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EDUCATION:

University of California, Berkeley – Ph.D. in Chemistry, 1975

Ph.D. Thesis – *The Role of Manganese in the Mechanism of Photosynthetic Oxygen Evolution*

Nebraska Wesleyan University, Lincoln, Nebraska – B.S. in Chemistry with distinction, 1970

PROFESSIONAL EXPERIENCE:

7/08–Pres. – Secondary Faculty Appointment, Department of Biochemistry and Molecular Biophysics, Washington University, St. Louis, MO

7/06–Pres. – Lucille P. Markey Distinguished Professor of Arts and Sciences, Departments of Biology and Chemistry, Washington University, St. Louis, MO

7/02–6/06 – Chair, Department of Chemistry and Biochemistry, Arizona State University

7/88–6/06 – Professor of Chemistry and Biochemistry, Arizona State University

7/85–6/88 – Associate Professor of Chemistry, Arizona State University, Tempe, AZ

7/79–6/85 – Assistant Professor of Chemistry, Amherst College, Amherst, MA

6/76–6/79 – Postdoctoral Fellow, Department of Biochemistry, University of Washington, Seattle, WA with Prof. William Parson

8/75–12/75 – Assistant Professor of Chemistry, American University of Beirut, Beirut, Lebanon

1/75–7/75 & 1/76–5/76 – Postdoctoral Fellow, Lawrence Berkeley Lab., Berkeley, CA, with Prof. Kenneth Sauer

6/70–12/74 – Graduate Student, Department of Chemistry, University of California, Berkeley, CA, Prof. Kenneth Sauer, Advisor

SERVICE TO PROFESSION:

Conferences Organized

Co-organizer, Conference on Photosynthetic Antennas, Drymen, UK, 2007

Co-organizer, Midwest Photosynthesis Conference, Turkey Run, IN, 2007

Co-organizer, Agouron Institute Conference on Oxygen, Santa Fe, NM, 2006

Co-organizer, Conference on Photosynthetic Antennas, Montreal, Canada, 2004

Co-organizer, Astrobiology Science Conference, Tempe, AZ, 2003

Co-organizer, US-Australia Joint Workshop on Artificial Photosynthesis, Sydney, Australia, 2003

Co-organizer, Western Regional Photosynthesis Conference, Asilomar, CA, 2003

Co-organizer, Conference on Photosynthetic Antennas, Queensland, Australia, 2001

Co-organizer, Sauer/Klein Reunion Symposium, Berkeley, CA, 1998
Organizer, US-Japan Symposium on Photosynthetic Antennas, Kona, Hawaii, 1997
Vice Chairman (1990) and Chairman (1991) of Gordon Research Conferences on
Photosynthesis
Local Arrangements Chairman, Biophysical Society Annual Meeting, Phoenix, 1988
Organizer, First Eastern U.S. Photosynthesis Conference, Woods Hole, MA, 1984

Books and Editorial Service

Consulting Editor, *Advances in Photosynthesis and Respiration*, 2009-2012
Author, *Molecular Mechanisms of Photosynthesis*, Blackwell Science, Oxford, UK, 2002
Editor, with M. Madigan and C. Bauer, *Anoxygenic Photosynthetic Bacteria*, Kluwer
Academic Publishing, Dordrecht, The Netherlands, 1995
Editorial Board, *Current Chemical Biology*, 2007-present
Editorial Board, *Biochemistry*, 2001-present
Editorial Board, *International Journal of Astrobiology*, 2001-present
Editorial Board, *Biophysical Journal*, 2000-2003
Editor-in-Chief, *Photosynthesis Research*, 1988-1999
Consulting Editor, *Advances in Photosynthesis*, 1991-1998
Editorial Board, *Photosynthesis Research*, 1985-1988

Grant Review Panels

Grant Review Panel Member, DOE Energy Biosciences Program, 2008
Grant Review Panel Member, NSF Prokaryotic Molecular Biology Program, 2004-2007
Grant Review Panel Member, NSF Microbial Genome Sequencing Program, 2005
Panel Manager, USDA Competitive Research Grants, Photosynthesis and Respiration
Program, 1996
Grant Review Panel Member, NASA Exobiology Program, 1994-1998
Grant Review Panel Member, NSF Molecular Biophysics Program, 1991-1994
Grant Review Panel Member, DOE Energy Biosciences Program, 1988
NIH Special Study Section Member, Sequencers, etc., 1987
Grant Review Panel Member, USDA Competitive Research Grants on Photosynthesis,
1985, 1986, 1989

Advisory Service

Council for Chemical and Biochemical Sciences, DOE Basic Energy Sciences, 2008-
2012
Committee of Visitors, Chemical Sciences, Geosciences, and Biosciences (CSGB)
Division, DOE Basic Energy Sciences, 2008
Scientific Advisory Board, Center for Photochemical Sciences, Bowling Green State
University, 2001-Present
External Program Review, University of Washington, Astrobiology Program, 2005
External Program Review, Louisiana Board of Regents review of nanotechnology at
Louisiana Tech University, 2003
International Scientific Committee for the Symposia on Phototrophic Prokaryotes,
Executive Committee, 2000-2009

Director's Division Review Panel Member, Physical Biosciences Division, Lawrence Berkeley Laboratory, 2000
Swedish Natural Science Research Council Expert Committee in Biophysical Chemistry, 1992
Site Review Team Member, Ames Laboratory, Iowa State University, 1989, 1992
Site Review Team Member, Medical Free Electron Laser Program, Office of Naval Research, 1990
On-camera participant and technical consultant for film *Photosynthesis: Life Energy*, produced by the National Geographic Society, 1983

Society Service

President, International Society for Photosynthesis Research, 2001–2004
Executive Committee, International Society for Photosynthesis Research, 1995–2001

ACHIEVEMENTS AND AWARDS:

Election, Beatrice NE Educational Foundation Hall of Fame, 2008
Charles F. Kettering Award for Excellence in Photosynthesis, American Society of Plant Biologists, 2008
Fellow, American Association for the Advancement of Science, Biology Section, 2004
Founding Fellow, Arizona Arts, Sciences and Technology Academy, 2004
Graduate Mentoring Award, Arizona State University, 1998
Graduate College Distinguished Research Award, Arizona State University, 1992
Alumni Achievement Award, Nebraska Wesleyan University, 1991
Who's Who in the World
Who's Who in America
Who's Who in Science and Engineering
Who's Who in American Education
Who's Who Among America's Teachers
National Science Foundation National Needs Postdoctoral Fellowship, 1977
Student Body President, Nebraska Wesleyan University, 1969–70

SOCIETIES:

International Society for Photosynthesis Research
American Association for the Advancement of Science
American Chemical Society
American Society for Microbiology
American Society of Plant Biologists
Biophysical Society
International Society for the Study of the Origin of Life
Union of Concerned Scientists

RESEARCH INTERESTS:

Excitation and electron transfer in photosynthetic systems
Origin and early evolution of photosynthesis and nitrogen fixation
Metalloenzymes involved in electron transfer and oxidative stress processes

RECENT UNIVERSITY SERVICE:

Washington University

Arts and Sciences Promotion and Tenure Committee, 2008-2011
Education of Undergraduates in the Life Sciences, 2008-present
I-CARES Faculty Search Committee, 2008-present
Biology Department Chair Search Committee, 2008-2009
Biochemistry Faculty Search Committee, Co-Chair, 2007-2008
Biochemistry Program Revision Committee, Chair, 2006-2007
Division of Biological and Biomedical Sciences (DBBS) Graduate Admissions
Committee, 2007-present
Florence Moog Scholarship Selection Committee, 2007- 2008
Chemistry Graduate Studies Committee, 2006- present
Bio-Energy Faculty Search Committee, 2006-2007

Arizona State University

Departmental Assignments

Chair, Department of Chemistry and Biochemistry, 2002-2006

College Assignments

School of Life Sciences Director Search Committee, 2004-2005
Dean's Strategic Planning and Academic Resources Advisory Council, 2003-2006
Molecular and Cellular Biology Executive Committee, 1994-1996; 1999-2003
Life Science Reorganization Committee, 2002-2003

University Assignments

Goldwater Scholarship Selection Committee, 1999-2006
Interim Director, Cancer Research Institute, 2004
Director, Bio and Molecular Photonics Initiative, 1999-2002
Biomedical Strategic Planning Committee, 1998- 2001
ASU Main Campus Strategic Planning Committee, 1998-1999
Chair, Research Investigation Committee, 1998-1999
Founding Director, ASU Center for the Study of Early Events in Photosynthesis,
1988-1991

PUBLICATIONS:

1. Blankenship RE and Sauer K (1974) Manganese in Photosynthetic Oxygen Evolution. Electron Paramagnetic Resonance Study of the Environment of Mn in Tris-Washed Chloroplasts. *Biochim. Biophys. Acta* **357**: 252-266. (R)
2. Blankenship RE, Babcock GT and Sauer K (1975) Kinetic Study of Oxygen Evolution Parameters in Tris-Washed, Reactivated Chloroplasts. *Biochim. Biophys. Acta* **387**: 165-175. (R)
3. Blankenship RE, Babcock GT, Warden JT and Sauer K (1975) Observation of a New EPR Transient in Chloroplasts that May Reflect the Electron Donor to Photosystem II at Room Temperature. *FEBS Lett.* **51**: 287-293. (R)
4. Blankenship RE, McGuire A and Sauer K (1975) Chemically Induced Dynamic Electron Polarization in Chloroplasts at Room Temperature: Evidence for Triplet State Participation in Photosynthesis. *Proc. Natl. Acad. Sci. USA* **72**: 4943-4947. (R)
5. Warden JT, Blankenship RE and Sauer K (1976) A Flash Photolysis ESR Study of Photosystem II Signal II_{vf}, the Physiological Donor to P680⁺. *Biochim. Biophys. Acta* **423**: 462-478. (R)
6. Babcock GT, Blankenship RE and Sauer K (1976) Reaction Kinetics for Positive Charge Accumulation on the Water Side of Chloroplast Photosystem II. *FEBS Lett.* **61**: 286-289. (R)
7. Smith GE, Blankenship RE and Klein MP (1977) Conversion of an E-3 ESR Spectrometer to 1-MHz Field Modulation. *Rev. Sci. Instr.* **48**: 282-286. (R)
8. Blankenship RE, McGuire A and Sauer K (1977) Rise Time of Signal II_{vf} in Chloroplast Photosystem II. *Biochim. Biophys. Acta* **459**: 617-619. (R)
9. Blankenship RE, Schaafsma TJ and Parson WW (1977) Magnetic Field Effects on Radical Pair Intermediates in Bacterial Photosynthesis. *Biochim. Biophys. Acta* **461**: 297-305. (R)
10. Dismukes C, McGuire A, Blankenship RE and Sauer K (1978) Electron Spin Polarization in Photosynthesis and the Mechanism of the Electron Transfer in Photosystem I: Experimental Observations. *Biophys. J.* **21**: 239-256. Correction **21**: 521 (1978). (R)
11. Blankenship RE and Parson WW (1978) The Photochemical Electron Transfer Reactions of Photosynthetic Bacteria and Plants. *Ann. Rev. Biochem.* **47**: 635-653. (IR)
12. Parson WW, Schenk CC, Blankenship RE, Holten D, Windsor MW and Shank CV (1978) Kinetics of Photochemical Electron Transfer Reactions *In Vivo* and *In Vitro*. In: *Proc. Conf. on Frontiers of Biological Energetics: Electrons to Tissues* **1**: 37-44. (CP)

13. Blankenship RE and Parson WW (1979) Kinetics and Thermodynamics of Electron Transfer in Bacterial Reaction Centers. In: *Topics in Photosynthesis: Photosynthesis in Relation to Model Systems*, J. Barber, ed. (Amsterdam: Elsevier) **3**: 71-114. (IR)
14. Blankenship RE and Parson WW (1979) The Involvement of Iron and Ubiquinone in Electron Transfer Reactions Mediated by Reaction Centers from Photosynthetic Bacteria. *Biochim. Biophys. Acta* **545**: 429-444. (R)
15. Blankenship RE (1981) Chemically Induced Magnetic Polarization in Photosynthetic Systems. *Accounts of Chemical Research* **14**: 163-170. (R, IR)
16. Yocum CF, Yerkes CT, Blankenship RE, Sharp RR and Babcock GT (1981) Stoichiometry, Inhibitor Sensitivity and Organization of Manganese Associated with Photosynthetic Oxygen Evolution. *Proc. Natl. Acad. Sci. USA* **78**: 7507-7511. (R)
17. Bunker G, E. Stern EA, Blankenship RE and Parson WW (1982) An X-ray Absorption Study of the Iron Site in Bacterial Photosynthetic Reaction Centers. *Biophys. J.* **37**: 539-551. (R)
18. Schenck CC, Blankenship RE and Parson WW (1982) Radical-Pair Decay Kinetics, Triplet Yields and Delayed Fluorescence from Bacterial Reaction Centers. *Biochim. Biophys. Acta* **680**: 44-59. (R)
19. Betti JA, Blankenship RE, Natarajan LV, Dickinson LC and Fuller RC (1982) Antenna Organization and Evidence for the Function of a New Antenna Pigment Species in the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Biochim. Biophys. Acta* **680**: 194-201. (R)
20. Natarajan LV and Blankenship RE (1982) Linear Dichroism of the 740 nm Absorbing Form of Chlorophyll *a*. *Spec. Lett.* **15**: 527-532. (R)
21. Pocinki AG and Blankenship RE (1982) Kinetics of Electron Transfer in Duroquinone-reconstituted Reaction Centers from Photosynthetic Bacteria. *FEBS Lett.* **147**: 115-119. (R)
22. Bruce BD, Fuller RC and Blankenship RE (1982) Primary Photochemistry in the Facultatively Aerobic Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Proc. Natl. Acad. Sci. USA* **79**: 6532-6536. (R)
23. Natarajan LV and Blankenship RE (1983) Free Energy Dependence of the Quenching of Chlorophyll *a* Fluorescence by Substituted Quinones. *Photochem. Photobiol.* **37**: 329-336. (R)

24. Natarajan LV, Robinson M and Blankenship RE (1983) Linear Dichroism of Cyanine Dyes in Stretched Polyvinyl Alcohol Films: A Physical Chemistry Laboratory Experiment. *J. Chem. Ed.* **60**: 241-243. (R)
25. Natarajan LV, Stein FM, Blankenship RE and Chang R (1983) Linear Dichroism and Fluorescence Polarization of Diphenyl Polyenes in Stretched Polyethylene Films. *Chem. Phys. Lett.* **95**: 525-528. (R)
26. Hale MB, Blankenship RE and Fuller RC (1983) Menaquinone is the Sole Quinone in the Facultatively Aerobic Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Biochim. Biophys. Acta* **723**: 376-382. (R)
27. Kirmaier C, Holten D, Feick R and Blankenship RE (1983) Picosecond Measurements of the Primary Photochemical Events in Reaction Centers Isolated from the Facultative Green Photosynthetic Bacterium *Chloroflexus aurantiacus*; Comparison with the Purple Bacterium *Rhodospseudomonas sphaeroides*. *FEBS Lett.* **158**: 73-78. (R)
28. Blankenship RE, Feick R, Bruce BD, Kirmaier C, Holten D and Fuller RC (1983) Primary Photochemistry in the Facultative Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *J. Cellular Biochem.* **22**: 251-266. (R, CP, IR)
29. Photosynthesis: Life Energy. On-camera participant and technical consultant for film produced by the National Geographic Society in association with Joseph Akin (1983).
30. Natarajan LV, Ricker JE, Blankenship RE and Chang R (1984) Solvent Influences on the Singlet Quenching of Chlorophyll *a* by 2,5-Dimethyl-p-Benzoquinone. *Photochem. Photobiol.* **39**: 301-306. (R)
31. Cho HM, Mancino LJ and Blankenship RE (1984) Light Saturation Curves and Quantum Yields in Reaction Centers from Photosynthetic Bacteria. *Biophys. J.* **45**: 455-461. (R)
32. Mancino LJ, Dean DP and Blankenship RE (1984) Kinetics and Thermodynamics of the $P870^+QA^- \rightarrow P870^+QB^-$ Reaction in Isolated Reaction Centers from the Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Biochim. Biophys. Acta* **764**: 46-54. (R)
33. Kirmaier C, Holten D, Mancino LJ and Blankenship RE (1984) Picosecond Photodichroism Studies on Reaction Centers from the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Biochim. Biophys. Acta* **765**: 138-146. (R)
34. Fuller RC, Blankenship RE and Feick RG (1984) The Molecular Topography of the Photochemical Membrane System in the Green Bacterium *Chloroflexus*. In: *Advances in Photosynthesis Research* C. Sybesma, ed., III, 377-380. (CP)
35. Blankenship RE, Mancino LJ, Feick R, Fuller RC, Machnicki J, Frank HA, Kirmaier C and Holten D (1984) Primary Photochemistry and Pigment Composition of Reaction

- Centers Isolated from the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. In: *Advances in Photosynthesis Research* C. Sybesma, ed., I, 203-206. (CP)
36. Blankenship RE (1984) Book Review of *Light Reaction Path of Photosynthesis* Fong FK (Berlin: Springer-Verlag) (1982) *Photochemistry and Photobiology* **39**: 585. (BR)
 37. Blankenship RE (1984) Book Review of *Photosynthetic Systems*: Danks SM, Evans EH and Whittaker PA (Chichester: John Wiley) (1983) *Structure, Function and Assembly. Quarterly Review of Biology* **59**: 462-463. (BR)
 38. Blankenship RE (1984) Primary Photochemistry in Green Photosynthetic Bacteria. *Photochem. Photobiol.* **40**: 801-806. (IR)
 39. Fuller RC, Sprague SG, Gest H and Blankenship RE (1985) A Unique Photosynthetic Reaction Center from *Heliobacterium chlorum*. *FEBS Lett.* **182**: 345-349. (R)
 40. Blankenship RE (1985) Electron Transport in Green Photosynthetic Bacteria. *Photosynth. Res.* **6**: 317-335. (IR, R)
 41. Blankenship RE and Prince RC (1985) Excited State Redox Potentials and the Z Scheme of Photosynthesis. *Trends. Biochem. Sci.* **10**: 382-383. (R)
 42. Prince R, Gest H and Blankenship RE (1985) Thermodynamic Properties of the Photochemical Reaction Center of *Heliobacterium chlorum*. *Biochim. Biophys. Acta* **810**: 377-384. (R)
 43. Blankenship RE (1986) Book Review of *Photosynthesis*: C. H. Foyer, (New York: John Wiley) (1984). *Photochemistry and Photobiology* **43**: 357. (BR)
 44. Blankenship RE and Fuller RC (1986) Membrane Topology and Photochemistry of the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. In: *Photosynthesis III, Encyclopedia of Plant Physiology New Series*, Staehelin LA and Arntzen CJ, eds. (Heidelberg: Springer-Verlag) **19**: 390-399. (IR)
 45. Kirmaier C, Blankenship RE and Holten D (1986) Formation and Decay of Radical Pair State P⁺I⁻ in *Chloroflexus aurantiacus* Reaction Centers. *Biochim. Biophys. Acta* **850**: 275-285. (R)
 46. Foster JM, Redlinger TE, Blankenship RE and Fuller RC (1986) Oxygen Regulation of the Development of the Photosynthetic Membrane System in *Chloroflexus*. *J. Bacteriol.* **167**: 655-659. (R)
 47. Becker M, Middendorf D, Woodbury NW, Parson WW and Blankenship RE (1986) Picosecond Electron Transfer and Stimulated Emission in Reaction Centers of *Rhodobacter sphaeroides* and *Chloroflexus aurantiacus*. In: *Ultrafast Phenomena*, Fleming GR and Siegman AE, eds., Springer-Verlag, 374-378. (CP)

48. Brune DC and Blankenship RE (1987) Light Absorption and Fluorescence of BChl *c* in Chlorosomes from *Chloroflexus aurantiacus* and an *In Vitro* Model. In: *Progress in Photosynthesis Research*, Biggins J, ed., Nijhoff M, Pub., Dordrecht, I: 419-422. (CP)
49. Redlinger TE, Foster JM, Wynn RM, Knaff DB, Blankenship RE and Fuller RC (1987) Oxygen Regulation of Cytochrome *c*-554 Synthesis in *Chloroflexus*. In: *Progress in Photosynthesis Research*, Biggins J, ed., Nijhoff, Pub., Dordrecht, 4: 745-748. (CP)
50. Wynn RM, Redlinger TE, Foster JM, Blankenship RE, Fuller RC, Shaw RW and Knaff DB (1987) Electron-Transport Chains of Phototrophically and Chemotrophically Grown *Chloroflexus aurantiacus*. *Biochim. Biophys. Acta* **891**: 216-226. (R)
51. Brune DC, Nozawa T and Blankenship RE (1987) Antenna Organization in Green Photosynthetic Bacteria. I. Oligomeric Bacteriochlorophyll *c* as a Model for the 740 nm-Absorbing Bacteriochlorophyll *c* in *Chloroflexus aurantiacus* Chlorosomes. *Biochemistry* **26**: 8644-8652. (R)
52. Brune DC, King GH, Infosino AI, Steiner T, Thewalt MLW and Blankenship RE (1987) Antenna Organization in Green Photosynthetic Bacteria. II. Excitation Transfer in Detached and Membrane-Bound Chlorosomes from *Chloroflexus aurantiacus*. *Biochemistry* **26**: 8652-8658. (R)
53. Nozawa T, Trost JT, Fukada T, Hatano M, McManus JD and Blankenship RE (1987) Properties of the Reaction Center of the Thermophilic Purple Photosynthetic Bacterium *Chromatium tepidum*. *Biochim. Biophys. Acta* **894**: 468-476. (R)
54. Blankenship RE, Brune DC, Freeman JM, King GH, McManus JD, Nozawa T, Trost JT and Wittmershaus BP (1988) Energy Trapping and Electron Transfer in *Chloroflexus aurantiacus*. In: *Green Photosynthetic Bacteria*, Olson JM, Ormerod JG, Amesz J, Stackebrandt E and Trüper HG, eds., Plenum Press, New York, 57-68. (CP)
55. Brune DC, Blankenship RE and Seely GR (1988) Fluorescence Quantum Yields and Lifetimes for Bacteriochlorophyll *c*. *Photochem. Photobio*, **47**: 759-763. (R)
56. Wittmershaus BP, Brune DC and Blankenship RE (1988) Energy Transfer in *Chloroflexus aurantiacus*: Effects of Temperature and Anaerobic Conditions. In: *Photosynthetic Light-Harvesting Systems*, Scheer H and Schneider S, eds., Walter de Gruyter, Berlin, 543-554. (CP)
57. Brune DC, King GH and Blankenship RE (1988) Intermolecular Interactions Between Bacteriochlorophyll *c* in *In Vitro* Oligomers and in Chlorosomes. In: *Photosynthetic Light-Harvesting Systems*, Scheer H and Schneider S, eds., Walter de Gruyter, Berlin, 141-151. (CP)

58. Blankenship RE, Trost JT and Mancino LJ (1988) Properties of Reaction Centers from the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. In: *The Photosynthetic Bacterial Reaction Center: Structure and Dynamics*, Breton J and Vermeglio A, eds., Plenum Press, New York, 119-127. (CP)
59. Trost JT, McManus JD, Freeman JC, Ramakrishna BL and Blankenship RE (1988) Auracyanin: A Blue Copper Protein from the Green Photosynthetic *Chloroflexus aurantiacus*. *Biochemistry* **27**: 7858-7863. (R)
60. Blankenship RE, Brune DC and Wittmershaus BP (1988) Chlorosome Antennas in Green Photosynthetic Bacteria. In: *Light-Energy Transduction in Photosynthesis. Higher Plants and Bacterial Models*, Stevens SE, Jr. and Bryant DA, eds., Am. Soc. Plant Physiol., Rockville, MD, 32-46. (CP, IR)
61. Meyer TE, Tollin, Cusanovich MA, Freeman JC and Blankenship RE (1989) *In Vitro* Kinetics of Reduction of Cytochrome *c*-554 Isolated from the Reaction Center of the Green Phototrophic Bacterium, *Chloroflexus aurantiacus*. *Arch. Biochem. Biophys.* **272**: 254-261. (R)
62. Trost JT and Blankenship RE (1989) Isolation of a Photoactive Photosynthetic Reaction Center-Core Antenna Complex from *Heliobacillus mobilis*. *Biochemistry* **28**: 9898-9904. (R)
63. Mimuro M, Nozawa T, Tamai T, Shimada K, Yamazaki I, Lin S, Knox RS, Wittmershaus BP, Brune DC and Blankenship RE (1989) Excitation Energy Flow in Chlorosome Antennas of Green Photosynthetic Bacteria. *J. Phys. Chem.* **93**: 7503-7509. (R)
64. Wang J, Brune DC and Blankenship RE (1990) Effects of Oxidants and Reductants on Energy Transfer Efficiencies in Green Photosynthetic Bacteria. *Biochim. Biophys. Acta* **1015**: 457-463. (R)
65. Causgrove TP, Brune DC, Blankenship RE and Olson JM (1990) Fluorescence Lifetimes of Dimers and Higher Oligomers of Bacteriochlorophyll *c* from *Chlorobium limicola*. *Photosynth. Res.* **25**: 1-10. (R)
66. Freeman JC and Blankenship RE (1990) Isolation and Characterization of the Membrane-bound Cytochrome *c*-554 from the Thermophilic Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Photosynth. Res.* **23**: 29-38. (R)
67. Blankenship RE, Wang J, Causgrove TP and Brune DC (1990) Efficiency and Kinetics of Energy Transfer in Chlorosome Antennas from Green Photosynthetic Bacteria. In: *Current Research in Photosynthesis*, Baltscheffsky M, ed., Kluwer Acad. Pub., Dordrecht **2**: 17-24. (CP, IR)

68. Becker M, Middendorf D, Nagarajan V, Parson WW and Blankenship RE (1990) Picosecond Absorption Studies on Photosynthetic Reaction Centers of *Chloroflexus aurantiacus*. In: *Current Research in Photosynthesis*, Baltscheffsky M, ed., Kluwer Acad. Pub. Dordrecht **1**: 121-124. (CP)
69. Bittersmann E, Blankenship RE and Woodbury N (1990) Picosecond Fluorescence Studies of *Rhodospseudomonas viridis*. In: *Current Research in Photosynthesis*, Baltscheffsky M, ed., Kluwer Acad. Pub., Dordrecht **2**: 169-172. (CP)
70. Olson JM, Pedersen JP, Causgrove TP, Brune DC and Blankenship RE (1990) Bacteriochlorophyll *c* Monomers, Dimers and Higher Aggregates in Dichloromethane and Carbon Tetrachloride. In: *Current Research in Photosynthesis*, Baltscheffsky M, ed., Kluwer Acad. Pub., Dordrecht **2**: 37-40. (CP)
71. Trost JT and Blankenship RE (1990) Isolation of a Reaction Center Particle and a Small *c*-type Cytochrome from *Heliobacillus mobilis*. In: *Current Research in Photosynthesis*, Baltscheffsky M, ed. (Kluwer Acad. Pub., Dordrecht) **2**: 703-706. (CP)
72. Causgrove TP, Brune DC, Wang J, Wittmershaus BP and Blankenship RE (1990) Energy Transfer Kinetics in Whole Cells and Isolated Chlorosomes of Green Photosynthetic Bacteria. *Photosynth. Res.* **26**: 39-48. (R)
73. Blankenship RE (1991) Photosynthesis: The Light Reactions, Chapter in: *Plant Physiology*, Taiz L and Zeiger E, eds. (Benjamin Cummings Co.), 179-218. (IR)
74. Becker M, Nagarajan V, Middendorf D, Parson WW, Martin JE and Blankenship RE (1991) Temperature Dependence of the Initial Electron-Transfer Kinetics in Photosynthetic Reaction Centers of *Chloroflexus aurantiacus*. *Biochim. Biophys. Acta* **1057**: 299-312. (R)
75. Meyer TE, Tollin G, Causgrove TP, Cheng P and Blankenship RE (1991) Picosecond Decay Kinetics and Quantum Yield of Fluorescence of the Photoactive Yellow Protein from the Halophilic Purple Phototrophic Bacterium, *Ectothiorhodospira halophila*. *Biophys. J.* **59**: 988-991. (R)
76. Dracheva S, Williams JC, Van Driessche G, Van Beeumen JJ and Blankenship RE (1991) The Primary Structure of Cytochrome *c*-554 from the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *Biochemistry* **30**: 11451-11458. (R)
77. Alden RG, Lin SH and Blankenship RE (1992) Theory of Spectroscopy and Energy Transfer of Oligomeric Pigments in Chlorosome Antennas of Green Photosynthetic Bacteria. *J. Lumin.* **51**: 51-66. (R)
78. McManus JD, Brune DC, Han J, Sanders-Loehr J, Meyer TE, Cusanovich MA, Tollin G and Blankenship RE (1992) Isolation, Characterization and Amino Acid Sequences of

- Auracyanins, Blue Copper Proteins from the Green Photosynthetic Bacterium *Chloroflexus aurantiacus*. *J. Biol. Chem.* **267**: 6531-6541. (R)
79. Causgrove TP, Brune DC and Blankenship RE (1992) Förster Energy Transfer in Chlorosomes of Green Photosynthetic Bacteria. *J. Photochem. Photobiol. B: Biol.* **15**: 171-179. (R)
80. Trost JT, Brune DC and Blankenship RE (1992) Protein Sequences and Redox Titrations Indicate that the Electron Acceptors in Heliobacteria are Similar to Photosystem I. *Photosynth. Res.* **32**: 11-22. (R)
81. Blankenship RE (1992) Origin and Early Evolution of Photosynthesis. *Photosynth. Res.* **33**: 91-111. (R, IR)
82. Lin S, Chiou HC and Blankenship RE (1992) Energy Transfer and Photochemistry in *Heliobacillus mobilis*. In: *Research in Photosynthesis*, Murata N, ed. (Kluwer Acad. Pub., Dordrecht) **1**: 417-420. (CP)
83. Dracheva S, Williams JC and Blankenship RE (1992) Cloning and Sequencing of the FMO-Protein Gene from *Chlorobium tepidum*. In: *Research in Photosynthesis*, N. Murata, ed. (Kluwer Acad. Pub., Dordrecht) **1**: 53-56. (CP)
84. Liebl U, Mockensturm-Wilson M, Trost JT, Brune DC, Blankenship RE and Vermaas WFJ (1992) The Reaction Center Core Polypeptide in the Photosynthetic Bacterium *Heliobacillus mobilis*, In: *Research in Photosynthesis*, Murata N, ed. (Kluwer Acad. Pub., Dordrecht) **2**: 595-598. (CP)
85. Cheng P and Blankenship RE (1992) Low Temperature Studies on Green Photosynthetic Bacterial Chlorosomes. In: *Research in Photosynthesis*, N. Murata, ed. (Kluwer Acad. Pub., Dordrecht) **1**: 121-124. (CP)
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