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### No. 57 May 1982

<u>ANNUAL MEETING</u> - Vancouver - June 27 - July 1, 1982 The following symposium will be one of those presented at the annual meeting of ASP:

### PHOTOIMMUNOLOGY

(1)	Introduction	John A. Parrish	5/10 min
(2)	The skin is an immune organ	Paul R. Bergstresser	40 min
(3)	The effects of UVR on immune function of skin	Georg Stingl	40 min
(4)	Immunobiology of photocarcinogenesis	Margaret Kripke	40 min
(5)	Significance of photoimmunology for humans	Warwick L. Morison	40 min

It is now becoming recognized that light affects the immune system of animals and humans. Circulating and noncirculating components of the immune system are directly and indirectly affected by ultraviolet radiation (UVR) in doses often encountered in therapeutic, occupational and recreational settings. Identification and quantification of these effects may lead to the use of light as a tool to explore the immune system. Photoimmunology is the study of the effects of light on the immune system and is a science which involves dermatology, immunology and photobiology. Therapeutic manipulation of immune status with light is a reasonable goal; present forms of phototherapy serve as possible examples. The short-term and long-term effects of light on the immune system of humans is complex only beginning to be understood. Photoimmunologic mechanisms are likely involved in sun-induced skin cancer.

# NEW BOOK - The Biology of Skin Cancer (Excluding Melanomas)

UICC Technical Report Series Volume 63. A series of Workshops on the Biology of Human Cancer. Report No. 15. Edited by O.D. Laerum and O.H. Iversen. 263 pp. 1981. Price: Swiss Francs 44.-/copy (US\$ 22.-/copy). ISBN: 92-9018-063-3. Distributed exclusively by Hans Huber Publishers, Bern, Switzerland.

The purpose of this Volume is to provide workers in this field with a critical evaluation of our current knowledge of the biological basis of carcinogenesis and neoplastic growth in the mammalian skin.

More cancers originate in the skin than in any other organ of the human body. The skin was one of the first organs for which a link was established between environmental factors and malignant tumours. Also, the first experimental tumours were induced in the skin. Yet, we do not fully understand the basic biological properties of malignant neoplasms of this organ, or the interaction between carcinogenic agents and the presumably normal tissue. For this reason, the International Union Against Cancer arranged a Workshop on skin cancer to critically assess the most recent knowledge of the biological basis of oncogenesis and neoplastic growth in the various cell types of the skin and to disseminate this knowledge to workers in experimental and clinical oncology.

The main emphasis is placed on carcinomas, especially squamous cell carcinomas, since most malignant neoplasms in skin originate from epithelia, particularly the epidermis. Malignant melanomas have been excluded because they deserve a separate volume.

In the first part of this Workshop Report, the historical background of skin cancer research and the structure and growth regulation of normal skin are discussed. A survey of the occurrence of skin cancer in man, including classification and biological properties, is followed by a discussion of the criteria of malignancy. Because of the large body of available experimental and clinical data, two of the largest chapters deal with chemical and ultraviolet radiation carcinogenesis. The role of other factors, such as ionizing radiation, viruses, the immune system, the dermal stroma and also aging at the cellular level in the various compartments of the skin, have been dealt with in separate chapters. In addition, the working group provided an overview of problems deserving priority in future investigations.

Most of this Volume represents the common consensus of all the participants. However, in the chapter on chemical carcinogenesis there have been different opinions on the interpretation of biological data. This has been expressed in an Appendix to Chapter 6 which focuses on the two-stage theory of carcinogenesis.

ORDER FROM: Hans Huber Publishers, Laenggassstrasse 76, CH 3000 Bern 9, Switzerland

### NEW BOOK SERIES - Solar Energy R & D in the European Community

The Commission of the European Community's Directorate General (XII) for Research, Science and Education is currently implementing, on a cost-sharing basis, an extensive solar energy R + D programme through contracts with European industry, research institutions and universities.

In the course of the programme the Commission organizes each year several coordination meetings to which the contractors are invited to present details of their work. The information presented at these meetings is recent, of high interest to other researchers in the field, and needs to be quickly and widely circulated for the further advancement of solar energy and all its applications.

The Commission has accordingly decided to launch, in cooperation with D. Reidel Publishing Company, a new book series publishing the Proceedings of Contractors' Meetings.

Each research field has been allotted a distinct subseries, and each volume will be numbered according to its position in a subseries as the proceedings become available.

The publishing programme will cover the following areas:

Series A - Solar Energy Applications to Dwellings
Series B - Thermo-mechanical Solar Power Plants
Series C - Photovoltaic Power Generation
Series D - Photochemical, Photoelectrochemical and Photobiological Processes
Series E - Energy from Biomass
Series F - Solar Radiation Data
Series G - Wind Energy
Series H - Solar Energy in Agriculture and Industry

It is the intention to publish approximately six proceedings volumes each year. They will mostly concern the areas of 'Solar Energy Applications to Dwellings', 'Photovoltaic Power Generation', 'Photochemical, Photoelectrochemical and Photobiological Processes' and 'Solar Radiation Data'. The first book in the new series, however, deals with 'Energy from Biomass' and covers the proceedings of the contractors' meeting held in Copenhagen in June 1981.

ORDER FROM: D. Reidel Publishing Company, P.O. Box 17, 3300 AA Dordrecht, Holland <u>or</u> 190 Old Derby St., Hingham, MA 02043 U.S.A.

ALSO FROM THE SAME PUBLISHER - Photochemical, Photoelectrochemical and Photobiological Processes

Proceedings of the EC Contractor's Meeting, held in Cadarache, France, 26-28 October 1981, edited by David Hall and W. Palz. Forthcoming Winter 1981/82, Solar Energy R & D in the European Community, Series D: Photochemical, Photoelectrochemical and Photobiological Processes 1.

### POSITIONS OPEN

<u>Assistant Research Biochemist</u> (Ph.D.) in Photobiology/Dermatology available immediately for collaborative work in UV skin-carcinogenesis. Must have experience in: epidermal polyamine, tyrosine and glutathione metabolism; chemical and light induction of skin tumors in animals and prophage in bacteria; DNA synthesis. Should have a proven interest in the study of the modulation of UV-tumorigenesis. Teaching will include postgraduate tutorials and epidermal biochemistry to dermatology residents. Salary \$14,750. Please send curriculum vitae to: Dr. N. J. Lowe, Department of Medicine, Division of Dermatology, UCLA School of Medicine, Los Angeles, CA 90024.

### EPA NEWSLETTER

The European Photochemistry Association has issued its February 1982 issue. In addition to reports from various European Photochemical conferences, it contains a list of photochemical publications, announcements of meetings, and general news items. The next issue will be in June, 1982.

For further information contact one of the following editors:

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#### SYMPOSIUM PROCEEDINGS

Bioluminescence and Chemiluminescence. Basic Chemistry and Analytical Applications. Ed. by Marlene A. DeLuca, William D. McElroy. (Proceedings of the Symposium on Bioluminescence and Chemiluminescence: Basic Chemistry. Held at the Univ. of California, La Jolla, Cal., Aug. 26-28, 1980. New York. Academic Press. 1981.

SUMMER PROGRAM

# Laser, Microwaves, Ultraviolet, and Ultrasound: Biophysical and Biological Basis, Applications, and Hazards in Medicine and Industry

Massachusetts Institute of Technology, Cambridge, MA August 9-13, 1982

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 further information, please contact:

Director of Summer Sessions Room E19-356, M.I.T. Cambridge, MA 02139

VANCOUVER ANNUAL MEETING - TRAVEL (Meeting dates: June 27 - July 1, 1982)

By going through a travel agent rather than a particular airline you will be able to find out the best rates available for travel to Vancouver. We suggest that you do this now, rather than waiting. Your best bet is to book early, and shop around. Different airlines have different rates from different cities - so explore all of your possibilities. It may also benefit you to stay over a Saturday night, so you may want to come into Vancouver a day early or stay a few extra days to benefit from better rates and allow yourself time to explore the beauty in the Vancouver area.

MEETINGS	
June 27- July 1	XV Informal Conference on Photochemistry, Stanford, California, U.S.A. Information: Dr. T.G. Slanger, PSO91, SRI International, 333 Ravenswood Ave., Menlo Park, CA 94025, U.S.A.
August 29- September 11	NATO Advanced Institute: Photobiochemistry of Tetrapyrrolic Pigments and Biomedical Applications ( <u>Tentative</u> ), Padova, Italy. Information: Dr. Giulio Jori, Istituto Biologia Animale dell Universita, Via Loredan, 10, I-35100 Padova.
September 5-9	4th EPA Summerschool on Photochemistry, Konigswinter, Germany. Information: Prof. HD. Scharf, Institut f. Organische Chemie, RWTH, ProfPirlet-Str. 1, D-5100 Aachen, F.R.G.
September, October	Ibero-American Photochemistry Meeting ( <u>Tentative</u> ), Santiago, Chile. Information: Prof. Eduardo Lissi, Chemistry Department, Faculty of Science, Universidad Tecnica, Casilla 5659, Correo 2, Santiago, Chile.
October 20- November 5	Workshop and Symposium in Environmental Mutagenesis, Islamabad, Pakistan. Information: Amir Muhammed, Pakistan Agricultural Research Council, L-13, AL-Merkaz, S-72, Islamabad, Pakistan. Supported by the National Science Foundation.
November 1-5	Effects of Ultraviolet Radiation on Plants: An International Workshop, Delhi, India. Information: Prof. L.O. Bjorn, Department of Plant Physiology, Box 7007, S-220 07, Lund, Sweden.
<u>1983</u> April 21-26	Biosynthesis of the Photosynthetic Apparatus: Molecular Biology, Development and Regulation, Keystone, Colorado. Organizers: R.B. Hallick, L.A. Staehelin and J.P. Thomber. Further Information: UCLA Symposia, Molecular Biology Institute, University of California, Los Angeles, CA 90024, Tel. (213) 206-6292.
Мау	Principles of Mutagenesis, Carcinogenesis, and Teratogenesis, Peoples Republic of China. Contact: Alexander Hollaender, The Council for Research Planning in Biological Sciences, Inc., c/o Associated Universities, Inc., 1717 Massachusetts Avenue, N.W., 603, Washington, D.C. 20036-2077, Tel. (202) 462-4475.
June 26-30	American Society for Photobiology Meeting, Madison, Wisconsin. Information: American Society for Photobiology, 4720 Montgomery Lane, Suite 506, Bethesda, Maryland 20014, U.S.A.
July 3-8	7th International Congress of Radiation Research, Amsterdam, Netherlands. Information: J.J. Broerse, Secretary General 7th International Congress of Radiation Research, c/o Radiobiological Institute TNO, P.O. Box 5815, 2280 HV Rijswijk, The Netherlands.

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