



NEWSLETTER

Published by the American Society for Photobiology /

4720 Montgomery Lane, Suite 506 / Bethesda, Maryland 20814 / (301) 654-3080

Editor: Thomas P. Coohill, Depts. of Biology and Physics,
Western Kentucky University, Bowling Green, KY 42101 tel.: (502) 745-3697

No. 64 January 1983

GORDON RESEARCH CONFERENCE: February 6-11, 1983. Holiday Inn, Ventura, California.

Physiochemical Aspects of Photosynthesis

The general plan for the conference will follow a poster format in which all participants will be invited to contribute posters. The posters will be organized into six groups which are outlined below. At the beginning of each session there will be a short presentation by a person who is quite active in the field. Their assignment is to focus attention on particularly interesting and new information, questions to be asked and problems that exist. Poster viewing will then ensue followed by discussion. Each discussion period will be conducted by two discussion leaders whose task will be to focus the discussion on the main advances that have been made in the last two years and maximize participation.

7 February. I. Photosynthetic Units; Protein Components, Three Dimensional Relationships, and Distribution in the Membrane: P. Loach, Overview of Antenna and Reaction Center Complexes; G. Feher and J. Anderson, discussion leaders; M. Okamura, Overview of Membrane Topology, Three Dimensional Relationships and Reconstituted Systems; J. Breton and K. Sauer, discussion leaders.

8 February. II. Primary Photochemical Events: W. Parsons, Comparison of Status of Bacteria, Algae and Plant Systems; J. Norris and P. Mathis, discussion leaders; C.A. Wraight, Primary Quinone and Iron Components and Gating; A. Trebst and R. van Grondelle, discussion leaders.

9 February. III. Secondary Electron and Proton Transfer Reactions: G. Hauska, Comparison of bc₁ Type Complexes; P.L. Dutton and B. Velthuys, discussion leaders; IV. Model Systems and Theoretical Aspects for the Primary Photochemical Events and Secondary Electron Transport: J. Fajer, Insights on in vivo RC's from Studies of Model Systems; R. Pearlstein and D. Mauzerall, discussion leaders.

10 February. V. Energy Coupling Reactions: D. Ort, Overview of Problems and Possibilities; W. Junge and W. Cramer, discussion leaders; Discussion of ATPase Complexes; B. Selman and M. Baltscheffsky, discussion leaders.

11 February. VI. O₂ Evolution: G. Babcock, Intermediate States and Isolatable Components; G. Renger and B. Andersson, discussion leaders.

For additional information contact:

Chairman:
Paul Loach
Biological Sciences
Northwestern University
Evanston, IL 60201
(312) 492-5654

Vice Chairman:
Richard Dilley
Biological Science
Purdue University
W. Lafayette, IN 47905
(317) 493-1249

NEW BOOKS:

Environmental Mutagenesis, Carcinogenesis, and Plant Biology, 1982. E. J. Klekowski, Jr., ed. Vol. 1, 208 pp, Vol. 2, 208 pp, each volume US \$21.95. Praeger Publishers, 521 Fifth Ave., New York, NY 10175.

Electron Transport and Photophosphorylation, 1982. J. Barber, ed. Vol. 4 in Topics in Photosynthesis. 304 pp. US \$89.75. Elsevier Biomedical Press, 52 Vanderbilt Ave., New York, NY 10017.

NEW BOOKS (Cont.):

On the Origins of Chloroplasts, 1982. J. A. Schiff, ed. 336 pp. US \$80.00. Elsevier Biomedical Press, P. O. Box 211, 100 A E Amsterdam, The Netherlands; in USA and Canada, 52 Vanderbilt Ave. New York, NY 10017.

Energy Coupling in Photosynthesis, 1981. B. R. Selman and S. Selman-Reimer, eds. Proceedings of 11th Harry Steenback Symposium held at the University of Wisconsin-Madison, July 6-8, 1981. 374 pp. US \$60.00. Elsevier Biomedical Press, P. O. Box 211, 100 A E Amsterdam, The Netherlands; in USA and Canada, 52 Vanderbilt Ave., New York, NY 10017.

Mitochondria, Chloroplasts and Bacterial Membranes, 1981. J. N. Prebble. A textbook for advanced undergraduate and graduate students in botany, biochemistry, and microbiology. 378 pp. US \$26.00. Longman, Inc., 19 W. 44th Street, New York, NY 10036.

Plant Cell and Tissue Culture, A Laboratory Manual, 1982. J. Reinert and M. M. Yeoman. 120 pp. US \$18.00. Springer-Verlag New York, 175 Fifth Ave., New York, NY 10010.

Plant Physiology, 1982. Irwin P. Ting. 642 pp. US \$27.95. Addison-Wesley Publ. Co., Reading, MA 01867.

POSITIONS OPEN:

Applications are requested for a tenure-track position at the Assistant Professor level (11-month appointment) in the Department of Botany and Plant Sciences, College of Natural and Agricultural Sciences, University of California, Riverside, with concurrent appointment in the California Agricultural Experiment Station. A Ph.D. is required; postdoctoral experience is preferred, but all qualified candidates will be considered. The successful candidate, with a Ph.D. or postdoctoral training in the physiology of plant development and/or plant biochemistry, will be expected to develop a vigorous, innovative, independent research program, with major emphasis on plant development, maturation, or senescence. Teaching responsibilities will include courses both undergraduate and/or graduate levels and supervision of graduate students. Send curriculum vitae and official transcripts, and arrange to have at least three letters of recommendation sent to: Dr. William W. Thomson, Chairman, Plant Physiologist Search Committee, Department of Botany and Plant Sciences, University of California, Riverside, CA 92521. Application deadline is January 1, 1983 or later if a suitable applicant has not been selected by this date. An Affirmative Action/Equal Opportunity Employer.

Plant Physiologist, GS-0435-11, Metabolism and Radiation Research Laboratory, Fargo, North Dakota. Term appointment not to exceed two years. USDA Agency: Agricultural Research Service. Duties: Incumbent conducts investigations on the basic principles and mechanisms of basipetal translocation in leafy spurge (*Euphorbia esula* L.). The objective of the assignment is to provide new scientific principles for the development of safe, effective and economical integrated control systems for leafy spurge. The incumbent plans and conducts greenhouse, plant growth chamber and laboratory research on the environmental, physiological and chemical modification or regulation of translocation patterns in leafy spurge. Mechanisms for enhanced basipetal transport of selected (¹⁴C) herbicides to inactive or dormant root bud systems will be investigated. Specific line of research as they affect herbicide translocation will include: 1) plant growth regulator-herbicide interactions; 2) chemical alteration of herbicide metabolism; 3) plant growth and development; and 4) environmental stress. Minimum qualifications: (Only applications providing evidence of the following will be eligible for consideration) (1) Academic and/or professional experience as specified in Announcement No. 408 and/or Announcement No. 421; Knowledge of (2) radioisotope tracer techniques; (3) techniques and procedures used in laboratory, greenhouse, and growth chamber studies with higher plants; (4) plant growth regulators; (5) translocation. This is a Research Associate position. The following qualification, while not required to establish eligibility, will distinguish better-qualified candidates from among those eligible: Knowledge of perennial plants. Contact: Special Examining Unit, Science and Education, U.S. Department of Agriculture, 6505 Belcrest Road, Room 555, Hyattsville, MD 20783. Refer to Announcement No. 421, Life Sciences.

POSITIONS OPEN (Cont.):

Postdoctoral Position: Available for 2 years maximum beginning October 1, 1982 or until filled. Salary is \$15,000 per year. This project (USDA/SEA/CGRO supported) is directed towards: (1) the physiology/biochemistry of photoactivation of O_2 evolution; and (2) the identification of polypeptides essential for photosynthetic evolution via: a) extraction/reconstitution and b) covalent probes for the O_2 -evolving enzyme. Experience in photosynthesis, isolation and analysis of proteins, and membrane biochemistry would be an advantage. Please send curriculum vitae and two letters of recommendation to: Dr. George Cheniae, N-205 Ag. Science Center North, University of Kentucky, Lexington, KY 40546-0091. An Equal Opportunity/Affirmative Action Employer.

Postdoctoral Position in Biochemistry: Available beginning between 1 October 1982 and 1 March 1983 for research related to pyruvate, Pi dikinase isolated from corn leaves and photosynthetic bacteria (e.g., reversible light activation, reaction mechanism, comparative physicochemical properties). Qualifications include a Ph.D. in biochemistry, microbiology, or a related field with at least some research experience in enzymology. \$13,000 to \$14,000 per year, for 2-year position. Send resume and names of three references to: Dr. Raymond Chollet, Department of Agricultural Biochemistry, University of Nebraska, Lincoln, NE 68583-0718 (Area code 402-472-2936). An Equal Opportunity/Affirmative Action Employer.

SOME INTERNATIONAL MEETINGS:

1983

July 3-7 7th International Congress on Radiation Research. Amsterdam, the Netherlands.

December 11-21 15th International Congress of Genetics. New Delhi, India.

1984

July 1-6 9th International Congress on Photobiology. Philadelphia, PA.

August 24-
September 1 3rd International Congress of the International Federation of Cell Biology.
Tokyo, Japan.

September 3-10 8th International Congress of Pure and Applied Biophysics. Bristol, England.

1985

August 25-30 13th International Congress of Biochemistry. Amsterdam, the Netherlands.

LIBRARY ON PHOTOSYNTHESIS

The ARC Research Group on Photosynthesis at Sheffield is endeavouring to establish a small library. They would greatly welcome reprints (ancient and modern), old books on photosynthesis, donations or, indeed, anything which would further this aim and preserve old texts, papers, journals or reprint collections which would otherwise be lost to posterity. Send to: Dr. David Walker, ARC Research Group on Photosynthesis, The University, Sheffield, S10 2TN, UK.

President Signs NSF, EPA Spending Bills.

The 1983 funding fate has been sealed for two independent federal agencies of special interest to biologists.

The President has signed into law the 1983 appropriations for the Environmental Protection Agency and the National Science Foundation.

There was good news for the National Science Foundation. That agency's total 1982 appropriations level was less than the preceding year's, but the 1983 appropriations will make up some of the difference.

Both research and related activities and science and engineering education will get more money in 1983 than they did in fiscal 1982.

The Congress gave the President more than he asked for in salaries and expenses for EPA, making it very clear that the lawmakers do not want any reductions in the number of positions during 1983. The Congress had expressed concern that proposed large-scale personnel reductions would make it difficult for the agency to carry out its legal mandate.

	FY 82 Approp.	FY 83 Approp.
NSF	\$992,495,000	\$1,090,000,000
EPA	\$743,884,000	\$738,075,000

AMERICAN SOCIETY FOR PHOTOBIOLOGY

4720 Montgomery Lane, Suite 506
Bethesda, Maryland 20814

Non-Profit Org.
U. S. POSTAGE
PAID
Washington, D. C.
Permit No. 45126