



NEWSLETTER

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Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66213 Tel: (913) 588-7416

No. 116 Aug/Sep 1988

The Photobiology Association of Japan

Getting it Together in Japan

The following story was written by Dr. Takashi Ito in response to a request by the editor. It is an "unofficial" letter to the membership of ASP so that we may better understand the state of organized photobiology in Japan. Dr. Ito, in addition to his duties as president of the Photobiology Association of Japan, is also an ASP Councilor and a former associate editor of P&P.

The Photobiology Association of Japan is now in its sixth year. I am somewhat embarrassed that there has been so little communication between the two societies for so long. Thus, I am pleased to be able to respond to Dennis' request to describe the Japanese association to the ASP membership.

The roots of organized photobiology in Japan can be traced to the Comité Internationale de Photobiologie (CIP), forerunner of the Association Internationale de Photobiologie (AIP). Responding to a persistent demand of the CIP and other sources, a volunteer group of Japanese photobiologists was formed in 1964, headed by Professor S. Yomosa. The purpose of this group was to collect

names of those interested in photobiology in Japan and to transmit that list to the CIP as requested. In 1972 Professor I. Honjo was elected vice-president of the CIP, and was succeeded, after his

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passing, by Dr. K. Shibata who remained AIP vice-president until 1980. In the meantime a great effort to form a national organization of photobiology resulted in the present Photobiology Association which was established in 1983. Members are drawn from 14 existing academic societies including

botany, zoology, chemistry, biophysics, radiation research, photosynthesis, photomedicine, and so forth. In the present system, member societies each send one representative to form a committee. The committee meets once a year to handle international affairs and the planning for the promotion of photobiological studies. The organization of a photobiology symposium has also become a yearly activity. This Association officially represents Japan to the AIP. This year we have submitted a proposal to host the next, 11th International Congress on Photobiology (1992) in Japan.

With this short note I send my greetings to the American Society for Photobiology, hoping to work in harmony for the future of photobiology.

— Professor Takashi Ito, President
Photobiology Association of Japan

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Dear members,

All of you will have noticed the recent furor regarding the possible decline of the ozone layer. For the first time, photobiologists are in a position to make their expertise available in a very public way. The Society has had numerous inquiries from the press during the last few months, and we have referred these requests to the most qualified individuals we could find. It would be helpful if those individuals who feel they are particularly qualified to comment on particular aspects of the effects of near UV radiation on humans, other organisms, plants, and microorganisms would send their names and areas of expertise to me and to the Secretariat to aid us in making such referrals in the future. I believe that the Society can and should play an important role in educating the public and the news media about these events.

We are pleased to print the letter from Professor Ito, President of the Photobiology Association of Japan. Since Professor Ito is a Councilor of the ASP, we are assured of continuing strong interactions with the Photobiology Association of Japan. A similar association exists through council memberships with the European Society for Photobiology. I believe these interactions should eventually lead to a Federation of Photochemical and Photobiological Societies. Suggestions as to how to accomplish this goal are welcome.

- Chris Foote

SOCIETY HIGHLIGHTS

Gleanings from the 44th and 45th Council Minutes - Kendric Smith sent his apologies for missing the Colorado Springs meeting. This marks the first time in the history of the Society that its founding father has not been present at the annual meeting.

Council approved a motion to keep the 1989 dues at the 1988 level. This action was taken in view of cautious optimism that the final 1987 budget may end up on the plus side. As soon as the final audit is available (mid-July) the NEWSLETTER will carry a report.

Expect to receive a ballot in the near future concerning the term of the editor of P&P. Associate editor terms were previously changed to four years.

Council Actions

The current proposal would change the editor's term to match, from three years to four.

The possible sites for the 1991 annual meeting have been narrowed to two. The final contestants are the Omni Hotel in St. Louis and La Mansion del Rio in San Antonio, with San Antonio currently in the driver's seat.

A brochure describing photobiology, aimed at college students is in the final stages of preparation by the Education Committee. Council charged the committee to seek outside funding to cover printing and mailing costs.

The Long Range Planning Committee was disbanded due to inactivity.

SIDELIGHTS

Welcome to the Fold

In May and June the Society added thirty-one new members, eight of them students. We trust that membership will be beneficial for these individuals and for the ASP.

Full Members

Robert H. Austin
Princeton University

Frank P. Bolin
Henry Ford Hospital

William C. Galley
McGill University

M.S.H. Giannini
U. of Maryland Sch. of Med.

O. Hayes Griffith
University of Oregon

Yoshihisa Iwamoto
University of Shizuoka

R.H. James
Food and Drug Admin.

Jeffrey R. Kanofsky
Hines V.A. Hospital

Albert Kligman
U. of Penn. Sch. of Med.

M.K. Lyon
Stanford U. Sch. of Med.

Richard Mathies
University of California

Douglas C. Neckers
Bowling Green State U.

Tsuyoshi Nishisaka
Tokyo Noh-Koh University

Stephen Plaston
St. Thomas's Hospital

Till Roenneberg
Harvard University

James A. Ross
Western General Hospital

Iqbal Sadiq
Al-Sabah Hospital

Eduardo Silva
Univ. Catolica de Chile

John Spudich
Albert Einstein Coll. of Med.

L. Andrew Stachelin
University of Colorado

D.H. Stedman
University of Denver

Shigeru Takagi
Nagoya, Japan

Rory L. VanFossen
Johnson & Johns. Baby Prod.

Student Members

Jeffrey W. Berger
University of Pennsylvania

Marjan Garmyn
U.Z. Sint-Rafael

Curtis D. Henderson
Houston, TX

Takashi Mizuma
Univ. of Calif.-San Fran.

David D. Parrish
New Jersey Med. School

Michael J. Schifano
Wenske Laser Center

Manal A. Shukri Swairjo
Kuwait University

David Whyte
Univ. of Calif.-San Fran.

Policy Making

The Society contributes to the support of a Congressional Science Fellow and a Sigma Xi Lectureship. The American Society for Photobiology is a member of the American Institute of Biological Sciences, the International Society for Photobiology, and the National Academy of Sciences/National Research Council.

Specialty Areas

The research interests of members cover the following areas:

- Bioluminescence
- Chronobiology
- Environmental Photobiology
- Photomedicine
- Photochemistry
- Photomorphogenesis
- Photomovement
- Photoreception
- Photosensitization
- Photosynthesis
- Phototechnology
- Spectroscopy
- Ultraviolet Radiation Effects
- Vision

Interaction with Industry

The Society invites industry, at the corporate as well as individual level, to become involved in its many activities. Industrial members are encour-

aged to submit papers and abstracts and to participate at meetings and other functions.

Corporate sponsors are known as Sustaining Members. They support the Society through an annual fee, which entitles them to exhibit space at meetings and all other privileges, including a gratis subscription to Photochemistry and Photobiology.

Membership Information

Interested educators, researchers, industrialists, and students are invited to apply for membership in the American Society for Photobiology. For a membership application, please fill out the form at the bottom of this page, remove, and mail to the following address:

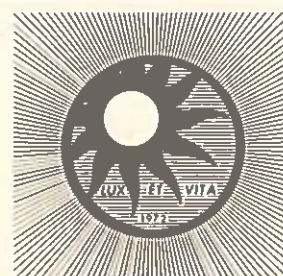
American Society for Photobiology
8000 Westpark Drive
Suite 400
McLean, VA 22102
Telephone: (703) 790-1745

I am interested in becoming a member of the American Society for Photobiology. Send an application form to the following address (please print or type):

NAME

AFFILIATION

ADDRESS



American
Society for
Photobiology

- Bioluminescence
- Chronobiology
- Environmental Photobiology
- Photomedicine
- Photochemistry
- Photomorphogenesis
- Photomovement
- Photoreception
- Photosensitization
- Photosynthesis
- Phototechnology
- Spectroscopy
- Ultraviolet Radiation Effects
- Vision

Light

One of the most important elements of our environment, light, has been largely overlooked by the scientific community—perhaps because of its ubiquity. Until recently there have been no compelling reasons to study the biological effects of light except to satisfy the curiosity of a small number of scientists. The situation is now changing as scientists and the general public become aware that light has many important biological effects other than being necessary for the growth of plants and for vision.

Recognizing that there was a growing awareness of the unique importance of the effects of light (both beneficial and detrimental) on all living organisms, and that current problems of national and international concern require an accurate and effective input of knowledge of photobiology and photochemistry, the American Society for Photobiology was founded in 1972. Representing more than 1650 scientists in 1987, the purpose of this Society is to advance and promote original research in photobiology, to facilitate integration of the different disciplines in photobiology, and to disseminate knowledge and information about the photobiological aspects of scientific problems.

The American Society for Photobiology unites the many areas of photobiology through:

Photochemistry and Photobiology, a monthly international journal that contains new research papers and review articles.

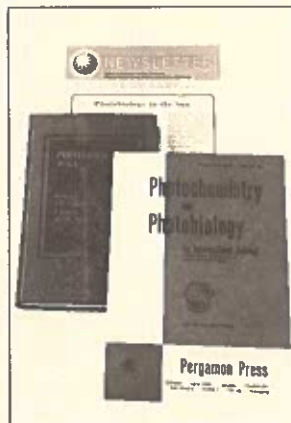
ASP Newsletter, issued bi-monthly, which covers current items and areas of interest to photobiologists, book reviews, related meetings, and positions available.

Membership Directory, issued biannually to list names and addresses of current members.

Annual Meeting, which draws hundreds of scientists from all areas of photobiology. Abstracts are published in the May issue of Photochemistry and Photobiology.

Photochemistry and Photobiology

Payment of annual dues entitles members to a complimentary subscription to Photochemistry and Photobiology. This journal contains new research articles and reports, annual reviews of sub-specialty developments, book reviews, and announcements. Library subscriptions are available through Pergamon Press.



Annual Meeting

Each year the Society holds its annual scientific meeting at which Symposia (current areas of research activity), Photobiology Schools (basic concepts and techniques used in the subspecialties), Lectures, Contributed Papers, and Posters are presented. Workshops on new research topics are also conducted periodically in conjunction with the main meeting.

Scientists from similar or different backgrounds have the opportunity to meet and exchange ideas. Ample free time is allocated for informal discussion. Meetings are often held at campus locations or at vacation areas to enhance this interaction.

Every fourth year, the Society holds a joint meeting with the International Photobiology Congress in different countries, affording basic scientists, photochemists, plant physiologists, clinicians, and other investigators an opportunity to meet, exchange, and learn of recent advances in the field of photobiology. Proceedings of the Congress are published in book form.

Education

The Society promotes education in Photobiology through the Education Committee of the Council and by presenting Schools and Workshops at the annual meeting. Textbooks of interest are reviewed and many texts and pieces of research equipment are exhibited at the annual meeting.

The Society offers advice and suggestions to prospective authors of photobiological texts and lab manuals.

Travel grants are available to encourage students to submit abstracts and present their work at the annual meeting.

PRESIDENT

PENNSYLVANIA COLLEGE OF OPTOMETRY

The Board of Trustees of the Pennsylvania College of Optometry invites nominations and applications for the position of President of the College. The College is seeking an individual who will build upon the institution's historical leadership role in the optometric community. Candidates should have an outstanding record of accomplishment in higher education, although individuals of distinction in other fields will be considered. Salary and benefits are competitive. Candidates should submit a complete resume including names, addresses and telephone numbers of 3 references no later than September 1. Screening will begin August 1.

Nominations and applications should be submitted to:

Edward Hueber, Chairman
Presidential Search Committee
Pennsylvania College of Optometry
1200 West Godfrey Avenue
Philadelphia, PA 19141

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POSTDOCTORAL FELLOW

A postdoctoral position is available immediately for a cell and molecular biologist to participate in a comprehensive study examining DNA repair mechanisms and cellular recovery processes and their relationship to radiation resistance in cultured insect cells. Emphasis will be on isolation of genetic material associated with the pronounced radioresistance. Experience in modern molecular biology techniques is desirable.

Please submit C.V. and names of three references to:

Dr. T.M. Koval
Department of Oncology
Mayo Clinic
Rochester, MN 55905

An equal opportunity/affirmative action institution.



Laser dyes – Eastman Kodak Company offers a 67 page handbook which includes absorbance, fluorescence and laser output curves for over 50 dyes. A brief overview of methods to maximize lasing output in specific applications is included. Write Eastman Kodak Company, 343 State St., Rochester, NY 14650.

POSTDOCTORAL FELLOWS

Two postdoctoral positions are available to work on "Oligonucleotide Directed Photochemotherapy", a project involving photomodification of anti-sense DNA with photoactivable compounds; characterization of nuclease sensitivity, membrane transport and target specificity. A Ph.D. in biochemistry or molecular biology is required. Postdoctoral experience in molecular biology, experience with HPLC and/or photochemistry-photobiology is preferred. Salary is highly competitive, commensurate with experience.

The successful candidate will work in the Dermatology Department at Yale in New Haven for 2 years, and will then be considered for a position at Chemex Pharmaceuticals to continue research in molecular biology of skin disorders and discovery of new drugs.

For confidential consideration please forward a C.V. to both:

Dr. Frank Gasparro
Dermatology Dept.
Yale Univ. (Photobiol.)
P.O. Box 3333, Hunter 615
New Haven, CT 06510

Dr. Atula Khandwala
Vice-Pres., Research
Chemex Pharm., Inc.
1401 17th St., Suite 850
Denver, CO 80202

FYM*

The teacher had asked her class to tell about their fathers and spell their occupations. The first student responded, "My father's a baker, b-a-k-e-r, and if we visit him he'll give each of us a cookie."

The next student volunteered, "My father's a banker, b-a-n-k-e-r, and if we visit him he'll give each of us a penny."

The third child said, "My father's a photobiologist, f-o-t-o... No, it's p-h-o-o...no.

"Why don't you sit down, think about it, and try again later.", suggested the teacher.

Whereupon the next child stood up and proclaimed, "My father's a bookie, b-o-o-k-i-e, and if we visit him he'll give us each 10 to 1 odds that that kid will never be able to spell photobiologist!

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

* For Your Misinformation

P&P Subgroup of Biophysical Society Spanned the 70's

The photochemistry and photobiology subgroup of the Biophysical Society began with a flash of Kendric Smith's energy in 1970 and expired, after a few last gasps, in 1979. The group flourished as a major expression of photobiology interest for several years in the early 1970's, meeting annually the day before the regular Biophysical Society meetings, sometimes conjointly with other subgroups. The beginning – prior to creation of ASP – attracted many of those who would eventually play major roles in ASP to an organizational meeting in Baltimore in 1970 and to the first symposium in New Orleans in 1971. The end was signaled by the successful ASP meeting of 1976 – just two weeks before the subgroup meeting. Apparently people's photobiology flames were spent, as the subgroup business meeting drew a crowd of zero*. A rekindling of sorts occurred in 1977 when both the president and president-elect each organized a symposium without the other's knowledge. (Even today, the Biophysical Society's most vigorous subgroups cannot boast of two meetings in one year!) Govindjee chaired the final symposium in 1978 and the remaining contents of the treasury were given out as student travel awards in 1979.

– John Pooler

* The author was there as a witness.

Historical Note:

Did you feed the lights?

At the 1900 Paris International Exposition visitors could read newspapers night or day without gas (or electric) lighting. Ralph DuBois, a French scientist illuminated a room with large flasks of luminescent bacteria, producing a blue-green glow sufficient for reading.

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

FOCUS ON:

Roy H. Pottier

Dynamic and industrious are words that describe Roy H. Pottier, whose term as ASP Councilor started in March. How else can one describe a man who, with his own hands, built the house in which he and his family live?

Roy is a graduate of the Universite de Moncton (B.Sc.,



1969) and the University of New Brunswick (Ph.D., chemistry, 1973). After his graduate studies in Canada, he spent two years as a research associate in France (Universite de Bordeaux, 1973-1975) where he carried out laser flash photolysis studies on the mechanism of photooxidation of thiazine dyes, with emphasis on the effect of pH on the singlet oxygen mechanism.

On his return to Canada, he carried out post-doctoral research at Universite de Montreal (1976), where he concentrated on vacuum ultraviolet and photoelectron spectral studies of non-aromatic azomethine compounds. In 1976 he assumed a faculty position at the Royal Military College of Canada in the Department of Chemistry and Chemical Engineering.

Roy believes in the multidisciplinary approach to photobiology, and is involved in the use of the basics of photochemistry and spectroscopy to attack problems such as the effect of pH on the mechanism of selective biodistribution of potential photochemotherapeutic agents, including porphyrin derivatives, phthalocyanines, rhodamines, and merocyanines. Experimental approaches used in his work include conventional UV – visible and IR transmittance spectroscopy, photoacoustic spectroscopy, *in vitro* and *in vivo* fluorescence measurements, photohemolysis and phase distribution techniques. Roy is also involved in the analysis of urinary calculi, a service he provides for the local University affiliated hospital (Queen's), where he holds an adjunct position in the Department of Urology.

As a Councilor one of Roy's goals is to promote understanding and cooperation between the ASP and other photobiology societies.

Brochure Ready for Distribution

How did you learn about and decide to join ASP? Did a fellow scientist tell you about the Society? Did you discover it through P&P? Certainly you did not learn about our Society by reading a brochure which discusses the purposes of the Society and tells you how to become a member. Until early this year no such brochure existed.

Today the situation is different. Our Public Relations Committee, chaired by Madhu Pathak, has produced the first professional brochure of the ASP. On the facing page is a reproduction of that brochure. It is a single sheet which folds in thirds. Thus, lying flat as shown, the front cover is seen on the upper right. The back panel, in the middle on the top, contains a form which can be returned to request a membership application. The brochure was designed so that the application request form is on the reverse side of the picture of Society publications. This way removing the form does not destroy any of the text. The bottom three panels are seen as a unit when the brochure is opened to the inside.

The new brochure will be made available at national and international conferences and meetings. It will also be distributed to individuals who request information about membership in the Society. Madhu and his committee are to be congratulated on a job well done.

President Foote Announces New Committees

In Colorado Springs President Foote appointed and charged the Society's committees with a variety of tasks. Among them are consideration of expansion of the Journal, recruitment of new regular and corporate members, and promotion of education in photobiology. Should you have concerns about these or other issues the committee memberships are listed below. The first individual listed in each case is the committee chair.

Archives

I. Kochevar
F. Daniels
K. Smith

Constitution and Rules

L. Grossweiner
J. Jagger
I. Kochevar
K. Smith

Education

R. Pottier
M. Mathews-Roth
J. Roberts
B. Sayre
D. Valenzeno

Executive

C. Foote
R. Burk*
T. Coohill
L. Grossweiner
D. Kessel
P.-S. Song

Finance

H. Black
T. Coohill
C. Foote
D. Kessel
M. Kripke

Grants and Awards

J. Hearst
C. Gomer
D. Hug
D. Kessel
R. Ley
E. Lipson
M. Peak
G. Schuster

Meeting Site

L. Grossweiner
N. Krinsky
M. Kripke

Membership

R. Sayre
M. Pathak
J. Pooler
G. Truscott

Nominating

L. Grossweiner
H. Black
D. Kessel
P. Loach
P. Quail
M. Rodgers

Program

T. Coohill
C. Foote
M. Mathews-Roth
M. Pathak
P.-S. Song
M. Wasielewski

Public Affairs

N. Geacintov
E. DeFabo
R. Ley
D. Lytle
F. Urbach

Representatives

AIBS - H. Seliger
NAS/NRC - D. Kessel

Public Relations

M. Pathak
T. Coohill
T. Ito
D. Kessel
D. Valenzeno*

Publications

M. Rodgers
I. Kochevar
T. McDonagh
P.-S. Song*
D. Valenzeno*
M. Wasielewski

SASC Performance

L. Grossweiner
T. Coohill
C. Foote
D. Kessel
P.-S. Song

Historian

F. Daniels

* denotes *ex officio*

Announcements

Frontiers in Photochemical Sciences

A Symposium honoring D.C. Neckers and the
Center for Photochemical Sciences
October 1, 1988
Bowling Green, Ohio

Distinguished photochemical scientists from academe and industry will present lectures in their areas of research specialties.

Contact: Pat Green
Center for Photochemical Sciences
Bowling Green State University
Bowling Green, OH
Tel: (419) 372-2033



OPTICON '88

October 30 - November 4, 1988
Santa Clara, CA

Opticon '88 is the first jointly sponsored conference that addresses the needs of all professionals: technicians, engineers, and pure and applied research scientists with interest in optics and its applications. It includes a major technical exhibition, lectures and discussions on current and future expectations for lasers and optical technology, over 30 short courses and an employment center.

Contact: Larry Lotridge
OPTICON '88
1816 Jefferson Place, NW
Washington, DC 20036
Tel: (202) 223-8130

1988 Annual Meeting of the United States National Committee of the Commission Internationale de L'Eclairage

October 23-25, 1988
Salem, MA

This meeting includes a special workshop on photobiological aspects of lighting which will be presented by Division 6 of the Committee, "Photobiology and Photochemistry".

Contact: Dr. Klaus D. Mielenz
National Bureau of Standards
Gaithersburg, MD 20899
Tel.: (301) 975-2316



21st Annual Meeting of The European Society for Radiation Biology

October 24-30, 1988
Tel Aviv, Israel

A variety of topics in radiation biology will be covered including DNA damage and repair, oxygen radicals in chemistry and biology, and ionizing vs. non-ionizing radiation events. This meeting immediately precedes the International Photobiology Congress.

Contact: The Secretariat
European Society for Radiation Biology
P.O.B. 50006
Tel Aviv 61500, Israel
Tel: 972-3-654571

New Titles

Phytochrome and Photoregulation in Plants

16th Yamada Conference on Phytochrome and
Photoregulation in plants.

Edited by M. Furuya
Academic Press, Inc. (San Diego, London)
\$55.00, 354 pages, 26 chapters, figures

Chemiluminescence: Principles and Applications in Biology and Medicine

Ellis Horwood Series in Biomedicine
By A. Campbell
VCH Publishers Ltd. (Cambridge, U.K.)
£ 40 (Brit.) hardcover, 584 pages, 95 figures, 110 tables

Eye, Brain and Vision

by David H. Hubel
W.H. Freeman Publ. Co.
£ 14.95 (Brit.), 240 pages



Light and Plant Growth

By J.W. Hart
Unwin Hyman Inc. (London, Boston, Sydney)
\$50.00 hardcover, \$19.95 paperback, 80 illustrations

Photosynthetic Light Harvesting Systems: Organization and Function

Proceedings of an International Workshop—October 12-16,
1987, Freising, Fed. Rep. Germany
Edited by Hugo Scheer and Siegfried Schneider
Walter de Gruyter, Inc. (New York & Berlin)
\$187.00 hardcover, 636 pages, numerous illustrations

CALENDAR OF EVENTS

1988

- | | | | |
|--------------|--|--------------|---|
| Aug 29-Sep 2 | 2nd International Conference on Laser Spectroscopy of Biological Objects – Pecs, Hungary [115] | Sep 25-30 | Symposium on Site-Specific Photo-labeling of Biomolecules – Los Angeles, CA [114, encl] |
| Sep 1-2 | Lasers in Urology – Denver, CO | Sep 26-28 | Vth Symposium on Optical Spectroscopy – Eisenach, G.D.R. [115] |
| Sep 6-7 | Principles and Applications of Lasers in Medicine – Glasgow, U.K. [115] | Oct 1 | Frontiers in Photochemical Sciences – Bowling Green, OH [116] |
| Sep 6-7 | Advances in Photochemotherapy at SPIE Meeting – Boston, MA | Oct 20-21 | Lasers in General Surgery – Chicago, IL |
| Sep 15-16 | Lasers in Gastroenterology – Greenville, NC | Oct 23-25 | 1988 Annual Meeting, USNC/CIE – Salem, MA [116] |
| Sep 18-20 | Organic Free Radicals – Zurich, Switzerland [115] | Oct 24-30 | 21st Ann. Meeting, European Soc. for Radiation Biol. – Tel Aviv, Israel [116] |
| Sep 19-23 | International Congress on Optical Science and Engineering – Hamburg, F.R.G. [115] | Oct 30-Nov 4 | OPTICON '88 – Santa Clara, CA [116] |
| Sep 25-28 | ACS National Meeting – Los Angeles, CA | Oct 30-Nov 6 | 10th International Congress on Photobiology – Jerusalem, Israel [113-115] |
| Sep 25-29 | 5th Internat. Symp. on Bioluminescence & Chemiluminescence, Florence-Bologna, Italy [115] | Nov 3-4 | Lasers in Urology – Toledo, OH |
- [] – Square brackets denote the Newsletter issue in which additional information may be found.

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