Meeting held at The Royal Society on 12–13 April 2000. Discussion Meeting held at The Novartis Foundation on 14 April 2000. Phil Trans Royal Soc B Biological Sciences, Vol. 355 Number 1402.
- Sheehy JE, Mitchell PL and Hardy B (eds) (2000) Redesigning Rice Photosynthesis to Increase Yield: Proceedings of the Workshop on the Quest to Reduce Hunger, Redesigning Rice Photosynthesis, held in Los Baños, Philippines, 30 November-3 December 1999. In: Studies in Plant Science; 7. Elsevier, Amsterdam (ISBN: 0444506101; LCCC no.: 2001265263)
- Walker JE (ed) (2000) The mechanism of F1F0-ATPase. Biochim Biophys Acta 1458: 221–510
- Yunus M, Pathre U and Mohanty P (eds) (2000) Probing Photosynthesis: Mechanisms, Regulation, and Adaptation. Taylor & Francis, London (ISBN: 0748408215) (This book honors Pafullachandra (Raj) Sane of India, and also contains an historical chapter on 'Milestones in Photosynthesis Research'.)
- Aro E-M and Andersson B (eds) (2001) Regulation of Photosynthesis. In: Advances in Photosynthesis and Respiration Series, Vol. 11 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht (ISBN: 0792363329)
- Grossman AR, Field CB and Berry JA (eds) (2001) Special Issue in Honour of Olle Björkman: Plants and Their Light Environment. Photosynth Res 67: 1–156
- Heathcote P (ed) (2001) Type 1 photosynthetic reaction centers. Biochim Biophys Acta 1507: 1–310
- Ke B (2001) Photosynthesis: Photobiochemistry and Photobiophysics. In: Advances in Photosynthesis (AIPH) Series, Vol. 10 (Series Editor: Govindjee). Kluwer Academic Publishers, Dordrecht, The Netherlands (ISBN: Hardcover 0792363345; Paperback 079236791X) (This is the first single-authored book in the AIPH Series.)
- Nugent J (ed) (2001) Photosynthetic water oxidation. Biochim Biophys Acta 1503: 1–259
- Mackenzie C and Kaplan S (eds) (2001) Special Issue: Genomics. Photosynth Res 70: 1–127
- Barber J and Anderson JM (eds) (2002) Photosystem II: molecular structure and function. Papers of a Discussion Meeting held at The Royal Society on 13–14 March 2002. Phil Trans Royal Soc B Biol Sci, Vol. 357, Number 1426.
- Barry BA and Bricker TM (eds) (2002) Special Issue: Biochemistry of the Photosynthetic Water-oxidizing Complex. Photosynth Res 72: 125–222
- Beale SI (ed) (2002) Special Issue: Tetrapyrrole Photoreceptors in Photosynthetic Organisms. Photosynth Res 74: 95–233
- Foyer CH and Noctor G (eds) (2002) Photosynthetic Nitrogen Assimilation and Associated Carbon and Respiratory Metabolism. In: Advances in Photosynthesis and Respiration, Vol. 12, Series Editor: Govindjee. Kluwer Academic Publishers, Dordrecht (ISBN 0792363361)
- Gilmore AM, Farley SJ and McCutchan J (eds) (2002) Light Stress and Photosynthesis. Funct Plant Biol 29: 1125–1215 (A group photograph of the participants is also included in this special issue)

- Holtum JAM (ed) (2002) Crasulacean Acid Metabolism: plasticity in expression, complexity of control. Funct Plant Biol 29: 657– 785
- Miller M, Aartsma TJ and Blankenship RE (eds) (2002) Special Issue in Honour of Jan Amesz: Green and Heliobacteria. Photosynth Res 71: 1–183
- Muttiah RS (ed) (2002) From Laboratory Spectroscopy to Remotely Sensed Spectra of Terrestrial Ecosystems. Kluwer Academic Publishers, Dordrecht (ISBN: 1402007531)
- Price GD and Badger MR (eds) (2002) CO₂ concentrating mechanisms in aquatic photosynthetic organisms. Funct Plant Biol 29: 117–416
- Allen JF and Raven JA (2003) Chloroplasts and mitochondria: functional genomics and evolution. Papers of a Discussion Meeting held at The Royal Society on 26–27 June 2002. Phil Trans Royal Soc B Biol Sci. Vol. 358, Number 1429
- Green B and Parson W (eds) (2003) Light-harvesting Antennas. In: Advances in Photosynthesis and Respiration, Vol. 13, Series Editor: Govindjee. Kluwer Academic Publishers, Dordrecht (ISBN: 0792363353)
- Larkum AWD, Raven J and Douglas S (eds) (2003) Photosynthesis of Algae, Vol. 14, Series Editor: Govindjee. Kluwer Academic Publishers, Dordrecht (ISBN: 0792363337)
- Mohanty P and Raghavendra AS (eds) (2003) Chloroplast Development and Structure. J Plant Physiol 160: 1–96

Acknowledgments

I am grateful to Yaroslav de Kouchkovsky for the photograph and the legend of Figure 3. Rumana Tayyab and Aheed Mohiuddin are acknowledged for their dedicated participation in producing the lists and the figures used here. I thank J. Thomas Beatty, and John Allen for their valuable suggestions. Howard Gest is thanked for recommending that the material included here be published as a 'general appendix' at the end of this special issue. I am grateful to David Krogmann and David Walker for providing inspiration to complete this task. This manuscript was edited by J. Thomas Beatty.

References

- Cold Spring Harbor Biological Laboratory (1935) Symposia on Quantitative Biology, Vol. III. The Biological Laboratory, Cold Spring Harbor, Long Island, New York
- de Kouchkovsky Y (2002) The laboratory of photosynthesis and its successors at Gif-sur-Yvette, France. Photosynth Res 73: 295– 303
- Fischer-Zeh K (2000) Helmut Metzner (1925–1999). Photosynth Res 63: 191–194
- Franck J and Loomis WE (eds) (1949) Photosynthesis in Plants: a Monograph of The American Society of Plant Physiologists. The Iowa State College Press, Ames, Iowa

- Fuller RC (chairman) (1959) The Photochemical Apparatus Its Structure and Function: Report on Symposium held 16–18 June 1958, Brookhaven Symposia in Biology, Number 11. Brookhaven National Laboratory, Upton, New York
- Gaffron H, Brown AH, French CS, Livingston R, Rabinowitch EI, Strehler BL and Tolbert NE (eds) (1957) Research in Photosynthesis: Papers and Discussions Presented at the Gatlinburg Conference, 25–29 October 1955. Interscience Publishers, New York
- Govindjee and Gest H (eds) (2002) Celebrating the millennium: historical highlights of photosynthesis research, Part 1. Photosynth Res 73: 1–308
- Govindjee and Krogmann D (2004) Discoveries in oxygenic photosynthesis (1727–2003): a perspective. Photosynth Res 80: 15–57 (this issue)
- Govindjee, Sestak Z and Peters WR (2002) The early history of Photosynthetica, Photosynthesis Research and their publishers. Photosynthetica 40: 1–11
- Govindjee, Beatty JT and Gest H (eds) (2003a) Celebrating the Millennium: Historical Highlights of Photosynthesis Research, Part 2. Photosynth Res 76: 13–462
- Govindjee, Beatty JT and Gest H (2003b) Celebrating the Millennium: Historical Highlights of Photosynthesis Research, Part 2. Photosynth Res 76: 1–11 (Editorial)
- Kok B and Jagendorf AT (chairman and organizer) (1963) Photosynthetic Mechanisms of Green Plants. National Academy of Sciences – National Research Council Publication Number 1145, Washington, DC
- McElroy WD and Glass B (eds) (1961) A Symposium on Light and Life (held in 1960). The Johns Hopkins Press, Baltimore, Maryland
- Metzner H (ed) (1969) Progress in Photosynthesis Research, 3 volumes. Publication sponsored by International Union of Biological Sciences, Tübingen, Germany
- Olson JM (chairman) (1967) Energy Conversion by the Photosynthetic Apparatus: Report of Symposium held 6–9 June 1966, Brookhaven Symposia on Biology, No. 19. Biology Department, Brookhaven National Laboratory, Upton, New York
- Olson JM and Hind G (eds) (1977) Chlorophyll-proteins, Reaction Centers, and Photosynthetic Membranes: Report of Symposium held 7–9 June 1976. Biology Department, Brookhaven National Laboratory, Upton, New York (BNL 50530, Biology & Medicine-TID-4500) (also contains a dedication to Dan W. Reed (1940–1974) by John Olson). National Technical Information Service, Springfield, Virginia
- Siegelman HW and Hind G (eds) (1978) Photosynthetic Carbon Assimilation: Proceedings of a Symposium held at Brookhaven National Laboratory, Upton, New York, 31 May– 2 June 1978. In: Basic Life Sciences, Vol. 11. Plenum Press, New York
- Thomas JB and Goedheer JC (eds) (1966) Currents in Photosynthesis – Proceedings of the Second Western-Europe Conference on Photosynthesis, Woudschoten, The Netherlands, September 1965. Ad Donker Publisher, Rotterdam, The Netherlands
- van Ginkel G and Goedheer JHC (1991) Jan Bartolomeus Thomas. Photosynth Res 30: 65–69
- Wurmser R (President) and Coursaget J, Lavorel J, Moyse A, Roux E and de Kouchkovsky Y (organizers) (1963) La Photosynthèse. Colloques Internationaux du Centre National de la Recherche Scientifique (CNRS) No. 119, held at Gif-sur-Yvette, 23–27 July 1962. Èditions du Centre National de la Recherche Scientifique, Paris, France