



# NEWSLETTER

Published by the American Society for Photobiology /

1340 Old Chain Bridge Road, Suite 300 / McLean, Virginia 22101 / (703) 790-1745

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No. 91 June 1985

ASP - Newsletter

### \*\*\* ELECTION RESULTS \*\*\*

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### NEW JOURNAL

Comments on Molecular and Cellular Biophysics edited by Burt V. Bronk, Clemson University and J.W. Longworth, Illinois Institute of Technology.

Comments on Molecular and Cellular Biophysics is a bimonthly journal devoted to timely critical reports on significant recent developments in physical and quantitative studies of molecular and cellular biosciences. The journal's purpose is to facilitate dissemination and critical discussion of emerging ideas. The invited short review articles will describe new work and integrate this with well-known material to develop an historical perspective. From time to time the journal will also include reports from topical conferences.

While most journals require their papers to conform to rigid specifications, COMMENTS on Molecular and Cellular Biophysics encourages working scientists to express their thoughts on a wide and open-ended range of topics, both narrow and broad in scope. Less formal and more challenging than most journals, COMMENTS often presents individual views that might otherwise be lost in the field's vast literature.

This successful format enables molecular biologists, biochemists, cell biologists, and physicists interested in biology to keep abreast of important work in areas outside their own disciplines.

The journal keeps you in tune with developments in such areas as protein structure...protein dynamics...excitable membranes...bioenergetics...quantitative cell biology...nucleic acids...membrane transport...radiation interactions...and more.

Please submit papers on new areas of development and emerging ideas in the molecular and cellular biosciences to Burt V. Bronk, Department of Physics and Astronomy, Clemson University, Clemson, South Carolina 29631 or J.W. Longworth, Physics Department, Illinois Institute of Technology, Chicago, Illinois 60616, USA.

Postdoctoral position for bioorganic research of visual pigments and bacteriorhodopsin and related polyenes. The projects are directed toward a better understanding of the primary photochemical and subsequent dark processes and structural information of the binding sites. One or two openings. Preference given to persons trained in biochemical or biophysical studies of related systems or photochemical/spectroscopic studies of molecules in rigid media. Starting date: flexible (approximately January 1986). One year initial appointment, renewal possible. Stipend: minimum \$17,000/yr. Send curriculum vitae, two letters of reference to: Professor Robert S.H. Liu, Chemistry Department, University of Hawaii, 2545 The Mall, Honolulu, HI 96822.

Postdoctoral Research Associate. For studying regulation of photosynthetic carbon metabolism in C<sub>3</sub> and C<sub>4</sub> plants. Send letters of inquiry to Dr. Gerald Edwards, Dept. of Botany, Washington State University, Pullman, Washington 99164-4230. (509) 335-1826. WSU is a 504 Title XI Affirmative Action Institution and Equal Opportunity Employer.

Two meetings concerning the hazards of non-ionizing radiation.

1985

July 10-13 Hazards of Light, Myths and Realities, an International Symposium. University of Manchester, Manchester UK. Eye and skin problems of light and lighting in the natural, domestic, commercial and medical environment. Host organisations: The Manchester Eye Institute, The British Photobiology Society, and The National Illumination Committee. Session Topics: 1) Overview, 2) Ultraviolet Light and the Skin, 3) Light and the Eye, 4) General topics: Light in Industry and Medicine, 5) Establishment and Implementation of Protection Standards. There will be two poster sessions, and a workshop "The Formulation of a Sunscreen".

Theme - Until the beginning of this century, human behavioural patterns have been dominated by the solar cycle. Throughout time the sun has been the only significant light hazard in man's domain. Today, the advent of inexpensive artificial sources of illumination have revolutionised our environment and to some extent released us from the constraints of night and day. At the same time, technology has given us previously undreamt-of sources of light with some, such as lasers, being even brighter than the sun. Scientists from many disciplines have appreciated that such developments may have attendant risks for our species and these require investigation now. How close are we to light pollution? How is our changing light environment affecting the aging processes in our bodies? What are the hazards and risks of bright light sources in industry and medicine? These problems and the possibilities of others will be discussed at this inter-disciplinary forum. If you are interested in contributing to these discussions on light hazards and the premature aging of vulnerable tissues by light, or are interested in being informed by them, you may wish to attend this inaugural international symposium. For further information contact Secretariat: Dr. R.P.F. Gregory, Dept. of Biochemistry, The Medical School, Manchester M139PT, UK.

Aug 5-9

Non-Ionizing Radiations: Biophysical and Biological Basis, Applications, and Hazards in Medicine and Industry, Massachusetts Institute of Technology, Cambridge, MA. The course will emphasize practical considerations in safe and effective use of these modalities in Medical and Industrial practice, e.g. methods and instrumentation for power measurement, calibration, dosimetry, compliance with Federal and State regulations, etc. The program will include information concerning lasers, microwaves, ultraviolet, magnetics fields and ultrasound. Tuition for the one-week program is \$1,050, due and payable upon notification of admission. Academic credit is not offered. Partial tuition assistance may become available for a limited number of applicants. This program is approved for nine Continuing Education Credits by the American Board of Health Physics and for two credits toward maintenance of certification by the American Board of Industrial Hygiene. The program is sponsored by the MIT Department of Mechanical Engineering and the Harvard-MIT Division of Health Science Technology. For further information, please contact: Director of Summer Sessions, Room E19-356, M.I.T., Cambridge, MA 02139.

BOOKS

Photochemistry and Photobiology edited by Ahmed H. Zewail, California Institute of Technology, USA. Proceedings of the International Conference held at the University of Alexandria, Egypt, 5-10 January, 1983. These two volumes contain over 100 papers presented at this major conference. The crosslinking between the different aspects of lasers, photochemistry and photobiology, and the eminence of the participants involved, combine to make this work a state-of-the-art review of fundamental and applied research in the field. Contents of Vol. 1 previously appeared in the journal *Laser Chemistry*, Volumes 2 and 3, 1984, 1,504 pp. in 2 vols., hardcover 3-7186-0205-9, \$175.00. Order from: STBS, Marketing Department, 50 West 23 Street, New York, NY 10010.

Motility and Taxis in Prokaryotes by Alexei N. Glagolev, Moscow State University, USSR. Translated from the Russian. A volume in the *Physicochemical Biology Reviews Supplement Series*, Soviet Scientific Reviews Section D. Exploring major new discoveries in bacterial behavior. *Motility and Taxis in Prokaryotes* represents the state of the art of this new field. The author uses the methodology of molecular biology, genetics and biophysics to delineate the main components of bacterial control mechanisms and to speculate on the future prospects in the field. 1984, 289 pp., hardcover 3-7186-0160-5, \$126.00. Order from: STBS, Marketing Department, 50 West 23 Street, New York, NY 10010.

Energetics of the Photosynthesizing Plant Cell by L.N. Bell, K.A. Timiryazev Institute of Plant Physiology, USSR Academy of Sciences, Moscow, USSR. Translated from the Russian. Volume 5 in the Soviet Scientific Reviews Supplement Series, Physicochemical Biology. This volume presents the results of ongoing research in the energetics of photosynthesis. Focusing on the simplest living photosynthetic system - the plant cell - the findings in this work are directly applicable to more complex plant systems. After beginning with an introduction to the physics of photoenergetics, the volume discusses plant physiology and the importance of using direct experimental methods to obtain quantitative results. The balance of the work is devoted to an analysis of the energetics of those processes which determine the energy balance of illuminated plant cells. 1985, 420 pp., hardcover 3-7186-0195-2, \$175.00. Order from: STBS, Marketing Department, 50 West 23 Street, New York, NY 10010.

Other New Titles

Oxford Survey of Plant Molecular and Cell Biology. Volume 1. 1984. B.J. Mifflin, ed. 234 pp. \$45.00. Oxford University Press, Walton Street, Oxford, England OX2 6DP.

Biosynthesis of the Photosynthetic Apparatus: Molecular Biology, Development and Regulation. 1984. P.J. Thornber, L.A. Staehelin, and R.B. Hallick. UCLA Symposium on Molecular and Cellular Biology. 406pp., \$78.00. Alan R. Liss, Inc., 150 Fifth Ave., New York, NY 10011.

Chloroplasts. 1984. J. Kenneth Hooper. 292 pp., \$19.95 (paper). Plenum Publishing Corporation, 233 Spring Street, New York, NY 10013.

Light and the Flowering Process. 1984. D. Vince-Prue, B. Thomas, and K.E. Cockshull. 328 pp., \$27.50. Academic Press, Orlando, FL 32887.

Photosynthesis. 1984. Christine H. Foyer. 219 pp., \$29.95. John Wiley & Sons, Inc., Dept. 0764, Somerset, NJ 08873.

SPOTLIGHT - Kentucky Lions Eye Research Institute, Department of Ophthalmology

The department is headed by Dr. Arthur H. Keeney and is active in clinical, educational, and research considerations involving vision and vision defects. Services include an eye clinic, V.A. ophthalmology, pediatric ophthalmology, glaucoma, vitreoretinal, cornea and external diseases, low vision aid, eye pathology, and electrophysiology of optic nerve function. Research efforts deal with studies of retinal S-antigen characterization, uveal melanoma, corneal wound healing, sickle cell hyphema, photocoagulation of iris neovascularization, inflammatory reactions in the pineal gland, electrical responses of the retina, metastatic malignancies to the eye and adnexa, the ocular hazards due to welding arcs, optic nerve structure, light factors in cataractogenesis, proliferative vitreoretinopathy, lens metabolism, and the determination of the thresholds for retinal damage from chronic exposure to light in single and multiple exposures.

The department is located in Louisville, Kentucky and is part of the University of Louisville Medical complex.

PHOTOBIOLOGY 1984 -- Proceedings of the Ninth International Congress on Photobiology

PHOTOBIOLOGY 1984 is now available through Praeger Scientific, New York, for \$30.00. Those of you WHO ATTENDED THE CONGRESS (Philadelphia, July 1984) were afforded the opportunity to order the Volume at a pre-publication discount price of \$18.00. If any of you have not sent your pre-publication order form back to the ASP Secretariat, it is not too late if you act now. Praeger will continue to honor these orders for a limited time. PLEASE NOTE: This offer is only for CONGRESS ATTENDEES. Several order forms were received from Institutional Libraries and Praeger will not honor these at the pre-publication price. If a purchase order is used, it must be accompanied by the order form, sent to you in April, as verification of Congress Attendance. In addition, DO NOT make checks payable to the American Society for Photobiology. You will be invoiced directly by Praeger Scientific. If you wish to send payment with your order, have checks or money orders made payable to Praeger Scientific.

**PHOTOCHEMISTRY AND PHOTOBIOLOGY**

We would like to remind members who subscribe to PHOTOCHEMISTRY AND PHOTOBIOLOGY to contact the ASP Secretariat (1340 Old Chain Bridge Road, Suite 300, McLean, VA 22101 - Telephone: (703)790-1745) with all changes in address and subscription problems. We are unable to claim missing issues from the publisher unless we know about them. When you contact us, please have a listing of the Volume and Issue Numbers (and Months) which have not been received. Please keep in mind that if you paid your 1985 dues late you should have received the January and February 1985 issues (if you were a 1984 subscriber), but that a lapse in receipt could be experienced after the February issue. Depending on the date of payment, delivery should later be resumed on a regular basis, followed by the issues missed due to late payment.

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- Volume 41, Number 1 (January 1985)
- Volume 41, Number 2 (February 1985)
- Volume 41, Number 3 (March 1985)
- Volume 41, Number 4 (April 1985)
- Volume 41, Number 5 (May 1985)

OTHER MISSING ISSUES: \_\_\_\_\_

Mail this form to: ASP Secretariat, Attn: Peggy Hinton, 1340 Old Chain Bridge Road, Suite 300, McLean, VA 22101.

**AMERICAN SOCIETY FOR PHOTOBIOLOGY**

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