

## NEWSLETTER

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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. 119 Feb/Mar 1989

ELECTIONS ISSUE

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## Presidential Nominees

### MICHELINE M. MATHEWS-ROTH

Channing Laboratory Harvard Medical School Boston, Massachusetts

B.S. Biology St. Elizabeth Coll. 1956 M.D. Medicine NYU Med. School 1961 Intern/Fellow Pathology Boston City Hosp. 1962-63

### Research Interests:

Photomedicine, UV-induced skin cancer Photoprotection, particularly visible light Carotenoid pigment biochemistry and function Bacterial photosensitization and photoprotection

ASP Offices: Councilor, 1985-1988

ASP Committees:

Chair, Education Com. 1985-1988 Chair, Local Arrangements Com., Boston-1988

Assoc. Editor, Photochem. Photobiol., 1974-83

ASP Activities: None

Other Service:

Organiz. Com. 7th & 8th Internat. Carotenoid Symp. Subcom. Travel Grants, US Nat. Com. for

Photobiology, 1976

NIH study sections-carotenoids or photobiology

### Academic Honors:

Beta Beta (Biology Honor Society)
Kappa Gamma Pi (Women's Schol. Honor Soc.)
Borden Award for Medical Research, 1961
Elected to Amer. Soc. for Clinical Invest., 1977
B.S. degree magna cum laude
M.D. degree with honors in Microbiology

### Other Pertinent Information:

Charter member of ASP Invited Symp.Organizer, 1988-Photoprotection

### KENNETH SAUER

Chemistry Department University of California Berkeley, California

A.B. Chemistry Oberlin College 1953
M.S. Chemistry Harvard Univ. 1954
Ph.D. Phys. Chemistry Harvard College 1958

### Research Interests:

Photosynthetic light reactions Excitation transfer Role of manganese in oxygen evolution

ASP Offices: None
ASP Committees: None

ASP Activities:

Honorary Editorial Board., Photochem. Photobiol.
Plenary Lecture, 1st ASP Meeting, Sarasota, 1973
Symposium Lecture, ASP Meeting, Asilomar, 1979
Symposium Lecture, ASP Meeting, Vancouver, 1982
Other Service:

Visit. Com., Carnegie Inst. Wash., Dept. Plant Biol. Research Grants Panels: US Agricult. Dept.,

Photosynthesis Sec.; US Energy Dept., Biol. Energy Res. Planning Com.: 7th Internat. Photosynthesis Congr., 1985-86; 2nd Berkeley Structural Biol. Conf., 1987-88

### Academic Honors:

USAID Visiting Professor, Ankara, Turkey, 1969-70 Japan Soc. Promotion Science, Univ. Lecturer, 1976 Guggenheim Research Foundation Fellow, 1976-77 Amer. Assoc.Advancement of Science, Fellow, 1976 UNESCO Lect., Indian Inst. Sci., Bangalore, 1982 Alexander von Humboldt Found., Senior US

Scientist Award, 1985-86

Other Pertinent Information:

Member of ASP since 1973

### ELECTIONS ISSUE

## Councilor

### ROBERTO A. BOGOMOLNI

Department of Chemistry
University of California at Santa Cruz

Ph.D. Biophysical Chemistry Univ. Calif., Berkeley

Research Interests:

Light energy conversion and light signal transduction by bacterial rhodopsins

Retinal-protein photochemistry.

ASP Offices: None ASP Committee: None

ASP Activities:

Session Chair at annual meetings Symposium organizer (1986) Symposium Speaker

Other Service:

Exec. Com., Bioener. Grp., Biophys. Soc. (1978-1982) Organiz. Com., Internat. Symp. Retinal Proteins, Szeged, Hungary, 1985

Session & Symp. Chair, Biophysical Society

Organizer & Chair, 5th Internat. Conf. Structure & Function of Retinal Proteins, Santa Cruz, CA, July, 1990.

Other Pertinent Information:

Member of ASP (charter), Biophysical Society, Internat. Cell Res. Organ. (UNESCO), AAAS, Sigma Xi Adj. Prof., Biochem/Biophys, Cardio. Res. Inst., UCSF

### **EDWARD LIPSON**

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Department of Physics Syracuse University

B.Sc. (Hons.) University of Manitoba 1966 Ph.D. California Inst. Technology 1971

Research Interests:

Photoreception

Biophysics

Photomovement Sensory transduction

Blue-light photoreceptors

ASP Offices: None
ASP Committees: None
ASP Activities: None

Other Service:

Director, Graduate Biophysics Program, Syracuse

University, 1983-89

Co-organizer of *Phycomyces* Meetings: Cold Spring Harbor Laboratory, 1982 La Rabida, Huelva, Spain, 1986

Academic Honors:

Alfred P. Sloan Foundation Fellow, 1979-1983

Other Pertinent Information:

Member, European Society for Photobiology

### WALTER EISENBERG

Department of Chemistry
Illinois Institute of Technology

B.S. Chemistry University of Toronto
M.S. Organic Chem. Rochester Inst. Technology
Ph.D. Organic Chem. University of Buffalo

Research Interests:

Oxidant Chemistry Biochemical Oxidant Damage Atmospheric Singlet Oxygen Generation PAH Photooxidation

ASP Offices: None ASP Committees:

Finance Committee, 1987-1988

**ASP Activities:** 

Organized ASP Symp., Environmental Photobiol.,

Other Service:

Chair, Chemistry Dept., Illinois Inst. Tech., 7/87-

Other Pertinent Information:

Member American Chemical Society, American Association Advancement Science, ASP, Sigma Xi Lecturer, HPLC School, Chicago Chromatography Discussion Group, 1982-1988

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### **JOAN ROBERTS**

Science and Math Department
Fordham University at Lincoln Center

B.S. Chemistry Marymount-Manhattan Coll. 1965 Ph.D. Org. Chem. St. John's 1972

Research Interests:

Photosensitization in the eye Photosensitization in the skin

ASP Offices: None ASP Committees:

Education Committee, 1983-present

**ASP Activities:** 

Helped to write ASP Educational Brochure,

"What is a photobiologist"

Other Service:

Reviewer for Photochem. Photobiol.

Academic Honors:

Visiting Professor, Univ. of London, 1989

Other Pertinent Information:

Joined ASP, 1976 Charter member of ESP Charter member, Am. Res. Vision Organization Charter member, Society Ocular Toxicologists

## **Nominees**

ELECTIONS ISSUE

### **CHARLES J. GOMER**

Departments of Pediatrics and Radiation Oncology Univ. of So. California-Childrens Hosp. of Los Angeles

B.S. Biology St. Lawrence University 1973 Ph.D. Radiat. Biol. SUNY-Buffalo 1978

Research Interests:

In-vitro Photosensitization
Preclinical and Clinical Photodynamic Therapy

ASP Offices:

None

**ASP Committees:** 

Awards Committee, 1988-present

**ASP Activities:** 

Guest Editor, Photochem. Photobiol., November, 1987

Organized ASP Symp., Photodynamic Therapy, 1986

Other Service:

Editorial Board, Lasers in Surgery and Medicine Associate Editor, EJP; J. Photochem. Photobiol.

Other Pertinent Information:

Post Doctoral Studies: Photobiology and Radiation Biology, Los Alamos National Laboratory

### **DENNIS PAUL VALENZENO**

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Physiology Department
The University of Kansas Medical Center

B.S. Physics Case Western Reserve 1971
M.S. Physics Case Western Reserve 1975
Ph.D. Physiology Case Western Reserve 1976

Research Interests:

Membrane photosensitization Electrophysiological photomodification Photogenerated reactive oxygen

ASP Offices: None ASP Committees:

Education Committee member, 1986-present Publications Committee, ex officio, 1987-present Public Affairs Committee, ex officio, 1987-present ASP Activities:

Newsletter Editor, Aug. 1987-present

Co-organized ASP Symp., Membrane Photomodification, 1980

Other Service: None

Academic Honors:

Visit. Prof., Membr. Photobiol., 5/85, L'Aquila, Italy

Other Pertinent Information:

Member, European Society for Photobiology Postdoctoral: Physiology, Emory University, 1976-80

### **NIKIFOROS KOLLIAS**

Physics Department Kuwait University

A.B. Physics UCLA 1963 Ph.D. Physics Univ. Wyoming 1971

Research Interests:

Cutaneous reactions to ultraviolet radiation Solar ultraviolet radiation

ASP Offices: None
ASP Committees: None
ASP Activities: None
Other Service:

Consultant, Environment. Protect. Council of Kuwait & Dermatology Dept., Al-Sabah Hosp. on UV effects.

Academic Honors:

Howard Iserman Award, Soc. Cosmetic Chem., 1988

Other Pertinent Information:

As of July, 1989, I will join the Wellman Labs at Massachusetts General Hospital, Boston, MA.

Member ASP, American Physical Society, Am.
Association of Physics Teachers, European Society for Pigment Cell Research

### BRIAN C. WILSON Ontario Cancer Foundation

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B.Sc. Physics University of Glasgow 1967 Ph.D. Physics University of Glasgow 1971

Research Interests:

Photodynamic Therapy
Laser Biophysics
Optical Instrumentation
Light Propagation in Tissue

ASP Offices: None
ASP Committees: None
ASP Activities: None
Other Service:

Faculty, Ontario Laser & Lightwave Res. Center Assoc. Editor, J. Photochem. Photobiol. Member, Health and Welfare Canada, Working

Group on Laser Services in Hospitals

Member, NCI Canada, Research Panel on Physics, Radiobiology and Photobiology

Academic Honors:

Visit. Prof., Wellman Lab Photomed., Harvard, 1988

Other Pertinent Information:

Fellow, Amer. Soc. Laser Medicine and Surgery Member, European Society for Photobiology Council Member, Internat. Photodynamic Assoc. SOCIETY HIGHLIGHTS

### **ASP FINANCIAL REPORT, 1987**

The audit for the fiscal-year 1987 shows a surplus of \$18,358. This figure represents an encouraging reversal of the past deficits, and we hope that there will be no surprises facing us in 1988. The current 1988 budget predicts a surplus of \$5,850. It should be noted that there are some uncertainties in providing such an estimate, e.g., journal income, library subscriptions, membership, etc.

Several steps have been taken to bring the Society nearer to a rational financial policy. The new contract with Pergamon Press provides for quarterly payments to the Society. This will ease the 'cash-flow' problems inherent in the previous annual-payment system. Fiscal responsibility and accountability will be enhanced by the change in our fiscal year which now coincides with the terms of the elected officers. The 1989 budget has been apportioned on an 8-month basis, and thereafter, new budgets will begin on September 1. These changes should aid us in maintaining closer control over our financial future.

Remember that the Secretary-Treasurer (David Kessel) and Chairman of the Finance Committee (Homer Black) welcome suggestions concerning maintaining financial stability, and anything short of periodic purchase of lottery tickets will be carefully considered.

- David Kessel and Homer Black

SIDELIGHTS

### **Fall Council Meeting**

One of the distinct fringe benefits of being an ASP Council member is the opportunity to become intimately familiar with the Chicago Airport for one weekend every year. On November 19 of last year, ASP Councilors and Officers once again converged on the O'Hare Hilton for the fall Council meeting. President Foote presided over an efficient meeting encompassing a wide range of topics.

The financial status of the Society has improved considerably as indicated in the story above. The Publications Committee reported that proofs of the new ASP directory have been reviewed. The directory will be distributed to the membership soon. There was considerable deliberation concerning Photochem. Photobiol. including its relationship to J. Photochem. Photobiol. The agreement for a trial expansion of P&P to include additional photochemistry papers was reviewed and the first such issue will appear in August. It was also decided that discussions between ASP and ESP on the fate of their two journals should be pursued.

Stratagies to raise the profile of ASP on the national scene were presented by the Public Affairs Committee. These included establishing contacts with selected individuals in government who have an interest in environmental affairs related to photobiology. Council regretfully accepted the resignation of Farrington Daniels, Jr. as ASP historian due to poor health. We wish him a speedy recuperation. President Foote will appoint a new historian in the near future

## Honor Roll

We have recently been informed that ASP member Claude Hélène has been elected to the French Academie des Sciences.

Just before press time we also received word that another ASP member, Richard B. Setlow, has received the prestigious Enrico Fermi Award which is accompanied by a pesidential citation, a gold medal, and a \$100,000 honorarium.

Congratulations to both!

## SOVIET, COLORED OPTICAL GLASS IN THE USA

The entire line of Soviet, colored optical glass is now available in the USA. Sets of 117 filters are individually calibrated and certified by the manufacturer, Mashpribroringtorg, USSR. These sets have sold for as much as \$1000, but are now available for \$285, including shipping, within the USA. A limited supply of the 40 mm by 40 mm polished sets are available from the Solar Light Company, 6655 Lawton Avenue, Philadelphia, PA 19126, Tel.: (215) 927-4206.

Solar Light Company is a sustaining member of ASP.

# Association Internationale de Photobiologie: Past and Present

Recent deliberations on the role of ASP in the international photobiology community have raised questions concerning the role played by the AIP. Here we present the founding of AIP. In the next issue we will continue this theme with a consideration of the current mission of AIP.

### Part I: The Past

Today, photobiology is an interdisciplinary study of great importance. While isolated studies of the effects of light on plants, animals and man can be traced back to antiquity, what we today consider to be modern photobiology can fairly be said to have begun as an organized science in 1901, when the Danish Nobelist Finsen founded an institute in Copenhagen, with two major missions: to investigate the effects of light on biological, chemical and physical systems, and to use this knowledge for the alleviation of disease.

Organized photobiology had its origin in 1928 when an international meeting to discuss medical applications of light was held in Lausanne. At that time, the forerunner of AIP was developed, the Comité Internationale de la Lumière. Even at this founding, seven countries were represented. The original charge to the Comité has really not changed: its task was to stimulate research into the chemistry and physics of the effects of light, and for its measurement; to study the effects of light on living organisms, both from the biological and pathological points of view, and to study the uses of light in therapy and hygiene.

The CIL held three international congresses — in Paris in 1929, in Copenhagen in 1932 and in Wiesbaden in 1936. After a long hiatus due to the Second World War, an international committee was re-established in 1950 by Morikofer of Davos, Latarjet of the Institut Curie and Alexander Hollaender of the Oak Ridge Laboratories in the United States. Seventeen national committees were formed. The first meeting of the new committee was held in Paris in September, 1951. At dinner in a local restaurant, five members — Harold Blum, Alexander Hollaender, Walter Morikofer, Jean Mayer and Brois Rajewski concluded that it was time to change the name to Comité Internationale de Photobiologie, since the scope of this research field had broadened to encompass many areas in addition to the effects of light on disease.

- Fred Urbach

### A REPORT ON AIP ACTIVITIES:

# THE 10th INTERNATIONAL CONGRESS ON PHOTOBIOLOGY JERUSALEM 1988

The Tenth International Congress on Photobiology was held in Jerusalem from Oct. 30th - Nov. 4th under the auspices of the "Association Internationale de Photobiologie". A meeting of the board and executive committee of the association was chaired by Dr. Rohatgi-Mukherjee, president of the association, and included representatives from 12 countries. A decision was made to hold the next International Photobiology Congress in Japan in 1992. The meeting will be organized by Dr. Takebe in early September of that year and the probable meeting site is Kyoto. The new board of AIP was presented to and approved by the general assembly later in the week. The president of the new board is Dr. T. Yoshizawa (Japan) and the four vicepresidents are Dr. S. Braslavsky (West Germany), Dr. G. Ronto (Hungary), Dr. D. Hall (UK) and Dr. I. Kochevar (USA). Dr. Honigsmann (Austria) and Dr. R.M. Tyrell (Switzerland) will remain as treasurer and secretary-general, respectively, for the next 4 years. During the week, the Edna Roe lecture was presented by Dr. E. Moustacchi and the Finsen lecture was presented by Dr. R.D. Ley.

The prestigious Finsen medals were awarded to Dr. I. Magnus and Dr. D. Arnon. A citation of their outstanding contributions to photodermatology (Dr. I. Magnus) and photosynthesis (Dr. D. Arnon) were made by Drs. A. Young and L. Bjorn, respectively, at the farewell dinner where Dr. F. Urbach (past-president of AIP) also thanked Dr. E. Riklis for organizing an excellent meeting. The recently formed European Society for Photobiology and 'he consolidated Japanese photobiology societies now form a major force together with the well-established American Society for Photobiology for the promotion and development of the science of Photobiology. These groups together with the AIP have a major responsibility in promoting and aiding photobiology in developing countries. An AIP sub-committee chaired by Dr. Rohatgi-Mukherjee has been studying the problems involved, and a round-table on the subject was held during the Jerusalem meeting. The work will be continued in the years ahead.

- Rex Tyrell

### POSTDOCTORAL POSITION

A postdoctoral position will be available February, 1989, for studies of UV mutagenesis under a newly renewed N.I.H. project. The interaction of gene expression and induced mutation will be investigated with an operon in *E. coli* that transcribes a precursor for 7 tRNA's. Previously we characterized UV mutagenesis that produced suppressor mutations (alterations in the anticodon sequence) of the glutamine tRNAs from this operon (J. Bacteriol. 170, 5371-5374). The current study will determine DNA sequences for individual, inactive mutants derived from a functional suppressor. Of interest are the consequences of particular modes for gene expression, the involvement of excision repair, and a possible role for strand-asymmetric DNA repair. Send inquiries, including names and phone numbers of references, to:

R. Bockrath, Ph.D. Microbiology — I.U.M.C. 635 Barnhill Drive Indianapolis, IN 46223 Tel.: (317) 274-2235

### POSTDOCTORAL FELLOW

A position is available to study the photochemistry of phototoxic chemicals. Research involves the identification of reactive photoproducts using a variety of spectroscopic techniques, including electron spin resonance (direct ESR and spin trapping), fluorescence and phosphorescence spectroscopy (including singlet oxygen luminescence) and flash photolysis. Experience in ESR and/or photochemistry is desirable but not essential. Candidates must be US citizens, or permanent US residents, and should not be more than three years postdoctoral. Salary is commensurate with experience, beginning at \$24,000 for individuals with less than one year's postdoctoral training. Send curriculum vitae and names of three references to:

Dr. Colin F. Chignell
Laboratory of Molecular Biophysics
(MD 17-03)
Nat'l Instit. of Environmental Health Sciences
PO Box 12233
Research Triangle Park, NC 27709
Tel.: (919) 541-3197.

### AMERICAN RED CROSS YOUNG INVESTIGATOR

A new position exists at the laboratories of the American Red Cross Blood Services, Northwest Ohio Region, Toledo, Ohio, in association with Dr. Peter Lau (ARC) and Dr. M.A.J. Rodgers (Bowling Green State University). The position requires a US citizen or resident holding a Ph.D. degree or equivalent with a preferred specialism in photobiology or a related area. The appointee will be expected to initiate a research program concerned with the development of photochemical methods for removing viral or immune responsive agents from blood. Letters of application with curriculum vitae and names of three referees to be sent to:

Dr. Peter Lau American Red Cross 2275 Collingwood Toledo, OH 43620.

### POSTDOCTORAL POSITION

Postdoctoral appointment available in the laboratory of Drs. Meyrick and Jennifer Peak to investigate cellular and molecular effects of UVB, UVA and visible radiations. Application of modern DNA molecular techniques to elucidate fundamental mechanisms is one aspiration of our work, but our interests range widely into other aspects of UV photobiology. For technical info, contact Drs. M. or J. Peak, (312) 972-3850. Send CV, names of three references to:

Rosalie L. Bottino Employment and Placement Box BEM-Postdoc Argonne National Laboratory 9700 South Cass Avenue Argonne, IL 60439-4844.

### **FYM**

A member of our vision sub-specialty reports concerning a cross-eyed teacher. It seems she'd lost control of her pupils!

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

\* For Your Misinformation

### **Announcements**

## Future Directions for Lasers in Medicine and Surgery

Feb 26-March 3, 1989 Sheraton Palm Coast Resort, Palm Coast, FL

Contact: H.A. Comerer

Engineering Foundation 345 East 47th Street

New York, New York 10017

Tel: (212) 705-7835

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### HIrd International Symposium on Quantitative Luminescence Spectrometry in Biomedical Sciences

May 23-26, 1989 Ghent, Belgium

Contact: Dr. W. R. G. Baeyens

Tel.: (091) 218951

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## International Conference on Lasers in the Life Sciences

July 18-21, 1989 Guangzhou, China

Contact: Prof. Ma Tian-Chi

Quantum-Electronics Institute South China Normal University Guangzhou, China 510631

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### Interactions of UV-B and Crop Plants

February 13-15, 1989 University of Florida, Gainesville

The U.S. Department of Agriculture in cooperation with the University of Florida is sponsoring an evaluation workshop on the interaction of UV-B and plants, February 13 through 15, 1989, at the University of Florida. The objective of the workshop is to assess our current state of knowledge concerning instrumentation used in studies on UV-B/plant interactions and to summarize our knowledge on the responses of plants when exposed to UV-B radiation. Attendance at this workshop is limited. There will be a limited opportunity to present posters. Further information can be obtained by contacting Dr. R.H. Biggs, 1119 Fifield Hall, University of Florida, Gainesville, FL 32611, Tel: (904) 392-6888 and FAX: (904) 3922-8493).

### **Summer School on Photochemistry**

July 30-Aug 5, 1989 Spies, Switzerland

This school is a joint venture between the European Photochemistry Association, the Inter-American Photochemical Society and the Japanese Photochemistry Association. The school is intended for graduate students and research scientists from universities, as well as from industry, and will consist of lectures followed by discussions.

Contact: Dr. Thomas Oppenlander

F. Hoffmann-La Roche Co. Ltd.

Central Research Units

Bau 65/607

CH-4002 Basel, Switzerland

Tel.: (061) 688 25 23



### VIth International Conference on Energy and Electron Transfer

August 14-18, 1989 Prague, Czechoslovakia

Contact: Dr. L. Skala

Department of Chemical Physics

Charles University Ke Karlova 3 121 16 Prague 2 Czechoslovakia

## Ozone Depletion and Plant Effects Deadline extended

The deadline for submission of proposals under the Depletion of Stratospheric Ozone as Related to Crop Productivity program area has been extended to April 10, 1989. Proposals in this area of research which are included for the first time in the Competitive Research Granst program must be postmarked by this date. In addition these proposals will now be reviewed by a single peer review panel, instead of by panels which review other plant science proposals.

- from the Federal Register, 53, 50636

## CALENDAR OF EVENTS

### 1989

Feb 13 Deadline for receipt the XVIIth ASP An	nual Meeting	July 1-2 July 2-6	PDT of Neoplasia Workshop – Boston, MA [118] XVIIth ASP Annual Meeting –
	Meeting –	July 2-6	XVIIth ASP Annual Meeting -
Feb 13-15  Biophysical Society For Cincinnati, OH			Boston, MA [118]
Feb 26-Mar 3 Future Directions for and Surgery – Palm (		July 2-7	19th Meeting Federation of European Biochemical Societies - Rome, Italy
March 6-10 40th Pittsburgh Conf Exposition – Atlanta		July 18-21	Internat. Conf. on Lasers in the Life Sciences – Guangzhou, China [119]
March 31 Marked ballots due		July 30-Aug 5	Summer School on Photochemistry – Spiez, Switzerland [119]
May 1-3 Photosensitization: I Environmenal Aspec	ets - Toledo, OH	Aug 14-18	VIth Internat. Conference on Energy and Electron Transfer – Prague,
May 4-5 Great Lakes Sympos dynamic Cancer The	ium on Photo- rapy – Toledo, OH	Aug 27-Sep 2	Czechoslovakia [119]
May 23-26  IIIrd Internat. Symp.  Luminescence Spect cal Sciences – Ghent	rometry in Biomedi-	Aug 21-Sep 2	3rd Congress, European Society for Photobiology – Budapest, Hungary [118]
June 27-30 Internat. Symp. on P Biotechnology – Poz			rackets denote the Newsletter issue in litional information may be found.

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### **AMERICAN SOCIETY FOR PHOTOBIOLOGY**

8000 Westpark Drive McLean, Virginia 22102

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THOMAS F CCCHILL
PHYSICS DEPARTMENT
WESTERN KENTUCKY LAIVERSITY
BOWLING GREEN KY 42101