AMERICAN SOCIETY FOR PHOTOBIOLOGY
LUX ET VITA 1972

NEWSLETTER

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No. 73 November 1983

ASP - Newsletter

Congressional Fellow
Ronald Rahn 1983-84

Ronald Rahn has been selected as the 1983-1984 Congressional Science Fellow representing both the American Society for Photobiology and the Biophysical Society. The Fellowship program is administered by the American Association for the Advancement of Science and over 40 fellows are participants this year representing a wide variety of professional societies. As a fellow, Rahn will spend the year working on the staff of a member of Congress or for one of the Congressional subcommittees. Over the past several years, the Society has sponsored two fellows, both of whom have remained in Washington to continue their public service careers in science policy.

After receiving his undergraduate degree in chemistry from the University of Connecticut in 1957, Rahn went on to earn his PhD in physical chemistry from Brandeis University in 1963. At Brandeis his thesis problem dealt with the magnetic properties of transition metal ions as studied by ESR. The next two years (1963-1965) were spent at the Bell Telephone Laboratories working with R. G. Shulman, E. Eisinger, and J. W. Longworth on the excited state properties of DNA. It was during this period that Rahn's research interests turned towards Biophysics and Photobiology. In order to pursue these interests, a position at the Oak Ridge National Laboratory' Biology Division (from which Rahn is currently on leave) was assumed in 1965. At Oak Ridge, Rahn's work has centered around DNA photochemistry. A former Councilor of the Society (1980-1983), Rahn looks forward to communicating with the Society through the Newsletter as well as by contacts at the National Meeting. In all, he expects the coming year to contain many interesting and beneficial experiences and looks forward to sharing them with Society Members.

THE SECRETARIAT IS MOVING!! * * * * * * IMPORTANT NOTICE TO ALL MEMBERS * * * * * * * THE SECRETARIAT IS MOVING!!

EFFECTIVE 1 DECEMBER 1983
THE SOCIETY OFFICES WILL RELOCATE TO THEIR NEW HOME IN McLEAN, VIRGINIA.

THE NEW ADDRESS WILL BE:

ASP
1340 OLD CHAIN BRIDGE ROAD
SUITE 300
McLEAN, VA 22101 PHONE: (703)790-1745

Awards

ISCC Presents Godlove Award. At its 52nd Annual Meeting in Louisville, April 10-12, the Inter-Society Color Council presented its 1983 Godlove Award to Eugene M. Allen, Professor Emeritus of Chemistry at Lehigh University. The Godlove Award was established in 1956 by Mrs. Margaret N. Godlove in memory of her husband, Dr. I. H. Godlove, Chairman of the Council 1948-1950 and its Newsletter editor for many years. The Award has been presented biennially since 1957.

Professor Allen's distinguished career in color science and technology spans a time period of more than 40 years. He is probably best known for his work in turbid-medium theory and its application. Through his publications and consultations he is responsible for many of the present-day mathematical techniques being used for computer colorant formulation.

Association Internationale de la Couleur. The 1983 Deane B. Judd-AIC Award for the AIC will be conferred on David Lewis MacAdam in recongition of his extensive contributions to the science and technology of colour. In particular, Dr. MacAdam's work on spectrophotometry, spectroradiometry, optimal colours, dominant wavelength and excitation purity, uniform chromaticity diagrams and uniform colour solids for reflecting objects, perceptible differences in chromaticity and in tristimulus values leading to the well-known MacAdam ellipses and ellipsoids, chromatic adaptation, colour computations including some of the first use of computers, loci of constant hue and brightness, and colorimetric fundamentals of colour reproduction especially in colour photography, are among the contributions noted here for recognition by the Association. Dr. MacAdam is now a professor at the Institute of Optics at the University of Rochester.

New Books

Principles of Fluorescence Spectroscopy by Joseph R. Lakowicz, University of Maryland, School of Medicine, Baltimore. 487 pages plus index, illus., 1983, Plenum Publ. Co. ISBN41285-3 $32.50.

Fluorescence methods are being used increasingly in biochemical, medical, and chemical research. An introduction to the fundamental aspects of fluorescence spectroscopy, this volume fills the need for a basic text and reference source on the subject. The volume discusses all basic phenomena and discloses the various biochemcal applications. The presentation is kept as simple as practicable, and wherever extensive equations are used, a good deal of text is included to explain the origin and meaning of each expression.

Each chapter begins with the theoretical basis of each phenomenon of fluorescence, followed by examples that illustrate the use of the phenomenon in the study of biochemical problems. The volume contains a wealth of figures to help the neophyte grasp the concepts more easily. Separate chapters are devoted to fluorescence polarization, lifetimes, quenching, energy transfer, solvent effects, protein fluorescence, and excited state reactions. To enhance the usefulness of this work as a textbook, problems are included that illustrate the concepts described in each chapter. An additional chapter is devoted to the instrumentation used in fluorescence spectrometry--an especially valuable feature for those performing or contemplating fluorescence measurements. The volume includes extensive references to the primary literature of fluorescence spectroscopy that will be useful for those who need to go on to more advanced study.

A lucid presentation of a methodology used extensively in biochemical, chemical and medical research, Principles of Fluorescence Spectroscopy will be of interest to students and professionals in the fields of biophysics, biochemistry, analytical chemistry and applied spectroscopy, molecular biology, and immunobiology.

Experimental and Clinical Photoimmunology Volume I and Volume II

Editors

Volume I

Raymond A. Daynes, PhD
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Salt Lake City, UT

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Contents

Volume I
Photobiology and Basic Immunology

Volume II
Experimental Photoimmunology and Clinical Photoimmunology

VOLUME I		VOLUME II	
Catalog No.:	5370P	Catalog No.:	5371P
No. of Pages:	224	No. of Pages:	208
US:	$69.00Prepub.	US:	$61.00Prepub.
Outside US:	$79.00Prepub.	Outside US:	$70.00Prepub.

NINTH INTERNATIONAL CONGRESS
ON PHOTOBIOLOGY

&

Twelfth Annual Scientific Meeting
American Society for Photobiology

PROGRAM OUTLINE

CONGRESS SOCIAL EVENTS

Sunday Evening, 1 July, 8:00 pm
Opening Reception

Monday Evening, 2 July
Musical Evening

Tuesday Evening, 3 July
Banquet with Civic Dignataries

Wednesday Afternoon & Evening, 4TH OF JULY!!
Free Time - Optional Tours & Events Available

Friday Afternoon, 6 July
Closing Reception

TENTATIVE SCIENTIFIC PROGRAM

MONDAY, 2 JULY

Morning

School:	PhotoCDNIP
Plenary Lectures:	Visual Cortex Processing
	X-Ray Laser
Minisymposia:	Borrowed Prosthetic Groups and Enzymes in Bioluminescence
	Influence of Color on Human Behavior
	Photobiology of Urocanic Acid

Afternoon

Special Lecture:	Edna Roe Memorial Lecture (AIP)
Symposia:	Human Perception of Color
	Light and Magnetic Resonance: Biological Studies

Evening

Workshops:	Systemic Effects of Ultraviolet Radiation on Human Physiology
	Experience of Multicenter Studies on PUVA and Human Cancer
	Synchrotrons: What Can You Do with Them Now and Where?
Conversazione:	New Tools for Photobiology -- Medical light sources, fast timing, streak cameras, holographic optical detectors, two dimensional photon counting detectors, phase conjugation, and turbulent media
	Transfer of Excited Electronics Energy in Membranes and Photosynthetic Systems
	Photoreception Transduction: Phosphorylation Cascade; cGMP, cATP, Ca(II); Gated Sodium Channels; Proton Pumps; Protein Modification
	Cell Death, Metabolism and Mutagenesis

TUESDAY, 3 JULY

Morning

School:	Photoelectric Effects and Photosynthesis
Plenary Lectures:	Controlled Mutagenesis in Bacteriorhodopsin
	Quantum Photochemistry
Minisymposia:	Malignant Melanoma and UV Irradiation
	Induction by Damaged DNA of Repair Systems in Cells and Bacteria

Afternoon

Special Lecture:	Finsen Lecture (Finsen Institute)
Symposia:	Modulation of Light Energy Conversion in Photosynthesis
	Genetics of Repair of DNA Damage

Evening

ASP Presidential Lecture

Historical Lecture

WEDNESDAY, 4 JULY

Morning

School:	Sky Polarization and Navigation
Plenary Lectures:	Bioluminescence
	Insect Vision
Minisymposia:	Photomorphogenesis
	Model Systems for Photoreception in Vision, Photomovement and Reaction Centers
	Water Splitting Reaction in Photosynthesis

Afternoon & Evening

FREE TIME

THURSDAY, 5 JULY

Morning

School:	Laser Fluorescence and Immunoassay
Plenary Lectures:	Membrane Motion and Triplet Probes
	Photomovement Action Spectra and the Japanese Large Spectrograph
Minisymposia:	Femtosecond Lasers: Biological Studies
	Primary Events in Visual Pigment and Bacteriorhodopsin Response to Light

Afternoon

Symposia:	Porphyrin Phototherapy of Cancer
	Light Regulated Processes in Photoreception

Evening

Workshops:	Ultraweak-level Light Emission from Living Systems: A Tool for Diagnosis and Research
	Photophosphorylation
	Lasers in Medicine and Biology
Conversazione:	Repair and Human Diseases
	Ultraviolet Radiation-Induced Human Cancer
	Indole and Electron Transfer Photochemistry

FRIDAY, 6 JULY

Morning

School:	Laboratory Cell Sorters
Plenary Lectures:	Phototreatment of Human Subjects
	Primary Steps in Photosynthesis
Symposia:	Photoimmunology
	Vertebrate Clocks

Afternoon

Special Lecture:	Congress Lecture--Bird Navigation
Rapporteur Sessions:	Photophysics and Photochemistry Photosynthesis Photomedicine Chronobiology and Bioluminescence Photomorphogenesis DNA Photodamage & Repair

AIP General Assembly

Closing Events

NOTES: Contributed Paper Sessions will run concurrently, each morning, Monday - Friday.

Poster Sessions (3) will be on Monday, Tuesday and Thursday afternoons.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT

AMERICAN SOCIETY FOR PHOTOBIOLOGY
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Suite 300
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SEE YOU IN PHILADELPHIA!!!

Annual Report - Photochemistry and Photobiology by Pill-Soon Song

1. Subscriptions

	1981	1982
Libraries	998	958
Individuals	64	62
Members (ASP)	1189	1301
Total	2251	2321

2. Manuscripts

During calendar year, 1982, 448 manuscripts were received, with an overall acceptance rate of 54%.

Manuscripts Published in 1982

261 manuscripts (including 14 Yearly Reviews) were published in 1982, resulting in an average of 21.8 papers/issue. (In 1981, there were 275 manuscripts or 22.9 papers/issue.) In addition, the following items were also published in 1982: Book Lists - 1; Book Reviews - 8; Errata - 3; History of ASP - 1; Notices - 2; Subject and Author Indexes - 2; Acknowledgement of Reviewers -1. The total number of pages printed in 1982 was 1,675.

Geographical distribution. 47% of the manuscripts published in 1982 were submitted from the U.S.A. 33% were published from Europe and 15% from Asia. 21 countries were represented.

Categories of Manuscripts Published in 1982.

Category	No. of Manuscripts
Phototechnology; Photochemistry; Spectroscopy	74
Photosensitization; UV (and Visible) Radiation Effects	70
Environmental Photobiology; Medicine	17
Chronobiology; Photoreception; Vision	15
Photomorphogenesis; Photomovement; Photosynthesis	71
Bioluminescence; Other	14

3. Publication Time in Months

1981:	Editorial Time (Editor+Referees+Authors)	Printing Time Volume	Total (in Months) 33, 1981
1.8 5.2	7.0		
Volume 34, 1981	2.2	4.9	7.1
1982:			
Volume 35, 1982	2.5	4.9	7.4
Volume 36, 1982	2.4	4.0	6.4

4. Personnel Changes

Dr. M.M. Mathews-Roth resigned as Associate Editor as of December 31, 1982. Drs. I.E. Kochevar and F. McCapra were appointed for their terms beginning January 1, 1983. Dr. David B. Knaff will be on Sabbatical leave from Texas Tech for 1983 and asked to be relieved of his Associate Editorship duties. Dr. Paul Mathis of Cen Saclay, Gif-sur-Yvette, France has agreed to join the Editorial Board beginning July 1, 1983.

Request for Assistance

SCIENCE SOFTWARE NEWSLETTER

The Center for Environmental Studies at Arizona State University is interested in publishing a newsletter dedicated to computer (particularly microcomputer) software and applications for the natural sciences. The newsletter would be published quarterly and would contain 1) a listing and short review of recent scientific software, with availability and compatibility specifications; 2) one or more articles on microcomputer techniques--how to download software for different systems, how to choose between a minicomputer and a network of micros, etc.; 3) a forum for advertising "custom" software--a place where scientists who have written software for specialized modeling or applications (for microcomputers, minis, or mainframe) can list and describe programs for free use, exchange or sale. We are currently assessing the level of interest in such a publication among the scientific community, as an aid to obtaining necessary funding. If you are interested in seeing such a publication, would like further information regarding it, or would be willing to serve as a reviewer for new software and documentation, please call or write to me at the address below.
- DIANA J. GABALDON, PhD, Center for Environmental Studies, Arizona State University, Tempe, AZ 85287 (602) 965-3051 -

New Meeting Announcements

1984 April 6-8 Eastern U.S. Regional Conference on Photosynthesis to be held at Woods Hole Marine Biology Laboratory, Woods Hole, MA. For further information contact: Robert Blankenship, Department of Chemistry, Amherst College, Amherst, MA 01002 (413) 542-2148.

1984 Aug. 16-18 Conference on Plant Pyrroles. Immediately following the meeting of the American Society of Plant Physiologists at UC Davis. The conference will take place at the Ralston-White Retreat Center in Mill Valley, California. Transportation from Davis to Mill Valley and from Mill Valley to San Francisco Airport will be provided.
Format: Round Table Discussions
Topics: Current Developments in the Biochemistry and Physiology of Chlorophylls, Hemes, Phytochrome and Phycobiliproteins
Estimated Cost: 125 US dollars, including transportation to and from the Rolston-White Center.
To get on the mailing list for this conference write to: P. Castelfranco, Department of Botany, University of California, Davis, California 95616

1984 Feb. 12-15 ISCC 1984 Williamsburg Conference on Color and Imaging. Another in the series of popular and successful ISCC Williamsburg Conferences, with the title Color and Imaging, will be held at the Williamsburg Lodge, Williamsburg, Virginia, under the sponsorship of the Inter-Society Color Council. For further information and descriptive brochure with application form for attendance, contact the ISCC Publicity Chairman, Dr. Fred W. Billmeyer, Jr., Department of Chemistry, Rensselaer Polytechnic Institute, Troy, New York 12181.

Position Wanted

Laboratory Technician - Robert D. Marks, 5452 N. 92nd Street #3, Milwaukee, WI 53225
Bachelor of Science Degree in Conservational Biology. This degree lends itself to conservational and ecological work, as well as a laboratory position. Would welcome the challenge of a park maintainence/supervisor position, assistant museum currator or environmental pollution technician. B.S. Degree, Biological Aspects of Conservation, University of Wisconsin-Milwaukee.

Postdoctoral Position Available

Applications are invited for a postdoctoral research position funded for three years by the British Medical Research Council to study the effects of ultraviolet light on cellular systems, with emphasis on wavelengths of U.V. present in the solar spectrum. Studies will involve human cell tissue culture, dye lasar action spectroscopy, DNA repair and molecular genetics, and membrane biochemistry. Applicants should have a sound background in molecular biology. The post is tenable for up to three years and is available from 1st December 1983. Starting salary up to L7,630 p.a. Applications together with a curriculum vitae and the names of two referees should be sent as soon as possible to Dr. Stephen H. Moss, School of Pharmacy and Pharmacology, University of Bath, Avon, England, U.K.

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