

# 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 Tel: (913) 588-7416

• • • No. 110 Aug/Sep 1987

# Photobiology in the Sun

Stimulating presentations, intense discussions, and balmy weather characterized the 1987 ASP annual meeting held in Bal Harbour, Florida. Attendees often had to make difficult choices between the twelve symposia, nine contributed paper sessions, and a poster session. Several of the symposia covered topics which crossed the borders of traditional areas in photobiology. For example, the audience for "Optics of Biological Tissues" included investigators in the areas of photomorphogenesis, photosynthesis, and photomedicine. "Charge and Energy Transfer in Model Biomembranes" drew investigators in photochemistry, photosynthesis, and other areas. Four Photobiology Schools (held at 8:00 A.M.) and four lectures rounded out the program. The ASP Research Award was presented to Dr. Thomas Dougherty for his research on fundamental and applied aspects of photodynamic therapy (see story on page 2). Luckily, the afternoon thundershower ended and skies cleared immediately before the banquet which was held around the pool.

The Business Meeting was more highly attended than in many previous years, probably due to the scheduled discussion of the dues increase recommended by Council. The topic was strongly debated by many members. After several viewpoints were expressed and the officers explained the current budget and the reasons for Council's recommendation, the quorum of members attending voted to increase the annual dues for full members to \$45. Student dues will not be increased. The signing of a new agreement with Pergamon Journals for publication of "Photochemistry and Photobiology" was announced. A committee (W. Shropshire - chair, J. Jagger, D. Lytle, P.-S. Song, D. Burk) had evaluated proposals from several publishers.

#### Inside this Issue

Society Business......Page 2
From the President's Desk
1987 ASP Research Award
New Members

Features......Page 3
Discovering Our Roots
Focus On: Daniel Cosgrove

Miscellaneous News......Page 4
Committee members
New Look Newsletter

Notices......Page 5
Announcements
New Titles
Positions

Calendar of Events.....Page 6

Based on the thorough investigation of this committee and a recommendation from the Exectutive Committee the Council had voted to renegotiate an agreement with Pergamon which should result in a shortened publication time and financial benefit to the Society. Future meeting sites were announced: 1988 (March) - Colorado Springs; 1989 (July) - Boston; 1990 (June) - Vancouver; 1991 - Midwest location being sought.

The Council met twice during the annual meeting. Topics discussed included: a proposal for a photobiology lab manual, sites for future meetings, a reconsideration of the previously recommended dues increase for members, appointment of a Newsletter editor, status and changes in "Photochemistry and Photobiology", and committee appointments and functions.

A Past-Presidents' Forum, attended by Past-Presidents and the current Executive Committee, was held for the first time. The motivation for this session was to tap into the experience of the Past Presidents on topics of current concern to the ASP. The topic discussed was alterations in the structure of the officers, such as changing the role of the President-Elect from that of Program Chair to that of a president-in-training. The results were reported to Council.

— Irene Kochevar

THE GUIDING LIGHT From the President's Desk

Dear members.

1988 is an ASP "leapyear" because the 10th International Congress on Photobiology will be held in Jerusalem from 30 October to 6 November. Information about this important event can be obtained by contacting: Secretariat, P.O. Box 983, Jerusalem 91009, Israel. Following our tradition the 16th ASP Annual Meeting will be held earlier than usual, from 13-17 March, 1988 at the Broadmoor, Colorado Springs. The Call for Papers was mailed recently to members. If you have not received the material by now, please contact the ASP Secretariat. The abstract deadline is 16 November 1987, with one important exception. Students who are applying for travel awards must submit their abstracts by 16 October 1987, in order to provide adequate time for evaluation by the Grants and Awards Committee. The ASP last visited the Broadmoor in 1980, prior to the Strasbourg Congress. The location was so highly conducive to science and recreation that the Council enthusiastically endorsed a return visit. If you missed the 1980 meeting, I suggest that you take this opportunity to join us at one of the best conference facilities in the U.S.

To close my first regular column as ASP President, I should like to emphasize that the principal function of the ASP Officers, Council, and Secretariat is to be of service to the members. ASP activities require continual liason between the Secretariat in Virginia, the Editorial Office in Nebraska, and the publisher in Devon, U.K. Although we are continually attempting to improve our primary and follow-up procedures, things go wrong from time to time. If you should encounter any problems in delivery or communications involving the ASP, please call me at (312)-567-3378, and I will attempt to resolve it as soon as possible.

— Len Grossweiner

# SOCIETY HIGHLIGHTS Dougherty is Research Awardee

Dr. Thomas J. Dougherty, Roswell Park Memorial Institute, received the second annual research award on June 23, 1987 at the 15th annual meeting of the ASP in Bal Harbour, Florida. The award recognizes his contribution to the field of photochemotherapy, specifically the use of the

tumor-localizing compound, hematoporphyrin derivative (HPD) to sensitize tumors to destruction by visible light. Dr. Dougherty was first to demonstrate the potential of photochemotherpy for cure of certain experimental and spontaneous tumors. With his clinical collaborators, he was a pioneer in the application of photoche-



motherapy to treatment of human tumors. To date, over 2,000 patients in several countries have received HPD therapy. Phase 1 trials of HPD are now under way for tumors of the bladder and bronchus, for final U.S. Food and Drug Administration approval, ex-

pected in 1989. Dr. Dougherty, who obtained his Ph.D. in organic chemistry from Ohio State University in 1959, has made many significant contributions to the basic science of HPD photochemotherapy, as well as to the problems of optical engineering that need resolving to carry out treatment — Meyrick J. Peak of patients.

#### SIDELIGHTS

#### Members, one and all

The ASP has maintained an enviable rate of growth. In the past nine years membership has nearly doubled (833 to 1625). In addition the number of sustaining members has been greatly increased during the past year. The ASP has been strengthened and vitalized by its new members and looks forward to contributions from the following individuals who have become members during June, July and August.

R. Rox Anderson Wellman Laboratory

Harry W. Braun, II Research Analysists

David E. Budil Argonne National Laboratory

Andre G. Golard New York University

Barbara W. Henderson Roswell Park Memorial Inst.

Heidi Hersberger Hill Top Research, Inc.

Christine Ann Huselton Univ. Medicine & Dentistry of NJ

Shuichi Kinoshita Osaka University

Lark A. Lambert U.S. Food and Drug Admin. Choon-Hwan Lee Columbus, Ohio

Dae Hyung Lee Seoul National University

Kary B. Mullis Xytronyx, Inc.

Soo Nam Park Seoul National University

Yong Tae Park Kyungpook National University

Walter G. Roberts Beckman Laser Institute

Wesley Rockhold Derma-Test Labs

Klaus D. Winclker Institut fur Biophysik

Welcome!

## **Discovering Our Roots**

"Glimmerings of the Past" becomes a regular feature with this issue. Historical articles have appeared sporadically in the Newsletter and have served to enhance our appreciation of our roots and our heritage in photobiology. In this column we will review the history of the ASP, sometimes in anecdotal form, and sometimes based on the recollections of a single individual. If those recollections conflict with your own, I invite you to send me your own account. In later issues we will expand this historical coverage to include any areas of photobiology, whether related to the ASP or not.

We will begin this series with a look at our own history, the history of the ASP Newsletter. Newsletter was published by the U.S. National Committee for Photobiology in October, 1972, edited by Richard Setlow. This is noteworthy because funds were virtually nonexistent in the formative days of the Society, yet a portion of the \$10,000 NSF grant, which was to support the National Committee for a full year, was used to distribute a newsletter. The next 11 issues were edited by Kendric Smith, with issue 5 being the first official ASP Newsletter. The Newsletter, in these days, was a vehicle to drum up support for the concept of the fledgling Society. For a time the president of the Society also edited the Newsletter, thus John Spikes produced issues 13 to 17 (Dec '74 to Dec '75) and Angelo Lamola was responsible for issues 18 to 21 (Jun '76 to Sep '77). Starting with Bodo Diehn's tenure, editors were selected by the Publications Committee. Bodo published issues 22 to 49 (Dec '77 to Sep '81). He was responsible for bringing word processing to the Newsletter (Mar '80) and increased the frequency of publication to monthly. Tom Coohill continued this tradition, editing issues 50 to 102 (Oct '81 to Jun'86). Tom added the capability to publish pictures as a regular feature (Nov '81). Finally, Vincent DeLeo turned out issues 103 to 109 (Jul '86 to Jun '87) and introduced the two column format.

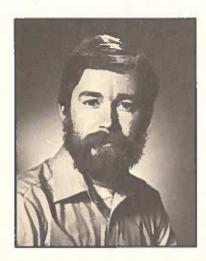
See also, K.C. Smith (1982) Photochem. Photobiol. 35, 597-614 and T.P. Coohill (1986) ASP Newsletter 100.

FOCUS ON:

# Daniel J. Cosgrove

"Focus on:" will present a profile of an individual of importance to the Society. The next few issues will devote this space to biographical sketches of our four new council members, presented in alphabetical order.

Daniel Cosgrove was born in Chicopee, MA in 1952, making him one of our youngest council members. He obtained his B.S. in Botany from the University of Massachusetts in 1974, and his Ph.D. in Biological Sciences from Stanford in 1979. Following a year as a visiting scientist in Juelich, FRG he spent a year as a postdoctoral fellow at the University of Washington before accepting a post as Assistant Professor of Biology at Penn State University.



Daniel's research focuses on the mechanism and control of irreversible cell expansion during plant growth. He views this growth as a physical process, investigating the limitations on plant growth under normal and stressed conditions. Light has a pronounced effect on plant growth; it induces young leaves to expand while at the same time suppressing elongation of stems. Daniel and colleagues have found that blue irradiation inhibits stem elongation in young dark-grown seedlings with remarkably fast kinetics: lag times as short as 15 s and response half-times of 20 to 30 s. From earlier studies they know that this growth inhibition operates by a stiffening of the cell wall. Possible mechanisms for this rapid change in wall properties are being investigated, including changes in the pH or calcium concentration of the cell wall free space.

Recognition of the quality and importance of this work has come in the form of an NSF Presidential Young Investigator's Award for 1984 to 1989, as well as a McKnight Foundation Award.

# Who can help? Try these new committee members.

As the membership of the ASP has grown (see page 2), so has the scope of the Society. In recent years the Society has become involved more than ever in public affairs, education in photobiology, and the history of the science of photobiology. These activities have been made possible by the dedicated work of the members of the Society's committees.

The Society has recently approved a new slate of committee members. During the coming months reports of the activities of some of these committees will appear in the Newsletter. In the meantime the following is a partial listing of committees, their members and chairmen. These are the individuals whom you should contact in each area. In a later issue we will publish the remainder of the listing.

#### **ARCHIVES COMMITTEE**

J. Jagger - chair

P. Loach

K. Smith

#### CONSTITUTION AND RULES

I. Kochevar - chair

F. Janzen

K. Smith

F. Urbach

#### **EDUCATION**

M. Mathews-Roth - chair

R. Pottier

J. Roberts

G. Truscott

D. Valenzeno

#### EXECUTIVE COMMITTEE

L. Grossweiner - chair

R. Burk (ex officio)

C. Foote

D. Kessel

I. Kochevar

P. Song (ex officio)

#### FINANCE COMMITTEE

H. Black - chair

W. Eisenberg

N. Giacintov

A. Girotti

#### MEETING SITE

I. Kochevar - chair

T. Coohill

N. Geacintov

F. Urbach

#### GRANTS AND AWARDS

M. Peak - chair

W. Briggs

M. Feinleib

A. Girotti

R. Ley

J. Longworth

W. Shropshire

#### **MEMBERSHIP**

R. Sayre - chair

D. Cosgrove

D. Kessel

J. Pooler

G. Truscott

### New Look Newsletter!

As you have no doubt noticed this issue marks the debut of a new format for the Newsletter. Desktop publishing has arrived at the ASP! Starting with this issue PageMaker (Aldus) will be used with a LaserWriter printer to compose and produce camera ready copy for the printer on a Macintosh Plus computing system. While the ASP has provided the software, we are indebted to the Department of Physiology of

the University of Kansas Medical Center for the use of the hardware. The new system offers considerable flexibility, allowing insertion of graphics and formation of columns with considerable ease. We hope that you enjoy the new look and we are interested in your comments.

Along with the new look comes a new Newsletter editor. Dennis Valenzeno



assumes these duties with this issue. He has been a member of the A.S.P. since 1978 and is currently a member of the Education Committee. His interests are in photosensitization of cell membranes and applications in photomedicine. He has a B.S. and M.S. in physics and a Ph.D. in physiology from Case Western Reserve. Dennis is anxious to make the Newsletter a source of information for photobiologists and photochemists. This depends on your input. Please send contributions of any nature to him at the address given on page one.

#### **Announcements**

Course on Lasers in Gastroenterology
Laser Institute of America

October 16-17 - Philadelphia, PA November 20-21 - Orlando, FL

Contact: Laser Institute of America 5151 Monroe Street Toledo, OH 43623

.....

Course on Optical Components and Systems

Engineering Technology Institute November 17-21 Anaheim, CA

Contact: Engineering Technology Institute

Box 8859

Waco, TX 76714-9990

Inter-American Photochemical Society Meeting

January 4-7, 1988 Clearwater Beach, FL

Contact: David Schuster

Department of Chemistry New York University New York, New York 10003

Tel.: (212) 598-3427

2nd Latin-American Meeting on Photochemistry and Photobiology

Feb 1-4, 1988 Universidade de Sao Paulo

Contact: Dr. M.G. Neumann

Instituto de Fisica e Quimica de Sao Carlos

Universidade de Sao Paulo

Brazil

Tel.: (0162) 71-1016

Short Courses for Industry

The Center for Photochemical Sciences at Bowling Green State University offers the following:

Photochemistry and Photopolymerization Transient Intermediate Spectroscopy: Applications and Trends

Molecular Photobiology

Photochemistry and Photophysics of Dyes

Photoelectrochemistry

Vibrational Spectroscopy: Methods and Applications Photosensitization: Environmental and Medical

Applications

Contact: Dr. D.C. Neckers

Center for Photochemical Sciences Bowling Green State University Bowling Green, Ohio 43403

#### New Titles



Porphyrins and Porphyrias, edited by Y. Nordmann Colloques Inserm, Volume 134 2nd International Congress on Porphyrins and Porphyrias, University of Paris VII. June 19-22, 1985. \$45.00, 231 pages, 22 chapters

Available from: John Libbey Eurotest Ltd.

6 Rue Blanche

• • • • • • • • • • • • • • • • • •

92120 Montrouge, FRANCE

Light-Activated Pesticides, edited by J.R. Heitz and K.R. Downum. ACS Symposium Series, Volume 339 192nd American Chemical Society Meet., Agrochem. Div. Anaheim, CA. September 7-12, 1986. 339 pages, 22 chapters

Available from: American Chemical Society

Distribution Office, Dept. 225 1155 16th Street, NW Washington, D.C. 20036

# THE LIGHT AT THE END OF THE TUNNEL Positions Available

#### POSTDOCTORAL POSITION

Postdoctoral position available March 1988 at the Division of Biological and Medical Research, Argonne National Laboratory. This position is funded by two grants from the NIH for a one to three year term in the laboratory of Dr. Meyrick Peak, Molecular Photobiology Group. The research involves study of the molecular photosensitization reactions that may underly the carcinogenic effects of solar UV. The program is flexible, ranging from study of DNA damages and repair in human cells to the use of DNA cloning and sequencing techniques for investigation of the site-specificity of these radiations. In a related area, new DNA photoproducts caused by photosensitizations need to be identified. Previous experience in the field is not a prerequisite.

Full relocation expenses (to and from country of origin), employee benefits, and a competitive salary are offered. Please write to Dr. M.J. Peak, Building 202, Argonne National Laboratory, 9700 South Cass Avenue, Illinois 60439, U.S.A.

#### CALENDAR OF EVENTS

#### 1987

- Sep 6-11 2nd European Congress of Photobiology Padova, Italy
- Sep 14-16 Conference on Photochemistry: Joint Swiss-Italian E.P.A.'s - Villa Olmo, Italy
- Sep 20-25 EMBO Workshop on Oxygenic Electron Transport Systems in Cyanobacteria -Cape Sounion, Greece
- Oct 2 Nominations of Officers and Councilors due
- Oct 16 Student Travel Award Applications due (with abstract)
- Oct 16-17 Lasers in Gastroenterology Philadelphia, PA
- Oct 25-30 SPIE New Directions in Photodynamic Therapy Cambridge, MA
- Nov 7-8 ASP Fall Council Meeting
- Nov 9-11 Laser Research in Medicine at ICALEO '87 San Diego, CA
- Nov 16 ASP abstracts due
- Nov 17-21 Optical Components and Systems Anaheim
- Nov 20-21 Lasers in Gastroenterology Orlando, FL

#### 1988

- Jan 4-7 Inter American Photochemistry Society Clearwater Beach, FL
- Feb 1-4 2nd Latin-American Meeting on Photochemistry and Photobiology Sao Paulo, Brazil
- Feb 5 Ballots due to Secretariat
- Feb 28-Mar 3 1988 Biophysical Society Meeting -Phoenix, AZ
- Mar 13-18 16th A S P Annual Meeting Colorado Springs, CO
- Jul 17-23 XII IUPAC Symposium on Photochemistry - Bologna, Italy

#### FYM: FOR YOUR MISINFORMATION

Rumor has it that Kraft will be moving all of their operations to Israel at the time of the International Photobiology Meeting in that country in 1988. At the time of the move it has been said that the name of the company will be changed to Cheeses of Nazareth.

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

PAGE 6

#### **AMERICAN SOCIETY FOR PHOTOBIOLOGY**

8000 Westpark Drive McLean, Virginia 22102 Non-Profit Org. U.S. POSTAGE P A I D Bethesda, MD Permit No. 5251

THOMAS P COOHILL
PHYSICS DEPARTMENT
WESTERN KENTUCKY UNIVERSITY
BOWLING GREEN KY 42101