

# NEWSLETTER

Published by the American Society for Photobiology 8000 Westpark Drive, Suite 400 • McLean, Virginia 22102 • (703) 790-1745

Editor: Dennis Paul Valenzeno, Department of Physiology, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66213 Tel: (913) 588-7416

No. 121

Jun/Jul 1989

Sustaining Member: Solar Light Company

# Seeking the Sun

If Icarus had been able to call on the Solar Light Company for testing equipment, the Wright Brothers would still be making bicycles. The Solar Light Company, a long-time sustaining member of ASP, is nearly synonymous with solar simulators, but the company also sells a variety of meters.

Daniel Berger, the founder of the Solar Light Co., developed the solar ultraviolet simulator in 1965, while a member of the biophysics faculty of Temple University's School of Medicine. This made possible clinical testing of light induced sensitivities as well as the determination of sunscreen efficacy (SPF). Two years later he started Solar Light to market the simulator. In 1973, as part of the Federal Climatic Impact Assessment Program, Berger helped to develop a global network of meters for the measurement of biologically effective UV radiation. This network has been in continuous operation to the present.

Today, building on its 20 years experience with solar simulators, Solar Light also offers, in addition to its solar simulators, a variety of meters tailored

to monitor exposure to specific wavelength bands, e.g. the sunburn spectrum, UV-A, and the spectrum of light effective in the treatment of hyperbilirubinemia. Solar Light has also become involved in public education in recent years. It is quite proud of the bronze award in the "teaching value" category that it received from the American Academy of Dermatology for the poster "Ozone and Your Skin".

Should you be interested in more information about Solar Light, contact Carolyn Berger at (215) 927-4206.

# New Photobiology Institute in Nebraska

A new Institute for Cellular and Molecular Photobiology has been established at the University of Nebraska-Lincoln. The objectives of the Institute are to: a) promote collaborative research among photobiologists at UNL and elsewhere, b) recruit graduate students for photobiology labs at UNL, c) prepare grant proposals to extramural and intramural agencies, and d) sponsor summer visiting seminar speakers. The grant proposals prepared by the Institute members will primarily aim at graduate fellowships and multi-user equipment. In particular part of the seed money for the Institute will be used to establish a subnanosecond time-resolved spectrofluorometer lab. Fields of interest of the 14 faculty members include spectroscopy, photosynthesis, photoreceptors, photomorphogenesis, photomovement, and energy transfer. For information about opportunities for graduate studies and postdoctoral fellowships, write to: Professor Pill-Soon Song, Institute for Cellular and Molecular Photobiology, University of Nebraska, Lincoln, NE 68588-0304

#### Inside this Issue

Pres. Farewell, Election Results	Page 2
Glimmerings Jim Longworth	Page 3
Letters	Page 4
More Letters	Page 5
Positions, Books & FYM	Page 6
Announcements	Page 7
Calendar	Page 8

THE GUIDING LIGHT
From the President's Desk

Dear members,

This is my last column as President. At the Boston meeting Tom Coohill takes the gavel. The gavel, as those of you who have attended the business meetings know, is a prism attached to a plastic handle. It and the magnificent mahogany case in which it resides were constructed by the elves at the Smithsonian under the guidance of Walt Shropshire. Unfortunately, the case was not designed to travel as checked luggage, and did not survive the trip to Colorado Springs. It has been mended, and will be at Boston. A keg of beer will also be at the business meeting. Got to have a quorum, after all.

Congratulations to Mickey Mathews-Roth, the new President-Elect. She, like previous presidents and like Tom Coohill, will face the continuing problem of increasing costs and decreasing income. Library subscriptions continue to drop ever so slightly (at a rate of ten to twenty a year), but every lost subscription is \$178 that the Society doesn't get in income. Go see your librarian about subscribing today if your library doesn't already. We need to increase the library base.

At a recent executive committee meeting we observed that the Society needs to move more agressively into areas where our members have expertise by organizing topical symposia and encouraging special journal issues. We will develop some symposia in print as one way of implementing this suggestion. Lasers in Medicine will be the first; tissue optics was also suggested; we would welcome suggestions (and volunteers to organize symposia) for additional areas where we could have some impact. I think this will also be an important way to broaden our membership base.

It's been an honor to serve as your President. I'll look forward to seeing many of you in Boston.

- Chris Foote

SOCIETY HIGHLIGHTS

## Voice of the Members

The membership of ASP has spoken, and as a result the Society has an excellent new slate of officers to lead us into the next year. Our new President Elect is

Micheline Mathews-Roth.

New Councilors starting their three year terms of office are

Charles Gomer Edward Lipson Joan Roberts Brian C. Wilson.

Congratulations to all the newly elected!

We regret to inform you that Farrington Daniels, Jr. has felt it necessary to resign from the position of ASP Historian on the advice of his physician. We're grateful for Farrington's service to the Society during his tenure of office.

President Chris Foote has appointed Jim Longworth to succeed Farrington as the new ASP Historian. Jim's career is highlighted in the "Focus On" column on page 3.

P.S. If you've missed the Annual Meeting pre-registration, on-site registrations are always welcome.

## Can't Present Your Abstract?

Please be considerate. If you have submitted an abstract for the Society's Annual Meeting, and if for any reason you find that you cannot be present to make your presentation, please notify your session chairman or the program coordinator, Tom Coohill as soon as possible. Your colleagues will thank you.

SIDELIGHTS

## From the ESP Newsletter

ESP has established a Council of National Representatives. Each European nation sends one delegate. The council will be responsible for nominating Executive Committee members.

Herbert Honigsmann will succeed George Truscott as ESP president. He is currently treasurer of AIP.

President Truscott has received suggestions that ESP meet annually. The opinion of the ESP membership is being solicited.

A committee, composed of Herbert Honigsmann, Giulio Jori and Rex Tyrell, has been appointed to re-negotiate the future publishing contract for the ESP's journal.

The ESP congress in 1991 will be held in the Netherlands, probably Leiden.

Due to an improved financial situation, ESP anticipates providing a few travel awards for students to attend the ESP's IIIrd Congress in Budapest.

# Confessions in Bioluminescence

## Recollections of Beatrice Sweeney

The following is the first of a two part article written by Beatrice Sweeney. It represents her recollections and impressions of the origin and early years of the ASP. President of the ASP from 1979 to 1980, Bea is a Professor of Biology at the University of California, Santa Barbara.

Kendric Smith is almost single-handedly responsible for starting the American Society for Photobiology. At the time he was the chairman of the National Committee for Photobiology of the National Research Council. The roster of this committee in those days read like the list of future presidents of ASP: Angelo Lamola, Fred Urbach, John Spikes, Jim Longworth, Kendrick, myself and others. Kendrick was an impressive figure presiding over our deliberations and insisting that we take very seriously the charge to this committee to further the study of photobiology. One way to accomplish this was to start a new photobiology society, best of all with a journal. With this in mind, Kendrick negotiated with Mr. Maxwell of Pergamon Press, publisher of Photochemistry and Photobiology, a journal of which Kendrick was an editor. It must have been an interesting barter. Maxwell was at that time looking for a society to sponsor the journal and Kendrick used this leverage to make a very good bargain for ASP. The Society has been in an excellent financial position ever since. The first issue of P&P sponsored by ASP was volume 18, July 1973.

## YOU LIGHT UP MY LIFE

Female fireflies attract males by their lighting pattern. One exception is the female of the species Photinus pennsylvanica, native to the region from Massachusetts to Panama. She imitates the pattern of Photinus scintillans, attracts males of that species, then has them for dinner!

From: Nature's Light
by Francine Jacobs
J. Woodland Hastings,
scientific advisor

FOCUS ON:

# Jim Longworth

**ASP Historian** 

Jim Longworth has had a long-standing interest in the historical aspects of photobiology. He has collected anectdotes from the early years of the science and has, from time to time, presented these in various formats. It is certainly the Society's good fortune then, that Jim has agreed to assume the office of ASP Historian.

Excited states of proteins and nucleic acids have been the subjects of Jim's scientific pursuits throughout



his career. His Ph.D. is in biochemistry from the University of Sheffield (1962). He followed this with postdoctorals at the University of Minnesota in chemistry, and then at Bell Labs in Murray Hill. For 18 years Jim called the biology department of Oak Ridge home, but recently he has joined the faculty of the physics department at the Illinois Institute of Technology. His current research involves picos-

econd studies of electron and electronic energy transfer in proteins. He is also involved in development of a new technology to sequence the human genome, involving a microholographic X-ray microscope.

Jim has held a variety of offices in photobiology. He was one of the original Councilors of ASP and was President from 1978 to 1979. He was the secretary-general of the International Photobiology Congress in 1984 in Philadelphia, and has been the Sigma Xi lecturer in photobiology, discussing "The Role of Lasers in Photobiology and Photomedicine".

Time away from work may find Jim attending the theatre or an orchestra concert. On rare occasions, he says, you may even find him frequenting some of the Chicago area establishments which offer liquid refreshments. We welcome Jim to his new office and look forward to his contributions to our "Glimmerings of the Past" feature of the Newsletter.

# Readers'

The following four letters are the last in the series of responses to an editorial which appeared in the Jun/Jul 1988 Newsletter. They address three main issues raised in that editorial; 1) should ASP drop the word American from its name, 2) should ASP assume a leadership role as an international photobiology organization, and 3) can the field of photobiology support more than one quality journal? All responses have been passed on to President Foote.

These issues are very important and serious to answer, but I am going to send you my own opinion about the issues of American Society for Photobiology.

I have no objection to dropping of "American" from the name of ASP. However, the society should consider and serve American membership first, because each country has its own society for photobiology. I think it is time to consider domestic and international membership separately. For one reason, domestic annual meeting and international conference have different meanings and they are held in different conditions. Domestic meetings are the places for memberships to study and compete each other, while international conference provides researchers a chance to exchange information and to understand the trends of photobiology. I hope that American Society for Photobiology, Japanese Federation of Photobiology, European Society for Photobiology and others will be united and reorganized into a new international organization for photobiology. Today information is oversupplied and released from many publishers as well as organizations, I think it would be better and convenient for our researchers to collect various articles and papers on photobiology and publish from our organization. I know that Photochemistry and Photobiology is the valuable international journal of photobiology with worldwide circulation.

I think we need more time for discussion to ensure the bright future of photobiology.

As a charter member of ASP, I am responding to your article on the international nature of ASP and whether this should be reflected in renaming the Society. The fact that 40% of ASP's membership is outside the U.S. is not unique. The American Society for Plant Physiologists also has many members who are not in the continental U.S. We have always been proud of that fact, and all reasonable effort is made to serve these members at least as well as those who are geographically closer. Both ASPP and ASP have prestigious journals, which are available at very reasonable cost to the members. This alone is a primary attraction for membership. Furthermore, both societies organize interesting annual meetings with timely symposium topics. In my opinion that is why people find membership attractive.

I wonder would the membership increase if ASP became the Society for Photobiology? Recently I read of a study on the effect of name changes of several large U.S. corporations of long standing in the business section of the Washington Post. The study found that the public was often not aware of the products produced by the renamed company. Further, the confidence factor in the product quality was high when identified with the old name, and dropped to a low 5-15% under the new name. One of the companies was Alegis, which has just returned to its old name of United Airlines. Perhaps here is a lesson worth considering.

Maryland

I appreciate that you want to hear my opinion about the "A" in the ASP and I apologize for answering so late. As you will know I am already an ASP member since 1984 and I still enjoy reading Photochemistry and Photobiology with its interdisciplinary contents.

But coming to the point: In my opinion the diversity of scientific research should be reflected by an active scientific community represented by national societies. But photochemical and photobiological research is truly not a matter of nationality. Therefore international joint meetings should be the main goal of future activities. This creates scientific friendships and an exchange of ideas. Furthermore, I am not an "E"- or an "A"- chemist but a "P"hoto-chemist!

Japan

F.R.G.

# Reflections

1. The word "American" in ASP has never meant anything negative to me, and it has not prevented me from being an interested and enthusiastic newcomer to the Society when my research turned into the photodirection.

I feel that it would be a change for its own sake to drop "American" and cannot really understand what can be gained by it.

- 2. It might be that there is a fragmentation in all growing sciences. From physics we of course know that different parts of physics have their own societies, every country has its own physical society, there is a European Physical Society and there is also an international union of physical sciences. I have never found any contradiction in the fact that I am a member of a Norwegian and a European society (I am also a member of a swedish physical society!). In the same way: my membership in the European Society for Photobiology does not mean that I intend to withdraw from ASP. I like the scientific activities which the societies present and offer.
- 3. Quite specifically I think that two photobiology journals should be able to exist side by side. From my (earlier) involvement in the production of the Scandinavian Journal for Plant Physiology I conclude that several journals in a fairly limited field can not only exist simultaneously at a high scientific level, but that they can do so and sell quite well! (The last point is of course important for societies owning a journal and which need an income for its activities.)

I mean the field of photobiology/photomedicine/photochemistry etc. has a market which is to compare with that of plant physiology and am therefore mentioning that sector of publication science as an example.

- 4. How could ASP best serve the international photobiology society? That is a very broad question and not simple to answer in a single letter! But
  - by keeping high scientific standard in the journal.
- by taking an educating approach to new authors and students trying to publish, i.e. trying really to point out what is wrong in a refused manuscript, never to be ironic in the editor comments, try to improve the new author's method, style, English or whatever.
- by keeping the newsletter at its high level (I enjoy it very much and it means a Society contact which is very valuable).
- by offering travelling grants etc. for younger students to the U.S. (especially important for members abroad).

- to try to open up postdoctoral possibilities for (in our case) European students in photobiology.
- to have conferences, summer schools, etc. at the high level set by the Society.
- might be by cooperating, now and then, with the Japanese and European Societies when it comes to meetings? This must certainly be stimulating.
- by always stressing that the promotion of photobiology is the important and central thing for the Society.

I have a feeling that some of these points are fairly selfevident ones but I hope all the same that they can be of some help to you, once being expressed. I certainly wish ASP all success in the future.

Norway

## FYM Feedback

Dear Dennis:

We were all highly entertained here to read about the actual derivation of the Secretary-Treasurer's title in the ASP. Many of the lab staff actually had to go home because of excess laughter and its adverse effect on the CNS.

What was perhaps not initially appreciated was that the budget for the Newsletter went down with the Treasurer, and we'll have to use Monopoly money until we find the remains.

Best wishes, David Kessel Secretary-Treasurer

### New Titles



### POSTDOCTORAL POSITION

A postdoctoral position will be available in the laboratory of Dr. Benjamin Ehrenberg, at Bar Ilan University, Israel, starting January 1990. Our group's interests and activity are in biophysical spectroscopy and photosensitization. In particular, we study membrane-probe (electrochromic metallochromic) interactions; membranal and cellular photosensitization effects by porphyrins and their analogs; bacteriorhodopsin's membrane structure. Interested candidates with experience in membrane studies and/or molecular spectroscopy (absorption, fluorescence, resonance Raman) are invited to apply by sending a CV and names and addresses (including BITNET) of references to:

Prof. Benjamin Ehrenberg
Department of Physics
Bar Ilan University
Ramat Gan 52-100, Israel
BITNET: F67350@BARILAN
FAX: 00972-3-344622

### POSITION WANTED

Established Professor (ASP member) nearing retirement, who wants to remain active in research, is looking for a suitable position. Areas of experience include organic photochemistry, synthesis, and bioorganic chemistry. (Currently working on metabolites of carcinogenic azaaromatics). Will consider any location, but northeastern US preferred. A resume and names of referees can be obtained from:

John J. McCullough Chemistry Department (Organic) David Keir Building Queen's University BELFAST BT9 5AG Northern Ireland

# The Science of Photobiology: 2nd Edition Ed.: Kendric C. Smith

A new edition – updated, expanded, and available in hardcover and paperback.

Plenum Publishing Co., 417 pages + index, illus., 1989.

Hardcover \$59.50 (\$71.40 outside US & Canada)

Paperback \$29.50 (\$35.40 outside US & Canada)

#### Green Photosynthetic Bacteria

Ed.; J.M. Olson, J.G. Ormerod, J. Amesz, E. Stackebrandt, and H.G. Truper
Plenum Publishing Co., 338 pages, illus., 1988.
\$69.50 (\$83.40 outside US & Canada)

#### The Photosynthetic Bacterial Reaction Center: Structure and Dynamics

Vol. 149 in the NATO ASI Series A: Life Sciences Ed.; J. Breton and A. Vermeglio Plenum Publishing Co., 454 pages, illus., 1988 \$85.00 (\$102.00 outside US & Canada)

# Reactive Oxygen Species in Chemistry, Biology, and Medicine

Ed.; A. Quintanilha
Plenum Publishing Co., 240 pages, illus., 1988
\$55.00 (\$66.00 outside US & Canada)

#### Proceedings of the International Symposium on Photobiology and Biotechnology June, 1989

Poznan Technical University Publishing \$20 (postage & deliv. included)

Editor's Note: The Publisher requested a bank transfer by June, 1989 to Narodowy Bank Polski, NBP III OIM Poznan 63034-10298-151-4787, Poland, indicating "Photobiophys-Symposium89-Proceedings" on the transfer. Regretably this notice was not received in time for the last Newsletter issue.

# FYM<sup>\*</sup>

A young woman, having been told that she had only 12 hours to live, anxiously related the tragic news to her husband. "And a few of those hours have already passed!" she concluded.

"What do you want to do with your remaining time?" asked the shaken husband.

"I'd like to spend the whole night on a romantic dinner, dancing, and an intimate tête-atête with you," she replied.

"Sure," retorted her husband, "that's easy for you to say. You don't have to get up in the morning!"

For Your Misinformation

See reply to last issue's FYM on page 6.

The editor, the Secretariat, and the ASP assume no responsibility concerning the veracity of this claim.

## Announcements

## **International Photodynamic Association:** Third Biennial Meeting

July 17-21, 1990 Buffalo, New York

Contact: Mrs. Judy Felski, Secretariat

Roswell Park Memorial Institute

666 Elm Street

Buffalo, NY 14263-0001 Tel.: (716) 845-4426

## **DNA Damage and Repair** in Human Tissues

Brookhaven Symposia in Biology, No. 36 October 1-4, 1989 Upton, Long Island, New York

The program covers skin, blood cells and internal organs. Speakers include R. Setlow, B. Sutherland and J.C. Sutherland. \$350 fee includes dorm room. Several scholarhips will be awarded to young scientists.

Contact: B. Sutherland

Symposium Chair Biology Department

Brookhaven National Laboratory

Uptown, NY 11973

# 8th Congress, International Society for Laser Surgery and Medicine

November 4-7, 1989 Taipei, People's Republic of China

The congress covers a wide variety of laser applications in medicine and surgery. An extensive social program is available.

Contact: 8th Congress of the International Society for Laser Surgery and Medicine

C/O National Taiwan University Hospital

No. 1 Chang Te Street Taipei, Republic of China Tel.: (02) 3123456-2267

## XIVth International Conference on Photochemistry

August 21-26, 1989 Beijing, People's Republic of China

This conference is sponsored by the International Organizing Committee of Photochemistry, the Chinese Chemical Society, and the Academia Sinica. It has been organized by the Institute of Photographic Chemistry, Academia Sinica. Special programs for accompanying persons and post-conference tours of China are available. Support of up to \$800 per person is available for US scientists via a grant from NSF (Contact NC Yang, Chem. Dept., U. Chi., 5735 S. Ellis Ave., Chi., IL 60637).

Contact: Professor Shikang Wu

Institute of Photographic Chemistry

Academia Sinica Beijing 100012

People's Republic of China

## International Conference on Regulation of Free Radical Reactions: **Biomedical Aspects**

Bulgarian Academy of Sciences-Institute of Physiology Society for Free Radical Research World Health Organization September 13-16, 1989 Varna, Bulgaria

The conference will emphasize recent findings concerning regulation of free radical reactions in biomembranes, cells and organisms. The possible role of antioxidants and antioxidant enzymes in several disease processes which may have a free radical etiology will be explored. The conference should be of interest to biochemists, chemists, biophysicists, physiologists, pharmacologists, toxicologists, nutritionists and clinicians. The scientific program will extend over 4 days and consists of Plenary lectures, half-day Symposia, and sessions for free communications and posters.

Contact: Dr. E. Serbinova

Institute of Physiology

Bulgarian Academy of Sciences Acad. G. Bonchev Str., bld. 23

1113 SOFIA

BULGARIA

Tel.: 359-2-705259

# CALENDAR OF EVENTS

#### 1989

June 21	Soc. for Light Treatment and Biological Rhythms – Bethesda, MD [120]	Aug 14-18	VIth Internat. Conf. Energy and Electron Transfer – Prague, Czech. [119]
June 27-30	Internat. Symp. on Photobiology and Biotechnology – Poznan, Poland [118]	Aug 21-26	XIVth International Conference on Photochemistry – Beijing, China [121]
July 1-2	PDT of Neoplasia Workshop – Boston, MA [118]	Aug 27-Sep 2	European Society for Photobiology, 3rd Congress, – Budapest, Hungary [118]
July 2-6	XVIIth ASP Annual Meeting – Boston, MA [118, 120]	Sep 13-16	Regulation of Free Radical Reactions – Varna, Bulgaria [121]
July 2-7	19th Meeting Federation of European Biochemical Societies – Rome, Italy	Sep 6-7	SPIE Advances in Photochemotherapy – Boston, MA
July 7	1st Meeting: British Photodermatology Group – Cambridge, U.K. [120]	Sep 10-15	American Chemical Society National Meeting – Miami Beach, FL
July 18-21	Internat. Conf. on Lasers in the Life Sciences – Guangzhou, China [119]	Oct 1-4	DNA Damage and Repair in Human Tissues – Long Island, NY [121]
July 30-Aug 5	Summer School on Photochemistry – Spiez, Switzerland [119]	Oct 3-5	International Conference on Photody- namic Therapy – Sofia, Bulgaria
Aug 6-11	8th Internat. Congress on Photosynthesis—Stockholm, Sweden [120]	<ol> <li>Square brackets denote the Newsletter issue in which additional information may be found.</li> </ol>	

PAGE 8

AMERICAN SOCIETY FOR PHOTOBIOLOGY

8000 Westpark Drive McLean, Virginia 22102 Non-Profit Org.
U.S. POSTAGE
PAID
Kansas City, MO
Permit No. 5251

ASP02788 F 12/89 74
THOMAS P COOHILL
PHYSICS DEPARTMENT
WESTERN KENTUCKY UNIVERSITY
WESTERN KENTUCKY 42101
BOWLING GREEN KY 42101