

## Council Considers Enacting Steps from the Strategic Plan

**Daniel Yarosh**  
ASP Treasurer

The Society Council has been developing a strategic plan during the past two years. Many members participated in one part of this plan — the membership survey — during the last dues renewal. A second part was the change over to Courtesy Associates as our Executive Secretariat. They contributed ideas based on their experiences with other scientific societies.



Dan Yarosh, ASP Treasurer

Our Society faces many challenges today. *Photochemistry and Photobiology* is scientifically stronger than ever, but faces economic uncertainty from electronic publishing, declines in library subscriptions, and competing journals. Society membership has not been growing, and the membership survey reflects a decline in younger investigators. The annual meeting draws fewer than half of our members and is a substantial expense to the Society, above the registration fees and contributions from donors.

ASP remains in a solid position. We have substantial financial reserves to carry out our programs. Those members who have taken leadership positions have acted to analyze the problems, survey the membership, and enact changes. One of these changes was to join BioOne, a service that bundles electronic versions of related scientific publications and markets them to small- to mid-size libraries, which would otherwise be unable to afford subscriptions to all the collected journals. This year ASP received its first substantial royalty payment from this effort. The costs of the Annual

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Meeting have been carefully controlled, and we will have an outstanding 30th anniversary gathering in the beautiful setting of Quebec City, with 26 symposia (all with computer projectors) and an overflow of posters.

There is more to do. The Council is considering plans to pro-actively recruit new members and encourage members, especially young investigators, to submit abstracts and participate in the annual meeting by reserving speaker slots in each session for young investigators. The membership survey did not show a consensus to move the meeting from the summer, and suggestions were made to Council to infuse more “new” science in a shorter meeting format, with focused “Special Interest Group” sessions. In Society administration, the Council is considering ways to use electronic communication in its meetings and in communication with membership. For example, over 80% of members said they would welcome receipt of the newsletter by e-mail, saving on

printing costs. A marketing campaign for *Photochemistry and Photobiology*, including placing ads in other publications and accepting ads in ours, is being considered to boost this key source of Society revenue. A dues increase, which has not occurred since 1998, is also under consideration in order to protect against the loss of revenue from the decline in institutional subscriptions to the journal.

The Society is in the early stages of planning for the 2004 annual meeting. This is the year of the International Congress of Photobiology, which will be in Korea during mid-June. Our current plan is to have a meeting in Seattle during the 2nd or 3rd week of July. We will be discussing this at the Quebec City meeting.

The Council will take up proposals at its two sessions during the annual meeting, and welcomes discussions of these and other ideas at the annual business meeting. The Council actively discusses issues by e-mail in the time leading up to the annual meeting. If members have ideas for the Council, they may e-mail them to the Secretariat, at [asp@courtesyassoc.com](mailto:asp@courtesyassoc.com), for circulation to the Council. Participation in strategic planning is a good way to begin your involvement in ASP governance.



*Map of Old Quebec, site of the 30th Annual ASP meeting (July 13-17). The meeting site, Fairmont Le Château Frontenac, is enclosed in a box.*

# Letter From the Editor

**Peter A. Ensminger**

The “ASP Strategic Marketing Plan”, developed by Courtesy Associates and discussed by **Dan Yarosh** in this issue of *ASP News*, made several suggestions for improving the ASP web site (<http://www.photobiology.org>). The most significant of these are redesigning the web site so that it is more visually appealing, updating all pages for improved navigation, and adding a “current news” section that is updated regularly.

Beginning on April 27, **Dennis Valenzano** and I will begin implementation of these changes. My own task will be to prepare the “Current News” section. This section will be updated biweekly and will include “Photobiology News” and “Recent Publications by ASP Members”.

“Photobiology News” will highlight recent photobiology news items drawn from current journals, newspapers, magazines, and other media. I will make every effort to choose topics that appeal to members in the five different divisions of the ASP — Photochemistry, Photophysics and Phototechnology; Photosensory and Circadian Biology; Photosynthesis, Bio- and Chemiluminescence; Photomedicine; and Environmental Photobiology and UV effects. Please feel free to send me your suggestions.

“Recent publications by ASP Members” will list recent publications by ASP members and links to the abstracts published at the NCBI PubMed/MedLine web site. I will be performing PubMed searches about once a week using the database of ASP members (maintained by the Secretariat) and some creative ‘find/replace’ and ‘copy/paste’ commands. Please feel free to tell me about your own recent publications for inclusion in this section.

We will update the “Current News” section biweekly from April 27-July 13 so that members can give us feedback on our work at the Annual Meeting in Quebec City. In addition, we will try to arrange for viewing of the web site (downloaded to a CD if web access is unavailable) at the Annual Meeting. We look forward to hearing from you!

## **ASP News**

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# *Cove Days — The Seaside Childhood of a Scientist*

By John Jagger (Photon Publications)

## **About the Book**

*Cove Days* is an account of a Dallas scientist and former ASP President who spent his youth living at the seashore in New Haven, Connecticut, where he received all of his formal education, from kindergarten to a Ph.D. in biophysics from Yale.

The book describes his delight in growing up directly on the seashore, with a beach as his backyard. The intimacy with nature, from watching storms come up out of the west across the harbor, and actually sailing through some of those storms in a small boat, to the great cacophony of crying seagulls and crashing waves, to the myriad sea creatures that inhabited his world, makes this a compelling account of what it was like to grow up by the sea.

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*“This account has prompted many fine accolades. The subject is appealing and the telling of it is superb.”*

*- John O.C. McCrillis, Chairman,  
Editorial Committee, New Haven  
Colony Historical Society*

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But the book goes beyond that. It deals with the many influences that steered the author toward science as a career, from the questions that constantly arose in his mind about what the world is made of and how it works, to family and friends and teachers who fed his curiosity. He discusses the role of the arts in the making of a scientist, and the emergence of the “scientist/artist,” pointing out the role that beauty, symmetry, and simplicity have played in scientific theories. The book is interspersed with scientific reflections on events of his childhood. All of this makes it more than just a personal history.

This often-amusing tale should appeal to those who love the sea, as well as providing insights into the formative years of a scientist.

## **About the Author**

**John Jagger** is a biophysicist and radiation biologist. He was born in 1924 at 64 Morris Cove Road, New Haven, CT, which continued to be his home for 30 years. After graduating from Hillhouse High School, during World War II, he received a certificate in Aeronautical Engineering from the Curtiss-Wright Technical Institute, Glendale, CA, and then worked for three years in aircraft design.

He then studied physics at Yale College from 1946 - 1949, spent two years in the physics department of the Memorial-Sloan Kettering Cancer Center in New York City, and then returned to Yale to get his Ph.D. in biophysics in 1954. Aside from the year of training in California, he received all of his formal training in New Haven, from kindergarten to Ph.D.

He did post-doctoral research at the Radium Institute in Paris, and then worked as a research scientist for nine years in the Biology Division of the Oak Ridge National Laboratory in Tennessee. In 1965, he moved to Texas, where he was Professor of Biology, and later Professor of General Studies and Biology, at the University of Texas at Dallas, over a period of 21 years.

He has been editor of the journal of *Photochemistry and Photobiology*, and President of the American Society for Photobiology, which honored him in 1991 with a Lifetime Achievement Award.

He has written over 60 scientific papers and three books: *Introduction to Research in Ultraviolet Photobiology* (Prentice-Hall, 1967), *Solar-UV Actions on Living Cells* (Praeger, 1985), and *The Nuclear Lion: What Every Citizen Should Know About Nuclear Power and Nuclear War* (Plenum, 1991). He is now retired and lives in Dallas, where he continues to write in the area of science and society.

Married in 1956 to Mary Esther Gaulden, Ph.D., he has two children, Thomas Alexander (1960) and Yvonne Virginia Mellinger (1962), who also live in Texas.

# *The Music Of Sunlight – The First Molecular Adventure*

by Wilbert Veit, Jr., D.M.D. (Sunlight Books)

**Wilbert Veit's** new book (Web site, <http://www.molecadv.com>) is a short novel that seeks to ignite in young adults a curiosity about the process of photosynthesis. Music is the metaphor which describes the energy of absorbed light. The hero is a teenage boy, Eddie, who asks his biochemist father why the weeds in their garden grow so fast. He gets an unexpected answer ...

*“The sun calls to the plants with a kind of music that makes them feel excited and full of energy,” his father confided. “Remember at Adventure World last month when we heard the band on the other side of the park? Remember how we went closer to hear better and how we felt energized by the music before we went back on the rides?”*

*“Yeah,” Eddie replied. “The rides were cool, especially the roller coaster, and it was neat to hear the music and be on the rides at the same time.”*

*“Well, sunlight is more exciting to plants than an amusement park or even a rock concert,” his father grinned. “It’s a cosmic kind of music. They can hear it with their leaves, and the more they hear the more they grow so they can listen more and more.”*

Eddie is thrust into a fantastic journey. He becomes an electron, enters a leaf, and follows the chemical pathways of the photosynthetic process.

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***“a rare combination of imagination  
and communication”***

***- David Walker, Emeritus***

***Professor of Photosynthesis***

***University of Sheffield, U.K.***

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*“You see,” his dad continued, “if you were an electron, even a simple tomato leaf would be a very exciting place. In fact, you could go into what I call The Molecular Adventure Park and hear the music of sunlight for yourself. It would blow your mind.”*

Eddie becomes the electron in a hydrogen of a molecule of water. The metaphor is two sailors (hydrogens) on the deck of a sailboat (oxygen).... H<sub>2</sub>O....sailing The Great

Sea (the water in the lumen of a chloroplast thylakoid). Eddie’s father explains ...

*“when your mind merges with an electron, everything happening to that electron is perceived through the lens of your own mind.”*

And so, the manganese center is experienced as a boat-house, which accepts two sailboats at a time. The four sailors are pulled from the decks (hydrogens removed), the sailors’ caps (protons) are removed and pushed into the sea (hydrogen ions released into the lumen), and each electron in turn takes the monorail (tyrosine side chain) to the reaction center domes (chlorophyll P680 molecules of Photosystem II). Eddie’s journey follows the intricacies of the Z-scheme (including the Q-cycle), the production of ATP, and on through the Benson-Calvin cycle of the dark reactions. The molecules and energy transformations are all experienced as characters, places and events in an extreme sports adventure park. Near the end of the journey after “the great NADP bird” has delivered Eddie and a girl electron (Donna) to a chain of three barges (3-carbon chain which is 3PGAL), Donna leads the electrons in song ...

*“We’ve heard sunlight. We’ve heard starlight,  
Flown to mountains high,  
Skied, then traveled jungles deep.  
We made it, you and I.*

*‘Cause we are living in a molecular world,  
And I am a molecular girl.  
We are dancing in a molecular world,  
And I am a molecular girl.”*

Upon his return from the molecular level Eddie’s perspective has been forever changed.

*“A shiver of wonder held Eddie fast, like the thrill that puts goose bumps on the back of your neck when you look down the first great slope of a roller coaster or hear for the first time a song that touches the heart. Actually, it was the thrill of sudden understanding that gripped him as he looked around the garden with new eyes, knowing that The Molecular Adventure Park was all around, in every living leaf.”*

# 60 Years of Silvia E. Braslavsky!



*Silvia Braslavsky, celebrating her 60th birthday at the Max-Planck-Institute für Strahlenchemie in Mülheim, Germany.*

**Silvia Elsa Braslavsky**, 1998 ASP Research Awardee and Associate Editor of *Photochemistry and Photobiology* since last year, was born in Buenos Aires on April 5, 1942. She is unmistakably South American in her vitality in science and sports, though she is addicted to chilly temperatures, be it water that no one else would dive into, or snow and ice anywhere from the Andes to the Lapp region. She is equally enthusiastic in her interest of culture, music and theatre in particular.

Born and raised in Buenos Aires, Silvia graduated from the *Facultad de Ciencias Exactas y Naturales*, University of Buenos Aires, and received her doctorate, with highest honors, in 1968. True to her outspoken and courageous nature, several infamous Argentinian Generals rated her as politically “not correct”. As a consequence, she wisely chose to cross the Andes with her supervisor, Professor **Eduardo A. Lissi**, and his group and take refuge in Santiago de Chile. She spent 1969-72 as a postdoctoral fellow with Professor **Julian P. Heicklen** at Penn State University, working in gas phase (*inter alia*, smog) photochemistry, then returned to Argentina as an Associate Professor (physical chemistry) at the *Universidad de Rio Cuarto* until 1975. After a short odyssey including research stays at Penn State University (again with Heicklen) and the University of Alberta (with **Otto Strausz**), word had reached Edmonton that I was beginning a new group in Mülheim an der Ruhr, Germany. Consequently, in October 1976, Silvia arrived at the *Max-Planck-Institut für Strahlenchemie* accompanied by her two daughters, eight and seven years old. Her daughters were already well-versed in Spanish and English and were soon to become unrivalled in German as well — unlike their mother, I must admit.

Silvia began in a research field in which we Mülheimer were all novices at that time — the photophysics and photochemistry of biological photoreceptors. Chromoproteins associated with open-chain tetrapyrroles were the prime target, particularly phytochrome, well known for photomorphogenic control of higher green plants but thought to be a singular protein of 60 kDa in those days. Silvia’s unrelenting energy, her ambition, enthusiasm for research, imaginative and creative thinking, and her broad interests in science at large paid off. The scientific crop — harvested by her group of devoted doctoral students, postdoctoral fellows, and technical staff and complemented by close collaborations within the institute and by an ever-increasing number of joint projects with colleagues from all over the globe — is quite substantial. It is documented by over 160 papers in peer-reviewed journals and 40 reviews and chapters in reference books. Her achievements derive mostly from kinetic and thermodynamic investigations of biological photoreceptors and photosensors (natural and recombinant phytochromes, retinal proteins, photoactive yellow protein, photosynthetic units) and model chromophores. She benefited from systematic in-group technical developments adapted to the specific needs as they arose in the study of complex equilibria between spectrally often strongly overlapping components. These include multicolor nanosecond flash photolysis, time-resolved photobaric (optoacoustic) and photorefractive (photothermal beam deflection) spectroscopies, and steady-state and time-resolved near-IR emission (sensitized formation of singlet molecular oxygen). It is no surprise that she has been invited as a lecturer, guest researcher and professor to visit scientific research institutions just about everywhere, and has been and continues to be a plenary lecturer at symposia and conferences throughout the world.

Silvia has also played an active and prominent role in scientific societies, formulating policies and acting on behalf of the photosciences. For example, she served as a Titular Member of the IUPAC Commission on Photochemistry from 1983-89, and as its Chairperson from 1989-91. Among several commission documents produced under her chair, the ‘*Glossary of Terms Used in Photochemistry*’ carries her authorship. She was Vice President of the *Association Internationale de Photobiologie* from 1988-92 and has been a member of several organising committees of symposia and editorial boards. Photochemists probably remember her best as the Scientific Chairperson of the IUPAC Symposium on Photochemistry in Dresden in the year 2000.

The international community of photochemists and photobiologists owes much to Silvia because of her uncompromising engagement in scientific research and her willingness to further the cause of scientific organizations by considerable personal contributions in time and effort. Last, but not least, we should applaud her strong support of (photo)chemical research in Argentina, now ailing in its support of science. Numerous brilliant young scientists have returned home from Silvia's laboratory, trained in state-of-the-art methods, spirited with new insights and projects, freshly motivated by successful collaborations with Silvia, and often backed by substantial material aid from German funds.

A celebration of her 60th anniversary at the Strahlenchemie in Mülheim revolved around two prominent guest speakers, **Ana L. Moore** (Arizona State University) and **Juan C. (Tito) Scaiano** (University of Ottawa), Argentinian compatriots and close friends of Silvia. Their reminiscences of Silvia, the successful scientist and the warm and charming personality, were shared enthusiastically by her large community of fans from within the institute and from many parts of the world. Colleagues, former and current students and coworkers, technical staff, and others gathered to congratulate her on past achievements, to thank her for having been a caring teacher, an ever-helpful colleague, a reliable friend, and to wish her many more years of good health and fruitful research.

-**Kurt Schaffner**



# PubCrawler

## Email Alert for PubMed Publications

“A good puzzle would be to cross Dublin without passing a pub.” - Leopold Bloom, *Ulysses*

Right in Leopold Bloom's old stomping ground, there's now a web server that can automatically execute customized searches of the scientific literature. PubCrawler (<http://www.pubcrawler.ie/>) is a free “alerting” service that performs user-defined searches of the daily updates to the PubMed/Medline and Entrez/GenBank databases and then emails the results to users. The program, written in Perl, was developed by **Karsten Hokamp** and **Ken Wolfe** of the Department of Genetics, Trinity College, Dublin. With the approach of Bloomsday (June 16th), could there be a better time to subscribe to PubCrawler?

Users can easily define their own search parameters, such as keyword(s), author name(s), journal title(s), etc., and can perform as many searches as desired. Previous searches are stored and only the newest records are emailed each day. The email appears as an HTML Web page, identical to the results of a search of PubMed or Entrez.

PubCrawler, with more than 10,000 users, solves several problems inherent to manual searches of PubMed and Entrez. First, a lengthy search string need not be retyped day after day. Second, new articles, which may be hidden among others that have been seen before, may be uncovered. Third, searches can be performed during off-peak hours (early in the morning) when internet traffic is light. More technical details are available from an article published in EMBnet News ([http://www.uk.embnet.org/embnet.news/vol6\\_1/pubcrawler.html](http://www.uk.embnet.org/embnet.news/vol6_1/pubcrawler.html)).

Alas, PubCrawler is not the only game in town. There are a number of similar services including Amedeo (<http://www.amedeo.com/>), Biomail (<http://biomail.sourceforge.net/biomail/>), JADE (<http://www.biodigital.org/jade/>), and ScienceTracker (<http://www.thescientificworld.com/publications/scitracker.asp>). PubCrawler and these other programs will certainly help you in your Odyssean searches of the literature.

-**PAE**

# International Symposium on Photosensory Biology

June 22-24, 2002

Seogwipo, Jeju (Cheju), Korea

An international symposium on the subject of photosensory biology will be held on the Island of Jeju, Korea, Saturday, June 22 through Monday, June 24. There is an excursion around the island on June 25th. The venue for the symposium is Cheju National University Retreat in Seogwipo, one of the sites for 2002 World Cup soccer games.

The First Asian Photobiology Congress immediately follows the Jeju meeting, on June 26-28, Awaji Island, near Kobe, Japan. You can attend both meetings if you wish. For the Kobe meeting, visit <http://www.cherry.bio.titech.ac.jp/photon.html> and write to [mhashi@med.kobe.ac.jp](mailto:mhashi@med.kobe.ac.jp).

The scientific program for the informal Jeju symposium includes as invited speakers: **Winslow Briggs, Anthony Cashmore, Francesco Lenci, Edward Lipson, Katsushi Manabe, Akira Nagatani, John Spudich, Satoru Tokutomi, Masamitsu Wada, Masakatsu Watanabe, David Wood** and others including Kumho Life and Environmental Science Laboratory scientists. We are inviting Professor **David Baulcombe** (John Innes Center, U.K.), recipient of the 2002 Kumho Science International Award in Plant Molecular Biology and Biotechnology, administered by the International Society for Plant Molecular Biology. The award ceremony will be held in Seoul, June 21-22, 2002. The Jeju symposium is dedicated to Professors Lenci and Wada on the occasion of their 60th birthdays.

We invite you to attend the symposium being held at one of the most attractive, exotic islands of the world. We also welcome contributed papers. Abstracts (MS-Word format) are due April 30, 2002. Send the abstracts to **Pill-Soon Song** ([pssong@ksc.kumho.co.kr](mailto:pssong@ksc.kumho.co.kr)) by e-mail. Registration fees (\$200) includes a room for 3 nights and lunch/dinner for 3 days.

For further information, contact Pill-Soon Song  
Tel: [82]62-970-2630; Cellular [82]11-9604-7533  
Fax: [82]62-972-5085  
e-Mail: [pssong@ksc.kumho.co.kr](mailto:pssong@ksc.kumho.co.kr)  
URL: <http://klesl.kumho.co.kr>

## How to get there

There are direct *Asiana Airlines* flights [owned and operated by Kumho] from Los Angeles, New York, Chicago, Seattle, San Francisco, Frankfurt, London, China and Japan (several cities), and many cities in Asia to Seoul. You then take a 1-hr flight from Seoul (domestic terminal) to Jeju International Airport. There are direct flights to Jeju from several cities in Japan and Shanghai. For those traveling from the U.S., I recommend Chicago Travel and Transport ([chicagotravel@msn.com](mailto:chicagotravel@msn.com), 1-800-270-0977) in Chicago, which specializes in getting the lowest fares for visitors to Korea. To qualify for an APEX fare, consider attending and contributing a paper at the following meetings: *Kumho Life & Environmental Science Laboratory Annual Workshop*, Friday, June 21-Saturday, June 22, 2002 (web site: <http://klesl.kumho.co.kr>) and *1st Asian Conference on Photobiology*, June 26-28, 2002 (see the web site above).

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## Neonatal sunburn and melanoma in mice\*

Noonan FP, Recio JA, Takayama H, Duray P, Anver MR, Rush WL, De Fabo EC, Merlino G.

Laboratory of Photobiology and Photoimmunology, Departments of Dermatology and Immunology, George Washington University Medical School, Washington DC 20037, USA.

Retrospective epidemiological data have indicated that cutaneous malignant melanoma may arise as a consequence of intense, intermittent exposure of the skin to ultraviolet radiation, particularly in children, rather than from the cumulative lifetime exposure that is associated with other forms of skin cancer. Here we use a genetically engineered mouse model to show that a single dose of burning ultraviolet radiation to neonates, but not adults, is necessary and sufficient to induce tumours with high penetrance which are reminiscent of human melanoma. Our results provide experimental support for epidemiological evidence that childhood sunburn poses a significant risk of developing this potentially fatal disease.

\*Reprinted with permission from *Nature* 2001 413: 271-2.

# Upcoming Events

## April 21 – 24, 2002

### *Biohydrogen 2002*

Ede, Netherlands

Contact: Marcel Janssen

Wageningen University

Department of Agrotechnology and Food Sciences

Food and Bioprocess Engineering Group

P.O. Box 8129

6700 EV Wageningen, The Netherlands

Tel: +31-317-483396 Fax: +31-317-482237

Email:

Biohydrogen.2002@algemeen.pk.wau.nl

## May 19-24, 2002

### *Gordon Research Conference on Photosensory Receptors and Signal Transduction.*

Il Ciocco, Barga, Italy (Tuscany).

Contacts:

John Spudich, conference chair:

John.L.Spudich@uth.tmc.edu,

Pill Soon-Song, vice-chair:

pssong@ksc.kumho.co.kr

Web site: [http://www.grc.uri.edu/](http://www.grc.uri.edu/programs/2002/photosen.htm)

[programs/2002/photosen.htm](http://www.grc.uri.edu/programs/2002/photosen.htm)

## June 13-14, 2002

### *Laser Bioeffects Meeting*

Paris, France

Contact: Marc Andrieux

Centre Technique d'Arcueil 16

bis avenue Prieur de la Côte d'Or

F - 94 114 ARCUEIL Cedex, France

Tel: + 33 1 42 31 89 71

Fax: + 33 1 42 31 99 92

E-mail: mandrieu@etca.fr

## June 22-24, 2002

### *An International Symposium on Photosensory Biology*

Seogwipo, Jeju (Cheju), Korea

Contact: Pill-Soon Song

Tel: [82]62-970-2630;

Cellular [82]11-9604-7533

Fax: [82]62-972-5085

E-mail: pssong@ksc.kumho.co.kr

(See complete announcement in this issue of *ASP News*)

## June 23-28, 2002; July 21-26, 2002; August 4-9, 2002;

## January 12-17, 2003; March

## 16-21, 2003

### *Protein Purification: Isolation,*

### *Analysis, and Characterization of GFP*

Cook College, Rutgers University, New

Brunswick, NJ

A five and one-half day hands-on laboratory course using the remarkable Green-Fluorescent Protein (GFP), a novel marker for gene expression, as the source material.

Contact: Prof. William W. Ward

Tel: 732-932-9562 ext. 216 or 212

Email: crebb@rci.rutgers.edu

Web site: [http://www.rci.rutgers.edu/~](http://www.rci.rutgers.edu/~meton/protein.html)

[meton/protein.html](http://www.rci.rutgers.edu/~meton/protein.html)

## June 26-28, 2002

### *1st Asian Conference on Photobiology*

Awaji Yumebutai International Conference

Center, Hyogo, Japan (near Kobe)

Web site:

<http://www.cherry.bio.titech.ac.jp/paj2.htm>

e-mail: mhashi@med.kobe-.ac.jp

## June 24-July 4, 2002

### *Molecular Electronics:*

### *Bio-sensor and Bio-computer*

N.A.T.O. Advanced Study Institute

Pisa, Italy

Contact: Paolo Gualtieri

Istituto di Biofisica C.N.R.

Area della Ricerca di Pisa

Via Moruzzi 1

56124 Pisa, Italy

Phone: 39-050-3153026

Fax: 39-050-2760

E-mail: paolo.gualtieri@ib.pi.cnr.it

## June 30, 2002

### *World Photodermatology Day*

Paris, France

Sunday afternoon, the day before the 20th

World Congress of Dermatology.

Contact: Rik Roelandts

Photodermatology Unit

University Hospital

Kapucijnenvoer 35

B-3000 Leuven, Belgium

Email: Rik.Roelandts@uz.kuleuven.ac.be

## July 7-11, 2002

### *Ninth International Conference on*

### *Laser Applications in Life Sciences*

Vilnius, Lithuania

Contact: LALS'2002 Organizing Committee

Sauletekio al. 9, bldg.3

Vilnius, LT-2040, Lithuania

Tel: 370 2 366050

Fax: 370 2 366006

E-mail: lals.org@ff.vu.lt

## July 13-17, 2002

### *30th American Society for Photobiology*

### *Annual Meeting*

Le Chateau Frontenac

Quebec City, Canada

Contact: Woody Hastings,

Chair of the Scientific Program

Tel: 617-495-3714

Fax: 617-496-8726.

Email: Hastings@FAS.Harvard.edu

## July 14-19, 2002

### *XIXth IUPAC Conference on*

### *Photochemistry* Budapest, Hungary

Contact:

Hungarian Chemical Society (MKE)

H-1027 Budapest

Fu u. 68., Hungary

Phone: 36-1-201-6886 Fax: 36-1-201-8056

Email: mail.mke@mtesz.hu

## August 25-30, 2002

### *International Conference on Luminescence and Optical Spectroscopy of*

### *Condensed Matter (ICL'02)*

Renaissance Hotel, Jerusalem, Israel

Contact: ICL'02 Secretariat

c/o Unitours Israel Ltd.

P. O. Box 3190

Tel Aviv 61031, Israel

Telephone: +972 3 5209999

Fax: +972 3 5239299

Email: Meetings@unitours.co.il

## August 25-28, 2002

### *Fifth International Melanocortin*

### *Meeting*

Sunriver Resort in Central Oregon

Contact:

Fifth International Melanocortin Meeting

Vollum Institute

Oregon Health & Science University

3181 Sam Jackson Park Rd L474

Portland, OR 97201-3011

Telephone: 503-494-1305

Fax: 503-494-4534

E-mail: melano@ohsu.edu

## September 9-13, 2002

### *XVIIIth International Pigment Cell*

### *Conference* Kurhaus Hotel, Scheveningen,

The Netherlands

Contact: Mrs. Caroline M. van Battum

P.O. Box 2084

NL-2301 CB Leiden The Netherlands

Telephone: +31(0)715276434

Fax: +31(0)715275262

Email: C.M.van\_Battum@lumc.nl

## February 23-28, 2003

### *Seventh International Conference on Solar Energy and Applied Photochemistry*

[SOLAR '03] combined with

*Fourth International Training Workshop on*

*Environmental Photochemistry*

[ENPHO '03]

Luxor, Upper Egypt

Contact: Dr. Sabry Abdel-Mottaleb,

Professor of Chemistry, Director,

Photoenergy Centre Fac. of Science

Ain Shams University

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