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NEWSLETTER

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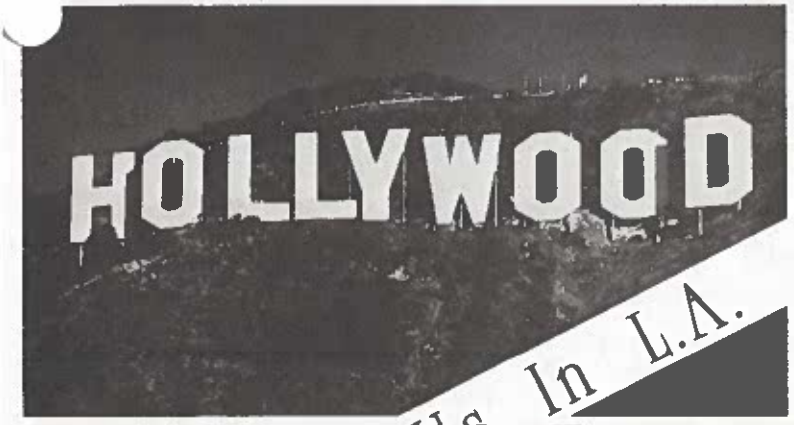

Join Us In L.A. June 22 - 26!

Book Review - "Solar UV Actions on Living Cells", by J. Jagger

Any book that begins with the statement, "All events in the universe consist of interactions of matter and radiation", is bound to capture the interest of photobiologists. That, and the fact that more scientists are focusing their studies on radiation effects caused by the wavelengths present at the earth surface due to solar exposure, makes Dr. Jagger's new book "Solar-UV Actions on Living Cells" a timely appearance.

The book contains nine chapters, three appendices, and a comprehensive reference list. The first chapter gives an overview of the physical, chemical, biological, and medical aspects of solar-UV photobiology. Chapter two reviews the data available from far-UV (<290nm) studies as a background for the often more recent work at longer wavelengths. It includes discussions of the molecular damage accrued by cells and its subsequent repair. Having set the stage, Dr. Jagger begins chapter three with a discussion of near-UV (>320nm) molecular targets, lesions, and repair systems. What follows is a detailed description of these parameters. Chapter four limits itself to sublethal effects, chapter six to synergestic and antagonistic effects of mixed near UV and far UV exposures.

Perhaps a bit out of sequence, chapter seven discusses what is currently known about the "mid-UV" region (290-320nm) that bridges the gap between far and near UV. All of the mid-UV reaches the earths surface but the shorter wavelengths are severly attenuated. Dr. Jagger ends his book by expanding into multicellular organisms (Chapter 8), including humans. The last chapter discusses the uses of solar UV as a tool to study a variety of biological and medical phenomena. This chapter ends with a summary in the "Ozone problem" and human exposure to artifical solar-UV (tanning parlors, etc.).

As was the case with Dr. Jaggers previous book, (which concentrated mainly on far UV effects) a useful list of sources, filters and detectors, along with units and dosimetery, is included in the appendices. The experimental procedure needed to carry out solar-UV experiments are also listed and include the details needed for action spectroscopy.

The book is somewhat lacking in details concerning artificial sunlight sources, especially solar simulators and tunable dye lasers. But these topics are covered elsewhere. What is evident is the care Dr. Jagger has taken to think through the importance of solar UV in the biosphere. For example, he cites evidence that organisms seem to have just enough resistance to solar UV to allow them to survive in a particular ecosphere.

In summary, this book will be a valuable reference for the increasing numbers of investigators beginning to concern themselves with solar UV effects in biological systems. I expect it will become as dog-eared and worn by constant usage as was Dr. Jagger's previous book "Introduction to Research in Ultraviolet Photobiology".

T.P. Coohill

"Solar UV on Living Cells" by John J. Jagger, Praeger Publishing, 521 5th Ave., NY,NY 10175, 202 pages, $37.95.

BOOKS
From PLENUM, 223 Spring Street, New York, N.Y. 10013

VIDEO MICROSCOPY
By Shinya Inoue, Marine Biological Laboratory, Woods Hole, Mass., and University of Pennsylvania
With contributions by Robert J. Walter, Jr., Michael W. Berns, Gordon W. Ellis, and Eric Hansen
This handbook details the opportunities in the fast-growing field of video microscopy, guiding the reader through basic practical aspects, explaining essential operating principles, and examining each imaging step in a logical progression. Also included are an appendix on the principles and applications of high-extinction polarized light microscopy, an extensively cross-indexed glossary, and a clear discussion of video principles.
0-306-42120-8/528 pp. + index/ill./1986/$65.00

PRINCIPLES OF FLUORESCENCE SPECTROSCOPY
By Joseph R. Lakowicz, University of Maryland School of Medicine
An easy-to-read and well illustrated introduction to fluorescence spectroscopy.
0-306-41285-3/510 pp./ill./1983/$32.50

RADIATION DOSIMETRY
Physical and Biological Aspects
Edited by Colin G. Orton, Wayne State University School of Medicine
A collection of up-to-date reviews by leading authorities on the physical and biological dosimetry of a variety of radiations and their beneficial and harmful effects. The theory and applications of microdosimetry are examined from the biophysical perspective, and a review of the dosimetry of ultraviolet radiation details essential measurements and protection methods.
0-306-42056-2/319 pp. + index/ill./1986/$59.50

TIME-RESOLVED FLUORESCENCE SPECTROSCOPY IN BIOCHEMISTRY AND BIOLOGY
Edited by R.B. Cundall, University of Salford, UK, and R.E. Dale, Paterson Laboratories, Christie Hospital, and Holt Radium Institute, Manchester, UK
Volume 69 in the NATO ASI Series: Series A: Life Sciences.
0-306-41476-7/proceedings/800 pp./ill./1983/$110

METHODS IN PORPHYRIN PHOTOSENSITIZATION
Edited by David Kessel, Wayne State University School of Medicine
This book brings together the latest findings and methodologies in the use of porphyrin photosensitization for the detection and treatment of neoplastic disease. Researchers in photochemistry, photobiology, analytical chemistry, biophysics, parmacology, surgery, and medicine offer methodologically detailed coverage, representing the state of the art in this growing field. An extensive bibliography on the subjects of porphyrin localization and therapy is included, making the book especially valuable as a reference and guide to the literature. Volume 193 in the series Advanced in experimental Medicine and Biology
0-306-42210-7/proceedings/362 pp./ill./1986/$55.00

PHOTORECEPTION AND VISION IN INVERTEBRATES
Edited by M.A. Ali, University of Montreal, Canada
A structured presentation of four areas of current investigation - complexity and/or efficiency, adaptive radiation, and convergence and divergence - in the visual systems of invertebrates from protozoa to echinoderms. Volume 74 in the NATO ASI Series: Series A: Life Sciences.
0-306-41626-3/proceedings/868 pp./ill./1984/$115.00

PRIMARY PHOTO-PROCESSES IN BIOLOGY AND MEDICINE
Edited by R.V. Bensasson, Museum National d'Histoire Naturelle, Paris, France, G. Jori, University of Padua, Italy,E.J. Land, Christie Hospital and Holt Radium Institute, Manchester, England, and T.G. Truscott, Paisley College of Technology, Scotland
There has been a dramatic increase in medical applications of phototherapy and photochemotherapy. This volume covers advances in both areas. NATO ASI Series: Series A: Life Sciences.
0-306-41930-0/proceedings/492 pp./ill./1985/$85.00

VISION IN VERTEBRATES
By M.A. Ali and M.A. Klyne, University of Montreal, Canada
This new textbook surveys the workings, structure, and adaptations of vision in vertebrates.
0-306-42065-1/282 pp./ill./1985/$45.00
text adoption price on orders of six or more copies: $24.50

CHLOROPLASTS
By J. Kenneth Hoober, Temple University School of Medicine
A volume in the series Cellular Organelles.
0-306-41643-3/hardcover/292 pp./ill./1984/$42.50
0-306-41686-7/paperback/292 pp./ill./1984/$19.95

NOMINATIONS

At the next meeting (Sept. 7-12, 1986) of the International Association for Photobiology, nominations for both the FINSEN medal and the Edna Roe Lecture will be considered.

The Finsen medals are for outstanding service to Photobiology and the Edna Roe lecture is to be given by a female photobiologist. Recommendations should be sent to Dr. Rex M. Tyrrell, Secretary General, Association Internationale de Photobiologie, Swiss Institute for Experimental Cancer Research, CH-1066 Epalinges S/Lausanne, Switzerland. Nominations may be made by individual photobiologists.

For more details contact Frederick Urbach, M.D., Professor and Acting Chairman, School of Medicine, The Center for Photobiology, Skin and Cancer Hospital, 3322 North Broad Street, Philadelphia, PA 19140.

MEETINGS

1986

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June 22-26 AMERICAN SOCIETY FOR PHOTOBIOLOGY - Fourteenth Annual Scientific Meeting. Los Angeles, California.
HOTEL - The Sheraton Universal is located at 333 Universal Terrace Parkway, Universal City, CA 91608, overlooking Universal Studios and the San Fernando Valley. The hotel's phone number is (818) 980-1212. Further Information: Diane Taub, Executive Officer, ASP, 1340 Old Chain Bridge Road, Suite 300, McLean, VA 22101.

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June 26-27 Porphyrin Workshop - This meeting will be held at the end of the ASP Annual Meeting (June 22-26) at Universal City in L.A. It will begin on Thursday afternoon, June 26th and continue all day Friday, the 27th. For information contact: Dr. David Kessel, Department of Medicine, Harper Hospital, 3990 John R. Street, Detroit, MI 48201.

Aug 11-15 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. For futher information, please contact: Director of Summer Sessions, Room E19-356, M.I.T., Cambridge, MA 02139.

Aug 17-21 Illuminating Engineering Society of North America. Boston, MA. The conference will feature the latest developments in the field of illumination. Sessions and exhibits will feature lighting design, sources, luminaires, light and vision, roadway lighting, and award-winning lighting applications. A special one-day educational seminar will be held concurrently on commercial lighting design, and participants will earn IES-CEU credits. Details on the program will be available in mid-February, and registration information will be available in May. For more information contact: Elizabeth Downs, (202) 705-7926.

Sept 7-12 First European Congress of Photobiology. Grenoble, France. Provisional list of invited speakers: E. Ben-Hur, N. Boens, R. Bonnett, R. Cogdell, F. Dall'Acqua, J. Deseinhoffer, E.C. Friedberg, C. Helene, J.E. Hearst, J. Hoeijmakers, E. Holzle, G. Jori, P. Mathis, W.L. Morison, R. Paulsen, M. Radman, A. Sarasin, S. Sedgwick, T.G. Truscott, K. Vogt, D.A. Walker, K. Wolff, R. Wood, R. Worest, A. Young. Abstracts due by May 8. Contact: Secretariat 1st ECP, DRF/Documentation Chimie, Centre d'Etudes Nucleaires, 85X, 38041 Grenoble Cedex, France.

Oct 19-24 170th Meeting of the Electrochemical Society. San Diego, California. Symposium on Picosecond and Faster Phenomena in Luminescence, Absorption and Raman Spectroscopies. Invited speakers are: Charles Shank, Ben Greene, Nasser Peyghambarian, Mike Rodgers, Norman Schiller, A. Nurmikko, M. El-Sayed. Chairman: Prof. R.R. Alfano, City College of New York, IUSL (212-690-6960). Co-chairmen: H.G. Brittain and N. Schiller (201-469-6640).

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