AMERICAN SOCIETY FOR PHOTOBIOLOGY
LUX ET VITA 1972

NEWSLETTER

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No. 98 February 1986

ASP - Newsletter

IMPORTANT NOTICE.....IMPORTANT NOTICE.....IMPORTANT NOTICE

REQUEST FOR UPDATE OF DATA FOR 1986 PRINTING OF ASP DIRECTORY

On PAGE FOUR of this Newsletter is a request for you to review the information contained on the mailing label used to bring you this issue of the Newsletter. This is the information that will be contained in the 1986 ASP Membership Directory, scheduled for publication in April. Please note that we must have ANY AND ALL CHANGES from you by 15 March in order to implement them prior to the printing of the Directory. Please check this section NOW and respond PROMPTLY. Thank you for your cooperation.

DUES GRANTS AVAILABLE FOR UNEMPLOYED MEMBERS - David Kessel

For the Grants and Awards Committee, I would like to remind our members that unemployed members may apply to the Committee, through the Secretariat, for a one-year waiver of Society membership dues.

NEW BOOK

Medical and Biological Effects of Light

Edited by Richard J. Wurtman, Michael J. Baum and John T. Potts, Jr. The Annals of the New York Academy of Sciences, Volume 453, Published: October 1985. $92.

The Medical and Biological Effects of Light, Volume 453 of the Annals of the New York Academy of Sciences, is the published proceedings of an international conference and contains 32 papers and 12 poster papers. Professionals participated from several disciplines, including clinical medicine, psychiatry, basic science and light engineering. Topics include direct effects of light; indirect effects of light; biological rhythms; and the health effects of interior lighting.

Environmental light produces numerous biological effects related to health beyond simply affecting vision and cutaneous pigmentation. Some of these effects involve direct responses of circulating chemicals to light waves; others are mediated by the brain and neuroendocrine organs. The excellent work collected in this volume focuses on recent advances in the understanding of these effects - effects that may be important for the design of interior environments that optimize health.

Contents

- Effect of Dietary B-Carotene on Psoralen Induced Phototoxicity. By A. Kornhauser, W. Wamer and A. Giles, Jr.
- Photoimmunology: Study of the Effects of Non-ionizing Radiation on the Immune System. By W. L. Morison
- Eye Hazards of Environmental Lighting. By D. H. Sliney
- A History of Organizations Interested in the Biological Effects of Light. A. A. Lamola

Part II. Indirect Effects of Light: Biological Rhythms
- Visual Pathways and the Entrainment of Circadian Rhythms. By. R. Y. Moore and J. P. Card
- Effects of Illumination on Suprachiasmatic Nucleus Electrical Discharge. By G. A. Groos and J. H. Meijer
- A Circadian Pacemaker for Visual Sensitivity? By M. Terman and J. Terman
- Maternal Entrainment of the Developing Circadian System. By S. M. Reppert
- Seasonal Cycles in Energy Balance: Regulation by Light. By J. Dark and I. Zucker
- Annual Reproductive Rhythms in Mammals: Mechanisms of Light Synchronization. By M. H. Hastings, J. Herbert, N. D. Martensz and A. C. Roberts
- Daily and Annual Rhythms in Human Melatonin Secretion: Role in Puberty Control. By F. Waldhauser and M. Dietzel
- Action Spectra, Dose-Response Relationships and Temporal Aspects of Light's Effects on the Pineal Gland. By R. J. Reiter
- Indirect Effects of Light: Ecological and Ethological Considerations. By H. J. Lynch, M. H. Deng and R. J. Wurtman
- Possible Behavioral Consequences of Light-Induced Changes in Melatonin Availability. By H. R. Lieberman, G. Garfield, F. Waldhauser, H. J. Lynch and R. J. Wurtman
- Immediate and Delayed Effects of Bright Light on Human Melatonin Production: Shifting "Dawn" and "Dusk" Shifts the Dim Light Melatonin Onset (DLMO). By A. J. Lewey, R. L. Sack and C. M. Singer
- Seasonal Affective Disorder and Phototherapy. By N. E. Rosenthal, D. A. Sack, S. P. James, B. L. Parry, W. B. Mendelson, L. Tamarkin and T. A. Wehr
- Therapeutic Effects of Bright Light in Depresed Patients. By D. F. Kripke

Part III. Health Effects of Interior Lighting
- Use of Light to Treat Jet Lag: Differential Effects of Normal and Bright Artificial Light on Human Circadian Rhythms. By R. A. Wever
- Effect of Indoor Lighting on Normal Skin. By C. Cole, P. D. Forbes, R. E. Davies and F. Urbach
- Photosensitivity Diseases Related to Interior Lighting. By L. C. Harber, G. B. Whitman, R. B. Armstrong and V. A. DeLeo
- Activation of the Melanocyte System by Ultraviolet Radiation and Cell Transformation. By M. A. Pathak
- Effects of Light Source Spectral Distribution Upon Visual Functions. By H. R. Blackwell
- Therapeutic Uses of Light. By J. A. Parrish, C. F. Rosen and R. W. Gange
- Health Effects of Interior Lighting: Discussion. By I. Abramov

Part IV. Poster Papers
- Rebound Increase of Nocturnal Serum Melatonin Levels Following Evening Suppression by Bright Light Exposure in Healthy Men: Relation to Cortisol Levels and Morning Exposure. By J. Beck-Friis, G. Borg and L. Wetterberg
- Effect of Light Wavelength on the Suppression of Nocturnal Plasma Melatonin in Normal Volunteers. By G. C. Brainard, A. J. Lewy, M. Menaker, R. H. Fredrickson, L. S. Miller, R. G. Weleber, V. Cassone and D. Hudson
- Production of Pyrimidine Dimers in DNA by an Incandescent Spot Lamp. By G. Ciarrocchi, B. M. Sutherland and J. C. Sutherland
- The Effects of Light on Retinal Dopamine in the Rat. By B. F. Godley, A. W. Flaherty and R. J. Wurtman
- Psoralen Increases Melatonin Levels without Ultraviolet Light. By L. J. Grota, A. J. Lewy, L. A. Goldsmith and G. M. Brown
- Photoactivation of Urocanase in Pseudomonas putida; Activation by a Biochemically Generated Excited State. By D. H. Hug and R. C. Venema
- Effects of Electric Lighting on Human Muscle Strength: Visible Spectrum and Low Frequency Electromagnetic Radiation. By D. L. Jewett, S. M. Berman and M. R. Greenberg
- Schizophrenia; Altered Biological Responses to Light. By C. N. Karson, K. F. Berman, A. C. Roy, M. J. Jaffe and F. M. DeMonasterio
- Aging, Day-Night Rhythms in Opiate Analgesia and Environmental Lighting. By M. Kavaliers, M. Hirst and G. C. Tesky
- Life in Constant Light Increases the Longevity of Cardiomyopathic Hamsters (CMH). By B. H. Natelson, J. Cook and W. N. Tapp
- Relationship of Daylength to Reproduction in the White-Footed Mouse. By L. J. Petterborg
- Pineal Function in Fawnhooded (DAB) Rats. By B. Rosoff, H. Yamashita and E. Tobach

Ordering Information: The New York Academy of Sciences, Publications Department, 2 East 63rd Street, New York, NY 10021 (212)838-0230

FOR LOAN OF VIDEOTAPE(S) FOR A ONE WEEK PERIOD

Please send me the videotapes checked below for a loan period of one week. I agree to see that they are promptly returned by first class mail (or UPS) at the end of that week. A $2.00 postage and handling fee per tape should accompany each request for loan. Specify whether you require the 3/4" or 1/2" VHS videotape.

[ ] 1. "Toward a Molecular Understanding of Sunlight-Induced Cancer in Mouse and Man" - B. M. Sutherland

[ ] 2. "Controlled Mutagenesis in Reaction Center Proteins" - J. Hearst

[ ] 3. "Patterns of Discovery in Ultraviolet Photobiology: Development of New Paradigms" - J. Jagger

[ ] 4. "Bioluminescence" - M. DeLuca

[ ] 5. "Phototreatment of Human Subjects" - B. Johnson

Send request to: Dr. Barbara A. Zilinskas, Department of Biochemistry and Microbiology, Lipman Hall, Cook College, Rutgers University, New Brunswick, NJ 08903. MAKE CHECKS/MONEY ORDERS PAYABLE TO: AMERICAN SOCIETY FOR PHOTOBIOLOGY

YOUR NAME AND COMPLETE ADDRESS:

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TAPES REQUESTED FOR THE WEEK OF:

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NOTE: Please allow at least three weeks prior notice for processing and delivery.

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FOR PURCHASE OF VIDEOTAPE(S)

Please send me the videotape(s) checked below. A check or money order, MADE PAYABLE TO AMERICAN SOCIETY FOR PHOTOBIOLOGY, is enclosed with this order.

[ ] 1. "Toward a Molecular Understanding of Sunlight-Induced Cancer in Mouse and Man" - B. M. Sutherland
3/4" videotape $40.00
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[ ] 2. "Controlled Mutagenesis in Reaction Center Proteins" - J. Hearst
3/4" videotape $40.00
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[ ] 3. "Patterns of Discovery in Ultraviolet Photobiology: Development of New Paradigms" - J. Jagger
3/4" videotape $28.00
1/2" VHS tape $20.00

[ ] 4. "Bioluminescence" - M. DeLuca
3/4" videotape $40.00
1/2" VHS tape $25.00

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YOUR NAME AND COMPLETE ADDRESS:

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AWARD - News release from the New York Academy of Sciences

Norman Sutin Receives the Polychrome Corporation Award in Photochemistry -- Dr. Norman Sutin, Senior Chemist at Brookhaven National Laboratory, was the recipient of the Polychrome Corporation Award in Photochemistry. The Award consists of a certificate of citation and a check for $1,000 to Dr. Sutin for his outstanding contributions to the field of inorganic photochemistry.

Dr. Sutin's astute identification and initiation of important research areas and imaginative exploration and application of theoretical models provide the framework for the present detailed understanding of the electron-transfer reactions of excited states of metal complexes. By imaginatively exploiting the properties of these excited states, he has made pioneering contributions to the design of solar energy storage systems.

Dr. Sutin attended the University of Cape Town, South Africa, where he received his B.S. in 1948 and M.S. in 1950. He then went on to pursue doctoral studies at Cambridge University, England, where he earned his Ph.D. in 1953.

Author of over 160 scientific papers, Dr. Sutin has served on the Editorial Board of Comments on Inorganic Chemistry and the Journal of the American Chemical Society.

In 1983 Dr. Sutin was the recipient of the prestigious American Chemical Society Malinckrodt Award for Distinguished Service in the Advancement of Inorganic Chemistry.

MEETINGS

The January Newsletter contained a list of meetings for this year. Additional meeting announcements will be reported as received.

1986

June 26-27 Porphyrin Photosensitization Workshop. A workshop on porphyrin photosensitization will follow the 1986 ASP meeting in Los Angeles. Sessions will be held the afternoon of June 26 and on June 27 at the Universal City Sheraton Hotel. Topics to be presented will include clinical updates on use of porphyrin photodynamic therapy for cancer control, modes of tumor localization, light dosimetry, porphyrin photobiology, photophysics and photochemistry. Additional details can be obtained from David Kessel, Department of Medicine, Harper Hospital, Detroit, MI 48201.

Sept. 7-12 Symposium - Light-Activated Pesticides. Anaheim, CA. Sponsored by Agrochemical Division, American Chemical Society. For further information please contact either Dr. James R. Heitz, Department of Biochemistry, Mississippi State University, Starkville, MS 39762 or Dr. Kelsey R. Downum, Department of Biology, Florida International University, Miami, FL 33199.

POSITIONS AVAILABLE

POSTDOCTORAL FELLOWSHIPS available in areas of immunotoxins, photochemistry and photobiology. Candidates should have knowledge of protein chemistry and some knowledge of organic synthesis with emphasis on heterocycles. This is a collaborative research project, demanding interaction between immunologists, chemists and photobiologists (Dr. Julia Levy, Microbiology; Dr. D. Dolphin, Chemistry; G. H. N. Towers, Botany). Salary $22,000 Canadian for one year and possibly renewable for second year. Send curriculum vitae and three letters of reference to Dr. David Dolphin, Department of Chemistry, or Dr. Julia Levy, Department of Microbiology, The Univeristy of British Columbia, Vancouver, B.C. V6T 2B1, CANADA.

VIDEOTAPES NOW AVAILABLE OF SEVERAL KEY LECTURES PRESENTED AT THE NINTH INTERNATIONAL CONGRESS ON PHOTOBIOLOGY

Videotapes of several lectures presented at the Ninth International Congress on Photobiology are now available for loan or sale. ASP Members are invited to borrow one or more of these videotapes for a period of one week at no charge other than the cost of mailing. Simply complete the enclosed order form. Time of availability of the tapes may be limited by demand, so please plan in advance, particularly if you wish to use these tapes in teaching. Tapes may also be purchased. Simply complete the form enclosed, and the tapes will be promptly mailed to you upon receipt of your order and check.

This videotape project was sponsored by the American Society for Photobiology, assisted through the ASP Education Committee.

IMPORTANT NOTICE - CALL FOR INFO FOR 1986 DIRECTORY! IMPORTANT NOTICE - CALL FOR INFO FOR 1986 DIRECTORY!

PLEASE CHECK YOUR MAILING LABEL (BELOW). This mailing label will show you what information will appear in the 1986 Membership Directory, scheduled to be published in April. **Please take special care in checking your phone number (see second line in example below).** It has come to our attention that many phone numbers are incorrect. Often when people move, they send us a change of address, but forget to send the new telephone number. In addition, when cities are assigned new area codes or institutes get new telephone systems which change the phone numbers, members forget to send us a correction.

IF WE DO NOT RECEIVE CORRECTIONS/MODIFICATIONS FROM YOU BY 15 MARCH 1986, THE INFORMATION WILL APPEAR AS IT APPEARS BELOW. The Secretariat is under a mandate to produce the Membership Directory during the month of April, and if we do not receive the requested information from you by the date stated, we will be be unable to wait for it and still meet our deadline. It is to your benefit to respond promptly.

TOP LINE (see example below) - (a) Your Membership Number; (b) Membership Type - F/Full, E/Emeritus, S/Student; (c) Expiration Date - Month and Year through which your membership dues have been paid (as of 15 January 1986); (d) the year you joined the Society; (e) subspecialties

	(a)	(b)	(c)	(d)	(e)
TOP LINE EXAMPLE:	ASP06634	F	1285	84	1315
SECOND LINE EXAMPLE:	(703)555-1212				
THIRD LINE:	NAME				
FOURTH LINE:	MAILING ADDRESS				
FIFTH LINE:	MAILING ADDRESS				
SIXTH LINE:	CITY, STATE (OR COUNTRY, IF FOREIGN ADDRESS) ZIP CODE				

SUBSPECIALTIES LISTING

1. Bioluminescence
2. Chronobiology
3. Environmental Photobiology
4. Medicine
5. Photochemistry
6. Photomorphogenesis
7. Photomovement
8. Photoreception
9. Photosensitization
10. Photosynthesis
11. Phototechnology
12. Spectroscopy
13. Ultraviolet Radiation Effects
14. Vision
15. Other*

*Please specify "other" discipline

PLEASE MAKE ANY CHANGES/CORRECTIONS NEXT TO THE MAILING LABEL AND RETURN TO: ASP SECRETARIAT, 1340 OLD CHAIN BRIDGE RD, SUITE 300, McLEAN, VA 22101. REMEMBER - WE MUST RECEIVE THESE CHANGES BY NO LATER THAN 15 MARCH 1986.

AMERICAN SOCIETY FOR PHOTOBIOLOGY
1340 Old Chain Bridge Road, Suite 300
McLean, Virginia 22101

FIRST CLASS MAIL